

Symbolism of Clothing: The Relationship between Teacher Clothing and
Children's Perceptions in Elementary School Physical Education

by

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ABSTRACT

Teachers of physical education have the responsibility to develop and teach programs that physically educate elementary school children (Hickson & Fishburne, 2005). Therefore, what teachers do to achieve this aim is a critical consideration. Issues such as planning, lesson delivery (Bradford & Hickson, 2014; Mawer, 1995; Rink, 2006; Siedentop, 1991), and the evaluation of learning (Metzler, 2005; Pangrazi & Beighle, 2010) are constant themes of consideration and thought. However, other areas of *preparedness* such as presentation (i.e., clothing) have not been investigated to the same degree (Hickson & Bradford, 2012). Therefore, the purpose of this explanatory mixed-methods study was to determine whether an elementary school teacher's choice of clothing in physical education affects children's perceptions toward that teacher and the physical education lesson. Elementary school-aged children from six northern Alberta schools participated in the study. Quantitative data was collected through the use of a Mannequin Clothing Assessment Questionnaire (MCAQ); whilst focus group interviews were employed to collect qualitative data. Descriptive statistics were used to analyze the quantitative data. In regards to qualitative data, key words and themes emerging from the focus group interviews were analyzed and compared to identify common themes related to the children's perceptions. Both quantitative and qualitative data illustrated that clothing is perceived as important when teachers are teaching physical education lessons. This information may prove to be beneficial to literature on effective teaching, teacher as a role model, symbolism of teacher clothing and those involved in educational fields.

DEDICATION

To My Family ... Ashleigh, Kane, and Brooke!

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CHAPTER 1 – INTRODUCTION

Reflections from a Physical Educator

Several experiences have driven me to this study. Personal observations, throughout my career, have led me to believe that physical education is a marginalized subject area in elementary schools. Too often, it is excluded to make timetabling space for the “three Rs” in order for school children to achieve higher academic grades. Nevertheless, there is clear evidence that physical education does not deter academic achievement (Sallis et al. 1999; Singh, Uijtdewilligen, Twisk, van Mechelen, & Chinapaw, 2012). In addition to the marginalization, I have also observed ineffective teaching practices and a lack of care toward children’s learning in physical education. For example, I have personally noticed what Placek (1983) and Hickson (2003) found with ineffective teaching; children were simply kept “busy, happy, and good” during physical education lessons rather than participating in an environment where teaching and learning occurs.

Having taught at a variety of levels for over fourteen years, my feelings of disappointment, when witnessing ineffective teaching practices and minimal care toward student learning in physical education lessons, became so pronounced that I chose to make a career transition. I decided to return to the university setting as a graduate student to understand more about the teaching of physical education. Pleasingly, after experiencing five years of teaching at the university level, I have started to believe again that elementary school physical education can be taught by teachers who care for children’s learning (Rikard, 2009) and understand the important role physical education has on child development (Fishburne, 2005).

Positive feelings for the teaching profession have re-emerged due to my university experiences. For example, completing graduate courses and teaching pre-service teachers has prepared me to conduct this study. In my Master of Education program, I focused on an array of teaching styles available to teachers of physical education (e.g., Mosston and Ashworth's Spectrum of Teaching Styles). The work of Mosston and Ashworth (1986) has helped me understand fully the various teaching styles that can promote and support knowledge construction. Whilst completing my graduate work, I have worked with Dr. Clive Hickson on a variety of research presentations and publications that have explored effective teaching practices. Under his guidance, my overall knowledge about "quality learning" environments has increased immensely. This study, moreover, has led to a deeper understanding of the links between teaching and learning.

Research Needs

Throughout my reading of physical education literature, I began to notice areas of potential future research. There is minimal, if any, research that investigates the symbolism of teacher clothing in physical education. When I prepare to teach a physical education lesson, I ensure that I am wearing athletic style attire so that I can be physically active, adhere to the safety guidelines, and reveal my passion towards the subject area and its associated learning outcomes. Based on personal observations, many elementary school teachers do not wear attire normally associated with physical activity environments; it is these observations along with the information shared in this section that led me to this study. I aimed to help elementary school teachers understand how their choice of

clothing may affect school children's perceptions in physical education lessons, which may impact the learning environment.

Context of the Problem

Elementary school physical education programs should provide breadth, variety, and educational experiences that help develop *whole children* (Hickson, 2003). As each subject area can contribute unique strengths to the overall educational program for children, it is important all subject areas are taught effectively. In particular, research has indicated that physical education can have a profound effect on child development (Fishburne, 2005; Metzler, 2005; Pangrazi & Beighle, 2010). This is supported by Physical and Health Education Canada (2012) who stated that quality physical education programming can play a critical part in the development process for elementary school children. Hence, it can be argued that physical education has a unique role in the development of the *whole child*. For example, Medina (2008) contends that school children experience several benefits from quality physical education programs, including: higher levels of self-efficacy; greater academic performance; less disruptive behavior; and less anxiety. Physical skills (Rink, 2004; 2003), health benefits (Dauenhauer & Keating, 2011), and leadership opportunities (Lieberman, Arndt, & Daggett, 2007; Martinek & Schilling, 2003) are other positive outcomes that emerge from quality physical education programming.

In light of the information presented by Fishburne (2005), Medina (2008), Pangrazi & Beighle (2010), Rink (2004) and others, it is essential that elementary school children are exposed to physical education environments that promote

teaching and learning (Hickson, 2003). Such environments would consist of well-planned lessons with effective lesson delivery (Fishburne, 2005; Mawer, 1995; 1999; Rink, 2006; Siedentop & Tannehill, 2000), proper assessment techniques (Fisette et al., 2009a, 2009b; Metzler, 2005; Pangrazi & Beighle, 2010; Rink et al., 2002), and developmentally appropriate activities (Fishburne, 2005). Physical education environments that promote children's learning are often referred to as "quality learning" environments (Cherubini, 2009; Hickson, 2003). In order for school children to have the best opportunity to learn in physical education, teachers must employ teaching practices that promote children's learning (Hickson & Fishburne, 2001). This type of "quality learning" environment requires *effective teaching* (Hickson & Fishburne, 2001). It is commonly accepted that such learning environments can provide children with opportunities to learn and to acquire knowledge, skills, and attitudes that promote healthy and active lifestyles. For example, in a "quality learning" environment, children develop high levels of motor skill acquisition, understand the importance of and value physical activity, and become physically literate (Hickson & Fishburne, 2005; Rink, 2003); children become *physically educated* (Hickson, 2003).

What teachers of physical education choose to do to truly "physically educate" school children is a critical consideration. Researchers who study the quality of elementary school physical education have the responsibility to examine every potential facet that may impact children's learning, even if it has received little previous research attention. Although issues such as planning (Fishburne, 2005; LaBillois & Lagacé-Séguin, 2010), lesson delivery (Bradford &

Hickson, 2014; Fishburne, 2005; Grasha, 1996; Mawer, 1995; Siedentop, 1991), and evaluation of learning (Metzler, 2005; Pangrazi & Beighle, 2010) are constant themes of consideration and thought, other areas of preparedness have not been investigated to the same degree. For example, areas such as personal presentation (i.e., teacher clothing) has received little, if any, research attention. However, what an elementary school teacher chooses to wear whilst teaching physical education may be perceived by school children as part of a teacher's role modeling. Arthur (2011) contended that the role modeling of teachers (e.g., behaviors, actions, appearance) can stimulate the development of school children. Therefore, the choice of teacher clothing may impact children's perceptions which, in turn, may affect their learning. For example, if a teacher walks into the gymnasium wearing clothes not normally associated with physical activity, the children's perceptions toward the teacher may be such that might impact the children's learning during the lesson.

Purpose of the Study

The purpose of this study was to explore whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *children's perceptions* toward the teacher and physical education influenced by the teacher's choice of clothing in physical education lessons. Such an understanding can inform teachers about the benefits associated with their choices and also potentially create opportunities for more conducive learning environments for school children.

Research Questions

This study was guided by the general question:

1. What is the nature of the relationship between the *teacher as a role model* and the *symbolism of clothing*, and how are *children's perceptions* toward the teacher and physical education influenced by the teacher's choice of clothing in physical education lessons?

Given this general question, the study's sub-questions included:

- a) In what ways, if any, does a teacher's choice of clothing in physical education affect school children's perceptions towards that teacher?
 - (i) How does this differ between children's grade level?
- b) In what ways, if any, does a teacher's choice of clothing in physical education affect school children's perceptions towards their learning in physical education?
- c) What is the clothing of choice, if any, that school children believe their teachers of physical education should wear while teaching?

Significance of the Study

The significance of this study was in advancing the understanding of effective teaching, teacher as a role model, the symbolism of teacher clothing, and school children's perceptions towards their teachers. With this understanding, findings were practical and constructive for several educational stakeholders. For example, the results were advantageous for elementary school teachers by informing them how their choice of clothing affects the learning environment in

physical education. The findings also presented educational policy makers with a new body of knowledge concerning “quality learning” environments.

Moreover, newly acquired views, perceptions, and opinions from teachers and school administrators may promote more suitable timetabling strategies to provide time for teachers to change their clothes prior to and following a physical education lesson. The study’s findings may also receive attention from provincial, national, and international physical education organizations which may reach a wider audience of physical educationalists whilst promoting better learning environments that help school children enhance their academic achievement.

Lastly, the findings could potentially contribute to the literature on effective teaching, teacher as a role model, the symbolism of teacher clothing, and school children’s perception formation. Teachers of all subject areas may become interested in the findings as they may use them to help develop “quality learning” environments in other unique settings such as the science lab, art room, music room, etc.

Definition of Terms

The definitions provided in this section reflect the usage of the terms within this study. The definitions placed in alphabetical order have been deemed to be most complete and applicable to this study.

Coding. The process a qualitative researcher employs to create meaning from text data, divides it into text or image segments, labels the segments, inspects the codes for overlap and redundancy, and breaks down these codes into emerging themes.

Effective Teaching. Effective teaching is when a teacher is able to perform tasks expected of him/her successfully and creates an environment where students achieve intended learning outcomes.

Mixed-Methods Design. A Mixed-Methods research design, also known as *two-phase model*, involves the collection of quantitative data and qualitative data.

Focus Group Interviews. An interview process that obtains a shared understanding from a small group of individuals (usually 4 – 6 interviewees) during one interview.

Mannequin Clothing Assessment Questionnaire (MCAQ). A questionnaire designed for this study that consisted of twenty-eight visual mannequin images depicting teachers wearing different clothing and footwear options.

Symbolism of Clothing. The impact of clothing and appearance in everyday interaction with others.

Delimitations

Delimitations, or the limits and boundaries of the study, were identified.

The delimitations included:

1. The participants were elementary school children ranging from Grade One through Grade Six.
2. A total of six elementary schools from northern Alberta participated in the study.

Limitations

Limitations, or the potential weaknesses or problems in quantitative research, have been identified. The limitations included:

1. The researcher's inability to acknowledge and/or measure all potential lurking variables and spurious relationships that may have affected the study (e.g., participants' background knowledge).
2. Participants came from only six school sites. The school sites were not randomly selected. The lack of randomization (i.e., sampling procedure) prohibited the researcher to generalize the findings beyond the participants in the study.
3. The inability to include all potential clothing items and colors on the questionnaire (i.e., MCAQ).
4. Although member checks were conducted during the focus group interviews in summary statements, it was not possible to revisit the school sites due to the time on the school year (i.e., late-May), and due to the upcoming summer break.

CHAPTER 2 – REVIEW OF RELATED LITERATURE

Theoretical Framework

What is Theory? Theory refers to a structure that intends to model something about the world (Maxwell, 2005). Strauss (1995) suggested a theory provides a model of *why* the world is the way it is. Maxwell (2005) contended a simplification of the world that strives to clarify and explain an aspect of how it works represents a theory. A useful theory tells an enlightening story, provides new insights, and broadens one's understanding about some phenomenon (Maxwell, 2005). In light of these definitions, it would seem appropriate to view theory as providing clarification and a collective understanding for others.

The employment of existing theories has both advantages and risks (Maxwell, 2005). For example, a theory offers a framework for understanding what one sees. Nonetheless, “no theory will accommodate all data equally well; a theory that neatly organizes some data will leave other data disheveled and lying on the floor, with no place to put them” (Maxwell, 2005, p. 43). A suitable theory should illuminate what one sees, draw attention to particular events or phenomena, and shed light on relationships that might otherwise go unnoticed (Maxwell, 2005).

The “goal function” of theory is to make sense out of current knowledge by integrating and summarizing the knowledge while the “tool function” is to guide research by making predictions (Johnson & Christensen, 2012). Therefore, through this study, suggested relationships were identified and new predictions were constructed based on a theoretical framework that was tested to confirm its

authenticity. This study was situated primarily on children's perceptions towards their teachers in physical education. However, literature on the topics of *effective teaching*, *role modeling*, *symbolism of clothing*, and *perception formation* helped develop the theoretical framework. Thus, in the absence of a formal theory explaining how, if at all, teacher clothing in physical education affects school children's perceptions towards their teachers, it was essential to first understand what is known about the four topic areas, and then to examine how the theoretical understanding of these areas may be applied to the context of children's perceptions toward their teachers in physical education.

Effective Teaching

Defining Effective Teaching. Defining effective teaching in a precise manner has been a difficult task (Hickson, 2003; Kirchner & Fishburne, 1998; Yilmaz, 2011). For example, over the years, researchers have had issues distinguishing between terms such as effective, experienced, and expert teaching as well as determining applicable criteria to define "effectiveness" (Berliner, 1986; Hickson, 2005; Metzler, 2005; Siedentop & Eldar, 1989). For example, Hickson (2005) suggested that effective, experienced, expert, exemplary, and master are merely a few of the terms used to describe successful teachers. Moreover, terms such as these have been used interchangeably even within a particular study or research paper (Hickson & Fishburne, 2001). Arguably, since there is so much that occurs in a classroom that may rely on unconscious knowledge, it may be difficult to truly measure or accurately report on factors that influence effective teaching.

Although there are several terms that have been used to describe effective teaching, it is important to note that successful teachers produce successful students (Metzler, 2005). The concept of “effectiveness,” which originated in economics, but has found wide usage in different areas (e.g., education), has been referred to as an individual’s level of achieving self-set objectives (Tatar, 2004 as cited in Yilmaz, 2011). Used in this context, teacher effectiveness occurs when a teacher is able to perform tasks expected of him/her successfully (Yilmaz, 2011) and when a teacher creates an environment where students achieve intended learning outcomes (e.g., Berliner, 1987; Brophy, 1979; Gage, 1978; Harris, 1999; Hickson, 2003; Rink, 2003; Rosenhine, 1987; Yilmaz, 2011).

Classroom Research on Effective Teaching. Teachers can influence the work and learning of students. Therefore, understanding how to promote quality experiences for students and increasing the overall quality of teaching is an important objective (Paige, 2001). Considerable interest has existed in the identification of teaching skills and competencies over the years. However, the qualities that were perceived to determine and measure teacher effectiveness have been inconsistent; research on teacher effectiveness has evolved through several areas of focus (Cothran & Kulinna, 2008). A variety of designs and methods have been used in attempts to identify differences between effective and ineffective teaching (Bellon, Bellon, & Blank, 1992; Hickson, 2005; Metzler, 2005).

Research on teacher effectiveness has emphasized, over the years, that teachers require an array of knowledge bases (e.g., pedagogical, subject content, procedural knowledge about education), professional knowledge (e.g., multiple

teaching approaches, learning styles); and specific personality traits (e.g., enthusiasm, helpfulness, friendliness, humor, supportiveness) (Mowrer-Reynolds, 2008). Early research attempts veered toward teacher characteristics, qualities, and processes rather than investigating students and learning environments (Connelly, Clandinin, & He, 1997; Hickson, 2005; Mawer, 1995; Medley, 1987; Rink, 2003). For example, in the early 1900s, a teacher was judged to be effective based on his/her level of “goodness.” Character traits such as honesty, generosity, friendliness, dedication, and consideration were deemed to be key elements of “goodness,” or an effective teacher. These character traits needed to be confirmed in an authoritarian, disciplined, and organized classroom (Borich, 1996). Ayers (1989) suggested that teaching is not simply what one does; it is who one is. However, this classification of an effective teacher lacked any objective standards of performance.

Bellon et al. (1992) and Hickson (2005) contended that these initial studies had minimal influence on the teaching profession; they merely compared such units of analyses as personal qualities of teachers (e.g., care toward school children) with their perceived ability to teach. The amount and type of information gathered during initial approaches of effective teaching research was narrow; student data was not collected. However, researchers began to look beyond teachers to students. They began to realize the impact student data collection could have on the field’s understanding of teacher effectiveness (Lee, 2003).

Rink (2002) and Lee (2003) contended that the field moved through process-process designs in the 1950s and 1960s followed by a process-product focus of the 1960s and 1970s. For example, researchers, in the 1960s, began to place less emphasis on the personal characteristics of teachers and more emphasis on teacher and students behaviors (Bloom, 1981; Lee, 2003). Researchers began to visit classrooms to gather data and student interactions were investigated during this research era (Rink, 2002; Lee, 2003). Researchers developed instruments to measure social interactions in school (e.g., interaction rates, types of questions). Researchers believed that these instruments could identify the behaviors of effective teachers and, in turn, the new information could be taught to teachers to help them become better at what they do (Bellon et al., 1992; Hickson, 2005; Lee, 2003; Rink, 2003).

A significant advancement in research methodology occurred in the 1970s (Brophy, 1979; Lee, 2003; Mawer, 1995). Descriptive style studies identified both teacher and student behavior through an array of observation systems. Although this methodological approach played an integral role in determining what was actually going on in the classroom, it did not advance the understanding of the characteristics related to teacher effectiveness (Mawer, 1995). Effective teachers' characteristics were not the focal point of these research studies.

The 1980s saw an exploration of new conceptual frameworks to understand teaching (e.g., teacher knowledge); a rejection of the search for single variables and their influence on learning occurred (Cothran & Kulinna, 2008). Researchers, in the 1980s, began striving to identify aspects of classroom teaching

that promoted effective learning environments for students. Researchers attempted to discover how teachers promote student learning (Brophy & Good, 1986; Lee, 2003). The majority of the studies that investigated the relationship between the teaching process and student learning (i.e., product) were large correlation style research designs. In correlational studies, only the strength of a relationship can be determined, the cause of the relationship cannot be determined which limits this research methodology (Creswell, 2012; Gravetter & Wallnau, 2009; Metzler, 2005; Johnson & Christensen, 2012). Therefore, resulting from correlational studies, producing an accurate determination of effective teaching behaviors and skills remained difficult during this research era. However, Lee (2003) suggested this approach was a step forward; it led the way to a more mature, respected area of inquiry for researchers interested in teaching effectiveness.

Studies conducted in classroom environments represent the majority of effective teaching research. Through classroom-based research, several components of effective teaching have been identified on a consistent basis (Gipps, 1992; Mawer, 1995; 1999; Lee, 2003). The components include: a structured day; a focus on one subject area at a time; a provision of appropriate, breadth, and variety of activities; a positive learning environment; high student expectations; and a suitable discourse. In a review of research studies that indicated signs of effective teaching due to student achievement, Borich (1996) noted five key teaching behaviors (i.e., lesson clarity, instructional variety, teacher task orientation, participation in the learning process, student success rate). Borich's summarization of the research findings on effective teaching created

terms that brought clarification, consistency, and understanding to the research area (Hickson, 2005). However, through time, additions to and modifications of the five key behaviors undoubtedly will be identified (Borich, 1996; Hickson, 2005). It is, therefore, crucial that researchers continue to identify key areas of teacher effectiveness in order for educators to improve teaching skills and practices in the learning environment (Rink, 2003) so that an enhanced understanding can be developed in order to train and educate new teachers (Aaronsohn, 2003; Bain, 2004; Hickson, 2005; Lee, 2003; Rink, 2003).

Physical Education Research on Effective Teaching. Research on physical education teaching effectiveness has focused on the perspectives of teachers and students (Hickson, 2005; Lee, 2003; Silverman & Ennis, 2003). In physical education, the teaching environment is vastly different from that of a teacher in a regular classroom. For teachers of physical education, the teaching area is larger, children are moving the majority of the time, a variety of large and small equipment is in use, and physical safety is a constant concern (Metzler, 2005; Mawer, 1995; Rink & Hall, 2008; Siedentop, 1991). The majority of effective teaching research has focused on traditional academic subject areas (e.g., mathematics, language arts) (Hickson, 2003). Hence, effective teaching studies in physical education arrived late on the research scene (Hickson, 2005; Mawer, 1995). Primary studies involving teacher effectiveness in physical education included areas such as time-on-task and practice quality.

Investigations into the relationship between time-on-task and student learning in classroom-based research studies aimed to identify effective teaching

(Lee, 2003; Mawer, 1995; Rink, 2003). These investigations were based on the notion that enhanced student learning will result from the more time a student works on an activity. One attempt to understand how student engagement correlates with performance in physical education lessons was through the use of the Academic Learning Time in Physical Education measure (ALT-PE) (Siedentop, Tousignant, & Parker, 1982; Lee, 2003; Mawer, 1995; Rink, 2003). Metzler (2005) contended that one of the most important variables in effective teaching is Academic Learning Time (i.e., the amount of time learners spend engaged in appropriate learning tasks with high levels of success).

Initial results from the ALT-PE measures found a positive relationship between student engagement and student achievement. However, the relationship was lower than was initially expected (Lee, 2003; Mawer, 1995; Silverman, Divillier, & Ramirez, 1991). Later research on ALT-PE introduced and refined the concept of appropriate practice, which introduced qualifications such as “practice with adequate levels of feedback” and “practice with high rates of success” that were required to make practice a powerful agent in learning (Lee, 2003; Silverman, 1990; 1994). Failures of the ALT-PE studies might have been due to several factors (Lee, 2003; Rink, 1999). For example, the task being measured may have been the wrong one even when students participated at a high level in an activity. Secondly, the definition of motor engagement may not have been as critical to learning as initially thought. However, these suggestions have not been substantiated and remain as speculation. Regardless, the time spent by a student participating at an appropriate level during a lesson is a critical dimension of

effective teaching (Mawer, 1995; Rink, 1999, 2003; Rink & Hall, 2008; Silverman, 1991).

Children have a greater opportunity to develop motor skills when they are provided with ample time to practice and when they practice at a reasonably high level of success (Rink, 2003; Silverman, 1991). According to Silverman (1991),

Overwhelming evidence indicates that the amount of time practising (either measured by time or the number of practice trials) at an appropriate or successful level is positively related to student achievement and that inappropriate or unsuccessful practice is negatively related to achievement.” (p. 356)

With this knowledge, researchers (e.g., Cousineau & Luke, 1990; Goldberger & Gerney, 1990; Metzler, 1989; Silverman et al., 1991) began to alter their focus to investigate engagement, success, appropriateness of task, and sufficient amount of time. It was concluded that for children to acquire motor skills, a high level of engagement and a sufficient amount of time was required. Rink (2003) contended that a high level of engagement occurs when a child is actively involved in the lesson and participates successfully in developmentally appropriate activities.

Whilst attempting to learn more about the influence of practice time, researchers began to consider the actual number of practice attempts. The quality of practice was found to be more important than the amount of practice (Buck, Harrison, & Bryce, 1991; Mawer, 1995; Silverman et al., 1991). Rink (2003) asserted that a characteristic of quality practice is related to the child's level of cognitive effort. The importance of cognition becomes apparent at the point when

the child tries to determine how to attempt the skill (i.e., initial motor program) as well as during practice. Therefore, a short amount of time spent practicing skills correctly can enhance learning at a far greater rate than practicing skills incorrectly for long periods of time.

Effective Physical Education Programs. It is common for generalist trained teachers to be expected to provide all or at least some elementary school physical education instruction. Although generalist trained teachers are certified to teach physical education, teachers who have been specifically prepared to teach physical education (i.e., physical education specialists) have acquired specialized knowledge of the subject area. Physical education specialists have developed an understanding about movement skills, performance assessment, risks and benefits of participation, and the promotion of student learning in a fast-moving environment (DeCorby, Halas, Dixon, Wintrup, & Janzen, 2005; Fox and Harris, 2003; Mandigo et al. 2004; Rink & Hall, 2008). Rink and Hall (2008) contended that organizing and managing a physically active lesson on a blacktop area, a large outdoor field, or in a gymnasium is far more complicated than that of the regular classroom where school children sit in desks.

“Effective teachers always know what is going on in the learning environment.”

(Mawer, 1995)

Teaching physical education is mainly a dynamic process (Bradford & Hickson, 2014; Metzler, 2005; Mawer, 1995; Rink & Hall, 2008). Physical educators must rely on direct and immediate observations of student performance to make decisions about what to do next (Metzler, 2005; Rink & Hall, 2008). In

effective physical education programs, children develop the knowledge, skills, and attitudes to live physically active lifestyles (Fishburne, 2005; Hickson, 2003; McKenzie, 2003; Metzler, 2005). These are not the high-level skills of professional athletes, but rather the essential building blocks for a lifetime of physical activity (McKenize, 2003; Fishburne, 2005; Rink & Hall, 2008). It is the role of the elementary school program to ensure that a wide variety of introductory experiences in different kinds of physical activity (e.g., dance, games, gymnastics) are provided. In effective physical education programming, every child will be provided with optimal opportunities to master the basic fundamental skills that support performance in varying motor activities, acquire self-efficacy, and, above all, believe that physical activity will play a large part throughout their lives (Fishburne, 2005; Pangrazi & Beighle, 2010; Rink & Hall, 2008).

On the contrary, Rink and Hall (2008) asserted that ineffective physical education programs either focus solely on specialized sport skills rather than fundamental motor skills or teach no skills at all (e.g., low-organizational and “fun” activities that do not teach). Children lose confidence in their ability to learn and perform and may choose to disengage from the task when inappropriate activities or inadequate opportunities to practice motor skills occur (Metzler, 2005; Rink, 2003; Rink & Hall, 2008). For example, a child waiting for his/her turn to practice a motor skill is an ineffective teaching practice. Waiting in line and sharing equipment are the equivalents of children sharing pencils and books in the classroom (Rink & Hall, 2008).

Several early ALT-PE studies revealed that in typical physical education settings students were only engaged in appropriate forms of practice about one-third of the class time (Mawer, 1995; Silverman, 1991). The remaining time was typically spent in organization and management activities and passive listening to verbal instruction. Most commonly, observations revealed that students spent far more time waiting their turn to practice than being engaged directly in the lesson content which resulted in lower levels of student learning; or unsuccessful teaching (Mawer, 1995; Rink, 2003).

Successful physical education teaching was often identified when students were participating (busy), behaving well (good), and enjoying the activities (happy) (Hickson, 2003). Placek (1982) found that teachers of physical education were more concerned about student behavior than student learning. In an attempt to advance the knowledge of teaching physical education, Placek (1983) then investigated preservice teachers' beliefs toward successful and unsuccessful teaching in physical education. Results from her research indicated that preservice teachers believed that successful teaching in physical education emerges when students are "busy, happy, and good" which aligned well with her previous study.

Years later, Hickson and Fishburne (2002) compared elementary school preservice teachers' and experienced elementary school teachers' beliefs toward successful physical education teaching to other subject areas. The trend of "busy, happy, and good" was evident for both preservice teachers and experienced teachers of physical education; children's learning was found to be a low priority (Hickson & Fishburne, 2002). However, student learning was rated as the highest

indicator of successful teaching when these same teachers considered other subject areas.

These studies insinuated that the definitions of effective teaching provided by several researchers (e.g., Berliner, 1987; Brophy, 1979; Gage, 1978; Harris, 1999; Hickson, 2003; Rink, 2003; Rosenhine, 1987; Tatar, 2004; Yilmaz, 2011) are quite different from those of the preservice and experienced teachers' beliefs. Whether the issue begins with the ineffective teacher's poor organizational skills, inadequate equipment, poor decision for children to practice the content, or belief that "busy, happy, good" is effective teaching, the result is lack of practice which does not promote learning (Bradford, & Hickson, 2014; Placek, 1983; Hickson, 2003; Hickson & Fishburne, 2002; Metzler, 2005; Rink, 2003; Rink & Hall, 2008).

"In-school physical education has the potential to reach far more children and youth than any other kind of physical activity structure." (Hellison, 2003)

The costs and consequences of choosing to live physically inactive lifestyles are enormous (McKenzie, 2003; Pangrazi & Beighle, 2010). School-based physical education has the potential to help shape the place physical activity occupies in our lives (Hellison, 2003; McKenzie, 2003; Rink & Hall, 2008). In fact, the most physically active adolescents and adults are also likely to be those who have experienced structured sport or physical activities as school children (Rink & Hall, 2008). Therefore, preparation for adolescent and adult participation in physical activity involves laying a foundation of fundamental motor skills that can be subsequently developed into activity-specific patterns. Rink and Hall

(2008) stated that six target areas must be met for a physical education program to be considered effective. Effective physical education programs must: develop motor skills; impart knowledge required for a physically active lifestyle; encourage regular participation in physical activity; facilitate the development and maintenance of fitness; cultivate responsible personal and social behaviors; and promote the value of participation in physical activity. Solmon (2003) suggested the strongest of the six areas identified by Rink and Hall is competence at performing and confidence in using *motor skills* both of which are established through early experiences in physical activity and sport. Solmon's belief is shared by Fishburne (2005); sensitive time periods for motor skill development occur in a child's early years of school. According to Fishburne, "although motor skill development is subject to change over the entire life span, the elementary school years are considered a crucial time for determining optimum development" (p. 104). Therefore, in order to establish effective physical education programs, it is critical that researchers continue to identify characteristics of effective teaching in this subject area.

Characteristics of Effective Teaching in Physical Education. With regard to effective teaching in physical education, Siedentop (1998 as cited in Hickson, 2003) suggested that studies indicate that several teachers believe their teaching practices are effective. This self-evaluation of effectiveness is based primarily on the teacher's own perception of important teaching criteria (e.g., feedback, demonstration, children's enjoyment) (Hickson, 2003). In a review of research, Rink and Hall (2008) asserted that effective teaching in physical education occurs

when school children acquire the skills to lead a physically active lifestyle. Effective teachers not only contribute to children's choices toward physical activity during their elementary school years but they also affect their choices as adolescents and adults (McKenzie, 2003; Rink & Hall, 2008). Teachers who are effective in physical education have been found to promote learning outcomes related to physically active lifestyles, develop learning opportunities to reach intended learning outcomes, and assess the extent to which intended learning outcomes have been achieved (Metzler, 2005; Rink & Hall, 2008).

Effective teachers have a clear vision of the developmentally appropriate repertoire of motor skills that all children should learn and then must devise lesson structures that leaves no child behind (Mawer, 1995; Rink & Hall, 2008). Children are engaged at a high level in learning lesson content for a large part of each class period. Therefore, teachers must be effective in several key areas. Effective teachers are cognizant toward planning, establishing routines, class management, developmentally appropriateness, assessment, and task presentation (Mawer, 1995; Metzler, 2005; Rink, 2003; Rink & Hall, 2008).

“Students must understand that class time in physical education is learning time, and that the gymnasium or other physical education settings are places for learning – just like all other classrooms in the school.” (Metzler, 2005)

Planning. Teachers that are effective in physical education are well organized (Rink & Hall, 2008). Rink (2006) stated that effective teachers facilitate learning by planning well beyond daily lessons and by developing content with a progression of tasks that lead school children toward higher levels of competency.

According to Metzler (2005), “Effective teaching does not happen by accident. Teachers who are better prepared for class use class time and other resources more efficiently, increase appropriate student engagement, and promote higher levels of student learning” (p. 118). Effective teachers who are well planned have been found to provide children with more academic learning time in physical education (Mawer, 1995; Rink & Hall, 2008).

Established Routines. Throughout the research field in physical education teaching, establishing routines has been identified as an effective approach to teaching (Rink & Hall, 2008). It is the teacher’s responsibility to establish the learning environment by making children aware of particular expectations, rules, conduct, and routines that apply in physical education (Metzler, 2005). For example, effective teachers establish routines for entering and leaving the learning environment; collecting and returning equipment; starting and stopping a learning activity; handling equipment during class discussions; and converging for instruction and task presentation (Rink & Hall, 2008). School children appreciate the security of knowing what to do from the time they enter the learning environment until they leave (Pangrazi & Beighle, 2010).

Class Management. Teachers’ background experiences and their level of teaching skills influence many aspects of their teaching, including their expectations for children’s behavior and learning (Ennis, 2003). Managing a group of school children in physical education can be a difficult task if a teacher’s management skills are limited.

Effective teachers have clear expectations for children (Metzler, 2005; Rink & Hall, 2008). Effective teachers enforce and maintain children's behaviors required to minimize unengaged student time whilst maximizing the time devoted to active and appropriate learning (e.g., present material clearly to children, select developmentally appropriate content). When a physical education lesson is well managed, the learning experience compares to classroom instruction; credibility is brought to the program (Pangrazi & Beighle, 2010). For example, effective teachers are capable of making smooth transitions from one activity to another and understand how to anticipate events (e.g., foreseeable risks) (Rink & Hall, 2008).

Effective teachers are able to visually scan the learning environment for potential issues and use physical proximity to control children (Mawer, 1995; Metzler, 2005; Rink & Hall, 2008). When potential issues do arise, effective teachers are proficient at adjusting or modifying activities; they have "with-it-ness" (Metzler, 2005; Rink & Hall, 2008). Metzler (2005) contended that a teacher with good "with-it-ness" is able to monitor class events whilst fulfilling other tasks simultaneously.

Developmentally Appropriateness. In order for school children to obtain the knowledge, skills, and attitudes to live physically active lifestyles, they must be engaged in physical education programs that promote developmentally appropriate activities (Fishburne, 2005; Metzler, 2005). Teachers who have been identified as effective guide low- and average-skilled children to more successful practice situations and, at the same time, challenge high-skilled children by

inviting them to try more difficult activities (Rink & Hall, 2008). For example, effective teachers in physical education are able to select appropriate activities for children with particular developmental ages, experiences, and motor abilities; they help children reach a level of success for each activity that is challenging but achievable (Bradford, & Hickson, 2014; Metzler, 2005; Rink & Hall, 2008; Wuest & Bucher, 1995). Therefore, effective teachers recognize that activities in physical education can be inappropriate when they are too difficult and, on the other hand, when children are not challenged enough (Metzler, 2005; Rink & Hall, 2008).

Assessment. Quality physical education programs are based on standards of learning (Metzler, 2005). When children are learning in physical education, proper assessment of their skills must occur so that they understand areas of strengths and weaknesses. However, the quality of feedback is more important than the quantity (Rink & Hall, 2008). Rink and Hall (2008) contended that effective teachers provide feedback to children while simultaneously monitoring the entire class, use a variety of means to provide feedback other than just teacher to student (e.g., video replays, peer evaluations), and provide relevant feedback (e.g., specific, positive feedback) (Metzler, 2005; Rink, 1993; Rink & Hall, 2008). Rink (1993) contended that the type of assessment used depends on the purpose for which the information is being gathered and the type of information desired. Effective teachers understand that children with lower skill levels receive more benefits from specific, positive feedback than children with higher skill levels. Teachers who are effective in physical education observe children practicing, analyze their movement, and provide cues that will help them concentrate on an

aspect of the movement that will lead to enhanced motor skill ability (Metzler, 2005; Rink, 1993; Rink & Hall, 2008).

“Students develop a sense of competence or lack of it largely through previous experiences of success and failure.” (Rink, 2003)

Task Presentation. School children require the ability to perform motor skills and the knowledge about performance to be physically educated individuals (Ennis, 2003; Hickson, 2005). Teachers of physical education must destroy the myth that being “good” and “not good” at motor skills is a permanent trait that children are born with (Rink, 2002). Teachers must educate children about how motor skills are learned, rather than simply telling them they are good performers when they are not (Rink, 2002). As was discussed above, the development of motor skills is fundamentally the most critical element in physical education (Rink, 2003).

Effective teachers help children develop motor skills so that they are better equipped to choose physically active lifestyles (Fishburne, 2005; Mawer, 1995; Metzler, 2005; Pangrazi & Beighle, 2010; Rink, 2003; Rink & Hall, 2008). In order to help children develop motor skills, teachers must support children’s learning styles. Rink and Hall (2008) asserted that effective teachers know that children rely heavily on visual information. Therefore, they implement accurate visual demonstrations critical to the presentation of motor skill content. Effective teachers perform motor skill demonstrations that communicate correct information (Mawer, 1995; Rink, 2003; Rink & Hall, 2008). For example, during a motor skill demonstration, effective teachers reveal the desired performance

stripped of all unessential elements, at both natural and slower speeds of execution, while verbally emphasizing only the important performance cues for the motor skill.

As in the academic classroom, children's success will be highly related to how clearly the teacher presents the task (Metzler, 2005; Rink, 2003; Rink & Hall, 2008). For example, when children are sent off to practice a motor skill, they require a "motor plan" and that plan is established through clear verbal presentations and explicit modeling by effective teachers. According to Mawer (1995), "observation of an appropriate model is particularly important at this early stage of learning because learners need a clear idea of what they are aiming to achieve" (p. 168). A solid task presentation requires the teacher to obtain the children's attention, sequence the content and organizational aspects of the skill, communicate skills verbally as well as through demonstrations, use examples of good performance, and check for understanding (Metzler, 2005; Rink, 2006).

Importance of Moving. As stated previously in this section, there are similarities and differences for effective teaching in classroom curriculum areas and physical education. In classroom lessons, verbal instruction may consume the majority of the lesson (Rink & Hall, 2008). However, in physical education, verbal instruction must be brief and clear if valuable time for active practice is to be preserved (Metzler, 2005; Rink & Hall, 2008). For example, teacher-student communication in the classroom is likely to involve the teacher asking questions and the students responding to those questions; however, in physical education, the teacher often presents movement tasks and students respond motorically.

Effective teachers in physical education understand that children learn by moving, not by listening (Mawer, 1995; Rink & Hall, 2008). Therefore, effective teachers in physical education plan and teach in ways that move children towards the adoption of physically active lifestyles.

Teacher as a Role Model

“Every experience influences in some degree the objective conditions under which further experiences are had.” (Dewey, 1938)

Professionals who teach, lead, or mentor have unique opportunities to influence the behaviors of students through their own personal actions (Good & Brophy, 1991). Their actions become an aspect of their instructional methods, showcasing their knowledge and beliefs about their subject matter; that is, good teaching includes good role modeling. With the skills, talents, and attitudes they possess or lack, school teachers are one of the key, perhaps the most important, building blocks of the educational system (Yilmaz, 2011).

School children who believe they are accepted by teachers and peers at school and who perceive their teachers as caring are more likely to choose healthy behaviors and less likely to engage in risky behaviors (Vidourek, King, Bernard, Murnan, & Nabors, 2011). Therefore, schools that promote positive school climates increase the likelihood that their school children will connect to teachers positively, which is a primary component in student learning. Cardinal (2001) contended that because teachers are typically perceived as highly relevant and credible role models for children, they possess the power to affect school children's attitudes and behaviors profoundly. In fact, teachers possess the unique

opportunity to impact school children in a positive manner every school day (Vidourek, et al., 2011).

The teacher as a role model for school children has been well-documented (Smith-Mohamed, 1998; Shein & Chiou, 2011). For example, Gilmer, Speck, Bradley, Harrell, and Belyea (1996) found teachers, along with coaches, to be the most frequently cited nonfamily member adult role models for children. The theoretical basis for role modeling stems from Bandura's (1986) social cognitive theory. Specifically, modeling refers to one's ability to learn by observing the actions of others and the results of those actions (Cardinal, 2001). In support of this, psychological theories suggest that people often emulate those around them who are perceived to be similar (Erkut & Mokros, 1984, Smith-Mohamed, 1998) and the relationship can positively impact inspiration, improve self-image, enhance confidence (Erkut & Mokros, 1984; Wright & Wright, 1987), and support learning processes (Shein & Chiou, 2011). However, what is actually considered as role modeling can be quite varied in schools. On the basis of the social cognitive theory (Bandura, 1986), role modeling is believed to be a fundamental mode of communication for teachers and, subsequently, a fundamental mode of learning (Cardinal, 2001).

In a recent study on teachers as role models (Vidourek, et al., 2011), it was reported that teachers who were enthusiastic toward the learners and the subject material create more positive and welcoming learning environments. Vidourek et al. (2011) stated that "teachers who demonstrate consistent enthusiasm in the classroom act as an impetus for student academic achievement and motivate

students to connect to others and the school as a whole” (p. 124). Teachers who role model positively in the classroom by employing enthusiasm and excitement toward the learning outcomes contribute to academic success by encouraging children to participate willingly in learning activities and to maintain on-task focus (Yilmaz, 2011).

In education, Vidourek et al. (2011) contended that enthusiasm for teaching is commonly defined as teachers’ use of eye contact, facial expression, vocalization, gesturing, and movement across the learning environment. Teachers are in a unique position to role model a caring attitude through recognition of each child in the learning environment as well as modeling key behaviors of concern, support and understanding for all school children (Martino & Rezai-Rashti, 2012; Vidourek, et al., 2011).

Teacher as a Role Model in Physical Education

Role modeling is a powerful teaching tool. (Cardinal & Cardinal, 2001)

It is both known and accepted that positive, competent role modeling by teachers has a significant impact on desired practices formed by school children (Bradford & Hickson, in press). This is especially important for instruction in physical education (Dean, Adams, & Comeau, 2005). Physical education researchers have agreed that as a result of the nature of the physical educators’ leadership position, physical education teachers become models for their students naturally (Whitley, Sage, & Butcher, 1988). Hence, modeling behaviors that promote physical activity and fitness is a key principle for those involved in health, physical education, recreation, and dance.

As teachers of physical education strive to influence the population at large, lifestyle physical activities may be the most critical ones for them to role model for school children. Understanding the relative contributions of role modeling physical activity and fitness-promoting behaviours toward children has been identified as an understudied and potentially powerful influence in promoting physically active lifestyles within society (Cardinal, 2001). The National Association of Sport and Physical Education (NASPE) (2004) suggested that teachers of physical education should teach children what to do to be healthy and fit, how to do it, and why it is important to be healthy and fit. Therefore, the actions of teachers of physical education seem to be as important as the material being presented during lessons. Hence, the actions and appearance of a teacher during a lesson is a form of role modeling (Pangrazi & Beighle, 2010). For example, teachers of physical education who take pride in being physically active and demonstrate motor skills during lessons can influence school children in a positive manner (Pangrazi & Beighle, 2010). Fishburne (2005) agreed with this statement. He stressed that teachers of physical education should demonstrate motor skills and participate regularly in the physical activities with children during lessons.

Teachers cannot choose when to role model, but in fact, are role models of behavior at all times (Dean et al., 2005; Good & Brophy, 1973). As a result, they must be aware of the potential influence that role modeling can have on the physical and social behavior of their students. Teachers of physical education have a professional responsibility to role model active lifestyles and fitness-

promoting behaviors (NASPE, 1999). In assuming this responsibility, a teacher of physical education should be fit, set an example for others, and be devoted to helping others understand that good health is more choice than chance.

Demonstrator as a Role Model. Presenting a physical or motor task by role modeling is one of the most powerful forms of communicating to school children in physical education (Bradford & Hickson, in press; Vogler, 2003). An underlining basis for modeling is that it becomes easier to perform a motor task more proficiently after watching the task being modeled (Vogler, 2003).

Researchers have demonstrated that the effectiveness of a presented model depends on the status and skill level of the role model (Magill, 1997). The use of demonstration is part of a larger issue related to presenting information clearly to learners and is better understood as part of the process of communication.

The combination of verbal and visual information and rehearsal are most effective when the objective is to provide the learner with a clear idea of how to perform a motor task (Rink, 2003). Fishburne (2005) further postulated that teachers, in order to demonstrate motor skills, must consider the appropriateness of their clothing for physical activity. When teachers of physical education demonstrate motor skills, participate in physical activities with children, and display enthusiasm consistently during lessons can help children reach higher levels of motivation (Vidourek et al., 2011). Therefore, a teacher's choice of clothing (i.e., personal presentation) in physical education might have the potential to impact the learning environment. For example, it is more realistic for a teacher of physical education to role model various skipping game activities

correctly whilst wearing traditional athletic style attire with running shoes as opposed to dress pants with dress shoes.

Research Studies in Physical Education. An array of research studies have been conducted on teacher as a role model in physical education (Cardinal, 2001; Cardinal & Cardinal, 2001; Dean et al., 2005; Melville & Cardinal, 1997; Price, Desmond, & Ruppert, 1990). There have been minimal, if any, studies that relate directly to this study as it pertains to teacher clothing. However, researchers have concluded from previous studies that student perception toward teachers and the learning environment does impact student learning. The following section will describe an array of studies found through a review of related literature that closely, but not exactly, resembles the purpose of this study.

“Whether they like it or not, physical educators must view themselves as role models.” (Dean et al., 2005)

It is essential that, as role models, physical educators exhibit healthy lifestyle practices to optimize teaching effectiveness (Cardinal & Cardinal, 2001). Too often, an individual’s apparent fitness level is based on others’ visual perceptions (Thomson, 1996). Accordingly, a perception in fitness is often determined by the overall physical appearance of an individual. In brief, body shape and body composition are components of one’s overall physical appearance, and are two of the variables that affect the way physical educators are perceived and responded to by their students (Thomson, 1996). Physical educators who model good health behaviors will have a more positive impact on their

students, whereas, those who exhibit poor health habits may act as negative role models (Butcher & Thaxton, 1981).

With this being said, a study conducted by Dean et al. (2005) aimed to determine whether a female physical educator's physical appearance affected the cognitive performance of junior high school students on a test of health-related fitness knowledge and to determine whether her appearance affected students' attitudes towards her. Ninety-three grade 7-9 students participated in the experimental design. The independent variable (i.e., teacher's appearance) was manipulated. Over the span of 6-weeks, the female teacher taught the same unit on health-related fitness knowledge to two classes. In one class, the teacher wore specially designed body clothing making her appear physically heavier and in the other class, the teacher wore regular clothing reflecting her normal physical appearance. The clothes she wore whilst teaching were identical in both classes. The only differences with her clothes were the two sizes (i.e., size 6 and 18).

The instruments employed in this study were a health-related fitness examination (Bross, 1993) and a student attitude and behavioral intention questionnaire (SAQ) (Melville & Maddalozzo, 1988). The findings indicated that the physical appearance of obesity does affect the test scores of junior high school students on health-related fitness knowledge. This is consistent with previous research comparing the effects of physical appearance on student performance (Melville, 1999; Thomson, 1996). However, the teacher's physical appearance seemed less of a factor in their attitudes toward the teacher. Both classes had SAQ sums that reflected positive perceptions toward the female physical educator.

Dean et al. (2005) contended that a probable explanation was the physical educator was physically active and participated in both classes.

The study found that, between the two classes, the acquired knowledge differed but the student perceptions towards the teacher did not. Dean et al. (2005) stated that it is possible students have trouble valuing knowledge when they perceive that the instructor does not model the information presented which may explain the differences in knowledge performance. However, the specially designed suit worn by the teacher in the experimental class allowed physical movement that was identical for both classes. The fact that the teacher was obese seemed less important than her physical abilities (Dean et al., 2005). As the students observed the obese teacher's mobility over the course of the 6-weeks, they may have perceived she was not limited by her size, and the issue became less important. Thus, the students began to concentrate more on teacher qualities and personal characteristics and less on physical appearance and fitness level (Dean et al., 2005).

Initially, students' first impressions reflected uncertainty in the class with the obese teacher, but it seemed clear to the research team that the students' perceptions were altered once they observed the teacher in action. Results of this study indicate that the teacher's personality, characteristics, training, enthusiasm, and efficacy seems to be better indicators of student perceptions towards the teacher as opposed to the teacher's physical appearance. Nonetheless, there was no mention of the type of clothing being worn by the teacher. The only mention of

teacher clothing was that the sizes differed between the two classes. Could the clothes have impacted the students' perceptions throughout the study?

In a cross-sectional study conducted by Cardinal (2001), the purpose was (1) to describe the physical activity and fitness-promoting behaviors of teachers and preservice teachers of physical education and (2) to gain a better understanding of their attitudes toward role modeling. Cardinal included four sub-questions which focused upon teachers' and preservice teachers' percentages of regular physical activity, physical classifications of these teachers (i.e., underweight, acceptable weight, overweight, and obese), their attitudes toward role modeling, and whether their attitudes differed upon their physical classifications). The instrument employed by Cardinal was his *Attitude toward Role Modeling Questionnaire* (Cardinal et al., 1998). A total of 551 out of 1210 (i.e., 45.5%) surveys were returned by the adult participants and the majority of survey respondents were physically active (i.e., 83%). Many, but certainly not all, of the study's participants seemed to embrace the idea by "practicing what they preached" and identifying their important role as models of physical activity and fitness-promoting behaviors.

However, in a study conducted by Cardinal and Cardinal (2001), it was found that when role modeling was defined in terms of actual participation in appropriate physical activity and fitness behaviors – or in terms of being accountable for these behaviors – it received less support from the study's participants. Whether this suggests a "do as I say, not as I do" attitude cannot be determined with certainty. Nonetheless, it does raise this possibility, which should

serve to stimulate continued dialogue on this important topic (Cardinal & Cardinal, 2001).

Melville (1999) contended that teachers and pre-service teachers of physical education with less favorable attitudes toward role modeling and who do not engage in physical activity and fitness promoting behaviors on a regular basis may be underutilizing a potentially powerful mechanism for children's learning. For example, Melville and Maddalozzo (1988) and Thomson (1996) concluded that teachers of physical education who appeared to be physically fit influenced students' academic performance and behavioral intentions to be physically active more positively than those who appeared to be physically unfit. Both studies indicated that teachers of physical education can enhance teaching effectiveness if they are perceived by their grade six and seven students as being physically fit.

Two studies found that the majority of teachers of physical education (Price et al., 1990) and pre-service teachers of physical education (Savage, 1995) surveyed believed they could help enhance children's self-efficacy and learning toward physical activity by role modeling physical activity and fitness-promoting behaviors and maintaining a normal body weight.

An experimental study conducted by Melville and Maddalozzo (1988) concluded that a teacher of physical education who appeared to be physically fit had a more positive influence on high school students' academic performance and behavioral intentions to be physically active, compared to a teacher of physical education who appeared to be physically unfit.

Ideally, good teachers model, and thus teach, the most current information in their field. Since the promotion of “healthy, active lifestyles” appears to be a primary goal of physical education, one could assume that good teachers in this field teach and role model the most favored behaviors and processes for improving their health and physical fitness (Dean et al., 2005). Research in the area relating physical appearance to teacher effectiveness is limited (Dean et al., 2005).

However, the findings throughout the research studies described previously in this section offer some insight toward the teacher as a role model in physical education. The majority of the research findings on the teacher as a role model in physical educating seems to indicate that students have an easier time acquiring the knowledge and becoming motivated toward learning when teachers themselves “practice what the preach.” Although attitudes and actions are often considered when discussing the teacher as a role model, the *symbolism of clothing* is a topic area that has not received great attention in physical education. Therefore, in light of this lack of previous research and understanding, the issue of teacher clothing and its influence, if any, on elementary school children’s perceptions of the teacher is worthy of consideration. Newly constructed knowledge in this area may help add applicable knowledge to the studies mentioned previously and to the notion of teacher as a role model.

Symbolism of Clothing

In order to develop a deeper understanding toward the symbolism of clothing, it seems important to, first, build an appreciation of when clothing began

to affect people's perceptions of themselves and others. At what period in time did clothing become so deeply embedded in how people perceived themselves and others? The following section reflects on a time period when perceptions of self and others began to occur due to the types of clothes being worn.

Historical Overview. Throughout history, clothing has served as a symbol of status in some manner. Whether by sumptuary law or prohibitive cost, specific clothing items were designated for the exclusive use of people with power and status (Sybers & Roach, 1962). Rublack (2011), who teaches early modern European history at Cambridge University, contended that the Renaissance period was a turning point (i.e., c. 1300 to 1600) for the clothing industry. Rublack, who is also the author of "Dressing Up: Cultural Identity in Renaissance Europe" (Oxford University Press, 2010) stated that after 1300, a much wider variety and number of goods was produced and consumed across the globe (e.g., clothing). During this same time period, new forms of media (e.g., art) and the spread of mirrors led to more individuals becoming interested in their self-image, fashion, and trying to imagine how they were perceived by others.

"Clothing has changed the ways in which we feel and behave."(Rublack, 2011)

The word "fashion" gained currency in different languages during the Renaissance period. "Fashion" in the English language originated from the Latin word for "making." Rublack (2011) contended it was first used in 1550 to refer to a *temporary mode of dress* in Andrew Boorde's Book of Knowledge and this new preoccupation with fashion extended beyond the continent. For example, in 1570, a Chinese student, named Chen Yao, wrote about how fashion (i.e., shiyang,

which translates as “the look of the moment”) in his region of China had changed without warning (e.g., hairstyles, accessories) (Rublack, 2011).

Although many people perceived themselves in a better light during this period, Rublack (2011) and Currie (2008) asserted that several others reacted with shock to these cultural transformations. Stability, or a return to old customs, signalled order, whereas change, and especially constant change, was perceived to be threatening and corrupting. For example, moralists warned that clear principles should be followed concerning who should wear what in terms of their profession and bodily needs in different climates. These moralists believed that when the correct type of clothing was identified there would be no reason ever to change (Currie, 2008; Rublack, 2011).

As an example, individuals of an elite status strived to preserve the signalling of high rank through fine clothing (Currie, 2008; Rublack, 2011). Sumptuary laws, dating from Roman times and named after the Latin word “sumptus” meaning “expense,” had multiplied during the Renaissance period. These sumptuary laws aimed to limit the amount of money wealthy individuals could spend on clothing in order to limit competitive spending. These laws also set out what kinds of materials and sometimes even colors each status could wear (Rublack, 2011).

“Clothing made one historical.” (Rublack, 2011)

European moralists truly believed that clothing shaped people’s mentalities and that wearing clothes from foreign countries, for instance, would turn an individual into becoming licentious. Rublack (2011) and Currie (2008)

asserted that moralists were also concerned about the loss of “national” customs of behavior and becoming completely unidentifiable in any national, political or moral sense. It is important to acknowledge that our world today is not only developed in our modern times, but also influenced by such time periods as the Renaissance. Messages reflected in clothing about self-esteem, erotic appeal, or social development are all familiar to us today. Since they first surfaced, people have had to deal with issues about self-image and perceptions and whether clothes wear us or we wear them. Wardrobes could become repositories of fantasies and insecurities, as well as reflecting expectations of how an individual may be perceived by others (Rublack, 2011). A case could certainly be made for thinking that clothing has not only changed throughout history, but it has also changed history!

Research Studies. Whether accurate or not, perceptions about a person based on clothing serve as a source of information, a foundation for perception (Molloy, 1975; Roach, 1997). Over the years, an array of research studies has been conducted on the symbolism of clothing. According to Sybers and Roach (1962), “the first formal exploration of areas of possible research in textiles and clothing related to the social sciences was at a conference of home economists, sociologists, psychologists, and economists held in 1947 at Teacher’s College, Columbia University” (p. 185).

The following section briefly describes an array of studies that have been conducted over the years to illustrate the affect clothing can have on people’s perceptions. The section begins with studies of a general nature, filters down into

specific studies conducted in the learning environment, and ends with a more detailed overview of three studies that align with this study.

Knowles (1973) found that individuals who walk down a street are significantly less likely to walk between two individuals speaking to each other when the speakers are dressed in formal business attire as opposed to when the conversing people are dressed in informal attire. Schneider (1974) found that individuals present themselves in a more positive manner when they are well dressed as opposed to when they are poorly dressed. Athletes in uniform were rated more favorably on professionalism, team spirit, coordination, natural ability, and muscular strength than when they were not in uniform (Harris, Ramsey, Sims, & Stevenson, 1974).

Rosenfeld and Plax (1977) contended that clothing can be an indication of the personality or psychological disposition of an individual. Individuals wearing powerful clothes (e.g. dark blue and dark grey business suits, dress shirts, ties) (Molloy, 1975) will have a tendency to feel more powerful, confident, and assertive. Due to these feelings, the individuals may engage in powerful, confident, and assertive behaviors in social interactions. For example, how an individual feels internally will affect how he/she behaves externally (Roach, 1997).

Hensley (1981) found that, when asking for dimes to make a phone call, well-dressed individuals received more money at the airport; poorly dressed people received more money at the bus station. Professional athletes who wear black uniforms are perceived as playing rougher which supports the idea that

clothing has internal effects on the wearer and an influencing effect on how the individual is perceived by others. Rosenberg, Kahn, and Tran (1991) investigated the role of shaping candidate appearance and manipulating the vote in a political context. They found that, in terms of female candidate clothing, simple contrasts or white is preferred to dark or patterned outfits, and necklaces and earrings create a more favourable political image than no jewelry at all.

A considerable amount of evidence was found concerning how a public speaker's personal appearance affects how the audience will respond to him/her and the message, particularly during the initial moments of the presentation (Beebe & Beebe, 1997). Greater speaker persuasiveness may be fostered from enhanced perceptions of speaker competence, credibility, and professionalism that professional clothing tends to create (Roach, 1997).

Whether an individual chooses to wear expensive, formal clothing to project an image of higher status or because he/she has high status, the effect on how others perceive and react to the individual is similar (Roach, 1997). The studies conducted in general nature listed previously in this section illustrate that clothing does affect the perceptions of self and others. However, Gorham, Cohen, and Morris (1999) do warn that it is problematic to generalize findings from research studies conducted in non-classroom settings to education learning environments. For the purposes of this study, the focus now turns to the symbolism of clothing in the learning environment.

Symbolism of Teacher Clothing

“Appropriate dress is a sign that an individual is responding to situational demands.” (Workman & Freeburg, 2009)

What a person chooses to wear is a powerful communicator (Damhorst, Miller-Spillman, & Michelman, 2005; Roach, 1997). Roach (1997) contended that attire can be an indication of attitudes, beliefs, and values an individual holds. Many initial and enduring perceptions of a person are formed by simple observations and evaluations of the clothing he/she wears (Roach, 1997). Workman and Freeburg (2009) and Roach (1997) concurred that a teacher's choice of clothing is one form of communication that provides information about appropriate dispositions and behaviors. In support of these statements, Underwood, Kenner, and McCune (2002) found that a teacher's appearance is essentially a non-verbal form of communication which influences the validity of the spoken word. Therefore, what a teacher chooses to wear can impact the way others in the school environment (e.g., children, administrators, teachers) form perceptions about the teacher. As part of the learning environment, what a teacher chooses to wear models his/her expectations and standards (Freeburg & Workman, 2010) and can act as a primary impression management tool (Molloy, 1975). A teacher's choice of clothing is a multi-faceted set of interconnected elements of his/her role and identity (Workman & Freeburg, 2009). Freeburg and Workman (2010) further contended that teachers identified as role models should consider their choice of clothing in order to gain the level of respect and authority that they expect from their school children.

Research Studies in the Learning Environment. When it comes to research studies concerning the symbolism of clothing, Morris, Gorham, Cohen, and Huffman (1996) suggested that caution must be taken when drawing conclusions regarding potential payoffs of teacher clothing based upon literature not specifically concerned with the learning environment. In support of this statement, a few empirical studies have investigated the effects of clothing in learning environments.

“One of the reasons teachers are not paid as professionals is that they don’t look like professionals, and until they do look like professionals, they will never be paid like professionals.” (Molloy, 1975)

In relation to student perceptions toward their teachers, Davis et al.(1992) found that students in junior high school, when shown photos of teachers in formal clothing and in casual attire, expected there to be more respect shown to the teachers in formal clothing as opposed to the teachers in casual attire. Hickson and Stacks (1993) contended that even if a teacher’s clothing was not chosen with intent to communicate, its interpretation as a function of individual choice give it communicative relevance. Lukavsky, Butler, and Harden (1995) examined the effects of female teacher clothing on student perceptions of teacher characteristics. In the study, teachers with informal clothing were rated as most approachable, flexible, and, however, with the least respect. A further study found a significant relationship between teacher clothing and perceptions of teacher credibility (Westmyer & Flaherty, 1996).

Teacher clothing may influence student affect for the teacher, student mood, student motivation to learn, and student perceptions that learning activities are important (Hickson, & Bradford, 2012; Roach, 1997). Roach (1997) contended that if the teacher's clothing is a fashion to suggest that the learning environment is an important place to be, the students may respond by adopting more professional attitudes toward class discussions, preparing assignments, and studying. These types of student behaviors are likely to enhance student learning.

There are few studies that align with this dissertation. Although the following studies were conducted in the learning environment at the university level, they have identified some important issues affecting students' perceptions toward their teachers in relation to teacher clothing.

The purpose of Roach's (1997) study was to explore the effects of Graduate Teacher Assistants (GTAs) clothing while teaching. Specifically, Roach's study examined the relationship between GTA clothing and student perceptions toward affective/cognitive learning, student misbehaviours, and student ratings of instruction. The study's sub-questions included: to what extent are student perceptions of GTA clothing related to (1) student affective learning, (2) student cognitive learning, (3) student self-reported likelihood of misbehaviours, and (4) student ratings of instruction.

The study included 355 students, with a mean age of 21, enrolled in basic communication courses at a large university. After several weeks of continuing interaction with teachers in natural classroom settings, students were asked to rate the clothing of their GTAs using seven bipolar descriptors (i.e., informal-formal,

wrinkled-pressed, inappropriate-appropriate, dirty-clean, professional-nonprofessional, neat-sloppy, fashionable-unfashionable) and to complete teacher perception and learning measures. A “professional dress score” was calculated by summing responses to the clothing descriptors and a standard deviation split was employed to categorize teachers into three “professional clothing categories” (i.e., high, moderate, and low professional clothing). The students filled out information from classes spanning across all subject areas (e.g., Social Sciences, Geo-Sciences, Foreign Languages, Business, Physical Education, etc.).

An array of instruments was used to measure student perceptions, affective learning, cognitive learning, student misbehaviours, and student clothing orientations. However, for the purpose of comparing Roach’s (1997) study to my study, a focus will now key in solely on the relationship between teacher clothing and students perceptions toward their learning.

Affective learning was measured with a scale developed by Gorham (1988). Using a 7-point semantic differential scale, participants responded to the following items: attitudes toward course content; attitudes towards behaviours recommended in this class; attitudes toward the teacher of this class; likelihood of engaging in behaviours recommended in this class; likelihood of enrolling in another course of this type; and likelihood of taking another course with the teacher of this course. Alpha reliability, or Cronbach’s alpha, which provides an estimate of the reliability of a homogeneous test or of each dimension in a multidimensional test (Johnson & Christensen, 2012), equalled 0.97 in the affective learning measure (Roach, 1997). Johnson and Christensen (2012)

contended that the size of Cronbach's alpha, which identifies the degree to which measurement items are interrelated (i.e., internal consistency), should generally be, at a minimum, greater than or equal to 0.70 for research purposes.

A scale adapted from Richmond, McCroskey, Kearney, and Plax (1987) was used to measure cognitive learning. Participants were invited to respond to the following questions using a scale (i.e., 0 = nothing to 9 = more than any other class you have ever had):

1. How much are you learning in this class?
2. How much do you think you could be learning in this class if you had an ideal instructor?
3. How much knowledge/understanding are you gaining in this class?
4. If this class were being taught by the best possible instructor, how much do you think you could be learning?

During the analysis stage, Roach (1997) declined to compute the second and fourth questions because "learning loss" was not being explored. Alpha reliability for the cognitive learning measure equalled 0.94 (Roach, 1997) which means that the measurement items were found to be homogeneous with internal consistency (Johnson & Christensen, 2012).

