ABSTRACT

Source Credibility Theory (Hovland, Janis, & Kelley, 1953) posits that teachers’ power of persuasion, and consequently, effectiveness is amplified when students view them as credible. Remarkably, the literature on PE teacher effectiveness is bereft of studies on PE teacher credibility. This is especially surprising given that PE teachers are allegedly instrumental in helping children to learn how to lead active and healthy lifestyles (Pate et al., 2006). The purpose of this study was to investigate students’ perceptions and construction of PE teacher credibility.

Eight high- and low-skilled students from grades 3 and 5 were selected from a school employing an exceptional PE teacher holding a National Board Certification with over 20 years of experience. Data were collected over a period of three months in the school setting utilizing: (a) observations, (b) field notes, (c) open-ended questionnaire, (d) student drawings, (e) a photo elicitation exercise, and (g) group and individual interviews.

Data were analyzed inductively using Miles and Huberman’s (1994) four-stage analysis procedure to identify commonalities and themes. In the eyes of the students, a credible PE teacher: (a) “Looks Like One,” (b) “Practices What She Preaches,” and (c) “Is an ‘Awesome’
Pedagogue.” Findings indicated students had a confined construction of credibility as the PE
teacher was by far the most influential source informing students.

If quality PE teachers are important in children’s development of a positive disposition
toward physical activity (Graham, Holt/Hale, & Parker, 2010), knowing what children believe to
be characteristic of credible teachers appears essential. Students’ valuable insight about
teacher credibility have implications for both current PE teachers and PETE programs
concerned with teacher effectiveness, and hence, student learning.

INDEX WORDS: source credibility, teacher credibility, teacher effectiveness, student
perceptions
STUDENTS’ PERCEPTIONS AND CONSTRUCTION OF PHYSICAL EDUCATION TEACHER CREDIBILITY

by

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STUDENTS’ PERCEPTION AND CONSTRUCTION OF PHYSICAL EDUCATION TEACHER CREDIBILITY

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CHAPTER 1

INTRODUCTION

Technological development has improved quality of life – from revolutionary medical discoveries to ecological bio-fuels, the human race has enjoyed a healthier and longer life. Progress, however, has arguably promoted issues that are detrimental to the human condition. The lack of physical activity (PA) has been one of the catalysts of a number of health problems such as obesity and has negatively affected the lives of many people. According to the Centers for Disease Control and Prevention (CDC, 2010), there were approximately 72.5 million obese adults in the US in 2007-2008. Correspondingly, the approximated medical costs related to obesity jumped from $78.5 billion in 1998 (CDC, 2009) to as high as $147 billion dollars in 2006, with obese people having as much as $1,429 higher medical costs than people with average weight (CDC, 2010). Worse yet, hundreds of thousands of people lose their lives each year due to obesity-related problems (Flegal, Graubard, Williamson, & Gail, 2007).

Obesity was once thought to be a chronic illness that affected only adults. However, it has become such an epidemic that the number of overweight children has tripled between 1980 and 2000 (Ogden et al., 2002). Children and adolescent obesity has been linked to a number of health problems that include metabolic syndrome, type-2 diabetes, and cardiovascular and psychosocial abnormalities (Daniels et al., 2005). These conditions can significantly deteriorate quality of life and increase mortality rates while adding to the economic stress.
One significant way to prevent and decrease obesity is by promoting lifelong physical activity (Daniels et al., 2005; Pate et al., 2006) – “bodily movements produced by the skeletal muscles that require energy expenditure and produces progressive health benefits” (Hoeger & Hoeger, 2008, p. 3) – among children and young adults. Among many contributions, studies have shown that PA participation can improve children’s overall health by decreasing obesity (Gutin, Barbeau, & Yin, 2004; Kumanyika et al., 2008) and its related problems while increasing bone health (D. Bailey & Martin, 1994; Gutin et al., 2004), mental health (Hillman, Erickson, & Kramer, 2008), intellectual performance (Trudeau & Shephard, 2008), academic achievement and behavior (S. A. Carlson et al., 2008), academic performance (Castelli, Hillman, Buck, & Erwin, 2007) and social skills (R. Bailey, 2006). Additionally, there is indication that physically active children may stay more active during adolescence (Malina, 1996) and adulthood (United States Department of Health and Human Services [USDHHS], 1996) when compared to physically inactive children. Supporting this argument is the idea that children who are not physically active during their young years most likely will be inactive adults as well. There is evidence suggesting that 80% of overweight adolescents will become obese in adulthood (Biasiotto, Blake, & Land, 2005; Daniels et al., 2005). To make matters worse, adolescent obesity has been linked to increased overall mortality and risk of cardiovascular disease in adulthood (Daniels et al., 2005).

Physical Education’s Contribution

The seemingly best venue and vehicle for helping children learn to be physically active and enabling them to be physically active appears to be schools and school-based physical education (PE). Outside the home, schools are logically the most appropriate setting to educate
children and adolescents about healthy lifestyles because in part, students spend a large portion of their time there. Many medical, public health, and educational authorities – recognizing the impact schools could have on students’ overall quality of life – have emphasized the need for schools to pay attention to the terms of students’ PA and called on the need to reevaluate the role schools play in the obesity epidemic (Pate et al., 2006). In their study, Pate and colleagues concluded that “schools should assume a leadership role in ensuring that young people engage in adequate amounts of physical activity each day” (p.206). Supporting this rationale, the National Association for Sport and Physical Education (NASPE), Healthy People 2010, CDC, National Association of State Boards of Education (NASBE) and the American Academy of Pediatrics recommend daily PE in every school. NASPE defines daily PE as 225 minutes per week for middle and high school students and 150 minutes per week for elementary school students.

Schools can make a significant contribution in inspiring young people to be physically active by providing opportunities for them to engage in PA (Burgeson et al., 2001). The most effective way schools have to provide PA to students while promoting lifelong active lifestyles is through PE. Physical education programs in schools are designed to ultimately lead children to be physically active for a lifetime (Graham, Holt/Hale, & Parker, 2010). A testament to the importance of PE in our society is the fact that PE has been part of our schools since the late 1800’s (Pate et al., 2006; Wuest & Bucher, 1999). It is important to note that PE is a structured learning environment that does not equate to school recess or any other activity in school that may encourage PA.
With the goal of promoting lifelong healthy habits, the development of positive attitudes toward PA is one of the major objectives of PE programs in elementary and secondary schools (Luke & Cope, 1994). Research has shown that positive attitudes toward PA are related to higher PA participation (Deforche, De Bourdeaudhuij, & Tanghe, 2006), which may contribute to lower obesity levels. The development of positive attitudes toward PA may be mediated or intensified by the experiences the child encounters in school PE.

This assumption is supported by R. Bailey’s (2006) review of the scientific evidence of the benefits of PE and sport in schools. He concluded that PE and sport have the potential to develop students’ basic movement skills and physical proficiency, which are necessary for promoting positive lifestyle and PA participation later in life. In other words, R. Bailey suggested that physically educated students are more likely to live a “lifetime of healthful physical activity” (NASPE, 2004, p. 11). In addition, he indicated that if delivered properly, PE and sport could help develop self-esteem and preschool attitudes, social skills and social behaviors, and under certain situations, cognitive and academic development. When students master basic skills and knowledge (i.e., are physically educated) and have a positive learning environment, they are more likely to develop positive experiences in PE. The development of such experiences would increase the likelihood of adoption and maintenance of an active lifestyle (R. Bailey, 2006; Pangrazi & Dauer, 1992).

The Contribution of the Physical Education Teacher and Teacher Effectiveness

Although many features of PE programs – including time allocation, curriculum standards, equipment availability, and class size – are guided by Federal, State, local, and school policies, the actions and interactions of PE teachers can largely determine whether or not
students would be exposed to positive experiences (Aicinena, 1991; R. Bailey, 2006). Adding to this argument, Pate et al. (2006) suggested that PE teachers may play an instrumental role in guiding and inspiring children and young adults to live an active and healthy lifestyle. Smith and St. Pierre (2009) pointed out that research has indicated that some of the determinants of enjoyment – which is one important factor in the development of positive attitudes (McKenzie, Alcaraz, & Sally, 1994; Wankel & Kreisel, 1985) and sustained participation (Gould & Horn, 1984; Scanlan & Lewthwaite, 1986) in PA, sport, and PE – include the teacher (T. B. Carlson, 1995; Ryan, Fleming, & Maina, 2003) and instructional strategies (Mitchell, 1996). Consequently, it is rational to think that students are less likely to be physically educated when the PE teacher is less effective. As a result, they may not develop positive – or perhaps develop negative – experiences related to PE (e.g., Aicinena, 1991; Stelzer, 2005) and feel discouraged to engage in PA for life. On the other hand, students’ opportunities to learn are facilitated when the PE teacher is effective. Physically educated students are more likely to be competent and successful in the activities in which they participate than students who are not physically educated. As a result, they are more likely to develop positive attitudes toward these activities and may feel encouraged to engage in PA for life (Deforche et al., 2006).

It is reasonable to think, then, that the effectiveness of physical education teachers plays a vital role in the development of a physically educated person who possesses the skills, knowledge, and dispositions for healthy living and is essential in the fight against obesity. Thus, the preparation of effective PE teachers who can lead this drive and promote lifelong healthy habits and as a result, improve overall quality of life is paramount. This line of reasoning is supported by the public who – recognizing characteristics of effective teaching – “most
commonly mention[s] having higher-quality, better-educated, and more-involved teachers as the best way to improve kindergarten through grade 12 education in the United States” (Jones, 2009, para. 1).

Research in teacher education has recognized some of the behaviors and competencies that make PE teachers more effective (e.g., Schempp, 2003; Siedentop & Tannehill, 2000). However, the PE teacher effectiveness domain has not been explored completely. For example, NASPE, the body that sets the standards guiding PE teacher education (PETE) programs around the country, recognizes six major areas in the Initial PETE Standards as essential to an effective physical education teacher (NASPE, 2009a): (a) scientific and theoretical knowledge, (b) skill- and fitness-based competence, (c) planning and implementation, (d) instructional delivery and implementation, (e) impact on student learning, and (f) professionalism. Yet, the document does not address more specifically some of the subjective components that may influence teacher effectiveness. One important component which can positively increase PE teacher effectiveness that needs to be addressed in great detail is PE teacher credibility. Simply put, when students’ perceptions of credibility towards a teacher is improved, the teacher is more likely to promote learning and consequently increase teacher effectiveness.

**Source Credibility and Effective Teachers**

Source Credibility Theory (Hovland, Janis, & Kelly, 1953) supports the idea that a PE teacher’s power of persuasion is increased when he or she is credible in the eyes of the students. According to McCroskey and Young (1981), research has indicated source credibility as an important element in the persuasion or generation of understanding in the communication process. Pogue and AhYun (2006) not only argued that students’ perception of
cognitive learning is increased when they perceive their instructors to be highly credible, but also teachers have more influence on their students in the creation of understanding. If credible teachers are able to increase student learning and teacher effectiveness is determined by how much students learn the subject content, then it can be reasonably deduced that credibility may help increase teacher effectiveness and vice-versa.

Since source credibility is in the eye of the beholder, in this case students, it seems especially important to know what they believe makes a PE teacher credible. However, asking what they think will only paint part of the picture – we must also understand how they create their perceptions of PE teacher credibility. Creating a complete picture of the source credibility construct in PE may change current or help implement new teacher education policies which would adequately increase the credibility of PE teachers.

If the study of PE teacher credibility is to be carried out, it makes sense that we study the construct in an environment where the PE teacher is implicitly viewed as credible. In the same way Berliner (1986) suggested the investigation of expert teachers to learn more about tasks and teacher behaviors to inform novice teachers, as studying a credible PE teacher may inform the practice of less credible teachers. The best available method to recognize a credible teacher in PE is through the National Board for Professional Teaching Standards (NBPTS) certification. According to the NBPTS (2011), the certification is “achieved upon successful completion of a voluntary assessment program designed to recognize effective and accomplished teachers who meet high standards based on what teachers should know and be able to do” (NBPTS, 2011, Become a Candidate section, para. 2). When we consider that
effective PE teachers are deemed credible because they promote more learning than less effective PE teachers, then teacher effectiveness may be used as an indicator of credibility.

**Advancing the Field of Physical Education and Study of Source Credibility**

As society’s obesity problems increase, the need for PE teachers who can promote lifelong PA participation also increases. Understanding how credibility functions in PE may help in the development of more credible and effective PE teachers. With an increased focus on teacher accountability and teacher preparation, the investigation of PE teacher credibility would help PETE professionals better prepare our future physical educators. This knowledge may assist in closing the gap in this area of study in the PE literature and advance its field.

PE research should explore the credibility of PE teachers in the same way Fisher (1992) called for the need to investigate health teacher credibility: in the context of students’ perceptions. We do not understand how the credibility construct operates in the field of PE. More specifically, we ought to learn what qualities, behaviors, and skills students think would make PE teachers more credible in their eyes and how they construct credibility. In addition, this study may inform our understanding of the credibility construct and how it interacts with the teaching of PE. This study aimed to recognize how students constructed credibility and what qualities, behaviors, and teaching skills students perceived to make a PE teacher credible.

**Purpose of the Study**

The purpose of this study was to investigate students’ perceptions and construction of PE teacher credibility. The findings from this study illuminated the understanding of PE teacher credibility and teaching in PE. More specifically, the findings identified how students constructed their perceptions of credibility and the different personal qualities, behaviors, and
teaching skills that may increase the credibility of PE teachers and consequently, PE teacher effectiveness. The information gathered in this study may assist PETE professors, PE teachers and professionals in the area of PE and PA to improve their effectiveness as well as colleges and universities to adjust their PE teaching programs to enhance the credibility and effectiveness of pre-service teachers.
Research Questions

The research questions guiding this study were:

1. How do students characterize PE teacher credibility?
2. What personal qualities make PE teachers credible in the eyes of students?
3. What behaviors make PE teachers credible in the eyes of students?
4. What teaching skills make PE teachers credible in the eyes of the students?
5. How do students construct credibility and what sources inform their construction?
Definition of Terms

**Physical Activity.** “Bodily movements produced by the skeletal muscles that require energy expenditure and produce progressive health benefits” (Hoeger & Hoeger, 2008, p. 3).

**Physical Education.** “An academic subject that uses a planned, sequential program of curricula and instruction, based on state and/or national physical education standards, which results in all students, including those with disabilities, developing the knowledge, skills, and confidence needed to adopt and maintain a physically activity lifestyle” (American Alliance for Health, Physical Education, Recreation and Dance [AAHPERD], “Physical Education,” para.1).

**Physically Educated.** Individuals who “have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity” (NASPE, 2004, p.11).

**Source Credibility.** Message source’s power of believability as perceived by the message receiver (Hovland, Janis, & Kelly, 1953).
CHAPTER 2

REVIEW OF RELATED LITERATURE

The purpose of this study was to investigate students’ perspectives and construction of physical education (PE) teacher credibility. Consequently, it is essential to first inspect how the credibility construct has been defined historically and the existing body of knowledge regarding teacher credibility, PE teacher credibility, and student perspectives. Pertinent literature informing this study is presented in the five following sections: (a) Source Credibility Theory, (b) Source Credibility, (c) Teacher Credibility, (d) PE Teacher Credibility, and (e) Student Perspectives in PE. The following review of the literature demonstrates that PE teacher credibility is an important construct which may positively increase teacher effectiveness and advance student learning. In addition, this review identifies the benefits of using student perspective in the investigation of PE teacher credibility. Lastly, the objective of this chapter is to demonstrate that credibility is associated with specific personal qualities, behaviors, and teaching skills which impact how students perceive their PE teacher. The recognition of these characteristics is essential in elevating the credibility of PE teachers in schools and most importantly, the preparation of PE teachers in the future.

Credibility refers to the ability, quality, or power of a source or message to be believable. Since Aristotle’s observation of ethos, more commonly known as source credibility, as the most powerful means of persuasion (L. Cooper, 1932) over 2,500 years ago, scholars have investigated this construct in many fields, including communication, psychology,
information science, and marketing (Rieh & Danielson, 2007). With widespread interest on credibility, it is no surprise researchers have found conflicting results. In a review of empirical and theoretical literature, Rieh and Danielson observed that different fields have explored credibility using different perspectives, approaches, and objectives which have affected the direction of credibility research and resulted in different views about credibility and its effects. According to the authors, the focus of credibility research has been on five areas: (a) information resources (texts) as in information science, (b) organizations and groups as in management sciences, (c) messages and signals as in consumer research, (d) on media (e.g., newspaper and television) as in mass communication, and (e) on speakers as in interpersonal communication and psychology research. Rien and Danielson further added that the different disciplines bring different but related constructs (authority, persuasion, quality, and trust) into the debate, sometimes considered to be simply connected to or underlying dimensions of credibility.

The study of source credibility as it relates to education stems from contemporary communication research. This field of study supports the assumption that in the communication process, source credibility is a very important element (McCroskey & Young, 1981), with focus on the message source’s power of persuasion, generation of understanding, or attitude change. Research in communication is based on Source Credibility Theory, which originated from the work of Hovland et al. (1953). This theory proposes that receivers are more likely to be persuaded when the message source is perceived as credible. This line of research originated with the work of Hovland and colleagues (Hovland et al., 1953; Hovland & Weiss, 1951) investigating communication and persuasion during and after World War II.
Source Credibility Theory

In 1951, Hovland and Weiss explored the characteristics of a source on the acceptance of a message on a receiver. In their study, an identical message was transmitted to a group where the message was attributed to a “trustworthy” source and another group where the message was attributed to an “untrustworthy” source. To ensure a balanced level of opinions among the participants, four messages on four different topics were developed, each with one “affirmative” and one “negative” position on the issue. Questionnaires on opinion were administered before, immediately after, and a month after the message was communicated. The study’s results indicated that “fairness” of the message and “justifiability” of the receiver’s conclusions were affected by the source’s trustworthiness. In addition, opinion change advocated by the sources was greater when the message was presented by the “trustworthy” source. The authors concluded that although there was no difference in amount of acquisition and retention of information, opinion change was related to the source’s level of trustworthiness.

Expanding on the work of Hovland and Weiss, Hovland et al. (1953) sought to complement the extended amount of descriptive information gathered on persuasive communication. Using basic research to “supplement the findings derived from investigations of a practical nature” (p.v), their seminal work was the product of a group research effort with over 30 individuals on the experimental modifications of opinions and attitudes in communication funded by the Rockefeller Foundation. The collection of numerous studies yielded chapters focusing on several areas, including the credibility of the communicator.
The results from studies that investigated the credibility of the communicator revealed that the communicator’s cues of “intentions, expertness, and trustworthiness” (p. 35) significantly affected the reactions to a communication. Accordingly, judgments about the source were more favorable and immediate acceptance of recommended opinion was greater when the source was considered to be credible in comparison to a source less credible. Interestingly, however, was the fact that there was little difference between the amount of information learned from most and least credible sources. This finding indicated that opinion change not only required understanding of a new point of view, but also motivation to accept it. Apparently, individuals are more likely to accept recommendations and conclusions – which are expected to be supported by later experiences or lead to avoidance of punishment, social approval, or a reward – offered by someone who is believed to be honest, knowledgeable, and insightful. It should be noted that the motivation for acceptance is dependent on the specific situation of the individual and increases as the level of knowledge about the subject decreases. In addition, the results revealed that high-credible sources were more effective in influencing immediate opinion change when compared to low-credible sources, but this impact was lost after approximately two weeks.

In short, Hovland et al. (1953) advanced that the credibility of the source was related to characteristics which encompassed several dimensions (i.e., competence, caring, and trustworthiness). In their work, competence was defined as the “extent to which a communicator is perceived to be a source of valid assertions (his ‘expertness’),” while trustworthiness was the “degree of confidence in the communicator’s intent to communicate the assertions he considers most valid” (p.21). In addition, the dimension of caring was defined
as the intentions toward the receiver. These characteristics, when exhibited by the source, impact the receivers’ perceptions about the source and consequently, the source’s power of persuasion. Further, Hovland et al. suggested that many factors influence what characteristics are deemed valuable by the receiver and that these characteristics are flexible and may change over time.

**Source Credibility**

Although Hovland and colleagues’ work was the first step in understanding source credibility in the communication process, it steered the focus of ensuing research. For the following 20 years approximately, numerous studies investigated source credibility and its effect on persuasion (e.g., Andersen & Clevenger, 1963; Sikkink, 1956), and its dimensions (e.g., Applbaum & Anatol, 1973; Berlo, Lemert, & Mertz, 1969; Whitehead, 1968). In this stage of investigation, the majority of these studies used quantitative techniques – sociograms, linear rating scales, ranking, and semantic differential scales – and looked at the overall credibility of the source. These studies employed factor analysis and reported several dimensions and specific characteristics associated with source credibility.

In 1963, Andersen and Clevenger provided a summary of numerous experimental studies conducted in ethos (i.e., source credibility). Their findings were similar to Hovland et al.’s as evidence suggested the credibility of the source had an impact on the message communicated while information learned from the message was not related to the credibility of the source due to a temporal dimension. In addition, the authors brought to attention that the majority of earlier studies treated credibility as a fixed construct (e.g., Das, Rath, & Das, 1955; Sikkink, 1956; Weiss, 1953), but indicated that other studies began assuming credibility was
variable – based on perceptions that are subject to change (e.g., Berlo & Gulley, 1957; Tannenbaum, 1956).

This shift in perspective led researchers to investigate underlying variables and dimensions of source credibility. In 1966, McCroskey set out to develop Likert scales for the measurement of ethos (i.e. source credibility). Using speech and psychology literature, McCroskey identified 30 terms related to the construct. This set of items was given to two groups of 50 participants each. One group evaluated a source presumably with high credibility while the other group evaluated a source with low credibility. The results revealed that the dimensions of competence and trustworthiness were part of credibility while the third dimension, described by Aristotle and Hovland et. al (1953) as caring, was not. To verify that the results were not affected by the use of Likert scaling, the author conducted a study with essentially the same procedures but using 40 evaluative semantic differential items. At this time, in addition to supporting the existence of the two dimensions previously found, he indicated that the third dimension of caring was part of the competent dimension. With the assumptions that credibility was composed of only two dimensions (i.e. competence and trustworthiness, McCroskey added 14 items to the 30-item scale to measure each dimension independently with 22 items in seven experiments. Among results, the author concluded that the scales developed could reliably measure the two dimensions of credibility.

Two years later, Whitehead (1968) attempted to – due to the problem of selecting too many or too few possible characteristics inherited in studies using factor analysis – included new scales and confirmed already existing dimensions and scales measuring source credibility by using separate analyses. A booklet with 65 scales ordered randomly to reduce bias was given
to 152 college students to rate two tapes attributed to one high and one low credible source. The results revealed 10 scales that measured the three previously recognized dimensions of credibility (trustworthiness, competence, and caring) and a fourth dimension called objectivity. The author concluded that a change to the source credibility models was necessary since a new dimension was discovered and suggested additional studies should continue to explore new scales and dimensions.

A year later, Berlo et al. (1969) followed the trend suggested by Andersen and Clevenger (1963) and indicated that credibility and its variables were viewed as a “property of the source” and argued these variables should rather be construed as a “receiver’s response to a source” (p.565). They pointed out Hovland et al. (1953) had found some dimensions for the evaluation of a source and set out to expand on their work and “know how many dimensions are required to account for these evaluations” (Clevenger, 1963, p. 564). Contradicting the word of caution given by Hovland and colleagues, suggesting that credibility was related to context and time, Berlo et al.’s study aimed at creating a generalizable instrument for measuring the credibility of different information sources. Following the procedures used by Osgood, Suci, and Tannenbaum (1957), the researchers built a list of adjectives paired with their antonyms to be rated on a 7-point scale and conducted two studies that found similar results. In the first study, they used a new approach to this type of research. The authors interviewed university students and students’ wives and asked for sources the participants thought were highly acceptable and highly unacceptable and qualities that described those sources. A set of 83 pairs of polar adjectives were created to evaluate 18 sources by 91 university students and their wives. The
results indicated the existence of three dimensions (safety, qualification, and dynamism) and perhaps a fourth dimension (sociability) of credibility.

To investigate the limitations of the first study, the researchers conducted a larger second study. They used the same procedures of the study one with a few modifications. Berlo et al. used 35 scales, retaining 22 from the first study, to evaluate 12 sources and verify the existence of the four dimensions found in the first study. At this time, 112 residents of a city were randomly selected to participate in the study. The results confirmed the first study and indicated the existence of three dimensions of credibility (safety, qualification, and dynamism) that could be evaluated using five scales per dimension. The authors concluded that the dimensions were similar to Hovland et al.’s (1953) and Osgood et al.’s models with some differences in their meanings and what scales were related to each dimension.

With some consensus over the dimensions that construed credibility, studies began focusing on the scales measuring these dimensions. For example, expanding the debate over the stability of scales measuring source credibility, Applbaum and Anatol (1973) brought to attention that the scales proposed by McCroskey (1966) had not been empirically established. The authors argued that although McCroskey’s scales were thought to be reliable when used in different studies, these scales could vary from study to study according to each situation. The researchers then investigated the variation of scales measuring four dimensions of credibility (trustworthiness, expertness, dynamism, and objectivity) and the “overall factor structure of the subjects’ perceptions of and attributions to a source” (p.232) which would vary as a function of time. The authors construed a booklet with 31 bi-polar scales from the studies of Coan (1966), McCroskey (1966), Berlo et al. (1969), and Whitehead (1968) and asked 50 college
students to rate and rerate a high and a low credible source after one week. Using factorial analysis, the authors found that the credibility of the sources was confirmed by the participants. However, they did not find a high correlation of scales in the same evaluative factor between test and retest and found the factor structure did change over time. They concluded that there was some doubt on the reliability of using the McCroskey’s scales in different studies to measure source credibility. They suggested that such variation was due to the fact that communication may be a dynamic process where perceptions change over time.

Overall, the first 20 years of research in the communication process produced two major findings. The first finding was that source credibility was associated with the existence of several dimensions and scales that measured these dimensions, although there wasn’t a strong consensus on what dimensions and scales best measured it. Second, and perhaps most importantly, findings pointed out that source credibility was a flexible construct dependent on different factors such as time and context. Following these recommendations, studies in different fields such as psychology, information science, marketing (Rieh & Danielson, 2007), and education began investigating what specific dimensions and scales could best measure source credibility and used these scales to measure the credibility of the source in that particular field.

After decades of investigation, due to the fact that credibility is bounded by context and time, research in a variety of fields has found different characteristics and measures associated with source credibility. In a review of the literature, Pornpitakpan (2004) evaluated the empirical evidence on credibility of the message source and its effect on persuasion in the previous five decades to provide recommendations for the use of high- or low-credible sources.
According to the author, the majority of the studies that aim to the persuasion of consumers are mainly guided by social psychology's empirical findings and theories on attitude change or persuasion. In the review, the author described and summarized findings on the main effects of source credibility and the interaction between source credibility and five other components: (a) variables of source, (b) message, (c) channel, (d) receiver, and (e) destination (McGuire, 1978). Overall, Pornpitakpan found there is a higher level of persuasion attributed to a high-credible source in comparison to a low-credible source, although under certain conditions a low-credible source may be more effective than a high-credible source. More specifically, the author indicated that some source variables – expertise, physical attractiveness, similarity with the receiver, and gender – and their interaction with source credibility “has not been well researched, and the results are not clear to indicate whether there is significant interaction between them, let alone the patter of the interactions” (p.248). Since different fields have proposed a multitude of findings, the following section focuses on the literature pertinent to the present study and describes research conducted on source credibility in the field of education.

**Teacher Credibility**

In the field of education, more precisely in the classroom, the first steps in the investigation of teacher credibility can be traced back over to a century ago, when Kratz (1896) asked over 2000 students between grades 2 and 8 what were the qualities of their best teachers. Nonetheless, the investigation of teacher credibility as we know today – with its foundations on instruction communication research, which is based on Aristotle’s and Hovland et al.’s (1953) view of source credibility – initiated in the mid 1970’s when researchers began
investigating the role of teacher credibility in the instructional communication process. The meta-analytical review of teacher credibility of Finn et al. (2009) summarized the history and suggested the existence of the three generations of teacher credibility research that follows.

The first generation of research on teacher credibility, which mainly explored the relationship between teacher credibility and student outcomes and learning, was initiated by the study of McCroskey, Holdridge, and Toomb (1974). In the study, McCroskey and his colleagues followed the argument of Tucker (1971) – indicating that source credibility measures could only be used to measure the specific sources for which these scales were designed – and tested the generalizability of these measures across types of source and subject. The authors used 46 semantic scales adopted in previous studies (i.e., Norman 1963; McCroskey 1966; Markham, 1968; and Berlo et al., 1969) on three samples (lecture instructors, laboratory instructors, and independent instructors) of university students in different speech communication courses for a total of 1830 participants. Data were analyzed separately for each sample using principal component factor analyses and varimax rotation. The authors found that the dimensions of source credibility could vary among different types of source as well as the scales measuring these dimensions.

The study of McCroskey et al. (1974) made two important contributions to the research on teacher credibility when they sought to learn how students made judgments about the credibility of their instructors. Firstly, the authors developed the first teacher credibility measure – which was adopted by instruction communication researchers – consisting of 14 items in five dimensions: (a) competence (expert, reliable), (b) character (unselfish, kind), (c) sociability (sociable, cheerful, good-natured), (d) composure (poised, relaxed, calm), and (e)
extraversion (aggressive, verbal, bold, talkative). Secondly, and perhaps more importantly, they contributed theoretically with the findings of positive outcomes related with teacher credibility. For example, the authors found that when the teacher was deemed more credible students were more likely to sign up for another course from the same instructor and students recalled more information.

During this generation of research, Horai, Naccari, and Fatoullah (1974) investigated the effects of expertise and physical attractiveness of teachers upon opinion agreement and liking of 9th grade female adolescents. In the study, three levels of physical attractiveness (high, low, and no photograph) and three levels of expertise (high, low, and no information) were attributed to different sources while eight students were randomly assigned to each condition and a control group. Students read a newspaper article and rated their perceptions of the source and measured their recall about the information presented in the article. The results revealed that sources considered being high in expertise and physical attractiveness generated higher agreement than the other conditions. In addition, the authors indicated that recall was not greater by any condition which supported the previous findings of Hovland and Weiss (1951) and other studies.

Similarly, Chaiken (1979) investigated the relationship between physical attractiveness of the source and persuasion. In her study, the author pointed out that studies investigating the effect of physical attractiveness on persuasion had been equivocal. These studies had been conducted in laboratory settings and could have made attractiveness more relevant than it would be in natural settings. In addition, physical attractiveness was assumed to influence persuasion while ignoring the fact that attractiveness or the lack thereof could be associated
with other attributes such as intelligence, status, and personality. Consequently, Chaiken explored under natural conditions the opinion of 272 female and male university students (two of each gender per communicator) about their perceptions of 68 communicators (17 per level of attractiveness [high and low] and gender). The results revealed that attractive individuals were more likely to persuade others than individuals who were not attractive. This phenomenon was partly attributed to the fact that attractive people had characteristics (communication skills, educational accomplishment, and components of self-concept) that positioned them to be more effective communicators.

In the same year, Good (1979) embarked on a literature review of previous studies to present tenable conclusions from process-product studies. Good suggested that research should not focus on specific teaching behaviors due to the problem of establishing appropriate criteria, but take a broader look at teacher effectiveness by analyzing overall student outcomes. The author concluded that (a) elementary school teachers impacted student achievement, (b) classroom management skills were important, and (c) teaching behaviors called direct instruction may describe effective teachers. While taking a wide approach to describing managerial skills and direct instruction behaviors, Good cited studies pointing out managerial skills or direct instruction behaviors that had been linked to increased student learning and teacher effectiveness. More importantly, Good pushed the concept of direct teaching as a model associated with student learning. For him, “direct instruction should not be viewed as a set of prescriptive rules. It should be seen as a conceptual orientation that values active teaching, expository learning, focused learning, and accountability” (p.55).
The first generation of research on teacher credibility made important contributions to the understanding of teacher credibility. Firstly, McCroskey et al. (1974) provided the first instrument designed specifically for measuring the credibility of teachers. Secondly, teacher credibility was related to positive student outcomes. Lastly, credibility was associated with characteristics of the teacher. These findings provided a background for the next generation of studies investigating teacher credibility.

The second generation of teacher credibility research was initiated by the work of McCroskey and Young (1981). The study of McCroskey and Young was a response to a critique made by Cronkhite and Liska (1976) on source credibility research indicating that if factor analytic research was conducted correctly, the true dimensions of credibility would appear. While disagreeing on this point, McCroskey and Young argued that the major problem with the research conducted on source credibility was attributed to the distortion of the construct before data collection.

In their study, McCroskey and Young (1981) pointed out that even though a significant amount of research had been conducted on source credibility and its dimensionality, its original and subsequent definitions had not being challenged by “sophisticated psychometric technology” (p.25). They added that the work that initiated the first generation of research (i.e., McCroskey et al., 1974) on source credibility was misguided. By drawing part of their scale from instruments that were never intended to measure source credibility, McCroskey and colleagues created dimensions which were generalizable to different sources and subjects. Further, McCroskey and Young brought to attention that source credibility had been carefully and
properly defined and concluded that research should be intended to improve measurement instead of changing the nature of the construct.

After arguing that massive factor analytic studies could create unrealistic dimensions and change the nature of the source credibility construct, the authors provided an alternative to the problem. They suggested using carefully designed instruments to measure the dimensions of source credibility developed by Aristotle (intelligence, character, and good will) and later supported by Hovland et al. (1953) – who indicated similar dimensions, namely expertness (competence), trustworthiness, and intention toward the receiver (caring) – who had already defined the construct theoretically. Following this prescription, McCroskey and Young (1981) found that source credibility consisted only of two dimensions, namely character and competence. They concluded that “in terms of empirically based perceptions” (p.33), the three theoretical dimensions collapsed into two. Additionally, they pointed out there was a need to separate the related perceptions of source credibility from those which were not.

From that point on, researchers followed McCroskey and Young’s (1981) advice to use the credibility measurement with only two dimensions when investigating teacher credibility and student outcomes (e.g., Booth-Butterfield & Gutowski, 1993; Frymier & Thompson, 1992; Gomes & Pearson, 1990; Schrodt, 2003). For example, Gomes and Pearson investigated student’s perception of credibility and homophily – individual tendency to bond and associate with similar individuals – of male and female teaching assistants who were native and non-native English speakers. In their study, 223 students were assigned to one of four conditions with a male or female, native or non-native English speaker teacher assistant. After listening to audiotapes, students completed credibility and homophily instruments. Results indicated that
native English speakers received higher ratings for credibility (character) and homophily (background and attitude) than non-native English speakers. In addition, female teachers had relatively higher ratings than males. The authors concluded that homophily increases the chances of effective communication and consequently teacher credibility.

In another study, Frymier and Thompson (1992) investigated the relationship between teacher credibility, students’ motivation to study, and affinity-seeking techniques – defined by McCroskey and Wheeless (1976) as a positive approach towards another person. According to Frymier and Thompson, teachers naturally perform affinity-seeking techniques which could improve students’ perceptions of teacher credibility. In their study, 250 undergraduate students evaluated 169 male and 79 female instructors using scales to measure affinity-seeking strategies, teacher credibility, and student motivation. The results indicated that several affinity-seeking techniques (e.g., closeness, supportiveness, and equality) were associated with the character (caring) dimension of teacher credibility. In addition, the authors found that affinity-seeking techniques and teacher credibility were associated with student motivation to learn. Frymier and Thompson concluded that although they were able to identify affinity-seeking strategies at the college level, studies should investigate what strategies best work with students in high school and lower grades since these strategies could vary according to grade level.

A year later, Booth-Butterfield and Gutowski investigated message modality (e.g., print, audio, and video) and source credibility interactions affecting argument processing. In their study, 243 participants were assigned to a condition with either weak or strong arguments, with a high or low credible source, using one of three types of media: (a) videotape, (b)
audiotape, and (c) print. After exposure to the condition, students completed instruments measuring attitude, thought-listing, and manipulation checks on argument quality, involvement, cognitive effort and source credibility. Among findings, the authors indicated that strong arguments were related to high source credibility and a higher number of positive thoughts. Their findings suggested that the ability of teachers to provide strong arguments may increase their credibility while improving students’ argument processing.

More recently, Schrodt (2003) investigated students’ perceptions of instructor aggressive communication, perceived understanding, instructor credibility, and instructor evaluations. In his study, Schrodt argued that the ability of teachers to challenge students’ opinions and beliefs without being aggressive was an important quality to improve students’ critical thinking skills. A total of 248 undergraduate students were asked to rate the last instructor they had in class. Using instruments to measure each variable, Schrodt found that instructor argumentativeness was positively linked with instructor evaluation and credibility while instructor verbal aggressiveness (attack to others’ self-concepts) was negatively associated with student perceptions of credibility, evaluation, and understanding. In addition, results indicated that verbal aggressiveness was a stronger predictor of credibility than instructor argumentativeness. Schrodt concluded communication behaviors were important to facilitate student communication with their instructors and understanding.

Overall, the second generation of research on teacher credibility marked, as McCroskey suggested, “a halt to the proliferation of factor analytic studies of source credibility” (p. 34) seeking to find new dimensions of credibility. Building on the previous generation, research began investigating specific teacher behaviors such as affinity-seeking techniques, verbal
aggressiveness, and gender that had a direct or indirect impact on teacher credibility. They served as a starting point for the proliferation of studies that would explore qualities, behaviors, and skills related to teacher credibility.

The third generation of teacher credibility research was the product of two important theoretical contributions. First, Frymier and Thompson (1992) indicated that little research had been conducted to provide recommendations for teachers to increase their credibility in the classroom. As a result, instructor communication research began exploring specific areas that could increase teacher credibility including the use of verbal and nonverbal immediacy behaviors (e.g. S. D. Johnson & Miller, 2002; Teven & Hanson, 2004), affinity-seeking behaviors (e.g. Frymier & Thompson, 1992), and argumentative messages (e.g. Schrodt, 2003). Second, McCroskey (1992) extended Aristotle’s and Hovland et al.’s argument as caring being part of ethos (source credibility) and added a third dimension for measuring teacher credibility after observing that students who viewed teachers as being caring (how well a teacher communicates that he or she cares about the students) would also perceive their teachers to be more credible. McCroskey advanced that students perceived caring as a central component of good teaching even though it could be difficult to care about students especially in large classes. Further, the author added that teachers should learn how to communicate they care about students even if the feeling is not true, after all, if teacher can’t demonstrate they care they may not care at all (Teven & McCroskey, 1997). According to the study of McCroskey (1992), caring consisted of empathy (teacher’s ability to view a situation from the student’s perspective), understanding (ability of teacher to recognize student’s feelings, thoughts and ideas) and responsiveness (teacher’s ability to react to students appropriately in a timely
manner). With this conception in mind, two studies were conducted to verify the existence of caring as a third dimension of credibility (i.e., Teven & McCroskey, 1997; McCroskey & Teven, 1999).

In 1997, Teven and McCroskey set out to design a scale including caring as an independent dimension of credibility. In their study, the authors argued that the literature had ignored the writings of Aristotle and later Hovland et al. (1953) – indicating that source credibility was composed of three dimensions (competence, trustworthiness, and caring) – due to the lack of items related to this construct and the difficulty in isolating it from the other two dimensions. Building on the work of McCroskey (1992), the authors developed a 22-item bipolar scale with six items evaluating each of the competence and trustworthiness dimensions and 10 items they thought would measure perceived caring. The sample composed of 235 college students was asked to evaluate, after 12 weeks within the semester, the last teacher they had before coming to their basic communication course. This technique increased sample representation of students and teachers while allowing students to be more acquainted with their teachers. Additionally, the authors used a perceived caring scale developed by Koehn and Crowell (1997) to validate their measure. The results revealed that caring was indeed a dimension of credibility as it was related to positive teacher evaluation, cognitive learning, and affective learning. However, the authors cautioned that the study was conducted in a naturalistic environment and causal interpretation should be avoided. They recommended research should identify what teaching behaviors could increase students’ perception of caring.

Two years later, McCroskey and Teven (1999) conducted another study to verify the results and generalizability beyond communication instruction of Teven and McCroskey (1997)
and improved the teacher credibility measure into an 18-item scale measuring the three dimensions of competence, trustworthiness (or character), and caring. The authors argued that contemporary researchers and theorists had dismissed caring as a dimension of credibility and claimed that “contrary to earlier claims, [caring] should be restored to its former status in rhetorical communication theory” (p.90). In their study, 783 university students enrolled in three sections of a lower-level course in communication studies were asked to complete a questionnaire regarding one of 10 sources using a 18-item scale measuring the three dimensions of credibility and a 5-item scale measuring believability and likeableness. The sources selected were five figures students had not have personal interaction (public or political figures) and five sources students had personal interaction (roommate, former date, former job supervisor, and current boss). The results from the study supported the work of Teven and McCroskey as the authors concluded that caring was a dimension of credibility as Aristotle and Hovland et al. (1953) had argued previously. With support for the measurement of credibility as a tri-dimensional construct, studies began using this measure to investigate the impact teacher behaviors could have on teacher credibility and consequently, student learning (e.g., Baringer & McCroskey, 2000; Edwards & Myers, 2007; Mazer, Murphy, & Simonds, 2009; Myers, 2001; Teven & Hanson, 2004).

Edwards and Myers (2007) investigated the impact of instructor aggressive communication on teacher credibility. In their study, the authors posited that aggressive communication was composed of two factors: (a) argumentativeness (defending one’s position while attempting to refute someone else’s position) and (b) verbal aggressiveness (attack on a person’s self concept with the objective of delivering psychological pain). While the first is
considered a positive trait, the latter is considered to be a negative trait. Together, these traits could impact the teaching and learning environment. To verify and support these concepts, the researchers asked 128 undergraduate students from a communication course to read one of four (2x2 factorial design) scenarios describing an instructor’s use of high and low argumentativeness and verbal aggressiveness. After reading the scenario, students completed the credibility measure designed by McCroskey and Teven (1999). Results indicated that high argumentativeness and low verbal aggressiveness was the condition in which students considered the instructor the most credible. The authors concluded that both factors of aggressive communication behaviors jointly affected perceptions of credibility while verbal aggressiveness had a negative impact on credibility.

More recently, the impact on teacher credibility has been measured outside the classroom. Mazer, Murphy, and Simonds (2009) investigated the effects of teacher self-disclosure through Facebook on teacher credibility. In their study, the authors advanced that research indicates self-disclosure to be effective in teaching course content and argued that a teacher could increase students’ perception of immediacy by using self-disclosure behaviors via virtual networks. To explore this issue, 129 undergraduate students were requested to randomly develop an impression of one of three randomly selected Facebook profiles of a teacher displaying high, medium, and low self-disclosure. The students then, were asked to complete an 18-item credibility scale (McCroskey & Teven, 1999). The results indicated that teachers who display higher levels of self-disclosure on Facebook may be deemed more credible than teachers exhibiting low levels of self-disclosure. Furthermore, the authors
cautioned that instructors should be consistent with their self-disclosure in and outside of the classroom.

Overall, the third research generation of teacher credibility has made two important contributions to the literature. It advanced that credibility was composed of three dimensions and the investigation of teacher behaviors as it relates to credibility should be conducted to provide advice for teachers. These recommendations stimulated the proliferation of studies investigating specific behaviors that could increase students’ perceptions of teacher credibility. As a result, scholars have been able to better understand this construct and provide recommendations for in-service and pre-service teachers.

Finn et al. (2009) posited that these three generations of teacher credibility research have used the measures that were most appropriate at the time while seeking to investigate credibility from students’ perspective. The authors also noted that it was evident that increased teacher credibility assisted successful teacher-student interactions and created positive outcomes in the classroom. As an example, they referenced the work of McCroskey, Valencic, and Richmond (2004) stating teacher credibility as “the primary student perception that ultimately impacts learning outcomes” (Finn et al., 2009, p. 520). Also, they pointed out the work of Schordt, Witt, Turman et al. (2008) found that prosocial behaviors and characteristics of teachers were impacted by credibility while teacher credibility had a small impact on learning outcomes, even after manipulation of prosocial behaviors and teacher characteristics.

Additionally, Finn et al. (2009) posited that according to McCroskey et al. (2004), research in instructional communication is based on the rhetorical – considered by scholars the most “traditional” approach – and relational perspectives or general paradigms. McCroskey et
al. indicated the rhetorical instructional communication approach views teachers as the main source of information and students as the learners/receivers in a linear, teacher-controlled learning environment. On the other hand, the relational instructional communication approach views teachers and students both “as sources and receivers of information which result in the generation of shared meanings and simultaneous learning” (McCroskey et al., 2004, p. 198).

Finn et al. noted that research on teacher credibility has been classified within two general categories: (a) teacher behaviors and (b) student outcomes and learning.

The first area of research has explored what teacher behaviors and characteristics are associated with teacher credibility. These studies assumed that teacher behaviors and characteristics impact students’ perceptions of teacher credibility. For example, students have demonstrated that students may deem teachers more credible when teachers demonstrate they care (Teven & Hanson, 2004; Teven & McCroskey, 1997), are immediate (Glascock & Ruggiero, 2006; S. D. Johnson & Miller, 2002; Schrodt & Witt, 2006; Teven, 2007; Thweatt & McCroskey, 1998), and display affinity seeking behaviors (Frymier, 1992). In addition, teachers who are clear and confirmatory (Schrodt, Witt, Turman, Myers, Barton, & Jernberg, 2008), argumentative (Edwards & Myers, 2007), and provide positive cues (Beatty & Behnke, 1980) are more credible in students’ perceptions. Furthermore, teachers could improve their credibility if they are physically attractive (Chaiken, 1979), white (Glascock & Ruggiero, 2006; Hendrix, 1998), heterosexual (Russ, Simonds, & Hunt, 2002), and older (Semlak & Pearson, 2008). Conversely, teachers who are verbally aggressive (Cole & McCroskey, 2003; Edwards & Myers, 2007; Myers, 2001) and misbehave (Banfield, Richmond, & McCroskey, 2006; Teven, 2007; Thweatt & McCroskey, 1998; Toale, 2001) are perceived less credible by students.
An example of this line of inquiry was the study of Semlak and Pearson (2008). The authors posited that even though research had demonstrated that a teacher’s immediacy, verbal aggression, and sexual orientation had an impact on teacher credibility, little was known about how age and teacher misbehavior affected teacher credibility. To explore this issue, the authors had 369 undergraduate students enrolled in a basic communication course complete a source credibility measure (McCroskey & Teven, 1999) after manipulating the age (older and younger) and misbehaviors (incompetence, offensiveness, and indolence) of the teacher using a 2x3 factorial experimental design. The authors concluded that while there was no significant interaction between instructor age and teacher misbehaviors, students indicated that they were more likely to perceive older teachers more credible than young ones.

The second area of research has investigated the effect teacher credibility has on student outcomes and learning. More specifically, studies have indicated that the credibility of teachers affects student learning (Pogue & AhYun, 2006; McCroskey, Valencic & Richmond, 2004; Richmond, McCroskey, Kearney, & Plax, 1987; Teven, 2001; Teven & McCroskey, 1997), perceived student learning (Glascock & Ruggiero, 2006; Russ, Simonds, & Hunt, 2002), and classroom justice (Chory, 2007). In addition, credible teachers have more influence on students’ motivation (Christophel & Gorham, 1995; Frymier & Thompson, 1992; Gorham & Millette, 1997; Pogue & AhYun, 2006; Straits, 2007) and behavioral intentions (Yoon, C. Kim, & M. Kim, 1998). On the other hand, research demonstrated that a lack of teacher credibility makes student learning more difficult (Beatty & Behnke, 1980).

The study of Chory (2007) exemplifies this area of research. Chory investigated the relationship between students’ perception of teacher credibility and classroom justice. In the
study, 155 undergraduate students in communication courses at a mid-Atlantic university completed one scale for teacher credibility and three scales for classroom justice about the last instructor whose class they had attended. The results indicated that teacher credibility (character, caring and competence) positively affected students’ perceptions of classroom justice: (a) distributive (fairness of outcomes), (b) procedural (fairness of systems used to produce outcomes), and (c) interactional (fairness of treatment individuals receive). More precisely, instructor character was related to procedural, distributive, and interactional justice, while caring was related to procedural and interactional justice and competence was related to interactional justice.

In another study, McCroskey et al. (2004) had 93 teachers respond to three measures of temperament (neuroticism, extraversion, and psychoticism) while 1,123 students (group A) completed measures of teacher source credibility, task attractiveness, and teacher communication behaviors (responsiveness, assertiveness, and nonverbal immediacy) and 1138 students (group B) responded to measures on affective learning, teacher evaluation, and self-perceived cognitive learning. The results showed that students observed teacher temperament through teacher communication behaviors while these behaviors affected teacher credibility and task attractiveness. In addition, teacher source credibility, task attractiveness, and perceptions of teacher communication behaviors were linked to the outcome variables of affective learning, teacher evaluation, and learning loss.

After over four decades of research on source credibility in education, the study of Finn et al. (2009) attempted to summarize the positive effects teacher credibility had on education. The authors conducted a meta-analytical review of the literature investigating the relationship...
among teacher behaviors, student outcomes, and teacher credibility. More precisely, they set out to establish the effect sizes of the three dimensions of teacher credibility (competence, trustworthiness, and caring) and to compare the average effect sizes of each dimension calculated throughout the three generations of teacher credibility research using their respective measurements. The authors initially conducted an online search using electronic databases that included the Psychology and Behavioral Science collection in EBSCO and Academic Search Premier with terms that included teacher credibility, trustworthiness, character, and competence to select studies. A total of 74 articles published between 1974 and 2008 were reviewed and 51 articles were selected to participate in the meta-analysis. The results demonstrated a moderate and meaningful link between overall outcomes and teacher credibility, with similar effects detected for caring, trustworthiness, and competence. Higher correlations were found when all three dimensions were measured instead of only two (competence and character), indicating the positive impact caring has on teacher credibility and the effect teacher credibility has on student learning facilitation.

Research on teacher credibility has been able to support the existence of three dimensions of credibility (i.e. competence, caring, and trustworthiness) and identify many of the qualities and characteristics that make a teacher credible and many positive student outcomes. However, as Tucker (1971) has implied, the scales may be specific to their respective areas of research. For this reason, it is rational to conclude that the ability of the scales used to measure teacher source credibility may also vary according to teacher subject. Since the majority of the studies in this area of research have been conducted within instructional communication, more specifically on basic communication courses such as speech,
investigating other subjects may further inform the generalizability of these measures. In addition, exploring other subjects such as PE may inform what qualities, behaviors, and skills are specific to each subject.

The school subject closest related to PE that has directly investigated teacher credibility is health education. Research in this area gives support for exploring teacher credibility on different school subjects. In 1985, W. Bailey conducted a study on message source credibility in drug education to resolve research issues and expand on the construct. He argued that earlier studies’ results were contradictory and the effectiveness of drug programs could be impacted by its message sources. He added that earlier studies could have been misleading, as Hovland et al. (1953) have indicated, since it is “reasonable to assume that student opinions of the credibility of various information sources also might have changed” (W. Bailey, 1985, p.386). In his study, 1,734 university and 381 high school students enrolled in drug education classes completed a questionnaire accessing students’ perceptions on the credibility of five sets of different message sources with low (no college education), medium (baccalaureate degree), and high (doctoral-level, university trained professional with relevant experience) levels of expertise. W. Bailey found that professionals with higher levels of expertise were considered to be more credible in the eyes of both student groups.

Adding to the study of W. Bailey (1985), Ahia (1987) investigated the credibility of the sources of AIDS information among students and questioned the specificity of source credibility. In her study, the results indicated that students perceived scientists and physicians to be the most credible sources of information. This finding prompted her to ask if there was
any behavioral or personal characteristics present in scientists and physicians that made them more credible and if these characteristics were active or inert in health educators.

To answer the call of Ahia (1985), Fisher (1992) investigated empirically the credibility of health teachers to “determine the behaviors and characteristics that contribute to source credibility for health educators” (p. 424). Fisher used open-ended questionnaires to elicit answers from 375 students from 15 health classes. Using a panel of experts in education and another in credibility research to analyze and reduce data, the results created a list of 32 statements that defined the construct of health teacher credibility and provided a behavioral model of the health educator.

The study of teacher credibility has produced findings that can positively assist student learning. These studies have indicated that (a) teachers’ ability to persuade students is dependent upon students’ perceptions towards the teacher, (b) higher teacher credibility is linked with higher persuasion effectiveness, and (c) teacher credibility seems to be multidimensional. According to this field, credibility is defined as “the attitude toward a source of communication held at a given time by the communicator” (McCroskey, & Young, 1981, p.24). For this reason, studies have explored what qualities, behaviors, and skills make a teacher credible and consequently, more effective. From this perspective, it is assumed that when teachers are more credible, they have more persuasive power, which is related to many positive student outcomes (Finn et al., 2009). When teachers are perceived to be more credible in the eyes of their students, teacher behaviors are positively affected by their credibility, which may increase their effectiveness and student learning.
PE Teacher Credibility

The literature in PE is bereft of studies that directly investigated the source credibility of PE teachers. Perhaps the reason for this gap in the literature lies in the broad and extensive literature available in the field of education, and specifically in instructional communication. Nevertheless, a few studies have indirectly investigated some of the dimensions that make PE teachers credible (e.g., Bryant and Curtner-Smith, 2008, 2009a, 2009b; Dean, Adams, & Comeau, 2005; Gold, Petrella, Ange, Ennis, & Wolley, 2012; Melville & Maddalozzo, 1988).

Melville and Maddalozzo (1988) investigated the effect body fatness appearance had on physical educator’s ability to communicate exercise concepts to 850 high school students from six schools. The participants watched a 20-minute instructional video under one of two conditions. In one condition, the instructor wore a “fat suit,” which made him look overweight. In the other condition, the instructor did not wear a “fat suit” and appeared to be of normal weight. The students completed a questionnaire and a content test immediately after the video. Results showed that students who watched the “fat suit” instructor learned less and had lower intentions to exercise compared with students who watched the video under the other condition. In addition, the “fat suit” teacher scored lower on expert, appropriate role model, and likability scales. The authors concluded that the appearance of the teacher “may be a very powerful mediator of teaching effectiveness” (p.343). Although this study provided some evidence that the appearance of the teacher and role modeling could affect student learning and as a result PE teacher effectiveness, it did not examined how this process occurred. It appears that the investigation of credibility could shed some light on this phenomenon.
Supporting the notion of body appearance’s impact on student learning (Melville and Maddalozzo, 1988), Dean, Adams, and Comeau (2005) conducted a similar study to explore the effects of a female PE teacher’s appearance on student learning and attitudes toward the teacher. The authors argued that role modeling was an integral part in teaching PE due to the nature of the subject and voiced concern that PE teachers who looked “out of shape” could negatively impact student learning. To explore these issues, 93 students from 7th to 9th grades in two schools participated in a 6-week program on a health-related fitness knowledge course. Similarly to the study of Melville and Maddalozzo, the PE teacher looked of normal weight in the control condition while wearing a garment to look overweight in the experimental condition. Throughout the study, students completed tests and questionnaires to assess, respectively, their knowledge and attitudes toward the teacher.

Supporting the finding of Melville and Maddalozzo (1988), the results indicated that after six weeks students in the control group learned more from the average-weight PE teacher when compared to the overweight PE teacher. Contradicting the findings from Melville and Maddalozzo, however, the results indicated that there was no significant difference in attitudes toward the PE teacher between groups. The authors concluded that apparently students were more willing to accept information from the average weight PE teacher because she was not contradicting what she was teaching, in contrast to the overweight PE teacher. Further, the students had lower attitudes toward the overweight PE teacher at the beginning of the course but similar attitudes toward both PE teachers at the end of the course. The authors posited that students were able to ignore the appearance of the teacher and evaluate her on abilities and qualities.
The findings from Dean et al. (2005) provided further support to the idea that the appearance of the teacher may impact student learning. However, it demonstrated that over time the appearance of the teacher may not be as significant as Melville and Maddalozzo’s (1988) study claimed. It is important to note that this finding may be related to the PE teacher’s identical performance under both conditions. In a classroom setting, an overweight PE teacher may not be able to physically perform as well as a PE teacher of normal weight, which could negatively impact students’ perception towards the overweight PE teacher.

To answer the question raised by Melville and Maddalozzo (1988) about the generalizability of their findings and to further explore the impact appearance and role modeling has on student learning and perceptions of the PE teacher, Bryant and Curtner-Smith (2008, 2009a, 2009b) investigated the effect of PE teacher disability on students’ learning and perceptions of the PE teacher’s competence in an elementary (Bryant & Curtner-Smith 2008), middle (Bryant & Curtner-Smith 2009a), and high (Bryant & Curtner-Smith 2009b) school setting. In their studies, the authors advanced two hypotheses for students’ reactions based on (a) sociological and (b) psychological/developmental perspectives. From a sociological standpoint, the students constructed their perceptions about PE and their PE teacher according to the values of their society. The authors proposed that students at the elementary school, due to their age, would not have been yet socialized to think that “PE, physical activity [PA] and sport was for ‘whole’ and ‘fit’ bodies” (Bryant & Curtner-Smith 2009a, p. 7) and consequently, they would perceive the PE teacher with a disability more positively and learn more from her than older students (Bryant & Curtner-Smith 2008). On the other hand, high school students would be more socialized to believe that PE, PA and sport was for the able-bodied person and
would perceive the PE teacher with a disability more negatively than younger students and learn less than from an able-bodied PE teacher. In middle school, students would be more biased than elementary students but less biased than high school students against the PE teacher with a disability and would learn less than elementary students but more than high school students.