The results found that the students own clothing orientations had no significant relationship with how they perceived their teachers. However, Roach (1997) found a significant positive correlation ($r = .50$, $p = .0001$) between teacher clothing and student affective learning, indicating a strong moderate relationship. Teachers that were high in professional clothing had students who reported higher

levels of affective learning than teachers with moderate or low professional clothing levels. Likewise, teachers identified as wearing a moderate level of professional clothing had students who reported levels of affective learning lower than the teachers high in professional clothing, but higher than those wearing low professional clothing. Similarly, a significant positive correlation ($r = .36$, $p = .0001$) was found between the students' perceptions toward teacher clothing and students' cognitive learning, indicating a low to moderate relationship. Though it would be inappropriate to argue causality, results from this study indicate significant relationships between perceptions of teacher clothing and student affective and cognitive learning (Roach, 1997).

Roach (1997) contended that, in light of the study's results, high levels of professional teacher clothing create a positive, professional impression on students that is reflected in student perceptions toward the subject matter, the teacher, and the learning environment. It is reasonable to consider that professional teacher clothing is perceived by students as a sign that the teacher is serious about his/her role as an educator (Roach, 1997). Roach further asserted that the study's findings align with the general literature on clothing that point to positive influences associated with professional attire. A limiting factor in Roach's (1997) study was that the data were gathered from one university campus in one area of the country.

In comparison to Roach (1997), a study conducted by Gorham et al. (1999), which closely resembled Roach's, drew very different conclusions. The salient difference in the two approaches appeared to be in the operationalization of

the clothing variables. Roach encouraged students to evaluate their teachers' clothing using a series of bipolar descriptors (e.g., informal-formal, wrinkled-pressed) that were combined to calculate a "professional dress score." The study conducted by Gorham et al. invited students to describe what their teachers wore according to categories of clothing drawn from previous studies of attire effects on individual perceptions.

Gorham et al. (1999) disagreed with Roach's (1997) conclusion that more professional teacher clothing creates higher level of student respect for the teacher and the class in general and that the findings parallel, to a degree, the influence of clothing found in general attire literature. Gorham et al. contended that there is evidence of a reciprocity effect, with student respect for teachers related to their perception of teachers' respecting their role in the classroom enough to be clean, pressed, and neat. There is, however, no indication in Roach's findings that clean, pressed, neat, professional, appropriate, and fashionable teacher clothing necessarily translates to wearing a suit or equivalent standard business attire (i.e., the power dressing conclusion that has been borrowed from research in non-classroom contexts and translated to recommendations for teachers) (Gorham et al., 1999).

An important difference between Roach's (1997) design and the design employed by Gorham et al. (1999) is the method of clothing categorization. For example, Gorham et al. manipulated the style of teacher clothing by asking students to report what their teachers wore according to categories of dress drawn from previous studies of clothing effects on individual's perceptions (e.g., formal

professional, casual professional, and casual), while Roach directed students to evaluate the clothing of their teachers by employing seven bipolar descriptors (e.g., informal-formal). These conceptually different means of operationalizing the clothing variable helped lead to very different conclusions (Gorham et al., 1999).

Roach (1997) contended that throughout all the research studies conducted on clothing, classifying attire as sloppy, casual, and formal poses some problems. Though it is fairly easy to distinguish the extremes of the clothing continuum, it proves to be more difficult, for example, to determine what types of attire can be categorized as casual clothing. For example, khaki slacks can be perceived as casual or as more formal, depending on the situation and the evaluation. Therefore, it would seem advantageous methodologically to allow participants, in the classroom environment, to determine perceptually what represents informal, casual, formal, professional teacher clothing (Roach, 1997).

Symbolism of Teacher Clothing in Physical Education

Communication, voice, and appearance are critical in the face-to-face learning environment (Freeburg & Workman, 2010). First impressions, which lead to determined perceptions by students at the beginning of a class, are affected by a combination of teacher characteristics including the teacher's clothing (Workman & Freeburg, 2009). For example, the clothing being worn by a teacher in physical education must fit that of a person who is prepared to engage in physical activity or children may perceive the teacher as uncaring toward the subject area, not prepared to demonstrate the skills, and/or disinterested in

engaging in physical activities. According to Gordon (2010), “it appears that selection of professional attire enhances occupational attributes of teachers” (p. 48). Therefore, in physical education, teacher clothing that is associated with physical activity should be recognized as a teacher’s choice of attire. However, due to the fact that generalist trained elementary school teachers are required to teach a variety of subjects during a normal school day in many different locations (e.g., regular classrooms, art rooms, computer labs, gymnasias), what teachers choose to wear in physical education classes may not be at the forefront of their thinking.

Being radically over or under dressed in comparison to the expectations of others in a particular learning environment is likely to produce negative external perceptions for the wearer (Roach, 1997). Professional teacher clothing may convey a message to students that the teacher regards the learning activities as important where important concepts are discussed and important skills are taught (Hickson & Bradford, 2012; Roach, 1997). Students expect for teachers to be competent, professional, caring, and knowledgeable in the subject area they are teaching.

Clothing affects four kinds of perceptions: credibility, likability, interpersonal attractiveness, and dominance (Molloy, 1988). Out of the four listed, credibility and likability have been identified as the two most important image dimensions of first impression perceptions based on clothing (DeMeuse, 1987). Therefore, what teachers choose to wear in physical education may have major impacts on student perceptions at the beginning of the lesson.

Although Cooper (1995) noted that verbal communication can affect the classroom's mood, it is important to acknowledge that other nonverbal cues can also contribute to the classroom. This is an important view as physical education classes involve both verbal and nonverbal communication. In physical education, where effective teachers teach by moving (Metzler, 2005; Rink & Hall, 2008), teacher clothing must support the learning environment.

One important facet of clothing choice often overlooked in research studies is "practicality." "Practicality" was referred to by Roach (1997) as an individual's interest in the practical as opposed to the aesthetic value of clothing. When approaching the topic of teacher clothing, it may be helpful to explore and solidify definitional issues (Rublack, 2011). For example "professional" clothing generally refers to attire appropriate for a particular career position, role, and/or function. Clothing patterns appropriate for a particular profession would certainly differ, for example, between a life guard, a university instructor, and surgeon.

One study that supported the perception of teachers wearing clothes for practical reasons was conducted by Dougher and Gough (2006). Their study took place in a College of Agriculture (COA). Due to the hands-on nature of several agriculture classes, formal professional clothing was not always feasible (Dougher & Gough, 2006). The purpose of the study was to determine whether teacher clothing in the COA affected students' perceptions of teacher competency. The participants were majors in the COA at Montana State University.

Data were collected using a survey that requested students' age, sex, major, home background (e.g. rural farm), year in college, clothing of their

teachers, preference of clothing both for themselves and the faculty, level of comfort in formal clothing, the appropriateness of their teachers' clothing, preference for dress codes for teachers and students, and ranking of importance of course qualities including teacher clothing (Dougher & Gough, 2006). Students were surveyed twice four years apart in mid-November (i.e., 1998, 2002) to exclude a possible first-impression effect (Gorham et al., 1999).

Students in the COA were found to be comfortable with formal clothing in the classroom but were not influenced by the attire formality of the teacher. Students believed that teachers should not be required to dress formally, which is particularly useful in many COA classes that are held in the field, greenhouse, or laboratory (Dougher & Gough, 2006). When students ranked the importance of teacher clothing among five other teacher criteria (i.e., professionalism, method of presentation, method of grading, availability, course requirements), they ranked "method of presentation" first and "teacher clothing" last in both 1998 and 2002. From this study, it was deemed that teacher clothing was not important to the students.

A broader scope and depth of empirical research in this area is required to add to and confirm/disconfirm anecdotal information. Such research could positively impact the teacher training process and teaching effectiveness for educators. If the learning environment is perceived as important, particularly by the teacher, it is likely that students will respond by becoming more focused on their learning activities, which may, in turn, lead to higher levels of affective and cognitive learning (Roach, 1997).

Teachers often teach against uphill challenges (Roach, 1997). Therefore, it is logical to think that they would aim to obtain every technique, teaching principle, advantage, and situational control method that may enhance the effectiveness of their teaching. For example, developing an understanding of how students perceive teachers is critical for teachers; students will act and respond based on their perceptions (Roach, 1997). Future research should continue to probe the influences of teacher clothing in the learning environment (e.g., gymnasium). More knowledge is required on how teacher clothing affects students' perceptions during lessons involving motor skill development. Resulting from a review of the related literature, minimal, if any, studies have been conducted in the elementary school physical education setting concerning the relationship between teacher clothing and school children's perceptions.

Although there is an array of literature that focuses on the fact that clothing affects perceptions of self and others, developing a deeper understanding of *perception formation* (e.g., how, why, when perceptions are formed when an observer looks at what a person is wearing) was worthy of investigation for this study. Newly constructed knowledge in this area may help add applicable knowledge to the studies listed previously and to the notion that teacher clothing affects student perceptions in physical education.

Perception Formation

“The teaching profession is working hard to make itself more like other professions, undoubtedly not only to improve teaching, but to counter the common perception that ‘anyone can teach.’” (Joseph, 2001)

Over the course of the last century, school teachers have been perceived in many different ways, specifically and in general (Joseph & Burnaford, 2001; Nettleton, 1985). Throughout the following section, an overview of how teachers have been perceived over the years has been elaborated on followed by an in-depth investigation into perception formation.

Perceptions toward Teachers. Cartoons, visual art, poetry, television programs, and studies of perceptions toward teachers across diverse populations are media that deserve analysis (Joseph & Burnaford, 2001). Perceptions toward teachers have changed over the years. Unfortunately, there was a period in time when teachers were perceived to be negative, old females (Nettleton, 1985). There are stories about girls, scarcely older than their students, keeping school in one-room schoolhouses; young women and men from immigrant and working-class families deciding to teach because it offered that status of an educated profession; teachers as timid employees not only afraid to defend their own rights for fear of losing their jobs, but also fearful to speak up for the rights of others; etc. (Joseph & Burnaford, 2001). Upon searching for related literature on this topic area, two books were discovered that described several, specific and general, perceptions toward teachers (i.e., Joseph & Burnaford, 2001; Nettleton, 1985). There is limited work, if any, that included as much detail about how teachers were perceived by others as these two publications.

Nettleton (1985) pointed to several novels that were written over the years which described teachers based on memories. For example, in Astley's work written in 1958, called 'Girl with a Monkey,' a depressing picture was painted of

school as a place of mind-numbing pursuit of trivia, where the headmaster was a rotund tyrant and district inspectors were bizarrely ignorant men who knew a few tricky ways of wording a mental problem and all the hardest spellings for children under fourteen. In 1967, Oakley wrote 'A Wild Ass of a Man' and described a teacher who viewed school as a supervisory location until students turned fifteen years old and could leave school. According to Nettleton, in 1974, Braithwaite wrote 'To Sir with Love' in which he emphasized teaching elements in a new approach to the learning environment that were to be noted in later official reports. Nettleton pointed to the Newsom Reports which were written in 1963,

Much depends on thoughtful and efficient organization, but even more fundamental are the personal relations which exist between teachers and pupils. We leave the last word with head: 'The great thing is to like them.

If you don't, they'll know instinctively and you'll get nowhere with them.'

(p. 7)

Perceptions toward Teachers of Physical Education. Over the years, teachers have been perceived in many different ways. This has been no different for physical education teachers, and it could be argued that they have been perceived in a negative light by many people. Whilst discussing work written in 1974 by Oakley, Nettleton (1985) contended that in an educational system which was narrowly academic in orientation and geared towards a minority of students, the teacher of physical education was perceived as a second-class citizen, concerned with a subject area which was perceived to have nothing in common with the intellectual aims of the school.

Nettleton (1985) further contended that teachers of physical education were perceived as being more concerned with the subject rather than the students; with the successful performance of school teams, rather than the motives, aspirations, feelings, and reactions of individual students involved in physical activity. Teachers of physical education were perceived as being extroverted, dominant, aggressive, and competitive in nature (Nettleton, 1985). Although the evidence is not as comprehensive or conclusive as is wished, it may be important to ask the question, *How have these perceptions toward teachers been formed?* The following section has aimed to answer this question whilst developing a deeper understanding into perception formation. A focus now turns toward the various theories of perception formation.

“The majority of modern philosophers - that is, the majority of philosophers writing since the seventeenth century - have believed that in perception one is aware of some item other than the physical object one takes oneself to be perceiving.” (Robinson, 1994)

Perception Formation. Blake and Sekuler (2006) contended that perception is modifiable; perceptual skills improve with experience. The purpose of perception is to inform us about the objects and events in our immediate environment that can intelligently guide our behavior. From the time a person wakes up until he/she falls asleep, his/her mental and physical activities are guided by the bombardment of environmental information supplied by his/her senses. All the activities (e.g., reading, eating, talking, exercising) are strongly influenced by what one sees, hears, feels, touches, smells, and tastes (Blake & Sekuler, 2006). Although

perception formation is crucial to everyday living, Rookes and Willson (2000) contended that minimal effort is used to form a perception. However, the apparent immediacy of a perception contradicts the complex processes that occur behind the scenes. Human beings are equipped with specialized machinery that captures the information and translates it into the language of the nervous system (Blake & Sekuler, 2006).

Perceptions are self-directed from cognitive states such as beliefs, judgements, assumptions, etc. which allow individual's perceptual experiences to serve as evidence for conclusions about the surrounding environment (Blake & Sekuler, 2006; Ludwig, 1996; Rock, 1983). Therefore, our conception of the environment surrounding us is created on sensory perception (Huumo, 2010) and forming a perception involves all human senses (Rock, 1983; Rookes & Willson, 2000). However, vision plays the most critical role. This notion provides a strong argument for the knowledge of whether a teacher's choice of clothing can impact elementary school children's perceptions toward that teacher.

Visual Perception. Psychologists have investigated visual perception to a much higher degree than all other perceptual systems (Huumo, 2010; Rookes & Willson, 2000). What differentiates perceiving stimuli visually as opposed to employing other senses is that in visual observations a stimulus is perceived as a concrete object, whereas in other domains (e.g., hearing, smelling), the stimuli can also be perceived as a signal. Therefore, vision is arguably the most important sense for humans (Rookes & Willson, 2000). Incoming light from the environment is processed by various mechanisms in the eye prior to being

converted into electrical activity which travels along the neural pathways to the visual cortex (Blake & Sekuler, 2006; Rookes & Willson, 2000).

For humans, seeing can be thought of as a “distance sense.” The eyes pick up information originating from remote sources (Blake & Sekuler, 2000). In this respect, they function like a ship’s radar. They permit a person to make perceptual contact with objects located too far away for immediate grasp. In doing so, the eyes extend the perceptual grasp of the world. In the case of “far senses” (e.g., seeing), people are often dealing with objects located some distance away which offers the luxury of evaluating the potential consequences of future actions (Blake & Sekuler, 2000).

Perceptual Development. A long-standing philosophical debate has occurred about how and when perceptual abilities develop. At one extreme, “nativists” believe that human beings are born with certain perceptual abilities, and that, although these abilities are sometimes incomplete or immature at birth, they develop through a maturation process which is genetically programmed and does not rely on learning (Rock, 1983; Rookes & Willson, 2000). At the other extreme, “empiricists” believe that a child develops perceptual abilities through environmental experiences. Rookes and Willson (2000) contended that it would be unlikely for contemporary psychologists to support either of these extreme views and are more likely to believe that perceptual abilities occur from a mixture of environmental and innate factors. Likewise, Blake and Sekuler (2006) asserted that even the most simple perceptual experiences result from a complex series of neural events involving extensive interactions among numerous brain cells.

In perception studies, researchers have aimed to understand hidden complexities of perception. Questions have been asked, such as: *How are coherent perceptions derived from the countless inputs being received all the time by sensory receptors?*, *How are sensory data processed to provide mental representations of the environment?*, *How important are past experiences in determining perceptions?* (Rookes & Willson, 2000). Based on the visual system, there are researchers that believe perception is a direct process; all the information needed is contained in view of an individual's eyes. Others believe that the brain uses past experience and other influences to construct a version of reality whilst other researchers have attempted to merge these opposing views (Blake & Sekuler, 2006; Rock, 1983; Rookes & Willson, 2000).

Direct Processing Theory. Direct, or bottom-up, processing begins with an analysis of sensory inputs and is based on properties of the visual stimulus (Rock, 1983; Rookes & Willson, 2000). The information that is acquired in the bottom level (i.e., sensory inputs) is transmitted upwards to higher, more cognitive levels where a perception is formed (Rock, 1983; Rookes & Willson, 2000). Direct processing is also known as “data-driven” as the information (i.e., data) received by the sensory receptors determines (i.e., drives) perception. For example, when a child observes a teacher visually in the learning environment, the visual system removes all the simple features and fuses them with more complex, complete features that include facial expressions, stature, clothing, and other visible factors. Following these steps results in a perception that recognizes the set of integrated features of a teacher. Whether a child perceives the teacher in

a positive or negative manner depends on how the teacher was perceived by the child through this process.

The person primarily responsible for the direct processing theory was James Gibson (Rookes & Willson, 2000). Gibson (1966) believed firmly that enough rich sensory information in the patterns of light reaching the eyes (i.e., optic array) for perception takes place without recourse to higher cognitive processes. Rookes and Willson (2000) contended that Gibson was much more interested in perceptual formation in the natural environment and, for this reason, his theory was known as an “ecological theory.”

Although Gibson’s theory was quite complex and was formulated over a period of 30 years, Goldstein (1999) suggested that there are four main principles: (1) the proper way to describe a stimulus is in terms of the optic array not the retinal image, (2) the important perceptual information is created by the movement of the observer, (3) the primary element of the optic array is invariant information (i.e., information that remains constant as the observer moves), and (4) it is the invariant information which leads directly to perception.

The optic array (i.e., the structure or pattern of the light in the environment) is what Gibson believed was the beginning of a perception (Gibson, 1966; Rock, 1983; Rookes & Willson, 2000). For example, the way an observer perceives objects in the visual environment is due to the way the light rays reaching him/her are structured by the objects. This light structure is extremely complex due to the countless rays that are converging on the observer from all parts of the environment.

Visual perception does not occur in a vacuum and humans always find themselves in a rich context which includes the physical situation (e.g., in a classroom, on a train, etc.), psychological state (e.g., pleased, sad, angry, etc.), and physiological state (e.g., highly aroused, thirsty, tired, etc.) (Rookes and Willson, 2000). When the physical and psychological states are combined with our constantly changing optic arrays, we are enabled to recognize not only what the object is but what it does. Gibson (1986) called this the “affordance” of the object (e.g., a cup affords drinking, a chair affords sitting down). Although Gibson’s theory found prominence among researchers, his failure to account for the fact that we do not always perceive the world accurately has remained one of the major weaknesses (Rookes & Willson, 2000).

Constructivist Processing Theory. Constructivist, or top-down, processing involves more advanced and cognitive effects than direct processing. Interpretations of visual information cannot be explained by the insufficient amount of sensory information that is collected (Rock, 1983; Rookes & Willson, 2000). Stored knowledge must be employed to make sense of visual input. When forming a perception, cerebral information (i.e., stored mental concepts) travel downwards to influence the way sensory inputs are interpreted (Rock, 1983; Rookes & Willson, 2000). Constructivist processing is also known as “concept-driven” as prior knowledge (i.e., stored mental concepts) comes from the top to determine (i.e., drive) interpretation of sensory input at the bottom. For example, when a child observes a teacher visually in the learning environment, cerebral information about the teacher travels downward to influence the child’s

perception of the teacher based on such visual cues as facial expressions, stature, clothing, and other visible factors.

The constructivist theory began over a hundred years ago with Helmholtz (1821-94), who believed that perception was based on a process of unconscious inference (Rookes & Willson, 2000). According to Rookes and Willson (2000), Helmholtz argued that, on the basis of the sensations an individual receives, he/she draws conclusions about the nature of the object or event that the sensations are most likely to represent. Although constructivist processing is believed to be largely unconscious and instantaneous, perception is understood to be constructed as the information must be processed beyond the sensory level in order to be recognized accurately. Critics of constructivist processing suggested that such problem solving cannot occur without conscious awareness (Blake & Sekuler, 2006; Rock, 1983; Rookes & Willson, 2000).

Several theorists supported the constructivist processing approach to perception. For example, Eysenck and Keane (1995), contended that (1) perception is an active and constructive process involving more than the direct registration of sensations, (2) perception is constructed as the end-product of the interaction between the stimulus input and the internal hypotheses, expectation, and knowledge of the observer, and (3) perception is influenced by individual factors and this means that errors will sometimes be made, leading to inaccurate perceptions.

A further theorist, Gregory (1990) could not accept that perception results from direct processing with no intervening of higher cognitive processing.

Gregory believed that perception involves a dynamic search for the best interpretation of the available data (i.e., hypothesis testing) and that individuals do not need much sensory data in order to formulate hypotheses. Expectancy can serve as a short cut to interpretation of stimuli. However, there are some issues with a very strong constructivist theory of perception. One such issue is why people tend to see the world in a similar way if everyone constructs their own perceptual model (Rookes & Willson, 2000).

There are commonalities between the direct and constructivist theories. Both theories acknowledge that: (1) visual perception is dependent upon light reflected from stimuli in the environment, (2) perception can only occur when a physiological system is present to support it, (3) perception is an active process even though the two theoretical positions view the activity involved rather differently (e.g., for constructivists, this is embodied in the notion of the perceiver as a hypothesis tester; for those who believe in the direct approach, the perceiver acts as a map-reader rather than a passive camera), and (4) perception can be influenced by learning (Rookes & Willson, 2000). However, a central disagreement between the two theories, which centers on the relative contributions of both approaches, may be largely a reflection of the different experimental methods used by the two theorists. For example, Gibson worked in natural settings with optimal viewing conditions; direct processing probably had more impact. Whilst Gregory used impoverished stimuli where there was little scope for direct processing. It is likely, therefore, that in most circumstances fusing the two theories is probably required (Rookes & Willson, 2000).

Neisser (1976) aimed to merge the direct and constructivist theories by proposing a cyclic model of perception which was referred to as the “analysis-by-synthesis theory.” Perception, according to this view, is not a linear, one-way process with an input that leads progressively to a single interpretation. Neisser considers it instead as an active, cyclic process in which the viewer has to check and re-check input against expectations. Neisser’s theory can be criticised for failing to specify the processes which underlie the interactions between sensory input and stored knowledge (Rookes & Willson, 2000). In other words, Neisser did not commit to detail how sensory input and stored knowledge fuse together.

However, we are constantly presented with a diverse and ever-changing array of sensory information and, as we move around our environment, the patterns of light falling on the retina shift and change as well. In spite of this, we seem to be able to achieve a remarkably stable representation of our visual world. This suggests that our perception is highly organized. For example, we seem to construct the world from our visual input rather than see it directly. Although all the theories discussed have strengths and weaknesses, no single theory can account for all that is known about human perception (Blake & Sekuler, 2006; Rock, 1983; Rookes & Willson, 2000).

Contemporary Perceptual Philosophies. The philosophy that guides contemporary work in perception is referred to as “materialism.” The materialistic viewpoint was well expressed by the late Roger Sperry, a Nobel Prize winning brain scientist. According to Sperry (1980), perceptual experience is a functional

property of brain processing, constituted of neuronal and physicochemical activity, and embodied in, and inseparable from, the active brain.

The materialism view had its critics. Prominent scientists (e.g., Sir John Eccles, a Nobel Prize winner), supported an alternative view. The alternative, “dualism,” is often associated with the seventeenth-century French philosopher Rene Descartes (Blake & Sekuler, 2006). Dualism contends that perceiving (like any “mental” function) is not solely a phenomenon of the physical brain. Many people supported dualism as they were unconvinced that perception, a personal, subjective experience, can be fully explained by brain process, which are certainly not experiences (Blake & Sekuler, 2006).

Churchland (1988) argued against dualism. In his argument against the claim that perception is independent of what happens in the brain, Churchland cited numerous instances in which changes in the brain’s condition dramatically alter the content and quality of perception. Secondly, against the claim that perception is far too complicated to be the product of things as simple as nerve cells, Churchland pointed to research on neural networks showing that one can create extraordinarily complex, sophisticated systems out of very simple components, undercutting the need to postulate other, more intelligent agents. As a result, one can account for complex, intelligent aspects of perception without recourse to elements that are complex or intelligent.

Approaches to Understanding Perception. It is important to consider perception formation from a variety of viewpoints (Blake & Sekuler, 2006). In order to gain a deeper understanding of perception, several viewpoints have transpired over the

years which can all meet very different levels of understanding. In doing so, Blake and Sekuler (2006) identified four approaches to understand perception formation.

Psychological. Psychological approaches can take many different forms, but all have in common the employment of a behavioral measure as a gauge of perception. Behavioral measures may be verbal responses (e.g., “Yes, I hear it.”), manual reactions (e.g., “Press this button when you hear it.”), or reflexive reactions (e.g., “Did he flinch when the sound was produced?”). The behavioral reactions to stimuli are treated as indicators of whether the stimuli can be detected or whether they can be discriminated from other stimuli.

Experimental. In experimental approaches, the study of a particular element of perception often requires creation of a group of stimuli that is not available naturally. Control and careful manipulation of the stimulus also permit one to identify exactly what aspect of the stimulus underlies some perceptual experience.

Biological. Throughout the history of perception research, a focus has remained on the dependence of perceptual events on neural events within sensory receptors and the brain. Biological approaches permit researchers to examine entire neural circuits in action, and to understand the flow of neural information from one part of the circuit to another.

Theoretical. Theoretical approaches focus on perception from an information-processing approach (Blake & Sekuler, 2006). In general, developed theories of perception sharpen our thinking and often translate qualitative observations into quantitative statements. Blake and Sekuler (2006) contended

that quantitatively explicit theories then serve to guide the design and implementation of experiments in perception.

Perception formation research has utilized an array of participants. (Rookes & Willson, 2000). For example, new-born babies have been involved in neonate studies and animals have been represented in those studies where human involvement was deemed as inappropriate or impractical. Such studies, as cataract, readjustment, and cross-cultural have been conducted to gain a deeper understanding of perception. From the variety of studies over the years, it is clear that some perception formation is innate and others develop later in life (Rock, 1983; Rookes & Willson, 2000).

There is no evidence to support either of the extreme views that perception is either completely learned or innate. The nature/nurture issue is really one of understanding the complex interaction between the expression of genetic factors and the influence of the environment (Rock, 1983; Rookes & Willson, 2000). Therefore, psychologists are in agreement that there is no clear answer to the issue and an interactionist viewpoint is the most appropriate approach.

Perception can be shaped by knowledge and occurs from a complex interplay of mutually interdependent events (Blake & Sekuler, 2006). To understand perception fully, and no one yet does, requires knowing all the components involved in the process and the ways those components interact (Blake & Sekuler, 2006; Rookes & Willson, 2000). Due to the fact that direct and constructivist processing frequently overlap (Rookes & Willson, 2000), it is likely that both types of processing are used regularly when students form perceptions

toward their teachers. As was discussed at the beginning of this section, many forms of media have described people's perceptions toward teachers. With a deeper understanding as to how perceptions are formed, teachers may employ strategies to receive favorable student perceptions which may lead to enhanced student learning.

Children in grade one do not have the same amount of experiences in physical education as do grade six children. Therefore, their perceptions may not likely be formed from previous experiences in a quality physical education lesson as would the grade six children. It would appear, however, that teacher clothing may play a critical role in children's perception formation. For example, when a teacher walks into the gymnasium to teach a lesson, one of the first features of the teacher that children can observe visually is the teacher's clothing.

"Perception puts us in contact with the world we live in; it shapes our knowledge of that world, and knowledge is power. (Blake & Sekular, 2006)

Whilst understanding how, if at all, teacher clothing affects school children's perceptions is important for all teachers of physical education, it might be particularly so for elementary school teachers. Generalist trained elementary school teachers are required to teach a variety of subjects in many differing locations, such as regular classrooms, art rooms, computer labs, and gymnasias. Therefore, the clothing being worn to the gymnasium by elementary school teachers is not always a tracksuit or the attire normally associated with physical activity. It may well be pants, with a sweater or collared shirt, and a variety of possible footwear. However, the children's perceptions toward teachers may have

much to do with the teacher's choice of clothing. Developing an understanding as to how school children perceive their teachers may help enhance children's learning and assist them in developing healthy, active lifestyles.

Review of Related Literature Summary

Blake and Sekuler (2006) contended that good theories tell us what to look for and where to look. A theory can provide new insights into an area of research (Maxwell, 2005) and can make sense out of current knowledge through summarization (Johnson & Christensen, 2012). A review of related literature was conducted and information gained helped to construct a theory that fused four specific content areas together. These four areas were effective teaching, teacher as a role model, symbolism of clothing, and perception formation. By integrating the theoretical understanding of these four areas, it was hoped that new knowledge concerning elementary school children's perceptions towards their teachers in physical education would be constructed.

Agreeing on a definition of effective teaching has been a difficult task for researchers over the years (Yilmaz, 2011). However, Rink (2003) contended that a primary element in effective teaching is student learning. Although the majority of effective teaching research has been conducted in the classroom environment, physical education studies on effective teaching have concluded that providing students with opportunities for learning helps to promote an effective environment (Rink & Hall, 2008).

Teachers are provided with a unique opportunity to act as role models for students. In fact, Dean et al. (2005) contended that teachers cannot decide when to

role model; they are role models all the time. Hence, teachers of physical education have the opportunity to role model several ways (e.g., healthy eating patterns, healthy lifestyles, enjoyment of physical activity). The review of related literature accentuated the importance for teachers of physical education to recognize the potential impact of being a role model to students.

Studies have shown that clothing is a powerful communicator (Roach, 1997; Damhorst et al., 2005). Rublack (2011) contended that the symbolism of clothing began long before modern times. For example, what a person chooses to wear has remained a constant source of information for people's perception formation since the Renaissance period (Rublack, 2011). Although several clothing studies have been conducted outside of the learning environment, researchers have found that relationships exist between teacher clothing and student perceptions in the classroom. Therefore, it seems likely from the classroom studies' results that teacher clothing may impact student perceptions in physical education. However, minimal, if any, studies have been conducted in the physical education setting. Hence, this study may lend itself well to the fields of "symbolism of clothing" and physical education.

The review of related literature revealed three main theories of perception formation (i.e., direct, constructivist, analysis-by-synthesis). It seems likely that the most appropriate theory is Neisser's "analysis-by-synthesis" theory which fuses the direct and constructivist theories together. The analysis-by-synthesis theory recognized a joint effort between the direct and the constructivist theories which relies heavily on the visual system. Rookes and Willson (2000) contended

that the visual system is, arguably, the most important sense for individuals. Neisser's theory emphasized that integrating prior knowledge with what a person sees is a cyclic process during perception formation. Along with perceptual theories, varying viewpoints exist for researchers to develop a deeper understanding of perception formation (i.e., psychological, experimental, biological, theoretical) (Blake & Sekuler, 2006).

Minimal, if any, studies have been conducted in the physical education setting which focus on student perceptions toward their teachers. Therefore, it would serve the field of physical education well if new knowledge was constructed about how elementary school children form perceptions towards their teachers. It would be noteworthy to conclude if any differences occur in perception formation between students in different grade levels.

In conclusion, there are four important points to be pulled from the review of related literature. (1) Understanding how to promote learning opportunities is an important consideration in an effective teacher's planning. (2) Physical education teachers can be role models to students. (3) Relationships have been found between teacher clothing and the learning environment. (4) Teachers have been perceived by students in many different ways over the years. This study intended to examine how the theoretical understanding described throughout this review of related literature may be applied to elementary school children's perception formation toward their teachers of physical education in relation to teacher clothing.

CHAPTER 3 – METHODOLOGY

The Research

Research is conducted to discover something that is not already known (Hughes and Sharrock, 1997). Therefore, this study investigated elementary school children's perceptions toward teachers of physical education in relation to what their teachers wore while teaching. Moreover, the methods involved in research are a set of procedures in order to achieve a goal or a purpose (Madison, 2005). Therefore, in order to achieve its purpose, this study employed an explanatory mixed-methods design. Johnson and Christensen (2012) contended that thoughtful mixing of methods, procedures, and other paradigm characteristics is an excellent way to conduct high-quality research.

Current Research Study

Two different data sets (i.e., quantitative, qualitative) were obtained throughout this mixed methods study. For example, after the quantitative data (i.e., MCAQ) was collected and analyzed, an attempt to explain the results in more depth through a qualitative phase followed (i.e., focus group interviews).

Research Participants in Phase 1: Quantitative Phase

Following an introduction of the study to school division administrators and upon agreement to conduct the research within their school division, a meeting was set up with school principals from six elementary schools in northern Alberta, Canada to discuss the study occurring at their school sites. An information letter and consent form informed the potential participants and their parents/guardians that participation in the study was entirely voluntary. The

information letter and consent form outlined all the pertinent information concerning participation in this study. Only those students with signed consent forms were permitted to participate.

After agreement, a convenient sample of elementary school children ranging from grade one through to grade six (i.e., 6 – 12 years of age) were selected for the study. A total of 389 children participated in the study. Table 1 illustrates the number of participants according to school, grade, and gender.

Table 1

Number of Participants (School-Wide, Grade Level-Wide, Gender-Wide (M = Male; F = Female; T = Total)).

| School | Grade 1 F/M/T | Grade 2 F/M/T | Grade 3 F/M/T | Grade 4 F/M/T | Grade 5 F/M/T | Grade 6 F/M/T | Total F/M/T |
|---------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|
| 1 | 6/6/12 | 1/4/5 | 2/8/10 | 4/1/5 | 3/2/5 | 4/2/6 | 20/23/43 |
| 2 | 0/0/0/ | 0/0/0 | 12/17/29 | 8/8/16 | 9/9/18 | 9/5/14 | 38/39/77 |
| 3 | 2/1/3 | 1/2/3 | 9/1/10 | 5/10/15 | 7/6/13 | 8/2/10 | 32/22/54 |
| 4 | 13/9/22 | 5/9/14 | 4/6/10 | 6/6/12 | 7/1/8 | 4/6/10 | 39/37/76 |
| 5 | 3/6//9 | 6/4/10 | 7/3/10 | 4/2/6 | 7/2/9 | 16/11/27 | 43/28/71 |
| 6 | 3/5/8 | 7/0/7 | 1/4/5 | 14/10/24 | 5/3/8 | 7/9/16 | 37/31/68 |
| Total | 27/27/54 | 20/19/39 | 35/39/74 | 41/37/78 | 38/23/61 | 48/35/83 | 209/180/389 |

Figures 1, 2, and 3 provide a visual depiction of Table 1.

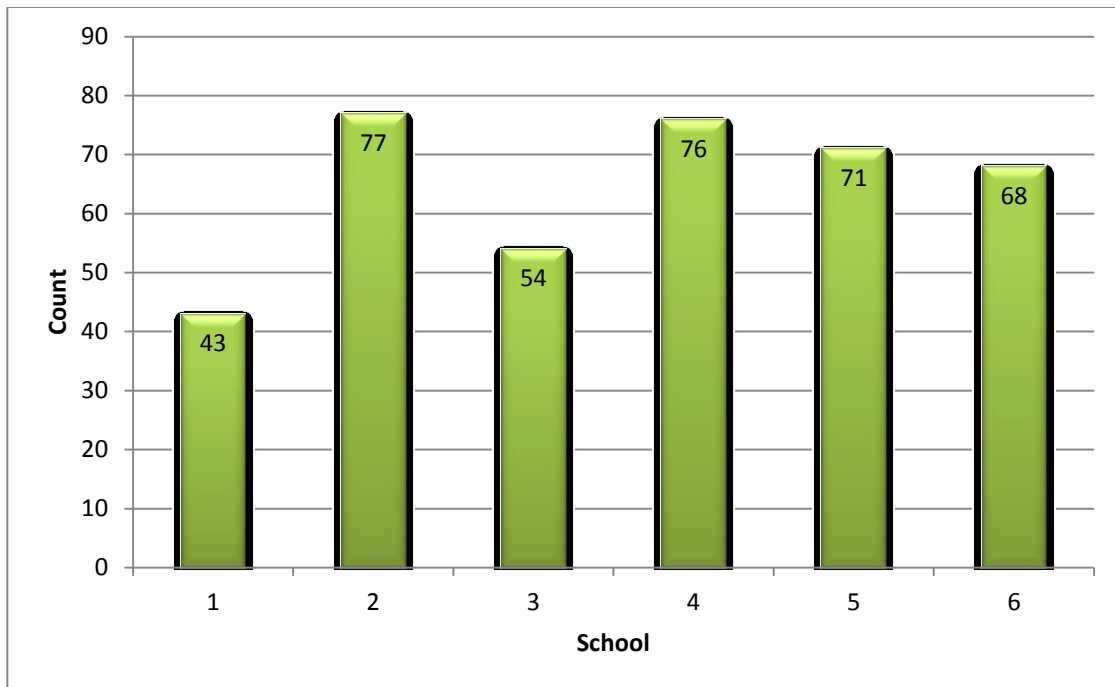


Figure 1. Number of participants from each school.

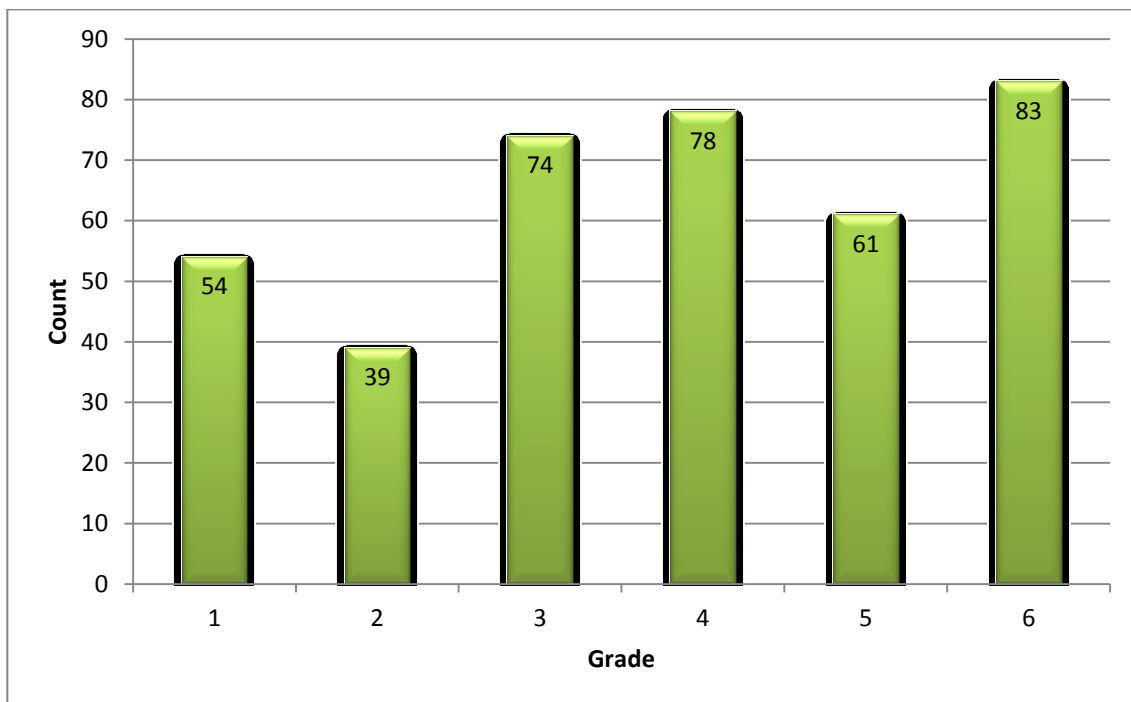


Figure 2. Number of participants from each grade.

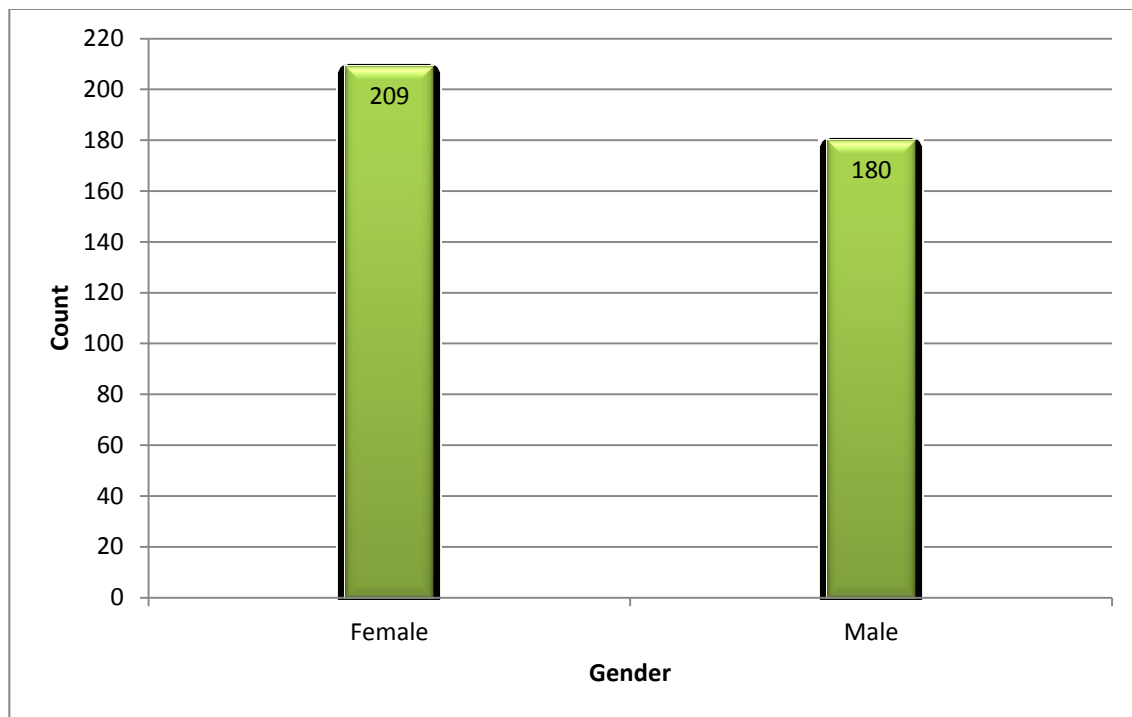


Figure 3. Number of participants from each gender.

Research Sites in Phase 1: Quantitative Phase

Each research site school followed regular provincial programming and were not schools of choice where students attend to participate in various sports, etc. The participants throughout the six participating schools were taught physical education by their classroom teachers.

School 1. School 1 had a population of approximately 300 children ranging from Kindergarten to Grade 6.

School 2. School 2 had a population of 550 children from Grades 3 to Grade 8.

School 3. School 3 had a population of approximately 150 children ranging from Kindergarten to Grade 6.

School 4. School 4 had a population of approximately 310 children ranging from Kindergarten to Grade 6.

School 5. School 5 had a population of approximately 375 children ranging from Kindergarten to Grade 6.

School 6. School 6 had a population of approximately 210 children ranging from Kindergarten to Grade 6.

Research Instrument in Phase 1: Quantitative Phase

To obtain data during the quantitative phase of this study, the research instrument that was employed was the Mannequin Clothing Assessment Questionnaire.

Mannequin Clothing Assessment Questionnaire (MCAQ). Johnson and Christensen (2012) contended that a questionnaire can be used to obtain the perceptions of research participants. The MCAQ (see Appendix B) consisted of twenty-eight visual mannequin images depicting teachers wearing different clothing options. The teacher clothing on the mannequins was selected from personal observations of what elementary school teachers wear commonly whilst teaching. Each mannequin was accompanied by a sentence asking the participants to determine whether they perceived that teacher to be a “really good,” “good,” “okay,” “not so good,” or “really not good” teacher of physical education depending on the clothes being worn by the teacher. For the purposes of associating the five faces to numbers in this “summative response scale” (Gamst, Meyers, & Guarino, 2008), numbers five through one were chosen, respectively, to represent the five faces. The numeric values located under each face in Figure 4 were applied after data collection was complete in an attempt to lessen any influence on participant choice.

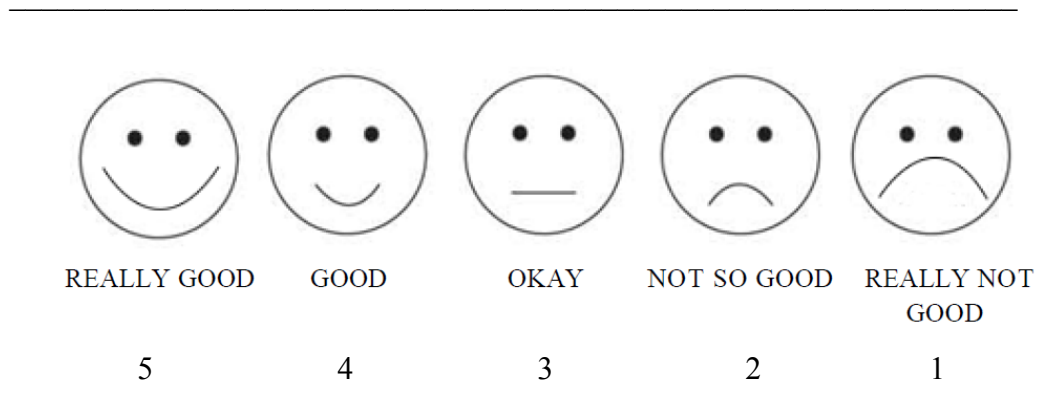


Figure 4. MCAQ Rating Scale (Summative Response Scale).

The mannequins were illustrated in a way that did not permit potential extraneous variables to appear. For example, the body size and the skin color of all the mannequin dolls were exactly the same. Moreover, the color of the clothing was not disclosed as the participants worked with black and white mannequin illustrations. At the bottom of each MCAQ page, participants had the opportunity, if they wished, to explain why they recorded a specific “face” for each mannequin. Comments were analyzed and employed to help develop questions for focus group interviews.

According to Johnson and Christensen (2012), “a key to effective questionnaire construction is understanding your research participants” (p. 165). Therefore, the inclusion of images on the MCAQ permitted the elementary school children to observe an array of images whilst reading a sentence below each image which met their level of understanding. In previous research, the use of images in a study’s design focusing on elementary school children has helped reach successful conclusions (Silver & Rushton, 2008). In addition to the level of understanding, Peterson (2000) contended that a questionnaire should be

structured to facilitate its completion. Therefore, by including images on the MCAQ, the participants were afforded opportunities to view what a teacher may look like rather than try to guess. This helped reach more credible evidence toward the participants' perceptions toward teachers.

In addition to the images, the language on the MCAQ was designed for elementary school-aged children (Johnson & Christensen, 2012). To avoid ambiguity caused by unfamiliar words, it was required that the researcher have some knowledge of the research participants prior to developing a questionnaire (Peterson, 2000). Therefore, the language was selected carefully in the MCAQ for elementary school-aged children.

Research Participants in Phase 2: Qualitative Phase

As part of their participation in Phase 1 of this study, two school principals agreed to have Phase 2 be conducted in their schools. A total of six focus group interviews (n = 19) were conducted in Schools 4 and 5. Participants were purposefully solicited by each school principal. In School 4, the focus group interviews were conducted in: Grades 1 and 2 with two female participants; Grades 3 and 4 with three males and one female; and Grades 5 and 6 with two males and one female. In School 5, the focus group interviews were conducted in: Grades 1 and 2 with two females; Grades 3 and 4 with one male and three females; and Grades 5 and 6 with one male and three females.

The grade range in each focus group interview was specifically chosen to mirror the developmental levels of child development identified by Fishburne (2005). These levels are based on a child's cognitive, emotional-social, and

physical levels and needs. Therefore, creating an environment that was conducive to children's discussion and comfort was aimed to be met. The focus group interviews were recorded and conducted in English-speaking schools.

Research Instrument in Phase 2: Qualitative Phase

Focus Group Interviews. Following the quantitative research phase, focus group interviews, conducted by myself, ensued to help further explain and expand on the initial quantitative results. To align with the content of this study, I chose to wear professional attire of a classroom teacher (i.e., dress shirt, dress pants, dress shoes). Following a Focus Group Interview Protocol (see Appendix C), participants were interviewed in a small room near the main office. This protocol was followed in order to minimize the possibility of leading questions and differences in questions presented to the various focus groups. Interviewing is defined as a conversation with a purpose to gather information (Berg, 2009). Madison (2005) contended that the interviewer and interviewees are in partnership and dialogue as meaning is constructed together. Creswell (2012) asserted that in terms of data collection, questions should be broad and general so that the participants can construct the meaning of a situation, a meaning typically forged in discussions or interactions with other individuals. Therefore, the Focus Group Interview Protocol was developed to discuss the trends that were identified from the quantitative phase data and further address this study's research questions. This approach aligns with Creswell (2012) who suggested that the more open-ended the questioning, the better, as the researcher listens carefully to what individuals perceive in the learning environment. Thus, researchers often

address the processes of interaction among individuals (Creswell, 2012). Also, they focus on the specific contexts in which individuals go to school in order to understand the historical and cultural settings of the participants. This was planned within this study to understand why the participants perceive their teachers as they do.

Berg (2009) contended that focus group interviews are designed for small groups of unrelated individuals, formed by a researcher and led in a group discussion on a particular topic. Therefore, three focus group interviews were conducted in two of the participating schools. The focus group interviews aimed to collect elementary school children's perceptions and opinions concerning teacher clothing in physical education.

Pilot Study

A pilot study was conducted prior to beginning this study. An explanatory mixed-methods investigation into the effect a teacher's choice of clothing in physical education can have on school children's perceptions toward the teacher included a total of 81 elementary school children from Grades 1 – 6 (i.e., 6 – 12 years of age). The pilot study was approved by the University of Alberta's Research Ethics Board and all ethical considerations were attended to. The participants responded to a questionnaire (i.e., quantitative data) and were provided with space to share their opinions (i.e., qualitative data). By conducting the pilot study, important results were found for this study.

The findings from the pilot study provided valuable information about the formation of the MCAQ. For example, the pilot study participants stated that they

were able to differentiate between each mannequin and understood clearly how to respond to the questionnaire. In particular, the pilot study provided clear direction as to how much time was required to complete the MCAQ and the importance of having clear directions to complete the questionnaire. For example, a critical change made for this study was the projection of each mannequin on a large classroom screen in addition to individual papers copies.

Procedures

To identify any trends that teacher clothing had on participant perceptions, Phase 1 in this mixed-methods study involved the completion of the MCAQ (see Appendix B) by 389 elementary school children in the six participating schools. The following process was followed with each class of student participants during Phase 1 of this study:

- I provided each participant with a personal black and white print paper copy of the MCAQ
- I explained the MCAQ
- participants were asked to complete the MCAQ both individually and anonymously
- participants were asked to use pencils to record their response on the MCAQ
- to ensure clarity of understanding, I projected a black and white version of the MCAQ onto a large classroom screen and answered any procedural questions raised by the participants

- participants were provided with enough time to respond to each mannequin depicted in the MCAQ before being instructed to move to the next page of the MCAQ
- as participants completed each page of the MCAQ, the corresponding page would also be projected onto a large classroom screen
- at completion of the MCAQ, I collected all items and participants were thanked for their participation

It is important to note that although this dissertation includes the original color version of the MCAQ that was created by a production company, black and white versions were utilized with the participants to ensure that color of clothing did not become an extraneous variable. Following the completion of the MCAQ, descriptive statistics were calculated and analyzed to search for any trends (see Appendix D, E, and F) and Phase 2 of this study was initiated.

Phase 2 focus group interviews further helped to identify and understand trends that teacher clothing had on participant perceptions. The focus group interviews followed the process outlined below:

- I provided each participant with a sheet of blank paper, pencils, crayons, and felt marking pens
- I explained the interview process
- open-ended questions were asked of the participants and their responses were collected using a voice recorder
- clarifying questions, etc. were asked when necessary and to ensure accurate understanding of responses

- participants were provided with time to draw their teacher of physical education
- I collected the drawings and thanked the participants for their participation

Data Analysis

Phase 1: Quantitative Data. This study employed descriptive statistics. As the intent was to explore the issue of teacher clothing in physical education, it was decided to utilize descriptive statistics to identify general trends and create a depth of understanding rather than inferential statistics to determine statistical significance and generalizability. The purpose of the analyses was to determine the mean differences of participant perceptions that were produced for each mannequin. The goal of descriptive statistics is to summarize the data set (Johnson & Christensen, 2012). Calculating and listing the descriptive statistics in an organized manner helped simplify the large data set (Gravetter & Wallnau, 2009). Descriptive statistics were calculated in the Statistical Package for Social Sciences (SPSS). SPSS is a computer program that performs statistical calculations (Gravetter & Wallnau, 2009). From this data analysis process, inferences were made regarding mean differences and order of descending means in relation to each mannequin.

Phase 1: Comment Box Qualitative Data. In addition to the quantitative data collected during Phase 1, a limited amount of qualitative data was also collected. The MCAQ provided the opportunity for participant comments to be added. These comments were also analyzed, along with the quantitative data, to help develop questions for focus group interviews.

Phase 2: Focus Group Interview Qualitative Data. Focus group sessions provided participants with the opportunity to respond to a series of open-ended questions and to draw a teacher of physical education. Interviews were recorded and transcribed in preparation for content analysis. Drawings were utilized to generate further discussion or ask points of clarification.

Content analysis is a detailed, systematic examination and interpretation of an interview in order to identify emerging patterns, themes, biases, and meanings (Berg, 2009; Merriam, 2009). Developing a familiarity with the data along with a strong sense of the general ideas and meaning is an important step in the analysis process (Creswell, 2012). Therefore, writing research notes and reflecting on each focus group interview, in addition to transcribing the interviews, assisted in developing an overall sense of the data along with the identification of potential emerging themes.

Transcripts from the focus group interviews were imported into the NVivo 10 data management computer program. NVivo 10 stores data, allows a researcher to code qualitative data, and also aids in qualitative data analysis. Although the NVivo 10 program was utilized at an initial level to search for commonly mentioned terms and statements, the actual coding categorization process (e.g., open coding) was conducted independently by myself and a research assistant (i.e., doctor of philosophy student). The purpose of including an external influence in the categorization process was to increase research credibility as a form of triangulation (Patton, 2002). The assistant was provided with copies of the focus group interview protocol to become more familiar with

the foundations from which the data was obtained. Once the focus group interviews were transcribed, a copy of each transcript was sent to the research assistant for data analysis. To ensure the anonymity of the participants, all identifiers were removed from the transcripts prior to the analysis stage.

The unit of analyses was identified for coding the data (e.g., phrases, themes). Using the unit of analyses, the transcript data was open-coded (Berg, 2009, Strauss & Corbin, 1998) by asking a specific and consistent set of questions, analyzing the data thoroughly, and writing theoretical notes throughout the coding process. Constant comparative analysis was used (Creswell, 2012; Johnson & Christensen, 2012; Mertens, 2014) to assist in the development of categories and sub-categories, at different levels of abstraction, to the meaning units. Categories were developed so that each category shared certain similarities and were distinct from other categories (Merriam, 2009). The categories were broad in scope and flexible enough to be modified throughout the data analysis process (Creswell, 2012; Johnson & Christensen, 2012; Mertens, 2014).

Emerging themes were then identified and categorized into coding frames, which were used to organize the data and identify findings following the completion of open-coding (Berg, 2009; David & Sutton, 2004). This process continued to the point of theoretical data saturation (Miles & Huberman, 1990).

Once the coding process was completed, the research assistant and I met to compare identified themes, categories and specific meaning units. Through comparative analysis (Creswell, 2012), more accurate interpretation of the data was ensured through discussion and agreement upon identified themes, sub-

themes, and the specific meaning units. This process was detailed in nature and demonstrated the flexibility within the research as new ideas or reformed themes emerged.

Methods Triangulation

“The whole is better than its parts.” (Johnson & Christensen, 2012)

Johnson and Christensen (2012) contended that in mixed-methods research, establishing and assessing research validity is a cyclical and ongoing process. An initial assessment of data and conclusion validity may lead to more data being collected (e.g., participant feedback). Methods triangulation was used in this study. Johnson and Christensen asserted the objective of methods triangulation is to combine different methods of data collection that have no overlapping strengths and weaknesses which will result in better conclusive evidence. Therefore, the use of a questionnaire (i.e., MCAQ) and focus group interviews produced better conclusive evidence as opposed to only using one method.

Establishing Trustworthiness

It becomes the responsibility of the researcher to ensure that data analysis is conducted in a rigorous and systematic manner. Therefore, Lincoln and Guba’s (1985) criteria: credibility, transferability, dependability, and confirmability were followed throughout this study’s qualitative portion of data analysis and interpretation. For example, direct citations from the recorded focus group interviews were used which enabled future readers to decide on the accuracy of the qualitative data interpretations.

I am aware that personal bias may have interfered with the findings of this study. Therefore, following the initial questions in the focus group interviews, probing questions were employed to ensure accuracy of the interviewees' thoughts (Creswell, 2012). In addition to myself, an external auditor played an important part in the analysis stage (i.e., research assistant). Although Cohen and Crabtree (2006) contended that an external auditor cannot know the data in as much depth as the researcher who is immersed in the study which may lead to different understandings of the data, it was beneficial to have a second researcher analyzing the data. Following Lincoln and Guba's (1985) criteria helped maintain consistency in regards to data analysis, interpretations, reflections, and suggestions for improvements.

Credibility. In this study, establishing the credibility value of the inquiry was ensured through triangulation. The triangulation element occurred through collecting both quantitative and qualitative data (i.e., questionnaire, focus group interviews) and by returning to the review of related literature. In addition, throughout the focus group interviews, probing questions were employed to enhance the credibility of the inquiry.

Transferability. Guba (1981) defined transferability as the degree of "fit" between two contexts. In qualitative research, which is largely subjective, this calls for a thorough understanding and description of the phenomena and the context under study. Ultimately, the perceptions presented could describe the perceptions of other school children in similar learning environments elsewhere. This is what Van Manen (1990) referred to as plausibility, or the "ah" moment; the familiarity

of an account of a lived experience. This aspect was ensured through thick descriptions and direct quotations.

Dependability. Dependability is synonymous with validity, stability, and consistency in quantitative research. In qualitative inquiry, however, the notion of stability is problematic since the field of inquiry is subjective and prone to shifts (Guba, 1981). Guba and Lincoln (1989) suggested that dependability in qualitative research can be enhanced through an audit trail and through the use of varied data sources. In this study, an audit trail of transcriptions, recorded tapes, and theoretical notes were kept. These could be used for an external audit.

Confirmability. Confirmability addresses the explicit nature of data interpretation (Guba, 1981). Guba and Lincoln (1989) proposed triangulation and reflexivity as two of the steps that qualitative researchers can take to enhance confirmability. In this study, triangulation occurred through collecting data from various sources (e.g., an array of focus group interviews). Practicing reflexivity entails revealing one's epistemological assumptions which bear on the way one formulates the research questions and on the way that one analyzes and presents the data. I have, in this regard, discussed my work and personal experiences which may have biased the way I interacted with the participants.

Ethical Considerations

Social scientists study the social lives of human beings. Therefore, ethical considerations towards colleagues, study populations, and the larger society must be adhered to (Berg, 2009). The main ethical considerations that arose from this study were participants' informed consent, confidentiality, and anonymity. This

study adhered to the University of Alberta Standards for Protection of Human Research Participants (University of Alberta General Faculties Council, 2012) and the Tri-Council Policy Statement (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, Social Sciences and Humanities Research Council of Canada, 2012). I understood that the rights, privacy, and welfare of the participants in this study must be respected and honored.

To fulfill this mission, the participants were informed about the study's purpose and procedures in the most clear and complete manner (Trochim, 2008) so they were prepared to make a conscious decision of whether or not to volunteer in the study. The participants were protected from harm (Bogdan & Biklen, 1992) and their identities remained anonymous in all descriptions of research findings.

Informed Consent. An information letter and consent form informed the potential participants and their parents/guardians, along with their school divisions, principals, and teachers, that participation in the study was entirely voluntary. The information letter and consent form, which was sent home to all potential participants, outlined pertinent information, including the study's purpose and procedures, the participant confidentiality agreement, and the right for withdrawal from the study at any time without penalty or prejudice (see Appendix A). Obligations and responsibilities that accompanied involvement were also clearly outlined to all participants and their parents/guardians in the consent form. For example, potential participants were informed that their privacy would be respected at all times during the focus group interviews. They were informed of

their right to not speak on any topic with which they felt uncomfortable and that they were free to change or retract anything that they had previously stated.

Parent/guardian consent forms, when signed, indicated agreement for their children to participate in this study. Hence, if parents/guardians did not sign the consent form, their children were not permitted to participate in this study.

Confidentiality. Participants' confidentiality is critical. The purpose of this study was to explore whether or not elementary school children's perceptions toward their teachers were affected, if at all, by the clothing being worn by their teachers. Thus, it was important that children's identities were protected. Consent forms and all other data identifying personal information (e.g., focus group interview data) were kept confidential and secured in a locked filing cabinet at the University of Alberta during the course of the study and after completion of the study. The data will remain secured for a five-year period deemed appropriate by the University of Alberta Research Ethics Board.

Anonymity. The true names of the participants were not used in this study. In the quantitative data, no names were used at all. In the qualitative portion of the study, pseudonyms were used throughout the focus group interviews and will be in all resulting publications.

Level of Risk. It was hoped that participation in this study was of benefit to the participants. As such, it was anticipated that no threats or harm affected the participants; they were not exposed to any emotional or physical danger since they were not required to answer sensitive questions during the focus group

interviews. The participants' rights and personal dignity were respected by the researcher throughout this study.

CHAPTER 4 – FINDINGS

The purpose of this study was to explore whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *children's perceptions* toward the teacher and physical education influenced by the teacher's choice of clothing in physical education lessons. This chapter fuses literature on effective teaching, teacher as a role model, symbolism of clothing, and perception formation with the study's findings to develop an understanding of teacher clothing in physical education. First, MCAQ descriptive statistics and qualitative findings are reported. Second, a coding tree is discussed to illustrate the themes that emerged through the focus group interviews. Following these two sections, the remainder of the chapter addresses the research questions whilst maintaining a focus on mixed methods analysis.

MCAQ Descriptive Statistics

The MCAQ was completed by 389 participants. Appendix F identifies the total response rate for each mannequin. The range of response rate was 100 – 97.7 percent with a mean response rate of 99.09 percent.

Participants were required to rate each mannequin in accordance to the clothing depicted and the capability to teach physical education effectively. From the participant responses, the summative response scale means were calculated for each mannequin. In mannequin order, the variations between means illustrate that the participants' held different perceptions toward the mannequins depending on clothing (see Figure 5).