From a psychological/developmental perspective, students’ perceptions would be opposite to those in the sociological perspective. Elementary students would perceive the PE teacher with a disability more negatively than older students because the PE teacher did not fit the able-body model students expected. On the other hand, high school students who were more mature would accept that teachers had different bodies and would view the PE teacher more positively than younger students. Middle school students would demonstrate less bias than elementary students but more bias than high school students toward the PE teacher with a disability and learn more than elementary students but less than high school students.

In their studies, 113 students (63 females, 50 males) in grades 4 and 5 from three elementary schools (Bryant & Curtner-Smith 2008), 201 students (69 boys and 132 girls) in grades 7 and 8 from three middle schools, and 109 students (58 boys and 51 girls) in grades 10 and 11 from two high schools watched a 20-minute video of a PE teacher teaching a swimming lesson to 10 students under two conditions. In the control group, the PE teacher was an able-bodied person. In the experimental group, the same PE teacher gave the impression she had a disability by sitting in a wheelchair. The video lessons were adapted for the students’ age groups. After watching the video, students were given a content examination to measure the amount of information they had learned and a questionnaire to assess students’ perceptions
about (a) liking the teacher, (b) how knowledgeable she was, and (c) the extent to which the PE teacher was a positive role model.

The studies’ results provided support to the sociological view, indicating that students socially constructed their meanings about PE, PA, and sport as areas for the able, fit body. Elementary students learned more from the PE teacher with a disability than students with the able-bodied PE teacher, although students’ perceptions about the teacher in both conditions were similar. This finding indicated that students were not yet socialized to believe that the PE teacher should be able-bodied and accepted the PE teacher with a disability more positively than older students. Middle school students learned as much about swimming under both conditions while their perceptions about the teacher were similarly positive. The authors concluded that middle school students were beginning socialization since students learned as much from both PE teachers and not more, as elementary students did, from the PE teacher with a disability. High school students learned less from the PE teacher with a disability than the able-bodied PE teacher and their perception scores were similar as the previous two studies.

Although the results of these studies may have provided support to the sociological constructivist perspective, further analysis is necessary. Similarly to Melville and Maddalozzo (1988), the inability of students to fully participate in the activity and the nature of the lesson (i.e. swimming) may have prevented students from realizing that the PE teacher could not perform the activities – a reverse from Dean et al.’s study where students observed, over time, that the teacher could perform activities even though she was overweight – and consequently, perceive their PE teacher with a disability in a negative light. The concept that students over time were able to assess the PE teacher’s ability supports the study of Dean et al. (2005)
indicating that even though appearance affected students’ performance, at least initially, it was more important to students that the PE teacher was able to perform the skills. It appeared that the ability of the teacher to perform and teach students counteracted the students’ initial negative impressions vis-à-vis the teacher’s weight. From this perspective, it seems that students find teaching skills and behaviors more important than appearance.

More recently, Gold et al. (2012) investigated qualities of PE teachers based on students’ perceptions of physical appearance. In the study, 805 middle school students from grades 7 and 8 looked at four pictures of PE teachers with different body composition and answered a questionnaire about their perceptions, attitudes, and behavioral intentions. The results indicated that students associated the image of normal and underweight PE teachers with positive attitudes toward PE and more positive behavioral intentions toward exercise, and with the idea these teachers had more knowledge and skills. In addition, the authors found that one third of students indicated that their PE teachers were overweight or obese and therefore not a good role model. The authors argued that the appearance of the PE teacher was related to the credibility of the teacher and the ability to be a role model to students. Although the study reinforced the idea that appearance may have an effect on PE teacher credibility, it did not explore how students constructed their perceptions about credibility as the studies of Bryant and Curtner-Smith and Dean et al. did.

Taken together, the studies of Melville and Maddalozzo (1988), Dean, Adams, and Comeau (2005), Bryant and Curtner-Smith (2008, 2009a, 2009b), and Gold et al. (2012) indicated that appearance may be a mediator of positive role modeling, which in turn may affect students’ perceptions toward the PE teacher and learning. These studies suggest that the
appearance of the PE teacher may influence teacher credibility. Further, these studies suggested that students construct their perceptions about PE and PE teachers as a social process. However, these studies did not describe how this social construction occurred or what other factors may impact students’ construction and perceptions about their PE teacher.

Complementing the aforementioned findings on PE teacher credibility, the study of Aicinena (1991) investigated effective PE teaching behaviors and characteristics that appear to be related to PE teacher credibility. After observing these behaviors, students may relate them to a PE teacher’s level of competence, trustworthiness, or caring. In a review of the literature on teacher behaviors correlated to student attitudes toward PE, Aicinena analyzed 84 studies to advise teachers on how to improve their behaviors and classroom environment to improve student’s attitude toward PE. Results from the study suggested that teachers should be methodologically flexible (competent dimension), set good health examples (trustworthy dimension), and interact in a personal manner with students (caring dimension). More specifically, Aicinena indicated that teachers should allow some student input into classroom decisions, should model healthy behaviors, and should interact, reinforce, and provide feedback and attention to students. In addition, teachers who develop personal interactions and allow students to work with friends increase students’ chances of developing positive attitudes toward PE. On the other hand, teachers should avoid ignoring and comparing students, avoid providing opportunities for students to feel embarrassed such as elimination games, and avoid giving slow-paced instruction. Although it is rational to think that the behaviors that improve students’ attitudes toward PE could increase the credibility of the PE teacher, the study of Aicinena did not provide any evidence of this.
Another area in PE that relates to the investigation of source credibility in PE is the concept of modeling. In a position paper, *NASPE* (2009b) emphasized the needs and explored the benefits of healthy lifestyle and physical fitness for professionals in the areas of physical activity (PA) as a way to promote PA participation. *NASPE* concluded that children and adolescents will more likely adopt healthy lifestyles if they see their physical educator or professional actively engaging in the behaviors and regular PA that they promote. The paper presented three key aspects related to modeling, PA, and fitness: (a) others can learn with the behaviors of models, (b) regular PA participation is an important behavior for PE teachers and professionals in the area who serve as role models, and (c) all professionals in the PA field should attain and maintain appropriate levels of physical fitness and health. PE teachers who are physically fit and know what it takes to be healthy may be more credible in the view of students and teachers who are more credible in the eyes of the students will more likely increase their effectiveness and improve student learning.

The relevant literature in PE and source credibility clearly suggests the positive impact of PE teacher credibility on student learning. However, the question of how to improve the credibility of PE teachers and thereby increase teacher effectiveness remains partially unanswered. For this reason, an investigation of the personal qualities, behaviors, and teaching skills make PE teachers credible is warranted. Apparently, the most appropriate way to investigate this question is by listening to what students have to say. After all, they are the ones who are learning and must see their PE teachers credible. This idea is further supported by the work of Fisher (1992) who, while investigating the credibility of health educators proposed: “If
health teacher credibility is to be well defined and understood, it needs to be investigated in the context of student perception” (p.424).

Student Perspectives in PE

The concept of investigating student perceptions about teaching and schooling is hardly novel. Still, the role of the student in educational research has been of a product to measure the impact of education (Groves & Laws 2003). One explanation of this phenomenon is the fact that education instruction became more of a “one-size-fits-all” direct instruction approach – where the teacher is the source of knowledge and students are learners – with an emphasis on the end product. Thus, the opinions of students have been forgotten.

More recently, educational reform movements have emphasized teacher accountability as a way to improve student learning. As a result, a new wave of interest in student perceptions as a way to increase individual learning has gained some momentum. Researchers have focused on the perceptions of students to provide valuable insight in the educational process. In the last two decades, a number of studies have investigated students’ feelings, thoughts, and perceptions about schools, teachers, and the learning process (e.g., Kirby & Gardner, 2010; Schultz & Cook-Sather, 2003).

This concept is spreading within PE albeit at a slower pace (e.g., T. B. Carlson, 1995; Dagkas, 2011; MacPhail & Kinchin, 2004; McEvilly, 2013; McCullick, Metzler, Cicek, Jackson and Vickers 2008; Portman, 1995; Veal & Compagnone, 1995). Student-centered research in PE has used mainly qualitative methods in an attempt to truthfully listen to students’ opinions (e.g. Chen, P. Cone, & L. Cone, 2011; Fry, Tan, McNeill, & Wright, 2010; Gray, Sproule, & Wang, 2008). The most used methods include interviews, observations, field notes, and video. Other
methods which may be more child-centered and can offer additional information to the field include students’ diaries (e.g., Groves & Laws, 2003) and drawings (e.g., MacPhail & Kinchin, 2004; McEvilly, 2013).

Studies focusing on students’ perceptions marked a shift in education from a teacher-centered to a student-centered approach. In 1995, Graham brought to attention that there has been an “increasing emphasis on ‘education as business’” (p. 364). He added that schools increasingly have been held accountable for student expected outcomes and identified vouchers and charter schools as examples of educational innovations that offer a “business model based on consumer choice and satisfaction” (p. 364). In addition, Graham pointed out that Americans have seen an emphasis on the business-like model in schools, where students are recognized as “customers” who should be satisfied. He argued that PE is a profession that does not know what students feel, think, like, or dislike. He concluded that the recent literature indicated that it is difficult to really know and understand the needs of students, and even more difficult to teach them in appealing and interesting ways.

Several studies investigating PE and students’ perceptions have emphasized the contributions that students can make to PE. Ratliffe and Inmwold (1994) positioned that while PE can promote regular student PA participation, it is necessary to listen to students as a way to verify if PE program goals have been met. The authors added that learning about students’ experiences can have an impact on how students are taught, as teachers may reflect on their practices and create new ways to facilitate learning. In their study, two girls and two boys were selected from a 3rd grade PE class held at a southeastern university laboratory school and were collectively interviewed during eleven sessions over a three-month period. The authors
concluded that the findings provided information that stimulates reflection on how students are taught in elementary PE.

Supporting the study of Ratliffe and Inmwold (1994), Dyson (1995) advanced students are a central part of educational practice, but were rarely involved in the research process. Since students can provide valuable feedback, he recommended that researchers should investigate actions and behaviors in the classroom and how teachers and students interact. In his study, Dyson observed 19 PE classes at one school, 21 in another school, and analyzed students’ group interviews and non-participatory observation field notes to explain and understand the perceptions of students about their PE program. Among the findings, the author found that students’ perspectives can be a vital tool to inform physical educators and researchers about what goes on in the gym. In his reflection, Dyson suggested that “listening to student’s voices is essential to the understanding of physical education” (p. 406).

In another study, Lee, Carter and Xiang (1995) expressed the positive impact of learning about student perspectives. Lee at al. indicated a number of researchers have suggested that students’ feelings and thoughts can affect achievement in many ways. More specifically, learning about achievement motivation in children depends on understanding student conception of ability. They added that a more complete knowledge about achievement motivation can generate practical implications for teachers.

More recently, McCullick, Metzler, Cicek, Jackson and Vickers (2008) pointed to the increasing attention on teacher accountability in teacher education and indicated that students’ perspectives may be a valuable source of information when assessing PE teacher education (PETE) programs. In the study, 45 students from grades 2 through 12 and six PE student
teachers from four different schools participated in group interviews (separated by age) that lasted between 45 and 60 minutes. The findings revealed that even though students were not able to thoroughly report on 3 of 10 areas of assessment, they were able to provide valuable information about student teachers. When reflecting on the study, the investigators made an important point about the positive contributions student’s perspective can have on education:

Students are more incisive than we often credit them for, and, when we listen carefully, their perspectives can have a tremendous impact on ours. Students bring a matter-of-fact perspective to the adult world that tends to reveal more of the truth than adults are willing to see. (p.5)

Research using students’ perceptions has mostly focused on students’ (a) general perceptions (e.g., Garn, Cothran, & Jenkins, 2011; Olafson, 2002; Portman, 2003) and attitudes (e.g., Bibik, Goodwin, & Omega-Smith, 2007; Rikard & Banville, 2006) about PE and (b) perceptions about PE practices (e.g., Fry, Tan, McNeill, & Wright, 2010; Gray, Sproule, & Wang, 2008; Mandigo & Holt, 2006; Osborn, Bauer, & Sutliff, 2002). Overall, these studies pointed out teaching skills that assisted student learning of the content.

The study of Portman (2003) suggested that PE teachers should provide opportunities for students to practice and be successful. Bibik et al. (2007) indicated a PE teacher should provide more sports or games and let students work with students of similar abilities while Rikard and Banville (2006) posited that in addition to providing a wide variety of activities and game play, PE teachers should challenge and motivate students to make PE fun. In relation to different practices, Fry et al. (2010) pointed out that conceptual games added experience to regular PE and Gray et al. (2008) indicated that students valued having team invasion games. In
addition, the study of Mandigo and Holt (2006) revealed that PE teachers should, in order to provide optimal challenge, provide opportunities for students to change games and develop skills and abilities.

The literature in PE has demonstrated the value students can add to the field of PE. Studies have related students’ perceptions about PE and PE practices, while suggesting numerous teaching skills and practices that can assist PE teachers in creating a positive learning environment and consequently, increase student learning. Although this information is valuable, research using students’ perspectives has not yet attempted to investigate students’ perceptions of PE teacher credibility directly, and a more detailed exploration of students’ perspectives and construction of PE teacher credibility is warranted.

Summary

This chapter presented pertinent literature that provides a backdrop and rationale for the present study. More specifically, this chapter has delineated literature that informs the purpose of this study of how students perceive and construct the credibility of PE teachers. This review of literature has indicated that (a) Source Credibility Theory posits that a source’s power of persuasion is related to how credible the source is perceived to be by the message receiver, (b) source credibility is a flexible and time dependent construct composed of three dimensions, (c) numerous teacher characteristics are related to the credibility of teachers, (d) little is known about the credibility of the PE teacher, and (e) using students’ perceptions about credibility could provide insightful information about the PE teacher credibility.

This chapter’s review of the literature began by describing Source Credibility Theory and the impact a message source could have on a message receiver by promoting learning and
opinion change. This section discussed the seminal work of Hovland et al. (1953), demonstrating that a message source’s believability in based on the credibility the message receiver perceives the message source to be. The more credible the message source is, the higher the chances the message receiver will listen, believe, and follow what the message source communicates. Understanding the source credibility construct could impact the effectiveness of a message. Additionally, Hovland et al. suggested that credibility was composed of three dimensions (i.e., competence, trustworthiness, and caring) and the perceptions about these dimensions are related to context and time.

Next, this chapter outlined the research conducted from the 1950’s to the 1970’s on source credibility that focused on identifying its dimensions and developing instruments that could measure the construct. Studies in this period identified two to five dimensions of credibility. Although there was some variation in how the dimensions of credibility and instruments to measure it were described, support for the dimensions recognized by Hovland et al. began to emerge along with valid instruments that could measure the construct. In addition, a shift in focus led researchers to begin investigating and support the concept proposed by Hovland et al. that credibility was a flexible and time-dependent construct. This finding drove research to specialize in different areas such as psychology, business, and education.

The following section in this chapter discussed how credibility research in education began in the 1970’s and developed through three generations to the present period. The study of Finn et al. (2009) demonstrated that the work of McCroskey and colleagues and other scholars paved the way for a better understanding of teacher credibility and instruments to
measure it. After decades, teacher credibility research demonstrated that credibility was
indeed composed of the same dimensions that Hovland et al. (1953) had described previously.
More importantly, teacher characteristics related to teacher credibility began to emerge.

The penultimate section in this chapter described studies that were indirectly related to
the credibility of PE teachers. These studies have provided support to the concept that teacher
characteristics can impact students’ perceptions about the PE teacher, student learning, and
teacher effectiveness. However, an examination of relevant literature revealed that, due to a
process-product perspective, little is known about how this concept takes place. It appears then
that investigating how students construct and perceive PE teacher credibility could provide
valuable information to close this gap in the literature and reveal what specific personal
qualities, behaviors, and teaching skills relate to the credibility of the PE teacher and thus
improve teacher effectiveness.

Following this principle, the last section of this chapter demonstrated that using
students’ perspectives to explore teacher credibility could be helpful. Research conducted in PE
using students’ perspectives has demonstrated the valuable contributions that students have
made to the research process and understanding of PE. Given that Source Credibility Theory
suggests that credibility is in the eye of the beholder, and that PE is moving towards, as Graham
(1995) has suggested, a model of business where students are view as customers who must be
satisfied, it is rational to think that using students’ perspectives to learn how students construct
and perceive credibility is necessary.
CHAPTER 3

METHODS AND PROCEDURES

The purpose of this study was to investigate students’ perspectives and construction regarding physical education (PE) teacher credibility. Specifically, this study aimed to identify specific personal qualities, behaviors, and teaching skills that make PE teachers credible in the eyes of the students and how students constructed their views of credibility. This investigation was framed by Source Credibility Theory (Hovland et al., 1953) and complemented by Symbolic Interactionism (Blumer, 1969). These perspectives will be discussed in subsequent sections of this chapter. Additionally, the study was guided by the following research questions:

1. How do students characterize PE teacher credibility?
2. What personal qualities make PE teachers credible in the eyes of students?
3. What behaviors make PE teachers credible in the eyes of students?
4. What teaching skills make PE teachers credible in the eyes of the students?
5. How do students construct credibility and what sources inform their construction?

The research design and methods selected to be used in this study will be discussed in the this chapter in the following sections: (a) role of the researcher, (b) theoretical framework, (c) participant selection, (d) data collection procedures, (e) data analysis techniques, (f) data trustworthiness, and (g) transferability/extrapolation.
Research Design and Methods

A qualitative research design was selected to frame this study as it allowed a deeper understanding of students individually and collectively and their perspectives and construction of PE teacher credibility. Denzin and Lincoln (2008) provided a clear definition of this type of research:

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world….Researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (p. 4).

The use of qualitative techniques provided advantages over quantitative techniques in the generation of data needed to answer the research questions. Data in qualitative studies are “a source of well-grounded, rich descriptions and explanations of processes in identifiable local contexts. With qualitative data one can preserve chronological flow, see precisely which events led to which consequences, and derive fruitful explanations” (Miles & Huberman, 1994, p.1). In this study, qualitative methods allowed better understanding of students’ feelings, thoughts, behaviors, and construction of PE teacher credibility.

Role of Researcher

It is important that researchers identify their own subjectivities while discussing and taking into account biases in the research process (Patton, 2002). This section presents the subjectivities relating to credibility and PE that I have developed as a K-12 student, undergraduate and graduate student, and PE teacher at an elementary school. The recognition
and reflection of my biases toward the study assisted me in keeping them in balance during my investigation and will help the reader better understand the study.

Subjectivity Statement

I connect with this research topic personally, professionally, culturally, and socially. First, I have a personal association to it as PE and healthy living are part of my personal philosophy of life. I truly believe that people can learn many lifelong lessons though PE. I am one example of it. When I look back in my childhood, I can still remember the positive experiences I had in PE due mostly to the positive influence my elementary school teacher had. He was the first person besides my family that cultivated in me a desire to play sports and to be physically active and healthy. As I grew up playing sports and living a healthy and active life, the benefits of healthy living only inspired me to learn more. The experiences I had as an undergraduate and graduate student in health and physical education and subsequently, my professional career as an elementary PE teacher, only reinforced the belief that healthy living is the best way to live my life.

Second, this topic relates to me on a professional level. As a physical educator, I believe in the positive impact that PE teachers can have on students’ lives. As I entered college, I started to realize that a large number of the population wasn’t as lucky as I was in terms of quality living. The more I studied the idea, the more I learned how our lifestyles can interfere with our quality of life. As a master’s student, I became more curious about the reasons some people were more positively affected by PE teachers than others. As I reflected about this issue, I realized that teacher credibility could have a positive impact on how people experienced PE and understood this influence was grounded in teacher education. As a fourth year PhD
student, I wanted to focus on what could be done to increase physical education credibility, contribute to the body of knowledge, and perhaps bring change to one area that has not received the attention I deem necessary.

Thirdly, as an international student, I have a different perspective from those who have always been in the US. I have seen how the population can be indifferent to education and health without realizing they could contribute to and change their quality of life. I have seen schools where physical education programs were effective and positively affected students’ lives. I believe education as a whole, and physical education in particular, could be improved and more effective in preparing physically educated citizens to live a healthy life.

Finally, I feel a have a social connection to this issue. Teaching is one of the most, if not the most important, profession there is and it saddens me to see that teachers in general do not receive the professional and social recognition they deserve. Worse yet, to see that physical education is considered to be at a lower level when compared to other school subjects is heartbreaking. It is amazing to me that people choose not to see all the benefits that only physical education can provide to students at any age. No other subject encompasses such broad knowledge content. No other subject matter can indirectly teach some of the skills needed to be successful in our society. If I could make people aware of the necessity of physical education in schools, I would feel that I have done my contribution to society.

**Implications for My Role in This Study**

My previous experiences connected me to and facilitated my investigation by giving an insider’s perspective for the study. My experiences as a student in PE classes allowed me to establish a better relationship with participants, who were in the same situation I once was,
and create a sense of trust and confidence. These experiences, however, affected my thoughts, feelings, and interpretations during the study. Consequently, it was important to be aware of how these experiences affected the design and interpretations in my study. As part of an audit trail, a researcher’s journal was created to record my feelings, thoughts, and experiences throughout the study. Having a written record allowed me to better understand how my previous bias affected the study while making me aware of how my perceptions constructed the meanings I made during my investigation. It also helped me recognize my subjectivities as they happened and provided a time to look back and reflect on my experiences during the study. This information was used in a circular manner during all stages of the study since my experiences shaped my decisions which shaped my experiences.

**Theoretical Framework**

With the objective of investigating students’ perspectives of PE teacher credibility, Hovland et al.’s (1953) Source Credibility Theory framed the study. This theory indicates that the message source’s power of persuasion is determined by how much credibility the receiver attributes to the message source. According to Hovland and Weiss (1951), receivers are more likely to be persuaded when the message source is perceived as credible and as a result, the message source is more likely to generate understanding and change attitude in the receiver. In other words, the more credibility the receiver attributes to the source of the message, the higher the chances the receiver will learn more and change his or her attitude. When this notion is applied to PE teachers, the more credibility the PE teacher has in the eyes of the students, the more likely the students are to believe in their PE teacher. When the PE teacher’s believability (or power of persuasion) is high, the possibilities for students learning the PE
content and changing attitudes towards a healthier lifestyle are increased. For this reason, understanding how students constructed the credibility of and what qualities, skills, and behaviors made PE teachers credible in their perspective was necessary.

The aforementioned presuppositions reflect assumptions – epistemology and theoretical perspective – that I brought into the research process. Crotty (2003) suggested “different ways of viewing the world shape different ways of researching the world” (p.66). More specifically, the epistemology (theory of knowledge) guiding this study was constructionism. Although constructionism is closely related to constructivism – sometimes used interchangeably due to a lack of consistency in terminology – it seems useful to reserve the term constructivism, as Crotty indicated, “for epistemological considerations focusing exclusively on ‘the meaning-making activity of the individual mind’ and to use constructionism where the focus includes ‘the collective generation [and transmission] of meaning’” (p.58). In other words, constructionism looks at how individuals create their meanings while being affected by their social interactions and culture of society.

Giving support to this approach, a series of studies conducted by Bryant and Curtner-Smith (2008; 2009a; 2009b) investigated how students constructed their perceptions in PE classes. More specifically, the authors explored the hypothesis which suggested “that pupils’ beliefs about how physical education teachers should act and what they should look like were socially constructed” (Bryant & Curtner-Smith, 2009b, p.312). In the studies, the researchers showed two videos of the same teacher teaching a swimming lesson – the only difference between the videos was that in one the teacher was on a wheelchair – to students in elementary, middle, and high-school. The results of the studies indicated that as students get
older “their beliefs about physical education teachers with disabilities gradually change for the worse because they are socialized into believing that sport, physical activity, and physical education are for what appear to be whole and fit bodies” (Bryant & Curtner-Smith, 2009b, p. 311). Building on the idea that students socially construct their perceptions about credibility, the present study investigated how students constructed the credibility of a PE teacher based on their previous experiences and social interactions.

Intermingling with constructionism, the theoretical perspective – a philosophical position which represents our view about the world and offers a basis for selecting the methodology to be used – framing this study was interpretivism, where meaning and knowledge are constructed through social interaction with others and considerably influenced by context and culture (A. DeGroff, personal communication, January 20, 2010). More specifically, symbolic interactionism (SI) was used. According to Prasad (2005), SI is an American variation of interpretivism with influences of pragmatism and has been developing as a sociological tradition at the University of Chicago. SI descends from American Pragmatism and German phenomenology, developing from the ideas of George Mead and Charles Cooley.

The central concepts of SI, as Prasad (2005) indicated, are rooted on Herbert Blumer’s (1969) development of a micro-sociological tradition based on the ideas of Mead and Cooley about the individual and the construction of social meaning, where the study of symbols as well as the study of human meaning is addressed. From this perspective, objects have meaning only when people give it to them during everyday social relations. The three fundamental ideals created by Blumer (1969) which provide the foundations for SI way of thinking derived from the theory of mind, self, and society created by Mead are:
• Individuals interact with objects based on the meaning they place on these objects.
• The meaning individuals place on objects come from the social interaction these individuals have with the society that they live in.
• These meanings are not fixed, but rather frequently changed as individuals modify their interpretations as they deal with these objects.

In SI, all social and organizational interactions are symbolic – events, objects, and actions have different meanings for different people. For example, “a book not only is something to read, but also symbolizes knowledge and wisdom; a skyscraper is not merely a place to work, but can also be a symbol of modern architecture and corporate lifestyles” (Prasad, 2005, p. 21). Through the lens of SI, students’ perceptions about credibility are built upon the meanings these students give to this construct, which are influenced by their social interactions with their culture and people. This study was, hopefully, able to identify what these influences were – such as parents, school, and peers – and understand how they interacted in the students’ perceptions and construction of PE teacher credibility. Based on this theoretical perspective, the present study aimed to explore, from the students’ perspective, what qualities, skills, and behaviors made a PE teacher credible and how students constructed the credibility of a PE teacher. It assumed that each student had his or her own perception of what a credible PE teacher is, valuing different characteristics according to her or his perspectives.

**Participant Selection**

Presently, there is no method designed to directly identify credible teachers. However, given that credibility is the power of persuasion (Hovland et al., 1953) teachers have over their students and that such power contributes to increased learning, it is reasonable to assume that
teacher effectiveness – ability to promote learning – is an indicator of teacher credibility. Consequently, studying effective teachers, who are deemed to be credible because they are effective, is the most valid method to select a credible teacher and investigate teacher credibility. The certification given by the National Board for Professional Teaching Standards (NBPTS) is the most consistent method to identify effective teachers as it is the definitive advanced certification in the US for teachers (Lux & McCullick, 2011). The certification is a voluntary assessment program designed to identify accomplished and effective teachers who have met high standards which are based on what teachers should know and be able to do (NBPTS, 2011). Supporting the idea of NBPTS certification as a measure of teacher quality, Goldhaber and Anthony (2007) and Cavalluso (2004) indicated that results have consistently indicated that NBPTS certified teachers are more effective than teachers who are not (Lux, 2009).

Purposeful sampling was used (Patton, 2002) to select one credible PE teacher and students. Similarly to the study of Lux and McCullick (2011), the criteria for selecting credible teachers were: (a) NBPTS certification, (b) at least 10 years of teaching experience, and (c) formal recognition for programming and teaching. Once PE teachers meeting the criteria in the state of Georgia were found, their willingness to devote effort and time while participating in the study and accessibility were considered for the selection of one PE teacher.

The criteria for selection of boys and girls to participate in the study were: (a) skill level in PE and (b) ability to communicate. The PE teacher was asked to list students according to gender and performance level (high and low) in PE. To help reduce any bias the PE teacher could have in the study, the PE teacher was informed, during e-mail communication and face to
face conversations, that the study was not about her credibility or how students’ perceived her credibility, but how students’ perceived and constructed credibility of PE teachers in general. Once the list with possible participants was finalized, the PE teacher ordered these students according to their ability to communicate. Mixed groups with low and high-performance level students from both genders were selected to maintain a heterogeneous group. After students were selected, I communicated with the classroom teacher, principal, and PE teacher to schedule the activities in which students would participate.

Elementary school students from grades 3 and 5 were selected for this study for two reasons. First, students in these later elementary grades were considered to be more mature than younger students since they had the opportunity to accumulate more experiences in PE. These experiences could help students better understand and communicate their perceptions. Second, using students from 3rd and 5th grades could indicate any influence age had in students’ perceptions of credibility.

Similarly to Sanders and Graham’s (1995) study, two girls and two boys were selected from each grade level for a total of eight students. This number of students allowed me to follow Sanders’ (1996) strategies for interviewing, generate deeper and more meaningful data, conduct group interviews and other data collection methods, and manage a reasonable amount of data. The reason for having an even number of students from both genders was twofold. First, it made sense to listen to an equal number of boys and girls (e.g., Couturier, Chepko, & Coughlin, 2005; Osborne, Bauer, & Sutliff, 2002) as both genders could have differences of opinion. Second, an uneven number could change the “power “dynamics of the group
interviews as the outnumbered gender could feel discouraged to talk (Freeman & Mathison, 2009).

The school selected to participate in the study was determined by the presence of a NBPTS certified PE teacher, its location, and the PE teacher’s willingness to participate in the study. After a search on NBPTS’s website for certified PE teachers in the state of Georgia, I decided with my advisor, Dr. Bryan McCullick, which PE teacher and school best fit the needs of the study in relation to location, rapport, accessibility, and ability to collect meaningful data. The school selected to participate in the study was one of three elementary schools in the county with approximately 60 staff members and 750 students. It was located in the northern region in the state of Georgia. As of the 2010 US Census report, the city where the school was located had a total population of 2,536 with 889 total households and 624 families (http://factfinder.census.gov/home/saff/main.html). The demographic data indicated a homogenous population with 94.6% Caucasian, 4.7 Hispanic (of any race), and 1.7% African American. The community could be identified as middle class and blue-collar with a mean family income of $69,532 and a mean household income of $59,380.

The PE teacher selected to participate in the study was a white female approximately 45 years old with over 20 years of experience teaching PE. My informal conversations with the PE teacher revealed a PE teacher who loves her profession and is deeply invested in her students. Furthermore, my observations and field notes indicated that the PE teacher exhibited many qualities, behaviors, and teaching skills that are deemed necessary for effective teaching. For example, she appeared to be physically fit and able to demonstrate all activities to students.
Additionally, she was consistently observing and providing feedback to students. In short, the PE teacher exemplified an exceptional and credible PE teacher.

Once the school and PE teacher were selected, I contacted the PE teacher and asked for her participation. After the PE teacher demonstrated initial interest in the study, I contacted the school principal and asked permission to conduct the study. The school principal indicated that a proposal to be submitted to the schools or school district was not necessary. After approval, I asked the school principal and PE teacher for one 3rd and one 5th grade class which offered the most student diversity. I then asked the PE teacher to list four students (two girls and two boys) from each grade who best matched my selection criteria and I asked the PE teacher for an opportunity to talk to the students about my study and to invite them to participate in it. Using the PE teacher’s advice in the selection of students seemed appropriate since the PE teacher had a profound knowledge about the students’ PE skills and the investigation of her credibility was not the objective of my study. All necessary forms (Appendix A) were submitted and regulations were followed as set by the Institutional Review Board (IRB) at the University of Georgia when conducting research with human subjects.

Procedures

Data Collection Techniques

Data collection took 14 weeks due to school accessibility and methods of data collection, starting at the end of January 2012 and ending beginning May 2012. The extended period spent in the school and use of multiple data collection methods provided an in-depth understanding about perceptions, thoughts, feelings, and construction of credibility among students. A total of 15 visits were made for a total of over 45 hours contact hours with students.
and PE teacher. This time allowed me to develop better relationships with the PE teacher, students, and school faculty and staff, which facilitated my investigation of students’ thoughts, feelings, beliefs and perspectives. The methods for data generation were used in the following order with the exception of observations (which were used at different times).

**Participant orientation.**

Students participated in an orientation session where I explained and discussed the research process and the meaning of credibility. Given the complexity of these terms, I verbally explained, used the aid of dictionaries and a whiteboard to talk about the research process – as a “large homework or project in which I needed their help” – and the meaning of credibility as I made them “co-researchers” (Freeman & Mathison, 2009) in the study and developed in them a sense of ownership and responsibility. I moved on to the next activity only when students were able to demonstrate they understood the meaning of credibility. For example, students were able to articulate that they would listen and do things PE teachers told them because they were believable. These methods proved to be fruitful in generating understanding. The goal of this activity was to get students involved with the study, get them acquainted with the meaning of credibility, and begin developing a positive relationship with me.

**Open-ended questionnaire.**

The students completed an open-ended questionnaire (Appendix B) prompting them to list from most to least important the qualities, behaviors, and teaching skills which would make a PE teacher credible in their opinion and what influenced their perceptions of PE teacher credibility. Following the study of Fisher (1992), the questionnaire had an open-ended format with a brief description of credibility – which reinforced the discussion previously taken about
credibility – and an explanation of the study’s objective. Students had the choice to list anything (at least four) they believed would make a PE teacher more credible. In addition, students were asked to give an example when the PE teacher would perform the characteristics identified to verify their meanings and help organize the data according to the themes these characteristics suggested.

There were a few reasons for using this activity. As suggested by Freeman and Mathison (2009), it served as a “warm-up” activity for the discussion of teacher credibility – it assisted students in thinking and developing a better and deeper understanding about the construct – and it helped me develop a better relationship (“power balance”) with the students as they spent time with me. Particularly, the questionnaire was used to (a) reveal the words and themes students suggested the most, (b) compare the findings with the answers from the group and individual interviews for any differences, and (c) add additional questions to the group and individual interviews.

Student drawings.

There has been support for using drawings with young people as a method for collecting information and recording experiences and expressions. Multiple authors have encouraged the use of drawings as a data collection method (DiCarlo, Gibbons, Kaminsky, Write, & Stiles, 2000; Haney, Russell, Gulek, & Fierros, 1998). This activity was divided in two parts. Following the methods of MacPhail and Kinchin (2004), students were given a blank sheet of paper and color pencils and crayons and asked to, on part one, to draw a picture of “A PE Class I Like the Most” and, on part two, to draw a picture of “The Most Believable PE Teacher.” This activity served among many reasons, as an icebreaker and warm-up to build rapport with students and to
provide time to reflect on the topic, provide an alternative form of representation, and help focus the interviews (Freeman & Mathison, 2009). In addition, students were asked to draw together as a group about “their PE class.”

**Photograph elicitation.**

Students were asked to take 25 pictures in their communities, homes, and school about anything they thought influenced their perceptions of PE teacher credibility. Instructions to parents (Appendix C) were sent home to support children’s completion of the assignment. A digital camera was provided to participants who could not supply their own. Later, students were asked to select the five most influential pictures they took individually to be used during individual interviews. The purpose of this activity was to, while using images to elicit written or oral commentaries, promote empowerment, critical dialogue, and decision making among the participants in the study (Freeman & Mathison, 2009). Darbyshire, MacDougall, and Schiller (2005) suggested that using multiple methods of data collection, including photographs, “offers complementary insights and understandings that may be difficult to access through reliance on a single method of data collection” (p. 417).

**Observations.**

One of the advantages of direct observation is that the researcher can better understand the context where people interact (Patton, 2002). Participants and the PE teacher were observed using focused observation (Angrosino, 2005) where I looked for information pertinent to credibility. The observations occurred prior to the interviews to access participants’ initial perceptions of credibility in PE. This procedure allowed me to learn how students perceived PE, if they liked or disliked it, and if they always participated or just tried to avoid the
activities in the gym. Assessing participants’ skill level in PE aided in understanding their perceptions during the interviews. In addition, I wanted to learn how much they “believed” in their PE teacher, their personal attitudes toward their PE teacher, and if they liked or disliked their PE teacher.

Additionally, observation of the PE teacher’s characteristics was used in other activities to elicit responses about credibility. I wanted to identify what characteristics and behaviors the PE teacher demonstrated that made her believable according to the literature. Some characteristics include personal appearance (Melville, & Maddalozzo, 1988; Toomb, & Divers, 1972), gender (Glascock & Ruggiero, 2006; Rester & Edwards, 2007), misbehaviors (Banfield, Richmond, & McCroskey, 2006; Thweatt & McCroskey, 1998), verbal and nonverbal communication (Beatty & Behnke, 1980), student-teacher relationship (P. J. Cooper, Stewart, & Gudykunst, 1982), caring (Teven, 2007) and expertise (Farr, 2007). The open-ended questionnaire was used to confirm if the PE teacher in the study possessed any of the qualities mentioned by the students and determine if the teacher was credible in the eyes of the students. For example, if the teacher had many of the qualities indicated by the students in the questionnaire, the students should pay attention, listen, and engage in activities during class. Student-teacher interactions should also manifest students’ perceptions about the credibility of their PE teacher.

Information collected during observations was used to verify and compare answers from other data collection methods. It was also used to develop questions for the group and individual interviews. This activity helped students get used to my presence and improved our relationships. I observed students till I had a general idea about the students and their PE
teacher as it related to the credibility construct. Other observations were conducted after other data generation techniques such as group and individual interviews as a way to verify students’ responses. A total of four focused observations were conducted throughout the study.

**Group interview.**

Students were grouped according to their grade level, composing one group of 3rd graders and one of 5th graders, each containing two girls and two boys. Group interviews were dependent upon group dynamics and engagement of students and lasted between 15 to 25 minutes. Each group participated in two group interviews.

Data collection using group interviews (Appendix D) were divided in two parts: (a) students as researchers and (b) students as participants. During the first part of the group interviews, I used a “modified” group interview and asked students to be co-researchers in my study and help me develop ways in which I could generate trustworthy data with the participants. As “co-researchers,” I wanted the students to give ideas about activities I could use and questions I could ask during the interviews. There were two reasons for having the students as researchers. First, it helped me develop an empowering relationship with the students (Freeman & Mathison, 2009) which could get them more involved in the study. I wanted to give them a sense of participation and help establish rapport while increasing their level of comfort, which I believe, assisted in generating more trustworthy information during the interviews. Second, I wanted to learn more about them individually, their language, and culture.

In the second part of the group interview, I asked students questions (Appendix B) about credibility. In order to elicit responses, I used information from the open-ended
questionnaire, drawings and photographs. Also, I used the *Honesty Game* (Freeman & Mathison, 2009) where students finished open-ended questions as honestly as possible. This method supported students with their responses as they draw the questions from a hat and hold on to something. These questions were a continuation of the questions I asked in the group interview (Appendix D). The questions used were not of a personal nature and did not put the children in uncomfortable situations. These techniques served as a way to stimulate the students and aided in recall (Fontana & Frey, 2005). I also used information from previous data collection methods to verify information generated in this method. The information gathered in the group interviews informed decisions regarding the individual interviews.

**Individual interview.**

The individual interviews (Appendix E) gave “voice” to students’ interpretations and thoughts (Eder & Fingerson, 2003). During the interviews, I investigated students’ perceptions about PE teacher credibility one more time. I intended to use data generated in the previous data collection methods to help add questions to the interview while verifying information previously given by the students. During the interviews I worked the “power balance” with the students by facilitating a relaxed and informal environment to decrease the impact that adult-child interactions may have on students’ responses (Westcott & Littleton, 2005). By empowering the student during the interview, I built trust and made students feel comfortable enough to open up to me.

I used open-ended questions based on the interview guide method which lists questions or issues the interviewer plan to explore (Patton, 2002). This method gives more flexibility to the interviewer to explore issues that may arise spontaneously. The time spent with the
students and the number of meetings in the previous activities built a strong relationship between the students and me. The data generated in the questionnaire and group interview were used to prompt and facilitate students’ responses. In addition, I was able to verify the information given in the previous activities. At the end of the interviews I had a good grasp of what qualities, behaviors, and teaching skills students perceived to make PE teachers credible and how they constructed credibility. Each individual interview lasted 5 to 25 minutes depending on the richness of data and individual engagement. Data richness and saturation determined the number of interviews needed. Each student was interviewed two or three times.

Field notes.

This form of data collection was used alongside all data collection methods. Field notes were utilized to record all information pertinent to the context of the setting and what happened (Patton, 2002). Details of events that would be forgotten eventually were written down for later access, helping me remember specific situations. They contained information about the settings, what students did, thought, felt, and said, and my own personal feelings, thoughts, interpretations, and insights. These data helped me understand and support the data provided in the other methods of data collection. An effort was made to write the field notes as soon as possible to ensure accuracy. In summary, field notes “contain the ongoing data that are being collected. They consist of descriptions of what is being experienced and observed, quotations from the people observed, the observer’s feelings and reactions to what is observed, and field-generated insights and interpretations” (Patton, 2002).
Pilot Study

A pilot test was conducted to ensure feasibility and usefulness of the data collection techniques to be used in the actual study. More specifically, the participant orientation, open-ended questionnaire, drawing, and individual interview data collection methods were tested. One 5th grade boy from a city in the southern part of the state of Georgia was selected to participate in the pilot study. The results indicated that the open-ended questionnaire and drawing activities were easy to understand due to richness of data. The participant orientation and individual interview revealed that once some of the words used were modified, the participant was able to understand and provide rich information. For instance, the use of the words “being believable” was a substitute for “credibility.” Overall, the pilot study indicated that young children could, with proper modifications, express their thoughts and feelings about PE teacher credibility.

Data Analysis Techniques

Data generated through all data collection techniques were analyzed inductively, including data transcribed from group and individual interviews. Patton (2002) provides a clear explanation of inductive analysis:

Inductive analysis begins with specific observations and builds toward general patterns. Categories or dimensions of analysis emerge from open-ended observations as the inquirer comes to understand patterns that exist in the phenomenon being investigated... The strategy of inductive designs is to allow the important analysis dimensions to emerge from patterns found in the cases under study without presupposing in advance what the important dimensions will be. (pp. 55-56)
Data analyses were guided by Miles and Huberman (1994) four-step Flow Model approach – data collection, data reduction, data display, and conclusion drawing and verification – and carried out in relation to Source Credibility Theory (Hovland et al., 1953) as a way to provide a realistic view of students’ perceptions and construction of PE teacher credibility. Data were analyzed for themes that represented qualities, behaviors, and teaching skills making a PE teacher credible and the social structure in which students built their perceptions of credibility.

As noted by Miles and Huberman (1994), the four stages of data analysis occurred concurrently during the study. In my study, it meant that I carried out these steps of analysis in each of the data collection methods individually at first and collectively later. During the first stage, data was generated and initial analysis was conducted. Analysis of data started as soon as I walked inside the school for the first time and had my first field notes. Throughout the data collection techniques, initial patterns and themes were recorded. In the second stage, called data reduction, which “refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data” (p.10), I coded the data and organized them according to themes including data transcribed from interviews and field notes.

During the third stage, a display containing “an organized, compressed assembly of information that permits conclusion drawing and actions” (p.11) was produced. At this point data were sorted out into categories that best represented the data. Data transcribed and coded from interviews and field notes were coded individually first and combined later according to identified themes. Data were organized and aggregated in themes and categories related to how students perceived – qualities, behaviors, and teaching skills – and constructed the credibility of PE teachers. In the fourth stage of analysis, beginning at data generation, the
“analyst is beginning to decide what things mean – is noting regularities, patterns, explanations, possible configurations, causal flows, and propositions” (p.11). At this stage, I made sense of the data using Source Credibility Theory (Hovland, et al. 1953) as a reference to understand the school environment, responses and interactions of students, PE teacher, and others. For instance, I identified words such as “strong,” “funny,” and “intelligent” which could support the idea of a credible PE teacher. The resulting combination of data provided a view of how students perceived and constructed PE teacher credibility in their eyes.

**Data Trustworthiness**

As with any quantitative study, issues about validity and reliability transpire in qualitative research. Miles and Huberman (1994) suggested that the meanings that emerge from data being analyzed must be tested for their plausibility, sturdiness and ‘confirmability’ – their validity. In qualitative research, where trustworthiness parallels validity, the common positivist criteria for internal and external validity, reliability, and objectivity are replaced by terms that include credibility, transferability, dependability, and confirmability (Denzin & Lincoln, 2005) to address the central question posed by Guba and Lincoln (2005):

> How do we know when we have specific social inquiries that are faithful enough to some human construction that we may feel safe in acting on them, or, more important, that members of the community in which the research is conducted may act on them?

(pp. 206, 207)

To answer the aforementioned question, trustworthiness must be perceived not only as “a kind of rigor in the application of method” (p.205), but also as a type of rigor in interpretation of the
data. In addition to data analysis techniques, the following strategies were conducted to ensure data and analytical trustworthiness.

**Peer Debriefee**

Peer debriefing is the process of engaging with a peer in extensive discussions of the researcher’s findings, tentative analyses, conclusions, and field stresses to “test out” the findings and help make propositional implicit and tacit information the researcher might have (Guba & Lincoln, 1989). To increase accuracy of data collection and analysis, I continually discussed with my advisor my findings and interpretations in the study. During the study I periodically met and discussed issues related to data collection, data analysis, and findings. Having an experienced scholar to discuss and serve as a sounding board encouraged reflection and development of ideas that increased trustworthiness of the data.

**Reflexivity Journal/Audit Trail**

Another technique that was utilized to ensure trustworthiness was the keeping of a reflexivity journal – a kind of diary where the researcher records on a-daily or as-needed basis information about self and methods (Lincoln & Guba, 1985). The journal was divided in three parts as recommended by Lincoln and Guba: (a) daily schedule and study logistics, (b) a personal diary for analysis and reflection in terms of personal values, interests, speculations and insights, and (c) methodological log (audit trail) for decisions and rationale pertaining to methods. The information recorded in the journal provided reflection about decisions made and insight for decisions in every step of the study regarding data collection methods and analysis, findings, and discussions.
Triangulation

Triangulation refers to the process of using multiple methods to investigate a phenomenon to decrease data misrepresentation and misinterpretation of any one of the particular methods used. As Patton (2002) indicated, “studies that use only one method are more vulnerable to errors linked to that particular method...than studies that use multiple methods in which different types of data provide cross-data validity checks” (p. 248). The rationale for the use of multiple methods lies in the idea that the faults of one method are the strengths of a different method and the combination of methods help the observers achieve the best of each method (Denzin, 1970). In this study, data collection was completed with the use of an open-ended questionnaire, group and individual interviews, drawings, picture elicitation, field notes, and initial and post observations. The inconsistencies found in the results due to different data collection methods did not weaken the credibility of the study. It offered an opportunity for a deeper understanding and insight into the relationship between the phenomenon under the study and inquiry methods (Patton, 2002). By combining a multitude of techniques, I intended to “overcome the intrinsic bias that comes from single-methods, single-observer, and single-theory studies” (Denzin, 1989).

Transferability/Extrapolation

In qualitative studies, transferability (external validity) – which is always dependent upon the degree of overlapping and matching of salient conditions – is best established by the use of thick description, a term ascribed to anthropologist Gilbert Ryle and later elaborated by Clifford Geertz (Guba & Lincoln, 1989). Since qualitative studies aim to provide a thick description of a specific phenomenon, transferability is difficult to achieve. However, as Patton
(2002) indicated, a balance between depth and breadth can be achieved with the term developed by Cronbach et al. (1980) called “extrapolation.” The term implies that the researcher goes beyond the immediate results and makes thoughtful and logical “modest speculations on the likely applicability of findings to other situations under similar, but not identical, conditions” (Patton, 2002, p.584).

This study aimed to indicate the qualities, behaviors, and teaching skills students perceived to make PE teachers credible in their eyes. The data generated provided, to some extent, insight to teachers and administrators about credibility and what qualities, behaviors, and teaching skills students found important to increase PE teacher credibility. Any teacher could benefit from this study as it not only indicated specific credibility qualities, behaviors, and skills, but also insight about the credibility construct. Although this study was bound by its specific context, it allowed teachers to use the information provided and apply it to their specific contexts whatever they were.

Summary

The purpose of this study was to investigate students’ perspectives of PE teacher credibility. Guided by Source Credibility Theory (Hovland, et al., 1953) and framed by Symbolic Interactionism (Blumer, 1969), qualitative methods were used to obtain a thick, rich, and detailed description of how students perceived and constructed the credibility of PE teachers. Data collection methods included an initial observation, an open-ended questionnaire, group interviews, individual interviews, drawings, picture elicitation, field notes, and observations. Data analysis techniques included the Flow Model (Miles & Huberman, 1994) in relation to Source Credibility Theory. The methods of data collection and analysis were selected because I
believed they would complement each other and help create a more accurate and trustworthy account of students’ perspectives.
The purpose of this study was to investigate students’ perceptions and construction of physical education (PE) teacher credibility. Specifically, research question number two asked what personal qualities make PE teachers credible in the eyes of the students. This chapter presents the findings that emerged from the data addressing this question (Figure 1).

The notion that teachers’ appearance may affect the perceptions of students is hardly new. Over four decades ago, educational research indicated that teachers’ physical appearance, attire, and perceptions of competence influenced the opinions students had toward teachers (e.g., Chaikin, Gillen, & Derlega 1978). More recently, research studies in the field of physical education...
education have supported this notion (e.g., Bryant & Curtner-Smith, 2008, 2009a, 2009b; Dean, Adams, & Comeau, 2005; Melville & Maddalozzo, 1988) by indicating that students’ perceptions toward the PE teacher can be significantly influenced by teacher’s appearance. A major finding of this study concurs with this argument as participants suggested PE teachers should “look like one” in order to be credible in the eyes of students.

According to the children in the study, it seemed that appearance affords the PE teacher an early opportunity to establish his or her credibility. It appeared that students were able to make judgments about their PE teacher as visual contact was made. A PE teacher who “looks like a credible one” is more appealing and interesting to students because, in their eyes, that teacher appears to be more knowledgeable and athletic. In the study, the students indicated they wanted a PE teacher who could teach new skills and content which are important to students’ lives. In a few words, students wanted a PE teacher who was an expert in all facets of the subject. The PE teacher who “looks like one” conveys the idea he or she knows everything there is to know about PE and is able to perform every skill and every sport students can imagine. The credibility of the PE teacher would be increased in students’ eyes if the PE teacher, through appearance, displayed this idea.

According to the students participating in this study, the appearance of credible PE teachers was composed of two factors: (a) display of physical (or bodily) qualities, and (b) attire. The students felt that dressing appropriately was a key element to their conception of teacher credibility because it enhanced the teacher’s physical qualities and perceptions of expertise. The data supporting this theme and the inclusion of these factors will be discussed in the subsequent sections of this chapter.
Physical Qualities

The children in this study indicated that in order to “look like one,” a PE teacher should exhibit certain physical qualities. The physical appearance of the teacher not only makes first impressions, but also supports behaviors and teaching skills the teacher may possess. “Looking like one” affords the PE teacher the chance to communicate with students without saying a word. When a PE teacher “looks like one,” his or her appearance may suggest that students will learn, have fun, and exercise.

According to the data from this study, when the students first observed their PE teacher, they made judgments relating to athletic ability, behavior, and knowledge. This early assessment was later be supported or contradicted by behaviors and teaching skills the teacher exhibited, which in turn affected students’ perception about teacher credibility. For example, if a student observed and perceived the teacher to be athletic and knowledgeable, and later the student saw the teacher exercising and demonstrating how to perform exercises appropriately, the student’s earlier perceptions were reinforced and consequently, the student perceived the teacher to be even more credible. In short, physical appearance provides a glimpse regarding the quality of the PE teacher.

Students in the present study suggested that “looking like one” consisted of eight physical qualities that enhance the credibility of the PE teacher. These qualities were grouped in two sub-categories: (a) superficial and (b) more concealed. The first subcategory, superficial, indicates physical qualities that are quickly identifiable by the student. More concealed, the second sub-category, describes qualities that require more time and attention from students in order to recognize them.
Superficial Qualities

This sub-category of qualities refers to characteristics that students felt they could identify in a matter of seconds as they make visual contact with the PE teacher. At this time, students will make physical judgments about the teacher and connect the PE teacher with adjectives that best describe their physical characteristics. These characteristics assist in establishing first impressions about the teacher and contribute to students’ first perceptions as they relate to the credibility of the teacher. If the PE teacher possesses characteristics that students value and associate with PE and health, then the teacher will initially be deemed more credible by the students. Although such perception of credibility can change over time, it assists the PE teacher in starting on “the right note” with students. In the present study, students indicated a credible PE teacher should look (a) “in shape,” (b) “muscular,” and (c) “tall.”

Students from the study indicated a PE teacher should look “in shape” in order to be credible. Looking “in shape” refers to the idea that the PE teacher looks lean and not overweight or obese. It suggests that the PE teacher is someone who lives a healthy lifestyle. An example supporting this concept was the fact that all students drew a PE teacher of normal proportions when asked to draw the most believable PE teacher. The information given by Stacey (5th grade) provides a good example of how students believed a PE teacher should look “in shape.” In her drawing (Figure 2), Stacey drew a picture of a PE teacher who looks lean and athletic and wrote the word “skinny” – although the rest of her quotes and the picture seem to indicate that to Stacey, “skinny” means lean – as one of the qualities necessary to make a PE teacher credible. During one of her individual interviews, Stacey indicated that PE teachers
should look lean because they “don’t eat [unhealthy] so they are not [out of shape].” To Stacey, eating healthy directly impacts how the teacher looks.

In another example, Santa (3rd grade) indicated in his open-ended questionnaire, drawing, and one of his individual interviews that a credible PE teacher should look “in shape.”
When asked to explain in his interview how he knew his PE teacher was healthy, Santa conveyed the idea that the PE teacher should not be overweight when he said that “she is not really skinny, but she is in shape, she looks in shape.” Santa associated the idea of being healthy with the appearance of looking “in shape.” To him, when the PE teacher takes care of himself or herself, he or she will be healthy, and as a result, look “in shape.”

The children who participated in this study believed that when the PE teacher looks “in shape,” he or she has the knowledge about proper exercising to keep looking “in shape.” The students associated being “in shape” with a PE teacher who knows about proper nutrition and consumes healthy foods. Looking “in shape” conveys the idea the PE teacher has the motivation, desire, and discipline necessary to exercise, eat properly, and make the right choices to live a healthy life.

The students also indicated PE teachers should look “muscular” in order to “look like one.” Looking “muscular” proposes that the PE teacher appear relatively well-built with muscles that are visible. It portrays the idea that the PE teacher is strong and can perform many exercises that require strength such as push-ups and pull-ups. An example of what the children meant by this can be easily identified in three drawings where Snake, Stacey (Figure 2), and Santa (Figure 3) drew the picture of a credible PE teacher with large biceps. Looking “muscular” is supported by the previous quality as being “in shape” facilitates the appearance of looking “muscular.” Students also indicated that a PE teacher who looks “muscular” suggests a professional dedicated to being physically fit. They were able to associate competence to PE teachers who are successful in performing exercises that will make them strong. Consequently,
students would be more willing to listen to what PE teachers say because if they did, they would look “muscular” as well.

Figure 3. “The Most Believable PE Teacher “drawn by Santa

The last superficial quality offered by the children in this study that makes a PE teacher credible, in their estimation, is being “tall.” Being “tall” conveyed students’ idea that a PE teacher should be tall enough to perform activities such as grabbing the pull-up bar without assistance or shooting a basketball easily. In short, looking “tall” facilitates the performance of some motor skills. When PE teachers look “tall,” the children in the study believed that the teachers would be able to perform skills which students could not perform due to their height. Being “tall” makes the PE teacher look more athletic and able to perform difficult motor skills.
As a result, students would think highly of the PE teacher, which in turn may increase PE teacher credibility.

It should be noted that the concept of being “tall” was related to the stature of the children. Students indicated that their PE teacher was “tall” even though she was 5’5”. This concept suggested that the PE teacher must be taller than the students, which supports an increased ability to perform some physical skills. Perhaps a PE teacher who works with high school students may be required to have above average height in order to be taller than and deemed more credible by students. Among some of the students who indicated “tall” as a quality, Gamer (3rd grader) pointed out in an individual interview that PE teachers should be “tall” “so they could reach the pull-ups, so they could show you.” Supporting this idea, Santa (3rd grader) said that his PE teacher was “tall” enough that “she can play basketball.”

When the PE teacher “looks like one,” it indicates to students that the PE teacher is serious about the subject matter and is prepared to teach. When students in the study observed their PE teacher “looked like one,” they believed the teacher was there to teach them everything there was to know about sports, physical activity, and healthy living. This belief assisted in students’ perception that the PE teacher was an expert in the field and, therefore, students deemed their PE teacher more credible.

More Concealed Qualities

Contrary to the superficial qualities – the ones students needed only a few seconds to recognize – more concealed qualities were proffered by the children in this study as representative of physical characteristics that could only be identified over a longer period of time. These qualities require that the PE teacher exhibit behaviors that support such qualities,
which are manifested through the teacher’s appearance. In essence, more concealed physical qualities are less tangible and action-oriented, requiring the PE teacher to endorse his or her appearance with actions. In order to “look like one,” students indicated that PE teachers should be “strong,” “flexible,” “healthy,” “fit,” and “athletic.”

The children in the study indicated that a PE teacher looking “strong” would have to perform exercises regularly such as pull-ups and push-ups that demonstrate body strength. While looking “muscular” reveals a PE teacher who has relatively apparent musculature, being “strong” specified a teacher who could perform activities that require strength. All 3rd graders and one 5th grader indicated that the PE teacher ought to be “strong” in order to be credible. In his drawing, Gamer (3rd grade) wrote “30 push-ups” as one of the actions that indicate that a PE teacher is strong and thus credible. Stacey (5th grade), Fallen and Anne (3rd graders) wrote the word “strong” while Santa (3rd grade) wrote the word “very strong” on their drawings to indicate it as a characteristic of a credible PE teacher. When asked to give an example how he knew his PE teacher was strong, Santa said that she “did about 15 [push-ups] to show us once.” From students’ accounts, it was clear that the PE teacher must outperform the students in skills that require strength as a way to establish she or he is strong and “look like one.”