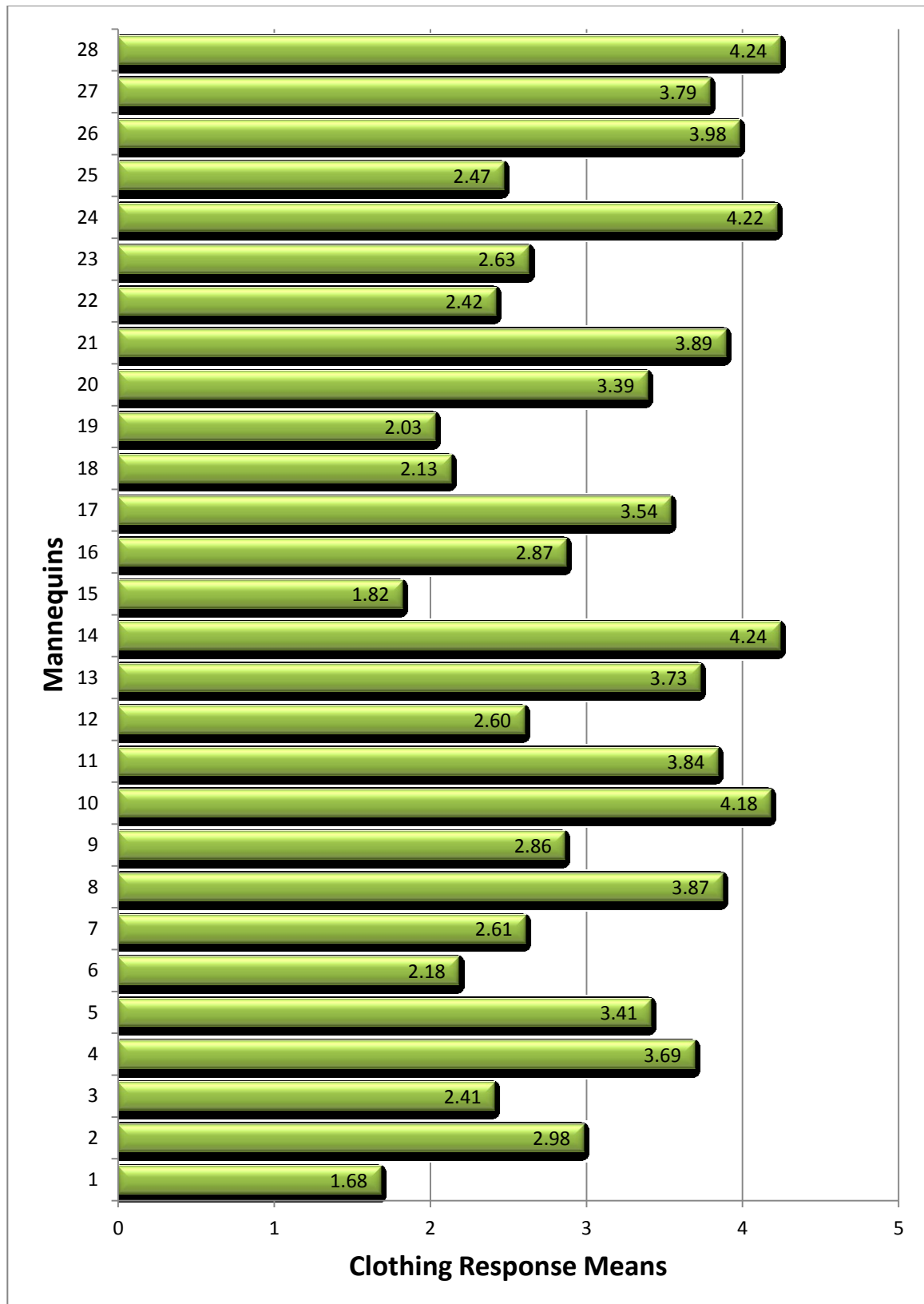


Figure 5. Participant Response Means According to Clothing





























Table 2 is a visual representation of the 28 mannequins ordered by descending clothing response means. From Table 2, it is possible to identify trends relating to participant responses toward the clothing choices on the mannequins. First, the highest 16 means out of 28 are the mannequins wearing “running shoes.” The mannequins wearing running shoes received means ranging from 4.24 to 2.87. Whereas, mannequins wearing “dress shoes” received means ranging from 2.86 to 1.68. This means that every mannequin that is wearing running shoes received a higher mean than the other mannequins that were depicted wearing dress shoes.

Second, regardless of footwear, the mannequins depicted wearing “sweat pants” or “khaki pants” received higher means than mannequins wearing “dress pants” and “skirts.” Mannequins wearing running shoes with sweat pants or khaki pants received means ranging from 4.24 to 3.73. Whereas, mannequins wearing dress pants or a skirt received means ranging from 3.69 to 2.87. Additionally, mannequins wearing dress shoes with sweat pants or khaki pants received means ranging from 2.86 to 2.42. Whereas, mannequins wearing dress shoes with dress pants received means ranging from 2.41 to 1.68.

Third, when considering the type of shirt worn by the mannequin, regardless of footwear and types of pants, mannequins wearing “golf shirts” received the highest means. For example, mannequins wearing running shoes with sweat pants or khaki pants received higher means when also wearing golf shirts. This pattern was repeated for mannequins wearing dress pants or a skirt with dress shoes.

Table 2.

Mannequins in Order of Descending Means*

| | | | | | | |
|---|---|---|---|---|--|---|
|  |  |  |  |  |  |  |
| #28-4.24 | #14-4.24 | #24-4.22 | #10-4.18 | #26-3.98 | #21-3.89 | #8-3.87 |
|  |  |  |  |  |  |  |
| #11-3.84 | #27-3.79 | #13-3.73 | #4-3.69 | #17-3.54 | #5-3.41 | #20-3.39 |
|  |  |  |  |  |  |  |
| #2-2.98 | #16-2.87 | #9-2.86 | #23-2.63 | #7-2.61 | #12-2.60 | #25-2.47 |
|  |  |  |  |  |  |  |
| #22-2.42 | #3-2.41 | #6-2.18 | #18-2.13 | #19-2.03 | #15-1.82 | #1-1.68 |

* mannequins #1-14 depict male teachers of physical education

* mannequins #15-28 depict female teachers of physical education

Therefore, from the information provided in Table 2 in accordance with Appendix F, the participants identified that the most appropriate clothing choices for the teaching of physical education were running shoes, sweat pants or khaki pants, and golf shirts. Conversely, dress shoes were perceived to be the least appropriate clothing choice. This is clearly shown through Mannequins 2 and 16 where they ranked higher than other mannequins despite the “dress” nature of their clothing due to the wearing of running shoes.

MCAQ Comment Box Analysis

At the bottom of each page of the MCAQ, participants were provided with an opportunity to record any comments about their response. They were encouraged, if they wished, to explain why they recorded a specific “face” for each mannequin. With a total of 389 participants, Figure 6 illustrates the number of comments that were written for each mannequin.

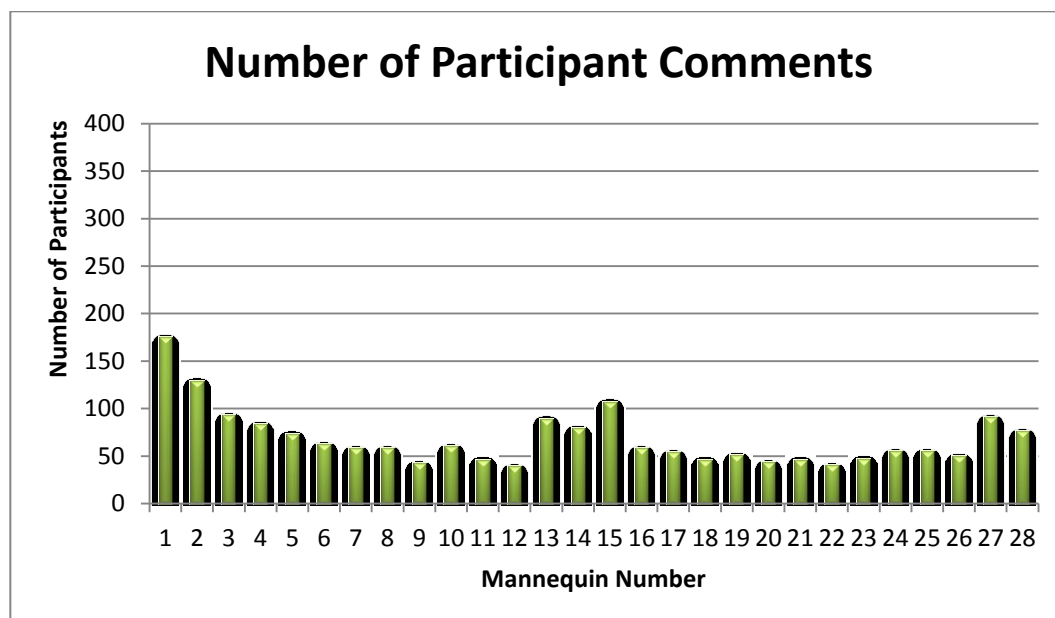


Figure 6. Number of Participant Comments

Although the number of comments provided by the participants was not extensive (Range = 39 to 175), and sometimes comments simply listed the clothes being worn by the mannequins (e.g., “dress shirt, dress pants, dress shoes”), from the comments that were provided, five themes were established. Within the five themes, no one particular theme emerged with more strength than others. Therefore, all five themes were viewed equally.

From the NVivo 10 program initial level search for commonly mentioned terms and statements and the coding categorization process (e.g., open coding) by myself and an independent rater, the themes, outlined in Figure 7, were identified. An independent rater was utilized to provide an independent assessment of the data. To ensure reliability, the second rater and I came to agreement about the five themes. The five identified themes were: (1) ability to demonstrate, (2) comfort, (3) mobility, (4) role modeling and (5) safety.

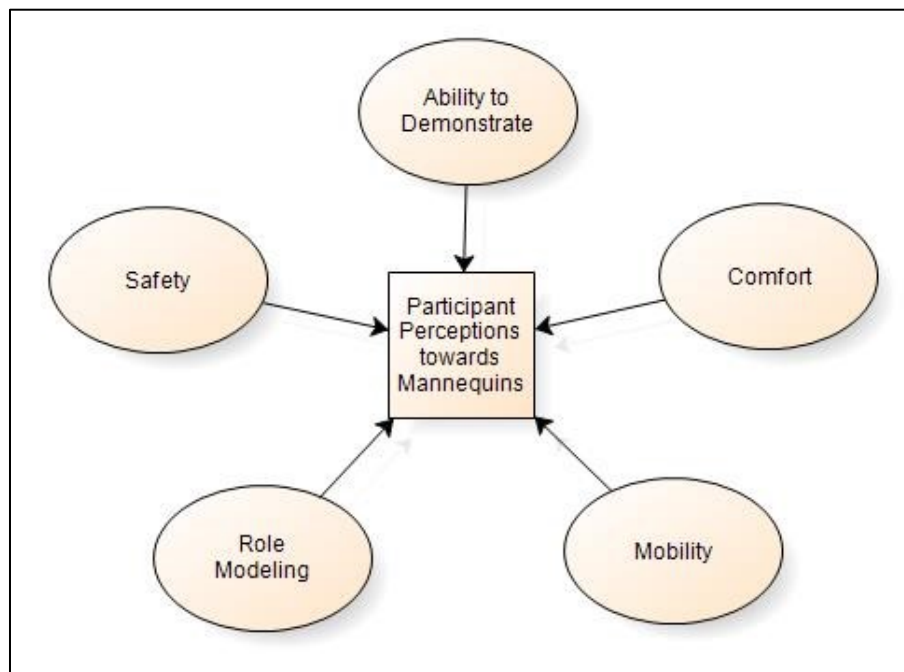


Figure 7. Identified themes from the MCAQ comment boxes

Ability to Demonstrate: The theme “ability to demonstrate” was identified from such comments as; “*he won ’t show you exactly what he wants you to do*” (Grade 5 male participant from School 1: Mannequin 1; Rating: Not So Good = 2/5) and “*then the teacher can move around and they can help you more*” (Grade 5 male participant from School 1: Mannequin 14; Rating: Really Good = 5/5). The review of literature identified that the ability to demonstrate is an important part of teaching physical education as demonstration can provide children with opportunities for learning (Rink & Hall, 2008). It is clear that the participants perceive this as well.

Comfort: “Comfort” was identified as a theme as several comments discussed the importance of not sweating. For example, a Grade 3 female participant from School 3 wrote, “*He will be sweating*” (Mannequin 11; Rating: Not So Good = 2/5) and “*I like the t-shirt Because she could start to sweat*” was written by a Grade 4 female participant from School 3 for Mannequin 28 (Rating: Really Good = 5/5). The participant comments clearly reflect that the choice of teacher clothing could impact potential comfort levels. Seeing that children are taught the issues of dressing appropriately for cold and hot weather, it should not be surprising that they in turn would expect a teacher to be dressed equally appropriately for activity in a physical education lesson.

Mobility: Although closely aligned to the theme of comfort, “mobility” was identified as a separate theme as participant comments clearly addressed issues of movement and mobility which were more than just comfort. Specifically, the theme of mobility refers to being able to move in the clothes

being worn. Loose clothes and running shoes were perceived by the participants as providing more mobility for teachers as opposed to dress pants and dress shoes. For example, a Grade 6 female participant from School 6 wrote, “*you can’t run in the dress shirt and Dress pants*” (Mannequin 2; Rating: Okay = 3/5), while a Grade 6 female participant from School 2 wrote, “*You can move around better in khaki pants than in a skirt*” (Mannequin 24; Rating: Good = 4/5). Gordon (2010) suggested that clothing enhances occupational attributes of teachers. From the participant responses, it is clear that mobility was perceived as an important attribute for physical education teaching. Therefore, clothing that allows for mobility is important.

Role Modeling: “Role modeling” was identified as a theme due to participant comments. Often times, participant comments referred to mannequins wearing clothes that “looked the part.” For example, a Grade 5 female participant from School 6 wrote, “*I feel that she doesn’t want to teach gym*” (Mannequin 15; Rating: Really Not Good = 1/5). In a similar manner, a Grade 6 female participant from School 6 wrote, “*This is the kind of teacher I want teaching me in gym class*” (Mannequin 27; Rating: Really Good = 5/5). This theme is consistent with the role modeling literature that suggests that teachers who are positive role models can impact the practices formed by school children, especially in a physical education setting (Dean et al., 2005).

Safety: The issue of “safety” is an important concern to those teaching physical education. Numbers of students, equipment, and noise are three variables that must be addressed to ensure that students are safe. This was also seen in the

data from participants who remarked on such things as inappropriate footwear and clothing that could conclude with the teacher tripping or falling. For example, a Grade 3 male participant from School 2 contended that, “*he will fall and chock*” (Mannequin 1; Rating: Not So Good = 2/5), whilst a Grade 3 female participant from School 3 contended that Mannequin 23 could, “*slip or fall in high-heals*” (Rating: Okay = 3/5).

Qualitative Data

After the collection and analysis of the MCAQ, a total of six focus groups were established to understand the trends that were identified from the MCAQ.

Focus Group Interviews: Coding Tree

Although effective teaching approaches are represented greatly in the literature (e.g., Mawer, 1995; Metzler, 2005; Rink, 2003; Rink & Hall, 2008), it seems essential to listen to children’s voices. Such an approach can help establish a higher level of understanding of what is occurring for students in the physical education learning environment and how learning may be enhanced. Therefore, a large amount of data collected in this study was related to what and how participants perceive their learning to occur in physical education and how teacher clothing impacts, if at all, their learning environment.

With support from Table 2 and participant comments on the MCAQ, questions for focus group interviews were established. A coding tree (see Figure 8) was developed during the analysis stage of the focus group interviews. Both deductive and inductive analysis was employed to help organize and illustrate the themes and sub-themes that emerged from the focus group data. The majority of

the findings were related to participant perceptions toward teachers of physical education, and in particular followed the subsequent four themes: (1) thoughts about physical education; (2) learning in physical education; (3) how teachers help learning in physical education; and (4) participant perceptions toward teacher clothing in physical education. The coding tree was agreed upon by both the primary researcher, second reader and my supervisor. Similar to the five themes that emerged during the analysis of the MCAQ in Phase 1, the four coding tree themes in this phase were also created in a non-hierarchical fashion. This was due to multiple discussion points for each theme and sub-theme. The following sections describe the various parts in the coding tree.

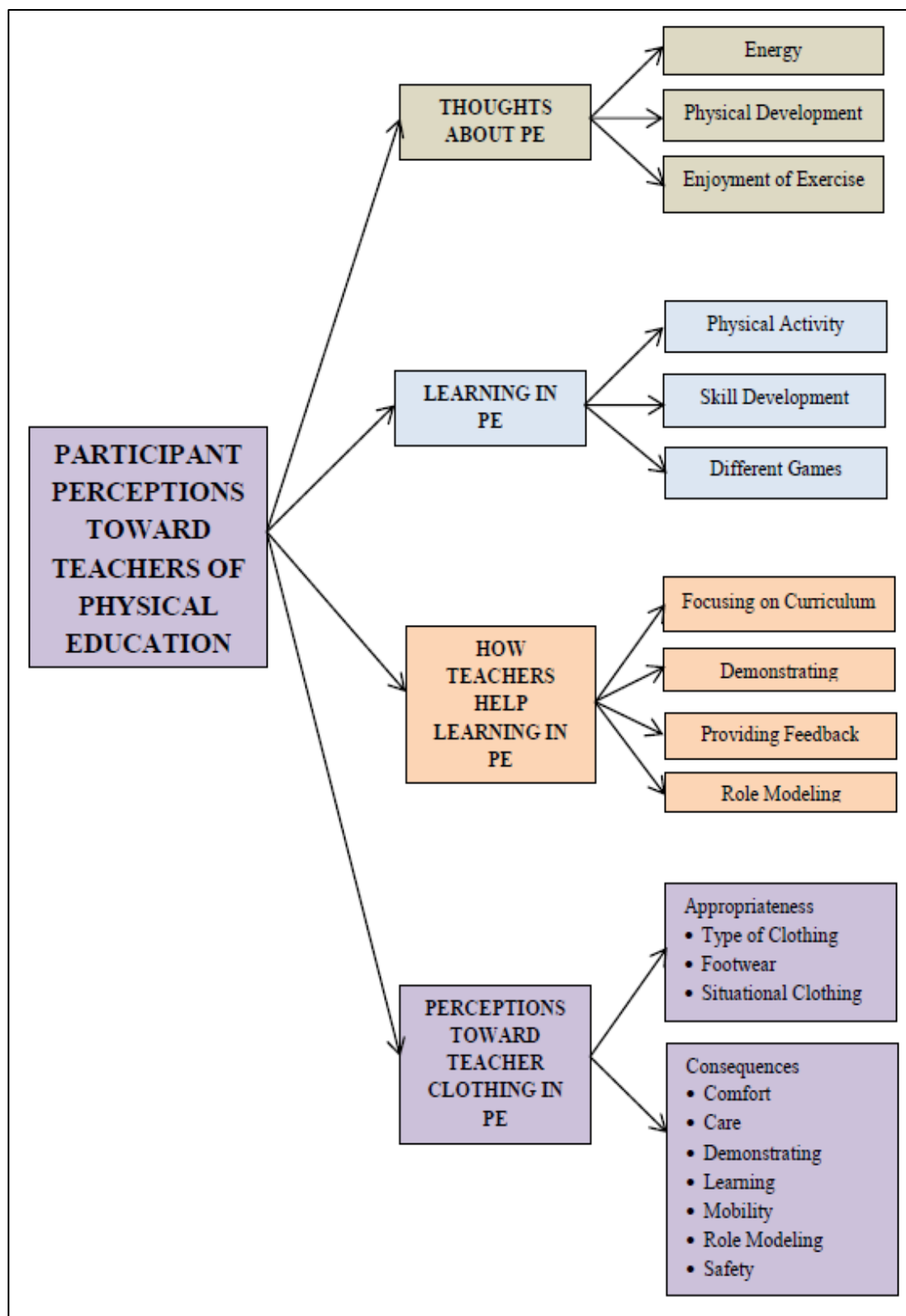


Figure 8. Coding Tree

Participant Perceptions toward Teachers of Physical Education

The themes that emerged from the main focal point of the coding tree (i.e., participant perceptions toward teachers of physical education) were (1) thoughts about physical education, (2) learning in physical education, (3) how teachers help learning in physical education, and (4) perceptions toward teacher clothing in physical education (see Figure 9).

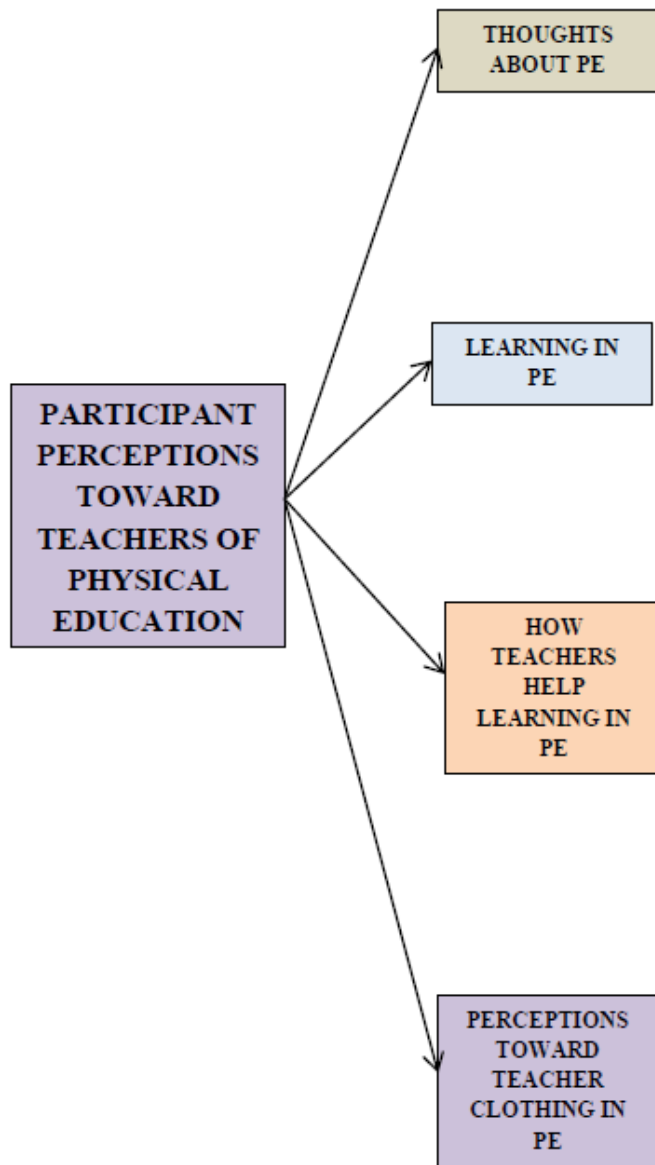


Figure 9. Coding Tree Section – Main Themes

Theme: Thoughts about Physical Education. During the first parts of the interviews, participants were asked about their thoughts about physical education. Responses arose about (1) energy, (2) physical development, and (3) enjoyment of exercise (see Figure 10). For example, when asked to explain if there were any benefits from physical education, a Grade 4 male from School 5 stated, “... *get a good start to your day if it’s in the morning.*”

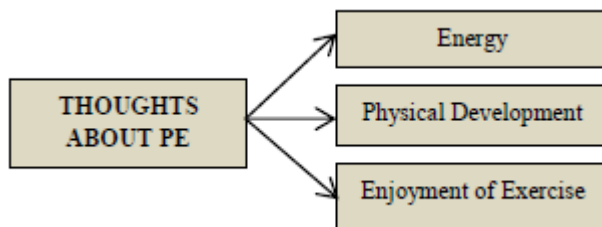


Figure 10. Coding Tree Section – Theme: Thoughts about PE

Theme: Learning in Physical Education. Throughout the interviews, participants expanded on their perceptions that physical education offers learning experiences. Responses arose about (1) physical activity, (2) skill development, and (3) different games (see Figure 11). For example, a Grade 2 female from School 4 stated, “*I learn to skip rope.*”

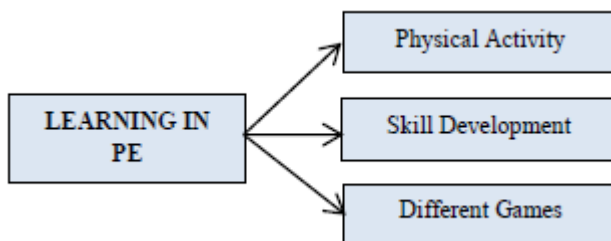


Figure 11. Coding Tree Section – Theme: Learning in PE

Theme: How Teachers Help Learning in Physical Education. Throughout the interviews, participants were asked to share how they perceived their teachers of

physical education helping with their learning. Responses arose about (1) focusing on curriculum, (2) demonstrating, (3) providing feedback, and (4) role modeling (see Figure 12). For example, a Grade 6 male from School 5 stated his teacher “... *corrects us if we’re wrong, and like he doesn’t get mad at us if we’re wrong ...*”

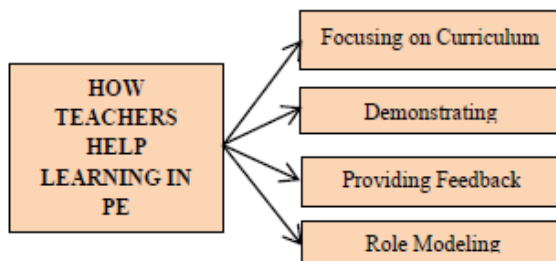


Figure 12. Coding Tree Section – Theme: How Teachers Help in PE

Theme: Perceptions toward Teacher Clothing in Physical Education. During the focus group interviews, participants were asked to share how they perceived the clothing choices of their teachers of physical education. Responses arose about both (1) appropriateness and (2) consequences (see Figure 13). For example, a Grade 1 female from School 5 stated, “... *if you were wearing dress shoes, you could slip and fall.*”

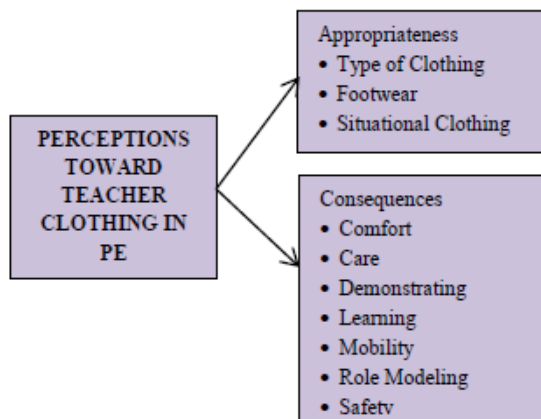


Figure 13. Coding Tree Section – Theme: Perceptions toward teacher clothing in PE

Responding to the Research Questions

The following section employs the research question and sub-questions as guidelines for organizational and explanation purposes of the findings.

Research Question 1

What is the nature of the relationship between the teacher as a role model and the symbolism of clothing, and how are children's perceptions toward the teacher and physical education influenced by the teacher's choice of clothing in physical education lessons? When answering this question, the data collected in this study suggests that the relationship is multifaceted and extensive. For example, Table 4 suggests that the participants perceive teacher clothing to be important. As discussed earlier, the top 16 out of 28 mannequins were all wearing running shoes. Also, the mannequins wearing sweat pants or khaki pants received higher means than mannequins wearing dress pants and skirts and those mannequins wearing golf shirts received the highest means when a new pair of pants or shoes was introduced. This trend, illustrated in Table 4, clearly identifies that MCAQ data on clothing choices does support the notion that participant perceptions were influenced by clothing choice.

In detail, mannequins wearing running shoes, sweat pants or khaki pants with a golf shirt received much higher means ranging from 4.24 to 4.18 than mannequins wearing running shoes, dress pants or a skirt with a dress shirt or a blouse which recorded means ranging from 2.98 to 2.87. Interestingly, Mannequin 2 received a higher mean (2.98) than Mannequin 1 (1.68) when the only difference in clothing choice was the footwear (i.e., running shoes compared to

dress shoes). Table 4 illustrates a relationship that exists between teacher clothing and children's perceptions with running shoes, golf shirt, and sweat pants or khaki pants being considered important for the teaching of physical education.

Further support of a relationship existing between teacher as a role model and the symbolism of clothing can be found in participant comments. The comments from both MCAQ and focus group interviews reinforce that a relationship exists. For example, participant comments indicate that they perceived their teachers as role models when they dressed appropriately for the teaching of physical education. A Grade 4 female from School 5 stated,

Ahh, I think gym teachers are supposed to be a role model because, umm, if you're going to be a gym teacher, you're supposed to show them how to do it, ... and, ahh, if you're not showing them what to do, what are they going to learn, what are they going to accomplish?

When asked, to clarify, if she believed a teacher of physical education should be a role model, she answered "Yeah."

Further, a Grade 6 female from School 5, when referring to Mannequin 1, stated, "He can't be a good role model cause he looks like he is going to wedding." Likewise, when asked if you can look like you are going to a wedding while teaching physical education, two females from School 5 (i.e., Grade 5 and 6) both stated, "No." Similarly, when asked if he perceived Mannequin 1 to be a role model for physical education, a Grade 6 male from School 4 stated, "Mmm, no. Not really." Similarly, Grade 3 male from School 2 wrote, "He is dressed like

a waitress,” whilst a Grade 4 participant from School 6 contended that Mannequin 1 *“Looks really unready!”*

On the contrary, participant comments explained that different mannequins were dressed more appropriately for role modeling while teaching physical education. In general, the participants perceived Mannequin 27 (sweat shirt, sweat pants, running shoes) as being a role model for physical education. For example, a Grade 6 male from School 2 wrote, *“she look perpared.”* Similarly, a Grade 6 female from School 6 wrote, *“This is the kind of teacher I want teaching me in gym class.”* Likewise, a Grade 4 female from School 6 contended, *“Really Ready!”* while a Grade 4 female from School 2 wrote, *“because its proper gym clothing.”*

It is clearly evident that the participants perceived the clothing on Mannequin 27 as representing a role model for the teaching of physical education. The differences between Mannequin 1 (dress shirt, tie, dress pants, dress shoes) and 27 were also evident in the MCAQ responses. Mannequin 1 received a mean of 1.68, while Mannequin 27 received a mean of 3.79. However, it is important to note that participants also regarded Mannequin 27 as not being the most appropriate role model. Participant comments often referred to Mannequin 27 as likely being too hot by wearing a sweat shirt. For example, a Grade 6 female from School 3 suggested, *“they are in active clothes but would get really hot.”* In light of this issue, participants rated Mannequins 14 and 28 (golf shirt, sweat pants, running shoes) with the highest means ($M = 4.24$). Both those mannequins were dressed primarily the same as Mannequin 27 with only one difference; a golf shirt

rather than a sweat shirt. For example, when rating Mannequin 28, a Grade 4 female from School 3 contended, *“I like the t-shirt Because she could start to sweat,”* while a Grade 5 female from School 3 wrote, *“good for not getting hot!☺”*

When explaining the existence of a relationship between teacher as role model and the symbolism of teacher clothing, a Grade 6 male from School 5 rated Mannequin 1 by stating, *“Ahh, really not good, because, umm, he’s wearing like dress shirt and tie, dress pants and dress shoes, ... it looks like she, ahh, he’s going to a party ...”* In a similar manner, a Grade 5 male from School 4 stated Mannequin 1 is, *“... wearing a dress stuff and it’s mainly meant for like going out to like a party or something.”* He added, *“So, you’re not really active, you’re just like, like standing around talking and stuff.”* While supporting his perceptions toward Mannequin 1, he then added, *“... He could sit on the sidelines pretty easily because you’re not, you’re not prepared for like teaching kids what they’re supposed to do.”* After being asked the clarification question if a teacher wearing inappropriate clothing is someone who does not role model the importance of physical education, he stated, *“Yeah.”*

In support of MCAQ responses and participant responses, participant drawings of teachers of physical education helped to further attest to a relationship between teacher as role models and the symbolism of teacher clothing. For example, participants referred to the importance of role modeling when explaining their drawings. A Grade 1 female from School 5 referred to her teacher (see Figure 14) as a role model in relation to clothing choices by stating,

“I, ahh, drew all the stuff that, that you should be wearing ... running shoes, a t-shirt and shorts.”

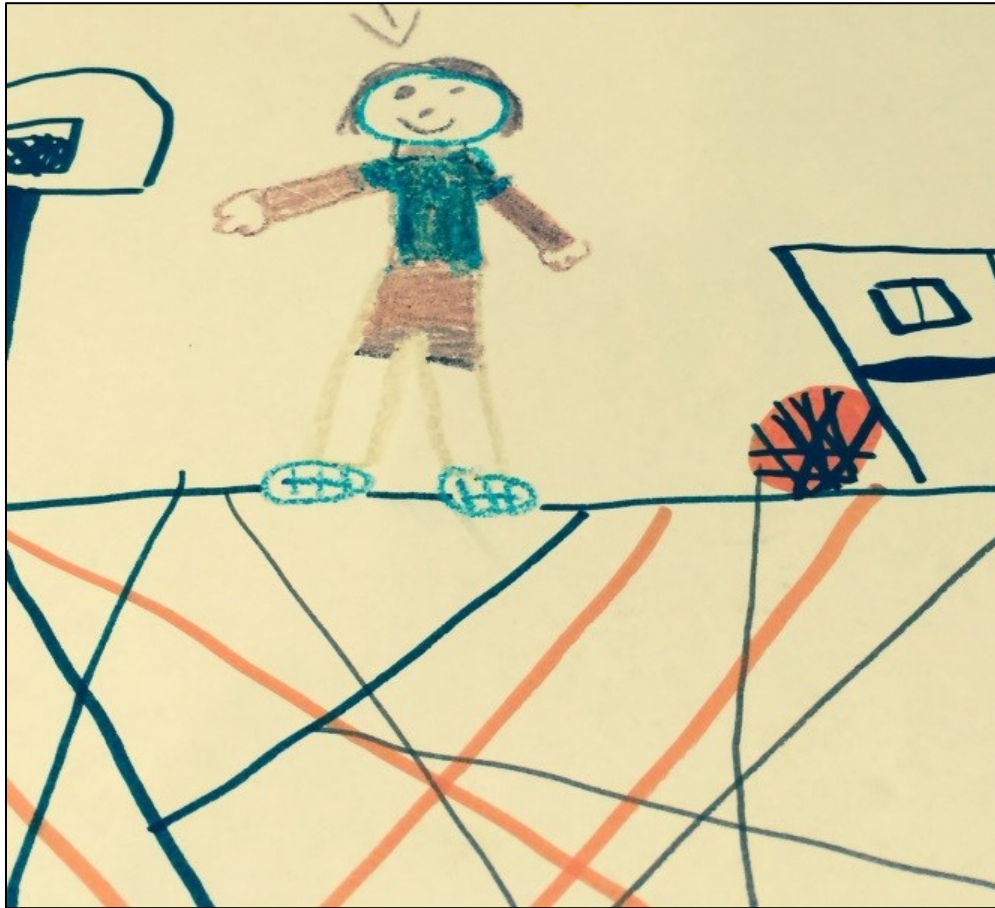


Figure 14. Drawing of a Physical Education Teacher (Grade 1 female; School 5)

Therefore, the findings from the MCAQ and focus group interviews clearly suggest that teachers of physical education must view themselves as role models. This finding supports the work of Dean et al., (2005) who state that role modeling is an important issue for those teaching physical education. The findings also support the role modeling literature that suggest that positive, competent modeling by teachers has a significant impact on desired practices formed by school children. Participants' comments outlined the impact of their learning

environments when their teachers of physical education were perceived as role models.

As I would suggest that a relationship does exist between teacher as a role model and the symbolism of teacher clothing, the following section addresses the second part of the research question. Are children's perceptions toward the teacher and physical education influenced by the teacher's choice of clothing in physical education lessons? Again, the response to this question is yes. To detail why I believe this to be so, the following section discusses children's perceptions toward the teacher and toward physical education.

Perceptions toward the Teacher. Interestingly, participants perceived their teachers of physical education positively when dressed in appropriate clothing. In support of appropriate clothing, participant comments referred to the importance of mobility for teachers of physical education. For example, a Grade 5 male from School 2 wrote, *"he wouldn't run fast with Dress shoes,"* while a Grade 5 female from School 3 wrote, *"Dress shoes you cant run in."* In a similar fashion, a Grade 6 female from School 5 contended that, *"He can't really run in the shoes."*

On the contrary, a Grade 5 male from School 2 wrote, *"golf shirt would be easy to move your arms,"* while a Grade 6 female from School 4 wrote, *"he can have more mobility with a golf shirt."* In a similar fashion, a Grade 5 male from School 3 contended that, *"You can be more active,"* while a Grade 6 female from School 3 held similar perceptions by writing, *"he is wearing a short sleeve shirt and easy clothes to move in."* Mobility, and lack of, was perceived to be an important issue for teacher clothing choice when teaching physical education.

These comments support the findings illustrated in Table 4. The 16 highest rated mannequins were wearing running shoes which were later described in focus group interviews as being important to provide for teacher mobility and safety. For example, whilst discussing Mannequin 14 (golf shirt, sweat pants, running shoes), a Grade 5 female from School 1 wrote, *“it would be good to wear running shoes so the teacher won’t slip.”* Likewise, a Grade 1 female from School 5 stated, *“... if you were wearing dress shoes, you could slip and fall.”* After being asked if she perceived safety to be a concern with inappropriate clothing, she stated, *“Yeah.”* In a similar fashion, when asked how come she thought a teacher could trip in a dress shirt, a Grade 2 female from School 5 stated, *“Cause, those, that really tight sometimes and it could like bend your arm, and when you bend, you could fall.”*

Participant perceptions toward their teachers of physical education were clearly influenced by teacher clothing. For example, whilst describing her “perfectly” dressed mannequin for the teaching of physical education, a Grade 5 female from School 5 stated, *“Umm, I, on my mannequin, I would, ahh, rather golf shirt, t-shirt, or a Sport Chek t-shirt, and sport pant ... and sneakers.”* When asked the follow-up question of why she mentioned those articles of clothing, she stated, *“... he would, ahh, teach us better ... taught us new things that we could, couldn’t do, but then we could do. Cause he taught us.”*

Likewise, whilst explaining his own drawing (see Figure 15), a Grade 6 male from School 5 stated, *“I put, umm, running shoes, shorts, and a t-shirt.”* He added,

I think because shorts are loose and it doesn't cover like your whole thing, so you're not going to be as hot, and then your t-shirt doesn't cover like all your arms, so it's not going to be as hot, and like usually the t-shirts aren't as thick, so they're kind of loose, so, and then your shorts usually aren't that thick, so, but then if you're wearing like, ahh, sweat, or like sweatpants, or like dress pants, they'd be a little more thicker, and then like be hotter and be more tight around your waste and stuff.

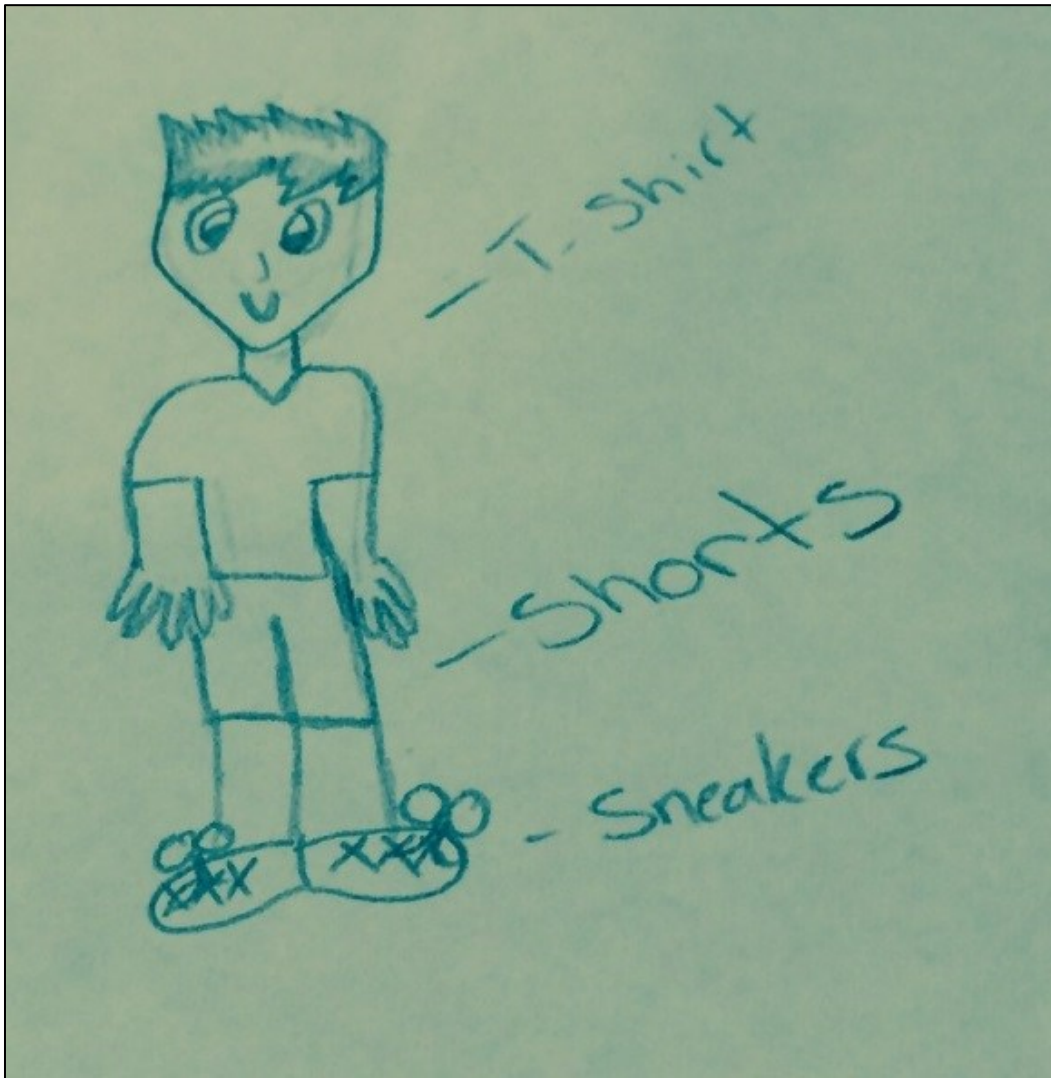


Figure 15. Drawing of a Physical Education Teacher (Grade 6 male; School 5)

“Teacher care” also emerged through the data in relation to teacher clothing. For example, when asked whether she perceives a teacher wearing inappropriate clothing to be one who cares about physical education teaching, a Grade 4 female from School 5 stated, *“I really don’t. Like, like who would wear that when they’re a gym teacher? Maybe a teacher maybe, but, a gym teacher? No.”* When asked if a classroom teacher could wear dress shoes whilst teaching, she stated, *“Yes.”*

Likewise, when asked how a teacher can demonstrate caring through clothing choices, a Grade 4 male from School 5 stated, *“Because, ahh, if, ahh, the teacher wears appropriate clothing for gym, ahh, they, they, ahh, know what to do, and they know how to teach phys. ed.”* he then added, *“... you can see that.”* Likewise, when asked whether or not teacher clothing in physical education can demonstrate teacher care toward the subject area, a Grade 4 female from School 5 stated, *“I do.”*

On the contrary, when asked what it was about Mannequin 1’s inappropriate clothing (dress shirt, tie, dress pants, dress shoes) opposed to a teacher dressed in more active wear (e.g., Mannequin 28), a Grade 4 male from School 5 stated,

Well people should know better actually, well, if they have an option in school or in physical education because they should not be wearing, ahh, dress pants and dress shoes, or fancy clothes to a gym: to teach physical education.

To support his response, he added, *“The mall, umm, the clothes that you wear only to certain occasions. For example, ahh, like a fancy restaurant, or mall...”*

It is clearly evident that participants perceived teachers who wore inappropriate clothing demonstrate a lack of caring toward the teaching of physical education. Because selection of professional attire enhances occupational attributes of teachers (Gordon, 2010), it is important for teachers of physical education who wish to be perceived as teachers who care for children’s learning must attend to their personal choices of clothing in the learning environment.

Perceptions toward Physical Education. Interestingly, it would seem that participants perceived physical education in a positive manner when teachers dress in clothes that support physical activity. For example, participants discussed their perceptions that learning can be enhanced from teachers who wear appropriate clothes while teaching physical education. When asked if she thought teaching would be better if a teacher wore a short sleeve shirt rather than a dress shirt, a Grade 2 female from School 4 stated, *“Then the teacher could teach me better.”* Likewise, a Grade 1 female from School 5 stated, *“Because if he’s not comfortable, he, he might make mistakes ... on the stuff that he’s teaching us.”*

While supporting appropriate clothing choices in order to move (e.g., golf shirt), when asked why it might be important for a teacher to be able to move and demonstrate when teaching physical education, a Grade 2 female from School 5 stated, *“... cause if they can’t move, then you won’t be able to learn.”* In a similar fashion, when asked if teaching can be affected negatively if teachers get too hot due to their clothing, a Grade 6 male from School 4 stated, *“Yes.”* Likewise,

when referring to energy loss whilst teaching, a Grade 6 male from School 5 stated, “... *cause if like their energy went down, they wouldn’t be able to teach us, so we’d be just pretty much sitting there.*” Similarly, a Grade 2 female from School 5 stated, “*Cause, if they get sweaty, then they’ll have to go and have some breaks and that would be wasting our gym time.*” While supporting her perceptions of inappropriate teacher clothing making the teacher too hot, she added, “... *and you won’t get energy.*” Whilst describing what a teacher who becomes too hot from clothing choices will most likely do, she stated,

Have a drink and, well, like sit down, and then he won’t be able to like teach and he won’t, well, and then like he’ll get tired, and then he’ll want, he’ll drink so that you can go again (mumbles) and he’ll be taking too long and he’ll be sw, like sweating.”

Likewise, when asked if what a teacher wears in physical education affects his/her learning, a Grade 4 female and male from School 5 both stated, “Yes,” while a Grade 3 female from School 5 stated, “*Hmm mmm.*” She supported her responses by adding, “*Because if the teacher wore some warm clothes, it wouldn’t be able, the teacher wouldn’t be able to run and would just want to sit down and like rest for a little while and then teach the kids.*” When asked if they are able to learn in physical education from a teacher who is sitting down on the sidelines, she added, “No.” Similarly, a Grade 3 female from School 5 stated, “*Cause if it sits out, then you’re not going to know what to do.*” In a similar fashion, a Grade 5 female from School 5 stated, “*Cause when you get tired, and then they’re wearing like tight clothes and thicker clothes, they might not want to*

show us how to do things, and we might be doing them wrong.” While referring to an ineffective physical education learning environment, a Grade 6 male from School 5 stated,

... and to add onto ... “yeah,” we, we had the same substitute too. And that day she came in, she had her dress on and stuff, and she just said “go play with the basketballs,” and she sat on the bench and watched us.”

The various MCAQ responses, participant comments and drawings all agreed to the idea that teachers of physical education need to assist children in their learning. This finding supports the work of Fishburne (2005), Mawer (1995), Metzler (2005), Pangrazi and Beighle (2010), Rink (2003), and Rink and Hall, (2008). To help children learn in physical education, effective teachers know that children rely heavily on visual information (Rink & Hall, 2008). For this to occur, clothing choices must promote the ability to move physically whilst producing a conducive learning environment.

In terms of perception formation, constructivist processing involves more advanced and cognitive effects than direct processing. Interpretations of visual information cannot be explained by the insufficient amount of sensory information that is collected (Rock, 1983; Rookes & Willson, 2000). Therefore, stored knowledge must be employed to make sense of visual input. This seems to be part of the reason participants perceived teachers as role models in relation to their clothing choices whilst teaching physical education. For example, when the participants responded to the MCAQ, although they were able to view each mannequin, it is most likely that they employed stored knowledge of what is

considered appropriate physical activity clothing and related this to appropriate clothing for effective teaching in physical education.

This is supported by Rookes and Willson (2000) as they contended when forming a perception, cerebral information (i.e., stored mental concepts) travel downwards to influence the way sensory inputs are interpreted. When a child observes a teacher visually in the learning environment, cerebral information about the teacher travels downward to influence the child's perception of the teacher based on such visual cues as facial expressions, stature, clothing, and other visible factors. This seems to support that what children see and know assists in their perception formation. If a teacher is perceived to not take physical education seriously, due to role modeling and clothing choice, it seems as if the participants might not take it seriously, too.

Research Question 1 Summary

It is clear from the data collected that a relationship exists between teacher as a role model and the symbolism of clothing and children's perceptions toward the teacher and physical education are influenced by teacher choice of clothing.

Research Sub-Question 1a

In what ways, if any, does a teacher's choice of clothing in physical education affect school children's perceptions towards that teacher? When reporting the ways that a teacher's choice of clothing in physical education affects school children's perceptions towards that teacher, the data collected in this study suggests there are several ways. For example, teachers were perceived to be role

models, safe, caring, mobile, and comfortable when wearing appropriate clothing whilst teaching physical education.

Teachers are Role Models. As mentioned in a previous section, teachers of physical education were perceived to be role models when wearing appropriate clothing. For example, when referring to Mannequin 15 (blouse, skirt, dress shoes), a Grade 6 female from School 2 wrote, *“this teacher is not prepared and does not show an interest in what she is teaching”* (Rating: Really Not Good = 1/5). Similarly, a Grade 5 female from School 6 wrote, *“I feel that she doesn’t want teach gym.”* (Rating: Really Not Good = 1/5). Whereas, when referring to Mannequin 14 (golf shirt, sweat pants, running shoes), a Grade 6 female from School 2 wrote, *“he is wearing all appropriate gym clothes.”* (Rating: Really Good = 5/5). Similarly, a Grade 6 male from School 5 wrote, *“he is a good teacher because he is Dress the way he is got to be Dressed”* (Rating: Really Good = 5/5).

Likewise, the participants perceived Mannequin 28 (golf shirt, sweat pants, running shoes) as being a role model for physical education. For example, a Grade 6 female from School 2 wrote, *“she shows an interest in what she is teaching”* (Rating: Really Good = 5/5). Similarly, another Grade 6 female from School 2 wrote, *“I absolutely like what the mannequin is wearing it’s appropriate for coaching volleyball.”* (Rating: Really Good = 5/5).

Teachers are Safe. “Teacher safety” was a concern for participants; they either perceived the teacher as being safe or unsafe. For example, when referring to Mannequin 1 (dress shirt, tie, dress pants, dress shoes), a Grade 3 male from School 2 wrote, *“he mite chock.”* (Rating: Not So Good = 2/5). Likewise, a Grade

3 male from School 2 contended that Mannequin 1, “... *will fall and chock.*” (Rating: Not So Good = 2/5), while a Grade 3 male from School 2 held similar perceptions by writing, “*Dress clothes are dangerous.*” (Rating: Really Not Good = 1/5).

On the contrary, when referring to Mannequin 14 (golf shirt, sweat pants, running shoes), a Grade 5 female from School 1 wrote, “*it would be good to wear running shoes so the teacher wont slip*” (Rating: Really Good = 5/5). Similarly, when asked whether or not a teacher is more safe when wearing running shoes, two Grade 5 females and a Grade 6 male from School 5 all stated, “*Yeah.*” In support of running shoes promoting a safer teacher of physical education, a Grade 2 female from School 4 stated, “*Cause you would have good grip at running.*”

Likewise, when asked the clarification questions of what it is about the running shoes that were perceived to promote safety, a Grade 3 female from School 5 stated, “*That they can run, and it won’t, umm ...*” while a Grade 4 female from School 5 finished the sentence by stating, “*... hurt their feet.*” Similarly, when referring to Mannequin 1, a Grade 2 female from School 5 added, “*He can also rip his pants if he’s trying like, if was going to like show them, like, to do something like the splits or something, then his pants could rip.*”

In terms of teacher safety, when referring to her own drawing (see Figure 16), a Grade 6 female from School 5 stated, “*Umm, I drew like a golf shirt and shorts and running shoes.*” After being asked to further explain her perceptions toward ways teacher safety and effectiveness can be enhanced due to teacher clothing, she contended, “*Cause it’s like loose, not tight.*” Whilst defending the

appropriateness of running shoes for teachers of physical education, she added,
“Cause running shoes have more like grip on it, so you don’t slip around.”



Figure 16. Drawing of a Physical Education Teacher (Grade 6 female; School 5)

Teachers are Caring. As mentioned in a previous section, participants perceived their teachers as either caring or not caring toward physical education and their

learning due to their clothing choices. For example, when asked to share her perceptions of Mannequin 15 (blouse, skirt, dress shoes), a Grade 4 female from School 5 stated, “... *who would wear that when they’re a gym teacher? ...*” Likewise, a Grade 6 male from School 6 contended that Mannequin 14 (golf shirt, sweat pants, running shoes), “... *show’s that that teacher cares*” (Rating: Really Good = 5/5).

Teachers are Mobile. Teachers were perceived to either be mobile or immobile due to their clothing choices. For example, whilst referring to Mannequin 19 (sweat shirt, dress pants, dress shoes), a Grade 5 female from School 2 wrote, “*you can’t run*” (Rating: Not So Good = 2/5), while a Grade 6 female from School 2 wrote, “*can’t run that well in high heels*” (Rating: Okay = 3/5).

On the contrary, Mannequin 20 (sweat shirt, dress pants, running shoes) was perceived to be more mobile than Mannequin 19. For example, a Grade 4 female from School 2 contended, “*you can go fastrs*” (Rating: Good = 4/5), while a Grade 3 female participant from School 3 held similar perceptions by writing, “*she can run*” (Rating: Okay = 3/5).

Teachers are Comfortable. Teachers were also perceived to be either comfortable or uncomfortable due to their clothing choices whilst teaching physical education. For example, whilst referring to Mannequin 5 (sweat shirt, dress pants, running shoes), a Grade 5 male from School 2 wrote, “*He would be hot*” (Rating: Good = 4/5). Likewise, a Grade 6 female from School 4 contended, “*You would get way to hot in the things that they are wearing*” (Rating: Not So Good = 2/5).

On the contrary, Mannequin 10 (golf shirt, khaki pants, running shoes) was perceived to be comfortable which translated into a more effective teacher. For example, a Grade 5 male from School 1 wrote, “*He wouldn’t get tired and Hot and He would be able to move good*” (Rating: Really Good = 5/5). Likewise, a Grade 4 female from School 6 held a similar perception by writing, “*he’s not gone to get hot soon*” (Rating: Really Good = 5/5).

In answering the question of what ways does a teacher’s choice of clothing in physical education affect school children’s perceptions towards that teacher, role modeling, safety, caring, mobility, and comfort were addressed. In the literature review, these topic areas were considered elements for effective teaching in physical education. Therefore, in order to teach effectively in physical education, clothing choices seems to be a primary determinant in the perceptions of the participants.





























Research Sub-Question 1a(i)

How does this differ between children’s grade level? In answering this question, the descriptive statistics (MCAQ) suggest that grade level findings are similar. In accordance with Appendix G, Tables 3 through to 8 provide visual representation of the mannequins according to each grade level. In each table, the mannequins have been arranged in descending means. For example, in Table 3 (Grade 1) Mannequins 17 and 19 received the highest and lowest means ($M = 4.43$ and 1.77), whilst in Table 8 (Grade 6), Mannequins 14 and 15 received the highest and lowest means ($M = 4.51$ and 1.51). When considering all six tables, it

is not possible to definitively describe differences that occur between each grade level. However, looking at the trends that occur in each table, it is possible to identify similarities and differences. For example, across all grade levels, mannequins wearing running shoes are looked upon most favourably. Likewise, mannequins wearing dress shoes are least favoured.

Table 3.

Mannequins in Order of Descending Means: Grade 1*





























| | | | | | | |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| #17-4.43 | #24-4.40 | #26-4.38 | #10-4.35 | #21-4.28 | #4-4.27 | #5-4.25 |
|  |  |  |  |  |  |  |
| #8-4.17 | #20-4.17 | #11-4.13 | #14-3.92 | #28-3.92 | #16-3.81 | #2-3.78 |
|  |  |  |  |  |  |  |
| #27-3.65 | #13-3.43 | #9-2.62 | #3-2.57 | #15-2.57 | #12-2.54 | #6-2.43 |
|  |  |  |  |  |  |  |
| #7-2.39 | #1-2.22 | #18-2.13 | #22-1.94 | #25-1.89 | #23-1.86 | #19-1.77 |

* mannequins #1-14 depict male teachers of physical education

* mannequins #15-28 depict female teachers of physical education

Table 4.

Mannequins in Order of Descending Means: Grade 2*





























| | | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| #10-4.21 | #24-4.18 | #14-4.10 | #17-3.92 | #21-3.92 | #28-3.92 | #11-3.90 |
|  |  |  |  |  |  |  |
| #4-3.87 | #26-3.82 | #16-3.79 | #8-3.74 | #5-3.66 | #20-3.62 | #13-3.49 |
|  |  |  |  |  |  |  |
| #27-3.49 | #2-3.47 | #9-2.87 | #7-2.79 | #23-2.76 | #3-2.62 | #22-2.39 |
|  |  |  |  |  |  |  |
| #25-2.36 | #12-2.31 | #18-2.24 | #15-2.23 | #6-2.21 | #19-2.03 | #1-1.74 |

* mannequins #1-14 depict male teachers of physical education

* mannequins #15-28 depict female teachers of physical education

Table 5.

Mannequins in Order of Descending Means: Grade 3*





























| | | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| #28-4.44 | #24-4.42 | #10-4.32 | #14-4.22 | #26-4.07 | #8-4.03 | #21-3.91 |
|  |  |  |  |  |  |  |
| #11-3.84 | #4-3.76 | #27-3.69 | #17-3.61 | #13-3.57 | #5-3.35 | #20-3.26 |
|  |  |  |  |  |  |  |
| #9-3.01 | #16-2.88 | #2-2.85 | #23-2.85 | #25-2.68 | #7-2.66 | #12-2.53 |
|  |  |  |  |  |  |  |
| #22-2.50 | #3-2.27 | #18-2.08 | #19-2.00 | #6-1.95 | #15-1.92 | #1-1.37 |

* mannequins #1-14 depict male teachers of physical education

* mannequins #15-28 depict female teachers of physical education

Table 6.

Mannequins in Order of Descending Means: Grade 4*





























| | | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| #10-4.29 | #24-4.26 | #4-4.17 | #28-4.17 | #26-4.05 | #8-3.88 | #11-3.88 |
|  |  |  |  |  |  |  |
| #21-3.88 | #27-3.87 | #4-3.74 | #13-3.73 | #17-3.55 | #20-3.34 | #5-3.26 |
|  |  |  |  |  |  |  |
| #2-2.96 | #9-2.85 | #16-2.77 | #23-2.73 | #12-2.72 | #7-2.64 | #25-2.54 |
|  |  |  |  |  |  |  |
| #3-2.47 | #22-2.44 | #18-2.27 | #6-2.16 | #19-2.01 | #1-1.62 | #15-1.62 |

* mannequins #1-14 depict male teachers of physical education

* mannequins #15-28 depict female teachers of physical education

Table 7.

Mannequins in Order of Descending Means: Grade 5*





























| | | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| #14-4.33 | #28-4.31 | #24-4.17 | #10-4.10 | #26-3.97 | #21-3.95 | #8-3.89 |
|  |  |  |  |  |  |  |
| #13-3.84 | #27-3.79 | #11-3.69 | #4-3.46 | #17-3.21 | #5-3.15 | #20-3.15 |
|  |  |  |  |  |  |  |
| #9-2.88 | #2-2.74 | #23-2.70 | #7-2.60 | #12-2.57 | #22-2.53 | #25-2.52 |
|  |  |  |  |  |  |  |
| #16-2.31 | #3-2.23 | #6-2.03 | #19-2.02 | #18-2.00 | #1-1.56 | #15-1.48 |

* mannequins #1-14 depict male teachers of physical education

* mannequins #15-28 depict female teachers of physical education

Table 8.

Mannequins in Order of Descending Means: Grade 6*

| | | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| #14-4.51 | #28-4.42 | #13-4.12 | #27-4.04 | #24-3.94 | #10-3.89 | #11-3.69 |
|  |  |  |  |  |  |  |
| #26-3.68 | #8-3.57 | #21-3.55 | #4-3.31 | #5-3.16 | #20-3.12 | #17-2.98 |
|  |  |  |  |  |  |  |
| #9-2.86 | #12-2.74 | #23-2.70 | #25-2.61 | #7-2.59 | #2-2.57 | #22-2.54 |
|  |  |  |  |  |  |  |
| #3-2.40 | #6-2.34 | #16-2.34 | #19-2.23 | #18-2.09 | #1-1.75 | #15-1.51 |

* mannequins #1-14 depict male teachers of physical education

* mannequins #15-28 depict female teachers of physical education

In a similar manner, clothing choices such as golf shirt or sweat shirt and sweat pants or khaki pants also seem appropriate for the teaching of physical education. Whereas, a dress shirt or blouse, skirt or dress pants were perceived to be inappropriate clothing choices. It is important to note that although these trends and patterns are noticeable in Tables 3 through to 8, it is not possible from the MCAQ data to determine absolute difference between grade levels.

As mentioned previously, when considering combined grade level data (see Table 4), three key findings were discovered, namely, that mannequins wearing running shoes, sweat pants or khaki pants, and golf shirts were considered to be dressed appropriately to teach physical education effectively. Although there were a few instances of anomaly, this was also noted in each grade level data set.

Therefore, to respond to the sub-question of whether or not differences existed between grade levels, I would suggest, generally, the answer is no. Slight differences do occur, but the general pattern is similar between grade levels. This is seen clearly when considering not only the MCAQ data, but also the data acquired through the focus group interviews.

Running Shoes. When referring to the appropriateness of running shoes, a Grade 1 female from School 5 shared her perceptions by contending that running shoes “... *would be good for what we are, were, if, for what we were wearing. Just like I’m wearing running shoes,*” whilst a Grade 2 female from School 4 stated the running shoes, “... *have a good grip.*”

When referring to Mannequin 2 (describe), a Grade 3 male from School 2 wrote, *“Runners are good for running but ties & pants are dangerous,”* whilst a Grade 5 female commented, *“This outfit still isn’t that good because dress pants and shirts aren’t that good for gym.”* Likewise, when referring to Mannequin 16, a Grade 6 female from School 6 wrote, *“just because she is wearing runners doesn’t mean she is ready for sports,”* whilst a Grade 4 male from School 2 commented, *“she has good shoes but non good shirt and pants.”*

These comments evidently explain the fact that these participants rated Mannequin 2 (dress shirt, tie, dress pants, running shoes) and Mannequin 16 (blouse, skirt, running shoes) lower than the top 16 out of 28 due to the dress shirt/blouse, tie, and dress pants, not the running shoes. Therefore, it can be suggested that the participants across all grade levels perceived running shoes to be the most appropriate choice of clothing for the teaching of physical education. There did not seem to be any clear differences across grade levels in terms of footwear.

Sweat Pants/Khaki Pants. When perceptions were shared about inappropriate teacher clothing in physical education, dress pants were considered an inappropriate choice. For example, a Grade 6 female from School 4 stated, *“... and with dress pants, they’re formal wear, so I don’t even know why he would be wearing those to school because there’s little children around.”* Likewise, when referring to Mannequin 1 (dress shirt, tie, dress pants, running shoes), a Grade 3 male from School 2 wrote, *“He still looks like a waitress but now hes wearing running shoes.”*

In a similar manner, when describing Mannequin 21 (long sleeve shirt, khaki pants, running shoes), a Grade 5 female from School 3 commented, *“Well you can actually move around in this clothing,”* whilst a Grade 4 male from School 1 referring to Mannequin 24 (golf shirt, khaki pants, running shoes) stated, *“This is really good because she is ready to do anything.”*

Similarly, whilst referring to inappropriate clothing on Mannequin 6 (sweat shirt, dress pants, dress shoes), a Grade 2 female from School 5 contended that, *“He’s not really okay.”* She added, *“Cause he’s wearing dress pants ...”* Likewise, a Grade 1 female from School 4 perceived khaki pants to be the most appropriate choice of pants when she stated her “best dressed” teacher of physical education would wear, *“... golf shirt, khaki pants and runners ...”*

Although there were some slight differences in mannequin ratings across all grade levels on the MCAQ (see Appendix G), the differences do not suggest there are major differences across grade levels. After fusing Appendix G with participant comments, khaki pants and sweat pants were perceived to be appropriate clothing choices for teaching physical education as opposed to dress pants or a skirt.

Golf Shirts. With regard to the choice of clothing on the upper torso, the level of appropriateness determined for golf shirts as opposed to sweat shirts is not as clear as the question of footwear. Although table 5 to 9 do identify a mannequin wearing a golf shirt as being the highest rated, there is some difference between the grade levels.

In support of the MCAQ responses, when referring to Mannequin 17 (golf shirt, dress pants, running shoes), a Grade 4 male from School 2 wrote, “*she has good shirt and shoes but not good pants.*” Similarly, a Grade 1 female from School 1 supported her rating of 5/5 for Mannequin 28 (golf shirt, sweat pants, running shoes) by writing, “*she has runners and t shirt.*” Similarly, when referring to the appropriateness of a golf shirt, a Grade 2 female from School 4 stated, “*Umm, cause it would be more loose and when you did stuff, and when you do stuff, it won’t be so hard ...*” She added that a golf shirt “*... would be good cause you won’t get that sweaty, and it won’t pull your arms so you can walk,*” while a Grade 1 female from School 5 stated that a short sleeve shirt, “*... you wouldn’t sweat in.*”

When a golf shirt was not chosen, a sweat shirt sometimes was. However, it was interesting to note that concern was raised by participants regarding the wearing of a sweat shirt and the level of appropriateness for such a choice. For example, when referring to Mannequin 25 (sweat shirt, khaki pants, dress shoes), a Grade 3 female from School 3 wrote, “*... get really HOT!!!*” whilst a Grade 6 female from School 5 referred to Mannequin 13 (sweat shirt, sweat pants, running shoes) by writing, “*He is wearing good gym clothes but the sweat shirt isn’t best idea.*”

After fusing Tables 3 through to 8 with participant comments, generally, golf shirts were perceived to be appropriate clothing choices for teaching physical education, as opposed to dress shirts, ties, blouses, long sleeve shirts, and sweat shirts.

Summary. After analyzing both the quantitative and qualitative data, there were no discernable differences across grade levels. The various MCAQ responses fused with participant comments all supported the idea that teachers of physical education will be most effective when wearing running shoes, sweat pants or khaki pants with a golf shirt. This finding supports the work Freeburg and Workman (2010). Appearance is critical in the face-to-face learning environment. It seems that the participants perceived their teachers of physical education to be more effective when they wore appropriate clothing (i.e., running shoes, sweat /khaki pants, golf shirt) while teaching.

As mentioned in the literature review, the clothing being worn by a teacher in physical education must align with someone who is prepared to engage in physical activity or children may perceive the teacher as uncaring toward the subject area, not prepared to demonstrate the skills, and/or disinterested in engaging in physical activities. What was stated by Gordon (2010), “it appears that selection of professional attire enhances occupational attributes of teachers” (p. 48) was found to be true in the participants’ perceptions.

Research Sub-Question 1a and 1a(i) Summary

It is clear from the data collected that a teacher’s choice of clothing in physical education does affect school children’s perceptions towards that teacher in terms of role modeling, safety, caring, mobility, and comfort, and such perceptions do not differ across grade levels.

Research Sub-Question 1b

In what ways, if any, does a teacher's choice of clothing in physical education affect school children's perceptions towards learning in physical education? From the focus group data, a teacher's choice of clothing in physical education does affect school children's perceptions towards their learning in physical education. The data collected in this study suggest that this is in several ways. For example, participant learning in physical education was perceived to be enhanced when teachers were comfortable, role modeling, and able to demonstrate.

Throughout the focus group interviews, participants shared their perceptions of how they learned in physical education. For example, when asked why she believes teaching physical education would be done better whilst wearing a short sleeve shirt as opposed to a dress shirt, a Grade 2 female from School 4 stated, *"Then the teacher could teach me better."* She further added to this statement by nodding her head when asked if she perceived teacher clothing to be an important consideration for better learning.

Comfort. As stated previously, teachers' comfort level whilst teaching physical education was perceived by participants to assist in their learning. For example, a Grade 6 male from School 5 stated,

... like the clothes you're wearing, so like if it's very thick to your body, you're going to feel uncomfortable and you're going to get hot, and then you're just ... you're not going to want to demonstrate. While, if you're

wearing like, ahh, loose clothes and like, you won't get as hot, so you can still teach and you still want to teach.

When asked if he perceived a teacher who gets too hot and sits down is creating a quality learning environment, he added, “No.” Likewise, when asked why she thinks a teacher’s teaching may not be good when he/she gets too hot in the clothes being worn, a Grade 1 female from School 4 stated, “*Because if he’s not comfortable, he, he might make mistakes ... on the stuff that he’s teaching us.*”

Similarly, children’s learning was perceived to be impacted negatively when teachers wear inappropriate clothes while teaching physical education. For example, whilst discussing why a teacher cannot teach as well when wearing inappropriate clothing (e.g., sweat shirt), a Grade 1 female from School 4 stated, “*... you get so tired and (sigh) ...*” Likewise, a Grade 2 female from School 5 stated, “*Cause, if they get sweaty, then they’ll have to go and have some breaks and that would be wasting our gym time.*” She then added, “*... and you won’t get energy.*” Likewise, when referring to Mannequin 1 (dress shirt, tie, dress pants, dress shoes), a Grade 3 male from School 2 wrote, “*I put a sad face because you will be hot in that stuff*” (Rating: Really Not Good = 1/5), while a Grade 4 female from School 2 wrote, “*he would be very hot and uncomfortable*” (Rating: Not So Good = 2/5).

In a similar manner, a Grade 5 male from School 1 wrote that Mannequin 10 (golf shirt, khaki pants, dress shoes), “*... wouldn’t get tired and Hot and He would be able to move good*” (Rating: Really Good = 5/5) when referring to Mannequin 16 (blouse, skirt, running shoes). It was perceived by participants that

their learning was enhanced when their teachers were comfortable in the clothes they wore. Issues such as being too hot, needing rest or water breaks were identified by the participants as negatively impacting their learning.

Role Modeling. Being a role model was clearly identified to assist in creating a better learning environment for children. For example, when referring to Mannequin 26 (sweat shirt, khaki pants, dress shoes), a Grade 4 female from School 3 wrote, *“This is what my gym teacher should wear”* (Rating: Really Good = 5/5). Likewise, a Grade 5 female from School 3 wrote, *“It’s a gym teacher sort of wear”* (Rating: Really Good = 5/5). Similarly, a Grade 4 female from School 5 stated,

... we just had inline skating, a week ago ... you guys probably did this too right ... he actually had his own rollerblades ... he was actually participating ... he actually showed other people that need help ... and he actually participated in like what, how to do rollerblading, and he was like playing all the games that we were playing, and we had a lot of fun with him.”

When asked whether or not she believes that what helped her learn was when her teacher set an example of being physically active and wore appropriate clothing, she stated, *“Hmm mmm”* and *“Yeah, it is very good teaching.”*

On the contrary, teachers were perceived to not be role models by the participants due to inappropriate clothing choices. For example, when referring to Mannequin 15 (blouse, skirt, dress shoes), a Grade 6 female from School 2 wrote, *“this teacher is not prepared and does not show an interest in what she is*

teaching” (Rating: Really Not Good = 1/5). Likewise, a Grade 5 female from School 6 wrote, *“I feel that she dosen’t want teach gym.”* (Rating: Really Not Good = 1/5). In a similar manner, a Grade 6 male from School 6 contended that, *“This shows that the teacher do’s not care.”* (Rating: Really Not Good = 1/5), while a Grade 4 male from School 6 wrote, *“it looks like shes going to a wedding”* (Rating: Not So Good = 2/5). Similarly, a Grade 4 male from School 5 stated, *“... it’s that teacher who’s just sitting down is not a good teacher. It’s, it wouldn’t be even called a teacher, just lazy person.”*

It is clearly evident that the participants perceived teacher clothing to affect their potential learning. Teachers wearing appropriate clothing (golf shirt, sweat pants, running shoes, etc.) were perceived to be role models and would likely provide a better learning experience than those wearing inappropriate clothing such as dress shirt, dress pants, and dress shoes.

Ability to Demonstrate. Participant responses suggest that a teacher’s ability to demonstrate activity in physical education would affect their learning. Clothing choice was seen as a determinant of whether a teacher was able to perform such as a demonstration. For example, whilst referring to Mannequin 1 (dress shirt, tie, dress pants, dress shoes), a Grade 5 male from School 1 wrote, *“he won’t show you exactly what he wants you to do”* (Rating: Not So Good = 2/5). Likewise, a Grade 6 female from School 1 wrote, *“They won’t be able to show you how to do it”* (Rating: Not So Good = 2/5). In a similar manner, when asked if he would consider teaching to be when a teacher walks into the gymnasium and sits down on the sidelines and says “go pick up some racquets or go play with the ball,” a

Grade 4 male from School 5 stated, *“No, the, ahh, like if you didn’t know what the game that you’re playing were, umm, you wouldn’t know how to play it, so you need, you, you needed, ahh, instructions of how to play it.”*

Similarly, a Grade 5 female from School 5 stated,
... if they wear like, umm, proper clothes ...then we would learn anything ... one time when we needed to learn new thing ... our teacher ... didn’t show us, then we were going to show to everyone, then we’re just going to be embarrassed because we didn’t, we didn’t learn how to do that.

When asked to clarify whether learning could be done better when a teacher is able to show her how to perform the skills properly, she stated, *“Yes.”* Likewise, when discussing her drawing (see Figure 17), a Grade 4 female from School 5 stated,

Umm, I, I did not put a dark shirt on my, ahh, mannequin, or my person that I drew because dark clothing attracts the light and it will make him warmer. So I put lighter clothes on him, so he wouldn’t like, ahh, go warm.”

Whilst extending the description of her diagram in relation to learning in physical education, she added, *“... he’s actually in my picture, he is, ahh, he’s demonstrating, ahh, going upper hand badminton, ahh, racquet, and having the birdie, and demonstrating how to hit the birdie up in the air.”*

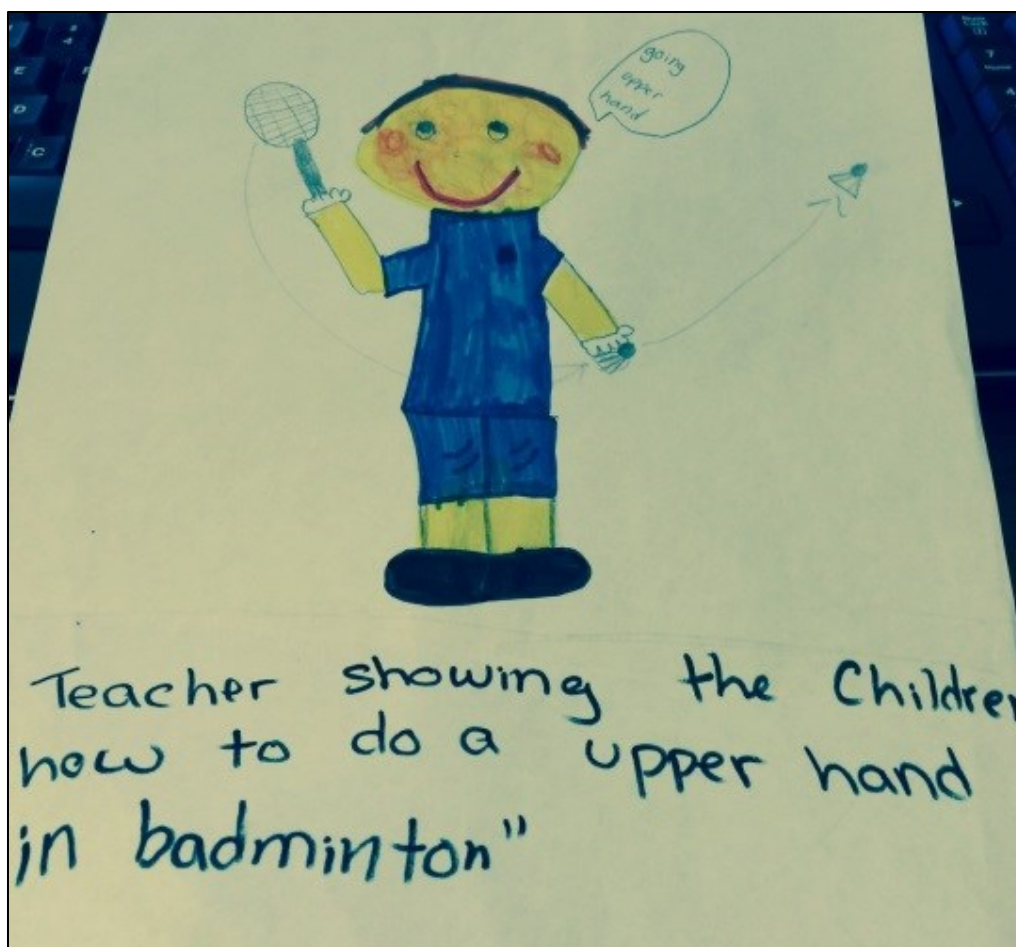


Figure 17. Drawing of a Physical Education Teacher (Grade 4 female; School 5)

Likewise, when referring to Mannequin 28 (golf shirt, sweat pants, running shoes) and demonstrating, a Grade 6 female from School 2 wrote, *“it’s a good example to show us!”* (Rating: Really Good = 5/5), whilst a Grade 5 female from School 6 commented on Mannequin 24 (golf shirt, khaki pants, running shoes) by writing, *“Its really good because she can move & teach more.”* (Rating: Really Good = 5/5). Further, while explaining how her teacher’s demonstration helps her learning, a Grade 5 female from School 5 stated, *“He shows us how to do it, like how, when he shows us first, and if we don’t get it right, he helps us.”* Similarly, a Grade 3 female from School 5 referred to her teacher as someone who

helps her learning through demonstration by stating, *“Because when, when we play like, umm, ss, like, mmm, soccer, he, he, picks, he, for an example, he picks somebody out of the, umm, the class, and he shows how to play it and demonstrates it.”*

Likewise, a Grade 4 female from School 4 shared her perceptions toward the importance of teacher demonstrations by stating,

Because, say you’re playing a new game, and, well, a new sport, and they say, and they just, umm, don’t like show you or an, show you anything, and then she, then she or he says you can play now and everybody is like ... we don’t (laughs) know what to do.

In regards to teacher demonstration and teacher clothing, when asked whether teachers of physical education should wear appropriate clothing in physical education (e.g., golf shirt) in order to demonstrate, a Grade 6 male from School 4 stated, *“And the teacher should have that, cause they should be able to do that too, to show.”*

The importance of teacher demonstrations in physical education has been alluded to in the literature. Teachers of physical education who demonstrate motor skills during lessons can influence school children in a positive manner (Pangrazi & Beighle, 2010). In agreement with Pangrazi and Beighle (2010), Fishburne (2005) stressed that teachers of physical education should demonstrate motor skills and participate regularly in the physical activities with children during lessons. It was clear the participants perceived their learning to be affected

positively when teachers wore appropriate clothing and were capable of demonstrating in physical education.

Research Sub-Question 1b Summary

Participants commented on how their learning in physical education was affected by teacher clothing. When teachers were comfortable, role modeling, and demonstrating, participant comments suggested that their learning would be positively impacted and create conducive learning environments. This supports the literature as Dean et al. (2005) contended these areas are especially important for physical education teaching.

Research Sub-Question 1c

What is the clothing of choice, if any, that school children believe their teachers of physical education should wear while teaching? When reporting the clothing of choice that school children believe that teachers of physical education should wear while teaching, the data collected in this study suggests there are clothing choices that are more appropriate than others. For example, participants perceived running shoes, sweat pants, khaki pants or shorts and a golf shirt to be the best choice.

For example, when explaining their “best” dressed teacher of physical education, a Grade 1 female from School 5 stated, *“They should wear a t-shirt ... and runners,”* whilst a Grade 2 female from School 5 stated,

... running shoes and those are good for running, and the pants they’re good like let you, like jogging, so if I was going to teach somebody, then

you could run better and you won't get so hot cause you're not wearing sweater.

Similarly, when describing the clothing of choice she perceived a teacher of physical education to wear, a Grade 4 female from School 5 stated, *"I would put a t-shirt, like, umm, a golf shirt, and I would give him some, like, umm, shorts, and I would like give him some like really good running shoes."* Likewise, a Grade 6 female from School 5 stated, *"... like they all said like shorts and a t-shirt, and sneakers."*

A Grade 1 female from School 4 mentioned, *"I would think, ahh, a good shirt that would, would, would let air in ... and good pants, kind of the same as the shirt, and runners."* She added, *"I, I'm actually going with golf shirt, khaki pants and runners and the shorts and the golf shirt and the runners ..."* Likewise, a Grade 4 male from School 4 stated the following as his clothing of choice for teachers of physical education, *"Running shoes, shorts and a short sleeve shirt."*

In a similar fashion, a Grade 4 male from School 4 stated, *"Found a perfect one ..."* when searching the MCAQ for a mannequin dressed appropriately for teaching physical education. He pointed out Mannequin 10 (golf shirt, khaki pants, running shoes). He supported his response by stating,

Cause, a golf shirt ... makes them move around in, and you'll probably be sweaty, so and it will let your, and, it, you wouldn't be as sweaty because it will let your arms cool off, and ... khaki pants are kind of nice and loose, so you could run in them easily, easily, so that's good and then runners, you could run in pretty good too.

Whilst holding similar perceptions, a Grade 3 male from School 4 added,

Umm, the golf shirt, he would, if he had a long sleeve shirt, it would get, he would get sweaty and if he had a short sleeve shirt, it would be easier to do stuff, like running and that stuff. And khaki pants ... it's loose and you could turn and do like games like, and runners would be good too.

Similarly, a Grade 4 female from School 5 perceived Mannequin 14 (golf shirt, sweat pants, running shoes) to be dressed appropriately for physical education. To support her perception, she stated, “... *I would think about this mannequin, I would say it would comfortable, it would be appropriate, it would be, ahh, be nice wear, and you can run in it.*” She added,

... cause you don't just like go and wear whatever you want ... there's a choice of being a good gym teacher and a bad gym teacher. So you really want to be a good gym teacher, so you would have a choice of being a bad gym teacher or a good teacher, and you could do ... the right choice or just do the wrong one, so you're better off just doing a good choice because if you come wearing like sweat shirt, sweat pants and like dress shoes, you're going to be so warm, and you're going to pay for it, cause you're going to go sit down , and then your students are going to be like what do I do, what do I do? ... but really, you should wear shorts, ahh, short sleeve shirt and runners, so you won't be that hot, and then when you interact with children, they're really going to like you ... when you're going to show them what, how to do it, ahh, you can learn.”

Likewise, a Grade 6 male from School 4 added his thoughts about the clothing of choice for the teaching of physical education by stating, *“Umm, well you should have shorts and like running shoes ... like not like jeans ...”* When asked why he believes Mannequin 10 (golf shirt, sweat pants, running shoes) would help the teaching of physical education, he stated,

Cause, sweat pants are, you can move a lot in them, and golf shirt’s like a normal t-shirt so you should be able to move in that, and kind, runners are good, so I think like it would be good for that.

Similarly, a Grade 5 male from School 5 stated, when referring to Mannequin 10, stated,

The golf shirt first, umm, when people go for a golf, umm, they have a golf shirt. Why? Because, umm, it’s stretchable when they like stroke the thing into the hole, and the khaki pants are stretchable too, and they can, and they’re in sneakers, and they can run, and they can help the class.

In a similar fashion, whilst explaining her diagram of a teacher of physical education (see Figure 18), a Grade 2 female from School 4 explained the clothing of choice included, *“Short sleeve shirt and short pants ...”* and *“... running shoes.”*

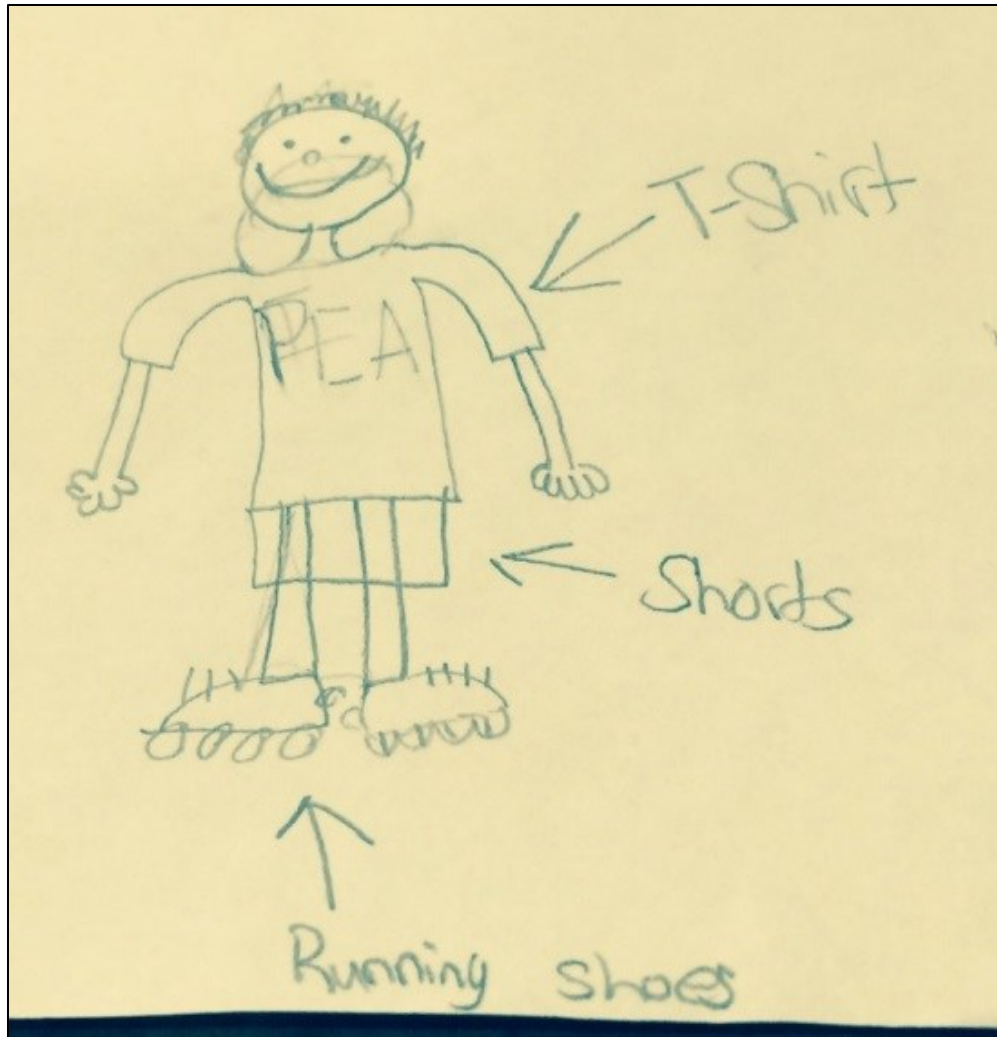


Figure 18. Drawing of a Physical Education Teacher (Grade 2 female; School 4)

Similarly, a Grade 6 female from School 4 stated, “... *golf shirts are made for sports and made for like movement, and sweats are baggier so you can move your legs and stretch, and running shoes, they, they will help ...*” whilst a Grade 6 male from School 4 explained what he perceived to be the clothing of choice for teachers of physical education by stating, “... *maybe some shorts, maybe like, like you know those Nike shorts, kind of like this, like those stretchy ones ...*” When asked why he referred to “stretchy ones,” he added, “*Well, cause they’re really stretchy ... when you sweat in them ... they, I don’t know, they’re called DryFit.*”

He then added, *“And shorts, eh, I think shorts are better than sweat pants.”*

Similarly, in support of “stretchy” clothes, a Grade 5 male from School 4 added, *“I think they should wear those stretchy, like, shirts, so they can move around, not like a dress shirt because they’re tighter, and cause you need to stretch, and pants that stretch, and you need to wear runners...”*

In a similar fashion, when explaining why he likes Mannequin 14 (golf shirt, sweat pants, running shoes), a Grade 6 male from School 5 stated, *“... he has the golf shirt, sweat pants, and runners on.”* To support his response, he added,

... cause he’s not wearing like, sweat pants are usually loose, and as (name of another student) said before, the golf shirt’s like stretchy and loose, and it’s not like tight on you, and he’s got running shoes on, so I think that’d be a good gym teacher.”

Likewise, whilst explaining the importance of choosing between wearing sweat pants/khaki pants or shorts, a Grade 5 female from School 5 stated, *“... if it’s really, really hot, they should wear shorts.”* She added, *“Yeah, but if it’s like normal, they should wear ... like pants and this shirt because ... so they can be safety and all of those things, and for sports.”*

In support of what participants perceived to be the clothing of choice for teachers of physical education, when referring to Mannequin 28 (golf shirt, sweat pants, running shoes), a Grade 5 female from School 1 wrote, *“she’s wearing loose clothes to move around”* (Rating: Really Good = 5/5), while a Grade 5 female from School 2 wrote, *“because you can really move”* (Rating: Really

Good = 5/5). In a similar fashion, a Grade 6 female from School 6 wrote, “*This outfits perfect for moving around*” (Rating: Really Good = 5/5).

Research Sub-Question 1c Summary

The choice of clothing for the teaching of physical education was clearly identified by the participants. For example, running shoes were perceived to be the clear choice for footwear. The data suggested that a teacher who chose to wear the clothing of choice (e.g., golf shirt, khaki pants) for the teaching of physical education was perceived to be “responding to situational demands” (Workman & Freeburg, 2009). Therefore, from the mannequins presented to the participants, the perceived the clothing of choice for teachers of physical education included a golf shirt, sweat pants, khaki pants, and running shoes. However, students also make clear reference to the appropriateness of wearing shorts. Although this was not a clothing choice depicted on any of the mannequins, the wearing of shorts was referred to by a number of participants.

Hence, tying participant comments to the literature, clothing choices that promote mobility and comfort allows teachers to be more effective in their teaching. Participants perceived the clothing of choice to assist in creating conducive learning environments. Rink (2003) stated that effective teachers know that children rely heavily on visual information. Therefore, effective teachers need to visually present themselves in an appropriate manner to children. This means the wearing of clothing that portrays a readiness to teach physical education - golf shirt, sweat pants, khaki pants, shorts, and running shoes.

CHAPTER 5 – DISCUSSION

The purpose of this study was to explore whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *children's perceptions* toward the teacher and physical education influenced by the teacher's choice of clothing in physical education lessons. Owing to the mixed methodology of this study, the research questions and the findings from the participant data discussed in Chapter 4, this chapter has been divided into the following sections: (1) the importance of teacher clothing choice, (2) the impact of teacher clothing on the learning environment, (3) teacher credibility as perceived by children, (4) practical implications, and (5) the potential impact of findings for the teaching of physical education.

The Importance of Teacher Clothing Choice

It is clear, from the findings of this study, that teacher clothing choice in physical education is important. Participants consistently pointed toward the importance of wearing running shoes, sweat pants/khaki pants/shorts with a golf shirt for several reasons discussed in Chapter 4. For example, a Grade 5 female from School 2 contended that a teacher wearing running shoes, "*can really move,*" whilst a Grade 2 female from School 4 explained her drawing of the "perfect" teacher of physical education as wearing, "*Short sleeve shirt and short pants ...*" and "*... running shoes.*" This clearly supports the notion that children require a teacher of physical education that is mobile, comfortable and able to demonstrate in order to learn most effectively.

According to Fishburne (2005), in order to demonstrate motor skills, teachers must consider the appropriateness of their clothing for physical activity. When teachers of physical education demonstrate motor skills and display enthusiasm throughout lessons, they can help children reach higher levels of motivation (Vidourek et al., 2011).

In terms of new insights for the teaching of physical education, this study has developed a more thorough understanding about the importance of teacher clothing. Although a teacher of physical education can prepare him/herself by developing thorough lesson plans and effective assessment techniques (Metzler, 2005; Pangrazi & Beighle, 2010), if that teacher decides to wear “inappropriate clothing” in the learning environment, the data indicates that he/she may well be perceived as being uncaring and unsafe toward the subject area. Therefore, if teachers wish to create a conducive learning environment, they must consider more than planning and assessment. The importance of demonstrating and role modeling has been supported throughout the literature review. As Bradford and Hickson (in press) and Vogler (2003) suggested the demonstration of physical or motor tasks has been perceived to be one of the most powerful forms of communicating to children in physical education. Therefore, wearing appropriate clothing to be able to do so is critical.

In the realm of physical education, clothing choice impacts child perceptions of the type of teacher, the learning occurring, and the overall learning experience. This lends itself to the literature. For example, Workman and Freeburg (2009) contended that wearing appropriate clothing is a sign of responding to

situational demands. The participant data collected in this study clearly indicates that clothing choice for a teacher of physical education must be part of a teacher's repertoire as physical education teaching requires being mobile, comfortable and able to demonstrate motor skills.

The Impact of Teacher Clothing on the Learning Environment

This study has helped develop a deeper understanding of how teacher clothing choice in physical education can impact children's perceptions toward the quality of learning experiences. For example, with regard to the type of clothing being worn, a Grade 1 female from School 4 explained that a teacher would likely be a "not so good" teacher of physical education, *"Because if he's not comfortable, he, he might make mistakes ... on the stuff that he's teaching us."* Statements such as this indicate that although a teacher may be well-prepared, his/her potential clothing choice can impact how children perceive the learning environment.

Clothing choices such as, running shoes, sweat pants and a golf shirt were perceived as being appropriate clothing for a teacher of physical education to be wearing. Although practicality of clothing choice is important (Roach, 1997), participants also identified such qualities as caring for the subject area, ready to teach, and able to participate. Whereas teachers, when wearing inappropriate clothing such as dress shoes, dress pants, and a dress shirt, were perceived as being unable to demonstrate skills (e.g. jumping), unsafe, and not caring about the subject area. Therefore, inappropriate clothing in physical education may well be perceived as impractical in the widest sense of the term.

In light of this, it is apparent that teachers of physical education need to understand that if they wish to create a learning environment that children perceive as supporting their learning, they need to wear clothing that is appropriate for physical activity. For example, the demonstration of skills is critical for a teacher of physical education. This is supported through participant data. For example, when discussing Mannequin 1 (dress shirt, tie, dress pants, dress shoes), a Grade 6 female from School 1 wrote, *“They won’t be able to show you how to do it”* (Rating: Not So Good = 2/5). If a teacher is unable to demonstrate the skills being learned by children, the learning experiences will not be as effective as compared to a teacher who is able to demonstrate. Teacher clothing has been identified, through this study, as a major reason for being able or unable to demonstrate skills in physical education which can be tied to role modeling. In physical education, role modeling by teachers has a significant impact on desired practices formed by school children (Bradford & Hickson, in press; Dean et al., 2005).

It is important to recognize that the elementary school teacher may not have the time to always change into clothing such as sweat pants, golf shirt, etc. during the busy school day. However, the data does indicate that the simple change of dress shoes into running shoes can positively influence the perceptions of the children toward the teacher, the subject area, and the learning occurring in the lesson. For example, a Grade 3 male from School 2 wrote, *“Runners are good for running ...”* Much research endeavours into effective learning environments have focused on issues such as planning, assessment, and delivery methods

(Metzler, 2005; Rink & Hall, 2008). I would contend that it is of the utmost importance to listen to what children are saying, and in this study, they constantly communicated that teacher clothing can assist in the effectiveness of physical education teaching.

Teacher Credibility as Perceived by Children

Throughout this study, it has become apparent that the participants perceived the clothing worn by the teacher of physical education as important. This adds to the research conducted by Hickson and Bradford (2012). Participant comments indicated that the credibility of the teacher is questioned. For example, when referring to Mannequin 15 (blouse, skirt, dress shoes), a Grade 6 male from School 6 stated, *“This shows that the teacher do’s not care.”* (Rating: Really Not Good = 1/5), while a Grade 4 male from School 6 contended, *“it looks like shes going to a wedding”* (Rating: Not So Good = 2/5).

What a teacher chooses to wear whilst teaching physical education is a powerful communicator to the children (Damhorst et al., 2005). For example, if a teacher is preparing to teach physical education wearing “inappropriate clothing,” a clear non-verbal message is being sent to the children that the teacher does not care for physical education and may not be able to teach the skills that are to be learned. When this occurs, the teacher is communicating to the children that physical education is simply a time for “not learning.” This finding adds to the “busy, happy, good” literature of Placek (1983) and Hickson and Fishburne (2005).

Practical Implications

The findings in this study clearly identify a relationship between teacher clothing and participant perceptions toward that teacher and physical education. Hence, it seems imperative for teachers of physical education to address this and become creative in searching for ways to be able to change into appropriate attire for teaching.

Over the past few years, I have shared this work at a number of educational events and have received a considerable amount of feedback. Although there has been much interest in the research, there has been a common response to my findings. This response has been in the question of, “How am I going to get changed during the day, I cannot leave my children?” I recently presented this research to a graduate class and was asked about the question of time. I asked a student to start a stopwatch and quickly changed from dress shoes into running shoes at my desk. Within 40 seconds, I had changed my footwear and was ready to teach and indicated to the class members that the findings of this study inform us that we need to become creative and to discover ways to wear appropriate attire for the teaching of physical education. When it comes to finding ways to change into appropriate clothing for the teaching of physical education, perhaps it is critical that we spend more time looking for ways to achieve this rather than ways to oppose it.

Overall, the practical implications that arose from the findings in this study can be summarized by listing the “appropriate clothing” choices for teachers of physical education. The wearing of running shoes, sweat pants/khaki

pants/shorts, with a golf shirt was perceived to be the most appropriate choice of clothing for teaching physical education. For example, when explaining their “best” dressed teachers of physical education, a Grade 1 female from School 5 contended, “*They should wear a t-shirt ... and runners,*” whilst a Grade 4 female from School 5 listed, “*... a t-shirt, like, umm, a golf shirt, and ... like, umm, shorts, and ... really good running shoes.*” However, as mentioned previously, in today’s elementary schools where most teachers teach across all subject areas, finding the time to change clothes when transitioning from a classroom subject area such as Mathematics or Language Arts to Physical Education is difficult. For example, if a Grade 2 teacher is teaching Mathematics and is wearing the regular teaching attire, it is difficult and potentially irresponsible to step out of the classroom to change clothes. Therefore, two suggestions are shared in the following sections to help support this study’s findings.

Suggestion #1 – Plan Ahead. As mentioned previously, although it is clear that teachers who choose to wear appropriate clothing whilst teaching physical education are perceived as caring, role modeling, and more fully prepared to teach effectively, as mentioned previously, it can be difficult to find the time to change. However, I would like to suggest that teachers plan creatively for their school day. For example, on certain days when a teacher teaches physical education in the first block, he/she may come to school already dressed in appropriate clothing for the teaching of physical education and ask to be excused by an administrator for a few minutes after the class to go get changed or change at the first recess bell. In another instance, if a teacher teaches physical education in the period right before

lunch break, the teacher could possibly ask for some class supervision for a few moments prior to the class to change into appropriate clothing and then plan to change back into formal classroom attire at lunch break. Similarly, if a teacher teaches Mathematics from 9:30 – 10:00AM and then Physical Education from 10:00 – 10:30AM, he/she could plan on wearing a golf shirt that day and bring some running shoes to change into quickly prior to and after class. Although the only item to change will be the shoes, the golf shirt has been chosen as it is considered to appropriate for teaching physical education.

Perhaps school administration personnel could consider ways in which they might be able provide classroom teachers with the opportunity to change into appropriate clothing for the teaching of physical education. If found, such a solution could enhance the overall effectiveness of the school's physical education program. If school administration wish to support the subject area of physical education, the findings from this study suggest that if generalist teachers are able to wear appropriate clothing for the teaching of physical education, the learning environment may well be perceived to be much more effective.

Suggestion #2 – Change Shoes. Although finding the time to change into appropriate clothing for the teaching of physical education is likely to be an issue with most elementary school teachers, what is not difficult is changing from dress shoes to running shoes. Such a change can be achieved in a few moments and it is hoped that teachers can do so quickly in the presence of their children without having to leave the classroom. By doing this, a clear message may well be sent to the children indicating the importance of physical education to the teacher.

This adds to Dean et al.'s (2005) statement of whether they like it or not, teachers of physical education must perceive themselves to be role models. Resulting from this study's findings, it is apparent that teacher role modeling in physical education is not confined to just behavior and action, but clearly includes clothing. Therefore, a teacher "... *show's that [he/she] cares.*" (Grade 6 male from School 6) by wearing a golf shirt, sweat pants with running shoes.

This study's findings indicate that teachers of physical education may well be perceived as more effective teachers and children may perceive physical education to be an important subject area where their learning is valued by the teacher. This adds to what Rink and Hall (2008) contended as they stated effective teachers of physical education are organized. In this case, organization is more than panning ahead in terms of lesson delivery and assessment, but also clothing. This can be summarized through a statement from a Grade 4 male from School 5 when he referred to a teacher of physical education wearing appropriate clothing as someone who knows, "... *what to do, and they know how to teach phys. ed. ... you can see that.*"

The Potential Impact of Findings for Teaching Physical Education

Elementary school children deserve to participate in physical education programs where they can become physically educated (Hickson & Fishburne, 2005). Therefore, programs must be constructed and delivered in a manner to support children becoming physically educated. In particular, the findings from this study would suggest that teachers need to be most aware of their clothing choices when taking children to the gymnasium. For example, a Grade 5 male

from School 1 contended that Mannequin 1 (dress shirt, tie, dress pants, dress shoes), “... *won't show you exactly what he wants you to do*” (Rating: Not So Good = 2/5).

Resulting from the findings of this study, teaching effectiveness can be enhanced if teachers of physical education consider their clothing choices whilst teaching. For example, Mannequin 28 (golf shirt, sweat pants, running shoes) was perceived to be a “really good” teacher of physical education, whilst a Grade 5 female from School 1 wrote, “*she's wearing loose clothes to move around*” (Rating: Really Good = 5/5). Similarly, a Grade 5 female from School 2 wrote, “*because you can really move*” (Rating: Really Good = 5/5).

These participant comments illustrate that when teachers are comfortable, mobile, safe, role modeling, and demonstrating, children's learning can be impacted in a positive manner. This adds to the work of Molloy (1988) as he contended that clothing affects four kinds of perceptions: credibility, likability, interpersonal attractiveness, and dominance. This study's findings clearly lend themselves to support credibility. For example, the participants perceived their teachers a credible or not due to the teacher clothing whilst teaching physical education. In support of this, when referring to Mannequin 10 (golf shirt, khaki pants, running shoes), a Grade 5 male from School 1 wrote, “*He wouldn't get tired and Hot and He would be able to move good*” (Rating: Really Good = 5/5). When looking at the following participant diagrams of effective teachers of physical education, it must be noted that appropriate clothing is being worn.



Figure 19. Drawing of a Physical Education Teacher (Grade 5 female; School 5)



Figure 20. Drawing of a Physical Education Teacher (Grade 4 female; School 4)

In summary, teachers should be finding ways, with support from the administration team, to wear appropriate clothing whilst teaching physical education. After all, if wearing appropriate clothing whilst teaching physical education can assist in children's learning due to greater perceptions toward the teacher and physical education, does it not seem worth the effort?

CHAPTER 6 – IMPLICATIONS FOR FUTURE RESEARCH

The findings of this study present a number of points that either confirm the research literature or are worthy of consideration for further research.

Therefore, this chapter has been written to explain how this research area can be expanded upon in the future. Although this study found trends for elementary school children's perceptions toward teacher clothing in physical education, it must be noted that this study marks the first of its kind. The review of related literature found no other work that has explored whether or not teacher clothing impacts children's perceptions in physical education. Therefore, ideas, implications, and future research questions are shared for future thoughts and discussion.

Chapter Organization

This chapter is organized into a variety of sections. First, future directions for the field are described. Second, a description of my future research program is outlined with thoughts and strategies for carrying out research both in physical education, and within regular classroom subject areas, too. Third, an explanation of how different research could be conducted using different research questions while employing different research methodologies.

Future Directions for the Field

A relationship was found between teacher clothing in physical education and participant perceptions toward the teacher and physical education. I would suggest that this study's findings may be beneficial to the field of education.

It is recommended that an awareness of the potential impact that clothing can have on a child's perception of a teacher of physical education be shared at all educational levels. Such discussion could be incorporated into effective teaching understanding. For example, teachers need to understand the importance their choice of clothing has on the impact of their physical education program. Sharing ways to change for their physical education classes and having school administrative support to create ways so that teachers could find time to change their clothing would start this important conversation.

It is apparent that the participants in this study had strong views about the clothing being worn by teachers of physical education. Therefore, it is suggested that teachers continue to listen to the voices of those children that they teach. Encouraging children to share their thoughts would enable teachers to gather valuable information as to what impacts a child's learning.

Summary of Future Directions for the Field

To summarize this section, it is noted that from this study's findings children's perceptions toward their teachers and physical education are related to teacher clothing. Knowing this would be important knowledge at all levels of schooling. Knowledge such as this could assist in positively impacting children's learning.

Future Research Program

As I conducted this study, I became aware of research gaps in this area. As mentioned previously, the issue of teacher clothing in physical education has received minimal, if any, research attention. Therefore, there are several other

questions beyond the scope of this study that could be asked. Therefore, the following section lists a variety of research ideas.

1. **Do differences exist between elementary school boys and girls when it comes to perceptions toward their teachers and physical education due to teacher clothing?** This study did not consider whether gender differences exist. One of the reasons for this was the understanding that elementary school classes are not segregated by gender. Therefore, this study did not separate the genders. However, it may be possible that differences exist between how elementary school boys perceive their teachers and physical education due to teacher clothing as opposed to girls of the same age. This could serve as a future research question.
2. **Do clothing colors affect elementary school children's perceptions toward their teachers and physical education?** This study did not consider the particular colors of clothing. Although the variable of color could present a difficult task when trying to identify all the possible combinations of clothing, it could serve as an important piece of research to understand children's perceptions of teaching physical education.
3. **Do school "team logos" and/or clothing "brands" affect elementary school children's perceptions toward their teachers and physical education?** On a number of occasions, when presenting this work, I have been asked as to whether team logo or popular brand name clothing impacts children's perceptions of the teaching of physical education. Understanding this issue is another potential area of research.

Interestingly, if it is found to do so, it would be important to understand whether socio-economic status has any impact.

4. **Can teacher clothing impact the levels of “student enjoyment and motivation” in physical education?** This study did not consider the participants’ levels of personal enjoyment and motivation toward physical education. Such a study investigating participants’ level of enjoyment and motivation toward learning in physical education could be correlated with their perceptions toward their teachers and physical education due to teacher clothing.

Summary of Future Research Program

To summarize this section, an array of future research questions has been shared. Throughout my journey of conducting this study, I have come across several ideas from other researchers and have received feedback concerning this study and how it can continue into the future. For example, looking into different variables such as clothing color, gender, and team logos may serve the research field with important new information.

1. Different Research Questions using Different Research Methodologies

Although the MCAQ developed and used in this study was revised from an initial pilot study that I and my supervisor conducted (Hickson, & Bradford, 2012), it has been suggested that it can be further enhanced to respond to varying research questions using different statistical measurements (e.g., Analysis of Variance). The following section illustrates different ways as to how adjustments could be made to the MCAQ.

1. **How much do different clothing combinations impact children's perceptions?** Inferential statistics were perceived to be beyond the scope of this study. However, for future research, there may be ways to run inferential statistics around the different clothing combinations in the MCAQ. For example, it has been suggested to conduct research that explores the statistical differences, if any, a golf shirt has on children's perceptions as opposed to a sweat shirt. Whether or not this information can help support the trends found in this study may be worthy of revising the MCAQ. For example, inferential statistics may lend to a deeper understanding of the differences, if any, between different clothing combinations (e.g., golf shirt, sweat pants, running shoes versus sweat shirt, sweat pants, running shoes). Although this study found that a golf shirt is more appropriate than a sweat shirt for several reasons (e.g., cooler), discovering how much it is more effective may serve to support this research area.
2. **Can fusing together a variety of variables lend itself to learning more about children's perceptions toward teacher clothing in physical education?** Although it may take a lengthy procedure to conduct such a study, discovering whether or not a new version of the MCAQ can be developed to respond to such issues as clothing color, gender, and student motivation in physical education may serve research needs. Conducting a study that fuses these variables together, and possibly others that may be thought of at a later date, may serve the research area with a new and

important body of knowledge. However, in order to conduct such a research study, a new version of the MCAQ would need to be developed with a variety of variables being considered. For example, within the MCAQ, a summative response scale would be required that corresponds to the independent variable of “student motivation” in physical education. In addition to the quantitative data that the MCAQ could collect, this study could be a pragmatic multi-level mixed methods study, in which each part of the study could help develop the next part (Mertens, 2014).

Summary of Different Research Questions using Different Research

Methodologies

In summary, the MCAQ could be further developed and different research methodologies utilized in order to discover new findings. For example, using different research paradigms (e.g., postpositivism) could lead to possible new uses for a revised MCAQ and/or a pragmatic multi-level mixed methods research study that could consider different variables not researched in this study (e.g., clothing color, gender, student motivation, etc.).

Final Reflections

Although this study may mark the first of its kind on the symbolism of teacher clothing in physical education, there are several important considerations. First, it is important that we continue to investigate the different variables that can impact physical education teaching and learning. This is important to ensure that children are provided with conducive physical education learning experiences. Second, the findings from this study illustrated that the choice of clothing is

important to children and their learning. Therefore, conducting future research to further investigate these findings may serve to create a better and more thorough understanding of the effective teaching of physical education. Third, employing different research methodologies in future research studies may help reach new findings not addressed in this study. Although this study identified some important findings, I believe that these findings are only the beginning of our understanding of teacher clothing and how it impacts school children's perceptions towards their teachers and physical education.

Although it has been noted that teachers of physical education have the responsibility to develop and teach programs that physically educate elementary school children (Hickson & Fishburne, 2005), the findings from this study may have added to the physical education research literature concerning effective teaching, teacher as a role model, and the symbolism of teacher clothing. As previously stated, issues such as planning, lesson delivery (Bradford & Hickson, 2014; Mawer, 1995; Rink, 2006; Siedentop, 1991), and the evaluation of learning (Metzler, 2005; Pangrazi & Beighle, 2010) have been constant themes of consideration and thought, but an area of *teacher preparedness* such as presentation (i.e., clothing) has not been investigated to the same degree (Hickson & Bradford, 2012). This study provides another thought for teachers when considering their practice.

It is hoped that the findings from this mixed methods study can assist in understanding the importance of an elementary school teacher's choice of clothing when teaching physical education. Providing conducive learning environments is

a critical aim for all teachers. The findings from this study have the potential to support this aim.

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APPENDIX A

LETTERS OF CONSENT

INFORMATION LETTER TO SCHOOL DIVISIONS

Study Title: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Research Investigator: Brent Bradford, Doctoral (PhD) Candidate

551 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5

Bdb3@ualberta.ca - 780-492-4273

Supervisor: Dr. Clive Hickson: Associate Dean - Education UG Student Services

530 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5

clive.hickson@ualberta.ca - 780-492-4952

Background

I am a graduate student in the Department of Elementary Education at the University of Alberta. Prior to pursuing my doctoral work, I spent 9.5 years teaching in Edmonton, Alberta. The majority of those years were spent teaching physical education to elementary and junior high school students.

Purpose

I hope to conduct a research study with the purpose of understanding whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *elementary school children's perceptions* toward the teacher, physical education, and physical activity influenced by the teacher's choice of clothing in physical education lessons. This research study is the focus of my Doctor of Philosophy Degree Dissertation. I would be grateful if you would consider allowing one or two of your elementary schools, and specifically the teachers and students from the selected school sites, to participate in this research study.

Study Procedures

Involvement of the teachers would be minimal. They will be simply asked if I can come into their classrooms to distribute a questionnaire to students that would take approximately 30 minutes to complete. Involvement of the students would entail responding to a questionnaire that I will distribute in their specific classrooms. Data will be collected and analyzed through the completion of the questionnaire. Phase two of this research study will direct 1-2 students from each grade level in each school to be involved in a focus group interview to gain their opinions of their perceptions toward their teacher of physical education. The focus group interviews will be recorded and conducted in English-speaking schools and will last approximately 45 minutes. After the focus group interviews are transcribed by myself, I will return to each school for one last focus group interview (approximately 30 minutes) in order to member-check (i.e., ensure that I understood what the participants meant in their responses).

Benefits

I hope that you will allow your school division to participate in my research study. It is hoped that, with your schools' assistance, an understanding toward the symbolism of teacher clothing in physical education can be gained. The information gained from my research study will be disseminated to educators and families of school children through presentations and articles. There are no costs for being involved in my research study.

Risk

There are no known risks associated with participation in my research study. If we learn anything during the research that may affect your willingness to continue being in my study, we will tell you right away. My research study will be conducted as approved by the University of Alberta's Research Ethics Board and in a respectful manner toward your school division. I will comply with the University of Alberta Standards for the Protection of Human Research Participants.

Voluntary Participation

There is no obligation to participate. You are under no obligation to allow your school division to participate in my study. Participation in my research study is free and completely voluntary. You may withdraw your schools, teachers, and students from this research study at any time without penalty and prejudice.

Confidentiality

All the data collected during my study will be secured and will remain confidential. School, teacher and student anonymity is assured; no participant will be identifiable in any document resulting from the research. The results from my study will be used for my Doctor of Philosophy Dissertation. Following the completion of my Dissertation, it is hoped that I publish some academic articles and lead some academic presentations regarding my research study. However, please understand that your schools, teacher and student identity will not be shared in any publications and presentations. For all their uses, data will be handled in compliance with the University of Alberta Standards.

Data will be kept confidential. The only people who will have access to the data will be Dr. Clive Hickson (Supervisor) and myself. Due to the fact that student's will be given a pseudonym prior to the focus group interviews, anonymity is guaranteed to the highest degree; no names will be used throughout the focus group interviews. Consent forms and any other data identifying study information (i.e., focus group transcriptions, audio-recordings) will be kept confidential and secure in a locked filing cabinet at the University of Alberta during the course of the study and after completion of the study for a five-year period. After the five-year period deemed appropriate by REB 1, consent forms and any other data identifying study information (i.e., focus group transcriptions, audio-recordings) will be shredded through a confidential shredding service or tapes "wiped clean" of all recordings. If your school division is interested in the results of my study, you can email me to inquire about the final report.

Further Information

If you have any further questions regarding my study, please do not hesitate to contact myself at (780) 492-4273 or bdb3@ualberta.ca or my supervisor Dr. Clive Hickson at (780) 492-4952 or clive.hickson@ualberta.ca. Thank you for considering this request. If you have concerns about this study, you may contact the Research Ethics Office, at 492-2615. This office has no direct involvement with my research study.

Yours truly,

Brent Bradford, M.Ed.

SCHOOL DIVISIONS CONSENT FORM

Title of Project: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Principal Investigator: Brent Bradford, University of Alberta: 780-492-4273

Supervisor: Dr. Clive Hickson, University of Alberta: 780-492-4952

Do you understand that you have been asked if your school division can be in a research study? **Yes / No**

Have you read and received a copy of the attached Information Sheet? **Yes / No**

Do you understand the benefits and risks involved for your school division in taking part in this research study? **Yes / No**

Have you had an opportunity to ask questions and discuss this study? **Yes / No**

Do you understand that you are free to refuse your school division to participate, or to withdraw your school division from the study at any time, without consequence, and that your participants' information will be withdrawn at your request? **Yes / No**

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information? **Yes / No**

This study was explained to me by: _____

I have read and understood the attached information letter and agree to have my school division to take part in this study:

Signature of School Division Director

Date

Printed Name of School Division Director

I believe that the person signing this form understands what is involved in the study and voluntarily agrees for his/her school division to participate.

Signature of Investigator or Designee

Date

A COPY OF THIS DOCUMENT SHOULD BE GIVEN TO THE SCHOOL DIVISIONS.

INFORMATION LETTER TO SCHOOL PRINCIPALS

Study Title: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Research Investigator: Brent Bradford, Doctoral (PhD) Candidate

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Bdb3@ualberta.ca - 780-492-4273

Supervisor: Dr. Clive Hickson: Associate Dean - Education UG Student Services

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Background

I am a graduate student in the Department of Elementary Education at the University of Alberta. Prior to pursuing my doctoral work, I spent 9.5 years teaching in Edmonton, Alberta. The majority of those years were spent teaching physical education to elementary and junior high school students.

Purpose

I hope to conduct a research study with the purpose of understanding whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *elementary school children's perceptions* toward the teacher, physical education, and physical activity influenced by the teacher's choice of clothing in physical education lessons. This research study is the focus of my Doctor of Philosophy Degree Dissertation. I would be grateful if you would consider allowing your school, and specifically the teachers and students from your school, to participate in my research study.

Study Procedures

Involvement of the teachers would be minimal. They will be simply asked if I can come into their classrooms to distribute a questionnaire to students that would take approximately 30 minutes to complete. Involvement of the students would entail responding to a questionnaire that I will distribute in their specific classrooms. Data will be collected and analyzed through the completion of the questionnaire. Phase two of this research study will direct 1-2 students from each grade level in your school to be involved in a focus group interview to gain their opinions of their perceptions toward their teacher of physical education. The focus group interviews will be recorded and conducted in English-speaking schools and will last approximately 45 minutes. After the focus group interviews are transcribed by myself, I will return to your school for one last focus group interview (approximately 30 minutes) in order to member-check (i.e., ensure that I understood what the participants meant in their responses).

Benefits

I hope that you will allow your school to participate in my research study. It is hoped that, with your school's assistance, an understanding toward the symbolism of teacher clothing in physical education can be gained. The information gained from my research study will be disseminated to educators and families of school children through presentations and articles. There are no costs for being involved in my research study.

Risk

There are no known risks associated with participation in my research study. If we learn anything during the research that may affect your willingness to continue being in my study, we will tell you right away. My research study will be conducted as approved by the University of Alberta's Research Ethics Board and in a respectful manner toward your school. I will comply with the University of Alberta Standards for the Protection of Human Research Participants.

Voluntary Participation

There is no obligation to participate. You are under no obligation to allow your school to participate in my study. Participation in my research study is free and completely voluntary. You may withdraw your school, teachers, and students from this research study at any time without penalty and prejudice.

Confidentiality

All the data collected during my study will be secured and will remain confidential. School, teacher and student anonymity is assured; no participant will be identifiable in any document resulting from the research. The results from my study will be used for my Doctor of Philosophy Dissertation. Following the completion of my Dissertation, it is hoped that I publish some academic articles and lead some academic presentations regarding my research study. However, please understand that your school, teacher and student identity will not be shared in any publications and presentations. For all their uses, data will be handled in compliance with the University of Alberta Standards.

Data will be kept confidential. The only people who will have access to the data will be Dr. Clive Hickson (Supervisor) and myself. Due to the fact that your student's will be given a pseudonym prior to the focus group interviews, anonymity is guaranteed to the highest degree; no names will be used throughout the focus group interviews. Consent forms and any other data identifying study information (i.e., focus group transcriptions, audio-recordings) will be kept confidential and secure in a locked filing cabinet at the University of Alberta during the course of the study and after completion of the study for a five-year period. After the five-year period deemed appropriate by REB 1, consent forms and any other data identifying study information (i.e., focus group transcriptions, audio-recordings) will be shredded through a confidential shredding service or tapes "wiped clean" of all recordings. If you are interested in the results of my study, you can email me to inquire about the final report.

Further Information

If you have any further questions regarding my study, please do not hesitate to contact myself at (780) 492-4273 or bdb3@ualberta.ca or my supervisor Dr. Clive Hickson at (780) 492-4952 or clive.hickson@ualberta.ca. Thank you for considering this request. If you have concerns about this study, you may contact the Research Ethics Office, at 492-2615. This office has no direct involvement with my research study.

Yours truly,

Brent Bradford, M.Ed.

SCHOOL PRINCIPALS CONSENT FORM

Title of Project: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Principal Investigator: Brent Bradford, University of Alberta: 780-492-4273

Supervisor: Dr. Clive Hickson, University of Alberta: 780-492-4952

Do you understand that you have been asked if your school can be in a research study? **Yes / No**

Have you read and received a copy of the attached Information Sheet? **Yes / No**

Do you understand the benefits and risks involved for your school in taking part in this research study? **Yes / No**

Have you had an opportunity to ask questions and discuss this study? **Yes / No**

Do you understand that you are free to refuse your school to participate, or to withdraw your school from the study at any time, without consequence, and that your participants' information will be withdrawn at your request? **Yes / No**

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information? **Yes / No**

This study was explained to me by: _____

I have read and understood the attached information letter and agree to have my school take part in this study:

Signature of School Principal

Date

Printed Name of School Principal

I believe that the person signing this form understands what is involved in the study and voluntarily agrees for his/her school to participate.

Signature of Investigator or Designee

Date

A COPY OF THIS DOCUMENT SHOULD BE GIVEN TO THE SCHOOL PRINCIPALS.

INFORMATION LETTER TO SCHOOL TEACHERS

Study Title: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Research Investigator: Brent Bradford, Doctoral (PhD) Candidate

551 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5

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Supervisor: Dr. Clive Hickson: Associate Dean - Education UG Student Services

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Purpose

I hope to conduct a research study with the purpose of understanding whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *elementary school children's perceptions* toward the teacher, physical education, and physical activity influenced by the teacher's choice of clothing in physical education lessons. This research study is the focus of my Doctor of Philosophy Degree Dissertation. I would be grateful if you would consider allowing your students to participate in my research study.

Study Procedures

Your involvement in my research would be minimal. You will be simply asked if I can come into your classrooms to distribute a questionnaire to your students that would take approximately 30 minutes to complete. Involvement of your students would entail responding to a questionnaire that I will distribute in your classroom. Data will be collected and analyzed through the completion of the questionnaire. Phase two of this research study will direct 1-2 students from your class to be involved in a focus group interview to gain their opinions of their perceptions toward their teacher of physical education. The focus group interviews will be recorded and conducted in English-speaking schools and will last approximately 45 minutes. After the focus group interviews are transcribed by myself, I will return to your school for one last focus group interview (approximately 30 minutes) in order to member-check (i.e., ensure that I understood what the participants meant in their responses).

Benefits

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Confidentiality

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Data will be kept confidential. The only people who will have access to the data will be Dr. Clive Hickson (Supervisor) and myself. Due to the fact that your student's will be given a pseudonym prior to the focus group interviews, anonymity is guaranteed to the highest degree; no names will be used throughout the focus group interviews. Consent forms and any other data identifying study information (i.e., focus group transcriptions, audio-recordings) will be kept confidential and secure in a locked filing cabinet at the University of Alberta during the course of the study and after completion of the study for a five-year period. After the five-year period deemed appropriate by REB 1, consent forms and any other data identifying study information (i.e., focus group transcriptions, audio-recordings) will be shredded through a confidential shredding service or tapes "wiped clean" of all recordings. If you are interested in the results of my study, you can email me to inquire about the final report.

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Yours truly,

Brent Bradford, M.Ed.

SCHOOL TEACHERS CONSENT FORM

Title of Project: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Principal Investigator: Brent Bradford, University of Alberta: 780-492-4273

Supervisor: Dr. Clive Hickson, University of Alberta: 780-492-4952

Do you understand that you have been asked if your students can be in a research study? **Yes / No**

Have you read and received a copy of the attached Information Sheet? **Yes / No**

Do you understand the benefits and risks involved for your students in taking part in this research study? **Yes / No**

Have you had an opportunity to ask questions and discuss this study? **Yes / No**

Do you understand that you are free to refuse your students to participate, or to withdraw your students from the study at any time, without consequence, and that your students' information will be withdrawn at your request? **Yes / No**

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information? **Yes / No**

This study was explained to me by: _____

I have read and understood the attached information letter and agree to have my school take part in this study:

Signature of School Teacher

Date

Printed Name of School Teacher

I believe that the person signing this form understands what is involved in the study and voluntarily agrees for his/her students to participate.

Signature of Investigator or Designee

Date

A COPY OF THIS DOCUMENT SHOULD BE GIVEN TO THE SCHOOL TEACHERS.

INFORMATION LETTER TO PARENTS/GUARDIANS: (Quantitative)

Study Title: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Research Investigator: Brent Bradford, Doctoral (PhD) Candidate

551 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5

Bdb3@ualberta.ca - 780-492-4273

Supervisor: Dr. Clive Hickson: Associate Dean - Education UG Student Services

530 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5

clive.hickson@ualberta.ca - 780-492-4952

Background

I am a graduate student in the Department of Elementary Education at the University of Alberta. Prior to pursuing my doctoral work, I spent 9.5 years teaching in Edmonton, Alberta. The majority of those years were spent teaching physical education to elementary and junior high school students.

Purpose

I hope to conduct a research study with the purpose of understanding whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *elementary school children's perceptions* toward the teacher, physical education, and physical activity influenced by the teacher's choice of clothing in physical education lessons. This research study is the focus of my Doctor of Philosophy Degree Dissertation. I would be grateful if you would consider allowing your child to participate in my research study.

Study Procedures

Your child's participation in my research study would entail responding to a questionnaire. The questionnaire, that will consist of a series of visual mannequin images depicting a teacher wearing different clothing options, will be administered by myself to your child. Your child will view each mannequin on a large scale (i.e., whiteboard) and on a small-scale (i.e., paper) prior to filling out a response. Completing the questionnaire will take approximately 30 minutes. The questionnaire will only need to be completed by your child once. Again, I will distribute the questionnaire to your child along with his/her classmates who volunteer to participate. Data will be collected and analyzed through the completion of the questionnaire.

Benefits

I hope that you will allow your child to participate in my research study. It is hoped that, with your child's assistance, an understanding toward the symbolism of teacher clothing in physical education can be gained. The information gained from my research study will be disseminated to educators and families of school children through presentations and articles. There are no costs for being involved in my research study.

Risk

There are no known risks associated with participation in my research study. If we learn anything during the research that may affect your willingness to continue being in my study, we will tell you right away. My research study will be

conducted as approved by the University of Alberta's Research Ethics Board and in a respectful manner toward your child. I will comply with the University of Alberta Standards for the Protection of Human Research Participants.

Voluntary Participation

There is no obligation to participate. You are under no obligation to allow your child to participate in my study. Participation in my research study is free and completely voluntary. Even if you agree to allow your child to be in my study, your child may withdraw from my research study at any time without penalty and prejudice. In the event of withdrawing your child, I will continue to use the data I have collected from your child because I will not know which responses are your child's as no names will be written on the questionnaires.

Confidentiality

All the data collected during my study will be secured and will remain confidential. Your child's anonymity is assured and he/she will not be identifiable in any documents resulting from my research study. The results from my study will be used for my Doctor of Philosophy Dissertation. Following the completion of my Dissertation, it is hoped that I publish some academic articles and lead some academic presentations regarding my research study. However, please understand that your child's identity will not be shared in any publications and presentations. For all their uses, data will be handled in compliance with the University of Alberta Standards.

Data will be kept confidential. The only people who will have access to the data will be Dr. Clive Hickson (Supervisor) and myself. Due to the fact that your child will not write his/her name on the questionnaire, anonymity is guaranteed to the highest degree; no names will be written on the questionnaires.

Consent forms and any other data identifying study information (i.e., questionnaires) will be kept confidential and secure in a locked filing cabinet at the University of Alberta during the course of the study and after completion of the study for a five-year period. After the five-year period deemed appropriate by REB 1, consent forms and any other data identifying study information (i.e., questionnaires) will be shredded through a confidential shredding service. If you and your child are interested in the results of the study, you can email me to inquire about the final report.

Further Information

If you have any further questions regarding my study, please do not hesitate to contact myself at (780) 492-4273 or bdb3@ualberta.ca or my supervisor Dr. Clive Hickson at (780) 492-4952 or clive.hickson@ualberta.ca. Thank you for considering this request. If you have concerns about this study, you may contact the Research Ethics Office, at 492-2615. This office has no direct involvement with my research study.

Yours truly,

Brent Bradford, M.Ed.

PARENTS/GUARDIANS (QUANTITATIVE) CONSENT FORM

Title of Project: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Principal Investigator: Brent Bradford, University of Alberta: 780-492-4273

Supervisor: Dr. Clive Hickson, University of Alberta: 780-492-4952

Do you understand that you have been asked if your child can be in a research study?