Being “flexible” was another quality students indicated was necessary for a credible PE teacher. To them, being “flexible” facilitated the performance of movement skills. It allowed the PE teacher to perform exercises at a full range of motion and demonstrate exactly the appropriate movement to students. To convey the idea that the PE teacher is flexible, (s)he should perform flexibility exercises such as touching toes or doing a “bridge.” Similarly with the concept of being “strong,” being “flexible” suggests that the PE teacher should, on a regular
basis, perform exercises that require some degree of flexibility (i.e., stretching, tumbling, etc.), preferably with students, to reinforce the concept that the teacher is flexible, and consequently, enhance students’ perception of teacher competence and credibility.

It is interesting to note that students had a profound understanding of the reasons for being flexible. They knew that flexibility facilitated performance. The following students’ testimonies exemplify this. January (5th grade) wrote in her drawing the word “flexible” and indicated in one of her individual interviews that the PE teacher should be flexible so he or she would be able to perform the exercises they would want students to execute. Providing a more practical application to this quality, Anne (3rd grade) indicated that a PE teacher should be flexible so she or he “could do like, back flips, and stuff, and she [a PE teacher] could actually teach you how to do stuff.”

Another quality students pointed out was the ability of the PE teacher to look “healthy.” When a PE teacher looks “healthy,” it sends a message that the PE teacher is in a state of good health. Looking “healthy” implies that the PE teacher performs behaviors that maintain and improve overall health. Consequently, students must be able to notice the PE teacher engaging in activities on a regular basis (i.e., exercising) and healthy eating while avoiding unhealthy behaviors (i.e., smoking or drinking) to conclude that the PE teacher looks “healthy.” It was clear from students’ testimonies that they understood the connection between the performance of healthy behaviors and the benefits from it. Anne’s (3rd grade) testimony provides an example of this. In her interviews she indicated that eating healthy and not smoking cigarettes or doing drugs was important for PE teachers to be credible because when “you can get fat and unhealthy,...you don’t feel good and you can’t exercise.” When the PE
teacher looks “healthy” and exhibits the behaviors students know promote health, students may begin to perceive the PE teacher as someone they can trust and genuinely cares about students’ well-being.

According to the children, a credible PE teacher should also look “fit.” In order to look “fit,” the PE teacher must, in addition to displays of strength, perform exercises requiring cardiovascular endurance for a longer period of time. Examples of these exercises include running, jumping rope, and playing soccer. When the PE teacher is “fit,” it allows her or him to perform and demonstrate motor skills that require a high level of cardiovascular endurance. Looking “fit” also communicates to students that the PE teacher believes in what he or she is telling students to do. Snake (5th grade) illustrated this point when he indicated in one of his interviews and wrote in his open-ended questionnaire that the PE teacher should be able to perform what he or she expects the students to do: “If he/she set for you to run a mile in six minutes or less, she [the PE teacher] should be able to do it.” Pepe (5th grade) underscored the importance of being “fit” as an important quality when he said in an individual interview that credible PE teachers “will stay fit, and they will make it look like they know what they are talking about because they actually do it.” Another way the children expressed PE teachers could demonstrate they are “fit” to students was to sporadically participate with students in these types of activities. When students observe the PE teacher performing activities that require some level of endurance, they may perceive the teacher to be “fit.” As a result, students would believe that the PE teacher exercises on a regular basis and would think highly of and perceive the teacher to be more credible.
In addition to the aforementioned qualities, students argued that being “athletic” was a quality that would increase the credibility of a PE teacher. Being “athletic” refers to the idea that the PE teacher can perform a variety of motor skills at a high level of performance. Whereas looking “fit” refers to the idea of executing exercises such as running, looking “athletic” suggests the ability to perform sport-related skills such as throwing a baseball or digging in a volleyball game. In a sense, it supports the idea that the PE teacher is “good” in performing motor skills. This concept was supported by the majority of the students who indicated that the PE teacher should be able to perform all the skills the teacher expects students to learn. For example, Snake (5th grade) wrote in his open-ended questionnaire that “if he/she [the PE teacher] introduced a new [station] or exercise then he/she would show you how to do [the] said activity.” When the PE teacher is “good” at performing activities, students perceive the PE teacher to be “athletic,” and consequently, knowledgeable about these activities. As a consequence, students would be prone to believe that they are learning appropriate movements from someone who is competent in the activity.

An important point is that what students suggested that make a PE teacher “look like one” was related to what was taught in the gym. The image students created about the PE teacher reflected their knowledge of PE. When students learned, primarily in their PE class, that exercise could make people stronger and healthier, students created the idea that the teacher should look “muscular” as he or she should exercise. In another example, students indicated that the teacher should look lean because they learned that by eating properly, people would be able to maintain a healthy body weight. In short, the knowledge gained about PE influenced
how students perceived PE, physical activity and exercise, and as a result, the credibility of the PE teacher. This concept will be discussed in chapter 7 Construction of Credibility.

**Dressing Like One**

In addition to displaying physical qualities, a PE teacher should also “dress like one” in order to be credible in the eyes of these students. Data collected via different methods illustrated that students strongly felt that the PE teacher should wear appropriate clothing to be considered credible. Examples of how important “dressing like one” was to students emerged during follow-up interviews where students were shown pictures of six PE teachers of different age, gender, and attire and asked to pick the one they thought was the most credible. All four 3rd graders and two 5th graders selected the same PE teacher who, among other reasons, was wearing PE clothing. Pepe (5th grade) indicated in his follow-up interview that he would not be able to pick the most credible teacher because “if they were all wearing athletic clothing, they would all be credible.”

According to the children, “dressing like one” created a notion that the PE teacher is ready to teach, move, and get involved with students. To “look like one,” a PE teacher must wear clothes that give the idea of movement and that movement could be performed in that clothing. Examples of this type of clothing include a t-shirt, sweat pants or shorts, and tennis shoes. In a few words, the PE teacher must wear athletic clothing. January (5th grade) said during a group interview that PE teachers should “always have on some PE clothes like sneakers, jogging shorts, and sweat pants, that kind of thing.” Santa (3rd grade) wrote on his open-ended questionnaire that his PE teacher is credible because she “wears gym clothes.” For Pepe, credible teachers “know what clothes to wear, like tennis shoes instead of flip-flops.”
Supporting this concept, students indicated that the pictures with the PE teachers who were wearing polo shirts and khaki pants looked like coaches and were more experienced, but were less athletic than the ones wearing athletic gear. For example, January said in one of her interviews that “they [PE teachers wearing athletic clothing] would be teaching their class instead of just telling them [students] how. I think that these two [wearing polo shirts], would just like tell students how to do it [instead of showing how to do it].” It was clear from January’s interview that she associated the idea of “looking like a coach” with being more experienced but less athletic. She associated the teachers’ attire with their ability or lack thereof to physically teach students.

The same phenomenon occurred with the picture of a female PE teacher who was wearing a sweater and jeans. She was depicted by the majority of students to be too “formal” and did not look to be a PE teacher who would be able to perform the skills expected of students to learn. This teacher was ranked by the majority of students, with the exception of one, among the lowest in credibility. However, as soon as the students were asked to imagine all PE teachers in the same athletic attire, she was ranked among the top PE teachers. In her case, the athletic attire assisted in highlighting her physical qualities – as students pointed out, “in shape” and “muscular.”

Although students’ testimonies strongly supported the concept of “dressing like one,” two negative cases warrant discussion. During the picture selection event two 5th graders did not select a PE teacher wearing a t-shirt as the most credible. Apparently, these two students selected someone who was more similar to them instead of selecting a PE teacher who appeared to be the most credible. It seemed that these students made a more personal choice.
as they were able to relate their own qualities with the teachers’. For instance, *Snake* (5th grade) selected a PE teacher who was older and less “in shape” than the others and was wearing a polo shirt and khaki pants. When *Snake* was asked the reasons for selecting him and not an “in shape,” and “more muscular” PE teacher, *Snake* said “he just got that look, you know, that he is believable I mean...he looks he is physically fit,...he looks like he had experience and that he is very believable in the physical education field.” From his insightful statement, it seemed that *Snake* selected someone more closely related to him, someone who was knowledgeable and not as lean as the others. In the same way, *January* selected a white female PE teacher who was wearing jeans and a shirt, but looked to be young and athletic, qualities similar to *January*’s.

These two negative cases suggested that at an earlier age, such as the 3rd graders, students may be more inclined to believe in a PE teacher who exhibits all physical qualities one could expect in a PE teacher and wears appropriate attire. In short, it appeared that students wanted the perfect PE teacher. However, as students get older and more experienced, as the 5th graders, they may begin relating with teachers who are more similar to them, teachers who have flaws and are less difficult to emulate.

It should be noted that data revealed that “dressing like one” may improve but does not guarantee a high level of credibility. Rather, “dressing like one” seemed to enhance the physical qualities the PE teacher may have. Supporting this idea, the four 3rd graders and two 5th graders selected the same PE teacher. Besides the fact that the teacher was wearing active gear, the students indicated that he looked strong, athletic, and healthy. It appeared that his physical
qualities were enhanced by his outfit which worked in combination with his physical qualities to portray the appearance of a credible PE teacher.

Summary

This chapter provided a description of physical qualities and proper outfits students identified to make a PE teacher credible in their opinion. The physical qualities indicated by students were “in shape,” “muscular,” “tall” (superficial qualities), “strong,” “flexible,” “healthy,” “fit,” and “athletic” (more concealed qualities). It was apparent from students’ testimonies that the physical appearance of PE teachers had an impact on students’ perceptions of teacher credibility. According to the children in the study, the more physically capable PE teachers look, the higher their chances of looking credible to their students. In addition, students suggested that the PE teacher should wear athletic attire to enhance their physical qualities. The idea given that the teacher was ready and able to exercise assisted students in perceiving their PE teacher more credibly.
CHAPTER 5

PRACTICES WHAT SHE PREACHES

Figure 4. “Practice What She Preaches” hierarchy of behaviors

The purpose of this study was to investigate students’ perceptions and construction of physical education (PE) teacher credibility. Specifically, research question number three asked what behaviors make PE teachers credible in the eyes of the students. This chapter presents the theme that emerged from the data and answers this question (Figure 4).

A prevalent theme that emanated from the data suggested by the students was that in order to be credible PE teachers should “practice what they preach.” In short, this theme represents the idea that credible PE teachers demonstrate a set of behaviors that serve two related purposes. First and most immediately, the exhibition of these behaviors reinforces what
the PE teacher teaches in the gym. Second and more importantly, these behaviors are meant to set good examples and inspire students to emulate healthy behaviors. As a result, the display of these behaviors could lead students to become physically educated individuals.

PE teachers should “practice what they preach” to reinforce their teaching. For the students in this study, their PE teacher was their main source of knowledge about PE, and consequently, they expected her to validate what she was communicating. The children believed that if the PE teacher was teaching concepts that included the proper way to perform motor skills, how to eat healthily, and the benefits of exercise, the PE teacher should be able to demonstrate to students that these concepts worked in the real world. They expected the PE teacher to perform everything she wanted students to perform and put into practice everything she was teaching. To the students, it made sense that if their teacher was teaching something for their benefit, the PE teacher should do the same for her benefit. In essence, the children suggested that PE teachers should be physically educated individuals, who believe and apply the concepts they teach and live a healthy lifestyle. For this reason, the behaviors of the PE teacher must align with his or her “preaching” and demonstrate to students that what students are learning is valuable. The PE teacher ought to serve as a living example to validate what he or she teaches. A comment from Stacey (5th grade) strengthens this argument. To her, credible PE teachers “follow the rules of what they are teaching. Like, when they are teaching about how to take care of your body, you don’t go see them do the exact opposite” (individual interview).

The students participating in this study also indicated that if children are to be physically educated individuals, PE teachers should lead the way and show to students what behaviors are necessary for developing a healthy lifestyle. Supporting this concept was the fact that
numerous times throughout interviews students suggested that a PE teacher should “set an example” when discussing what behaviors were important to improve the credibility of PE teachers. For example, when Stacey was asked, in an individual interview, why it is important that PE teachers eat healthily, she said: “It is not good if you see your PE teacher [say] ‘eat healthy kids’ and then you go see her pile up a plate with a bunch of cake. That sets a bad example for the kids.”

When PE teachers “practice what they preach,” they give practical examples of healthy behaviors that students should follow. They demonstrate to students that these behaviors could be assimilated and performed for life. In a sense, “practicing what they preach” indicates to students that they can be successful in adopting these behaviors and becoming physically educated adults. This notion of role modeling was suggested by every student in the study. For instance, when January was asked the reason PE teachers should be healthy, she said, “because they should, to be able to teach, and tell us how to be healthy, I think that they should be healthy. So they would be setting a good example for us.” In another example, when Santa was asked why credible PE teachers should exhibit healthy behaviors, he simply replied, “to be a good influence,” and later added, “...because they want you to be healthy.”

Students’ testimonies suggested that when students acknowledge a PE teacher doing what he or she encourages students to do, students’ perception of that PE teacher’s trustworthiness is heightened. In turn, the children can begin to believe that they can trust their PE teacher about the things he or she says, that the PE teacher is worthy of their attention as they will learn something important for their lives. An excerpt from Fallen’s interview gives an example of how “practicing what she preaches” enhances the credibility of PE teachers. After
learning that her PE teacher does “good things” and doesn’t do “bad things,” Fallen believed
that her PE teacher was credible, and as a result, assumed that she would never engage in bad
behaviors:

**Researcher:** Why do you believe in her [PE teacher]?

**Fallen:** I know I can trust her cause I have seen her do a lot of good things. I have never seen her do any like, like smoking or stuff like that.

**Researcher:** So she sets a good example?

**Fallen:** Yeah. She doesn’t do bad things like, maybe some PE teachers would just do it, because the students would never know, but I know Mrs. Vivian [pseudonym] would never do that.

Although students expected PE teachers to set good examples in everything they do, they indicated specific behaviors that are elemental to making PE teachers credible. They are behaviors that the PE teacher should exhibit. These behaviors exemplify the lifestyle of the PE teacher.

**Behaviors**

The Merriam-Webster Dictionary (2013) defines a behavior as “the manner of conducting oneself; anything that an organism does involving action and response to stimulation.” Thus, in the present study, a behavior was defined as an observable activity performed by the PE teacher on a regular basis. In the opinion of the students, a PE teacher would be deemed more credible when he or she (a) exercises, (b) plays sports, and (c) performs peripheral behaviors. These behaviors will be discussed in the following sections. It should be noted that these behaviors reinforce all the physical qualities previously discussed in chapter 4.
_Looks Like One._ For example, a teacher who exercises and plays sports regularly will more likely be able to demonstrate in class that (s)he is “fit” and “athletic” to the students.

**Exercises**

According to the children in this study credible PE teachers are those who “practice what they preach” and, to them, it meant that PE teachers should _exercise_ on a regular basis. When the PE teacher instructs students about _exercise_ and students understand the benefits associated with it, they expect the PE teacher to do it. The 3rd grade students who participated in the study provided strong examples of this rationale. _Gamer_ (3rd grade) wrote (figure 5) in his drawing of “The Most Believable PE Teacher” the word “_exercise_” as one of the behaviors a credible PE teacher should perform. In one of his interviews, _Santa_ (5th grade) indicated that

*Figure 5.* “The Most Believable PE Teacher” drawn by _Gamer_
the teacher should exercise “so they could stay in shape and not be real fat.” In another example, Fallen wrote in her open-ended questionnaire that a credible teacher “exercises A LOT.” For these students, exercise makes people healthy. Since the PE teacher is the person who tells them to be healthy, they expect the PE teacher to exercise.

It was clear from students’ responses that PE teachers should engage regularly in physical activities – such as running, jogging, riding a bicycle and lifting weights – which would enable the PE teacher to demonstrate the activities to students to learn and emulate in order to develop and maintain skills and physical health. The following data are examples of this line of thinking. Stacey (5th grade) wrote in her drawing of “The Most Believable PE Teacher,” the words “fit and active” to indicate the PE teacher should exercise while Pepe (5th grade) said in one of his interviews that credible PE teachers “will stay fit and they can be healthy, so they can show you how to do things more easily.” When PE teachers “practice what they preach,” they exercise and set the example for students, demonstrating it is important that students exercise in order to perform a multitude of activities.

According to the children in the study, the performance of these exercises reinforces the PE teacher’s physical qualities because students are able to make the connection that physical qualities are a product of proper exercising. For example, the students suggested that when they knew that their PE teacher exercised on a regular basis, they believed their teacher not only looked “in shape,” but truly was “fit” and “healthy.” When the students observed their PE teacher running at school and in the neighborhood, they assumed that she was “fit” enough to run and demonstrate to students how to run. The students concluded, then, that their teacher
exhibited her physical qualities because she exercised on a regular basis in order to develop them.

**Plays Sports**

*Play sports* was another behavior PE teachers should demonstrate, according to the children in this study, in order to “practice what they preach” and, therefore, be credible. This behavior specifies that the PE teacher should *play a variety of sports* in order to be more credible in the eyes of the students. Whereas the previous behavior (i.e., *exercises*) suggested engagement in physical activity in a broader sense (e.g., running and lifting weights), *plays sports* indicates participation in sports that require specific motor skills such as basketball and soccer. For instance, *Fallen* (3rd grade) wrote in her open-ended questionnaire that a credible teacher “*plays sports.*” When the PE teacher *plays sports*, it conveys the idea to students that the PE teacher engages in a variety of sports on a regular basis which, in turn, helps the PE teacher develop his or her motor skills, knowledge, and overall physical health.

It was distinct from students’ statements that they understood that by *playing sports* the PE teacher would learn the specific motor skills associated with these sports and be able to proficiently demonstrate these skills to students. An example of this rationale was given by *Stacey* (5th grade) in one of her interviews. *Stacey* indicated that she believes her teacher is credible because *she* has witnessed that “*she [PE teacher] participates in sports at the park and stuff.*” Agreeing with *Stacey*, *Gamer* (3rd grade) pointed out the personal gains for the PE teacher when he said, “*she like gets more strength by playing...sports like football and you catch the ball, or soccer kicking the ball.*”
In addition, students suggested that by playing sports the PE teacher could seemingly increase her knowledge and proficiency in the PE content. The following example supports this rationale. For Stacey, by playing sports the PE teacher demonstrated to students she was knowledgeable. When Stacey was asked why the PE teacher should play sports, she answered that when “she [PE teacher] participates with the students, you can tell that she knows what she is teaching.”

Playing sports also appeared to support the physical qualities PE teachers may have. The data indicated that once the students learned that by playing sports one could develop personal health, physical skills, and fitness, and they observed their PE teacher playing sports, students assumed that the PE teacher was enjoying the benefits associated with playing sports. Consequently, students were more inclined to perceive that their PE teacher was someone who, among other qualities, was “fit” and looked “in shape.” These qualities, as outlined in chapter 4 Looks Like One, are characteristics the children in the study associated with the credibility of the PE teacher. Additionally, the perceptions students had about their PE teacher assisted in reinforcing what their PE teacher did in the gym. As students observed their PE teacher performing appropriate sports skills, they understood that the teacher’s physical qualities helped in her performance of sports. At this time, students began to realize that their PE teacher was “practicing what she preaches.” As a result, their perception of their PE teacher’s credibility was increased.

**Behaviors Enforcing Peripheral Goals**

Whereas the previous two sections described behaviors that are the center focus of what goes on in the gymnasium (i.e., the performance of exercises and sports), this section
delineates behaviors that reinforce the more peripheral goals of PE. These behaviors represent some of the secondary objectives PE teachers should aspire to teach in order to develop physically educated individuals. Nevertheless, students indicated that the exhibition of these behaviors supported that PE teachers “practice what they preach” and as a result, enhanced PE teacher credibility. The following are examples of this type of behavior. According to students, a credible PE teacher (a) eats healthy, (b) maintains hygiene, and (c) avoids unhealthy behaviors.

**Eats healthy.**

Every student in the study indicated that PE teachers should eat healthy in order to “practice what they preach.” For instance, *Fallen* and *Santa* (*3rd* graders) wrote respectively in their open-ended questionnaire that a credible teacher “eats right” and “eats healthy.” *Stacey* (*5th* grade) wrote in her drawing of “The Most Believable PE Teacher” the words “eat healthy” as a behavior a credible teacher should have. *Anne* (*3rd* grade) not only wrote in her open-ended questionnaire that a teacher “eats healthy food,” but also gave examples of what healthy foods may be: “They eat apples and carrots.” When the PE teacher eats healthy, this behavior communicates to students that the PE teacher is someone who is knowledgeable about the benefits of consuming a healthy diet and what foods are associated with these benefits. It was apparent from students’ statements that they comprehended the potential benefits of eating healthy. *Pepe’s* (*5th* grade) account is an example of how students perceived this behavior. During one of his individual interviews, *Pepe gave a rationale for a teacher to eat healthy* when he said, “if they eat healthy, they will stay fit.”

In addition, students suggested that by eating healthy, PE teachers could reinforce their physical qualities. For example, the above comment given by *Pepe – suggesting that by eating*
Healthy PE teacher will stay fit – also indicated students were able to associate that the performance of this behavior would improve the appearance of the PE teacher. Once students learned in the gymnasium that eating healthy would assist with their physical health and how they looked, they associated eating healthy with the physical qualities discussed in the chapter 4 Looks Like One. When students were able to make this connection, they were more inclined to believe that their PE teacher was “in shape,” “fit,” and “healthy.”

Since students valued the habit of eating healthy and associated this behavior with PE teacher credibility, PE teachers could improve their credibility by telling and displaying to students that they do eat healthy, and therefore, that they “practice what they preach.” For example, the students in this study indicated that their PE teacher eats healthy foods in the school cafeteria. Students also indicated that their PE teacher eats healthy because she had mentioned in a nutrition PE lesson that she eats healthy. At this time, the PE teacher reinforced the idea that she eats healthy and modeled this behavior to students by giving examples of healthy foods she eats. On the other hand, PE teachers should be mindful that students may observe everything their PE teachers do, and consequently, should avoid eating unhealthy foods in the presence of students.

Maintains hygiene.

Another behavior students indicated PE teachers should exhibit to “practice what they preach” was maintaining proper hygiene. This behavior relates to the ability of the PE teacher to practice and maintain personal cleanliness that is conducive to health. Examples of this behavior would be wearing clean clothing, bathing regularly, and having appropriate hair trimming. When PE teachers “practice what they preach,” they look professional and clean. PE
teachers who *maintain hygiene* portray to students they are individuals who understand the importance of proper hygiene for the prevention of disease, social acceptance, and overall health and wellness. They are individuals who show to students how someone should take care of himself or herself.

Although this characteristic was only mentioned directly by one student, this behavior deserves attention as many students indirectly suggested its presence. Perhaps a reason for this lack of discussion about this behavior was that students took this topic for granted. Given the fact that all students in the study displayed proper hygiene on a daily basis, it is rational to think that this behavior was something students assumed every person already performed. Students’ testimonies indicated that they believed the teacher should look healthy, clean, and wear proper clothing, Stacey (5th grade) indicated in one of her individual interviews that the teacher should *maintain hygiene* to stay healthy and set “*an example for the students.*” If one considers that students showed consideration for the visual appearance of the teacher, it appears that the students would perceive a PE teacher more credible if he or she exhibited *proper hygiene.* It was clear from students’ drawings, interviews, and discussions that they assumed PE teachers, as well as other adults, normally perform this behavior to a certain degree. PE teachers who would display a low or a high level of hygiene could increase or decrease his or her credibility in the eyes of the students.

**Refrains from unhealthy behaviors.**

Supporting the idea PE teachers should exhibit healthy behaviors, PE teachers who “practice what they preach” should also *refrains from unhealthy behaviors* in order to increase their credibility. While the exhibition of healthy behaviors could set good examples to students
and increase the credibility of the PE teacher, the *exhibition of unhealthy behaviors* may neutralize or even decrease credibility. In a few words, the PE teacher should avoid setting, as *Fallen* (*3rd* grade) indicated, "*bad examples*" for students. According to the children in the study, when students observe a PE teacher exhibiting *unhealthy behaviors*, they may realize the PE teacher is contradicting what he or she is “preaching,” and consequently, students could perceive their PE teacher as less credible.

The concept of *refraining from unhealthy behaviors* suggests that any behavior that could be detrimental to one’s physical health should be avoided by the PE teacher. For example, students indicated, during their group interviews, that PE teachers should not eat unhealthy foods, use drugs, smoke cigarettes, use tobacco products, or drink alcohol. In her individual interview, *Anne* (*3rd* grade) not only indicated that the PE teacher should eat healthy to be more credible, but also “*not smoke and not do drugs.*” Although the students in the study may never know if their PE teacher does or doesn't *refrain from unhealthy behaviors*, they indicated it was important that PE teachers display only good behaviors to students in order to increase their credibility. Apparently, if students saw their teacher performing *unhealthy behaviors*, they would begin believing the idea and conceptualize that their teacher was unhealthy. As a result, these students could think that their PE teacher was contradicting what she was informing the students (e.g., eat healthy) and as a result, the teacher could be deemed less credible by the students. The following testimony from *Fallen* (*3rd* grade) is an example of this rationale. When she was asked the reasons for believing her PE teacher in one of her individual interviews, she said:
I know I can trust her cause I have seen her do a lot of good things. I have never seen her
do any like smocking or stuff like that…. She doesn’t do bad things like, maybe some PE
teacher would just do it, because the students would never know, but I know Mrs. Vivian
would never do that.

**Summary**

This section presented the findings indicating that a PE teacher should “practice what
she preaches” and described behaviors students believed make for a credible PE teacher. These
behaviors related to characteristics of a PE teacher on a personal and professional level.
According to the children in the study, PE teachers should live a lifestyle congruent with what
they “preach” to students. In addition, the data indicated that students believed PE teachers
should set the example for students to follow. In the present study, students indicated that a
credible PE teacher who “practices what he or she preaches” (a) exercises, (b) plays sports, and
(c) performs peripheral behaviors.

Additionally, these behaviors supported the findings outlined in chapter 4 as these
behaviors were aligned with physical qualities students identified as necessary for a PE teacher
to “Look Like One” and consequently, to be credible. As students in the study were able to
observe that their PE teacher performed behaviors that set good examples and supported
“what she preached,” students’ perception of their PE teacher’s credibility was elevated.
The purpose of this study was to investigate students’ perceptions and construction of PE teacher credibility. Specifically, research question number four asked what teaching skills make a PE teacher credible in the eyes of the students. This chapter presents the findings that emerged from the data addressing this question (Figure 6).

According to the children in the study, a credible teacher must be an “awesome” pedagogue in order to be credible. This concept emanated from the data as students suggested a credible PE teacher is one who performs a variety of effective teaching skills which help students acquire the PE content. For these students, the concept of a credible PE teacher “just
rolling out the ball” and letting students play was unsatisfactory. In short, this theme revealed actions that a credible PE teacher does in the gymnasium. It is important to highlight that some of these skills were suggested through the indication of personal qualities and probing was necessary to elicit what behaviors might represent those personal qualities. For example, the quality of being “fair” revealed a teacher’s ability to demonstrate the teacher has no favorites and the rules in the gym should be followed by everyone without exception.

The numerous teaching skills suggested by the students reflected a set of commonalities that represent what they thought to be good teaching practice. These skills revealed that an “awesome” pedagogue, and therefore credible PE teacher, (a) promotes students’ security, (b) ignites students’ positive attitudes, and (c) stimulates students’ engagement with the content. It should be noted that although the organization of these categories and skills may suggest a lack of relationship among them, this was not the case. In fact, data indicated there was a level of interaction among these categories and skills. For example, by igniting students’ positive attitude, students felt more positive about PE and as a result, more willing to engage with the PE content. In the same manner, by encouraging students (i.e., a teaching skill), the PE teacher promoted students’ security and ignited students’ positive attitudes simultaneously. The following sections will discuss these themes while providing evidence and expanding on the teaching skills that exemplify each category.

**Promotes Students’ Security**

According to the participants in the study, a credible PE teacher should exhibit teaching skills that promote students’ security. These instructional skills were directed at developing students’ emotional and physical well-being – and consequently stimulating student learning –
as students that felt safe, nurtured, and protected were more likely to be engaged and learn. Through these teaching skills, the PE teacher has the opportunity to express to students that he or she is “caring” and “trustworthy” – two of the three dimensions of Source Credibility (Hovland et al., 1953). These abilities present a PE teacher who has a personal interest in students.

The students in this study suggested that when they felt safe, they believed their PE teacher would be there to help and support them no matter what they did. They felt free to try new learning experiences without the fear of making mistakes, being humiliated, or getting hurt. The children in the study were able to provide some examples of teaching skills the PE teacher could perform that may assist students feeling secure. They pointed out that a PE teacher should (a) be present, (b) treat students equally (c) display tranquility, and (d) protect students physically.

The teacher’s ability to be present suggests a capacity to overcome any problems the teacher may have. It implies stability in the life of the PE teacher allowing her or him to be in the gym day in and day out ready for teaching. The following comment from a student exemplifies this rationale. In her open-ended questionnaire, January (5th grade) wrote “she doesn’t take many days off. In my 6 years at this school she has only missed about 5 days.” She later added in an individual interview that being present was necessary for the credibility of the teacher because “the teacher would have to be here most of the time, so she could demonstrate everything to us.” It was clear from January’s statement that she valued someone who ensured that students would not miss any learning opportunities because of absence. Most importantly, the concept of the PE teacher not missing many days indicated a commitment to students who
felt that the PE teacher was someone who was always there for them, and consequently, someone they could trust.