Yes / No

Have you read and received a copy of the attached Information Sheet? **Yes / No**

Do you understand the benefits and risks involved for your child in taking part in this research study? **Yes / No**

Have you had an opportunity to ask questions and discuss this study? **Yes / No**

Do you understand that you are free to refuse your child to participate, or to withdraw your child from the study at any time, without consequence. However, you also understand that your child's information will be unable to be withdrawn at your request as no names will be put on the questionnaires? **Yes / No**

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information? **Yes / No**

This study was explained to me by: _____

I have read and understood the attached information letter and agree to have my child take part in this study:

Signature of Research Participant's Parent/Guardian

Date

Printed Name of Research Participant's Parent/Guardian
Grade Level

Child's Name and

I believe that the person signing this form understands what is involved in the study and voluntarily agrees for his/her child to participate.

Signature of Investigator or Designee

Date

A COPY OF THIS DOCUMENT SHOULD BE GIVEN TO THE PARTICIPANTS'
PARENTS/GUARDIANS.

INFORMATION LETTER TO PARENTS/GUARDIANS: (Qualitative)

Study Title: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Research Investigator: Brent Bradford, Doctoral (PhD) Candidate

551 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5

Bdb3@ualberta.ca - 780-492-4273

Supervisor: Dr. Clive Hickson: Associate Dean - Education UG Student Services

530 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5

clive.hickson@ualberta.ca - 780-492-4952

Background

I am a graduate student in the Department of Elementary Education at the University of Alberta. Prior to pursuing my doctoral work, I spent 9.5 years teaching in Edmonton, Alberta. The majority of those years were spent teaching physical education to elementary and junior high school students.

Purpose

I hope to conduct a research study with the purpose of understanding whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *elementary school children's perceptions* toward the teacher, physical education, and physical activity influenced by the teacher's choice of clothing in physical education lessons. This research study is the focus of my Doctor of Philosophy Degree Dissertation. I would be grateful if you would consider allowing your child to participate in my research study.

Study Procedures

Your child's participation in my research study would involve responding to some questions that I will ask in a focus group interview. In order to help further explain and expand on the initial quantitative results (Phase 1 of my study), the focus group interviews will be recorded, transcribed, and then coded in order to transform the data into emerging themes. The focus group interviews will consist of 4-5 school children. Your child will be directed to share his/her perceptions towards his/her teachers in relation to their teachers' choice of clothing in physical education whilst being asked to explain the reasons for their perceptions. Further, your child will be asked about his/her perceptions towards physical education and physical activity too. The focus group interviews will be recorded and conducted in English-speaking schools and will last approximately 45 minutes. After the focus group interviews are transcribed by myself, I will return to your child's school for one last focus group interview (approximately 30 minutes) in order to member-check (i.e., ensure that I understood what your child and other focus group interviewees meant in their responses).

Benefits

I hope that you will allow your child to participate in my research study. It is hoped that, with your child's assistance, an understanding toward the symbolism of teacher clothing in physical education can be gained. The information gained from my research study will be disseminated to educators and families of school children through presentations and articles. There are no costs for being involved in my research study.

Risk

There are no known risks associated with participation in my research study. If we learn anything during the research that may affect your willingness to continue being in my study, we will tell you right away. My research study will be conducted as approved by the University of Alberta's Research Ethics Board and in a respectful manner toward your child. I will comply with the University of Alberta Standards for the Protection of Human Research Participants.

Voluntary Participation

There is no obligation to participate. You are under no obligation to allow your child to participate in my study. Participation in my research study is free and completely voluntary. Even if you agree to allow your child to be in my study, your child may withdraw from my research study at any time without penalty and prejudice. In the event of withdrawing your child, I will continue to use the data I have collected from your child; however, if you would like me to delete your child's responses to the focus group interviews, you need only to contact me and make a request.

Confidentiality

All the data collected during my study will be secured and will remain confidential. Your child's anonymity is assured and he/she will not be identifiable in any documents resulting from my research study. The results from my study will be used for my Doctor of Philosophy Dissertation. Following the completion of my Dissertation, it is hoped that I publish some academic articles and lead some academic presentations regarding my research study. However, please understand that your child's identity will not be shared in any publications and presentations. For all their uses, data will be handled in compliance with the University of Alberta Standards.

Data will be kept confidential. The only people who will have access to the data will be Dr. Clive Hickson (Supervisor) and myself. Due to the fact that your child will be given a pseudonym prior to the focus group interviews, anonymity is guaranteed to the highest degree; no names will be used throughout the focus group interviews. Consent forms and any other data identifying study information (i.e., focus group transcriptions, audio-recordings) will be kept confidential and secure in a locked filing cabinet at the University of Alberta during the course of the study and after completion of the study for a five-year period. After the five-year period deemed appropriate by REB 1, consent forms and any other data identifying study information (i.e., focus group transcriptions, audio-recordings) will be shredded through a confidential shredding service or tapes "wiped clean" of all recordings. If you and your child are interested in the results of my study, you can email me to inquire about the final report.

Further Information

If you have any further questions regarding my study, please do not hesitate to contact myself at (780) 492-4273 or bdb3@ualberta.ca or my supervisor Dr. Clive Hickson at (780) 492-4952 or clive.hickson@ualberta.ca. Thank you for considering this request. If you have concerns about this study, you may contact the Research Ethics Office, at 492-2615. This office has no direct involvement with my research study.

Yours Truly,

Brent Bradford, M.Ed.

PARENTS/GUARDIANS (QUALITATIVE) CONSENT FORM

Title of Project: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Principal Investigator: Brent Bradford, University of Alberta: 780-492-4273

Supervisor: Dr. Clive Hickson, University of Alberta: 780-492-4952

Do you understand that you have been asked if your child can be in a research study?

Yes / No

Have you read and received a copy of the attached Information Sheet? **Yes / No**

Do you understand the benefits and risks involved for your child in taking part in this research study? **Yes / No**

Have you had an opportunity to ask questions and discuss this study? **Yes / No**

Do you understand that you are free to refuse your child to participate, or to withdraw your child from the study at any time, without consequence, and that your child's information will be withdrawn at your request? **Yes / No**

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information? **Yes / No**

This study was explained to me by: _____

I have read and understood the attached information letter and agree to have my child take part in this study:

Signature of Research Participant's Parent/Guardian

Date

Printed Name of Research Participant's Parent/Guardian

Child's Name (Grade)

I believe that the person signing this form understands what is involved in the study and voluntarily agrees for his/her child to participate.

Signature of Investigator or Designee

Date

A COPY OF THIS DOCUMENT SHOULD BE GIVEN TO THE PARTICIPANTS'
PARENTS/GUARDIANS.

INFORMATION LETTER TO STUDENTS: Quantitative

Study Title: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Research Investigator: Brent Bradford, Doctoral (PhD) Candidate
551 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5
Bdb3@ualberta.ca - 780-492-4273

Supervisor: Dr. Clive Hickson: Associate Dean - Education UG Student Services
530 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5
clive.hickson@ualberta.ca - 780-492-4952

Background

Hi, my name is Brent Bradford. I was a physical education teacher in Edmonton, Alberta but I am now a graduate student at the University of Alberta.

Purpose

I want to conduct a research study to learn more about "teacher clothing" in physical education classes. I would like to know if your thoughts about the clothing that teachers wear in physical education classes. I would be grateful if you would choose to join my research study.

Study Procedures

If you do choose to join, you will be asked to look at some pictures of teachers and filling out a questionnaire. The questionnaire will take about 30 minutes to complete. After you finish the questionnaire, I will collect it and read through your answers which will help me finish my research study.

Benefits

I hope that you will join my research study. I hope that, with your help, I can learn more about "teacher clothing" in physical education. After I collect all the thoughts from the students who chose to join the research study, I will summarize the information so that no one will be able to tell who said what information and then share it with others (teachers, parents, guardians, etc.). Please know that it will not cost you any money to join my research study.

Risk

There are no known risks by joining my research study. I will follow the University of Alberta's Research Ethics Board's rules and you will be treated in a respectful manner at all times.

Voluntary Participation

You do not have to join my research study. Choosing to join my research study is free and completely your choice. Even if you agree to join my study, you may stop being a part of my research study at any time without any problems. If you choose to stop, I will not ask you any further questions. However, the answers I have collected from you already will still be a part of my research study because I will not know which answers are yours as no names will be written on the questionnaires.

Confidentiality

All the answers I collect from you during my study will be secured and will remain confidential. Your answers will be stored privately. The only people who will have access to your answers will be Dr. Clive Hickson (my graduate work

Supervisor) and myself. No one will know your answers are from you because your name will not be on your questionnaire. The results from my study will be used for my graduate work. Following the completion of my graduate work, I hope that I can write articles and lead some presentations regarding my research study. Your name will not be shared in any of these articles and presentations.

I have to keep all the papers I collect, these forms, and the answers you give me in a locked filing cabinet at the University of Alberta for five years. After that it will all be shredded. If you and your family are interested in the results of the study, you can email me to get the final report.

Further Information

If you have any other questions about my research study, please contact myself at (780) 492-4273 or bdb3@ualberta.ca or my supervisor Dr. Clive Hickson at (780) 492-4952 or clive.hickson@ualberta.ca. Thank you for thinking about joining my research study.

Yours truly,

Brent Bradford, M.Ed.

STUDENT (Quantitative) ASSENT/CONSENT FORM

Title of Project: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Principal Investigator: Brent Bradford, University of Alberta: 780-492-4273

Supervisor: Dr. Clive Hickson, University of Alberta: 780-492-4952

Do you understand that you have been asked to be in a research study? **Yes / No**

Have you read and received a copy of the attached Information Sheet? **Yes / No**

Do you understand the benefits and risks involved for you in taking part in this research study? **Yes / No**

Have you had an opportunity to ask questions and discuss this study? **Yes / No**

Do you understand that you are free to not join, or to stop being part of the study at any time, without any problems? However, you also understand that your information will be unable to be withdrawn at your request as no names will be put on the questionnaires? **Yes / No**

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information? **Yes / No**

This study was explained to me by: _____

I have read and understood the attached information letter and agree to take part in this study:

Signature of Research Participant

Date

Printed Name of Research Participant

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee

Date

A COPY OF THIS DOCUMENT SHOULD BE GIVEN TO THE PARTICIPANT.

INFORMATION LETTER TO STUDENTS: Qualitative

Study Title: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Research Investigator: Brent Bradford, Doctoral (PhD) Candidate
551 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5
Bdb3@ualberta.ca - 780-492-4273

Supervisor: Dr. Clive Hickson: Associate Dean - Education UG Student Services
530 Education South, University of Alberta; Edmonton, Alberta, T6G 2G5
clive.hickson@ualberta.ca - 780-492-4952

Background

Hi, my name is Brent Bradford. I was a physical education teacher in Edmonton, Alberta but I am now a graduate student at the University of Alberta.

Purpose

I want to conduct a research study to learn more about "teacher clothing" in physical education classes. I would like to know if your thoughts about the clothing that teachers wear in physical education classes. I would be grateful if you would choose to join my research study.

Study Procedures

If you do choose to join, you will be asked to join a group of students to answer some questions that I will ask in a focus group interview. The questions will be about the clothing that teachers wear in physical education. The focus group interviews will last about 45 minutes. After I go over your answers from the first focus group interviews, I will return to your school for one last focus group interview (approximately 30 minutes) in order to make sure I understood you fully (i.e., make sure that I understood what you and other students meant in your answers). This will help me finish my research study.

Benefits

I hope that you will join my research study. I hope that, with your help, I can learn more about "teacher clothing" in physical education. After I collect all the thoughts from the students who chose to join the research study, I will summarize the information so that no one will be able to tell who said what information and then share it with others (teachers, parents, guardians, etc.). Please know that it will not cost you any money to join my research study.

Risk

There are no known risks by joining my research study. I will follow the University of Alberta's Research Ethics Board's rules and you will be treated in a respectful manner at all times.

Voluntary Participation

You do not have to join my research study. Choosing to join my research study is free and completely your choice. Even if you agree to join my study, you may stop being a part of my research study at any time without any problems. If you choose to stop, I will not ask you any further questions. I will continue to use your answers that I have collected from you. If you would like me to delete your

answers to the focus group interviews, just have your parents/guardians contact me and make a request.

Confidentiality

All the answers I collect from you during my research study will be secured and will remain confidential. Your answers will be stored privately. Because you will be given a pseudonym (i.e., a different name) before the focus group interviews, privacy is guaranteed to the highest degree as no names will be used throughout the focus group interviews. The only people who will have access to your answers will be Dr. Clive Hickson (my graduate work Supervisor) and myself. The results from my study will be used for my graduate work. Following the completion of my graduate work, I hope that I can write articles and lead some presentations regarding my research study. Your name will not be shared in any of these articles and presentations.

I have to keep all the papers I collect, these forms, and the answers you give me in a locked filing cabinet at the University of Alberta for five years. After that it will all be shredded or tapes "wiped clean" of all recordings. If you and your family are interested in the results of the study, you can email me to get the final report.

Further Information

If you have any other questions about my research study, please contact myself at (780) 492-4273 or bdb3@ualberta.ca or my supervisor Dr. Clive Hickson at (780) 492-4952 or clive.hickson@ualberta.ca. Thank you for thinking about joining my research study.

Yours Truly,

Brent Bradford, M.Ed.

STUDENT (Qualitative) ASSENT/CONSENT FORM

Title of Project: Symbolism of Clothing: The Relationship between Teacher Clothing and Children's Perceptions in Elementary School Physical Education

Principal Investigator: Brent Bradford, University of Alberta: 780-492-4273

Supervisor: Dr. Clive Hickson, University of Alberta: 780-492-4952

Do you understand that you have been asked to be in a research study? **Yes / No**

Have you read and received a copy of the attached Information Sheet? **Yes / No**

Do you understand the benefits and risks involved for you in taking part in this research study? **Yes / No**

Have you had an opportunity to ask questions and discuss this study? **Yes / No**

Do you understand that you are free not to join, or to stop being part of the study at any time, without any problems, and that your information will be stopped at your request? **Yes / No**

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information? **Yes / No**

This study was explained to me by: _____

I have read and understood the attached information letter and agree to take part in this study:

Signature of Research Participant

Date

Printed Name of Research Participant

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee

Date

A COPY OF THIS DOCUMENT SHOULD BE GIVEN TO THE PARTICIPANT.

APPENDIX B

MANNEQUIN CLOTHING ASSESSMENT QUESTIONNAIRE (MCAQ)

There are 2 images on each of the following 14 pages.

The first 7 pages represent **“Men Physical Education Teachers”**.

The last 7 pages represent **“Women Physical Education Teachers”**.

Below each image is a descriptive list of what the mannequin is wearing.

Below the descriptive list are five faces.



The first face means a **“REALLY GOOD”** teacher of physical education.



The second face means a **“GOOD”** teacher of physical education.



The third face means an **“OKAY”** teacher of physical education.



The fourth face means a **“NOT SO GOOD”** teacher of physical education.



The fifth face means a **“REALLY NOT GOOD”** teacher of physical education.



REALLY GOOD



GOOD



OKAY



NOT SO GOOD



REALLY NOT
GOOD

Instructions for students:

- 1) Please circle one of the faces under each mannequin image of a teacher of physical education.
- 2) After you circle one of the faces, please feel free to write down in the box below why you circled the face.

Men Teachers of Physical Education



This teacher is wearing:

Dress Shirt and Tie
Dress Pants
Dress Shoes



I circled the face because...



This teacher is wearing:

Dress Shirt and Tie
Dress Pants
Runners



I circled the face because...

Men Teachers of Physical Education



This teacher is wearing:

**Golf Shirt
Dress Pants
Dress Shoes**



I circled the face because...



This teacher is wearing:

**Golf Shirt
Dress Pants
Runners**



I circled the face because...

Men Teachers of Physical Education



This teacher is wearing:

Sweat Shirt
Dress Pants
Runners



I circled the face because...



This teacher is wearing:

Sweat Shirt
Dress Pants
Dress Shoes



I circled the face because...

Men Teachers of Physical Education



This teacher is wearing:

Long Sleeve Shirt

Khaki Pants

Dress Shoes



I circled the face because...



This teacher is wearing:

Long Sleeve Shirt

Khaki Pants

Runners



I circled the face because...

Men Teachers of Physical Education



This teacher is wearing:

**Golf Shirt
Khaki Pants
Dress Shoes**



I circled the face because...



This teacher is wearing:

**Golf Shirt
Khaki Pants
Runners**



I circled the face because...

Men Teachers of Physical Education



This teacher is wearing:

Sweat Shirt
Khaki Pants
Runners



I circled the face because...



This teacher is wearing:

Sweat Shirt
Khaki Pants
Dress Shoes



I circled the face because...

Men Teachers of Physical Education



This teacher is wearing:

Sweat Shirt

Sweat Pants

Runners



I circled the face because...



This teacher is wearing:

Golf Shirt

Sweat Pants

Runners



I circled the face because...

Women Teachers of Physical Education



This teacher is wearing:

Blouse

Skirt

Dress Shoes



I circled the face because...



This teacher is wearing:

Blouse

Skirt

Runners



I circled the face because...

Women Teachers of Physical Education



This teacher is wearing:

**Golf Shirt
Dress Pants
Runners**



I circled the face because...



This teacher is wearing:

**Golf Shirt
Dress Pants
Dress Shoes**



I circled the face because...

Women Teachers of Physical Education



This teacher is wearing:

Sweat Shirt
Dress Pants
Dress Shoes



I circled the face because...



This teacher is wearing:

Sweat Shirt
Dress Pants
Runners



I circled the face because...

Women Teachers of Physical Education



This teacher is wearing:

**Long Sleeve Shirt
Khaki Pants
Runners**



I circled the face because...



This teacher is wearing:

**Long Sleeve Shirt
Khaki Pants
Dress Shoes**



I circled the face because...

Women Teachers of Physical Education



This teacher is wearing:

**Golf Shirt
Khaki Pants
Dress Shoes**



I circled the face because...



This teacher is wearing:

**Golf Shirt
Khaki Pants
Runners**



I circled the face because...

Women Teachers of Physical Education



This teacher is wearing:

Sweat Shirt
Khaki Pants
Dress Shoes



I circled the face because...



This teacher is wearing:

Sweat Shirt
Khaki Pants
Runners



I circled the face because...

Women Teachers of Physical Education



This teacher is wearing:

Sweat Shirt

Sweat Pants

Runners



I circled the face because...



This teacher is wearing:

Golf Shirt

Sweat Pants

Runners



I circled the face because...

APPENDIX C

FOCUS GROUP INTERVIEW PROTOCOL

Research Question: Does a relationship exist between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *children's perceptions* toward the teacher, physical education, and physical activity influenced by the teacher's choice of clothing in physical education lessons?

Brief Interview Overview: Six focus group interviews were conducted. The focus group interviews were audio-recorded and transcribed. It was hoped to discover whether or not a relationship exists between the *teacher as a role model* and the *symbolism of clothing* and, if so, are *children's perceptions* toward the teacher, physical education, and physical activity influenced by the teacher's choice of clothing in physical education lessons. After informing the interviewees that they will be audio-recorded and that they can end the interview at any the time, the questions below were asked.

Questions:

1. What do you think about your physical education lessons?
 - a. Do you think your physical education lessons are good? What makes them good?
 - b. Why do you think that about your physical education lessons?
 - c. What is it about physical education that you like most?
 - i. So, I am hearing you tell me that your physical education lessons are ...
 - ii. Would I be accurate in thinking this about your thoughts towards your physical education lessons ... ?
2. How would you explain your typical physical education lesson?
 - a. Tell me the things that you do in most physical education lessons?
 - i. So, I am hearing you tell me ... ?
 - ii. Would I be accurate in thinking this about your typical physical education lessons ... ?
3. Do you learn new things in physical education? If so, what are some of the new things you learn?
 - a. How does a teacher help you learn in physical education?
 - b. How do you think your teacher teaches best in physical education lessons?
 - i. So, I am hearing you tell me that ...

- ii. So would I be right in thinking this about how you learn new things in physical education lessons ... ?
- 4. Do you think the mannequin depicting a teacher of physical education is a “really good”, “good”, “okay”, or “not so good” or “really not good” teacher of physical education? How come you think that?
 - a. What is it about the mannequin that makes you think that?
 - b. How come you think this mannequin would be a “” teacher of physical education? It is because of what?
 - c. Tell me more about that piece of clothing?
 - i. So what you are saying is that this mannequin is “.... “ because ...
 - ii. Would I be right in thinking that you believe this mannequin is “...” because ...
- 5. Do you think the clothing being worn by the mannequin depicting a teacher of physical education helps him/her teach in physical education? If so, how come you think that?
 - a. What is it about the clothing that makes you think that?
 - b. What is it about the physical education that makes you think that?
 - c. Would this be the same if we were talking about a classroom situation?
 - i. So, I am hearing you tell me ... is this correct?
 - ii. Would I be accurate in thinking this about your thoughts toward teacher clothing in physical education lessons?
- 6. What do you think a teacher of physical education should wear while teaching? How come you think that?
 - a. What is it about different clothes that makes you think that?
 - b. What is it about physical education lessons that make you think that?
 - c. What is it about physical activity that makes you think that?
 - i. So, I am hearing you tell me that ...
 - ii. Would I be accurate in thinking this about your thoughts toward teacher clothing in physical education?
- 7. How important, if at all, do you think teacher clothing is in physical education?
 - a. What is it about clothing that makes you think that?
 - b. What is it about physical education that makes you think that?
 - i. So, I am hearing you tell me that ...?

- ii. Would I be accurate in thinking this about your thoughts on teacher clothing in physical education?
- 8. What are your thoughts about physical education?
 - a. How come you think that about physical education?
 - b. What is about physical education that makes you think that?
 - i. So, I am hearing you tell me that ...?
 - ii. Would I be accurate in thinking ... about your response to this question?
- 9. What are your thoughts about physical activity?
 - i. When you are being active outside of school ...
 - b. How come you think that about physical activity?
 - c. What is about physical activity that makes you think that?
 - i. So, I am hearing you tell me that ...?
 - ii. Would I be accurate in thinking ... about your response to this question?
- 10. From the pictures, which teacher mannequins would make you want to be physically active or not? How come you think that?
 - a. What is about the clothing on the mannequin that makes you think that?
 - b. What is it about physical education that makes you think that?
 - i. So, I am hearing you tell me that ...?
 - ii. Would I be accurate in thinking ... about your response to this question?
- 11. As you look at this mannequin, what clothes do you think should be placed on it that would make you be physically active (if it was a teacher)?
 - a. What is about the clothing on the mannequin that makes you think that?
 - b. What is it about physical education that makes you think that?
 - c. What is it about physical education that makes you think that?
 - i. So, I am hearing you tell me that ...?
 - ii. Would I be accurate in thinking ... about your response to this question?

If Time Permits: Is there anything else you would like to add ...

Closing Remarks: Thank you for participating in this focus group interview. Do you have any questions? Your responses during this focus group interview will be kept confidential. No one, except myself, will know you answered these questions for me. Thank you again!

APPENDIX D

DESCRIPTIVE STATISTICS

Appendix D attends to each mannequin with its respective clothing items and participant responses recorded from each school, grade level, and gender. The collected data is illustrated through both table and graph.

The tables comprise of: school site, grade level and gender; number of responses; mode; mean; and standard deviation from the collected data. Column 3 in each table refers to the mode for each school site, grade level and gender and how many responses were recorded for the mode. Although all the descriptive statistics are of value, Column 3 of each table refers to the mode, the most frequently selected response by the participants. This was deemed to be important as it illustrates what face was chosen the most. Overall totals are listed at the bottom of each table.

In support of this particular study in which visual perceptions have been investigated, it was decided to include a graph (i.e., visual) to support the understanding of the collected data summarized within each table. Therefore, a graph is positioned below each table to visually display the mean differences between each school, grade level, and gender.

Mannequin 1

Clothing Choices

Collared, Long Sleeve Dress Shirt

Tie

Dress Pants

Dress Shoes

,



Figure 5a. Mannequin 1

The data from School 1 resulted in the highest mean (2.76). The data from Schools 2-6 resulted in lower means ranging from 1.42 to 1.83. Of 384 total responses, the score of 1 was recorded by 228 participants.

Table 3a.

Individual School Summary (Mannequin 1).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 41 | 3 (13) | 2.76 (1.300) |
| School 2 | 77 | 1 (47) | 1.57 (0.850) |
| School 3 | 54 | 1 (28) | 1.83 (0.966) |
| School 4 | 73 | 1 (48) | 1.42 (0.725) |
| School 5 | 71 | 1 (52) | 1.55 (1.053) |
| School 6 | 68 | 1 (45) | 1.44 (0.741) |
| Total | 384 | 1 (228) | 1.68 (1.001) |

Figure 3a illustrates the individual means of the participants' responses to the clothing on Mannequin 1 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

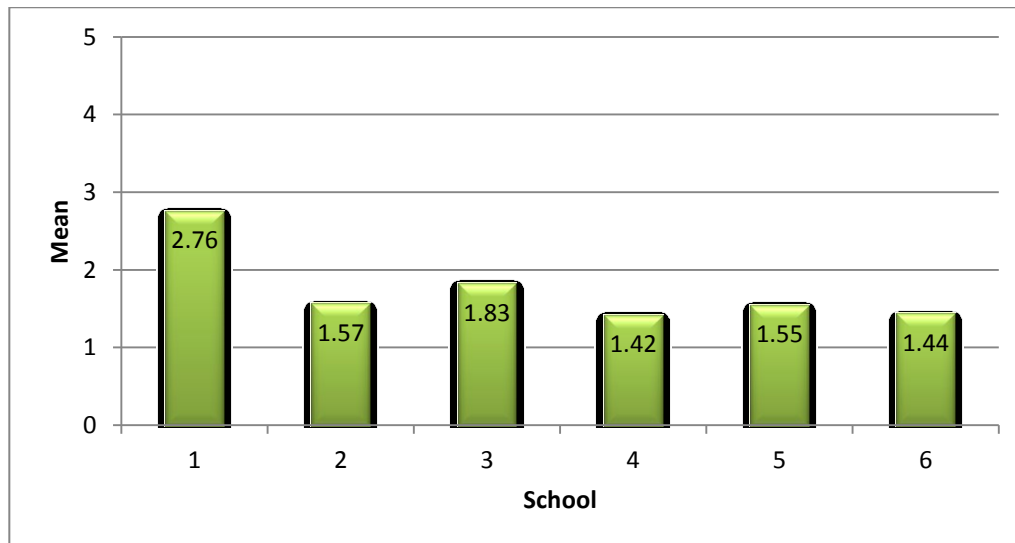


Figure 3a. Individual School Means for Mannequin 1

The data from Grade 1 resulted in the highest mean (2.22). The data from Grades 2-6 resulted in lower means ranging from 1.37 to 1.75. Of 384 total responses, the score of 1 was recorded by 228 participants.

Table 4a.

Grade Level Summary (Mannequin 1).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Grade 1 | 50 | 1 (28) | 2.22 (1.569) |
| Grade 2 | 39 | 1 (18) | 1.74 (0.880) |
| Grade 3 | 73 | 1 (54) | 1.37 (0.697) |
| Grade 4 | 78 | 1 (47) | 1.62 (0.871) |
| Grade 5 | 61 | 1 (38) | 1.56 (0.847) |
| Grade 6 | 83 | 1 (43) | 1.75 (0.948) |
| Total | 384 | 1 (228) | 1.68 (1.001) |

Figure 4a illustrates the individual means of the participants' responses to the clothing on Mannequin 1 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

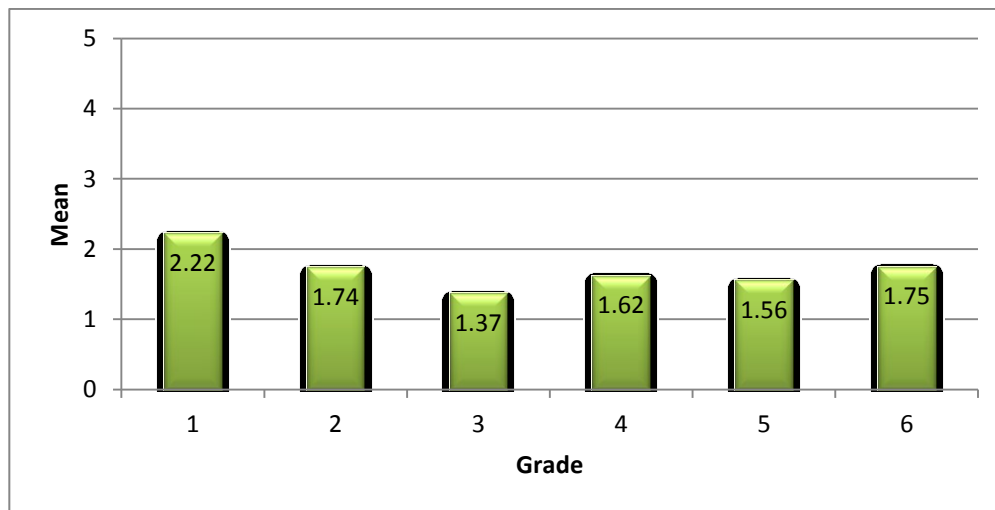


Figure 4a. Individual Grade Level Means for Mannequin 1

The means from the male and female participants were similar. The data resulted in a mean of 1.69 for males and 1.67 for females. Of 384 total responses, the score of 1 was recorded by 228 participants.

Table 5a.

Gender Summary (Mannequin 1).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 206 | 1 (130) | 1.67 (1.034) |
| Male | 178 | 1 (98) | 1.69 (0.964) |
| Total | 384 | 1 (228) | 1.68 (1.001) |

Figure 5a illustrates the individual means of the participants' responses to the clothing on Mannequin 1 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

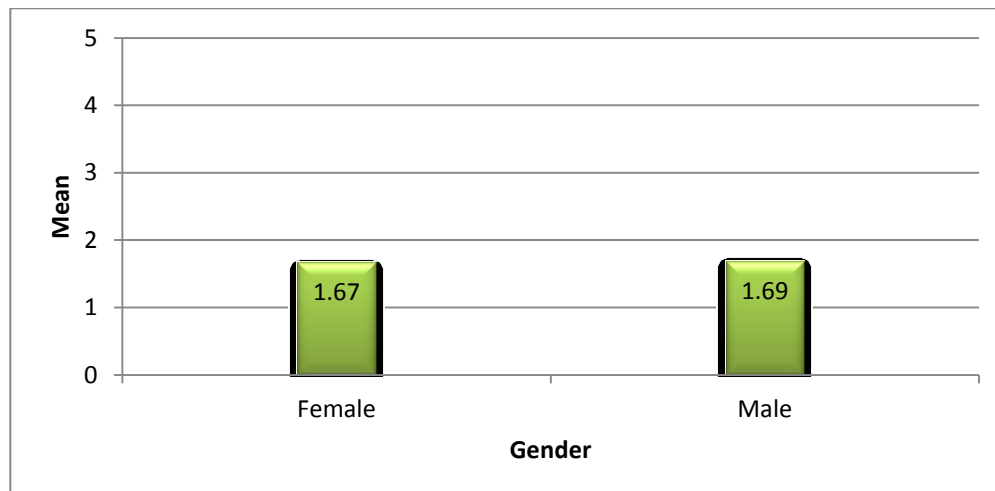


Figure 5a. Individual Gender Means for Mannequin 1

Mannequin 1 Summary

Mannequin 1 (Figure 2a) depicts a teacher wearing a collared long sleeve dress shirt, tie, dress pants and dress shoes for teaching physical education.



Figure 2a. Mannequin 1

The data collected from the participants resulted in a mean of 1.68 (SD 1.001) and a mode of 1. Therefore, the participants perceived the clothing of a dress shirt, tie, dress pants and dress shoes on Mannequin 1 to represent a teacher of physical education as being “really not good” and approaching the “not so good” level. However, participants from School 1 (Mean = 2.76) had a recorded a much higher mean than others.

Mannequin 2

Clothing Choices

Collared, Long Sleeve Dress Shirt

Tie

Dress Pants

Running Shoes



Figure 2b. Mannequin 2

The data from School 1 resulted in the highest mean (3.81). The data from Schools 2-6 resulted in lower means ranging from 2.56 to 3.13. Of 385 total responses, the score of 2 was recorded by 130 participants.

Table 3b.

Individual School Summary (Mannequin 2).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 43 | 3 (16) | 3.81 (0.906) |
| School 2 | 77 | 3 (38) | 2.79 (0.767) |
| School 3 | 54 | 4 (19) | 3.06 (0.960) |
| School 4 | 72 | 3 (24) | 3.13 (1.210) |
| School 5 | 71 | 2 (35) | 2.56 (1.168) |
| School 6 | 68 | 2 (31) | 2.88 (1.058) |
| Total | 385 | 2 (130) | 2.98 (1.082) |

Figure 3b illustrates the individual means of the participants' responses to the clothing on Mannequin 2 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

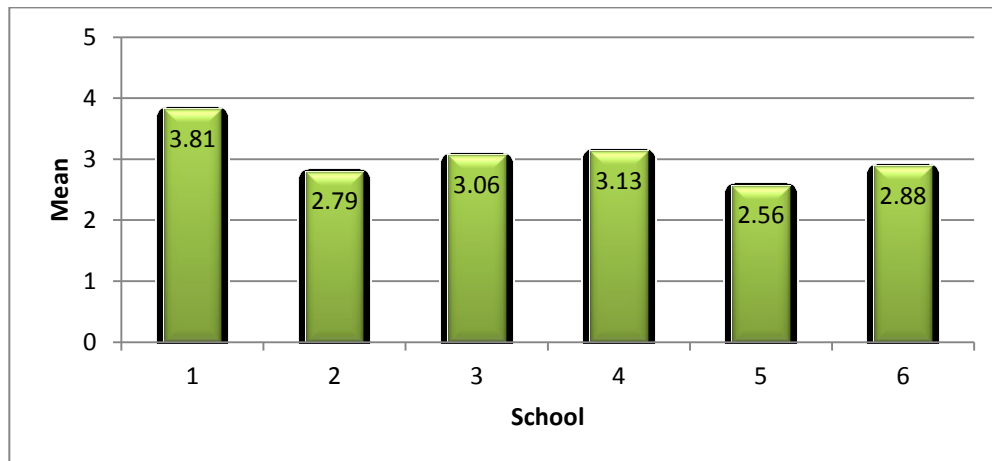


Figure 3b. Individual School Means for Mannequin 2

The data from Grade 1 resulted in the highest mean (3.78). The data from grades 2-6 resulted in lower means ranging from 2.57 to 3.47. Of 385 total responses, the score of 2 was recorded by 130 participants.

Table 4b.

Grade Level Summary (Mannequin 2).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 51 | 5 (21) | 3.78 (1.222) |
| Grade 2 | 38 | 5 (11) | 3.47 (1.224) |
| Grade 3 | 74 | 3 (31) | 2.85 (0.902) |
| Grade 4 | 78 | 3 (31) | 2.96 (0.959) |
| Grade 5 | 61 | 2 (29) | 2.74 (0.964) |
| Grade 6 | 83 | 2 (39) | 2.57 (0.940) |
| Total | 385 | 2 (130) | 2.98 (1.082) |

Figure 4b illustrates the individual means of the participants' responses to the clothing on Mannequin 2 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

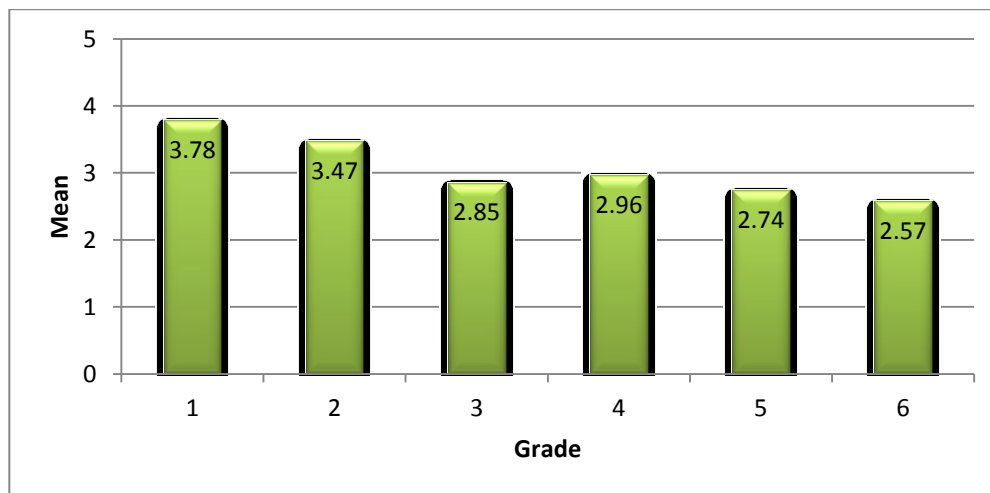


Figure 4b. Individual Grade Level Means for Mannequin 2

The data from males resulted in the highest mean (3.16). The data from females resulted in a lower mean (2.83). Of 385 total responses, the score of 2 was recorded by 130 participants.

Table 5b.

Gender Summary across all school sites (Mannequin 2).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 206 | 2 (87) | 2.83 (1.049) |
| Male | 179 | 3 (63) | 3.16 (1.095) |
| Total | 385 | 2 (130) | 2.98 (1.082) |

Figure 5b illustrates the individual means of the participants' responses to the clothing on Mannequin 2 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

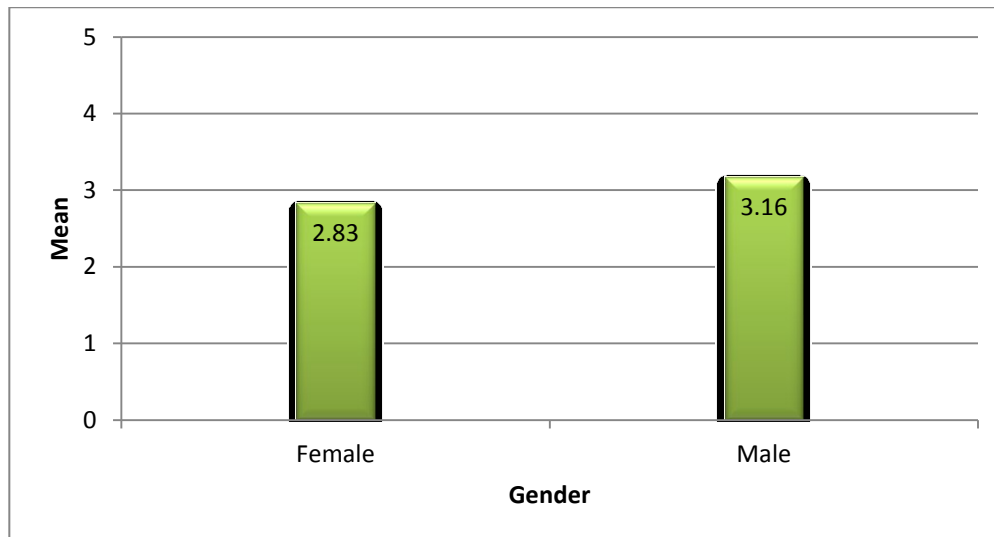


Figure 5b. Individual Gender Means for Mannequin 2

Mannequin 2 Summary

Mannequin 2 depicts a teacher wearing a collared long sleeve dress shirt, tie, dress pants and runners for teaching physical education.



Figure 2b. Mannequin 2

The data collected from the participants resulted in a mean of 2.98 (SD 1.082) and a mode of 2. Therefore, the participants perceived the clothing of a dress shirt, tie, dress pants and runners on Mannequin 2 to represent a teacher of physical education as being “not so good” and approaching the “okay” level.

Mannequin 3

Clothing Choices

Short Sleeve Golf Shirt

Dress Pants

Dress Shoes



Figure 2c. Mannequin 3

The data from School 3 resulted in the highest mean (2.98). The data from Schools 2-6 resulted in lower means ranging from 2.13 to 2.69. Of 386 total responses, the score of 2 was recorded by 167 participants.

Table 3c.

Individual School Summary (Mannequin 3).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 3 (14) | 2.98 (1.024) |
| School 2 | 77 | 2 (40) | 2.25 (0.764) |
| School 3 | 54 | 3 (26) | 2.69 (0.773) |
| School 4 | 74 | 3 (28) | 2.41 (0.964) |
| School 5 | 71 | 2 (39) | 2.13 (0.955) |
| School 6 | 68 | 2 (36) | 2.31 (0.718) |
| Total | 386 | 2 (167) | 2.41 (0.899) |

Figure 3c illustrates the individual means of the participants' responses to the clothing on Mannequin 3 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

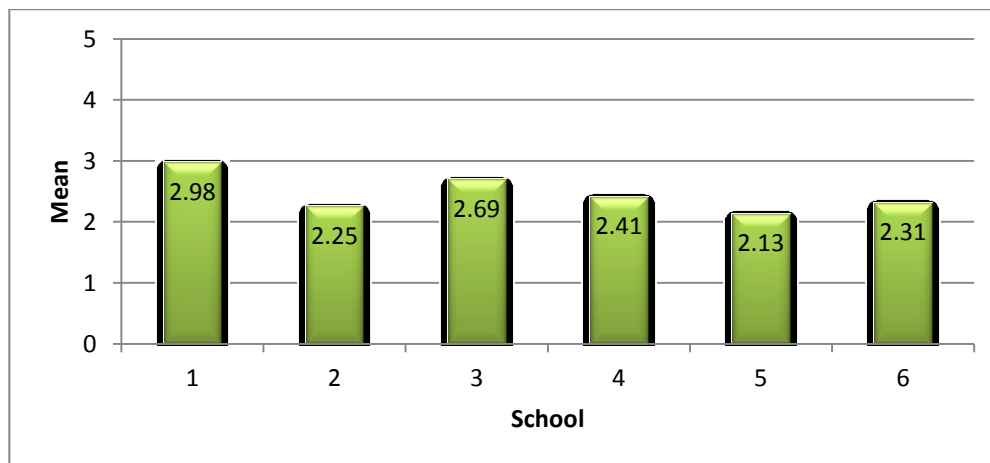


Figure 3c. Individual School Means for Mannequin 3

The data from Grade 2 resulted in the highest mean (2.62). The data from Grades 1 and 3-6 resulted in lower means ranging from 2.23 to 2.57. Of 386 total responses, the score of 2 was recorded by 167 participants.

Table 4c.

Grade Level Summary Across all School Sites (Mannequin 3).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 51 | 2 (14) | 2.57 (1.221) |
| Grade 2 | 39 | 3 (14) | 2.62 (1.067) |
| Grade 3 | 74 | 2 (32) | 2.27 (0.816) |
| Grade 4 | 78 | 2 (37) | 2.47 (0.785) |
| Grade 5 | 61 | 2 (33) | 2.23 (0.783) |
| Grade 6 | 83 | 2 (39) | 2.40 (0.811) |
| Total | 386 | 2 (167) | 2.41 (0.899) |

Figure 4c illustrates the individual means of the participants' responses to the clothing on Mannequin 3 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

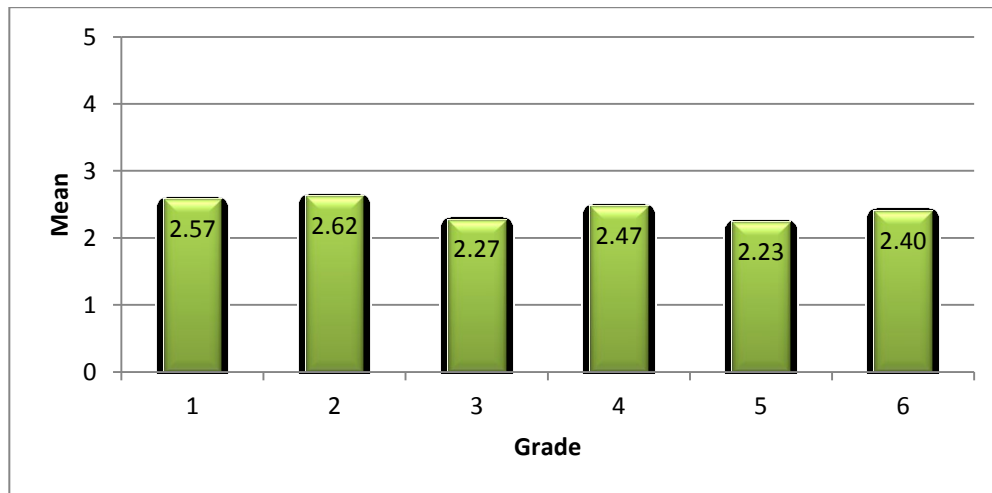


Figure 4c. Individual Grade Level Means for Mannequin 3

The means from the male and female participants were similar. The data resulted in a mean of 2.45 for males and 2.37 for females. Of 386 total responses, the score of 2 was recorded by 167 participants.

Table 5c.

Gender Summary across all school sites (Mannequin 3).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 2 (88) | 2.37 (0.882) |
| Male | 179 | 2 (79) | 2.45 (0.919) |
| Total | 386 | 2 (167) | 2.41 (0.899) |

Figure 5c illustrates the individual means of the participants' responses to the clothing on Mannequin 3 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

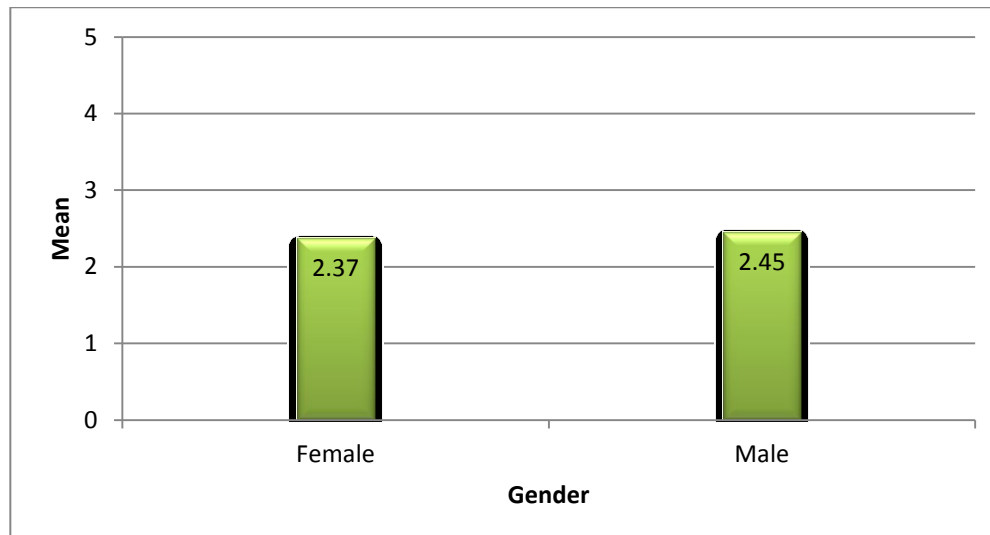


Figure 5c. Individual Gender Means for Mannequin 3

Mannequin 3 Summary

Mannequin 3 depicts a teacher wearing a golf shirt, dress pants and dress shoes for teaching physical education.



Figure 2c. Mannequin 3

The data collected from the participants resulted in a mean of 2.41 (SD 0.899) and a mode of 2. Therefore, the participants perceived the clothing of a golf shirt, dress pants and dress shoes on Mannequin 3 to represent a teacher of physical education as being “not so good.”

Mannequin 4

Clothing Choices

Short Sleeve Golf Shirt

Dress Pants

Running Shoes



Figure 2d. Mannequin 4

The data from School 1 resulted in the highest mean (4.31). The data from Schools 2-6 resulted in lower means ranging from 3.35 to 3.86. Of 386 total responses, the score of 4 was recorded by 149 participants.

Table 3d.

Individual School Summary (Mannequin 4)

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 5 (21) | 4.31 (0.950) |
| School 2 | 77 | 4 (38) | 3.64 (0.705) |
| School 3 | 54 | 4 (26) | 3.67 (0.727) |
| School 4 | 74 | 5 (25) | 3.86 (1.011) |
| School 5 | 71 | 3 (26) | 3.35 (1.057) |
| School 6 | 68 | 4 (27) | 3.56 (0.853) |
| Total | 386 | 4 (149) | 3.69 (0.929) |

Figure 3d illustrates the individual means of the participants' responses to the clothing on Mannequin 4 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

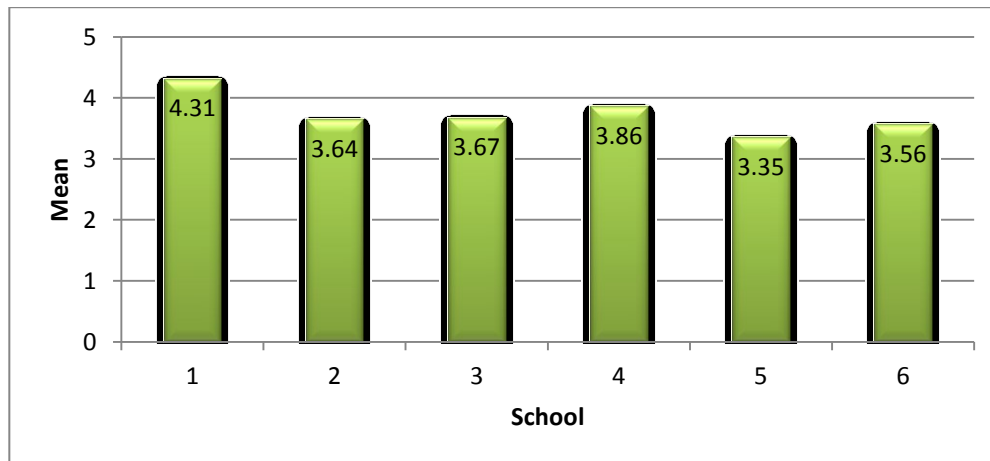


Figure 3d. Individual School Means for Mannequin 4

The data from Grade 1 resulted in the highest mean (4.27). The data from Grades 2-6 resulted in lower means ranging from 3.31 to 3.87. Of 386 total responses, the score of 4 was recorded by 149 participants.

Table 4d.

Grade Level Summary Across all School Sites (Mannequin 4).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 51 | 5 (30) | 4.27 (1.060) |
| Grade 2 | 39 | 4 (16) | 3.87 (0.978) |
| Grade 3 | 74 | 4 (34) | 3.76 (0.808) |
| Grade 4 | 78 | 4 (37) | 3.74 (0.813) |
| Grade 5 | 61 | 3 (27) | 3.46 (0.867) |
| Grade 6 | 83 | 3 (34) | 3.31 (0.869) |
| Total | 386 | 4 (149) | 3.69 (0.929) |

Figure 4d illustrates the individual means of the participants' responses to the clothing on Mannequin 4 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

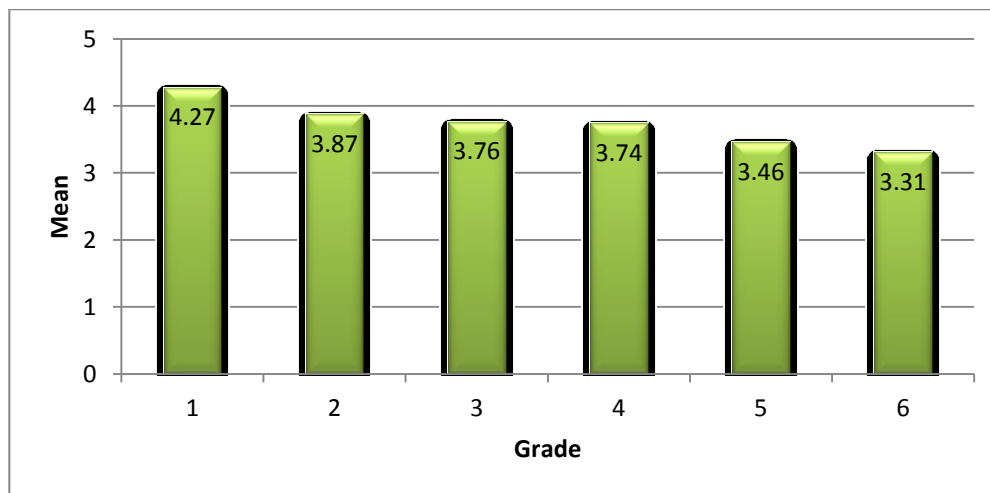


Figure 4d. Individual Grade Level Means for Mannequin 4

The means from the male and female participants were similar. The data resulted in a mean of 3.80 for males and 3.59 for females. Of 386 total responses, the score of 4 was recorded by 149 participants.

Table 5d.

Gender Summary across all school sites (Mannequin 4).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 4 (77) | 3.59 (0.935) |
| Male | 179 | 4 (72) | 3.80 (0.912) |
| Total | 386 | 4 (149) | 3.69 (0.929) |

Figure 5d illustrates the individual means of the participants' responses to the clothing on Mannequin 4 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

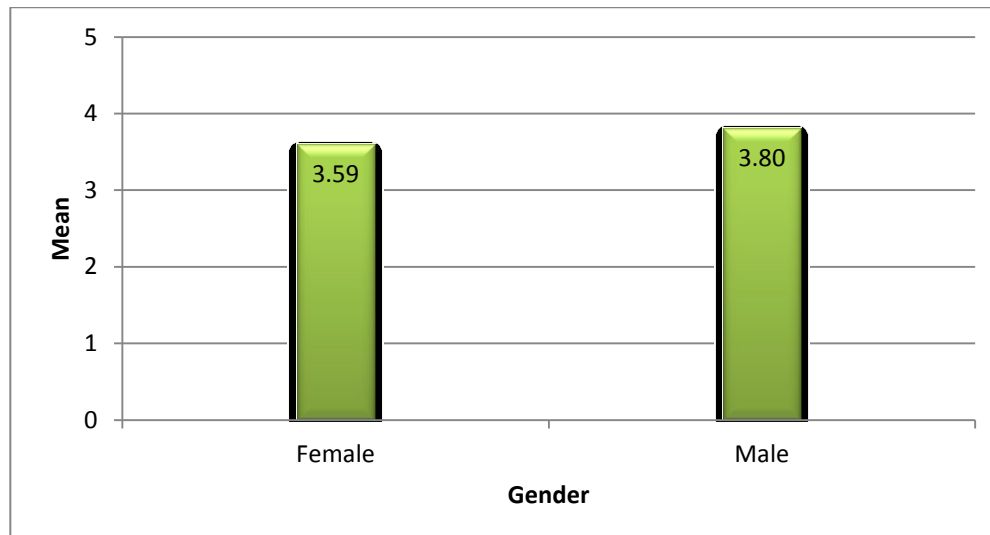


Figure 5d. Individual Gender Means for Mannequin 4

Mannequin 4 Summary

Mannequin 4 depicts a teacher wearing a golf shirt, dress pants and runners for teaching physical education.



Figure 2d. Mannequin 4

The data collected from the participants resulted in a mean of 3.69 (SD 0.929) and a mode of 4. Therefore, the participants perceived the clothing of a golf shirt, dress pants and runners on Mannequin 4 to represent a teacher of physical education as being “okay” and approaching the “good” level.

Mannequin 5

Clothing Choices

Long Sleeve Sweat Shirt

Dress Pants

Running Shoes



Figure 2e. Mannequin 5

The data from School 1 resulted in the highest mean (4.12). The data from Schools 2-6 resulted in lower means ranging from 3.08 to 3.53. Of 387 total responses, the score of 3 was recorded by 134 participants.

Table 3e.

Individual School Summary (Mannequin 5).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 5 (20) | 4.12 (0.968) |
| School 2 | 77 | 3 (32) | 3.23 (0.944) |
| School 3 | 54 | 4 (24) | 3.44 (1.003) |
| School 4 | 75 | 5 (21) | 3.37 (1.282) |
| School 5 | 71 | 3 (28) | 3.08 (1.038) |
| School 6 | 68 | 3 (31) | 3.53 (0.819) |
| Total | 387 | 3 (134) | 3.41 (1.060) |

Figure 3e illustrates the individual means of the participants' responses to the clothing on Mannequin 5 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

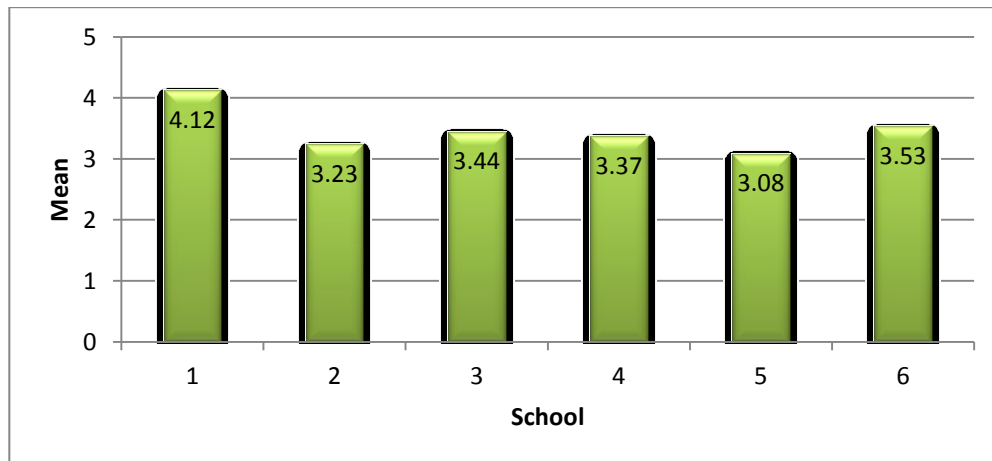


Figure 3e. Individual School Means for Mannequin 5

The data from Grade 1 resulted in the highest mean (4.25). The data from Grades 2-6 resulted in lower means from 3.15 to 3.66. Of 387 total responses, the score of 3 was recorded by 134 participants.

Table 4e.

Grade Level Summary Across all School Sites (Mannequin 5).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 53 | 5 (35) | 4.25 (1.254) |
| Grade 2 | 38 | 5 (11) | 3.66 (1.097) |
| Grade 3 | 74 | 3 (31) | 3.35 (0.999) |
| Grade 4 | 78 | 3 (35) | 3.26 (0.918) |
| Grade 5 | 61 | 3 (24) | 3.15 (0.891) |
| Grade 6 | 83 | 4 (29) | 3.16 (0.930) |
| Total | 387 | 3 (134) | 3.41 (1.060) |

Figure 4e illustrates the individual means of the participants' responses to the clothing on Mannequin 5 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

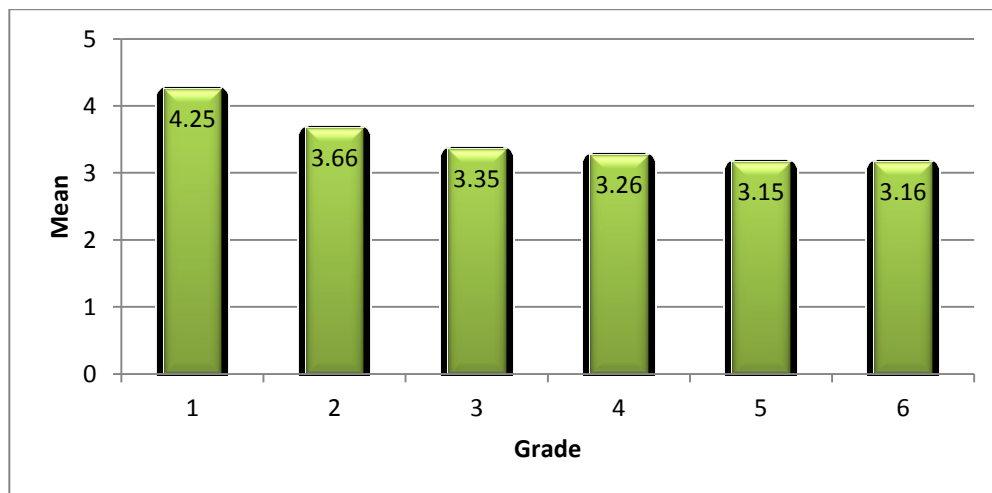


Figure 4e. Individual Grade Level Means for Mannequin 5

The means from the male and female participants were similar. The data resulted in a mean of 3.46 for males and 3.37 for females. Of 387 total responses, the score of 3 was recorded by 134 participants.

Table 5e.

Gender Summary across all school sites (Mannequin 5).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 3 (80) | 3.37 (0.986) |
| Male | 180 | 3 (54) | 3.46 (1.140) |
| Total | 387 | 3 (134) | 3.41 (1.060) |

Figure 5e illustrates the individual means of the participants' responses to the clothing on Mannequin 5 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

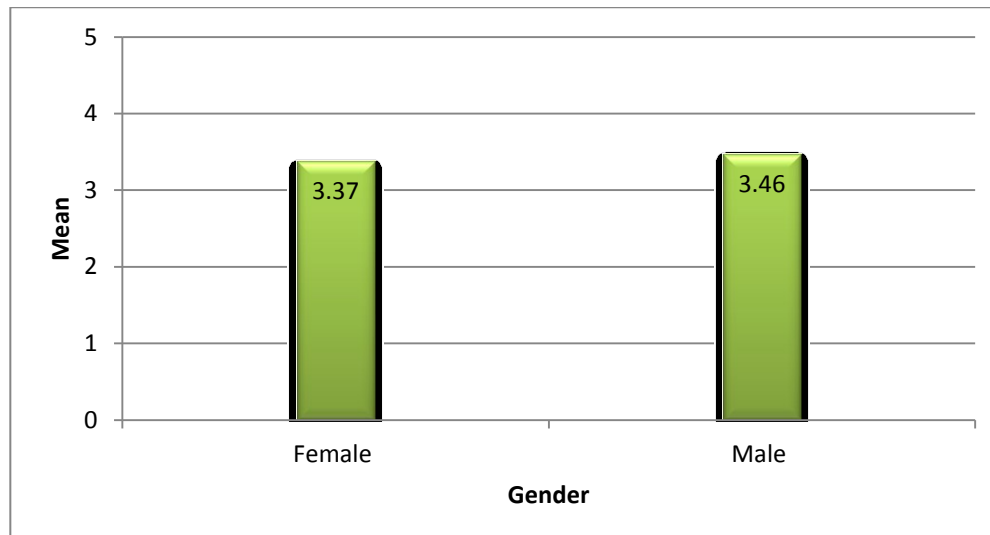


Figure 5e. Individual Gender Means for Mannequin 5

Mannequin 5 Summary

Mannequin 5 depicts a teacher wearing a sweat shirt, dress pants and runners for teaching physical education.



Figure 2e. Mannequin 5

The data collected from the participants resulted in a mean of 3.41 (SD 1.060) and a mode of 3. Therefore, the participants perceived the clothing of a sweat shirt, dress pants and runners on Mannequin 5 to represent a teacher of physical education as being “okay.”

Mannequin 6

Clothing Choices

Long Sleeve Sweat Shirt

Dress Pants

Dress Shoes



Figure 2f. Mannequin 6

The data from School 1 resulted in the highest mean (2.71). The data from Schools 2-6 resulted in lower means from 1.99 to 2.45. Of 380 total responses, the score of 2 was recorded by 141 participants.

Table 3f.