The children in the study also indicated a PE teacher should treat students equally in order to make students feel they are as important as anyone else in the class, and as a result, promote student security. When students believed their PE teacher treated students equally, they knew their teacher had no favorites and the rules of the gymnasium should be followed by everyone without exception. The statement provided by Gamer (3rd grade) is an example of this. He indicated during one of his individual interviews that a credible PE teacher should treat students equally because “you can’t let someone [a student] do something fun and not [let] all the other kids [students] do something fun.” It was apparent from Gamer’s statement that he needed assurance of equality in the class before he was going to attribute credibility to his PE teacher. It appeared that students felt that everyone should have the same rights and responsibilities where no student would have an advantage over another. When students realized they were treated equally by their teacher, where everyone was cared for, there were fewer chances of students feeling inferior or neglected. When this happened, it seemed that students felt accepted and secure, and consequently, more positive about participating in the activities provided by the teacher.

According to the children, the teacher’s ability to display tranquility was required to promote students’ security as well. When a PE teacher displays tranquility, he or she is able to promote an environment that assists students in maintaining a low level of personal anxiety or stress. This concept was exemplified by a few students via different data collection methods. Anne (3rd grade) wrote in her open-ended questionnaire that credible teachers “don’t yell at
you.” For Fallen (3rd grade), a credible teacher “doesn’t get really mad at us when we do something wrong” (open-ended questionnaire). For Pepe (5th grade), PE teachers should display tranquility to students because “it could take you a long time to get something down” (individual interview).

When students were participating in activities in the gym, it was important that they felt calm and secure about themselves. It appeared that the children believed that negative thoughts and feelings affected their confidence in their abilities and consequently, impaired learning. When their PE teacher displayed tranquility, students knew they could take their time to try and practice their skills without feeling any pressure to do it quickly or fear to perform it incorrectly. It was clear that students preferred a teacher who understands that students make mistakes and is willing to take the necessary time to ensure students learned the content at their own pace.

Additionally, students pointed that a PE teacher should protect students physically in order to be an “awesome” and thus credible pedagogue. Whereas the previous teaching skills promote students’ emotional security, protecting students physically indicate an interest – exhibited through actions – that directly promotes and maintains students’ physical well-being. Anne’s (3rd grade) testimony exemplifies this idea. She indicated in an individual interview that a teacher who protects students will help if someone falls and gets hurt. In addition, she said her teacher protected students because “when she is telling you instructions you can understand that she is trying to keep you safe.” It was apparent from students’ testimonies that physical security was an important element to student learning. It appeared that students’
perceptions of physical safety allowed them to engage in activities without the fear of physically getting hurt, their chances of learning the PE content were enhanced.

**Ignites Students’ Positive Attitudes**

The students in this study suggested an “awesome” pedagogue should trigger students’ positive attitudes in order to be credible. When the PE teacher ignited students’ positive attitudes, students felt good about coming to PE because they believed they would have an enjoyable learning experience. Students felt optimistic about themselves and their own abilities. When the PE teacher ignited positive attitudes, students felt they could learn and perform the activities their PE teacher had planned for them. Students wanted to come to PE because they wanted to have a great time. According to the children, an “awesome” PE teacher needs to, in order to ignite students’ positive attitudes and consequently increase his or her credibility, (a) exhibit enjoyment, (b) treat students well, and (c) provide encouragement.

A teaching skill students recognized that ignites students’ positive attitudes was the *exhibition of enjoyment*. This skill specifies that the PE teacher takes pleasure in his or her work and working with kids. Observation, field notes, and informal conversations suggested that when students were able to observe through teacher’s verbal and non-verbal communication (e.g., body language, a smile, or the tone of the voice) that their teacher appreciated what she was doing, students believed their PE teacher enjoyed her profession. The data provided substantial evidence that the PE teacher took pleasure in her job. Field observations indicated that the PE teacher was always smiling, enthusiastic, and energetic when working with her students. It was also apparent that her behavior affected students as they responded positively to her actions. Students would smile back and try harder to perform their activities.
Once students perceived their PE teacher *enjoyed* what she was doing, they knew their teacher wanted to be there and would do her best to benefit students. These students associated a *joyful* teacher with a teacher who is more knowledgeable and invested in students’ learning experiences. The following statement from a 5th grader provides a strong example of how students perceived the importance of having a *joyful* PE teacher. Supporting what she indicated in her drawing, Stacey said that PE teachers should *exhibit enjoyment* because “*when they are happy [it] means they like what they are doing, and when they like what they are doing, they are gonna do it with their best, and they know about it more*” (individual interview).

It was apparent from students’ statements that they believed PE teachers should demonstrate a genuine sentiment for teaching PE to children. It appeared that such enjoyment could encourage the PE teacher to develop his or her abilities, knowledge, and exhibition of skills that would ultimately enhance student learning. The students believed that a teacher who *exhibits enjoyment* would develop more positive learning experiences. It seemed that students’ perception that the teacher was there because she *enjoyed* what she was doing enhanced the atmosphere of the gym and students felt more positive about their attitudes.

Students indicated that a teacher should also *treat students well* in order to ignite students’ positive attitudes. Whereas the previously discussed ability to *treat students equally* suggested a level of fairness when dealing with students, the ability to *treat students well* indicates a level of caring. Students were able to provide specific examples about this concept. Anne (3rd grade) testified in one of her individual interviews that “*when you have to go to the bathroom she won’t say ‘hold on’, she will let you go.*” In addition, she said that a credible PE teacher “*doesn’t say bad words.*” Santa (3rd grade) implied that *treating students well* meant
that the PE teacher would redirect students if they were not following directions by saying (in a calm voice), “you should be doing this or that.”

When the PE teacher treated students well, students felt comfortable to do or ask for things they needed. Students understood that they had some freedom to be themselves. In short, they believed their PE teacher had their best interests in mind. When students felt this way, the PE class became more than just a class they had to attend. It transformed into a place where students felt invited, respected, and positive.

In addition, the children pointed out that a credible PE teacher ought to provide encouragement to ignite students' positive attitudes. This teaching skill refers to the ability of the teacher to execute actions (e.g., providing verbal praise or giving a high-five) that increase students’ desire to perform and as a result, drive students to try and achieve success in the gymnasium. In the study, the children indicated their PE teacher used different ways to encourage them, including verbal and non-verbal communication, body language, and participation in the activities with students.

The students in this study had no difficulty identifying the provision of encouragement as an important skill a credible PE teacher should perform. For example, Pepe (5th grade) indicated in an individual interview that when the PE teacher exhibited such skill, students felt inspired to participate and perform the activities planned by the PE teacher. Stacey (5th grade) indicated in one of her individual interviews that the ability to encourage was “a main one” skill that will make teachers credible. When prompted to expand on her idea, Stacey added that teachers “are not just like, seeing your level and letting you be there. They are trying to encourage you to do better.” When the PE teacher encouraged the students, they felt positive
and compelled to participate in the activities. As a result, students believed they were performing well and capable of achieving all the challenges the teacher had for them.

**Stimulates Student Engagement with Content**

This category describes teaching skills that exemplify what a PE teacher should demonstrate to stimulate students’ engagement with the PE content and increase his or her credibility. Whereas the previous sections delineated teaching skills that promote students’ security and ignite positive student attitudes—which contribute to student learning in a peripheral role—this section describes teaching skills that are essential to students’ acquisition of knowledge. Without these skills, learning would not take place. This category had the highest number of skills since students demonstrated a high level of interest in their learning.

When a PE teacher stimulates students’ engagement with the content, the teacher may heighten students’ chances of learning the physical skills and cognitive concepts in the lessons. When students engage with and learn the content, their likelihood of being successful might be enhanced. In brief, these teaching skills are the essence of effective teaching. It was apparent in the study that as students engaged with the content and concluded they were learning and being successful, their perceptions of teacher credibility were enhanced.

The teaching skills students designated stimulate students’ engagement with the content suggested the existence of two subcategories of skills that were performed (a) *ante* (Latin for “before”–thus, before) class and (b) *in situ* (Latin for “in the natural or original position or place”–thus, during) class. The following sections offer a discussion of these subcategories and the teaching skills they encompass.
**Ante Skills**

This subcategory describes teaching skills used by the teacher before students come to the gymnasiu, during the preparation time for class. These skills aid the PE teacher in planning, selecting, and preparing activities for the lesson. When the PE teacher uses these skills, he or she is able to prepare lessons and activities that may better match students’ needs, maximize opportunities for learning, and provide a stimulating learning environment.

Although students in the study could not observe the PE teacher performing these skills, they were able to notice the outcomes of these skills. For example, despite the fact students did not know how much time the teacher spent planning and arranging the necessary equipment for activities, they were able to identify that the appropriate equipment was available for use in the gym. In essence, these teaching skills prepared students’ learning experiences, making teaching more effective. Without them, the PE teacher would have difficulty performing effectively the *in situ* teaching skills. The children in the study were able to provide a few specific examples of this subcategory. According to them, a PE teacher should (a) organize, (b) vary, and (c) enhance learning experiences to stimulate students’ engagement with the PE content.

According to the students, the teacher’s ability to *organize* activities is necessary in the stimulation of students’ engagement with the content. It relates to the ability of the PE teacher to effectively plan and set up the classes, activities, and gymnasiu to promote learning. The following comments from students demonstrated why students found it necessary that the teacher *organize* students’ experiences. When asked the most important thing he would tell a PE teacher to be credible, *Gamer* (3rd grade) said in one of his group interviews, while reflecting
about his teacher, that a credible teacher should “have a schedule to keep track of all the things that we have to do.” Gamer’s statement suggested that in his opinion a credible PE teacher should have goals and be able to sequence lessons and activities to maximize learning.

Supporting Gamer’s impression of organization, Snake (5th grade) mentioned in his group interview that teachers “pretty much they have to keep organized, have to make sure what activity does what.” When the PE teacher organized the lessons, students had more appropriate opportunities to learn. Students knew what they were supposed to do and what was expected of them. Students’ testimonies suggested that the ability to organize activities allowed for the maximal development of skills and higher chance of student success.

Students revealed that PE teachers should also vary the activities in which students participate. This teaching skill reveals an ability to develop, prior to the beginning of a lesson, a collection of activities in order to engage students with the content. This skill was easily identified in students’ accounts. For instance, January (5th grade) wrote in her drawing that a credible teacher “does different activities.” In one of his group interviews, Snake (5th grade) indicated he enjoyed having many activities to perform “probably because all the activities that she [his PE teacher] makes us do, all the variety and all and some stuff has challenge to it.”

Supporting this idea, the drawings made by 5th graders Pepe, Snake, January, and third graders Gamer and Anne about “The PE Class I Like The Most” showed that students enjoyed having a variety of activities to perform. Gamer’s drawing (figure 7) titled “Space Gym” had a ladder, a slide, a floating trampoline, a vending machine, and a track. Although some students did not draw many activities in their drawings, they indicated that they appreciated variety in the lesson. For example, Fallen (3rd grade) drew only a soccer field, but indicated during a
Figure 7. “The PE Class I Like The Most” drawn by Gamer

follow-up interview that “you could still do other things besides soccer...like you still could do the volleyball and the hippity-hop and basketball if we had basketball nets in there.” Based on students’ accounts, it seemed that having a variety of activities assisted in keeping students interested, motivated, challenged, and engaged with the PE content. As a result, students realized they were learning while having fun, and consequently, deemed their PE teacher more credible.

In addition, students advanced the idea that a PE teacher should enhance activities in the gym. Whereas the previous teaching skill illustrated an ability to develop different activities,
this skill represents an ability to create experiences that are appealing and as a result, increase student enjoyment and engagement with the PE content. Although students were only able to recognize this skill during the PE lesson, it is important to note that the PE teacher must spend time before class creating these activities.

Data revealed students had no difficulty recognizing the importance of this ability in any PE teacher’s repertoire. For example, the only response Pepe (5th grade) wrote on his open-ended questionnaire that makes a PE teacher believable was that “they have creativity activities with hoses, bumps, and blind folds.” When asked the reason for writing this sentence during one his individual interviews, Pepe replied that “they know what stuff would still be exercising for you, but they can also make it fun.” It was clear that for Pepe students could have fun with activities while still learning and exercising. Supporting this concept, Santa (3rd grade) stated the following in an individual interview when asked for some of the reasons why he enjoys PE: “They [his PE teacher and assistant] have really cool themes like, army, boot camp, like star wars and stuff like that…. We could do bear crawl under the tents on the book camp, kinda like training for army and stuff like that.” Snake (5th grade) said in an individual interview that “she does certain things that no other teacher does. She like, she takes fun to a whole new level in school.” In addition to the idea that PE teachers should create engaging activities, students’ statements revealed that PE teachers should have a variety of equipment that would allow for the development of these activities. Although equipment was not the primary reason for students enjoying their activities, it seemed that having a variety of equipment facilitated the creation of engaging activities.
In Situ Skills

This set of skills defines what PE teachers do directly to students to promote their engagement with the content. These physical and verbal abilities are used by the teacher during class time to engage with students and enhance their learning experiences. It is at this time that learning occurs. These skills aid students in learning the content more effectively. As students become more skillful and knowledgeable about the content, there is a higher probability that their perceptions of their PE teacher being an “awesome” pedagogue are enhanced.

It is significant to remark that all the previous teaching skills discussed in this chapter serve as a foundation for and maximize the effect of the in situ teaching skills. When students feel more secure, have a positive attitude, and the lesson is structured to stimulate students’ engagement with the content, the in situ skills may be more effective. On the other hand, by performing these in situ skills, the PE teacher may also increase the efficacy of teaching skills in the other categories. In essence, all teaching skills interact to support student learning. When one considers that these skills are performed by the teacher directly toward students – making them more easily discernible – it is no surprise that these abilities were recognized by a high number of students. To the students, in order to ensure students’ engagement with the content in situ, a credible PE teacher should (a) articulate, (b) demonstrate, (c) provide examples, (d) participate, and (e) provide feedback to students during activities in the gymnasium.

Students expressed that a PE teacher should articulate well to students in order to be “awesome,” and therefore, credible. The ability to articulate is the ease with which the teacher verbally conveys information to the students. When the teacher articulates, she or he is
capable of speaking coherently to facilitate student understanding by enunciating words without hesitation or difficulty. The following commentaries from two students elucidate how students perceived this skill. In one of his individual interviews, Pepe (5th grade) said that his teacher “doesn’t stutter when she is talking, she knows what she is talking about.” Supporting Pepe’s idea, Stacey (5th grade) suggested in one of her individuals interviews that by speaking properly, the teacher could convey the idea of knowledge: “Not to be stuttering, I hated when people are teaching, when they don’t know what they are saying.” To these students, the ability of the teacher to speak clearly proposed a knowledgeable PE teacher – someone who knows the PE content and has the skills to pass it on. Students were able to rationalize that a knowledgeable PE teacher may enhance students’ experiences and consequently, their learning. In a sense, the capacity to articulate was an indication that an “awesome” PE teacher has content knowledge and consequently is credible.

The ability to demonstrate was a teaching skill advanced by all students in the study. When the PE teacher is able to demonstrate, he or she physically exhibits movements or skills that facilitate students’ comprehension of the movements to be practiced. Demonstrations allow students to visually grasp the content. They make it easier for students to mimic the movements as students observe the teacher and understand how the body should look when performing the motor skill. The following students’ comments justified the need for demonstrations. Fallen (3rd grade) pointed out in an individual interview that a PE teacher should demonstrate “because some people would get lost and they don’t really get how to do it.” January (5th grade) said that a PE teacher “should be able to show us what we have to do,
cause I wouldn’t want a PE teacher who just stands there and tell us what to do, cause I am a visual person” (individual interview).

Another teaching skill the children indicated a PE teacher needs to perform is the ability to *provide examples*. This skill implies that the PE teacher is able to make the content relevant to students as he or she gives practical illustrations that facilitate student understanding. When the teacher *provides examples*, students can connect the motor skill or concept being taught with their previous experiences. This connection facilitates students’ understanding of application and transferability of the movements being learned.

This skill augments on the ability to *demonstrate*, where the teacher will not only display the movement or skill students are to perform, but also discuss, tell, and show practical examples when they would be using the specific motor skill being performed. For example, when the teacher was demonstrating how to jump for height, she also gave a practical example when students would jump for height such as jumping to grab a rebound when playing basketball or when jumping rope. Supporting this idea, Fallen (3rd grade) indicated in an individual interview that her teacher, who is credible in her opinion, gave different examples on how to perform a skill when she said “*she teaches us different ways of how doing that stuff [activities] in case we get messed up on one of the ways….Because you might get stuff in one way, and then you might not know another way.*”

Students also indicated that a credible PE teacher ought to *participate* with students in their activities in the gym. Students’ comments evidently pointed out this skill. Snake (5th grade) wrote in his open-ended questionnaire that a credible teacher “*participated in an exercise with his/her fellow students*” while Fallen wrote on hers that credible teachers “*run with us*
sometimes.” Students asserted three advantages for displaying this skill. First, it allows the teacher to convey knowledge. Second, when the teacher participates, he or she has an opportunity to correct the performance of students while they are performing it, making it easier for students to understand the content. Third, it provides an occasion for the teacher to encourage students, a teaching skill previously discussed in this chapter.

The last teaching skills students advanced that a PE teacher needs is to provide feedback to students. This teaching skill implies a teacher’s ability to advise students about their movement and performance. It allows the PE teacher to observe students and systematically analyze their movements to correct inappropriate action. Stacey (5th grade) recognized such ability by writing in her drawing that a credible PE teacher “has tips.” Later, she added in one of her individual interviews that “they [PE teachers] show how to do, give you tips, that kind of thing.”

When the PE teacher provides feedback, students may understand the teacher is there to inform their practice. Data indicated that it seemed that the students felt comfortable and open to try the feedback given by their teacher. During my observations, I witnessed the PE teacher walking around the different stations to provide specific feedback to students. I noticed that students were receptive and tried to work on the “tips” the teacher had given them. As the PE teacher observed improper performance on an individual or group basis, she was able to analyze and provide specific feedback to correct ineffective practice.

Summary

This chapter presented the theme emanating from the data that described how children believed that credibility was determined, in part, by the excellent teaching skills of the PE
teacher. The data revealed teaching skills which were arranged into three categories promoting students’ (a) security, (b) positive attitude, and (c) engagement with content. The first category promoting students’ security encompassed teaching skills which enhanced students’ emotional and physical well-being. According to students, a PE teacher should (a) be present, (b) treat students equally (c) display tranquility, and (d) protect students physically.

The second category, aimed at igniting students’ positive attitudes, was composed of skills that may positively increase students’ participation and consequently, chances of student learning. Students specified that a teacher should (a) exhibit enjoyment (b) treat students well and (c) provide encouragement to students. These competencies assisted in the development of students’ dispositions and enjoyment towards PE.

The third category described teaching skills which stimulate students’ engagement with the content. These skills are designed to increase students’ involvement with the activities in the gym and as a result, increase the chances of learning. This category was further organized in two subcategories of ante (before) class and in situ (during) class abilities. The first subcategory described abilities used by the PE teacher to structure and plan for learning experiences before class. Students indicated a credible PE teacher should (a) organize, (b) vary, and (c) enhance learning experiences to stimulate students’ engagement with the PE content.

The second sub-category of teaching skills, in situ, defined abilities employed by the PE teacher during class directed towards students with the objective of maximizing transfer of knowledge and skills. Through these skills, students learn the PE content more effectively. Students suggested a PE teacher ought to (a) articulate, (b) demonstrate, (c) provide examples, (d) participate, and (e) provide feedback to students during activities in the gym class.
According to the children in the present study, these teaching skills allow PE teachers to prepare students mentally, physically, and affectively to absorb the PE content more efficiently. When PE teachers are “awesome” pedagogues, students have a higher chance of learning the content and becoming successful movers. As the students in this study were able to observe and relate their enhancement of knowledge and performance to what their PE teacher did, their perception of their PE teacher’s credibility was increased.
The purpose of this study was to investigate students’ perceptions and construction of physical education (PE) teacher credibility. Specifically, research question number five asked how students construct credibility and what sources inform their construction. This chapter presents the findings that emerged from the data addressing this question.

Source Credibility Theory (Hovland et al., 1953) posits that a message source’s power of persuasion is dependent upon the level of credibility the message receiver attributes to the message source. As the level of credibility increases, so does the source’s ability to persuade, and consequently, the source’s effectiveness. When this concept is applied in PE, it proposes that the more credible the PE teacher is perceived to be by the students, the higher the probability that the PE teacher will be able to influence students and consequently, increase student learning and teacher effectiveness. Since PE teacher credibility, and subsequently the ability to persuade, is dependent on students’ perceptions, understanding those perceptions are important to teacher effectiveness. Learning what informed and how students constructed their perceptions of PE teacher credibility in the present study assisted in understanding how students perceived PE teacher credibility.

While the previous three chapters described the themes that emanated from the data indicating what students perceived to be essential in making a PE teacher credible, this chapter illustrates how students constructed those perceptions. Symbolic Interactionism (SI) (Blummer,
(1969) was used as a backdrop to assist in the interpretation of this phenomenon. SI posits that people assign meaning to objects – in this case the credibility of the PE teacher – according to their relationship with the object and their society while these meanings are constantly being refined as people interact with these objects. Simply put, this perspective advanced that students’ construction of PE teacher credibility was influenced by the interaction students had with people, places, and objects, including PE and PE teacher credibility.

It was apparent that students were not passive recipients of information although some could not always articulate from where the information originated. Data from the students indicated they were active learners who interacted with people, places, and objects, and interpreted information to produce their own meanings about credibility. The following statements from two 5th graders provide examples of this concept. When asked where they learned the ideas that assisted their construction of credibility, Pepe simply answered “I guess I just learned it myself” while Stacey responded that “a lot just came through my head.” Given the fact that any direct or indirect information regarding credibility had to originate from a person, place, or object, it is rational to think that these students didn’t simply follow what they were told. This argument is supported by the fact that these students indicated, after probing questions, that they indeed acquired facts from different informants such as coaches and friends. Although Pepe and Stacey took credit for their own understanding, it was quite apparent that they were able to interpret information learned from multiple informants in order to come up with their own construction of credibility.

Investigating the people, places, and objects where students acquired their ideas and how they organized them offered a blueprint of students’ construction of credibility. This
knowledge affords PE professionals an opportunity to better understand the credibility construct and influence students’ perceptions of credibility. The first step in understanding this process was learning from where students acquired knowledge that informed their conceptualization of this construct. The second step was to evaluate their accounts to understand how they constructed their perceptions of credibility. Data interpretation revealed that the interaction with informants (people, places, and objects) provided a background which students used to construct and refine their perceptions of credibility. Data supporting this concept are presented in the following sections.

**Acquiring Information**

The first step in understanding how students constructed credibility was to learn where students acquired information that was related to their construction of credibility. Students’ responses indicated that people, places, and objects contributed with different but important information that was used by students in their construction of PE teacher credibility. Data revealed that students received information that related to the (a) knowledge of PE and (b) expectations for the PE teacher from primary and secondary informants. The following are a description of these sources, what kind of information was provided, and how this knowledge informed students’ construction of credibility.

**Primary Source**

According to the children, PE teachers were the most influential source because to a great extent, they were the people who actually taught about the subject. In the present study, the information covered by the PE teacher was offered in a variety of areas – from human anatomy and motivation to proper nutrition and dance – with the objective of improving
physically educating students to live an active lifestyle. For example, Pepe (5th grade) indicated that in PE he learned “that you need rest to stay fit, you need to eat healthy, and you learn how to pace yourself when you are running.” Stacey (5th grade) said she “learned all about healthy food, cardiovascular endurance and all of that kind of vocabulary stuff. Different types of fitness, many different exercises.” For Gamer (3rd grade), PE is a place “to learn about exercise and the body.”

It appeared that what students learned from the PE teacher influenced their conceptions of what the PE subject encompassed. These conceptions were used by the students, then, to measure how much their PE teacher should know and be able to do. Given the fact that students wanted to learn from someone who is an expert in the area, it is rational to think that students started expecting their PE teacher to epitomize the things she was teaching. In the same way students expected the math teacher to know and be able to perform math, they expected the PE teacher to know and exhibit the skills, attitudes, and dispositions that reflected PE. In essence, the more students learned about the subject, the more they expected from their PE teacher. The ability of the PE teacher to meet those demands affected how credible students deemed the PE teacher to be. A good example of this line of reasoning was given by Snake (5th grade) in one of his interviews. Since PE incorporates the physical, Snake expected that PE teachers should be able to demonstrate and execute physical skills. When asked about things that PE teachers could do or be in order to be credible, Snake said:

They need to have physical ability. If they want to have you run a mile in like 6 minutes, then they should be able to run a mile in at least 6 minutes. I don’t want the PE teacher
says you [need] to run in 6 minutes to get healthy and then when they try to run they only run in 11 minutes.

Secondary Sources

To a lesser degree, other groups of people also provided information that influenced students’ construction of PE teacher credibility. Students indicated four groups of people provided information to them: (a) family, (b) friends, (c) coaches, and (d) school teachers. It should be noted that these informants affected students’ construction of credibility in different ways. Even though the data in the present study suggested that PE teachers were the major source of information about PE, the other groups of people offered important contributions to students’ construction of credibility.

Family.

The students in the study indicated that, to a lesser degree, family also informed their construction of credibility. Family members provided information related to the PE content and what students had learned in their PE class. For example, during one of her interviews, Anne (3rd grade) said that she learned from her grandmother, mother, and brother about different ways to exercise and be healthy. It appeared that Anne used this information to support, refute, or modify her conceptions of PE, and consequently, refine her perceptions of credibility. In a more complex way, Snake’s (5th grade) statement also indicated how family members could support what was learned in PE. When asked why his brother would believe his PE teacher, Snake said:
Probably because all the activities that she [PE teacher] makes us do has a challenge to it. ...He [his brother] said it would be good for us to do all these exercises, this building up towards the next thing.

For some students, family not only provided information that added or reinforced what was learned in PE, but also set expectations for the PE teacher. When asked where he learned that PE teachers should be role models, Snake mentioned his siblings being role models to him and said:

I believe that if they [brothers] made me grow up strong like I have been, I think that they should do the same stuff; that they would actually get stronger and be able to do more in physical home situations where you are going to have to test your physical abilities.

It was clear from Snake’s statement that his experiences with his brothers taught him that the PE teacher, just as his brothers did, should do the same things she taught him to do. In a similar way, January’s testimony showed how her family experiences informed her expectations of her PE teacher: “My family is kind to me so I want my PE teacher to be kind too.”

Although the majority of students indicated family informed their construction of credibility, Pepe (5th grade) did not do so. He was the only student who indicated multiple times that his family had no influence on his construction of credibility. During his first group interview, when Pepe was asked what his parents said about PE and his PE teacher, he simply replied: “My parents don’t talk about my PE teacher,” and later added “I keep my school life at school.” Additionally, in his first individual interview he supported his statements. After being asked where he learned that the PE teacher needed to do the things he had mentioned to be
believable, he said he had learned by himself, “without having anybody to teach me.” Pepe further reinforced this idea during his second individual interview. At this time, when he was asked where he learned the idea that PE teachers must set the example, he simply answered “I just thought of it on my own.”

Even though it is unlikely that his parents or family had no impact on his perceptions of PE, three plausible explanations may clarify his answers. First, the fact that Pepe was a high-skilled student suggested he was successful in PE and consequently, his family didn’t see the need of providing additional information about PE. Second, it could have been difficult for Pepe to reflect or articulate his thoughts about this complex issue. Throughout his interviews it became apparent that Pepe had the most difficulty answering questions among all participants. On a few occasions he would spend time thinking about the answer only to end up giving no answer, even after receiving a few probing questions. Third, he might have considered the impact of his family minimal and disregarded their input. This explanation is supported by the fact that the only people Pepe suggested informed his perceptions of credibility were his coaches. Altogether, these explanations suggest that Pepe was informed the most about PE by his PE teacher. Apparently, Pepe considered his PE teacher knowledgeable about the subject. Consequently, it is easy to accept that Pepe considered his PE teacher credible.

Friends.

To a much lesser degree, the students also indicated friends informed their perceptions of credibility. Friends at school and neighborhood shared thoughts that reinforced and expanded students’ knowledge about the PE content and set expectations for their PE teacher. Strong evidence of this was provided by students’ responses. January mentioned in her
individual interview when asked where she learned things relating to the credibility of the PE teacher that “sometimes my friends talk about gym, like what we did, and if it was fun or not.” From her statement, it could be concluded her friends influenced her expectations for her PE teacher. For example, if her friends told her that PE was great because the PE teacher participated with them and had great activities for them to practice their skills, *January* would probably expect to some extent that her PE teacher did the same. And if *January’s* teacher did those things her friends mentioned, *January* could think highly of her PE teacher and consequently, perceive her PE teacher as more credible. On the other hand, if her friends told her the opposite, she could acknowledge her PE teacher as less credible. In essence, it appeared that friends could steer students’ judgments about the credibility of the PE teacher as students provided some expectations for the PE teacher.