Individual School Summary (Mannequin 6).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 3 (19) | 2.71 (0.995) |
| School 2 | 77 | 1 (24) | 1.99 (0.803) |
| School 3 | 53 | 3 (25) | 2.45 (0.992) |
| School 4 | 71 | 1 (26) | 2.06 (1.081) |
| School 5 | 71 | 2 (32) | 2.10 (1.097) |
| School 6 | 66 | 2 (33) | 2.05 (0.711) |
| Total | 380 | 2 (141) | 2.18 (0.976) |

Figure 3f illustrates the individual means of the participants' responses to the clothing on Mannequin 6 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

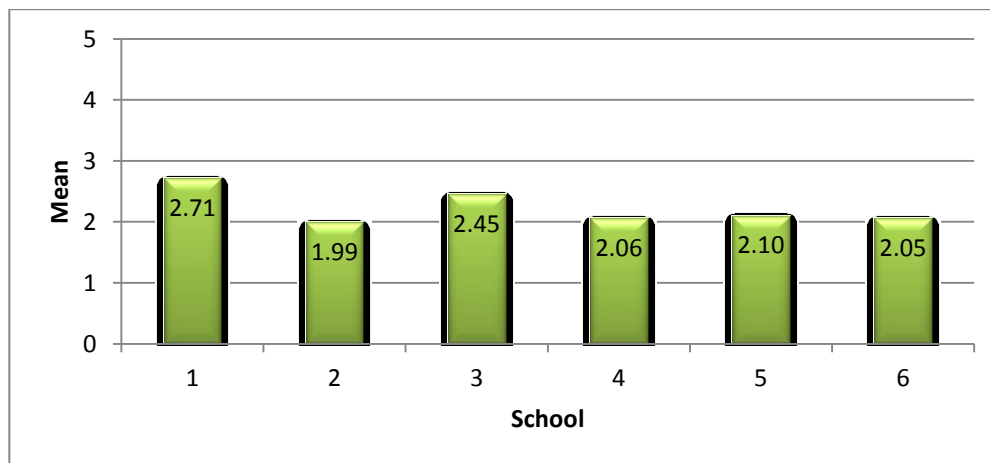


Figure 3f. Individual School Means for Mannequin 6

The data from Grade 1 resulted in the highest mean (2.43). The data from Grades 2-6 resulted in lower means from 1.95 to 2.34. Of 380 total responses, the score of 2 was recorded by 141 participants.

Table 4f.

Grade Level Summary Across all School Sites (Mannequin 6).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 49 | 1 & 3 (17) | 2.43 (1.307) |
| Grade 2 | 38 | 2 (13) | 2.21 (1.143) |
| Grade 3 | 73 | 2 (33) | 1.95 (0.815) |
| Grade 4 | 76 | 2 (34) | 2.16 (0.880) |
| Grade 5 | 61 | 2 (27) | 2.03 (0.836) |
| Grade 6 | 83 | 3 (31) | 2.34 (0.941) |
| Total | 380 | 2 (141) | 2.18 (0.976) |

Figure 4f illustrates the individual means of the participants' responses to the clothing on Mannequin 6 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

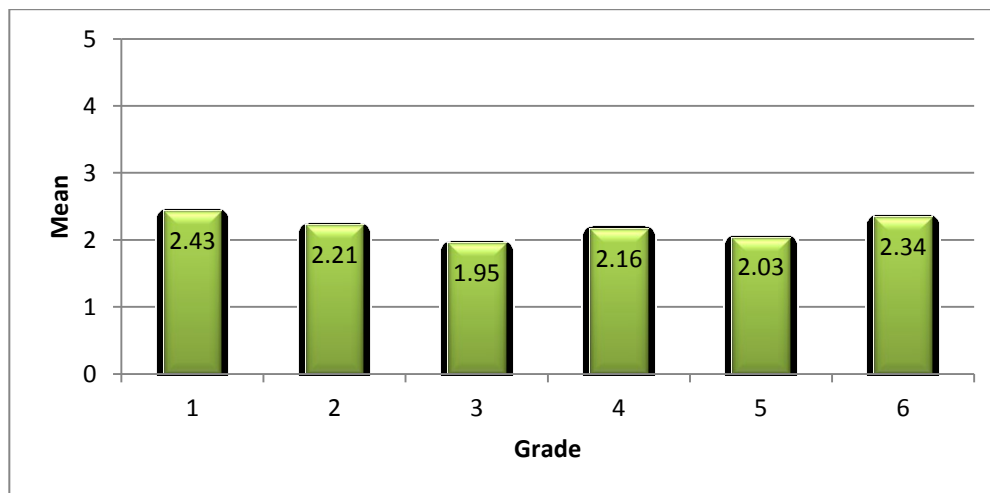


Figure 4f. Individual Grade Level Means for Mannequin 6

The means from the male and female participants were similar. The data resulted in a mean of 2.21 for males and 2.14 for females. Of 380 total responses, the score of 2 was recorded by 141 participants.

Table 5f.

Gender Summary across all school sites (Mannequin 6).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Female | 203 | 2 (85) | 2.14 (0.909) |
| Male | 177 | 2 (56) | 2.21 (1.049) |
| Total | 380 | 2 (141) | 2.18 (0.976) |

Figure 5f illustrates the individual means of the participants' responses to the clothing on Mannequin 6 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

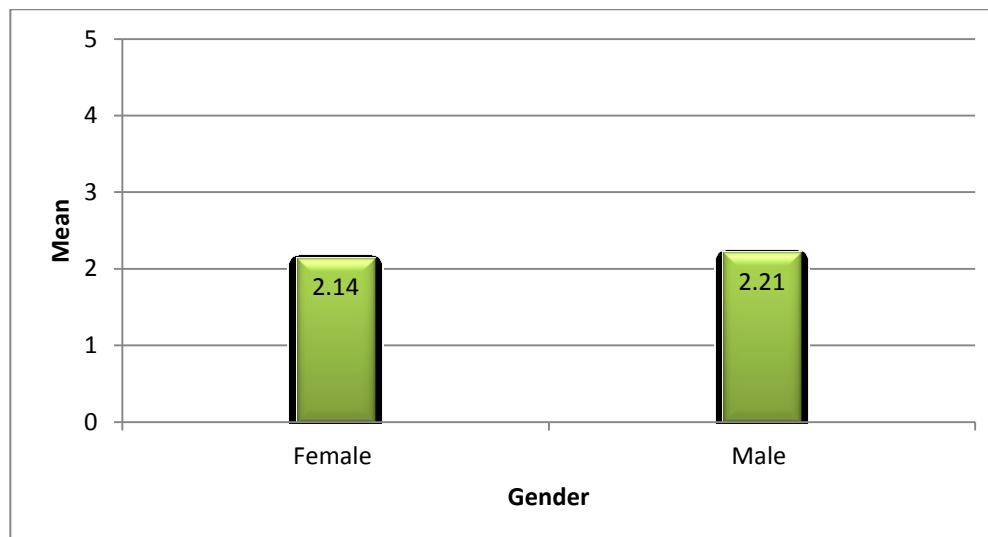


Figure 5f. Individual Gender Means for Mannequin 6

Mannequin 6 Summary

Mannequin 6 depicts a teacher wearing a sweat shirt, dress pants and dress shoes for teaching physical education.



Figure 2f. Mannequin 6

The data collected from the participants resulted in a mean of 2.18 (SD 0.976) and a mode of 2. Therefore, the participants perceived the clothing of a sweat shirt, dress pants and dress shoes on Mannequin 6 to represent a teacher of physical education as being “not so good.”

Mannequin 7

Clothing Choices

Long Sleeve Shirt

Khaki Pants

Dress Shoes



Figure 2g. Mannequin 7

The data from School 3 resulted in the highest mean (3.04). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 2.36 to 2.93. Of 382 total responses, the score of 3 was recorded by 156 participants.

Table 3g.

Individual School Summary (Mannequin 7).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 3 (18) | 2.93 (1.113) |
| School 2 | 77 | 3 (36) | 2.57 (0.818) |
| School 3 | 53 | 3 (28) | 3.04 (0.876) |
| School 4 | 74 | 3 (23) | 2.61 (1.301) |
| School 5 | 70 | 2 (25) | 2.37 (1.024) |
| School 6 | 66 | 3 (30) | 2.36 (0.835) |
| Total | 382 | 3 (156) | 2.61 (1.031) |

Figure 3g illustrates the individual means of the participants' responses to the clothing on Mannequin 7 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

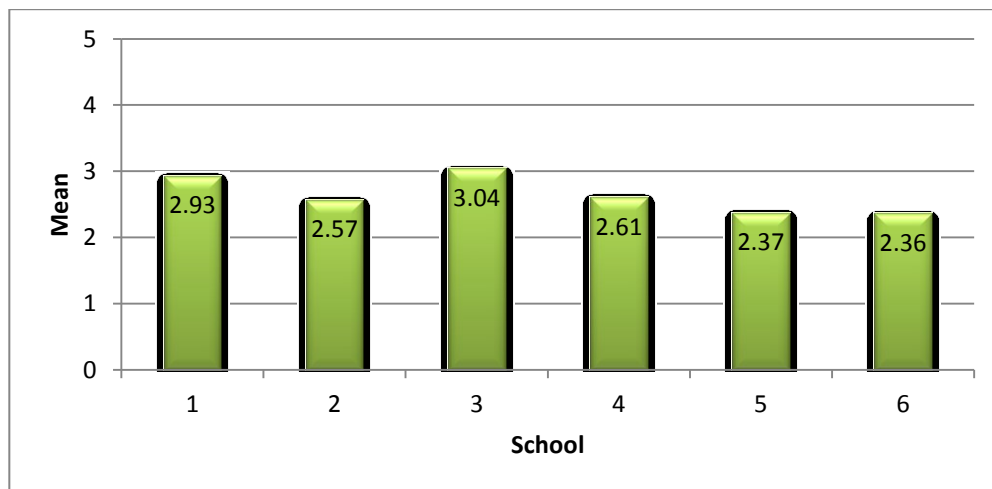


Figure 3g. Individual School Means for Mannequin 7

The data from Grade 2 resulted in the highest mean (2.79). The data from Grades 1, 3-6 resulted in lower means ranging from 2.39 to 2.66. Of 382 total responses, the score of 3 was recorded by 156 participants.

Table 4g.

Grade Level Summary Across all School Sites (Mannequin 7).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 51 | 1 (21) | 2.39 (1.415) |
| Grade 2 | 39 | 3 (13) | 2.79 (1.260) |
| Grade 3 | 73 | 3 (31) | 2.66 (0.916) |
| Grade 4 | 78 | 3 (31) | 2.64 (0.953) |
| Grade 5 | 60 | 3 (29) | 2.60 (0.848) |
| Grade 6 | 81 | 3 (39) | 2.59 (0.919) |
| Total | 382 | 3 (156) | 2.61 (1.031) |

Figure 4g illustrates the individual means of the participants' responses to the clothing on Mannequin 7 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

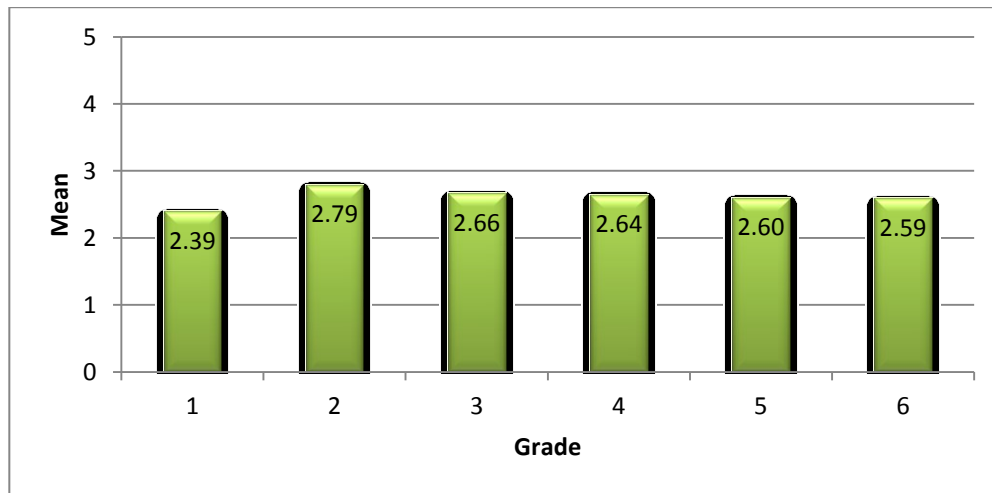


Figure 4g. Individual Grade Level Means for Mannequin 7

The means from the male and female participants were similar. The data resulted in a mean of 2.64 for females and 2.58 for males. Of 382 total responses, the score of 3 was recorded by 156 participants.

Table 5g.

Gender Summary across all school sites (Mannequin 7).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 205 | 3 (88) | 2.64 (1.008) |
| Male | 177 | 3 (68) | 2.58 (1.059) |
| Total | 382 | 3 (156) | 2.61 (1.031) |

Figure 5g illustrates the individual means of the participants' responses to the clothing on Mannequin 7 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

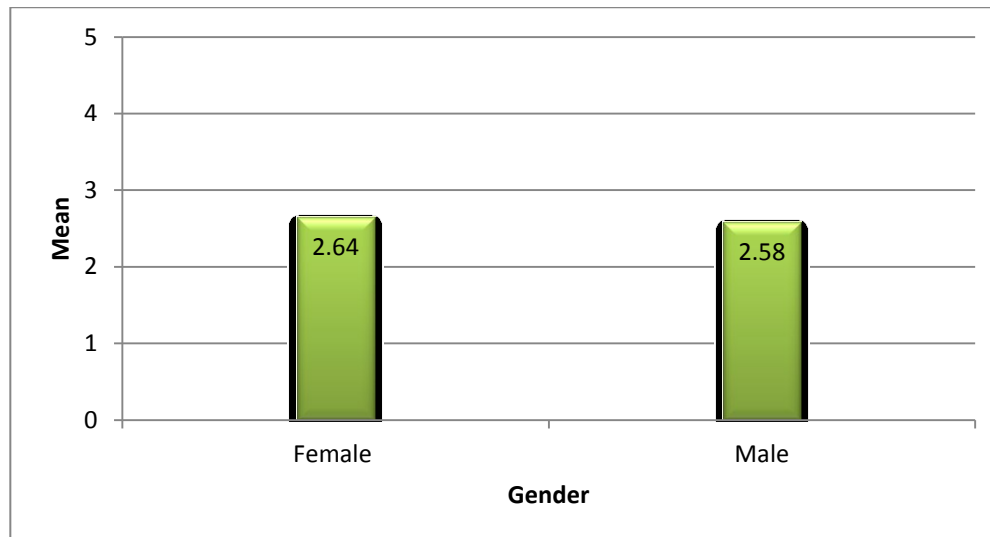


Figure 5g. Individual Gender Means for Mannequin 7

Mannequin 7 Summary

Mannequin 7 depicts a teacher wearing a long sleeve shirt, khaki pants and dress shoes for teaching physical education.



Figure 2g. Mannequin 7

The data collected from the participants resulted in a mean of 2.61 (SD 1.031) and a mode of 3. Therefore, the participants perceived the clothing of a long sleeve shirt, khaki pants and dress shoes on Mannequin 7 to represent a teacher of physical education as being “not so good” and approaching the “okay” level.

Mannequin 8

Clothing Choices

Long Sleeve Shirt

Khaki Pants

Running Shoes



Figure 2h. Mannequin 8

The data from School 1 resulted in the highest mean (4.37). The data from Schools 2-6 resulted in lower means ranging from 3.43 to 4.11. Of 387 total responses, the score of 4 was recorded by 145 participants.

Table 3h.

Individual School Summary (Mannequin 8).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 43 | 5 (25) | 4.37 (0.874) |
| School 2 | 77 | 4 (38) | 3.90 (0.836) |
| School 3 | 54 | 4 (31) | 4.11 (0.769) |
| School 4 | 75 | 5 (29) | 3.88 (1.139) |
| School 5 | 70 | 4 (24) | 3.43 (1.030) |
| School 6 | 68 | 5 (21) | 3.78 (1.063) |
| Total | 387 | 4 (145) | 3.87 (1.005) |

Figure 3h illustrates the individual means of the participants' responses to the clothing on Mannequin 8 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

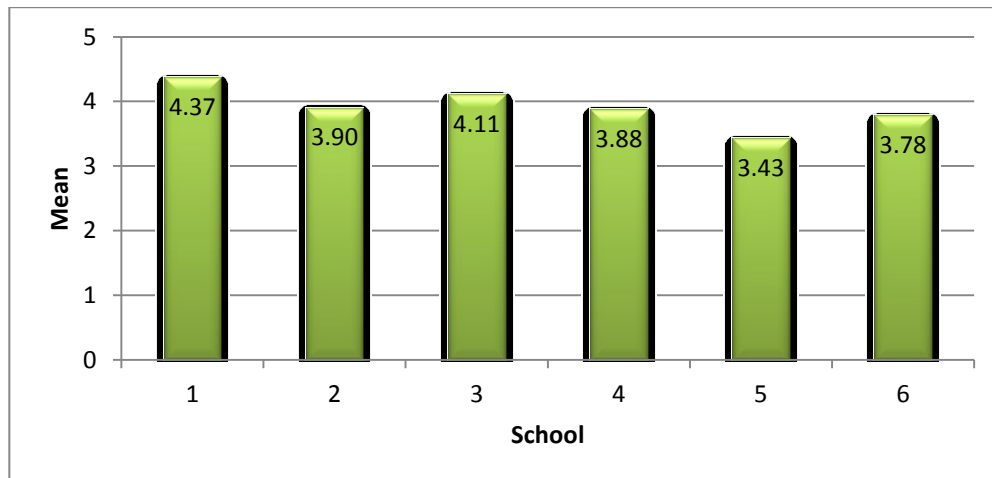


Figure 3h. Individual School Means for Mannequin 8

The data from Grade 1 resulted in the highest mean (4.17). The data from Grades 2-6 resulted in lower means ranging from 3.57 to 4.03. Of 387 total responses, the score of 4 was recorded by 145 participants.

Table 4h.

Grade Level Summary Across all School Sites (Mannequin 8).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 53 | 5 (31) | 4.17 (1.189) |
| Grade 2 | 39 | 4 & 5 (12) | 3.74 (1.117) |
| Grade 3 | 74 | 4 (33) | 4.03 (0.875) |
| Grade 4 | 78 | 4 (27) | 3.88 (1.032) |
| Grade 5 | 61 | 4 (26) | 3.89 (0.877) |
| Grade 6 | 82 | 4 (38) | 3.57 (0.930) |
| Total | 387 | 4 (145) | 3.87 (1.005) |

Figure 4h illustrates the individual means of the participants' responses to the clothing on Mannequin 8 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

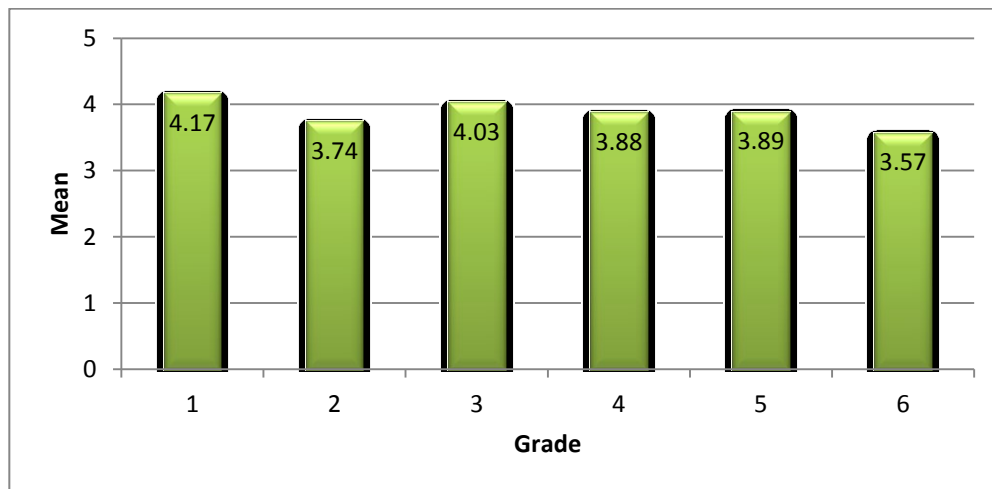


Figure 4a. Individual Grade Level Means for Mannequin 8

The data from male participants resulted in the highest mean (4.02). The data from female participants resulted in a lower mean (3.74). Of 387 total responses, the score of 4 was recorded by 145 participants.

Table 5h.

Gender Summary across all school sites (Mannequin 8).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 208 | 4 (74) | 3.74 (1.068) |
| Male | 179 | 4 (71) | 4.02 (0.905) |
| Total | 387 | 4 (145) | 3.87 (1.005) |

Figure 5h illustrates the individual means of the participants' responses to the clothing on Mannequin 8 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

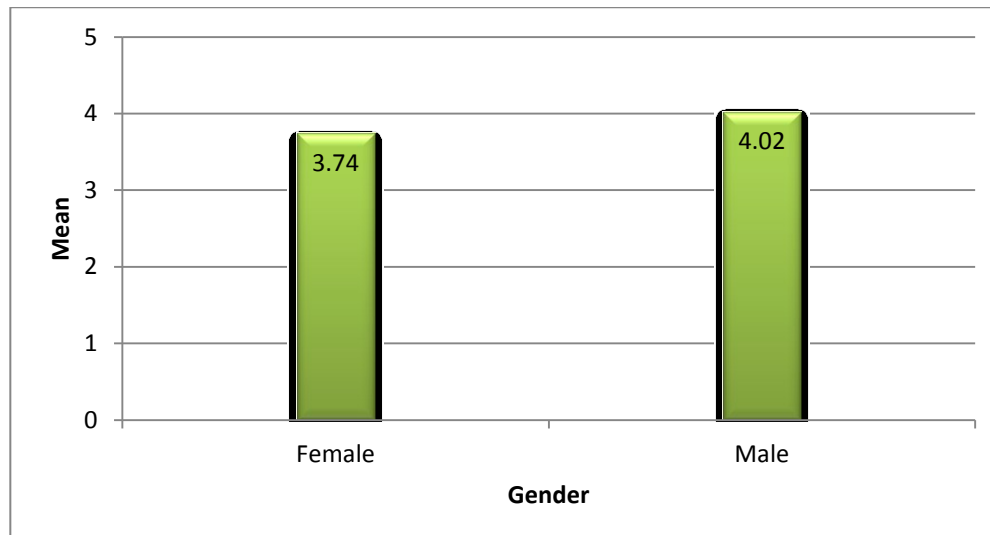


Figure 5h. Individual Gender Means for Mannequin 8

Mannequin 8 Summary

Mannequin 8 depicts a teacher wearing a long sleeve shirt, khaki pants and runners for teaching physical education.



Figure 2h. Mannequin 8

The data collected from the participants resulted in a mean of 3.87 (SD 1.005) and a mode of 4. Therefore, the participants perceived the clothing of a long sleeve shirt, khaki pants and runners on Mannequin 8 to represent a teacher of physical education as being “okay” and approaching the “good” level.

Mannequin 9

Clothing Choices

Short Sleeve Golf Shirt

Khaki Pants

Dress Shoes



Figure 2i. Mannequin 9

The data from School 3 resulted in the highest mean (3.30). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 2.58 to 3.26. Of 385 total responses, the score of 3 was recorded by 161 participants.

Table 3i.

Individual School Summary (Mannequin 9).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 3 (18) | 3.26 (0.939) |
| School 2 | 77 | 3 (45) | 2.88 (0.778) |
| School 3 | 53 | 3 (24) | 3.30 (0.799) |
| School 4 | 75 | 3 (22) | 2.73 (1.155) |
| School 5 | 71 | 3 (21) | 2.65 (1.184) |
| School 6 | 67 | 3 (31) | 2.58 (0.855) |
| Total | 385 | 3 (161) | 2.86 (1.004) |

Figure 3i illustrates the individual means of the participants' responses to the clothing on Mannequin 9 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

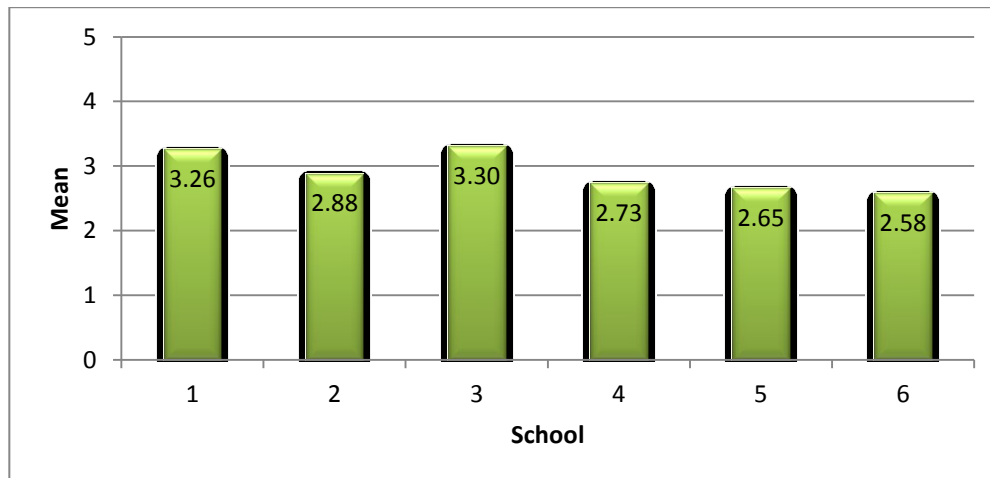


Figure 3i. Individual School Means for Mannequin 9

The data from Grade 3 resulted in the highest mean (3.01). The data from Grades 1, 2 and 4-6 resulted in lower means ranging from 2.62 to 2.88. Of 385 total responses, the score of 3 was recorded by 161 participants.

Table 4i.

Grade Level Summary Across all School Sites (Mannequin 9).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 52 | 1 (17) | 2.62 (1.388) |
| Grade 2 | 38 | 3 (13) | 2.87 (1.070) |
| Grade 3 | 74 | 3 (34) | 3.01 (0.868) |
| Grade 4 | 78 | 3 (33) | 2.85 (0.955) |
| Grade 5 | 60 | 3 (35) | 2.88 (0.715) |
| Grade 6 | 83 | 3 (34) | 2.86 (1.026) |
| Total | 385 | 3 (161) | 2.86 (1.004) |

Figure 4i illustrates the individual means of the participants' responses to the clothing on Mannequin 9 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

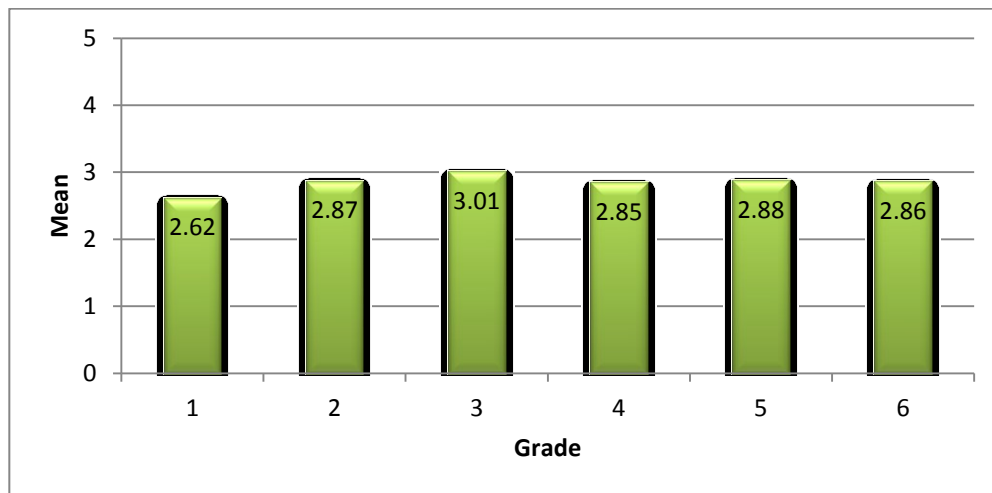


Figure 4i. Individual Grade Level Means for Mannequin 9

The means from the male and female participants were similar. The data resulted in a mean of 2.94 for males and 2.79 for females. Of 385 total responses, the score of 3 was recorded by 161 participants.

Table 5i.

Gender Summary across all school sites (Mannequin 9).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 206 | 3 (92) | 2.79 (0.974) |
| Male | 179 | 3 (69) | 2.94 (1.034) |
| Total | 385 | 3 (161) | 2.86 (1.004) |

Figure 5i illustrates the individual means of the participants' responses to the clothing on Mannequin 9 according to each gender. As noted on page __, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

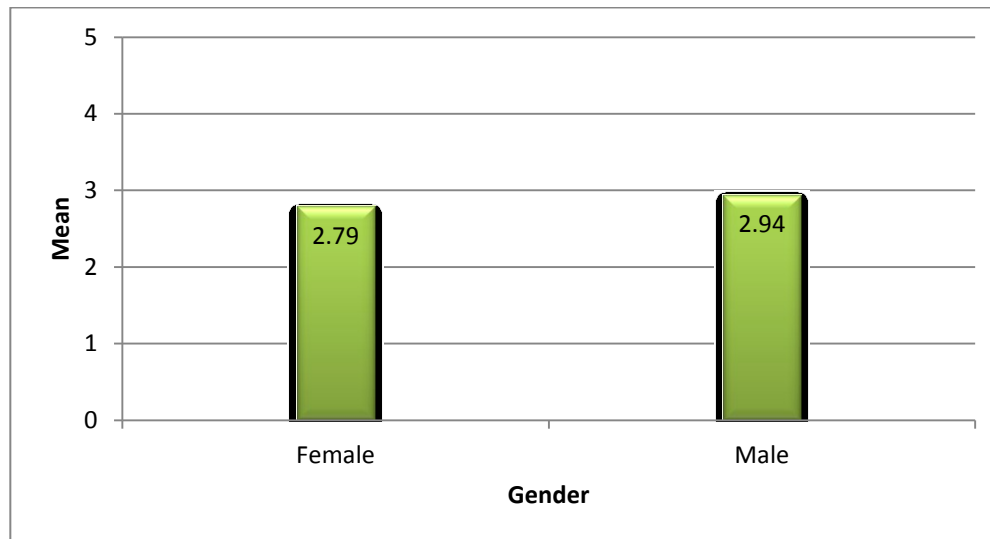


Figure 5i. Individual Gender Means for Mannequin 9

Mannequin 9 Summary

Mannequin 9 depicts a teacher wearing a golf shirt, khaki pants and dress shoes for teaching physical education.



Figure 2i. Mannequin 9

The data collected from the participants resulted in a mean of 2.86 (SD 1.004) and a mode of 3. Therefore, the participants perceived the clothing of a golf shirt, khaki pants and dress shoes on Mannequin 9 to represent a teacher of physical education as being “not so good” and approaching the “okay” level.

Mannequin 10

Clothing Choices

Short Sleeve Golf Shirt

Khaki Pants

Running Shoes



Figure 2j. Mannequin 10

The data from School 1 resulted in the highest mean (4.61). The data from Schools 2-6 resulted in lower means ranging from 3.90 to 4.21. Of 384 total responses, the score of 5 was recorded by 166 participants.

Table 3j.

Individual School Summary (Mannequin 10).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 41 | 5 (28) | 4.61 (0.666) |
| School 2 | 76 | 4 (37) | 4.16 (0.731) |
| School 3 | 53 | 4 (24) | 4.21 (0.793) |
| School 4 | 75 | 5 (36) | 4.21 (0.977) |
| School 5 | 71 | 5 (26) | 3.90 (1.097) |
| School 6 | 68 | 5 (29) | 4.18 (0.863) |
| Total | 384 | 5 (166) | 4.18 (0.898) |

Figure 3j illustrates the individual means of the participants' responses to the clothing on Mannequin 10 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

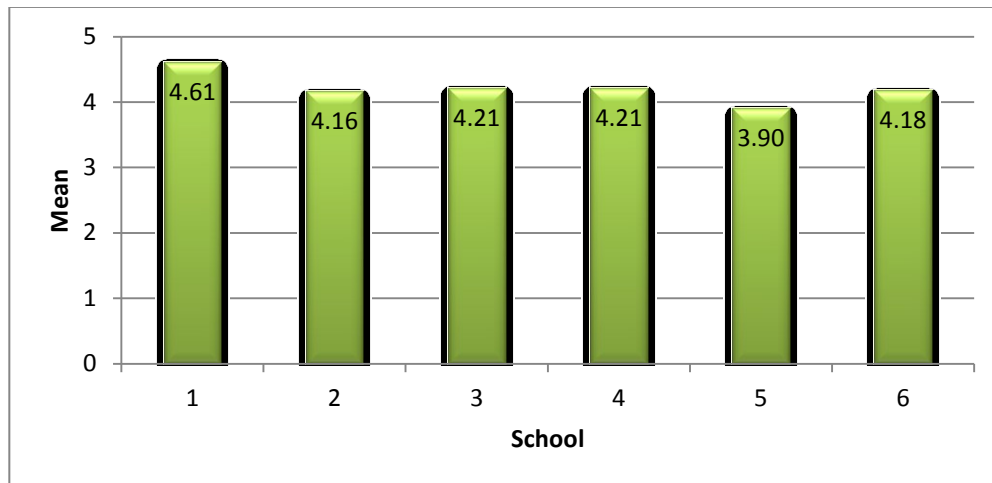


Figure 3j. Individual School Means for Mannequin 10

The data from Grade 1 resulted in the highest mean (4.35). The data from Grades 2-6 resulted in lower means ranging from 3.89 to 4.32. Of 384 total responses, the score of 5 was recorded by 166 participants.

Table 4j.

Grade Level Summary Across all School Sites (Mannequin 10).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Grade 1 | 51 | 5 (34) | 4.35 (1.146) |
| Grade 2 | 38 | 4 & 5 (16) | 4.21 (0.843) |
| Grade 3 | 74 | 5 (35) | 4.32 (0.778) |
| Grade 4 | 77 | 5 (36) | 4.29 (0.792) |
| Grade 5 | 61 | 4 (26) | 4.10 (0.851) |
| Grade 6 | 83 | 4 (36) | 3.89 (0.924) |
| Total | 384 | 5 (166) | 4.18 (0.898) |

Figure 4j illustrates the individual means of the participants' responses to the clothing on Mannequin 10 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

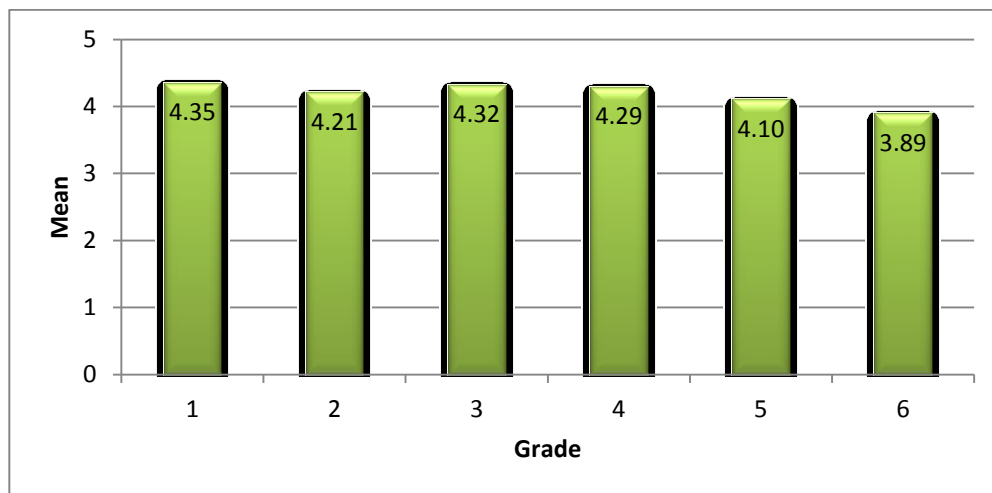


Figure 4j. Individual Grade Level Means for Mannequin 10

The means from the male and female participants were similar. The data resulted in a mean of 4.22 for males and 4.14 for females. Of 384 total responses, the score of 5 was recorded by 166 participants.

Table 5j.

Gender Summary across all school sites (Mannequin 10).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 4 (86) | 4.14 (0.852) |
| Male | 177 | 5 (85) | 4.22 (0.949) |
| Total | 384 | 5 (166) | 4.18 (0.898) |

Figure 5j illustrates the individual means of the participants' responses to the clothing on Mannequin 10 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

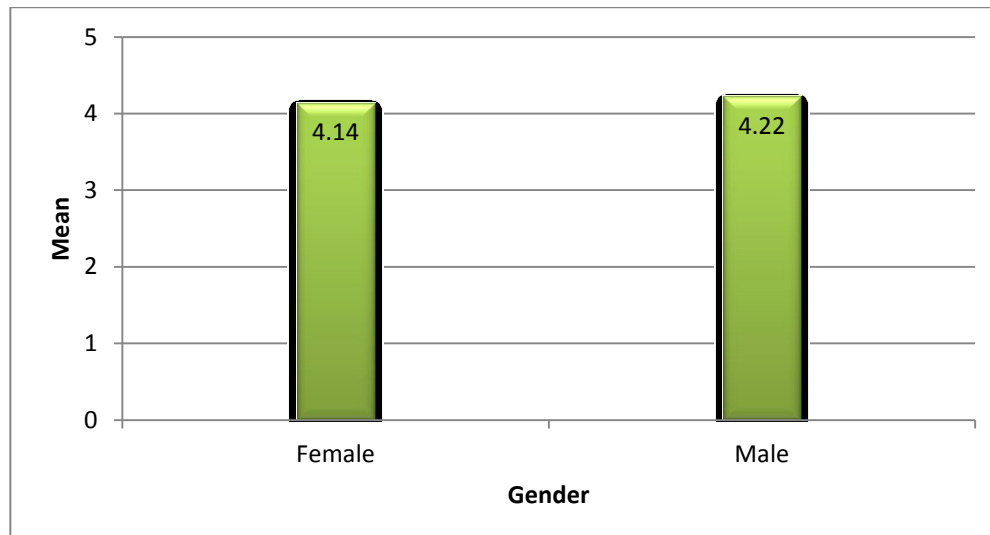


Figure 5j. Individual Gender Means for Mannequin 10

Mannequin 10 Summary

Mannequin 10 depicts a teacher wearing a golf shirt, khaki pants and runners for teaching physical education.



Figure 2j. Mannequin 10

The data collected from the participants resulted in a mean of 4.18 (SD 0.898) and a mode of 5. Therefore, the participants perceived the clothing of a golf shirt, khaki pants and runners on Mannequin 10 to represent a teacher of physical education as being “good” and approaching the “really good” level.

Mannequin 11

Clothing Choices

Long Sleeve Sweat Shirt

Khaki Pants

Running Shoes



Figure 2k. Mannequin 11

The data from School 1 resulted in the highest mean (4.33). The data from Schools 2-6 resulted in lower means ranging from 3.61 to 3.90. Of 387 total responses, the score of 4 was recorded by 158 participants.

Table 3k.

Individual School Summary (Mannequin 11)

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 5 (21) | 4.33 (0.786) |
| School 2 | 77 | 4 (41) | 3.73 (0.805) |
| School 3 | 54 | 4 (24) | 3.89 (0.904) |
| School 4 | 76 | 4 (25) | 3.80 (1.083) |
| School 5 | 71 | 4 (26) | 3.61 (0.933) |
| School 6 | 67 | 4 (27) | 3.90 (0.907) |
| Total | 387 | 4 (158) | 3.84 (0.934) |

Figure 3k illustrates the individual means of the participants' responses to the clothing on Mannequin 11 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

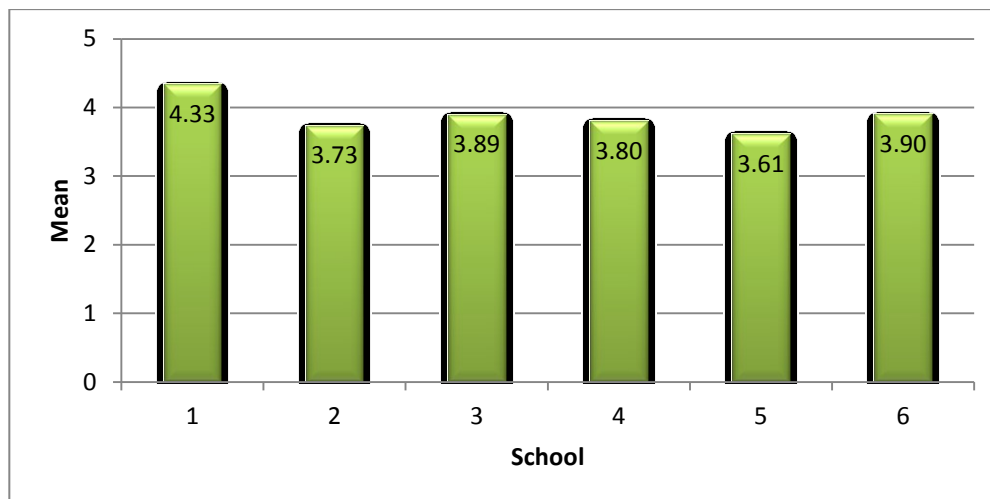


Figure 3k. Individual School Means for Mannequin 11

The data from Grade 1 resulted in the highest mean (4.13). The data from Grades 2-6 resulted in lower means ranging from 3.69 to 3.90. Of 387 total responses, the score of 4 was recorded by 158 participants.

Table 4k.

Grade Level Summary Across all School Sites (Mannequin 11).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Grade 1 | 53 | 5 (28) | 4.13 (1.161) |
| Grade 2 | 39 | 3 & 5 (13) | 3.90 (0.940) |
| Grade 3 | 74 | 4 (34) | 3.84 (0.828) |
| Grade 4 | 77 | 4 (28) | 3.88 (1.051) |
| Grade 5 | 61 | 4 (26) | 3.69 (0.827) |
| Grade 6 | 83 | 4 (46) | 3.69 (0.780) |
| Total | 387 | 4 (158) | 3.84 (0.934) |

Figure 4k illustrates the individual means of the participants' responses to the clothing on Mannequin 11 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

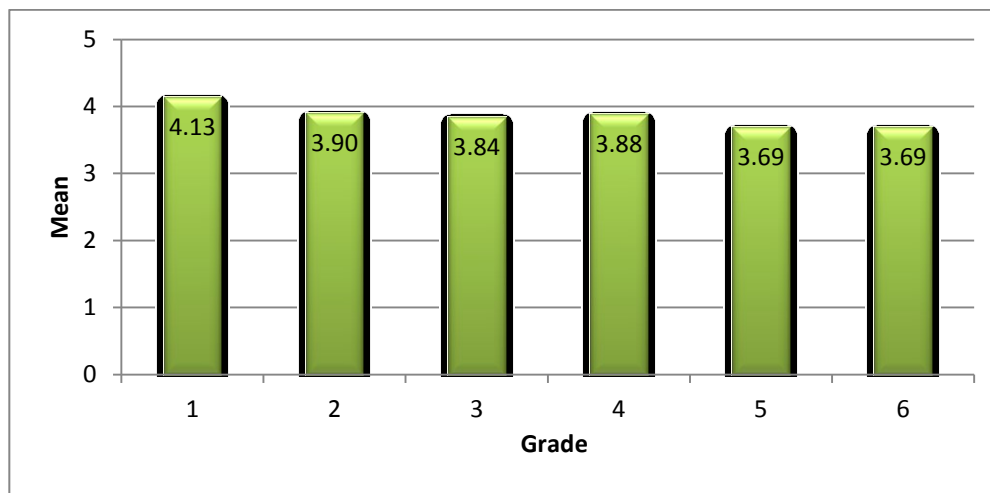


Figure 4k. Individual Grade Level Means for Mannequin 11

The means from the male and female participants were similar. The data resulted in a mean of 3.90 for males and 3.78 for females. Of 387 total responses, the score of 4 was recorded by 158 participants.

Table 5k.

Gender Summary across all school sites (Mannequin 11).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 208 | 4 (82) | 3.78 (0.981) |
| Male | 179 | 4 (76) | 3.90 (0.875) |
| Total | 387 | 4 (158) | 3.84 (0.934) |

Figure 5k illustrates the individual means of the participants' responses to the clothing on Mannequin 11 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

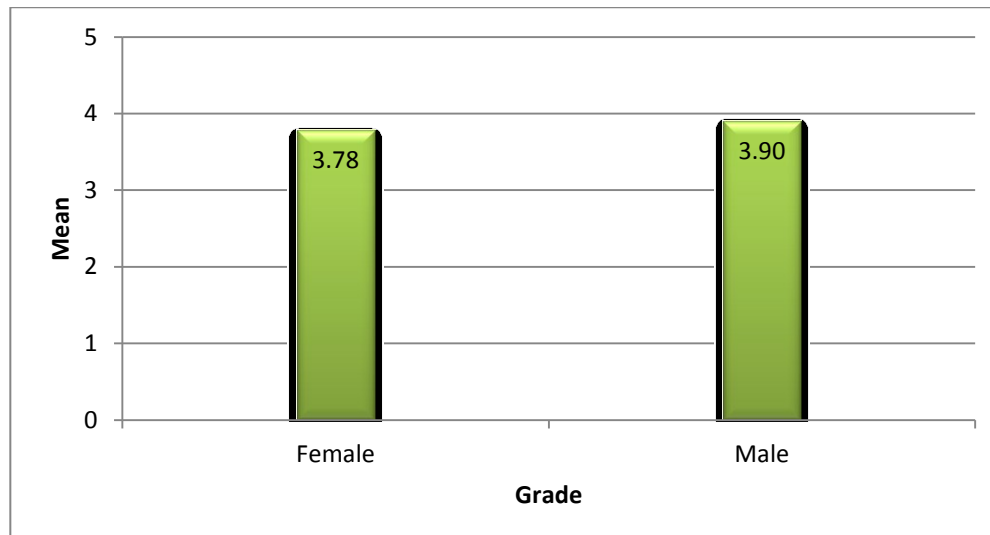


Figure 5k. Individual Gender Means for Mannequin 11

Mannequin 11 Summary

Mannequin 11 depicts a teacher wearing a sweat shirt, khaki pants and runners for teaching physical education.



Figure 2k. Mannequin 11

The data collected from the participants resulted in a mean of 3.84 (SD 0.934) and a mode of 4. Therefore, the participants perceived the clothing of a sweat shirt, khaki pants and runners on Mannequin 11 to represent a teacher of physical education as being “okay” and approaching the “good” level.

Mannequin 12

Clothing Choices

Long Sleeve Sweat Shirt

Khaki Pants

Dress Shoes



Figure 21. Mannequin 12

Of 384 total responses, the score of 3 was recorded by 158 participants.

The data from School 1 resulted in the highest mean (2.90). The data from

Schools 2-6 resulted in lower means ranging from 2.38 to 2.81.

Table 31.

Individual School Summary (Mannequin 12).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 41 | 3 (19) | 2.90 (0.917) |
| School 2 | 77 | 3 (40) | 2.57 (0.785) |
| School 3 | 54 | 3 (23) | 2.81 (0.973) |
| School 4 | 73 | 2 & 3 (23) | 2.38 (1.049) |
| School 5 | 71 | 2 (27) | 2.49 (0.954) |
| School 6 | 68 | 3 (28) | 2.62 (0.947) |
| Total | 384 | 3 (158) | 2.60 (0.948) |

Figure 31 illustrates the individual means of the participants' responses to the clothing on Mannequin 12 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

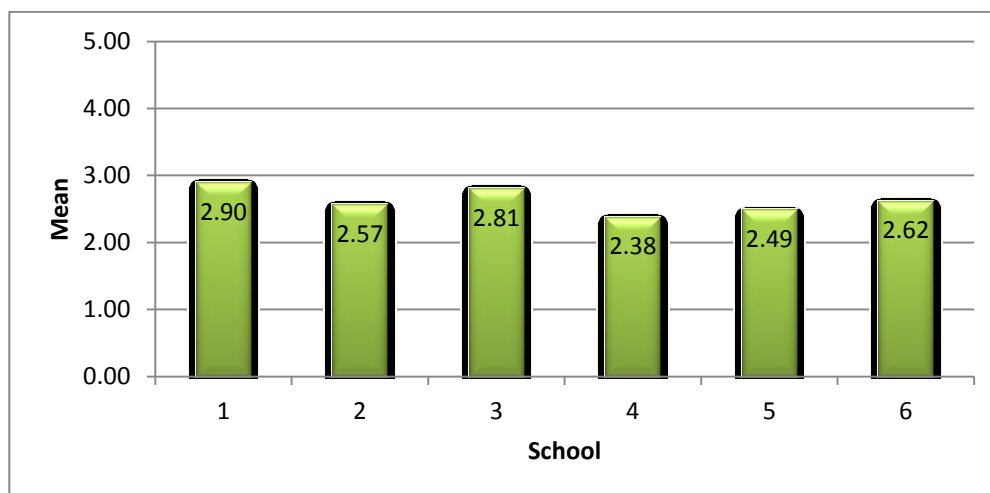


Figure 31. Individual School Means for Mannequin 12

The data from Grade 6 resulted in the highest mean (2.74). The data from Grades 1-5 recorded lower means ranging from 2.31 to 2.72. Of 384 total responses, the score of 3 was recorded by 158 participants.

Table 41.

Grade Level Summary Across all School Sites (Mannequin 12).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 50 | 3 (16) | 2.54 (1.232) |
| Grade 2 | 39 | 2 (16) | 2.31 (0.977) |
| Grade 3 | 74 | 3 (34) | 2.53 (0.831) |
| Grade 4 | 78 | 3 (26) | 2.72 (1.031) |
| Grade 5 | 61 | 3 (26) | 2.57 (0.921) |
| Grade 6 | 82 | 3 (45) | 2.74 (0.734) |
| Total | 384 | 3 (158) | 2.60 (0.948) |

Figure 41 illustrates the individual means of the participants' responses to the clothing on Mannequin 12 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

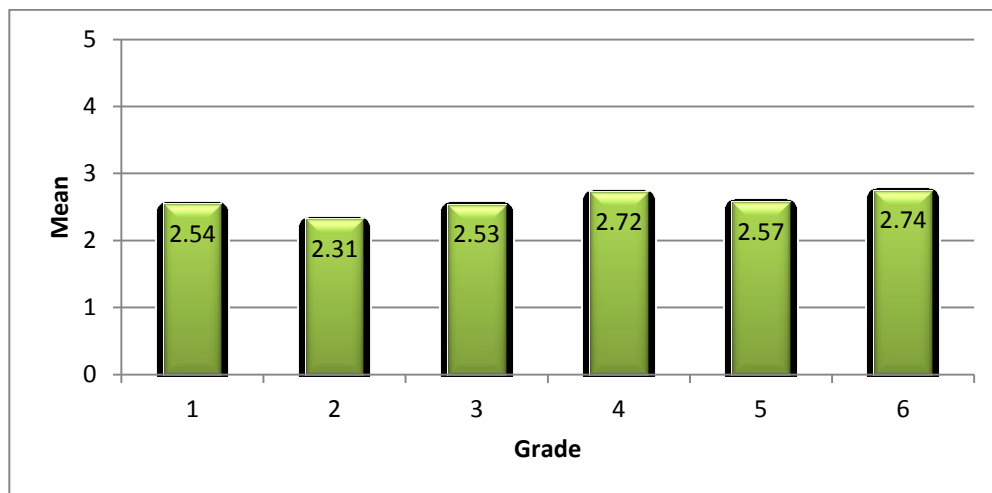


Figure 41. Individual Grade Level Means for Mannequin 12

The means from the male and female participants were similar. The data resulted in a mean of 2.62 for females and 2.58 for males. Of 384 total responses, the score of 3 was recorded by 158 participants.

Table 5l.

Gender Summary across all school sites (Mannequin 12).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 3 (94) | 2.62 (0.932) |
| Male | 177 | 3 (64) | 2.58 (0.969) |
| Total | 384 | 3 (158) | 2.60 (0.948) |

Figure 5l illustrates the individual means of the participants' responses to the clothing on Mannequin 12 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

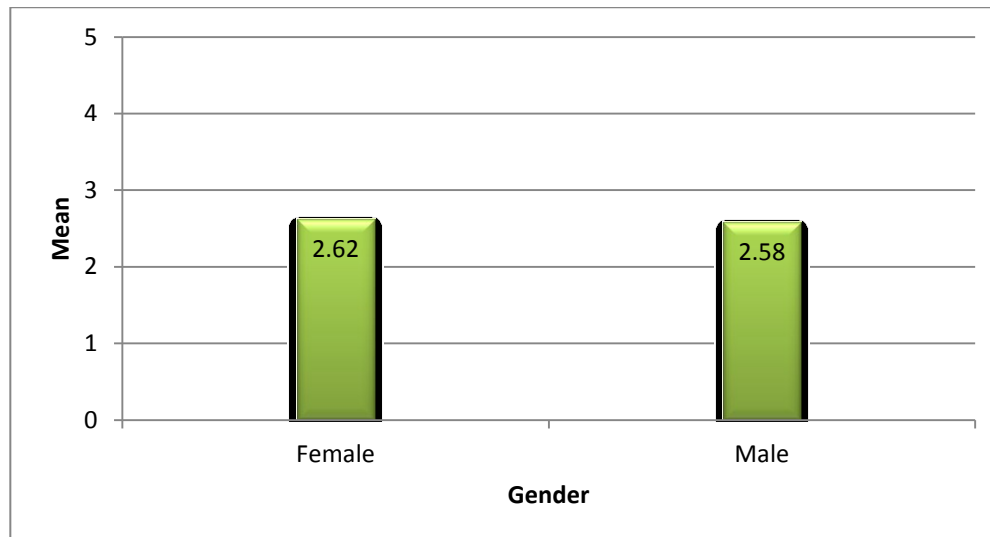


Figure 5l. Individual Gender Means for Mannequin 12

Mannequin 12 Summary

Mannequin 12 depicts a teacher wearing a sweat shirt, khaki pants and dress shoes for teaching physical education.



Figure 21. Mannequin 12

The data collected from the participants resulted in a mean of 2.60 (SD 0.948) and a mode of 3. Therefore, the participants perceived the clothing of a sweat shirt, khaki pants and dress shoes on Mannequin 12 to represent a teacher of physical education as being “not so good” and approaching the “okay” level.

Mannequin 13

Clothing Choices

Long Sleeve Sweat Shirt

Sweat Pants

Running Shoes



Figure 2m. Mannequin 13

The data from School 3 resulted in the highest mean (4.17). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 3.29 to 3.96. Of 389 total responses, the score of 5 was recorded by 136 participants.

Table 3m.

Individual School Summary (Mannequin 13)

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| School 1 | 43 | 5 (17) | 3.77 (1.360) |
| School 2 | 77 | 5 (27) | 3.58 (1.361) |
| School 3 | 54 | 4 (23) | 4.17 (0.885) |
| School 4 | 76 | 5 (21) | 3.29 (1.450) |
| School 5 | 71 | 5 (28) | 3.96 (1.114) |
| School 6 | 68 | 4 & 5 (21) | 3.79 (1.059) |
| Total | 389 | 5 (136) | 3.73 (1.254) |

Figure 3m illustrates the individual means of the participants' responses to the clothing on Mannequin 13 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

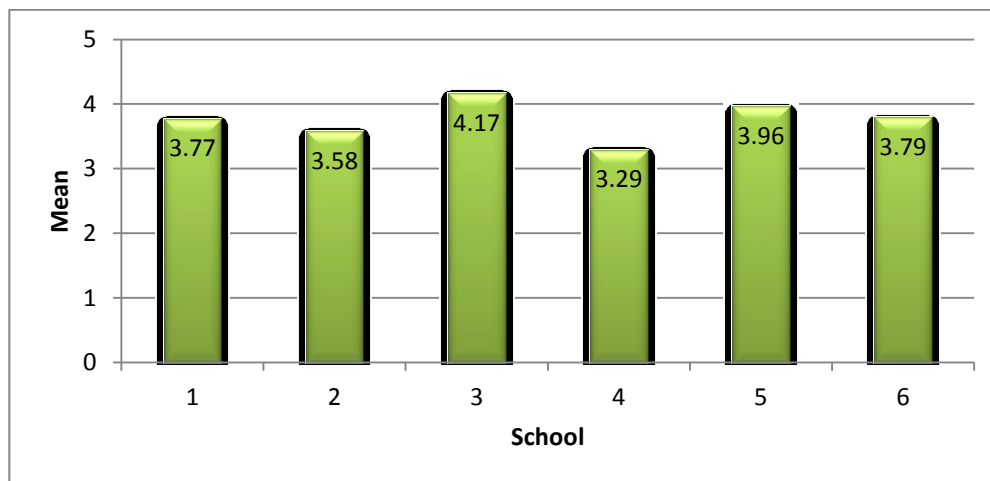


Figure 3m. Individual School Means for Mannequin 13

The data from Grade 6 resulted in the highest mean (4.12). The data from Grades 1-5 resulted in lower means ranging from 3.43 to 3.84. Of 389 total responses, the score of 5 was recorded by 136 participants.

Table 4m.

Grade Level Summary Across all School Sites (Mannequin 13).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 54 | 5 (18) | 3.43 (1.525) |
| Grade 2 | 39 | 5 (12) | 3.49 (1.374) |
| Grade 3 | 74 | 4 (22) | 3.57 (1.261) |
| Grade 4 | 78 | 5 (31) | 3.73 (1.286) |
| Grade 5 | 61 | 5 (23) | 3.84 (1.214) |
| Grade 6 | 83 | 4 (36) | 4.12 (0.861) |
| Total | 389 | 5 (136) | 3.73 (1.254) |

Figure 4m illustrates the individual means of the participants' responses to the clothing on Mannequin 13 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

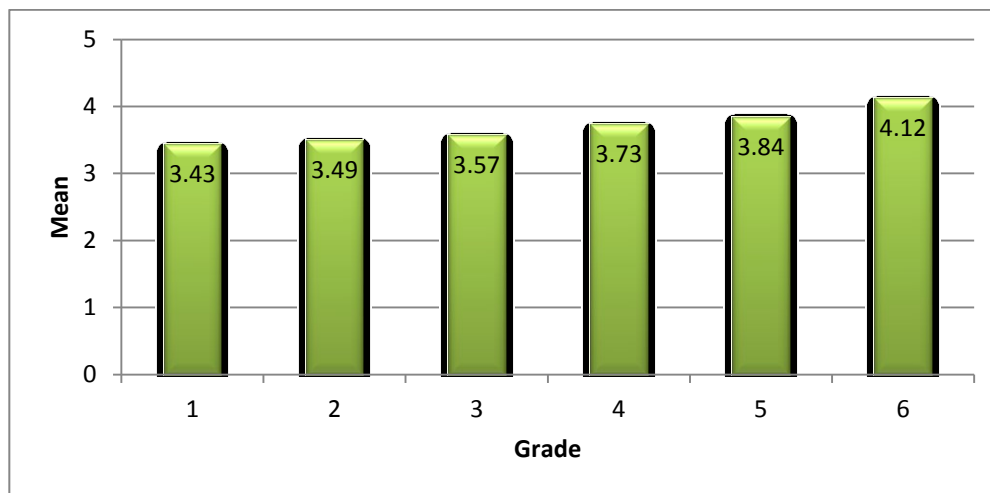


Figure 4m. Individual Grade Level Means for Mannequin 13

The means from the male and female participants were similar. The data resulted in a mean of 3.81 for females and 3.64 for males. Of 389 total responses, the score of 5 was recorded by 136 participants.

Table 5m.

Gender Summary across all school sites (Mannequin #13).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 209 | 5 (77) | 3.81 (1.224) |
| Male | 180 | 5 (59) | 3.64 (1.285) |
| Total | 389 | 5 (136) | 3.73 (1.254) |

Figure 5m illustrates the individual means of the participants' responses to the clothing on Mannequin 13 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

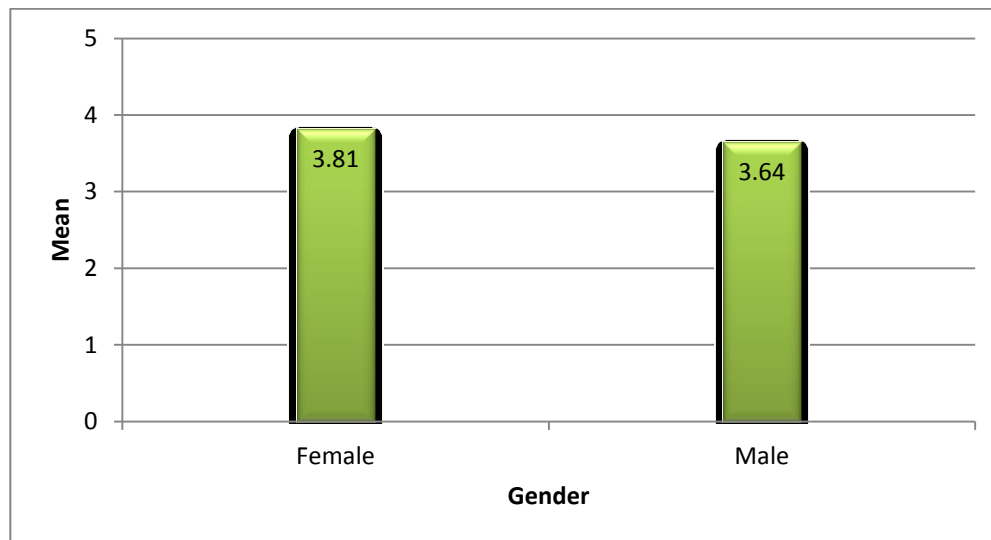


Figure 5m. Individual Gender Means for Mannequin 13

Mannequin 13 Summary

Mannequin 13 depicts a teacher wearing a sweat shirt, sweat pants and runners for teaching physical education.



Figure 2m. Mannequin 13

The data collected from the participants resulted in a mean of 3.73 (SD 1.254) and a mode of 5. Therefore, the participants perceived the clothing of a sweat shirt, sweat pants and runners on Mannequin 13 to represent a teacher of physical education as being “okay” and approaching the “good” level, although, 136 out of 389 recorded “really good” representing the mode.

Mannequin 14

Clothing Choices

Short Sleeve Golf Shirt

Sweat Pants

Running Shoes



Figure 2n. Mannequin 14

The data from School 1 resulted in the highest mean (4.56). The data from Schools 2-6 resulted in lower means ranging from 3.97 to 4.41. Of 387 total responses, the score of 5 was recorded by 200 participants.

Table 3n.

Individual School Summary (Mannequin 14).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 43 | 5 (34) | 4.56 (1.076) |
| School 2 | 77 | 5 (37) | 4.32 (0.785) |
| School 3 | 54 | 5 (30) | 4.41 (0.813) |
| School 4 | 74 | 5 (31) | 3.97 (1.110) |
| School 5 | 71 | 5 (31) | 3.99 (1.177) |
| School 6 | 68 | 5 (37) | 4.34 (0.924) |
| Total | 387 | 5 (200) | 4.24 (1.007) |

Figure 3n illustrates the individual means of the participants' responses to the clothing on Mannequin 14 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

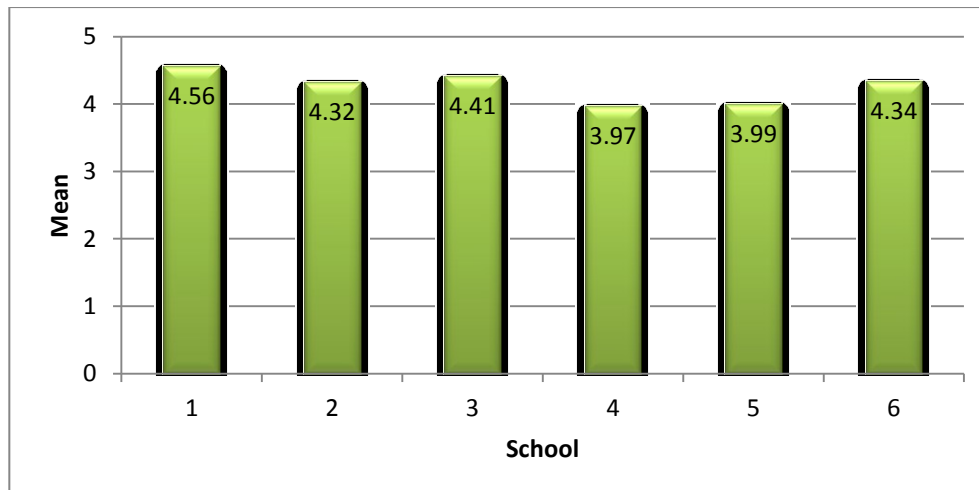


Figure 3n. Individual School Means for Mannequin 14

The data from Grade 6 resulted in the highest mean (4.51). The data from Grades 1-5 resulted in lower means ranging from 3.92 to 4.33. Of 387 total responses, the score of 5 was recorded by 200 participants.

Table 4n.

Grade Level Summary Across all School Sites (Mannequin 14).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 52 | 5 (29) | 3.92 (1.493) |
| Grade 2 | 39 | 5 (21) | 4.10 (1.142) |
| Grade 3 | 74 | 5 (35) | 4.22 (0.983) |
| Grade 4 | 78 | 5 (35) | 4.17 (0.918) |
| Grade 5 | 61 | 5 (33) | 4.33 (0.889) |
| Grade 6 | 83 | 5 (47) | 4.51 (0.632) |
| Total | 387 | 5 (200) | 4.24 (1.007) |

Figure 4n illustrates the individual means of the participants' responses to the clothing on Mannequin 14 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

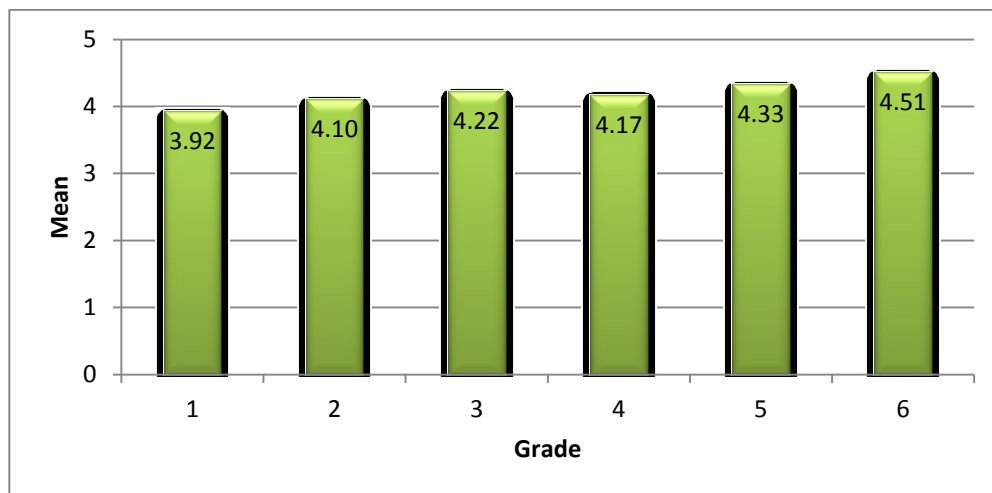


Figure 4n. Individual Grade Level Means for Mannequin 14

The means from the male and female participants were similar. The data resulted in a mean of 4.27 for females and 4.20 for males. Of 387 total responses, the score of 5 was recorded by 200 participants.

Table 5n.

Gender Summary across all school sites (Mannequin 14).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Female | 208 | 5 (111) | 4.27 (0.960) |
| Male | 179 | 5 (89) | 4.20 (1.060) |
| Total | 387 | 5 (200) | 4.24 (1.007) |

Figure 5n illustrates the individual means of the participants' responses to the clothing on Mannequin 14 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

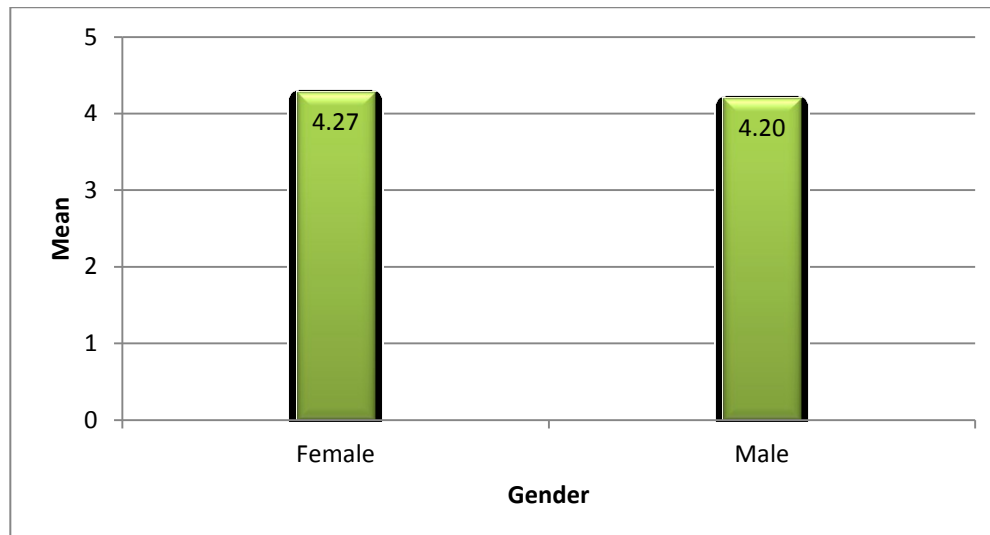


Figure 5n. Individual Gender Means for Mannequin 14

Mannequin 14 Summary

Mannequin 14 depicts a teacher wearing a golf shirt, sweat pants and runners for teaching physical education.



Figure 2n. Mannequin 14

The data collected from the participants resulted in a mean of 4.24 (SD 1.007) and a mode of 5. Therefore, the participants perceived the clothing of a golf shirt, sweat pants and runners on Mannequin 14 to represent a teacher of physical education as being “good” and approaching the “really good” level.

Mannequin 15

Clothing Choices

Short Sleeve Blouse

Skirt

Dress Shoes



Figure 2o. Mannequin 15

The data from School 1 resulted in the highest mean (2.63). The data from Schools 2-6 resulted in lower means ranging from 1.51 to 1.97. Of 388 total responses, the score of 1 was recorded by 218 participants.

Table 3o.

Individual School Summary (Mannequin 15).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| School 1 | 43 | 1 (13) | 2.63 (1.431) |
| School 2 | 77 | 1 (50) | 1.52 (0.852) |
| School 3 | 54 | 1 (29) | 1.80 (1.035) |
| School 4 | 76 | 1 (40) | 1.97 (1.265) |
| School 5 | 70 | 1 (43) | 1.81 (1.277) |
| School 6 | 68 | 1 (43) | 1.51 (0.782) |
| Total | 388 | 1 (218) | 1.82 (1.153) |

Figure 3o illustrates the individual means of the participants' responses to the clothing on Mannequin 15 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

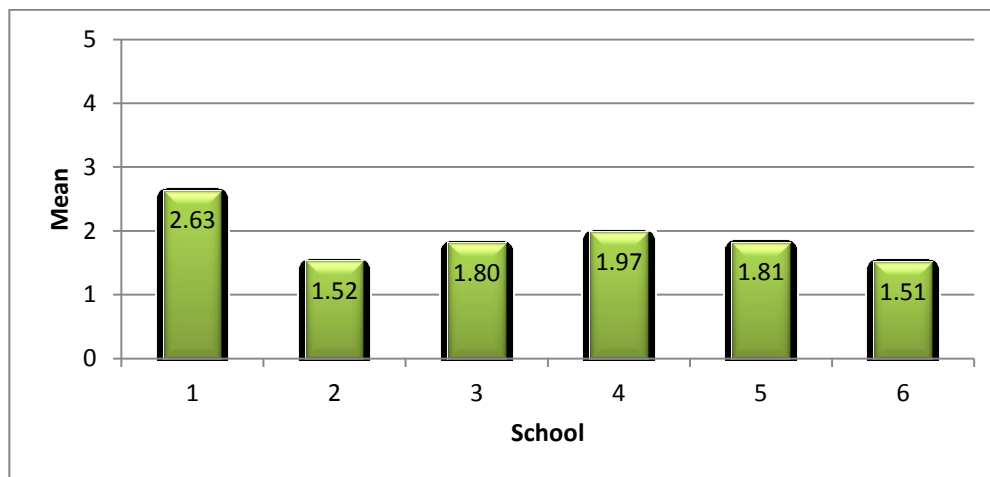


Figure 3o. Individual School Means for Mannequin 15

The data from Grade 1 resulted in the highest mean (2.57). The data from Grades 2-6 resulted in lower means ranging from 1.48 to 2.23. Of 388 total responses, the score of 1 was recorded by 218 participants.

Table 4o.

Grade Level Summary Across all School Sites (Mannequin 15).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 54 | 1 (18) | 2.57 (1.461) |
| Grade 2 | 39 | 1 (15) | 2.23 (1.266) |
| Grade 3 | 73 | 1 (34) | 1.92 (1.115) |
| Grade 4 | 78 | 1 (47) | 1.62 (0.957) |
| Grade 5 | 61 | 1 (46) | 1.48 (1.010) |
| Grade 6 | 83 | 1 (58) | 1.51 (0.875) |
| Total | 388 | 1 (218) | 1.82 (1.153) |

Figure 4o illustrates the individual means of the participants' responses to the clothing on Mannequin 15 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

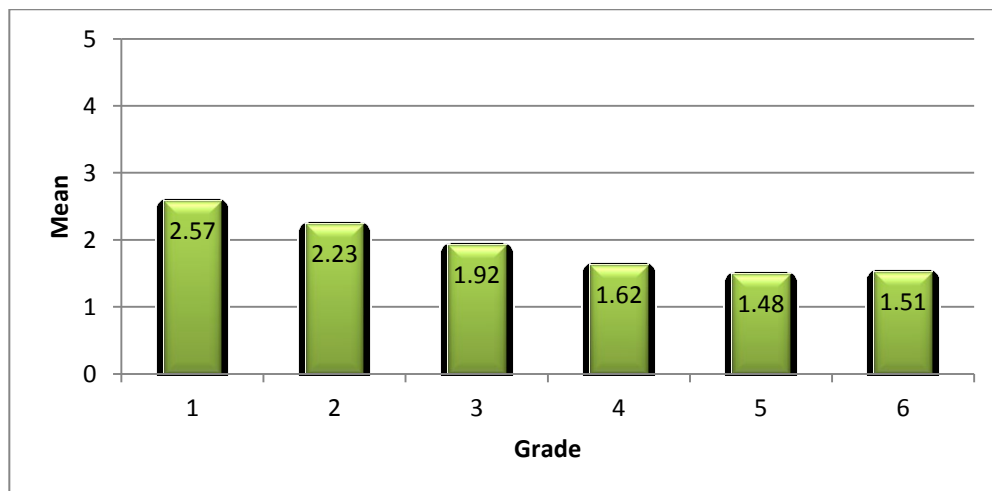


Figure 4o. Individual Grade Level Means for Mannequin 15

The means from the male and female participants were similar. The data resulted in a mean of 1.92 for males and 1.74 for females. Of 388 total responses, the score of 1 was recorded by 218 participants.

Table 5o.

Gender Summary across all school sites (Mannequin 15).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 208 | 1 (125) | 1.74 (1.108) |
| Male | 180 | 1 (93) | 1.92 (1.120) |
| Total | 388 | 1 (218) | 1.82 (1.153) |

Figure 5o illustrates the individual means of the participants' responses to the clothing on Mannequin 15 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

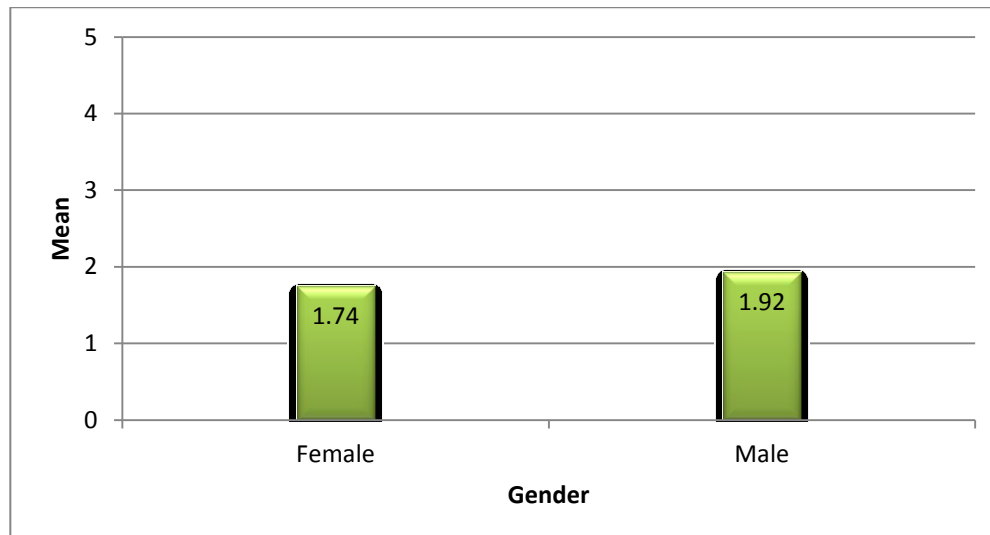


Figure 5o. Individual Gender Means for Mannequin 15

Mannequin 15 Summary

Mannequin 15 depicts a teacher wearing a blouse, skirt and dress shoes for teaching physical education.



Figure 2o. Mannequin 15

The data collected from the participants resulted in a mean of 1.82 (SD 1.153) and a mode of 1. Therefore, the participants perceived the clothing of a blouse, skirt and dress shoes on Mannequin 15 to represent a teacher of physical education as being “really not good” and approaching the “not so good” level.

Mannequin 16

Clothing Choices

Short Sleeve Blouse

Skirt

Running Shoes



Figure 2p. Mannequin 16

The data from School 4 resulted in the highest mean (3.37). The data from Schools 1-3 and 5, 6 resulted in lower means ranging from 2.43 to 3.33. Of 387 total responses, the score of 2 was recorded by 135 participants.

Table 3p.

Individual School Summary (Mannequin 16).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 43 | 5 (13) | 3.33 (1.426) |
| School 2 | 77 | 2 (35) | 2.44 (1.019) |
| School 3 | 53 | 3 (18) | 2.83 (1.105) |
| School 4 | 76 | 5 (25) | 3.37 (1.422) |
| School 5 | 70 | 2 (31) | 2.43 (1.111) |
| School 6 | 68 | 2 (30) | 3.00 (1.133) |
| Total | 387 | 2 (135) | 2.87 (1.255) |

Figure 3p illustrates the individual means of the participants' responses to the clothing on Mannequin 16 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

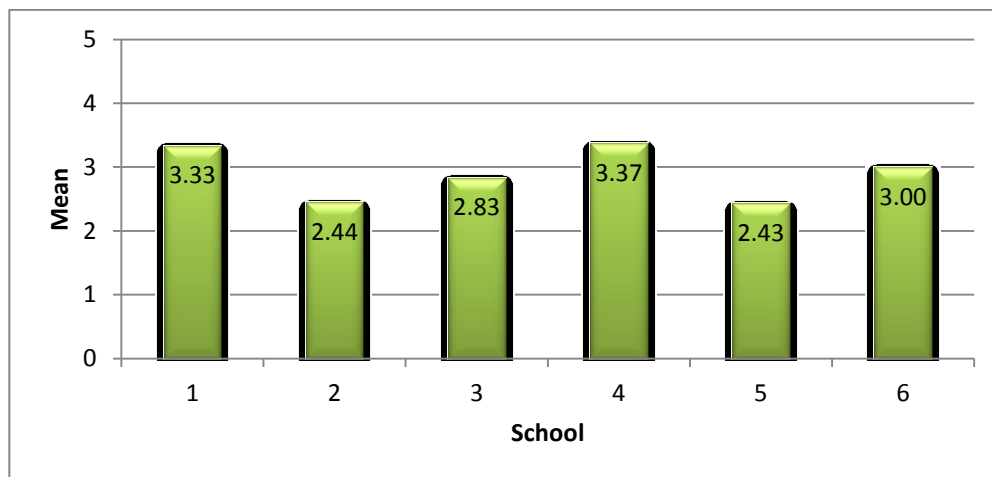


Figure 3p. Individual School Means for Mannequin 16

The data from Grade 1 resulted in the highest mean (3.81). The data from Grades 2-6 resulted in lower means ranging from 2.31 to 3.79. Of 387 total responses, the score of 2 was recorded by 135 participants.

Table 4p.

Grade Level Summary Across all School Sites (Mannequin 16).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 53 | 5 (27) | 3.81 (1.532) |
| Grade 2 | 39 | 5 (14) | 3.79 (1.080) |
| Grade 3 | 74 | 2 (25) | 2.88 (1.170) |
| Grade 4 | 77 | 3 (30) | 2.77 (0.999) |
| Grade 5 | 61 | 2 (31) | 2.31 (1.025) |
| Grade 6 | 83 | 2 (47) | 2.34 (0.979) |
| Total | 387 | 2 (135) | 2.87 (1.255) |

Figure 4p illustrates the individual means of the participants' responses to the clothing on Mannequin 16 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

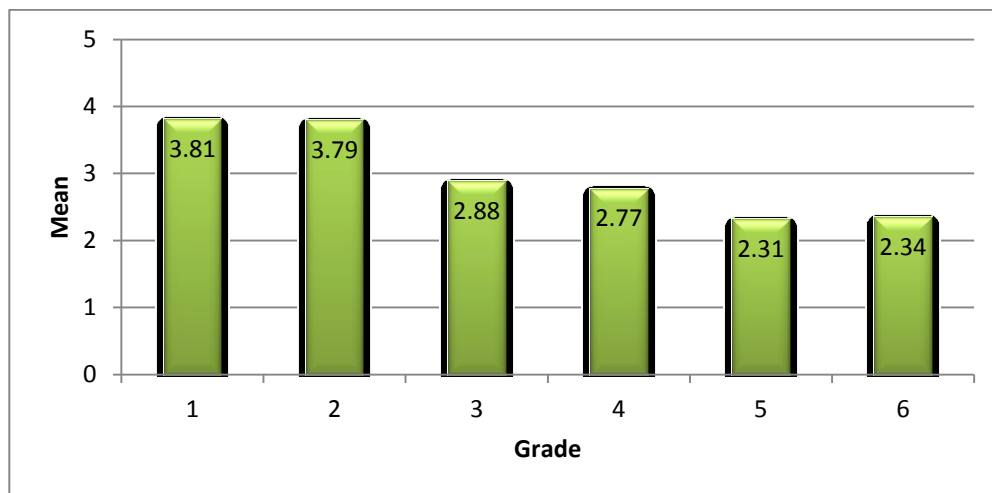


Figure 4p. Individual Grade Level Means for Mannequin 16

The means from the male and female participants were similar. The data resulted in a mean of 2.97 for males and 2.78 for females. Of 387 total responses, the score of 2 was recorded by 135 participants.

Table 5p.

Gender Summary across all school sites (Mannequin 16).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 2 (81) | 2.78 (1.181) |
| Male | 180 | 2 (54) | 2.97 (1.330) |
| Total | 387 | 2 (135) | 2.87 (1.255) |

Figure 5p illustrates the individual means of the participants' responses to the clothing on Mannequin 16 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

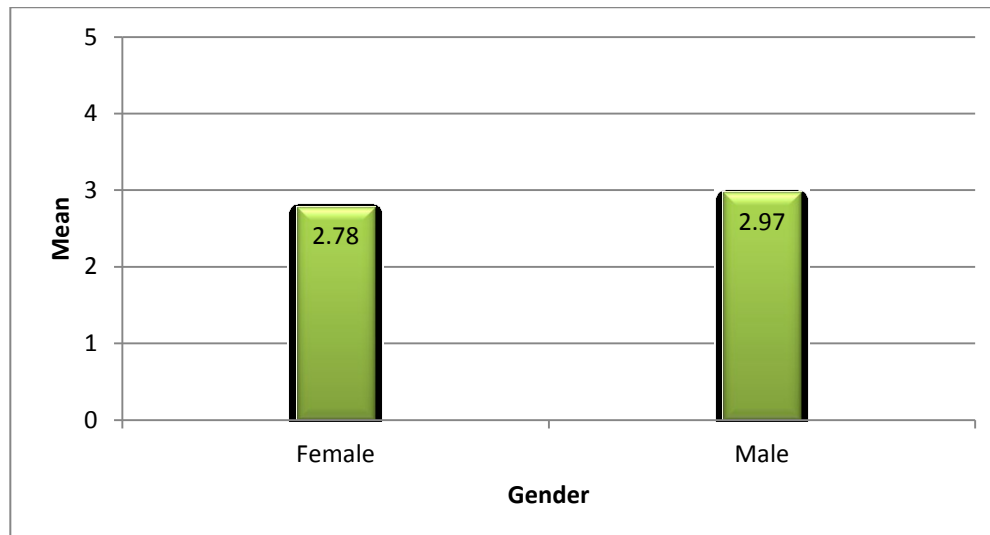


Figure 5p. Individual Gender Means for Mannequin 16

Mannequin 16 Summary

Mannequin 16 depicts a teacher wearing a blouse, skirt and runners for teaching physical education.



Figure 2p. Mannequin 16

The data collected from the participants resulted in a mean of 2.87 (SD 1.255) and a mode of 2. Therefore, the participants perceived the clothing of a blouse, skirt and runners on Mannequin 16 to represent a teacher of physical education as being “not so good” and approaching the “okay” level.

Mannequin 17

Clothing Choices

Short Sleeve Golf Shirt

Dress Pants

Running Shoes



Figure 2q. Mannequin 17

The data from School 1 resulted in the highest mean (4.33). The data from Schools 2-6 resulted in lower means ranging from 3.19 to 3.70. Of 388 total responses, the score of 3 was recorded by 146 participants.

Table 3q.

Individual School Summary (Mannequin 17).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 5 (25) | 4.33 (1.004) |
| School 2 | 77 | 3 (44) | 3.19 (0.889) |
| School 3 | 54 | 3 (24) | 3.44 (0.839) |
| School 4 | 76 | 5 (26) | 3.70 (1.143) |
| School 5 | 71 | 3 (27) | 3.31 (1.103) |
| School 6 | 68 | 4 (26) | 3.60 (0.900) |
| Total | 388 | 3 (146) | 3.54 (1.040) |

Figure 3q illustrates the individual means of the participants' responses to the clothing on Mannequin 17 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

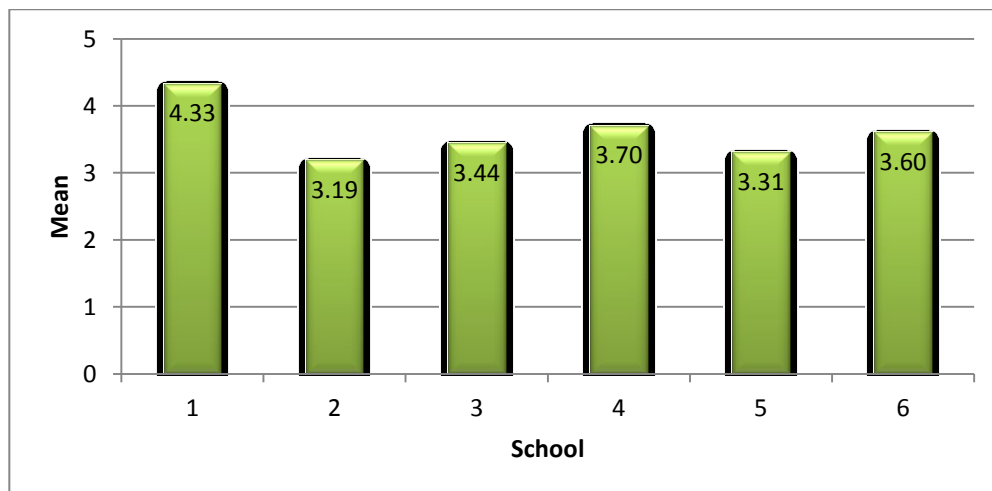


Figure 3q. Individual School Means for Mannequin 17

The data from Grade 1 resulted in the highest mean (4.43). The data from Grades 2-6 resulted in lower means ranging from 2.98 to 3.92. Of 388 total responses, the score of 3 was recorded by 146 participants.

Table 4q.

Grade Level Summary Across all School Sites (Mannequin 17).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Grade 1 | 53 | 5 (37) | 4.43 (1.010) |
| Grade 2 | 39 | 3 & 4 (13) | 3.92 (0.870) |
| Grade 3 | 74 | 3 (33) | 3.61 (0.919) |
| Grade 4 | 78 | 3 (37) | 3.55 (0.921) |
| Grade 5 | 61 | 3 (24) | 3.21 (0.985) |
| Grade 6 | 83 | 3 (37) | 2.98 (0.924) |
| Total | 388 | 3 (146) | 3.54 (1.040) |

Figure 4q illustrates the individual means of the participants' responses to the clothing on Mannequin 17 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

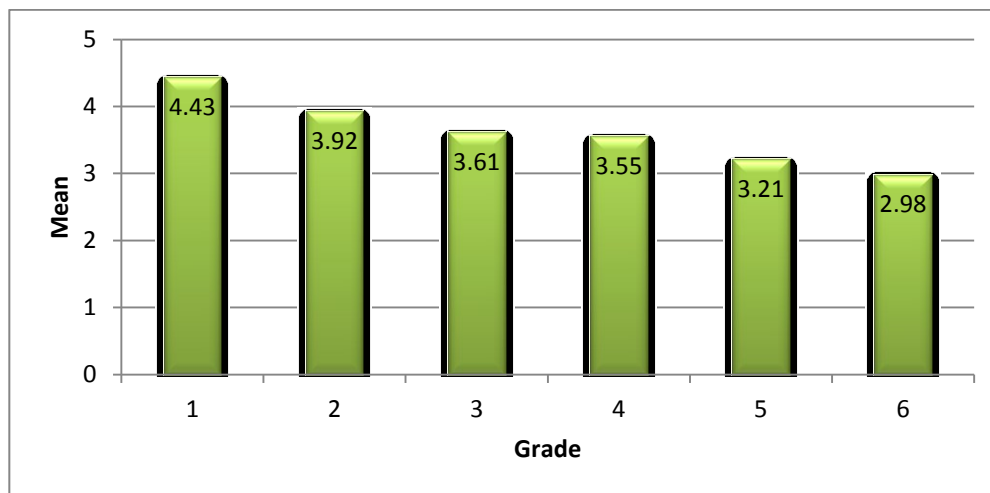


Figure 4q. Individual Grade Level Means for Mannequin 17

The means from the male and female participants were similar. The data resulted in a mean of 3.66 for males and 3.44 for females. Of 388 total responses, the score of 3 was recorded by 146 participants.

Table 5q.

Gender Summary across all school sites (Mannequin 17).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 209 | 3 (81) | 3.44 (1.041) |
| Male | 179 | 3 (65) | 3.66 (1.027) |
| Total | 388 | 3 (146) | 3.54 (1.040) |

Figure 5q illustrates the individual means of the participants' responses to the clothing on Mannequin 17 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

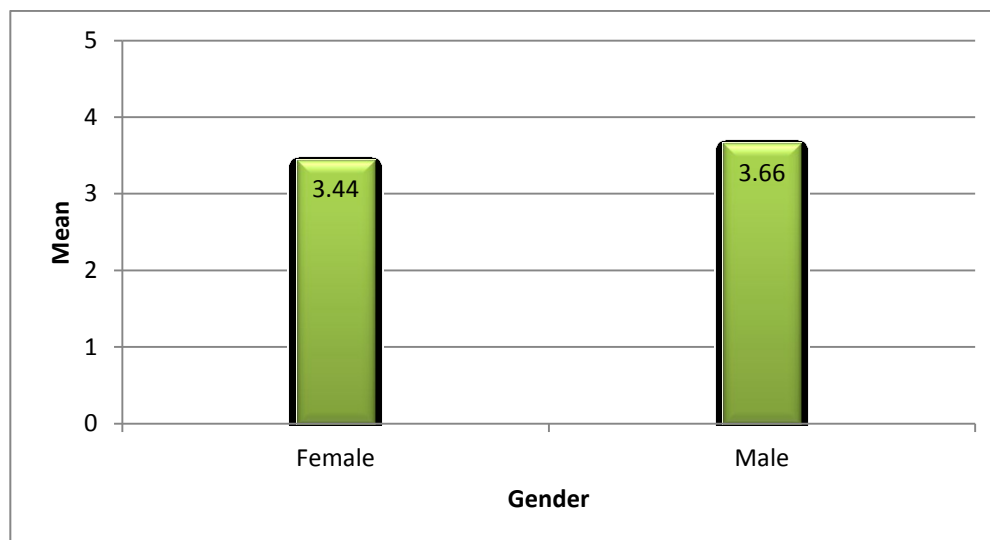


Figure 5q. Individual Gender Means for Mannequin 17

Mannequin 17 Summary

Mannequin 17 depicts a teacher wearing a golf shirt, dress pants and runners for teaching physical education.



Figure 2q. Mannequin 17

The data collected from the participants resulted in a mean of 3.54 (SD 1.040) and a mode of 3. Therefore, the participants perceived the clothing of a golf shirt, dress pants and runners on Mannequin 17 to represent a teacher of physical education as being “okay.”

Mannequin 18

Clothing Choices

Short Sleeve Golf Shirt

Dress Pants

Dress Shoes



Figure 2r. Mannequin 18

The data from School 1 resulted in the highest mean (2.78). The data from Schools 2-6 resulted in lower means ranging from 1.89 to 2.28. Of 382 total responses, the score of 2 was recorded by 170 participants.

Table 3r.

Individual School Summary (Mannequin 18).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 40 | 3 (15) | 2.78 (1.025) |
| School 2 | 75 | 2 (40) | 1.89 (0.764) |
| School 3 | 54 | 2 (24) | 2.28 (0.878) |
| School 4 | 74 | 2 (28) | 2.00 (0.993) |
| School 5 | 71 | 2 (35) | 2.06 (0.773) |
| School 6 | 68 | 2 (31) | 2.12 (0.820) |
| Total | 382 | 2 (170) | 2.13 (0.898) |

Figure 3r illustrates the individual means of the participants' responses to the clothing on Mannequin 18 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

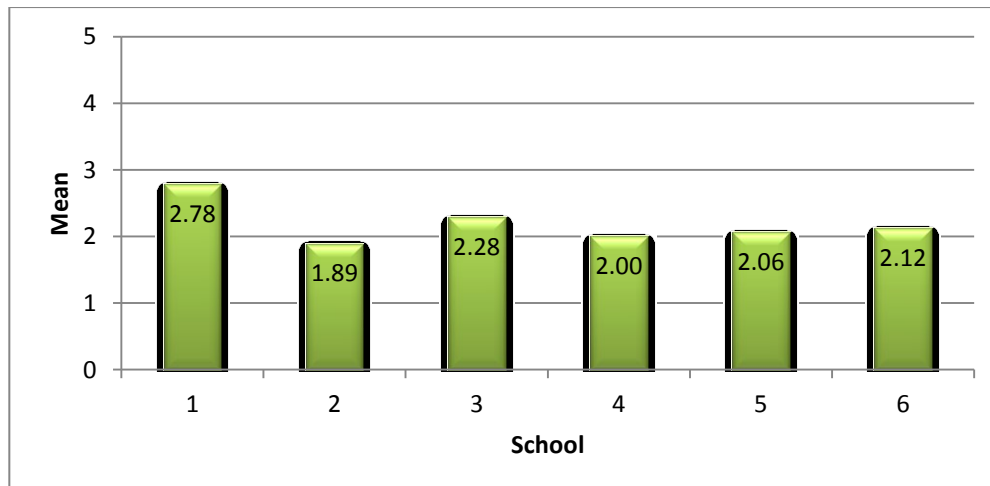


Figure 3r. Individual School Means for Mannequin 18

The data from Grade 4 resulted in the highest mean (2.27). The data from Grades 1-3 and 5-6 resulted in lower means ranging from 2.00 to 2.24. Of 382 total responses, the score of 2 was recorded by 170 participants.

Table 4r.

Grade Level Summary Across all School Sites (Mannequin 18).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 52 | 1 (22) | 2.13 (1.172) |
| Grade 2 | 38 | 2 (16) | 2.24 (1.025) |
| Grade 3 | 74 | 2 (34) | 2.08 (0.840) |
| Grade 4 | 78 | 2 (47) | 2.27 (0.801) |
| Grade 5 | 60 | 2 (30) | 2.00 (0.781) |
| Grade 6 | 80 | 2 (33) | 2.09 (0.860) |
| Total | 382 | 2 (170) | 2.13 (0.898) |

Figure 4r illustrates the individual means of the participants' responses to the clothing on Mannequin 18 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

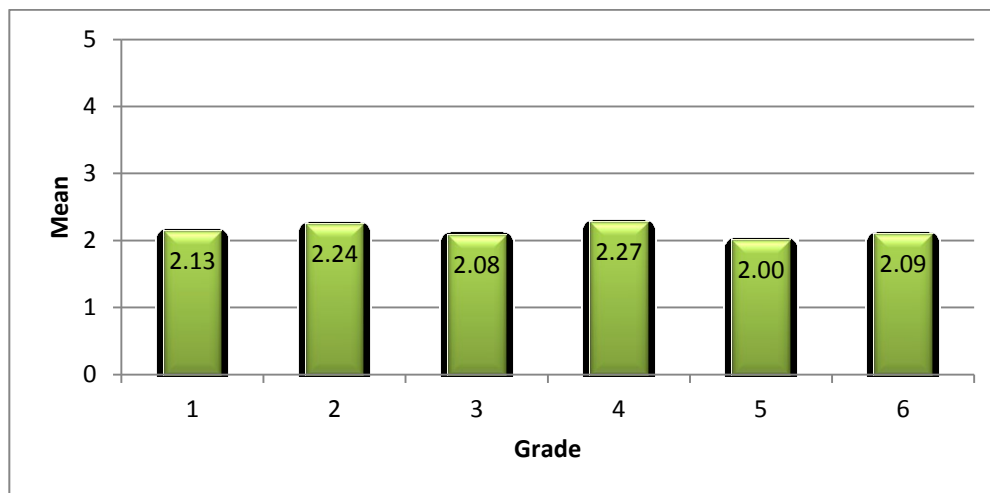


Figure 4r. Individual Grade Level Means for Mannequin 18

The data from males resulted in the same mean as the data from females (2.13). Of 382 total responses, the score of 2 was recorded by 170 participants.

Table 5r.

Gender Summary across all school sites (Mannequin 18).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Female | 205 | 2 (93) | 2.13 (0.833) |
| Male | 177 | 2 (77) | 2.13 (0.971) |
| Total | 382 | 2 (170) | 2.13 (0.898) |

Figure 5r illustrates the individual means of the participants' responses to the clothing on Mannequin 18 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

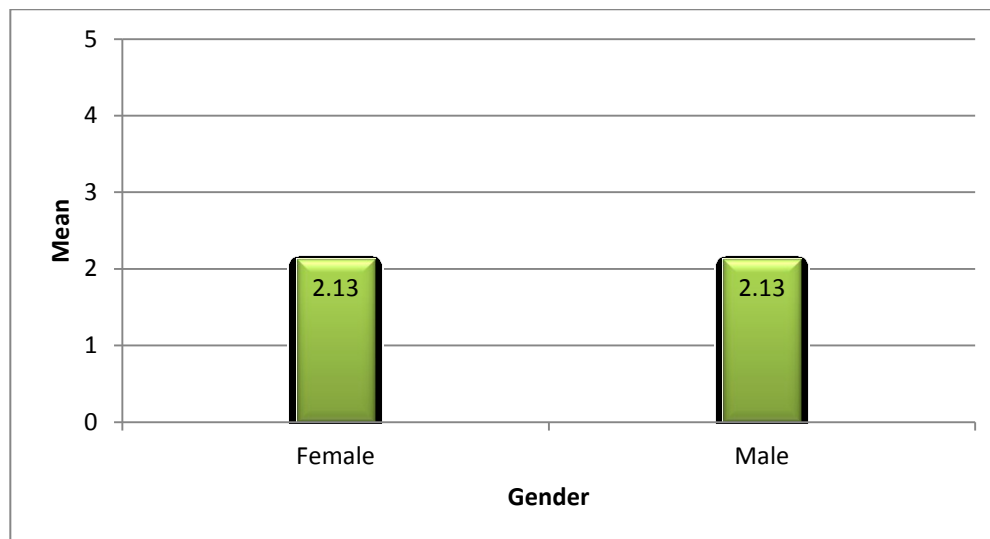


Figure 5r. Individual Gender Means for Mannequin 18

Mannequin 18 Summary

Mannequin 18 depicts a teacher wearing a golf shirt, dress pants and dress shoes for teaching physical education.



Figure 2r. Mannequin 18

The data collected from the participants resulted in a mean of 2.13 (SD 0.898) and a mode of 2. Therefore, the participants perceived the clothing of a golf shirt, dress pants and dress shoes on Mannequin 18 to represent a teacher of physical education as being “not so good.”

Mannequin 19

Clothing Choices

Long Sleeve Sweat Shirt

Dress Pants

Dress Shoes



Figure 2s. Mannequin 19

The data from School 3 resulted in the highest mean (2.26). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 1.83 to 2.13. Of 388 total responses, the score of 2 was recorded by 163 participants.

Table 3s.

Individual School Summary (Mannequin 19).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| School 1 | 42 | 1 (17) | 2.02 (1.070) |
| School 2 | 77 | 2 (42) | 1.88 (0.725) |
| School 3 | 54 | 2 (26) | 2.26 (0.757) |
| School 4 | 76 | 1 (32) | 1.83 (0.929) |
| School 5 | 71 | 2 (25) | 2.13 (0.999) |
| School 6 | 68 | 2 (28) | 2.12 (0.820) |
| Total | 388 | 2 (163) | 2.03 (0.889) |

Figure 3s illustrates the individual means of the participants' responses to the clothing on Mannequin 18 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

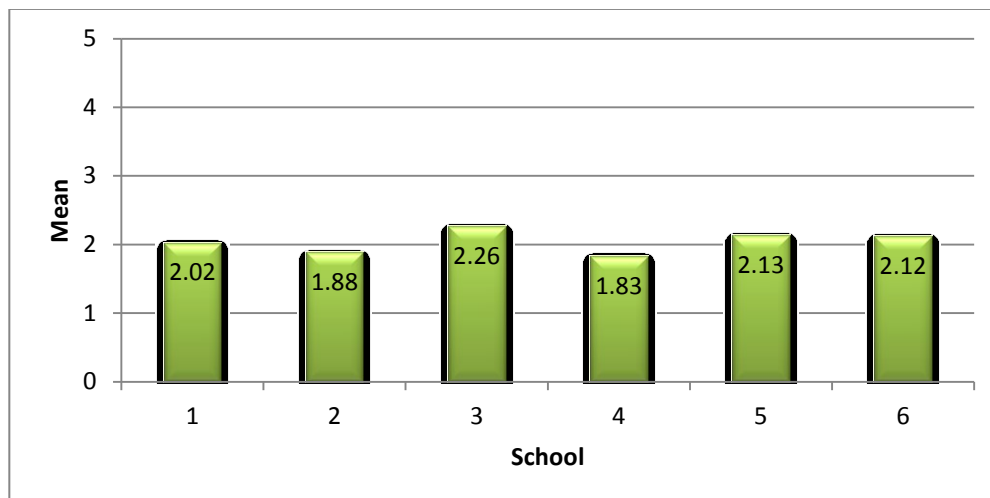


Figure 3s. Individual School Means for Mannequin 19

The data from Grade 6 resulted in the highest mean (2.23). The data from Grades 1-5 resulted in lower means ranging from 1.77 to 2.03. Of 388 total responses, the score of 2 was recorded by 163 participants.

Table 4s.

Grade Level Summary Across all School Sites (Mannequin 19).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 53 | 1 (29) | 1.77 (0.993) |
| Grade 2 | 39 | 1 (17) | 2.03 (1.181) |
| Grade 3 | 74 | 2 (36) | 2.00 (0.844) |
| Grade 4 | 78 | 2 (32) | 2.01 (0.860) |
| Grade 5 | 61 | 2 (34) | 2.02 (0.671) |
| Grade 6 | 83 | 2 (40) | 2.23 (0.846) |
| Total | 388 | 2 (163) | 2.03 (0.889) |

Figure 4s illustrates the individual means of the participants' responses to the clothing on Mannequin 18 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

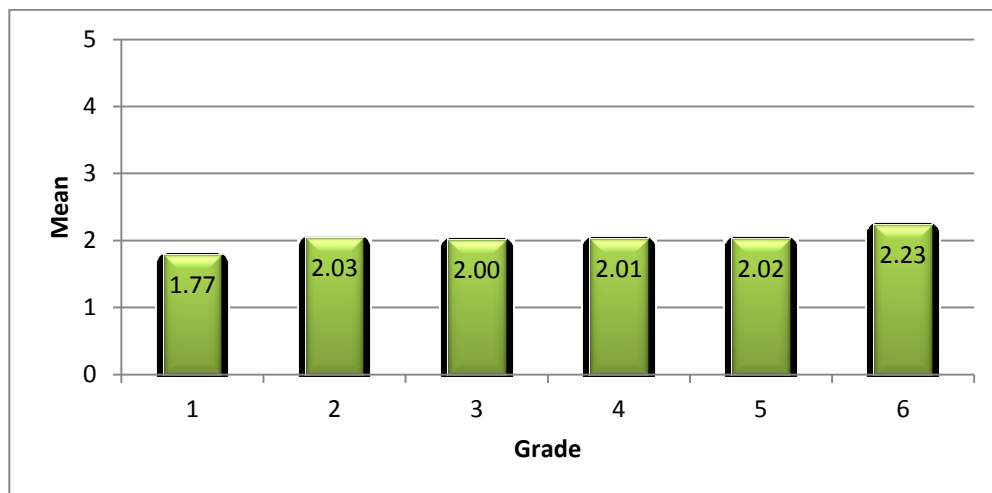


Figure 4s. Individual Grade Level Means for Mannequin 19

The data from females resulted in the highest mean (2.09). The data from males resulted in a lower mean (1.96). Of 388 total responses, the score of 2 was recorded by 163 participants.

Table 5s.

Gender Summary across all school sites (Mannequin 19).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 209 | 2 (95) | 2.09 (0.804) |
| Male | 179 | 1 & 2 (68) | 1.96 (0.976) |
| Total | 388 | 2 (163) | 2.03 (0.889) |

Figure 5s illustrates the individual means of the participants' responses to the clothing on Mannequin 19 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

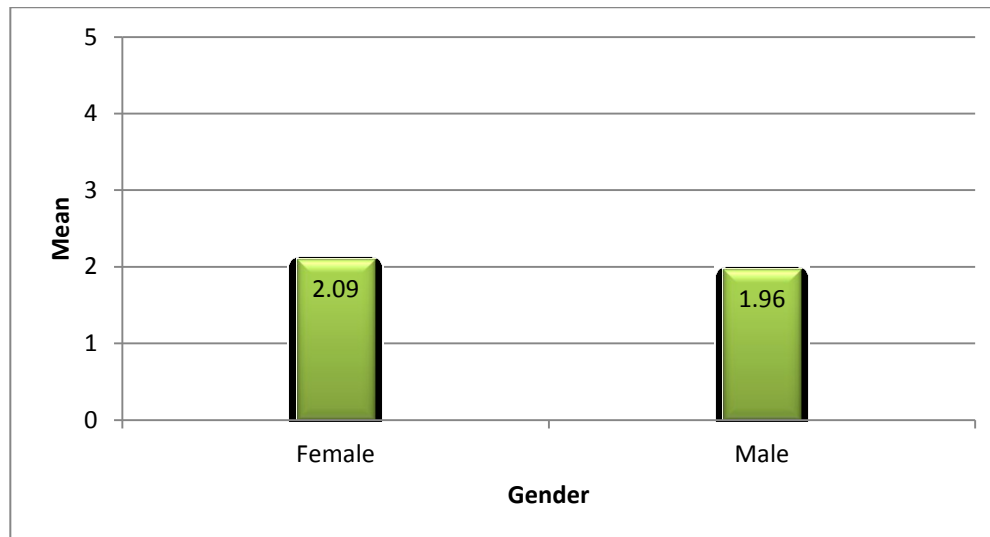


Figure 5s. Individual Gender Means for Mannequin 19

Mannequin 19 Summary

Mannequin 19 depicts a teacher wearing a sweat shirt, dress pants and dress shoes for teaching physical education.



Figure 2s. Mannequin 19

The data collected from the participants resulted in a mean of 2.03 (SD 0.889) and a mode of 2. Therefore, the participants perceived the clothing of a sweat shirt, dress pants and dress shoes on Mannequin 19 to represent a teacher of physical education as being “not so good.”

Mannequin 20

Clothing Choices

Long Sleeve Sweat Shirt

Dress Pants

Running Shoes



Figure 2t. Mannequin 20

The data from School 1 resulted in the highest mean (4.02). The data from Schools 2-6 resulted in lower means ranging from 3.08 to 3.50. Of 385 total responses, the score of 3 was recorded by 143 participants.

Table 3t.

Individual School Summary (Mannequin 20).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 41 | 5 (17) | 4.02 (0.987) |
| School 2 | 77 | 3 (38) | 3.08 (0.839) |
| School 3 | 54 | 4 (20) | 3.43 (0.903) |
| School 4 | 74 | 3 (26) | 3.38 (1.082) |
| School 5 | 71 | 3 (28) | 3.23 (1.058) |
| School 6 | 68 | 4 (27) | 3.50 (0.938) |
| Total | 385 | 3 (143) | 3.39 (1.002) |

Figure 3t illustrates the individual means of the participants' responses to the clothing on Mannequin 20 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

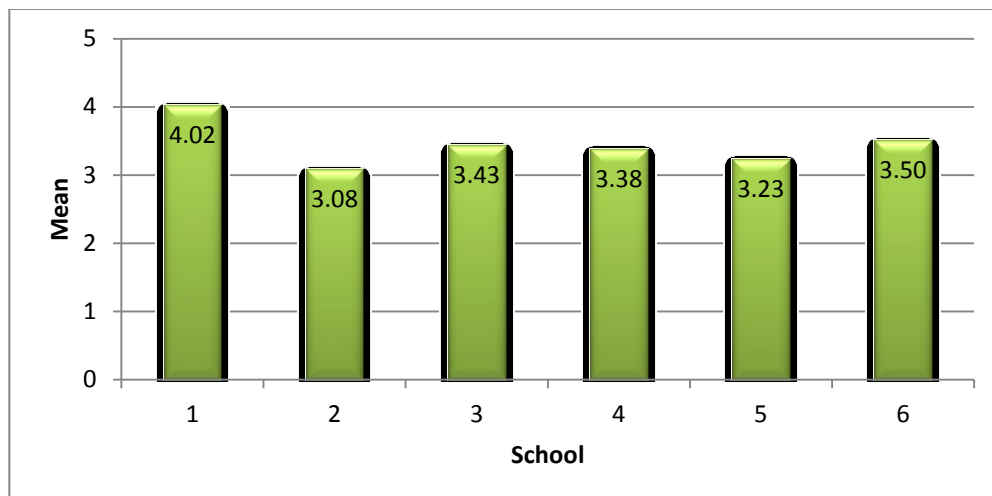


Figure 3t. Individual School Means for Mannequin 20

The data from Grade 1 resulted in the highest mean (4.17). The data from Grades 2-6 resulted in lower means ranging from 3.12 to 3.62. Of 385 total responses, the score of 3 was recorded by 143 participants.

Table 4t.

Grade Level Summary Across all School Sites (Mannequin 20).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 52 | 5 (32) | 4.17 (1.279) |
| Grade 2 | 39 | 3 (13) | 3.62 (1.042) |
| Grade 3 | 73 | 3 (36) | 3.26 (0.882) |
| Grade 4 | 77 | 4 (30) | 3.34 (0.912) |
| Grade 5 | 61 | 3 (29) | 3.15 (0.813) |
| Grade 6 | 83 | 3 (37) | 3.12 (0.832) |
| Total | 385 | 3 (143) | 3.39 (1.002) |

Figure 4t illustrates the individual means of the participants' responses to the clothing on Mannequin 20 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

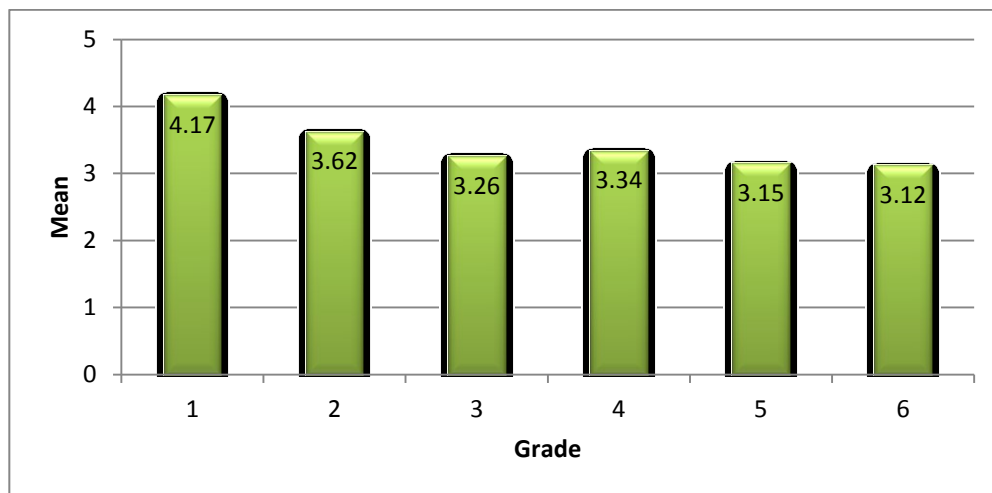


Figure 4t. Individual Grade Level Means for Mannequin 20

The data from males resulted in the same mean as the data from females (3.39). Of 385 total responses, the score of 3 was recorded by 143 participants.

Table 5t.

Gender Summary across all school sites (Mannequin #20).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 3 (82) | 3.39 (0.953) |
| Male | 178 | 3 (61) | 3.39 (1.058) |
| Total | 385 | 3 (143) | 3.39 (1.002) |

Figure 5t illustrates the individual means of the participants' responses to the clothing on Mannequin 20 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

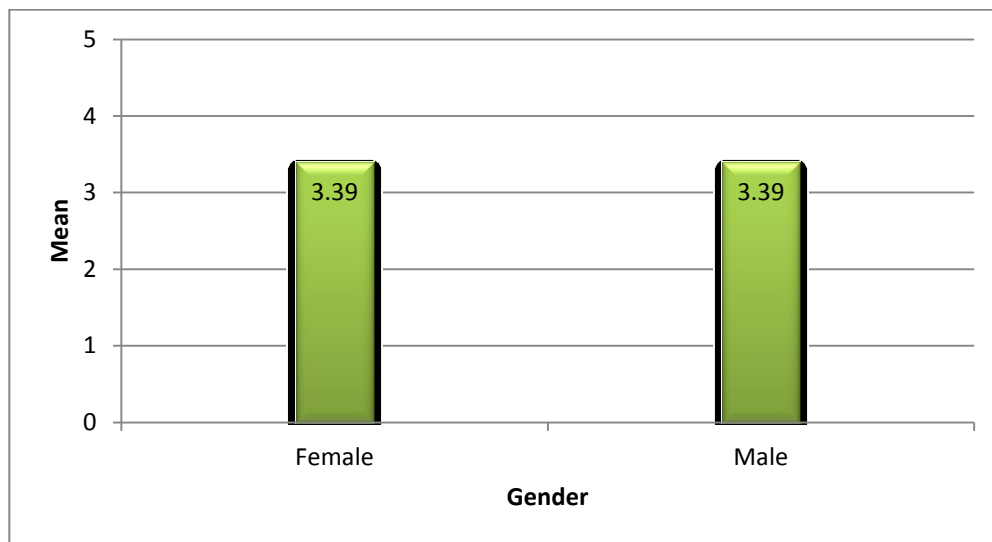


Figure 5t. Individual Gender Means for Mannequin 20

Mannequin 20 Summary

Mannequin 20 depicts a teacher wearing a sweat shirt, dress pants and runners for teaching physical education.



Figure 2t. Mannequin 20

The data collected from the participants resulted in a mean of 3.39 (SD 1.002) and a mode of 3. Therefore, the participants perceived the clothing of a sweat shirt, dress pants and runners on Mannequin 20 to represent a teacher of physical education as being “okay.”

Mannequin 21

Clothing Choices

Long Sleeve Light Shirt

Khaki Pants

Running Shoes



Figure 2u. Mannequin 21

The data from School 1 resulted in the highest mean (4.35). The data from Schools 2-6 resulted in lower means ranging from 3.52 to 4.01. Of 387 total responses, the score of 4 was recorded by 156 participants.

Table 3u.

Individual School Summary (Mannequin 21).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| School 1 | 43 | 5 (24) | 4.35 (0.897) |
| School 2 | 77 | 4 (46) | 3.91 (0.692) |
| School 3 | 54 | 4 (29) | 3.81 (0.779) |
| School 4 | 75 | 5 (28) | 3.88 (1.102) |
| School 5 | 71 | 4 (24) | 3.52 (1.026) |
| School 6 | 67 | 4 & 5 (25) | 4.01 (0.977) |
| Total | 387 | 4 (156) | 3.89 (0.951) |

Figure 3u illustrates the individual means of the participants' responses to the clothing on Mannequin 21 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

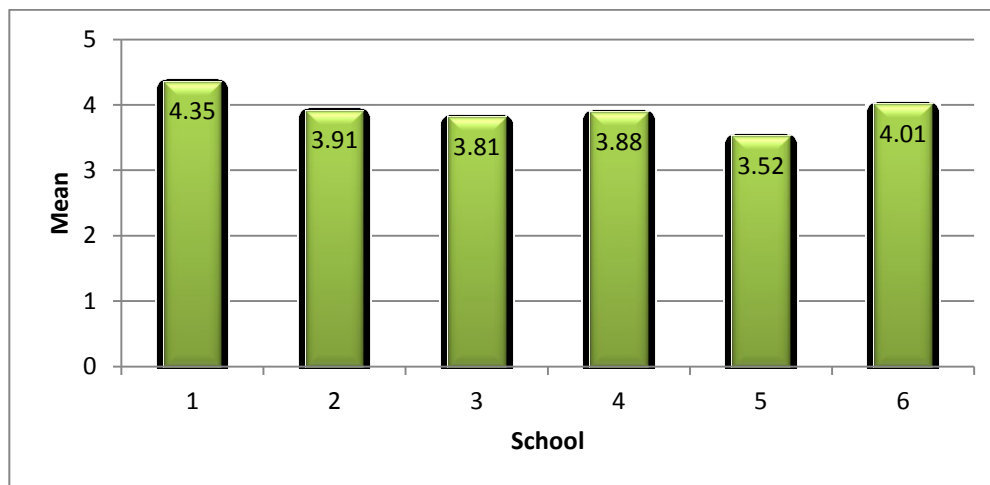


Figure 3u. Individual School Means for Mannequin 21

The data from Grade 1 resulted in the highest mean (4.28). The data from Grades 2-6 resulted in lower means ranging from 3.55 to 3.95. Of 387 total responses, the score of 4 was recorded by 156 participants.

Table 4u.

Grade Level Summary Across all School Sites (Mannequin 21).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 53 | 5 (33) | 4.28 (1.133) |
| Grade 2 | 38 | 4 (13) | 3.92 (0.912) |
| Grade 3 | 74 | 4 (37) | 3.91 (0.847) |
| Grade 4 | 78 | 4 (32) | 3.88 (0.980) |
| Grade 5 | 61 | 4 (27) | 3.95 (0.845) |
| Grade 6 | 83 | 4 (37) | 3.55 (0.887) |
| Total | 387 | 4 (156) | 3.89 (0.951) |

Figure 4u illustrates the individual means of the participants' responses to the clothing on Mannequin 21 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

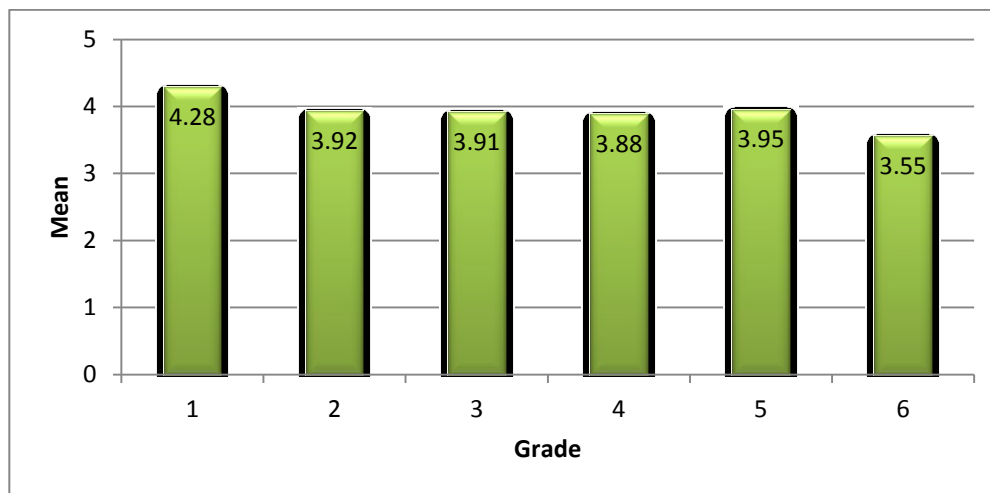


Figure 4u. Individual Grade Level Means for Mannequin 21

The means from the male and female participants were similar. The data resulted in a mean of 3.95 for males and 3.83 for females. Of 387 total responses, the score of 4 was recorded by 156 participants.

Table 5u.

Gender Summary across all school sites (Mannequin 21).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 4 (71) | 3.83 (0.963) |
| Male | 180 | 4 (85) | 3.95 (0.935) |
| Total | 387 | 4 (156) | 3.89 (0.951) |

Figure 5u illustrates the individual means of the participants' responses to the clothing on Mannequin 21 according to each gender. As noted on page __, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

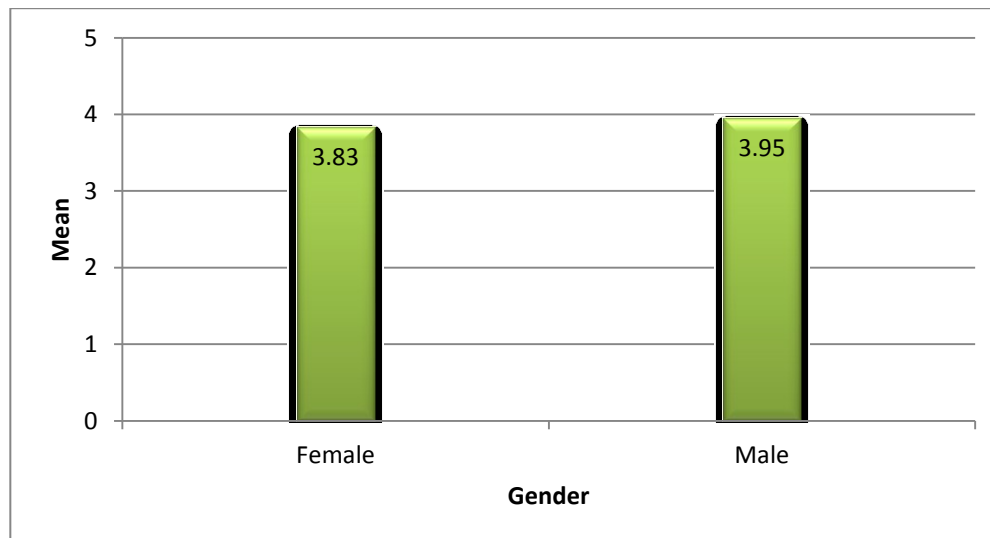


Figure 5u. Individual Gender Means for Mannequin 21

Mannequin 21 Summary

Mannequin 21 depicts a teacher wearing a long sleeve shirt, khaki pants and runners for teaching physical education.



Figure 2u. Mannequin 21

The data collected from the participants resulted in a mean of 3.89 (SD 0.951) and a mode of 4. Therefore, the participants perceived the clothing of a long sleeve shirt, khaki pants and runners on Mannequin 21 to represent a teacher of physical education as being “okay” and approaching the “good” level.

Mannequin 22

Clothing Choices

Long Sleeve Light Shirt

Khaki Pants

Dress Shoes



Figure 2v. Mannequin 22

The data from School 3 resulted in the highest mean (2.72). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 2.27 to 2.50. Of 383 total responses, the score of 3 was recorded by 139 participants.

Table 3v.

Individual School Summary (Mannequin 22).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 3 (17) | 2.50 (0.969) |
| School 2 | 77 | 2 (36) | 2.32 (0.768) |
| School 3 | 53 | 3 (25) | 2.72 (0.928) |
| School 4 | 75 | 3 (25) | 2.40 (1.040) |
| School 5 | 71 | 2 (33) | 2.27 (0.844) |
| School 6 | 65 | 3 (23) | 2.40 (0.949) |
| Total | 383 | 3 (139) | 2.42 (0.920) |

Figure 3v illustrates the individual means of the participants' responses to the clothing on Mannequin 22 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

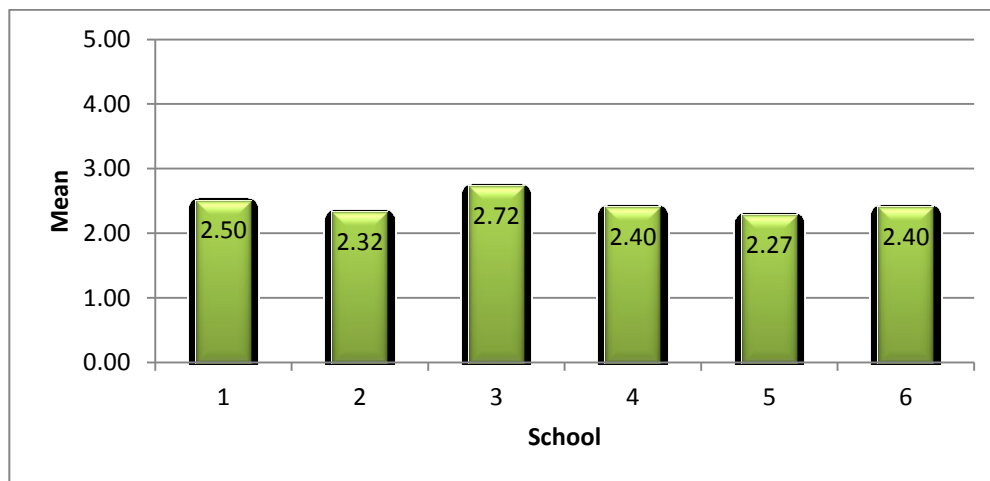


Figure 3v. Individual School Means for Mannequin 22

The data from Grade 6 resulted in the highest mean (2.54). The data from Grades 1-5 resulted in lower means ranging from 1.94 to 2.53. Of 383 total responses, the score of 3 was recorded by 139 participants.

Table 4v.