In another example, the information *Santa* (*3rd* grade) received from his neighbors helped reinforce what was taught by the PE teacher. He said that “at home, me and my neighbors play a lot of sports, like football, kickball” which gave him the idea “to get active,” – the most important objective of PE. For *Fallen* (*3rd* grade), she learned from her friends that the PE teacher should set good examples to be credible. When asked where she learned that PE teachers needed to eat healthy and be athletic, *Fallen* said, in addition to the PE teachers themselves, “I heard it from my friends.” Although friends were not the group of people offering information that mostly informed credibility’s construction, the interaction with friends offered a time for students to talk and reflect about PE, which in turn affected how students perceived PE, their expectations for the PE teacher, and PE teacher credibility.
Coaches.

The fourth group of people that informed students’ construction of credibility was coaches. To a lesser extent, coaches provided similar information to students as PE teachers did. Students learned from coaches about sports skills and performance, which reinforced students’ idea of exercising, knowledge about PE, and expectations for the PE teacher. Supporting this argument, Pepe (5th grade) answered when asked where he heard about PE outside school: “Well, I play sports, and the coaches are like the PE teachers. They teach you how to do things, and they know what they are talking about because most have played the sport they are coaching you about.” From Pepe’s statement, it seemed that his coaches not only informed what the PE content should be about, but also reinforced the idea that the PE teacher should, as the coaches did, be able to perform the things they are teaching students.

In another example, when Fallen (3rd grade) was asked what reminded her of her PE teacher, she said “when I am playing sports like soccer or basketball, and because my soccer coach when I see him, he is a PE teacher, and that reminds of my PE teacher.” The above statements indicated that students were able to draw similarities between their coaches and PE teachers, which in turn affected how students perceived the PE teacher. The more students learned about PE related content outside the gymnasium, the more informed were their constructions of PE teacher credibility.

Other teachers.

Although this group was identified by only one student, it deserves mention due to the fact that arguably teachers may spend more time with students than any other adult. The time spent will students provide an opportunity for teachers to inform students about credibility in a
different way than the other previously groups. Although teachers apparently did not teach about the PE content as PE teachers did, they had the opportunity to inform students’ expectations about the PE teacher. Stacey (5th grade) indicated in her interview that some of the things she thinks PE teachers ought to do to be credible came from her teachers. When Stacey was asked where she got the idea that PE teachers have to demonstrate and be able to do things for students, she said “because of my teachers mainly. They know what they are doing. They talk about it. They are participating in it. They show you how to do, give you tips, that kind of thing.” From her account, it was distinct that Stacey was able to transfer the concept of role modeling she learned from her classroom teachers to PE and set expectations for her PE teacher, which consequently, informed her construction of credibility.

**Tertiary Sources**

According to students in the study, places, and objects assisted in students’ construction of credibility. Whereas people informed students about the PE content and expectations for the PE teacher, this section describes sources that reinforced the information provided by people, assuming a supporting role in students’ construction of credibility. The following sections provide a description of these informants and how they interacted with students.

**Places.**

According to the students, there were three places that affected their construction of credibility: (a) school, (b) home, and (c) physical activity locations. Although in these places students interacted with people, the location was what formally informed students. It was in school, home, and physical activity locations where students had the opportunity to interact with objects that supported what was learned from people.
The first and most influential place that informed students’ construction of PE teacher credibility was the school. Within the school, students had a clear understanding that the gymnasium provided the most information about PE. It was in the gym where students had access to sports equipment, information about living healthy, and opportunities to play sports. When January (5th grade) was asked where in school she was told to be healthy, she did not hesitate to say it was “in the gym.”

In addition to the gym, students indicated that the lunchroom and playground, to a lesser degree, also informed their construction of credibility. The information that students learned in the lunchroom and playground reinforced what they learned in PE and their perceptions of credibility. For example, when asked about things that reminded her of PE during a group interview, Fallen answered “the lunch room, because like today, we had bananas and apples, and it tasted good, and that reminds me of PE.” Answering the same question, January said, “the lunch room, like, if they have apples out there it reminds me of how healthy you can be, to stay active and I see with the grapes and all the other fruits.” It is reasonable to conclude from students’ statements that what they had learned in PE – how to eat healthy and stay active – was reinforced by eating fruits in the lunchroom.

In the same way, the playground underlines students’ idea of exercising and playing sports they learned in PE. When asked why the playground reminded them of PE, Santa (3rd grade) responded “because sometimes we play football out there, that makes me think of exercising, get really active,” while Gamer (3rd grade) said “because of the track that you can run on, and the swing because you move your leg, you get exercise with your legs. And sometimes we play soccer out there.” It was apparent that students used what they learned in
PE and other places to reinforce and inform their knowledge of PE content, which in turn affected their construction of PE teacher credibility. The more students learned about the PE content, the more diverse were their perceptions of credibility.

The second most influential place that informed students’ construction of the credibility of the PE teacher was their home. There, students had the opportunity to interact with, in addition to family members, media communication sources and engage in physical activities while using sports equipment that supported and strengthened what they learned at school. The picture elicitation activity, where students were asked to take pictures of things that reminded them of PE and their PE teacher, supported this concept. The majority of the pictures was taken at home and depicted images of sports equipment such as basketballs, baseball bats and bicycles, and healthy foods such as oranges, apples, and water.

The third place informing students’ construction of PE teacher credibility was physical activity locations. The term implies any place where students reinforced their perception that exercise is good for improving their physical skills and physical health. Examples of these locations include parks, local gym, and neighborhoods. Fallen’s (3rd grade) attempt to describe the local gym, when asked about places that reminded her of PE or her PE teacher, exemplifies how students related these locations and PE: “There is this place that I live really close to, it’s like a PE place, and I’ve been there before and it looks just like the PE room. It’s like this building where people come and exercise.” Expressed in a different way, Santa (3rd grade) took pictures in his photo elicitation activity of places such as a swimming pool, soccer fields, karate school, and baseball field which reminded him of PE and his PE teacher. For January, a place that reminded her of PE was “the park. Cause you see people like at the rec centers playing all kinds
of sports and people running and marathons and people drinking lots of water, which is good and eating healthy stuff, and that reminds me of my PE.” For Gamer, even the circus reminded him of PE because there “they do hula-hooping, they do tight rope walking, they do those swings, swinging, that stuff.”

**Objects.**

Students indicated that objects informed their construction of PE teacher credibility. In this context, an object provided information which reinforced what they had learned about PE. The three major sources informing students were (a) food, (b) sports equipment, and (c) media communication.

**Food.**

Students indicated food informed their construction of credibility. In the photo elicitation activity, where students were asked to take pictures of anything that reminded them of PE and their PE teacher, students took pictures, among other things, of healthy food items. For example, Pepe (5th grade) took a picture of water jugs and a picture of a package of lasagna that read “Healthy Harvest – whole grain – Heart Healthy.” Fallen (3rd grade) took pictures of a Healthy Choice soup can, canned fruits, and whole wheat crackers while Santa photographed oranges, water, and Gatorade bottles. From students’ pictures, it appeared that students linked healthy eating with PE and their PE teacher because they learned that in order to be healthy, they must eat a nutritious diet. The idea that healthy foods helped inform the construction of credibility of a PE teacher was supported by the comments made by students suggesting that credible PE teachers should eat healthy. For instance, Stacey (5th grade) wrote in her drawing
that credible PE teachers “eat healthy.” Anne (3rd grade) wrote in her open-ended questionnaire that a credible PE teacher eats “apples and carrots.”

**Sports equipment.**

Sports equipment was suggested by students as a source of information used in their construction of credibility as students thought about PE when in contact with sports materials. It was apparent from students’ pictures that when they utilized equipment to play sports, they connected them with PE and their PE teacher. For instance, Gamer (3rd grade) took pictures of a bicycle, a baseball bat, and a scooter while Fallen (3rd grade) took pictures of equipment she found at home, including pictures of a jump rope, baseball, soccer ball, shin guards, and things that represented the idea of movement such as the videogame Wii, a football shaped cushion, and a t-shirt with the sports brand logo “Under Armor.” This connection suggested students had learned about sports and their importance to healthy living. From this connection, students realized that the PE teacher should also play sports in order to be credible. This idea is supported by the fact that students indicated that teachers should exercise in order to increase their credibility. It was clear that student’s related sports equipment to exercise, exercise to PE, and used this information to construct the credibility of the PE teacher.

**Media communication.**

Students additionally pointed out that media communication provided information that had an impact on their construction of PE teacher credibility. When asked where they acquired the ideas of what makes a PE teacher credible, students indicated that they learned from watching TV, listening to radio, and using the computer. Pepe (5th grade) answered in his group interview, when asked about where he had heard or seen anything that reminded him of his PE
teacher, “on TV sometimes there is these commercials of kids playing video games and some athletes tell them that they need to get moving and the athletes help the kids exercise.” For Pepe, the TV informed him that exercising was important. When this idea was paired with students’ indication that a PE teacher should exercise in order to be credible, it was apparent that TV helped inform students’ construction of credibility. TV was the number one media source students where found information that reminded them about PE and their PE teacher. In another example, Gamer (3rd grade) indicated that another source that informed him of PE was “the computer. If you type in workout places you can see all the places that you can work out of.”

Confined Construction of Credibility

To a great extent the PE teacher in the study was the main source of information that influenced students’ construction of credibility. This idea suggests that students had a confined construction of credibility since all but two students had the opportunity to interact with a PE teacher different than the one who participated in the study. This limited exposure to different PE environments may have confined students’ construction of PE teacher credibility.

The ability students demonstrated to interact and negotiate meaning with multiple sources suggested that the construction of credibility occurred in a two-way process where (a) the information obtained from different informants (b) interacted and informed students’ perception of credibility. An example of this can be observed in Fallen’s (3rd grade) response to a question regarding what assisted her conclusions about PE teacher credibility. During one of her individual interviews, Fallen indicated that her PE teacher taught her “how to eat right, and like, exercise daily, like go jogging.” In her open-ended questionnaire Fallen wrote that a
credible PE teacher should “eat right, play sports, and exercise a lot.” At first, it may seem that Fallen simply memorized what her PE teacher had taught her. However, data suggested Fallen used information from different sources (e.g., friends, coaches, and food) to create her perceptions about PE and expectations for the PE teacher. From her statements, it appeared that once Fallen learned that in order to be healthy one must exercise, eat healthy, and play sports, Fallen conceptualized that the subject of PE consisted of educating the physical. In addition, it seemed that Fallen acknowledged that the PE teacher was the expert in the area and that the PE teacher should be able to do what was being taught because Fallen had learned these ideas from her own experiences, other teachers, family, friends, and coaches. With this perception in mind, Fallen expected that the PE teacher, who teaches about being healthy and physically active, should perform those behaviors (i.e., eat right, play sports, and exercise) in order to be credible. After Fallen observed that her PE teacher did exhibit those behaviors, she recognized that her PE teacher was credible. In essence, the information Fallen learned (from her PE teacher and otherwise) about PE and expectations for the teacher informed how she perceived the PE subject, what she expected from her PE teacher, and consequently, her perceptions of PE credibility.

**Summary**

This section focused on students’ acquisition of information and how they utilized this information in their construction of PE teacher credibility. Students suggested they were active learners who interpreted information received from various informants to synthesize their meanings about PE and PE teacher credibility. The five groups of people indicated by students informing their construction of credibility were (a) PE teachers, (b) family, (c) friends, (d)
coaches, and (e) teachers. The interaction between students and these groups of people allowed them to learn new information related to the PE content and develop expectations for the PE teacher which would enlighten their perceptions of teacher credibility. In addition, the three most common places that informed students were (a) school, (b) home, and (c) physical activity locations. In these areas, students not only had the opportunity to interact with people, but also interact with the environment (objects) to acquire and support knowledge related to the PE content. Students also pointed about that (a) food, (b) sports equipment, and (c) media communication provided information about PE teacher credibility. These objects provided knowledge that supported and increased their understanding about the PE content. As students became more knowledgeable about the PE content, the more informed they were about their construction of PE teacher credibility.

Overall, students suggested that they learned about PE teacher credibility from a variety of sources. However, the experiences students had with their PE teacher in their PE class informed them the most. Although students mentioned that sources influenced their construction of credibility, students were clear to suggest that they came up with their definitions of credibility on their own. It appeared that students engaged actively in constructing their meanings about credibility as they absorbed the information provided by these informants, assimilated them, and constructed their understandings of credibility.
CHAPTER 8

DISCUSSION AND IMPLICATIONS

The purpose of this study was to investigate students’ perceptions and construction of physical education (PE) teacher credibility. The study was guided by five research questions targeting students’ perceptions about the characterization, personal qualities, behaviors, teaching skills, and construction of teacher credibility. These questions were: (a) How do students characterize PE teacher credibility? (b) What personal qualities make PE teachers credible in the eyes of students? (c) What behaviors make PE teachers credible in the eyes of students? (d) What teaching skills make PE teachers credible in the eyes of the students? (e) How do students construct credibility and what sources inform their construction?

These questions allowed data analysis to reveal the perspectives of students as it related to the credibility construct as a student-centered process. From students’ descriptions and insight, three themes emerged from the data that identified what they believed makes for a credible PE teacher. In their view, a credible PE teacher: (a) “Looks Like One,” (b) “Practices What She Preaches,” and (c) “Is an ‘Awesome’ Pedagogue.”

Findings from this study relate to and inform different fields beyond the teaching of PE. The findings build the theoretical basis for Source Credibility Theory (Hovland et al., 1953) and expand on relative literature revealing qualities, behaviors, and teaching skills that may increase teacher credibility and, thus, effectiveness in the teaching of PE. In addition, the
findings have implications for in-service PE teachers and PE teacher educators in the preparation of pre-service PE teachers.

In this final chapter, the findings relative to the research questions and themes will be summarized and discussed against relevant literature. Furthermore, recommendations will be suggested for future research – aiming to expand and explore the complexities of PE teacher credibility – and current PE teachers and PE teacher educators. This chapter will discuss the findings, implications, and recommendations in the following sections: (a) Source Credibility Theory, (b) PE teacher Credibility, (c) Implications for In-service PE Teachers, and (d) Implications for PE Teacher Education.

**Source Credibility Theory**

Source Credibility Theory (Hovland et al., 1953) posits that the source’s persuasive power is increased when the receiver of a message perceives the source as credible. The more credible the source is, the more likely the source will be able to persuade the receiver and generate understanding or attitude change. In education, research has supported this notion by linking credibility with positive student outcomes. For example, studies have shown that increased perceptions of credibility have led to increased reports of student motivation (Frymier & Thompson, 1992; Pogue & AhYun, 2006), affective learning (Pogue & AhYun, 2001; Teven, 2001), cognitive learning (S. D. Johnson & Miller, 2002; Richmond, McCroskey, Kearney & Plax, 1987), and classroom behavior (Teven, 2007). These findings make an important and strong contribution to the literature as they suggest that credibility may increase student learning and consequently, teacher effectiveness.
Regarding the findings of this study, Source Credibility Theory appeared to be a useful framework for studying the credibility construct as data revealed that students were able to identify personal qualities, behaviors, and teaching skills which would, in students’ opinion, enhance the credibility of PE teachers. The students who participated in the study had, on a regular basis, the opportunity to participate in PE classes taught by an effective PE teacher (represented by her National Board Certification). This structure allowed students to be exposed to many personal qualities, behaviors, and teaching skills that facilitated student learning. With such profound background, students were able to understand credibility as a complex construct and provide valuable insight into the credibility of PE teachers.

From a theoretical standpoint, Hovland et al.’s (1953) three-dimensional description of Source Credibility was valuable in developing the research questions, interpreting, and organizing the qualities, behaviors, and teaching skills students indicated make a PE teacher credible in their opinion. The concept that the credibility is in the eye of the receiver was useful as a framework for understanding and analyzing students’ perceptions and construction of PE teacher credibility. Content analysis proved to be beneficial in analyzing the data as well as conceptualizing the nature of personal qualities, behaviors, and teaching skills to identify the dimensions of credibility and recognize emerging trends on the data.

Source Credibility Theory (Hovland et al., 1953) proposes that credibility is composed of three dimensions, namely, (a) competence, also known as expertness; (b) caring, also called intentions; and (c) trustworthiness. This study’s findings are consistent with this notion as the students indicated personal qualities, behaviors, and teaching skills that supported the existence of these dimensions. For example, personal physical qualities such as “muscular” and
“in shape,” which suggested that credible PE teachers must “Look Like One,” reinforced the existence of the competence and trustworthiness dimensions of credibility. The teacher behaviors indicated by students such as “eats healthy” and “exercises,” suggesting a credible PE teacher should “Practice What She Preaches,” related primarily to the trustworthiness and secondly, to the competence dimensions of credibility. In addition, teaching skills such as the ability to “treat students well,” “organize,” and “vary” activities, suggesting that a credible PE teacher must be “An Awesome Pedagogue,” related to the caring, competence, and trustworthiness dimensions of credibility.

These findings are consistent with most recent literature indicating that credibility is composed of the three dimensions previously mentioned (e.g., McCroskey, 1992; McCroskey and Teven, 1999; Teven and McCroskey, 1997). McCroskey and Teven (1999) offered that while the literature has not argued over the importance of credibility in the persuasion process, studies have, due to misanalyses, ignored the “caring” dimension of credibility. McCroskey and Teven were able to provide further evidence of the existence of the third dimension (caring) of credibility. The findings from the present study support this view as students suggested the existence of a caring dimension through the indication that a PE teacher should demonstrate teaching skills such as “providing encouragement” and “protecting students’ physical well-being”.

Furthermore, Source Credibility Theory (Hovland et al., 1953) posits that many factors influence what characteristics are valued by the receiver to make a source credible and these characteristics may be flexible and change over time. These important arguments have been neglected by the literature on credibility – particularly in the PE literature – as very few studies
explored these variables. The findings from the present study address this issue. The findings lend support to Source Credibility Theory’s (Hovland et al., 1953) concept that students assign different levels of importance to different characteristics of a source as students provided specific characteristics that make a PE teacher credible. By revealing characteristics students deemed necessary, the present study puts us one step closer to understanding what specific characteristics are most important in making a PE teacher credible. The findings revealed specific characteristics that indicated students placed high importance on teacher’s appearance, behaviors, and teaching skills that contribute to student learning.

Source Credibility Theory was useful for studying the credibility construct as it was clear from the data that students understood that credibility conceptualized the PE teacher’s ability to be believable. This study targeted the importance of verifying students’ conceptions of personal qualities, behaviors, and teaching skills representing the three dimensions of source credibility as scholars in the field have suggested. In addition, the notion that the receiver makes his or her own construction of credibility was manifested through the different characteristics students pointed out to make a PE teacher credible.

**PE Teacher Credibility**

Source Credibility Theory (Hovland et al., 1953) conceives that the more credible a teacher is perceived to be, the more likely students will learn from that teacher. Thus, the proposition guiding this study was that if PE teachers were viewed as more credible, students would be more likely to learn the PE content and consequently, heighten their chances for students becoming physically educated individuals. If teacher effectiveness is determined by the amount of learning students experience and teacher credibility increases the chances of
student learning, it is rational to think that the credibility of the PE teacher could have a positive influence on teacher effectiveness. The more credible the PE teacher is, the greater the chances the teacher will be an effective one. Consequently, learning how students perceive credibility may assist in the development of more effective teachers.

While not a topic of interest to PETE scholars, this line of reasoning is congruent with the health education literature which has investigated what specific descriptors of health-related educators (Ahia, 1987; W. Bailey, 1985; Fisher, 1992) make them credible. In an effort to answer the calls of Ahia and W. Bailey, Fisher set out to explore what specific characteristics students attributed to the credibility of the health educator. In his study, Fisher argued that professions should be investigated individually while students should be heard in order to truly explore credibility as a construct.

The findings from the present study support and answer the call of Fisher (1992) as the credibility construct was investigated in relation to PE using students’ perspectives. Overall, the findings from the present study align with those of Fisher as students indicated characteristics that related to credibility. However, the findings add to the study of Fisher as students in the present study indicated that appearance was also an important determinant in the credibility of the PE teacher in addition to teaching behaviors as indicated by Fisher. Three reasons may explain why students in the study of Fisher did not indicate appearance as an important factor facilitating credibility. Firstly, Fisher only utilized an open-ended questionnaire for students to complete that asked “What did your most believable health educator teacher do that made him or her so believable?” Although probing, this question asked for behaviors of the health educator, which may have hindered students from describing factors such as appearance.
Secondly, two panels (health educators and source credibility experts) of professionals evaluated students’ responses. These panels could have eliminated any student suggestion indicating appearance as a contributing factor to credibility since the literature did not consider appearance a dimension of credibility. Finally, health educators and students simply may not have considered appearance a vital aspect in the credibility of health educators since this profession, contrary to PE, does not require physical abilities.

It is important to note that credibility is, as scholars have noted (e.g., Hovland et al., 1953), not a fixed, but rather a relative and flexible construct. This concept was supported by the findings from the present study which suggested that in each class the PE teacher has the opportunity to increase or decrease students’ perception of his or her credibility. It appears that credibility is in a continuum, where “less credible” is on one end while “more credible” is on the other, and the credibility of the teacher changes constantly towards one of the two ends.

These findings imply that each student had his or her own “credibility scale,” which was based on each student’s individual knowledge and set of values and beliefs. A behavior performed by the teacher could have been interpreted differently by students. An example of this was the variety of students’ responses suggesting that students placed emphasis on different characteristics they believed would make a PE teacher credible. Although the findings indicate there was a level of consensus among students’ response of what characteristics increase and decrease the credibility of the PE teacher, it was apparent that each action performed by the teacher had a different effect on students. An example of this was observed in the responses for the open-ended questionnaire which asked students to write in rank order
at least the four most important things they considered to make a PE teacher credible. Snake wrote in his open-ended questionnaire that the most important thing PE teachers should do to be credible was to participate in the activities with students while Anne mentioned the same skill only as the forth most important.

Furthermore, the threshold in which a student would consider a PE teacher credible may also be relative. Given the study’s findings, it seems that for some students a PE teacher may be required to perform many credible actions before they perceive the teacher as a credible one. For others, a few events may suffice for making the PE teacher credible in students’ eyes. In essence, the PE teacher earns and loses “points” from his or her “credibility account,” and how much “capital” that account must have in order for the PE teacher to be credible is relative to each student.

This finding is consistent with recent PE literature advancing a student-centered approach to research which values and recognizes the contribution students can provide (e.g., Dyson, 2006; Lee, Carter and Xiang, 1995; McCullick et al., 2008; McEvilly, 2013; Ratcliffe & Inmwold, 1994). McCullick and colleagues advanced that students do not receive enough credit for their insight and indicated that students could, if adults are willing and able to listen, have a tremendous impact on teaching. Support for this notion can be found in the present study as students demonstrated a high level of cognition and insight. Students were able to articulate they valued learning as well as recognized the importance a PE teacher’s personal qualities, behaviors, and teaching skills have in enhancing students’ experiences. Further, McCullick et al. noted that students’ perspectives could be used in the preparation of pre-service teachers as students had their own ideas of good teaching. This finding is significant as it supports the
findings from the present study which revealed that the use of students’ perspectives as a tool to enhance teacher preparation was appropriate.

In 1995, Graham’s monograph brought attention to the need of learning the thoughts, feelings, and ideas students have about PE. While suggesting that education has been turning to a business models, he argued that students should be treated as customers who should be satisfied. Following Graham’s advice, this study asked students about their perceptions and construction of PE teacher credibility. Students designated personal qualities, behaviors, and teaching skills that, in their opinion, would increase the credibility of PE teachers. The characteristics described by students yielded three themes. According to students, a credible PE teacher (a) “Looks Like One,” (b), “Practices What She Preaches,” and (c) “Is an ‘Awesome’ Pedagogue.” The following sections discuss the implications of each of these themes as they relate to the relevant literature.

**Looks Like One**

Although appearance is not a dimension of credibility, it appears that it may be for children. The children in the study indicated there was a relationship between the appearance of the PE teacher and credibility. This finding suggests that the appearance of the PE teacher is a medium for the display of physical characteristics that relate to the dimensions of credibility (i.e., competence, caring, and trustworthiness). This indirect association may be the reason why very few recent studies have investigated the relationship between physical appearance and credibility of the PE teacher (e.g., Melville & Maddalozzo, 1988; Bryant & Curtner-Smith 2008, 2009a, 2009b). Nevertheless, this relationship appeared to be relevant in the present study. Given the fact that PE is the only subject that teaches through the physical, considering
appearance as a factor impacting credibility seemed necessary. This finding is consistent with the literature attesting appearance has been related to the credibility of the source (Chaiken, 1979; Chaikin, Gillen, Derlega, Heinen & Wilson, 1978; Horai et al., 1974; Robinson, Stacks, & Melson, 1989).

In PE, the literature investigating the indirect impact of appearance on teacher credibility is minimal. Most recently, the studies conducted by Melville and Maddalozzo (1988), Dean et al. (2005), Bryant and Curtner-Smith (2008; 2009a; 2009b), and Gold et al. (2012) indicated PE teacher appearance may have an effect on students’ perceptions about their PE teacher and student learning. The findings from the present study support this concept as students suggested the appearance of PE teachers would affect PE teacher credibility.

Students in the present study indicated physical qualities related to the appearance of the PE teacher that may increase PE teacher credibility. In their opinion, in order to “Look Like One” a credible PE teacher should look (a) in shape, (b) muscular, (c) tall, (d) strong, (e) flexible, (f) healthy, (g) fit, and (h) athletic. These qualities reinforce the competence and trustworthiness dimensions of credibility. According to the children, when a PE teacher exhibits these qualities, students may believe the teacher has the necessary knowledge and physical ability to develop these qualities and demonstrate to students how to perform different motor skills, and as a result, the PE teacher could be deemed more competent by students. In addition, by demonstrating knowledge and ability, the PE teacher may increase trust with students since students would be able to see that what the PE teacher teaches works in practice.
These findings are consistent with the study of Melville and Maddalozzo (1988) and others (i.e., Dean et al., 2005; Gold et al., 2012) who found that students would learn more from a PE teacher who appeared to be more physically fit than another. In the study of Melville and Maddalozzo, two groups of students watched a 20-minute video of a PE teacher teaching exercise concepts to students with one difference. In one group, the PE teacher in the video was wearing a “fat suit” to look less physically fit while the other group watched the same video with the PE teacher not wearing a “fat suit” to look more physically fit. The findings from that study suggested, similarly to the findings from the present study, that students attribute more credibility to a PE teacher when he or she looks more physically fit, and as a result, students may learn more about the content.

The findings from the present study indicating that students may learn more from a physically fit PE teacher who is able to demonstrate motor skills contradict the findings of Bryant and Curtner-Smith (2008, 2009a) who investigated the effect PE teacher appearance had on elementary and middle school students. In their studies, the authors used the same procedures of Melville and Maddalozzo (1988) with one difference. Students in the experimental group watched a video of a PE teacher who appeared to have a disability (i.e., sitting on a wheelchair) teaching a swimming lesson while the control group watched a PE teacher who did not have a disability. The results from the studies indicated that elementary school students learned more from the PE teacher with a disability while middle school students learned the same amount from both teachers. The authors concluded that those students were not yet completely socialized to think that PE, physical activity (PA), and sports were for the able, fit body and were more willing to learn from the PE teacher with a disability
because of her condition. The findings from the present study indicated that students preferred a PE teacher with an ability to physically demonstrate movements to students since this teaching skill assisted their learning. These contradictions may suggest that the students in the studies of Bryant and Curtner-Smith, due to the studies’ design, did not have an opportunity to actually experience a teaching lesson from a PE teacher with disability nor observe that the PE teacher with a disability would not be able to physical demonstrate skills to students.

The findings from the present study revealed that students had a rationale suggesting that a PE teacher without disabilities would be more credible than one with disabilities. This finding advances the literature on PE teacher credibility and student learning as there is some evidence that the appearance of the PE teacher increases credibility regardless of students’ age. The fact that students in the present study were able to connect a PE teacher without disabilities with an increased ability to perform motor skills is an example of that.

The findings indicating that students would learn more from a more physically fit PE teacher who could demonstrate motor skills indicate that students believed that a physically fit and enabled-body appearance may positively improve the credibility of the PE teacher. These findings suggest that PE teachers should be the exemplar of how a physically educated person should look and epitomize personal fitness and health. In essence, the PE teacher should look the part. According to the children in the study, when the PE teacher “Looks Like One,” the PE teacher is able to perform everything they need in order to teach students to be physically educated individuals. These findings suggest that students were able to realize that a physically fit PE teacher would promote more learning.
Scholars have, for many years, advocated that PE teachers must be living testimonies of their commitment and be in shape if they expect anyone to listen to them (Bryant & Curtner-Smith, 2008, 2009, 2009b; Gold et al., 2012; M. W. Johnson, 1985; NASPE 2009b; Wilmore, 1982). Findings from the present support and add to the literature that students at a very young age agreed with this concept. There was strong evidence that to students the appearance of the PE teacher plays a role in credibility. Additionally, there is now evidence of what characteristics students look for when making judgments about the credibility of the PE teacher. However, this finding brings up important issues for future research. Studies investigating the credibility of the PE teacher should explore the interactions between age (elementary, middle, and high school), context, and the selection of qualities students look for in PE teacher’s appearance to support the consistency and transferability of the findings from the present study.