Grade Level Summary Across all School Sites (Mannequin 22).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 52 | 1 (25) | 1.94 (1.092) |
| Grade 2 | 38 | 2 (15) | 2.39 (1.001) |
| Grade 3 | 74 | 3 (38) | 2.50 (0.781) |
| Grade 4 | 77 | 2 (32) | 2.44 (0.910) |
| Grade 5 | 60 | 3 (27) | 2.53 (0.892) |
| Grade 6 | 82 | 2 & 3 (32) | 2.54 (0.834) |
| Total | 383 | 3 (139) | 2.42 (0.920) |

Figure 4v illustrates the individual means of the participants' responses to the clothing on Mannequin 22 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

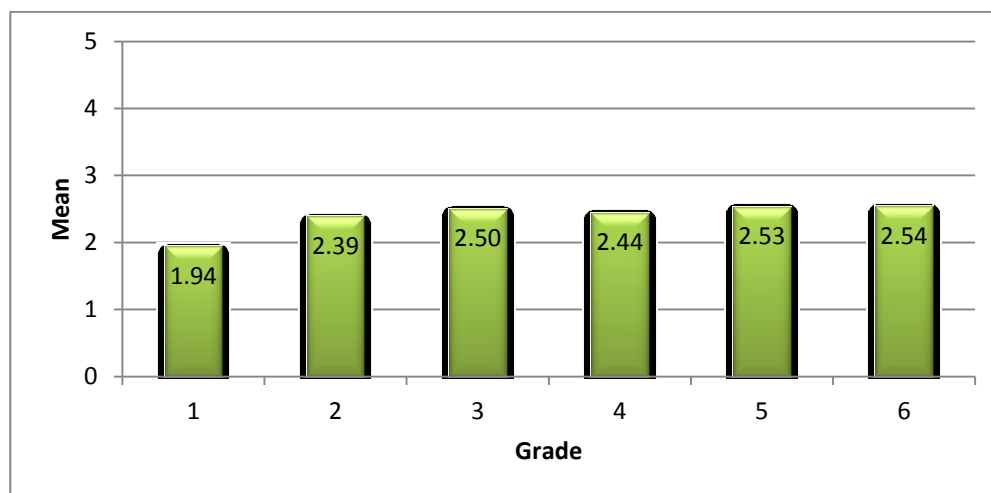


Figure 4v. Individual Grade Level Means for Mannequin 22

The means from the male and female participants were similar. The data resulted in a mean of 2.46 for females and 2.37 for males. Of 383 total responses, the score of 3 was recorded by 139 participants.

Table 5v.

Gender Summary across all school sites (Mannequin 22).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 206 | 2 (74) | 2.46 (0.924) |
| Male | 177 | 3 (67) | 2.37 (0.914) |
| Total | 383 | 3 (139) | 2.42 (0.920) |

Figure 5v illustrates the individual means of the participants' responses to the clothing on Mannequin 22 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

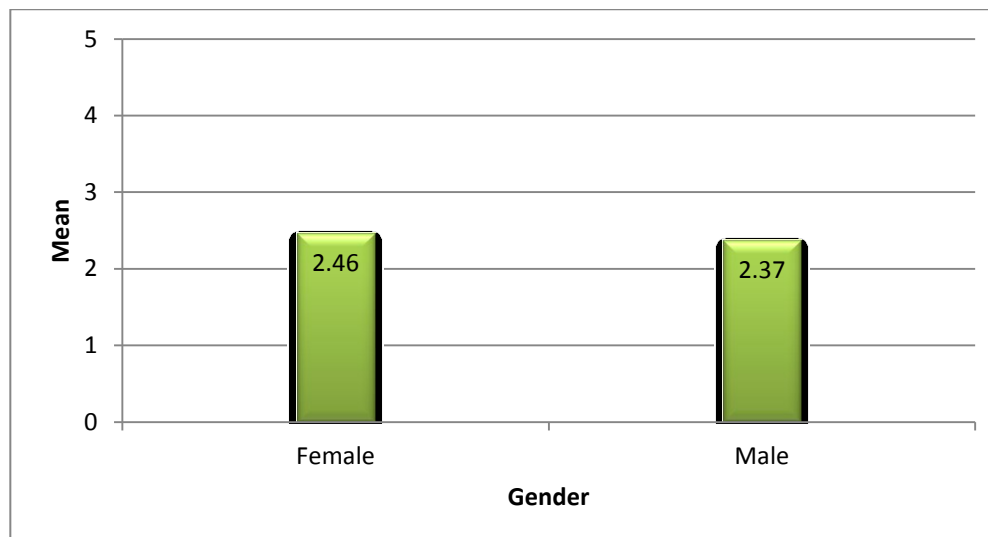


Figure 5v. Individual Gender Means for Mannequin 22

Mannequin 22 Summary

Mannequin 22 depicts a teacher wearing a long sleeve shirt, khaki pants and dress shoes for teaching physical education.



Figure 2v. Mannequin 22

The data collected from the participants resulted in a mean of 2.42 (SD 0.920) and a mode of 3. Therefore, the participants perceived the clothing of a long sleeve shirt, khaki pants and dress shoes on Mannequin 22 to represent a teacher of physical education as being “not so good” and approaching the “okay” level.

Mannequin 23

Clothing Choices

Short Sleeve Golf Shirt

Khaki Pants

Dress Shoes



Figure 2w. Mannequin 23

The data from School 3 resulted in the highest mean (2.89). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 2.51 to 2.64. Of 383 total responses, the score of 3 was recorded by 154 participants.

Table 3w.

Individual School Summary (Mannequin 23).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 42 | 3 (18) | 2.62 (1.081) |
| School 2 | 76 | 2 (31) | 2.62 (0.848) |
| School 3 | 54 | 3 (22) | 2.89 (0.965) |
| School 4 | 73 | 3 (26) | 2.64 (1.072) |
| School 5 | 71 | 3 (28) | 2.51 (0.939) |
| School 6 | 67 | 3 (31) | 2.55 (0.892) |
| Total | 383 | 3 (154) | 2.63 (0.962) |

Figure 3w illustrates the individual means of the participants' responses to the clothing on Mannequin 23 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

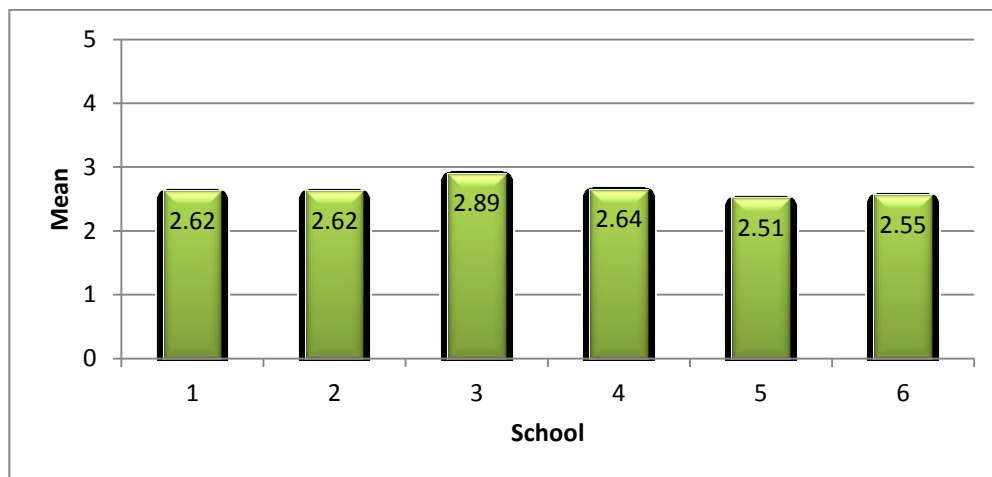


Figure 3w. Individual School Means for Mannequin 23

The data from Grade 3 resulted in the highest mean (2.85). The data from Grades 1, 2 and 4-6 resulted in lower means ranging from 1.86 to 2.76. Of 383 total responses, the score of 3 was recorded by 154 participants.

Table 4w.

Grade Level Summary Across all School Sites (Mannequin 23).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 51 | 1 (25) | 1.86 (1.000) |
| Grade 2 | 38 | 3 (17) | 2.76 (1.149) |
| Grade 3 | 73 | 3 (34) | 2.85 (0.877) |
| Grade 4 | 78 | 3 (27) | 2.73 (0.989) |
| Grade 5 | 60 | 3 (26) | 2.70 (0.830) |
| Grade 6 | 83 | 3 (40) | 2.70 (0.761) |
| Total | 383 | 3 (154) | 2.63 (0.962) |

Figure 4w illustrates the individual means of the participants' responses to the clothing on Mannequin 23 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

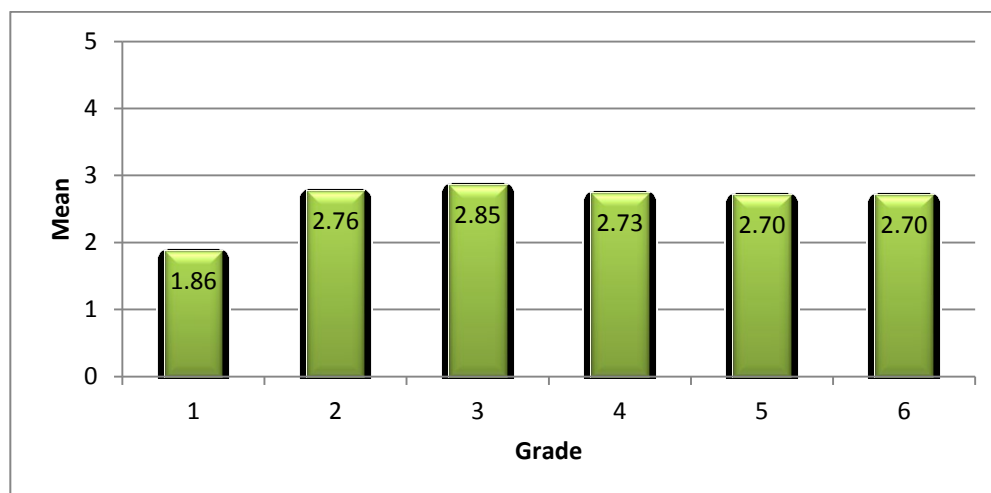


Figure 4a. Individual Grade Level Means for Mannequin 1

The means from the male and female participants were similar. The data resulted in a mean of 2.66 for males and 2.61 for females. Of 383 total responses, the score of 3 was recorded by 154 participants.

Table 5w.

Gender Summary across all school sites (Mannequin 23).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 206 | 3 (88) | 2.61 (0.919) |
| Male | 177 | 3 (66) | 2.66 (1.011) |
| Total | 383 | 3 (154) | 2.63 (0.962) |

Figure 5w illustrates the individual means of the participants' responses to the clothing on Mannequin 23 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

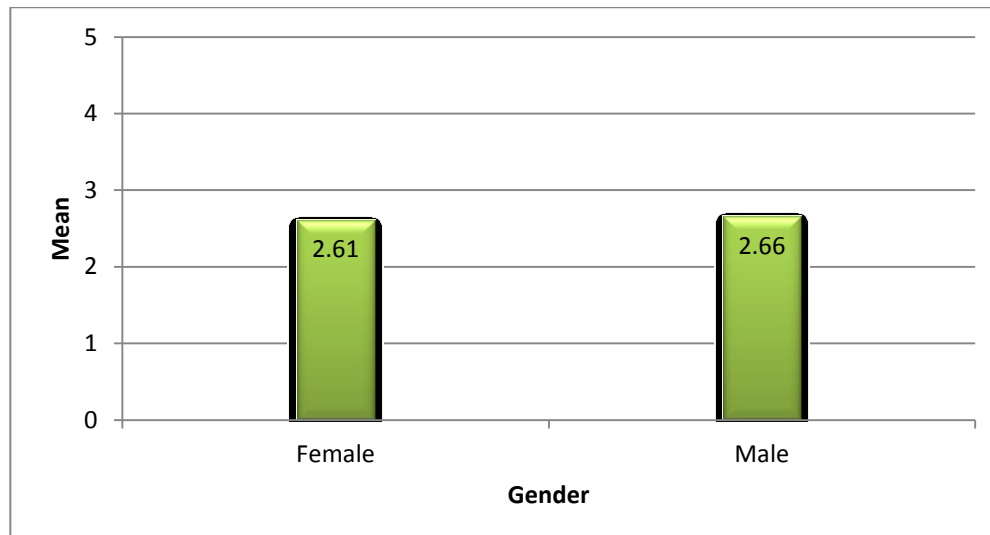


Figure 5w. Individual Gender Means for Mannequin 23

Mannequin 23 Summary

Mannequin 23 depicts a teacher wearing a golf shirt, khaki pants and dress shoes for teaching physical education.



Figure 2w. Mannequin 23

The data collected from the participants resulted in a mean of 2.63 (SD 0.962) and a mode of 3. Therefore, the participants perceived the clothing of a golf shirt, khaki pants and dress shoes on Mannequin 23 to represent a teacher of physical education as being “not so good” and approaching the “okay” level.

Mannequin 24

Clothing Choices

Short Sleeve Golf Shirt

Khaki Pants

Running Shoes



Figure 2x. Mannequin 24

The data from School 1 resulted in the highest mean (4.55). The data from Schools 2-6 resulted in lower means ranging from 3.96 to 4.28. Of 386 total responses, the score of 5 was recorded by 177 participants.

Table 3x.

Individual School Summary (Mannequin 24).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| School 1 | 42 | 5 (31) | 4.55 (0.916) |
| School 2 | 77 | 4 (39) | 4.19 (0.779) |
| School 3 | 53 | 5 (24) | 4.26 (0.788) |
| School 4 | 75 | 5 (39) | 4.28 (0.966) |
| School 5 | 71 | 5 (27) | 3.96 (1.061) |
| School 6 | 68 | 4 & 5 (28) | 4.21 (0.802) |
| Total | 386 | 5 (177) | 4.22 (0.903) |

Figure 3x illustrates the individual means of the participants' responses to the clothing on Mannequin 24 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

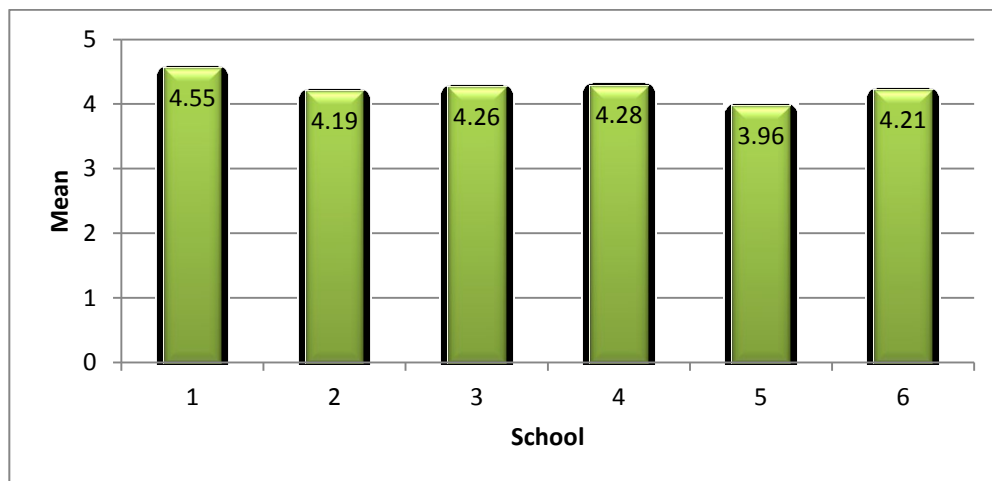


Figure 3x. Individual School Means for Mannequin 24

The data from Grade 3 resulted in the highest mean (4.42). The data from Grades 1, 2 and 4-6 resulted in lower means ranging from 3.94 to 4.40. Of 386 total responses, the score of 5 was recorded by 177 participants.

Table 4x.

Grade Level Summary Across all School Sites (Mannequin 24).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 52 | 5 (37) | 4.40 (1.107) |
| Grade 2 | 39 | 5 (18) | 4.18 (0.942) |
| Grade 3 | 74 | 5 (41) | 4.42 (0.811) |
| Grade 4 | 78 | 5 (35) | 4.26 (0.859) |
| Grade 5 | 60 | 5 (25) | 4.17 (0.905) |
| Grade 6 | 83 | 4 (39) | 3.94 (0.802) |
| Total | 386 | 5 (177) | 4.22 (0.903) |

Figure 4x illustrates the individual means of the participants' responses to the clothing on Mannequin 24 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

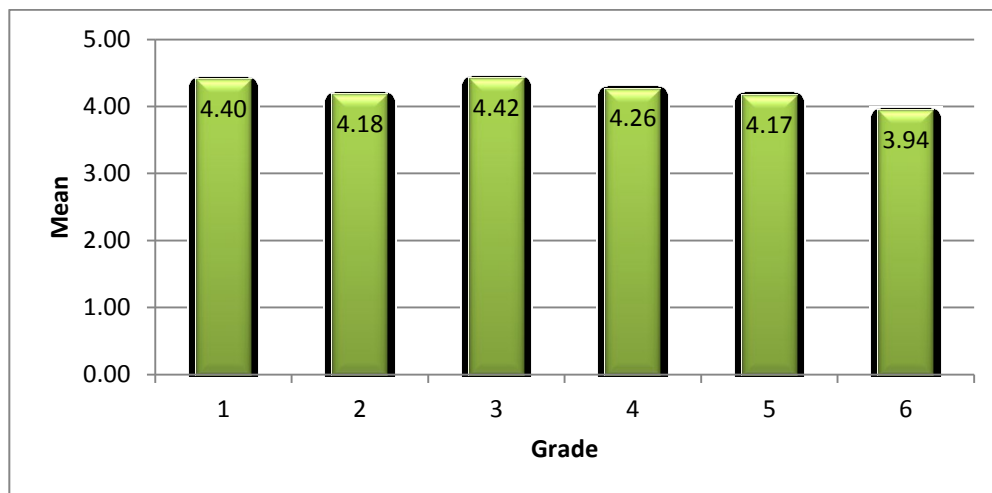


Figure 4x. Individual Grade Level Means for Mannequin 24

The data from males resulted in the highest mean (4.31). The data from the females resulted in a lower mean (4.14). Of 386 total responses, the score of 5 was recorded by 177 participants.

Table 5x.

Gender Summary across all school sites (Mannequin 24).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Female | 208 | 5 (86) | 4.14 (0.898) |
| Male | 178 | 5 (91) | 4.31 (0.902) |
| Total | 386 | 5 (177) | 4.22 (0.903) |

Figure 5x illustrates the individual means of the participants' responses to the clothing on Mannequin 24 according to each gender. As noted on page __, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

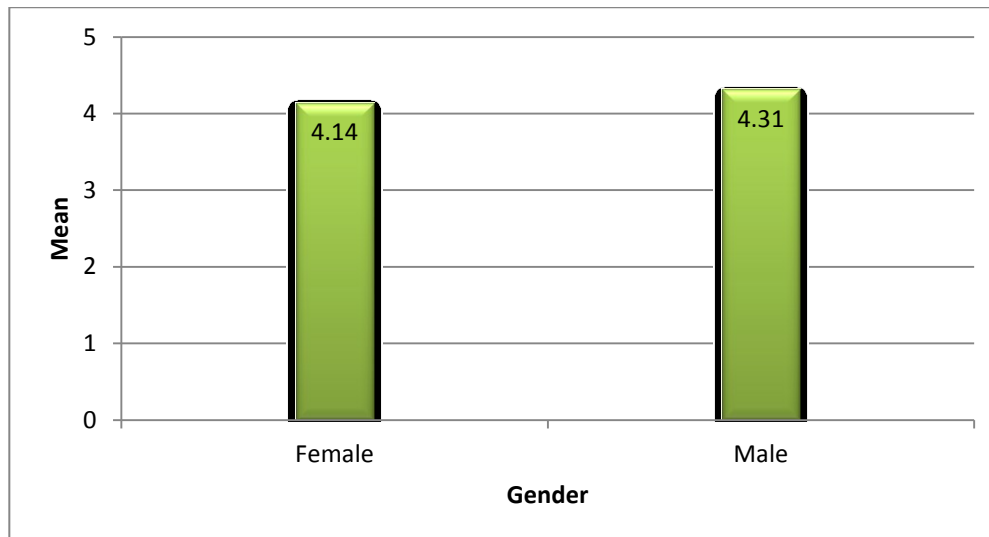


Figure 5x. Individual Gender Means for Mannequin 24

Mannequin 24 Summary

Mannequin 24 depicts a teacher wearing a golf shirt, khaki pants and runners for teaching physical education.



Figure 2x. Mannequin 24

The data collected from the participants resulted in a mean of 4.22 (SD 0.903) and a mode of 5. Therefore, the participants perceived the clothing of a golf shirt, khaki pants and runners on Mannequin 24 to represent a teacher of physical education as being “good” and approaching the “really good” level.

Mannequin 25

Clothing Choices

Long Sleeve Sweat Shirt

Khaki Pants

Dress Shoes



Figure 2y. Mannequin 25

The data from School 3 resulted in the highest mean (2.74). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 2.35 to 2.49. Of 387 total responses, the score of 3 was recorded by 139 participants.

Table 3y.

Individual School Summary (Mannequin 25).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| School 1 | 43 | 1 & 3 (14) | 2.37 (1.196) |
| School 2 | 77 | 3 (36) | 2.45 (0.770) |
| School 3 | 54 | 3 (20) | 2.74 (0.955) |
| School 4 | 74 | 2 (24) | 2.46 (1.088) |
| School 5 | 71 | 2 (28) | 2.35 (0.927) |
| School 6 | 68 | 3 (26) | 2.49 (1.015) |
| Total | 387 | 3 (139) | 2.47 (0.985) |

Figure 3y illustrates the individual means of the participants' responses to the clothing on Mannequin 25 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

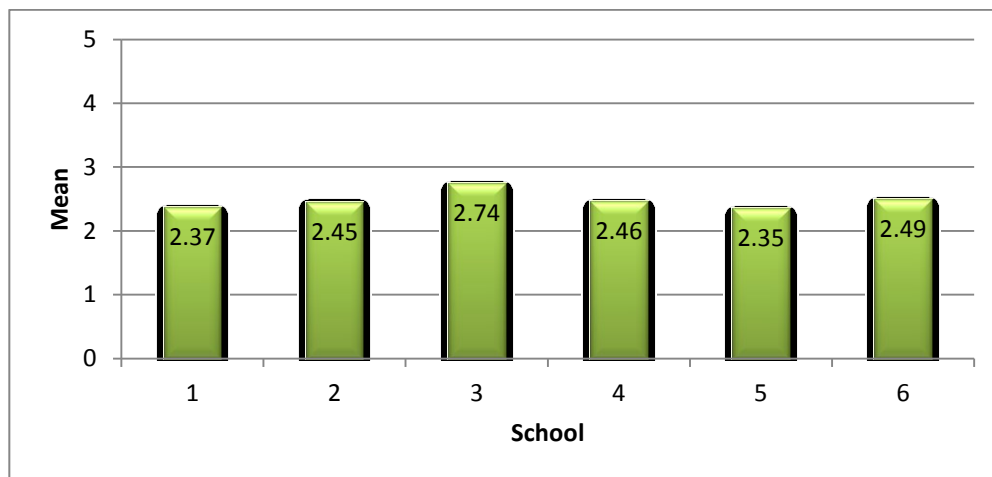


Figure 3y. Individual School Means for Mannequin 25

The data from Grade 3 resulted in the highest mean (2.68). The data from Grades 1, 2 and 4-6 resulted in lower means ranging from 1.89 to 2.61. Of 387 total responses, the score of 3 was recorded by 139 participants.

Table 4y.

Grade Level Summary Across all School Sites (Mannequin 25).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Grade 1 | 53 | 1 (30) | 1.89 (1.235) |
| Grade 2 | 39 | 2 & 3 (12) | 2.36 (1.112) |
| Grade 3 | 73 | 3 (33) | 2.68 (0.864) |
| Grade 4 | 78 | 3 (29) | 2.54 (1.041) |
| Grade 5 | 61 | 2 (25) | 2.52 (0.849) |
| Grade 6 | 83 | 3 (39) | 2.61 (0.730) |
| Total | 387 | 3 (139) | 2.47 (0.985) |

Figure 4y illustrates the individual means of the participants' responses to the clothing on Mannequin 25 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

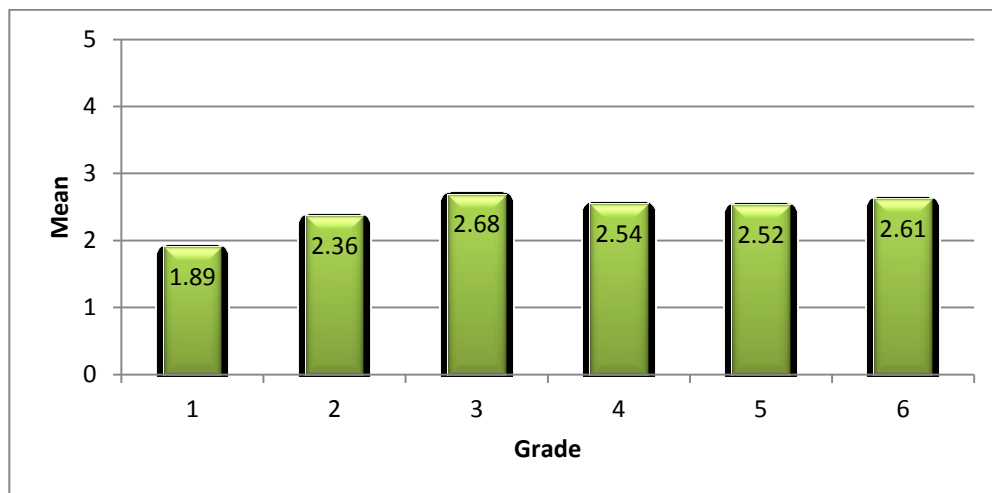


Figure 4y. Individual Grade Level Means for Mannequin 25

The means from the male and female participants were similar. The data resulted in a mean of 2.54 for females and 2.40 for males. Of 387 total responses, the score of 3 was recorded by 139 participants.

Table 5y.

Gender Summary across all school sites (Mannequin 25).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 3 (79) | 2.54 (0.949) |
| Male | 180 | 3 (60) | 2.40 (1.023) |
| Total | 387 | 3 (139) | 2.47 (0.985) |

Figure 5y illustrates the individual means of the participants' responses to the clothing on Mannequin 25 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

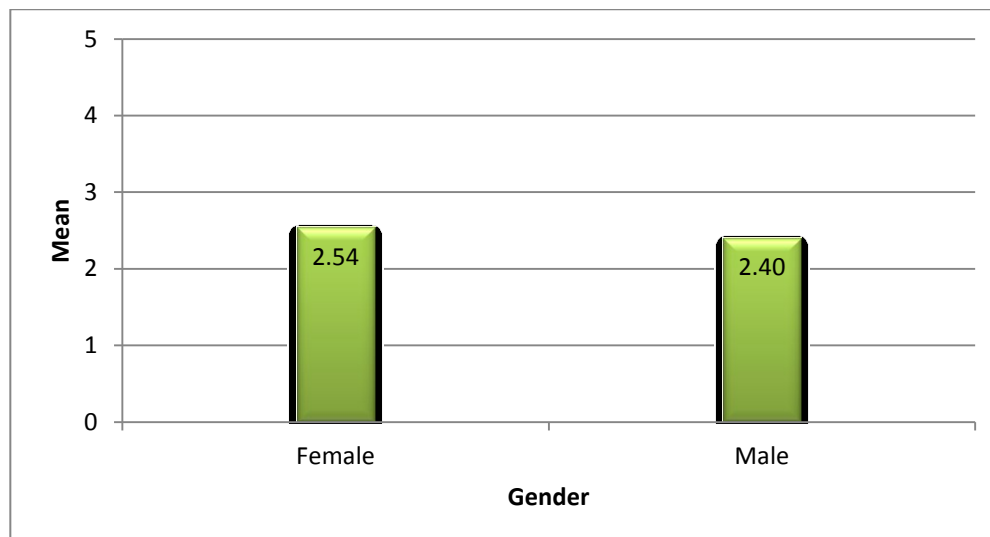


Figure 5y. Individual Gender Means for Mannequin 25

Mannequin 25 Summary

Mannequin 25 depicts a teacher wearing a sweat shirt, khaki pants and dress shoes for teaching physical education.



Figure 2y. Mannequin 25

The data collected from the participants resulted in a mean of 2.47 (SD 0.985) and a mode of 3. Therefore, the participants perceived the clothing of a sweat shirt, khaki pants and dress shoes on Mannequin 25 to represent a teacher of physical education as being “not so good” and approaching the “okay” level.

Mannequin 26

Clothing Choices

Long Sleeve Sweat Shirt

Khaki Pants

Running Shoes



Figure 2z. Mannequin 26

The data from School 1 resulted in the highest mean (4.51). The data from Schools 2-6 resulted in lower means ranging from 3.72 to 4.03. Of 385 total responses, the score of 4 was recorded by 149 participants.

Table 3z.

Individual School Summary (Mannequin 26).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| School 1 | 43 | 5 (28) | 4.51 (0.768) |
| School 2 | 77 | 4 (44) | 3.84 (0.844) |
| School 3 | 53 | 4 (22) | 4.02 (0.843) |
| School 4 | 73 | 5 (32) | 4.01 (1.047) |
| School 5 | 71 | 4 (25) | 3.72 (1.031) |
| School 6 | 68 | 4 (30) | 4.03 (0.863) |
| Total | 385 | 4 (149) | 3.98 (0.938) |

Figure 3z illustrates the individual means of the participants' responses to the clothing on Mannequin 26 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

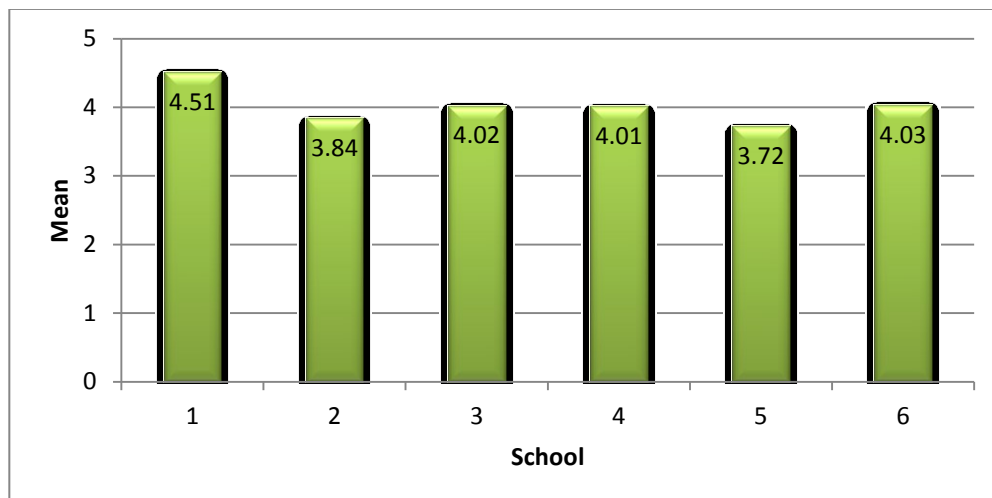


Figure 3z. Individual School Means for Mannequin 26

The data from Grade 1 resulted in the highest mean (4.38). The data from Grades 2-6 resulted in lower means ranging from 3.68 to 4.07. Of 385 total responses, the score of 4 was recorded by 149 participants.

Table 4z.

Grade Level Summary Across all School Sites (Mannequin 26).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|----------------|---------------------|
| Grade 1 | 53 | 5 (38) | 4.38 (1.147) |
| Grade 2 | 39 | 3 (14) | 3.82 (0.997) |
| Grade 3 | 74 | 4 (30) | 4.07 (0.849) |
| Grade 4 | 78 | 5 (30) | 4.05 (0.966) |
| Grade 5 | 59 | 4 (30) | 3.97 (0.809) |
| Grade 6 | 82 | 4 (45) | 3.68 (0.799) |
| Total | 385 | 4 (149) | 3.98 (0.938) |

Figure 4z illustrates the individual means of the participants' responses to the clothing on Mannequin 26 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

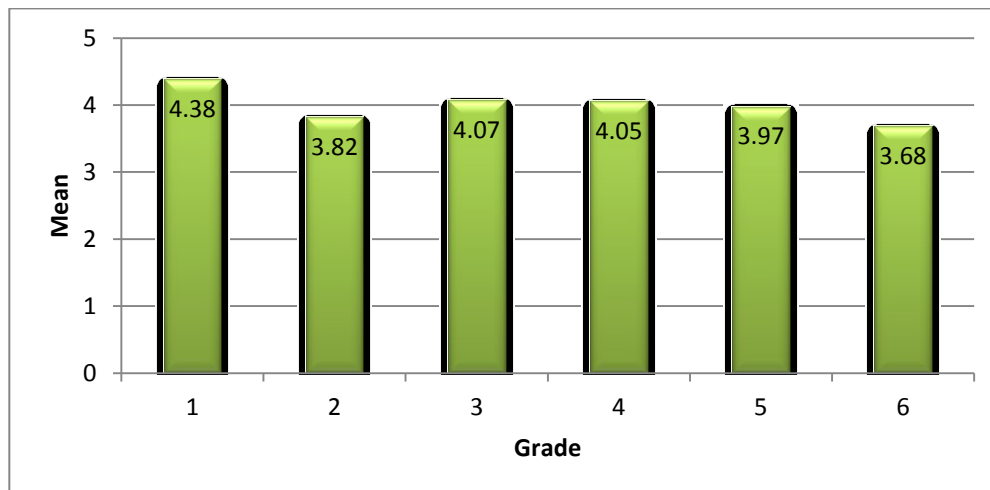


Figure 4z. Individual Grade Level Means for Mannequin 26

The means from the male and female participants were similar. The data resulted in a mean of 4.02 for males and 3.96 for females. Of 385 total responses, the score of 4 was recorded by 149 participants.

Table 5z.

Gender Summary across all school sites (Mannequin 26).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 208 | 4 (83) | 3.96 (0.903) |
| Male | 177 | 4 & 5 (66) | 4.02 (0.980) |
| Total | 385 | 4 (149) | 3.98 (0.938) |

Figure 5z illustrates the individual means of the participants' responses to the clothing on Mannequin 26 according to each gender. As noted on page __, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

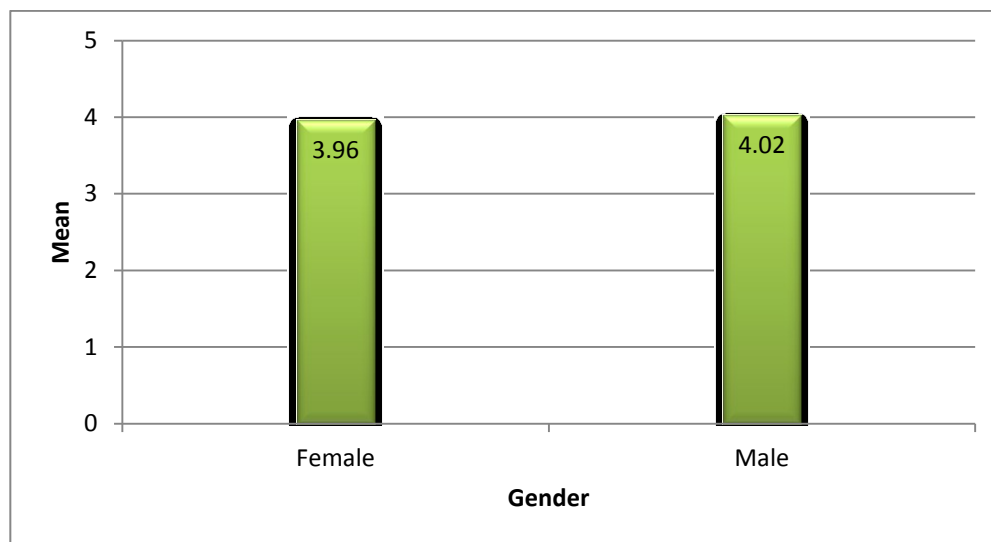


Figure 5z. Individual Gender Means for Mannequin 26

Mannequin 26 Summary

Mannequin 26 depicts a teacher wearing a sweat shirt, khaki pants and runners for teaching physical education.



Figure 2z. Mannequin 26

The data collected from the participants resulted in a mean of 3.98 (SD 0.938) and a mode of 4. Therefore, the participants perceived the clothing of a sweat shirt, khaki pants and runners on Mannequin 26 to represent a teacher of physical education as being “okay” and approaching the “good” level.

Mannequin 27

Clothing Choices

Long Sleeve Sweat Shirt

Sweat Pants

Running Shoes



Figure 2aa. Mannequin 27

The data from School 3 resulted in the highest mean (4.00). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 3.48 to 3.93. Of 386 total responses, the score of 5 was recorded by 149 participants.

Table 3aa.

Individual School Summary (Mannequin 27).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 43 | 5 (22) | 3.93 (1.387) |
| School 2 | 77 | 4 & 5 (24) | 3.64 (1.266) |
| School 3 | 54 | 4 (21) | 4.00 (1.064) |
| School 4 | 73 | 5 (23) | 3.48 (1.355) |
| School 5 | 71 | 5 (31) | 3.92 (1.228) |
| School 6 | 68 | 5 (29) | 3.91 (1.218) |
| Total | 386 | 5 (149) | 3.79 (1.263) |

Figure 3aa illustrates the individual means of the participants' responses to the clothing on Mannequin 27 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

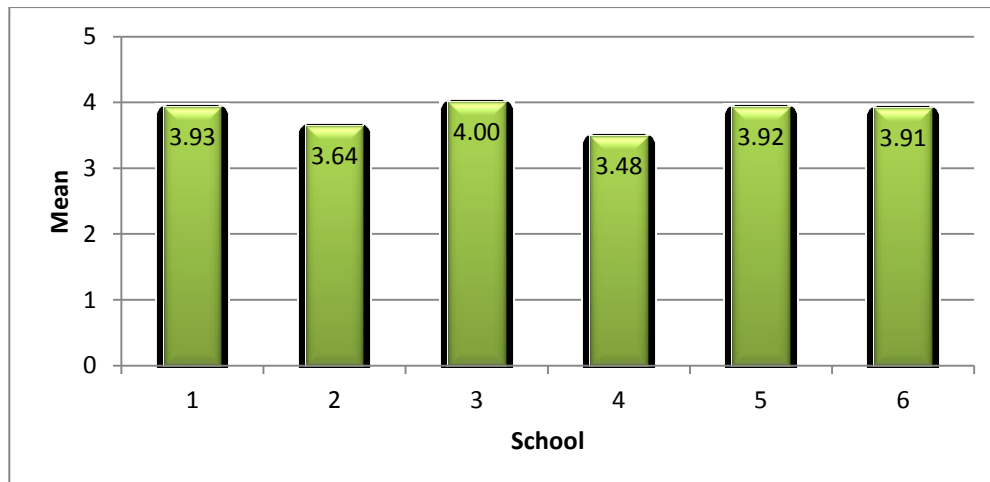


Figure 3aa. Individual School Means for Mannequin 27

The data from Grade 6 resulted in the highest mean (4.04). The data from Grades 1-5 resulted in lower means ranging from 3.49 to 3.87. Of 386 total responses, the score of 5 was recorded by 149 participants.

Table 4aa.

Grade Level Summary Across all School Sites (Mannequin 27).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 51 | 5 (20) | 3.65 (1.481) |
| Grade 2 | 39 | 5 (11) | 3.49 (1.315) |
| Grade 3 | 74 | 5 (27) | 3.69 (1.334) |
| Grade 4 | 78 | 5 (34) | 3.87 (1.252) |
| Grade 5 | 61 | 5 (23) | 3.79 (1.240) |
| Grade 6 | 83 | 5 (34) | 4.04 (1.017) |
| Total | 386 | 5 (149) | 3.79 (1.263) |

Figure 4aa illustrates the individual means of the participants' responses to the clothing on Mannequin 27 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

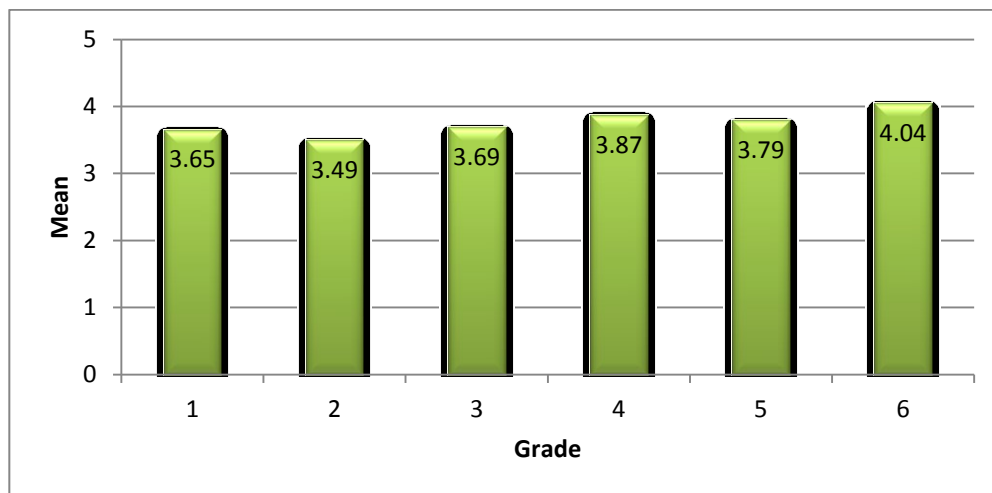


Figure 4aa. Individual Grade Level Means for Mannequin 27

The means from the male and female participants were similar. The data resulted in a mean of 3.86 for females and 3.70 for males. Of 386 total responses, the score of 5 was recorded by 149 participants.

Table 5aa.

Gender Summary across all school sites (Mannequin 27).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 207 | 5 (83) | 3.86 (1.215) |
| Male | 179 | 5 (66) | 3.70 (1.314) |
| Total | 386 | 5 (149) | 3.79 (1.263) |

Figure 5aa illustrates the individual means of the participants' responses to the clothing on Mannequin 27 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

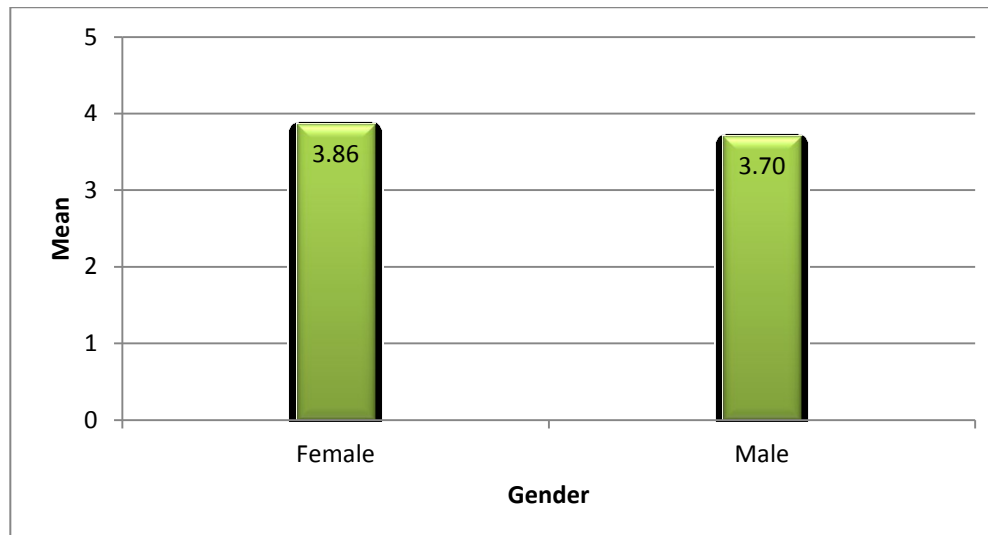


Figure 5aa. Individual Gender Means for Mannequin 27

Mannequin 27 Summary

Mannequin 27 depicts a teacher wearing a sweat shirt, sweat pants and runners for teaching physical education.



Figure 2aa. Mannequin 27

The data collected from the participants resulted in a mean of 3.79 (SD 1.263) and a mode of 5. Therefore, the participants perceived the clothing of a sweat shirt, sweat pants and runners on Mannequin 27 to represent a teacher of physical education as being “okay” and approaching the “good” level, although the 149 out of 386 participants chose “really good” which represented the mode.

Mannequin 28

Clothing Choices

Short Sleeve Golf Shirt

Sweat Pants

Running Shoes



Figure 2ab. Mannequin 28

The data from School 2 resulted in the highest mean (4.40). The data from Schools 1 and 3-6 resulted in lower means ranging from 4.07 to 4.38. Of 385 total responses, the score of 5 was recorded by 201 participants.

Table 3ab.

Individual School Summary (Mannequin 28).

| School | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| School 1 | 43 | 5 (26) | 4.16 (1.326) |
| School 2 | 77 | 5 (43) | 4.40 (0.799) |
| School 3 | 52 | 5 (30) | 4.38 (0.867) |
| School 4 | 74 | 5 (38) | 4.19 (1.069) |
| School 5 | 71 | 5 (31) | 4.07 (1.046) |
| School 6 | 68 | 5 (33) | 4.22 (0.990) |
| Total | 385 | 5 (201) | 4.24 (1.010) |

Figure 3ab illustrates the individual means of the participants' responses to the clothing on Mannequin 28 according to each school site. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

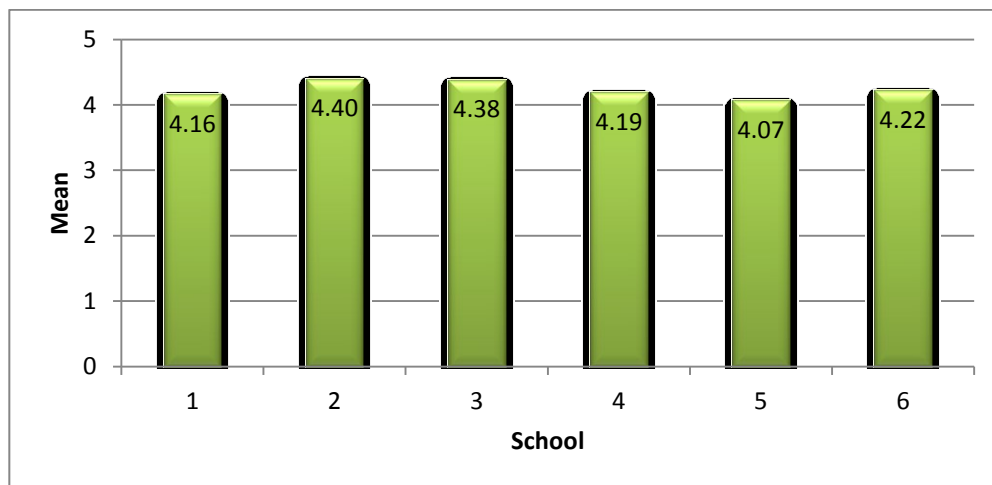


Figure 3ab. Individual School Means for Mannequin 28

The data from Grade 3 resulted in the highest mean (4.44). The data from Schools 1, 2 and 4-6 resulted in lower means ranging from 3.92 to 4.42. Of 385 total responses, the score of 5 was recorded by 201 participants.

Table 4ab.

Grade Level Summary Across all School Sites (Mannequin 28).

| Grade | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Grade 1 | 51 | 5 (27) | 3.92 (1.398) |
| Grade 2 | 39 | 5 (18) | 3.92 (1.345) |
| Grade 3 | 73 | 5 (43) | 4.44 (0.764) |
| Grade 4 | 78 | 5 (36) | 4.17 (0.973) |
| Grade 5 | 61 | 5 (33) | 4.31 (0.923) |
| Grade 6 | 83 | 5 (44) | 4.42 (0.735) |
| Total | 385 | 5 (201) | 4.24 (1.010) |

Figure 4ab illustrates the individual means of the participants' responses to the clothing on Mannequin 28 according to each grade level. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

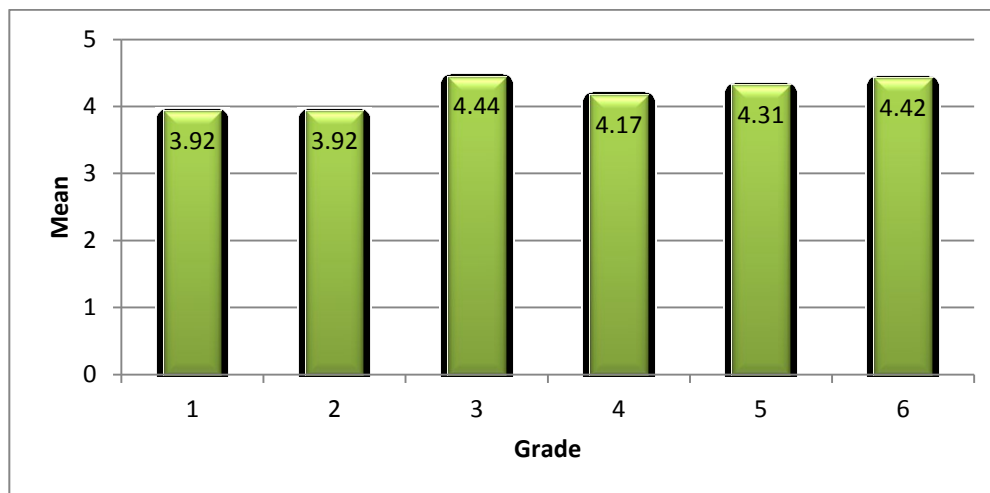


Figure 4ab. Individual Grade Level Means for Mannequin 28

The means from the male and female participants were similar. The data resulted in a mean of 4.30 for females and 4.17 for males. Of 385 total responses, the score of 5 was recorded by 201 participants.

Table 5ab.

Gender Summary across all school sites (Mannequin 28).

| Gender | N | Mode (Count) | Mean (SD) |
|--------------|------------|-----------------|---------------------|
| Female | 206 | 5 (111) | 4.30 (0.941) |
| Male | 179 | 5 (90) | 4.17 (1.084) |
| Total | 385 | 5 (201) | 4.24 (1.010) |

Figure 5ab illustrates the individual means of the participants' responses to the clothing on Mannequin 28 according to each gender. As noted on page 110, the range of score could be from 1 (Really Not Good) through to 5 (Really Good).

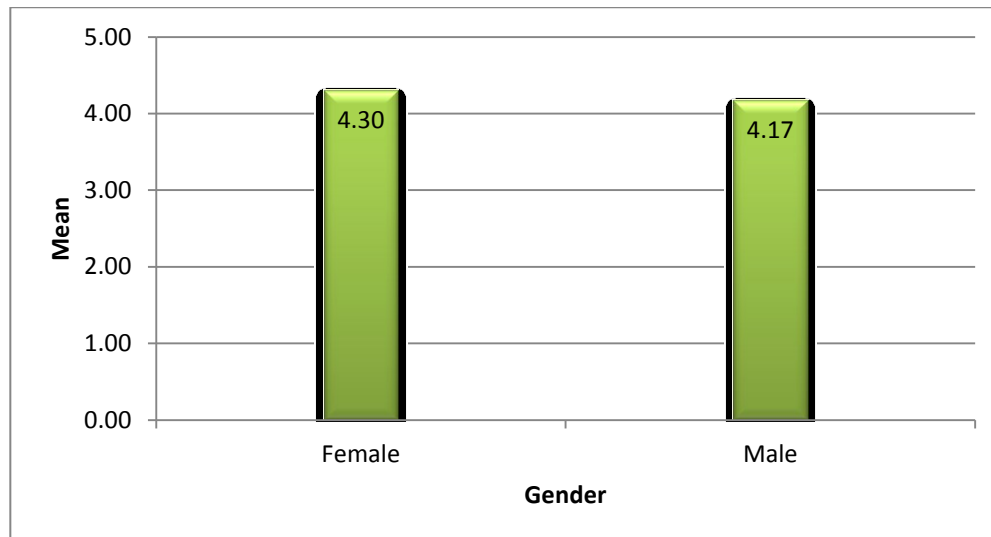


Figure 5ab. Individual Gender Means for Mannequin 28

Mannequin 28 Summary

Mannequin 28 depicts a teacher wearing a golf shirt, sweat pants and runners for teaching physical education.



Figure 2ab. Mannequin 28

The data collected from the participants resulted in a mean of 4.24 (SD 1.010) and a mode of 5. Therefore, the participants perceived the clothing of a golf shirt, sweat pants and runners on Mannequin 28 to represent a teacher of physical education as being “good” and approaching the “really good” level.

APPENDIX E

TOTAL PARTICIPANT RESPONSE RATE FOR EACH MANNEQUIN

| Mannequin | Cases | | | | | |
|-----------|----------|----------|----------|----------|-------|---------|
| | Included | Included | Excluded | Excluded | Total | Total |
| | N | Percent | N | Percent | N | Percent |
| 1 | 384 | 98.7% | 5 | 1.3% | 389 | 100% |
| 2 | 385 | 99.0% | 4 | 1.0% | 389 | 100% |
| 3 | 386 | 99.2% | 3 | 0.8% | 389 | 100% |
| 4 | 386 | 99.2% | 3 | 0.8% | 389 | 100% |
| 5 | 387 | 99.5% | 2 | 0.5% | 389 | 100% |
| 6 | 380 | 97.7% | 9 | 2.3% | 389 | 100% |
| 7 | 382 | 98.2% | 7 | 1.8% | 389 | 100% |
| 8 | 387 | 99.5% | 2 | 0.5% | 389 | 100% |
| 9 | 385 | 99.0% | 4 | 1.0% | 389 | 100% |
| 10 | 384 | 98.7% | 5 | 1.3% | 389 | 100% |
| 11 | 387 | 99.5% | 2 | 0.5% | 389 | 100% |
| 12 | 384 | 98.7% | 5 | 1.3% | 389 | 100% |
| 13 | 389 | 100.0% | 0 | 0.0% | 389 | 100% |
| 14 | 387 | 99.5% | 2 | 0.5% | 389 | 100% |
| 15 | 388 | 99.7% | 1 | 0.3% | 389 | 100% |
| 16 | 387 | 99.5% | 2 | 0.5% | 389 | 100% |
| 17 | 388 | 99.7% | 1 | 0.3% | 389 | 100% |
| 18 | 382 | 98.2% | 7 | 1.8% | 389 | 100% |
| 19 | 388 | 99.7% | 1 | 0.3% | 389 | 100% |
| 20 | 385 | 99.0% | 4 | 1.0% | 389 | 100% |
| 21 | 387 | 99.5% | 2 | 0.5% | 389 | 100% |
| 22 | 383 | 98.5% | 6 | 1.5% | 389 | 100% |
| 23 | 383 | 98.5% | 6 | 1.5% | 389 | 100% |
| 24 | 386 | 99.2% | 3 | 0.8% | 389 | 100% |
| 25 | 387 | 99.5% | 2 | 0.5% | 389 | 100% |
| 26 | 385 | 99.0% | 4 | 1.0% | 389 | 100% |
| 27 | 386 | 99.2% | 3 | 0.8% | 389 | 100% |
| 28 | 385 | 99.0% | 4 | 1.0% | 389 | 100% |

APPENDIX F

MANNEQUINS IN ORDER OF DESCENDING MEANS ACROSS ALL

GRADE LEVELS AND ALL SCHOOL SITES

| Mannequin | Mean (SD) |
|-----------|--------------|
| 14 | 4.24 (1.007) |
| 28 | 4.24 (1.010) |
| 24 | 4.22 (0.903) |
| 10 | 4.18 (0.898) |
| 26 | 3.98 (0.938) |
| 21 | 3.89 (0.951) |
| 8 | 3.87 (1.005) |
| 11 | 3.84 (0.934) |
| 27 | 3.79 (1.263) |
| 13 | 3.73 (1.254) |
| 4 | 3.69 (0.929) |
| 17 | 3.54 (1.040) |
| 5 | 3.41 (1.060) |
| 20 | 3.39 (1.002) |
| 2 | 2.98 (1.082) |
| 16 | 2.87 (1.255) |
| 9 | 2.86 (1.004) |
| 23 | 2.63 (0.962) |
| 7 | 2.61 (1.031) |
| 12 | 2.60 (0.948) |
| 25 | 2.47 (0.985) |
| 22 | 2.42 (0.920) |
| 3 | 2.41 (0.899) |
| 6 | 2.18 (0.976) |
| 18 | 2.13 (0.898) |
| 19 | 2.03 (0.889) |
| 15 | 1.82 (1.153) |
| 1 | 1.68 (1.001) |

APPENDIX G

PARTICIPANT RESPONSE MEANS IN DECSENDING ORDER ACCORDING TO GRADE LEVEL

GRADE 1

| Mannequin (Grade 1) | Mean (SD) (Grade 1) |
|------------------------|------------------------|
| 17 | 4.43 (1.010) |
| 24 | 4.40 (1.107) |
| 26 | 4.38 (1.147) |
| 10 | 4.35 (1.146) |
| 21 | 4.28 (1.133) |
| 4 | 4.27 (1.060) |
| 5 | 4.25 (1.254) |
| 8 | 4.17 (1.189) |
| 20 | 4.17 (1.279) |
| 11 | 4.13 (1.161) |
| 14 | 3.92 (1.493) |
| 28 | 3.92 (1.398) |
| 16 | 3.81 (1.532) |
| 2 | 3.78 (1.222) |
| 27 | 3.65 (1.481) |
| 13 | 3.43 (1.525) |
| 9 | 2.62 (1.388) |
| 3 | 2.57 (1.221) |
| 15 | 2.57 (1.461) |
| 12 | 2.54 (1.232) |
| 6 | 2.43 (1.307) |
| 7 | 2.39 (1.415) |
| 1 | 2.22 (1.569) |
| 18 | 2.13 (1.172) |
| 22 | 1.94 (1.092) |
| 25 | 1.89 (1.235) |
| 23 | 1.86 (1.000) |
| 19 | 1.77 (0.993) |

**PARTICIPANT RESPONSE MEANS IN DECSENDING ORDER
ACCORDING TO GRADE LEVEL**

GRADE 2

| Mannequin (Grade 2) | Mean (SD) (Grade 2) |
|--------------------------------|--------------------------------|
| 10 | 4.21 (0.843) |
| 24 | 4.18 (0.942) |
| 14 | 4.10 (1.142) |
| 17 | 3.92 (0.870) |
| 21 | 3.92 (0.912) |
| 28 | 3.92 (1.345) |
| 11 | 3.90 (0.940) |
| 4 | 3.87 (0.978) |
| 26 | 3.82 (0.997) |
| 16 | 3.79 (1.080) |
| 8 | 3.74 (1.117) |
| 5 | 3.66 (1.097) |
| 20 | 3.62 (1.042) |
| 13 | 3.49 (1.374) |
| 27 | 3.49 (1.315) |
| 2 | 3.47 (1.224) |
| 9 | 2.87 (1.070) |
| 7 | 2.79 (1.260) |
| 23 | 2.76 (1.149) |
| 3 | 2.62 (1.067) |
| 22 | 2.39 (1.001) |
| 25 | 2.36 (1.112) |
| 12 | 2.31 (0.977) |
| 18 | 2.24 (1.025) |
| 15 | 2.23 (1.266) |
| 6 | 2.21 (1.143) |
| 19 | 2.03 (1.181) |
| 1 | 1.74 (0.880) |

**PARTICIPANT RESPONSE MEANS IN DECSENDING ORDER
ACCORDING TO GRADE LEVEL**

GRADE 3

| Mannequin (Grade 3) | Mean (SD) (Grade 3) |
|--------------------------------|--------------------------------|
| 28 | 4.44 (0.764) |
| 24 | 4.42 (0.811) |
| 10 | 4.32 (0.778) |
| 14 | 4.22 (0.983) |
| 26 | 4.07 (0.849) |
| 8 | 4.03 (0.875) |
| 21 | 3.91 (0.847) |
| 11 | 3.84 (0.828) |
| 4 | 3.76 (0.808) |
| 27 | 3.69 (1.334) |
| 17 | 3.61 (0.919) |
| 13 | 3.57 (1.261) |
| 5 | 3.35 (0.999) |
| 20 | 3.26 (0.882) |
| 9 | 3.01 (0.868) |
| 16 | 2.88 (1.170) |
| 2 | 2.85 (0.902) |
| 23 | 2.85 (0.877) |
| 25 | 2.68 (0.864) |
| 7 | 2.66 (0.916) |
| 12 | 2.53 (0.831) |
| 22 | 2.50 (0.781) |
| 3 | 2.27 (0.816) |
| 18 | 2.08 (0.840) |
| 19 | 2.00 (0.844) |
| 6 | 1.95 (0.815) |
| 15 | 1.92 (1.115) |
| 1 | 1.37 (0.697) |

**PARTICIPANT RESPONSE MEANS IN DECSENDING ORDER
ACCORDING TO GRADE LEVEL**

GRADE 4

| Mannequin (Grade 4) | Mean (SD) (Grade 4) |
|------------------------|------------------------|
| 10 | 4.29 (0.792) |
| 24 | 4.26 (0.859) |
| 14 | 4.17 (0.918) |
| 28 | 4.17 (0.973) |
| 26 | 4.05 (0.966) |
| 8 | 3.88 (1.032) |
| 11 | 3.88 (1.051) |
| 21 | 3.88 (0.980) |
| 27 | 3.87 (1.252) |
| 4 | 3.74 (0.813) |
| 13 | 3.73 (1.286) |
| 17 | 3.55 (0.921) |
| 20 | 3.34 (0.912) |
| 5 | 3.26 (0.918) |
| 2 | 2.96 (0.959) |
| 9 | 2.85 (0.955) |
| 16 | 2.77 (0.999) |
| 23 | 2.73 (0.989) |
| 12 | 2.72 (1.031) |
| 7 | 2.64 (0.953) |
| 25 | 2.54 (1.041) |
| 3 | 2.47 (0.785) |
| 22 | 2.44 (0.910) |
| 18 | 2.27 (0.801) |
| 6 | 2.16 (0.880) |
| 19 | 2.01 (0.860) |
| 1 | 1.62 (0.871) |
| 15 | 1.62 (0.957) |

**PARTICIPANT RESPONSE MEANS IN DECSENDING ORDER
ACCORDING TO GRADE LEVEL**

GRADE 5

| Mannequin (Grade 5) | Mean (SD) (Grade 5) |
|--------------------------------|--------------------------------|
| 14 | 4.33 (0.889) |
| 28 | 4.31 (0.923) |
| 24 | 4.17 (0.905) |
| 10 | 4.10 (0.851) |
| 26 | 3.97 (0.809) |
| 21 | 3.95 (0.845) |
| 8 | 3.89 (0.877) |
| 13 | 3.84 (1.214) |
| 27 | 3.79 (1.240) |
| 11 | 3.69 (0.827) |
| 4 | 3.46 (0.867) |
| 17 | 3.21 (0.985) |
| 5 | 3.15 (0.891) |
| 20 | 3.15 (0.813) |
| 9 | 2.88 (0.715) |
| 2 | 2.74 (0.964) |
| 23 | 2.70 (0.830) |
| 7 | 2.60 (0.848) |
| 12 | 2.57 (0.921) |
| 22 | 2.53 (0.892) |
| 25 | 2.52 (0.849) |
| 16 | 2.31 (1.025) |
| 3 | 2.23 (0.783) |
| 6 | 2.03 (0.836) |
| 19 | 2.02 (0.671) |
| 18 | 2.00 (0.781) |
| 1 | 1.56 (0.847) |
| 15 | 1.48 (1.010) |

**PARTICIPANT RESPONSE MEANS IN DECSENDING ORDER
ACCORDING TO GRADE LEVEL**

GRADE 6

| Mannequin (Grade 6) | Mean (SD) (Grade 6) |
|--------------------------------|--------------------------------|
| 14 | 4.51 (0.632) |
| 28 | 4.42 (0.735) |
| 13 | 4.12 (0.861) |
| 27 | 4.04 (1.017) |
| 24 | 3.94 (0.802) |
| 10 | 3.89 (0.924) |
| 11 | 3.69 (0.780) |
| 26 | 3.68 (0.799) |
| 8 | 3.57 (0.930) |
| 21 | 3.55 (0.887) |
| 4 | 3.31 (0.869) |
| 5 | 3.16 (0.930) |
| 20 | 3.12 (0.832) |
| 17 | 2.98 (0.924) |
| 9 | 2.86 (1.026) |
| 12 | 2.74 (0.734) |
| 23 | 2.70 (0.761) |
| 25 | 2.61 (0.730) |
| 7 | 2.59 (0.919) |
| 2 | 2.57 (0.940) |
| 22 | 2.54 (0.834) |
| 3 | 2.40 (0.811) |
| 6 | 2.34 (0.941) |
| 16 | 2.34 (0.979) |
| 19 | 2.23 (0.846) |
| 18 | 2.09 (0.860) |
| 1 | 1.75 (0.948) |
| 15 | 1.51 (0.875) |