**Practices What She Preaches**

Students indicated that if PE teachers want to increase students’ perception of their credibility, they must practice what they preach. This finding suggests PE teachers should perform behaviors that set good examples to students and support what they teach in the gymnasium. Whereas the theme “Looks Like One” asserted a PE teacher who should look the part, the theme “Practices What She Preaches” represents a PE teacher who performs the part. This concept of role modeling is supported in the PE literature (e.g., Dean, Adams & Comeau, 2005; Gold et al., 2012; Melville & Maddalozzo, 1988; NASPE, 2009b; Staffo, 2000). Organizations such as the *National Association for Sport and Physical Education (NASPE)* have emphasized role modeling as a function to be performed by PE teachers while arguing that
children and adolescents are more likely to adopt what PE teachers promote when the teachers show the behaviors themselves (NASPE, 2009b).

Findings from this study are consistent with those of Cardinal and Cardinal (2001) who argued that modeling was a powerful tool in teaching and recommended that PE teachers should engage in activities such as aerobic and flexibility exercises to promote health-related physical fitness. The ability of students in the present study to recognize that teachers should exercise and the teacher’s capacity to perform these types of behaviors were examples of this. Additionally, findings from this study suggest that the exhibition of healthy behaviors reinforces and supports the appearance of the teacher. It appeared that students viewed their teacher’s appearance more positively when they were able to observe that the teacher performed healthy-enhancing behaviors.

Students in the present study firmly believed that credible PE teachers should live by the same rules of their teaching and be living examples of the benefits PE can provide for those who lead a healthy lifestyle. To students, a credible PE teacher would be able to do the things he or she tells students to do. Otherwise, students’ perception of PE teacher credibility may be reduced. It appeared that students concluded that when a teacher does what she or he is telling students to do, it makes the teacher more believable. According to the students, PE teachers should exercise, play sports, eat healthy, maintain hygiene, and avoid unhealthy behaviors in order to increase their credibility. This finding advances a notion that the students in the present study were aware of the different facets a physically educated person (NASPE, 2004) ought to possess and may indicate that the students understood what it takes to live healthy. Underscoring this finding, students were able to observe that their PE teacher
exhibited these behaviors, which contributed to her credibility. The PE literature is supported by this finding as research has suggested appropriate and inappropriate PE practices that contribute to the development of a positive learning environment (NASPE, 2009b). This finding adds to the literature as we now have some information about what teaching behaviors students perceive to be important in establishing the credibility of the PE teacher.

Findings from this study support the views of Melville and Maddalozzo (1988) who argued that students believed PE teachers should exhibit healthy behaviors as a model to be followed. In addition, the authors proposed that students in their study were more intolerant of a PE teacher who seemed to be more out of shape than the other as students indicated that the teacher wearing a fat suit (a) was not a good role model, (b) was not as likable, (c) was not as knowledgeable, and (d) influenced students less when compared to the teacher not wearing the fat suit. The findings from the present study support these ideas as students pointed out that a PE teacher who “Practices What She Preaches” would be a good role model, knowledgeable, and as a result, more believable and credible.

Having a credible PE teacher in this study allowed for a greater understanding of how the exhibition of these behaviors supports what is taught in the gym and sets the example for students. However, the presence of a credible PE teacher is not a reality in every school. Since the PE teacher in the present study was deemed to be a credible one, future research may investigate the perceptions of students of a PE teacher with low credibility to verify whether the exhibition or lack thereof of these behaviors impacts his or her credibility and how. In addition, studies may focus on how students’ age may influence how much importance they place on the performance of these behaviors in the establishment of teacher credibility.
Is an “Awesome” Pedagogue

According to the students in the present study, a credible PE teacher must possess teaching skills that ultimately facilitate student learning. This finding is consistent with numerous studies conducted in communication literature indicating that specific teaching skills and qualities may increase the credibility of the teacher (e.g., Banfield, Richmond, & McCroskey, 2006; Chory, 2007; Frymier & Thompson, 1992; Myers, 2004; Teven, 2007).

While these studies have provided strong evidence between teaching skills and credibility, the majority of these studies used an experimental design in an unnatural context with a sample of college students, which may have limited application and may prevent generalizability of results to younger students. The present study adds to the current body of literature by proposing that students at a young age also perceive teaching skills as contributing factors to teacher credibility. In addition, this finding suggests what specific teaching skills students in elementary school perceived to be most important in their perception of credibility of PE teachers. However, as cautioned by the literature, determining what teaching skills are most important are relative to specific context and time (Hovland et al., 1953; Andersen & Clevenger, 1963). For these reasons, future research must investigate specific school subjects while varying contexts and ages of participants to support current information about the credibility of teachers and provide insight about the interaction of these skills and qualities.

In the study, students suggested specific teaching skills that promote students’ (a) security, (b) positive attitudes, and (c) engagement with the content, and as a result, may improve learning, teacher effectiveness, and the credibility of the PE teacher. In essence, these teaching skills represent what the PE teacher does in the gym. According to the children, in
order to promote students’ physical and emotional security, a PE teacher should (a) be present (b) treat students equally (c) maintain low level of stress, and (d) protect students physically. The exhibition of these qualities would support and reinforce to students that a PE teacher is caring and trustworthy.

If one can assume that these teaching skills will promote students’ security and demonstrate to students that the teacher is caring and trustworthy, then it is rational to think that these qualities help promote the credibility of the PE teacher. This finding advances the idea proposed by Chory (2007) indicating that students’ perception of classroom justice had an impact on teacher credibility. Although Chory’s study was able to explore more deeply the concept of classroom justice, the present study was able to verify that students should have a palpable sense of fairness or justice before perceiving their teacher as more credible.

The children in the study also pointed out that a credible PE teacher must ignite students’ positive attitudes. Students suggested that credible PE teachers should (a) display enjoyment, (b) treat students well, and (c) provide encouragement to students. This finding is consistent with the instructional literature proposing that credible teachers possess teaching skills that contribute to students’ motivation and attitude towards the teacher and the course, and as a result, the improvement of teacher credibility (e.g., McCroskey & Wheeless, 1976; Frymier & Thompson, 1992). This finding supports the argument offered by Frymier and Thompson (1992) that a teacher’s affinity-seeking behaviors may positively contribute to student motivation. Students’ indication in the present study that a PE teacher should be encouraging is an example of that. By encouraging students, the PE teacher motivates students to participate in the gym’s activities. Further, Frymier and Thompson argued that these
behaviors would increase the credibility of the teacher. Findings in this study advance that students were able to indicate teaching skills – manifested through teacher behaviors – that would make students feel positive about their teacher and to participate in the gym, and as a result, improve the credibility of the teacher. The indication by the students that a teacher who treats them well by letting them go to the bathroom when needed was an example of that.

In addition, students suggested that some teaching skills may be performed ante (before) and in situ (during) class in order to enhance students’ engagement with the content, and consequently, teacher credibility. This finding indicates that PE teachers should be skilled pedagogues in the gymnasium in order to provide effective learning experiences for students. In a word, PE teachers should be competent. These findings support the education literature on Source Credibility Theory indicating competence as a dimension of credibility (e.g., Chory, 2007; McCroskey & Teven, 1999; Myers, 2004). However, the literature does not provide what specific teaching skills may increase the competent dimension of credibility of the PE teacher. The findings from the study add to the literature by indicating some specific teaching skills students believed PE teachers ought to perform.

The teaching skills proffered by the children in this study appear to reflect what scholars suggest are the types of knowledge teachers need (e.g., Fernandez-Balboa et al., 1996; Shulman, 1987; Tsangaridou, 2006) in order to be more effective. Based on the knowledge types proposed by Shulman (1987), students suggested that the PE teacher must have knowledge of (a) content, (b) pedagogy, (c) curriculum, and (d) learners in order to enhance students´ engagement with the content and as a result, increase PE teacher credibility. The behaviors that suggested these types of knowledge increase the credibility of the PE teacher in
the competent, caring, and trustworthy dimensions of source credibility. These findings contribute to the teaching and PE literature as we now have a better understanding of what types of knowledge students recognized to contribute to the credibility of the PE teacher. In addition, the fact that students mostly indicated teaching skills related to content knowledge suggests this type of knowledge may be the first and most necessary PE teachers should develop and demonstrate.

**Implications for In-Service PE Teachers**

When we consider that the ultimate goal of PE is to lead students to be physically active for a lifetime (Graham, Holt/Hale & Parker, 2010), the effectiveness of PE teachers is measured by their ability to “convince” students to do so by teaching students to become physically educated individuals. As indicated by Source Credibility Theory (Hovland et al., 1953), this ability to persuade students is based on students’ willingness to believe in their PE teachers. This power to be believable is grounded in students’ perception of teacher credibility, which is constructed by how students acknowledge the teacher’s level of competence, caring, and trustworthiness. These dimensions of credibility are expressed through a variety of personal qualities, behaviors, and teaching skills that students believe PE teachers may exhibit.

Frymier and Thompson (1992) positioned that investigating teacher behaviors and credibility may provide insight for in-service teachers who wish to improve their credibility in the classroom and foster student learning. Findings from this study support this notion as the resulting personal qualities, behaviors, and teaching skills may provide some guidance to in-service teachers who wish to improve their credibility. Four implications emerged from these
findings relating to PE teacher’s capacity for increasing credibility among students. PE teacher must (a) negotiate the part, (b) look the part, (c) live the part, and (c) be a great teacher.

**Negotiate the Part**

Over a decade ago Graham (1995) argued for the need for listening to students since they should be considered customers who should be satisfied. This concept of students as a central part of the learning process has received support from the literature. Mitra (2004) indicated that listening to students may lead to student gains while Bolmeier (2006) proposed that since students are the population most directly affected by the school program, they should be heard and have input on what goes on in schools. More recently, McCullick et al. (2008) indicated that students as early as 2nd grade indeed have the ability to provide rich information about their perspectives on PE. Understanding that students are the “stakeholders” in this process has implications to in-service PE teachers.

The findings from this study indicate that credibility is in the eye of the students who are constantly negotiating and constructing the credibility of the PE teacher as they interact with the teacher. For this reason, in-service teachers must be cognizant that credibility is a flexible construct which can be modified for better or worse. These findings suggest that PE teachers should, on a daily basis, exhibit personal qualities, behaviors, and teaching skills that would enhance students’ perception of teacher competence, caring, and trustworthiness. If students for one reason or another do not perceive the PE teacher to be credible, students’ chances of learning will decrease. Consequently, in-service teachers should learn what makes them credible in students’ opinions.
It is important to note that although students were able to recognize and articulate some personal qualities, behaviors, and teaching skills that would make PE teachers more credible, the students participating in the study do not represent the student population. In-service PE teachers should be aware that not all characteristics may work for them. However, students did suggest areas (i.e., personal qualities, behaviors, and teaching skills) which would, in their opinion, increase credibility.

**Look the Part**

Although limited, the PE literature investigating the impact of PE teacher appearance on student learning has suggested that appearance does impact credibility. Bryant and Curtner-Smith (2009b) proposed that studies on the appearance of PE teachers demonstrated that those who look more athletic and fit have an increased chance of being perceived as more credible by students. For this reason, the PE teacher must look the part. Findings from this study support this concept as students indicated physical qualities that indeed portray a healthy, athletic, and fit able-bodied PE teacher. In-service PE teachers must be aware that students, especially in PE, pay attention to teacher’s appearance. Examples of this may include purchasing athletic equipment that students may consider to be the most appropriate, exercising to maintain appropriate levels of fitness, and creating opportunities to show to students that the teacher looks the part.

The findings indicated that by looking the part, PE teachers have the opportunity to indirectly display to students they live a healthy lifestyle and, consequently, possess the knowledge to teach students. When students in the study observed their PE teacher looked the part, they understood that the PE teacher had the knowledge to look that way, and perceived
their PE teacher to be someone who exercises on a regular basis. In addition, students believed their PE teacher had the knowledge to teach them because the teacher did it herself.

These findings suggest that the appearance of the PE teacher must receive more attention in the educational setting. When one considers that PE is the only school subject that teaches through the physical, it is reasonable to think that PE teachers should look the part. In addition, in-service PE teachers must be aware that their looks reflect the PE profession. The better PE teachers look, the higher the chances students will believe in them and consequently, increase students’ chances of learning the PE content.

**Live the Part**

*NASPE (2009b)* advocates modeling as an important tool in PE as students are more prone to perform healthy behaviors that PE teachers perform themselves. Findings from the study provide support to this argument as students indicated that PE teachers must live by what they teach. The students indicated that if the teacher is teaching students to be healthy and physically active, PE teachers should do the same. In practice, it means that PE teachers must make an effort to exhibit healthy behaviors to students. For instance, the PE teacher may participate in the activities with students or participate in an athletic event where students would be able to observe the teacher being active.

These findings suggest that a PE teacher might be behooved to avoid displaying unhealthy behaviors to the students as it may negatively affect students’ perceptions towards the teacher. For example, the PE teacher should avoid eating unhealthy foods in the school cafeteria when students would be present. Also, PE teachers may consider what information
Being a Great Teacher

Over two decades ago, Aicinena (1991) reviewed the literature for teaching behaviors that would impact students’ attitude towards PE. She found that the PE teacher, through the performance of teaching skills, may positively impact students’ attitude towards PE. More recently, Byra (2006) proposed that the application of teaching skills and behaviors are essential to student learning due to the fact that students are diverse and learn in different ways. Findings from this study support the concept that the exhibition and performance of qualities, behaviors, and teaching skills by the teacher are necessary and make teachers more effective. The findings indicate that students were able to recognize and indicate that the PE teacher should be a great teacher in order to be credible. The ability of the PE teacher to perform teaching skills that engage students with the content is an example of that. Being a great teacher promotes legitimacy and trust with students. When students observed that the teacher was able to prepare lessons that help them learn, their perceptions of competence and trust towards the PE teacher increased.

The findings indicated that although students demonstrated a desire to have fun and socialize in class, students perceived learning to be the most important outcome in the gymnasium. In-service teachers should look to develop their teaching skills as students are able to recognize them. In the study, the children wanted a PE teacher who could promote positive experiences and increase learning. It should be noted that students indicated teaching skills that are performed before and during the class. This finding suggests that in-service teachers
must spend time before class to make sure they develop appropriate and interesting activities that will engage students with the content. In addition, in-service teachers should be aware that they must be active during class to ensure students stay involved with the lesson. The findings from the study provide some examples of teaching skills that may help in-service teachers engage students with the content and consequently, increase their credibility.

**Implications for PE Teacher Education**

The literature in teacher education (TE) and physical education teacher education (PETE) have consistently indicated that improving the quality of professional preparation of pre-service teachers may impact teacher effectiveness and student learning. Over two decades ago Goodlad (1990) indicated that TE programs are failing to prepare apt school teachers. Goodlad suggested that teacher educators play an important part in solving this problem. For this reason, PETE educators must equip pre-service teachers with the necessary tools to be effective educators.

The findings from the current study provide PETE faculty with understanding of how students perceive and construct the credibility of PE teachers. More importantly, the fact that students participated in PE classes taught by a credible PE teacher provided valid information that may inform the preparation of pre-service teachers. As suggested by Berliner (1986), using knowledge from experts is more useful than knowledge acquired from non-experts in the development of professionals. When one considers that the credibility of the teacher may positively impact teacher effectiveness, one can assume that teacher credibility can be an important tool in helping teachers “get the job done.” Findings from this study support this concept as students indicated they would learn more from someone they deemed to be
credible. For this reason, PETE educators should be aware about the ramifications this assumption can bring to their programs.

The idea that appearance may impact PE teacher effectiveness is not new. Research has overwhelmingly pointed out that PE teachers should be physically fit (Dean, Adams, & Comeau, 2005; Gold et al., 2012; Melville & Jones, 1990) in order to facilitate student learning. The findings in the study support this idea and bring to light the need for discussing this issue. The findings suggest that PETE educators may need to pay attention to, emphasize the effect of, and educate pre-service teachers about how to improve appearance and consequently, their credibility.

In addition, the findings from the present study – supporting research and PE professionals’ views that PE teachers should demonstrate proficient levels of physical fitness – raise an important issue regarding physical/fitness requirements for pre-service teachers in PETE programs. Given the expectations for in-service teachers to demonstrate and model behaviors that promote physically educated students in schools, it is rational to think that PETE programs should require in-service teachers to demonstrate, to a degree, appropriate levels of fitness. When discussing these requirements, it is essential to define what it means to be physically fit. The findings from this study provide a starting point for PETE educators to use in the preparation of pre-service teachers. It was clear from the findings that in-service teachers should be physically fit enough to perform the same activities their students would perform in the gymnasium.

In their investigation on the effect of appearance on students’ knowledge and attitudes, Dean, Adams, and Comeau (2005) argued that as role models, whether they like it or not, PE
teachers must exhibit healthy lifestyles to increase teacher effectiveness. The findings from the present study advance this concept. The behaviors students were able to indicate to increase PE teacher credibility are examples of this. The findings add to and reinforce the current literature indicating the need for PE teachers to exhibit healthy behaviors. Similarly with the concept of appearance, this issue raises an important discussion about the dispositions and attitudes pre-service students should develop and demonstrate. PETE educators have to consider their programs’ objectives and strategies that will assist pre-service teachers in developing and demonstrating these behaviors during and after their professional preparation.

In 2006, Collier proposed that there was little evidence on the best practices of PETE programs. Furthermore, she argued that in addition to subject matter knowledge, teachers must possess and perform teaching skills that would promote student achievement. Findings from the present study support this proposition as students were able to identify teaching skills which would improve the credibility of teachers and as a result, PE teacher effectiveness. Although the literature on education has an abundant amount of information on what teaching skills may improve teacher effectiveness, it does not have enough evidence, or at least the connection has not been made, on what teaching skills improve the credibility of the PE teacher. There appears to be a gap in the literature ignoring the contribution credibility may have on teacher effectiveness. Perhaps the reason for this is the fact that teacher effectiveness is normally measured by the final product – how much students know. It seems that what happens to promote learning – what supports the performance of teaching skills – has been partially ignored. Given that pedagogical knowledge is emphasized in the preparation of pre-service teachers and that credibility may increase teacher effectiveness, addressing what...
teaching skills pre-service teachers should learn is necessary. Even though the findings from this study are limited, they bring up this important issue for discussion. PETE educators should consider that some teaching skills may be perceived more favorably by school children than others. Given that PETE educators have limited time to teach pre-service students a certain amount of information, in this case teaching skills, knowing which ones may increase the credibility of the teacher may ultimately help pre-service teachers become more effective teachers.

**Professional Standards**

There is extensive research investigating the types of TE programs that may contribute to more effective and qualified teachers (Lux, 2009). Although a model is not available, research on TE and PETE has found some characteristics of exemplary programs (Collier, 2006). Based on these findings, the National Commission on Teaching and America’s Future (*NCTAF*) (2003) delineated six dimensions to quality teacher preparation programs: (a) careful recruitment and selection for teacher candidates, (b) strong academic preparation, (c) strong clinical practice to develop effective teaching skills, (d) entry level teaching support in residencies and mentored induction, (e) modern learning technologies, and (f) assessment of teacher preparation.

Taken together, they provide guidance to the development of successful programs. These standards outline knowledge, skills, and dispositions necessary for the preparation of effective teachers. Although necessary, these dimensions overlook components that contribute to teacher effectiveness. Considering the diversity students bring to the school setting, it is difficult to expect that novice in-service teachers perform all teaching skills required for effective teaching. Therefore, it is important to recognize that understanding what knowledge,
teaching skills, and dispositions may be more important in the development of teacher effectiveness to specific school subjects is necessary. The findings from the present study, it seems, indicate that attention to this aspect needs to be included in teacher preparation programs.

In the field of PE, PETE programs are accredited by the National Council for Accreditation of Teacher Education (NCATE) based on NASPE (2009a) standards. These standards, similarly to those of NCTAF’s dimensions, provide direction for the development of effective PE teachers: (a) scientific and theoretical knowledge, (b) skill-based and fitness-based competence, (c) plan and implementation, (d) instructional delivery and management, (e) impact on student learning, and (f) professionalism. Although findings from the present study support the concept of preparing effective teachers, they also suggest that the ability of the PE teacher to increase his or her credibility may increase the chances of student learning.

It seems then, that an examination of the standards as they relate to the findings (“Looks Like One,” “Practices What She Preaches,” and “An ‘Awesome’ Pedagogue”) is warranted. While most of the NASPE standards outline knowledge, skills, and dispositions needed for the preparation of effective teachers, they only peripherally address the credibility construct. The standards do not specifically describe what personal qualities, behaviors, and teaching skills contribute to either the effectiveness or credibility of the PE teacher. The findings from the study suggest that credibility is a powerful tool in assisting student learning and consequently, should be discussed within the standards. Although more evidence is still needed, there is a strong indication that credibility should be disseminated during the preparation of our pre-service teachers and professional development of in-service teachers if
we expect them to be prepared to effectively teach our children in schools to be physically active for life.

**Summary**

This final chapter provided a discussion of the findings, implications, and recommendations that emerged from the present study. The use of Source Credibility Theory (Hovland et al., 1953) assisted in the development of a methodology that presupposed that the credibility of the PE teacher was in the eyes of the students. The findings revealed personal qualities, behaviors, and teaching skills that may increase the credibility of the PE teacher. These characteristics suggested that a credible PE teacher should “*Look Like One,*” “*Practice What She Preaches,*” and be “*An ‘Awesome’ Pedagogue.*” By discussing the impact of credibility, the study brought to light an important construct that has being neglected by the literature and professional standards. The findings extended the education and PE literature exploring what specific personal qualities, behaviors, and teaching skills PE teachers should perform and exhibit in order to be deemed more credible by students.

The detailed description of these personal qualities, behaviors, and teaching skills was the first step in informing in-service, pre-service, and PETE educators about the importance, enhancement, and impact of PE teacher credibility. Credibility must be adopted by national standards, TE and PETE programs as an integral part of their content as neglecting this construct could negatively influence the preparation of pre-service and level of in-service teacher effectiveness. In a world where the obesity problem has reached epidemic proportions, the ability to physically educate students to be healthy and active citizens for a lifetime is imperative. This responsibility, more than ever before, rests on the shoulders of PE educators.
To face this challenge, physical educators must be prepared to effectively teach our children.

Credibility is one tool that can aid PE educators to accomplish this goal.
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presented to the Public Relations Special Interest Group, International Communication Association, San Francisco, CA.


APPENDIX A

INFORMED CONSENT
CONSENT FORM

I, _________________________________, agree to participate in a research study titled "STUDENTS’ PERCEPTIONS AND CONSTRUCTION OF A PHYSICAL EDUCATION TEACHER’S CREDIBILITY" conducted by Nilo Ramos from the Department of Kinesiology at the University of Georgia (542-4210) under the direction of Dr. Bryan McCullick, Department of Kinesiology, University of Georgia (542-3621). I understand that my participation is voluntary. I can refuse to participate or stop taking part at anytime without giving any reason, and without penalty or loss of benefits to which I am otherwise entitled. I can ask to have all of the information about me returned to me, removed from the research records, or destroyed.

The reason for this study is to investigate how students perceive and construct the credibility of a physical education (PE) teacher. If I volunteer to take part in this study, I will be asked to do the following things:

1) Be observed during physical education classes (about 3 class periods for 50min each period) and have my interactions with students participating in the study recorded (written).

2) Indicate privately to the researcher the PE skill level of students.

3) If necessary, indicate privately to the researcher students who I believe are best able to communicate and articulate their thoughts, feelings, experiences and perceptions to the researcher.

The study should take approximately 16 visits, depending on the number of visits needed to conduct the activities with the children participating in the study. After the initial observations, each visit by the researcher may take 5/10 minutes of my time per visit.

The benefits for me are that my participation may help me understand how students perceive and construct the credibility of a PE teacher and improve my credibility in the eyes of my students. The researcher also hopes to learn more about the impact credibility has on teacher effectiveness.

No risk is expected but I may reveal thoughts, beliefs, or perceptions about some of my students that (if released) could have professional implications for me in my working environment after the completion of the study such as reprimand from parents or school faculty. I understand that I will be the only teacher participating in the study and that while anonymity and complete confidentiality cannot be guaranteed, any potential risks from participation in the study will be reduced by giving pseudonyms to me and other participants and by eliminating any identifiable information about me, my school, or any other individuals in my school community. This information will not be shared with others without my written permission.
The investigator will answer any further questions about the research, now or during the course of the project.

I understand that I am agreeing by my signature on this form to take part in this research project and understand that I will receive a signed copy of this consent form for my records.

_________________________  ___________________________  __________
Name of Researcher      Signature                  Date
Telephone: 229-343-1363  Email: nramos@uga.edu

_________________________  ___________________________  __________
Name of Participant      Signature                  Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu.
PARENTAL PERMISSION FORM

I agree to allow my child, _____________________, to take part in a research study titled, “Students’ Perceptions and Construction of a Physical Education Teacher’s Credibility,” which is being conducted by Mr. Nilo Ramos, from the Kinesiology Department at the University of Georgia under the direction of Dr. Bryan McCullick. My child’s participation is voluntary which means I do not have to allow my child to be in this study if I do not want to. My child can refuse to participate or stop taking part at any time without giving any reason, and without penalty or loss of benefits to which she/he is otherwise entitled. I can ask to have the information that can be identified as my child’s returned to me, removed from the research records, or destroyed.

- The reason for the study is to find out how students perceive and construct the credibility of a physical education teacher. In other words, the researchers want to find out what characteristics, behaviors and teaching skills that make a PE teacher credible in the eyes of the students. The children in the study will not evaluate their PE teacher.

- Children who take part may improve their communication and cognitive skills. The researcher also hopes to learn something that may help other children learn physical education better in the future.

- If I allow my child to take part, my child will be asked to participate in activities that include drawing, writing, taking pictures (instructions provided), individual interviewing and group interviewing (with 3 other students) and talk about things related to physical education with the researcher. The interviews will be audio-recorded and safely stored at the researcher’s office file cabinet for a maximum of 5 years. The researcher will ask my child to do these activities once or twice a week for 20 to 40 minutes for 10 weeks. This activity will take place during free study time and will not interfere with physical education classes. If I do not want my child to take part then she/he will be allowed to study as usual.

- The research is not expected to cause any harm or discomfort. Since my child will not be evaluating his/her PE teacher, the information given by my child will not directly speak to the teacher and consequently offers minimal risks for my child to be identified or suffer any consequence. Additionally, a pseudonym will be assigned to my child to prevent any identification. My child can quit at any time. My child’s grade will not be affected if my child decides not to participate or to stop taking part.
• Any individually-identifiable information collected about my child will be kept confidential unless otherwise required by law. My child’s identity will be coded, and all data will be kept in a secured location.

• The researcher will answer any questions about the research now, or during the course of the project, and can be reached by telephone at 706.542.4210 or email at nramos@uga.edu. I may also contact the professor supervising the research, Dr. Bryan McCullick, at 706.542.3621 or bamccull@uga.edu.

• I understand the study procedures described above. My questions have been answered to my satisfaction, and I agree to allow my child to take part in this study. I have been given a copy of this form to keep.
We want to see if you would be willing to help us with a research project about things that kids think about, things that they feel, and things that they do. We'll ask you questions but it is different from school because there are no right or wrong answers. We just want to know what you really think. We want to know what makes a teacher be more believable.

If you decide to do the project with us, you will participate in some activities that include drawing, writing, talking, and talking with other students. This project should take between 8 and 12 classes. Your answers will be kept just between you and me. I may not be able to keep this promise if you tell me that you or another child is being hurt in some way, or if a judge asks me for some information. If that were happening, I would tell someone to help keep you or the other child safe. You can also decide to stop at any time or can choose not to answer questions that you don't want to answer.

Do you have any questions? Would you be willing to do the project with us?

____________________________________
Participant signature
APPENDIX B

OPEN-ENDED QUESTIONNAIRE
Directions: Please answer the following questions about the ability of PE teachers to be believable (“credibility”) as we have talked about before. There is no right or wrong answers. I want to know what you think. Give examples when possible.

1 – What was the first most important thing your most believable PE teacher did that made him or her so believable?
   The PE health teacher was believable because...
   For example,

2 – What was the second most important thing your most believable PE teacher did that made him or her so believable?
   The PE health teacher was believable because...
   For example,

3 – What was the third most important thing your most believable PE teacher did that made him or her so believable?
   The PE health teacher was believable because...
   For example,

4 – What was the fourth most important thing your most believable PE teacher did that made him or her so believable?
   The PE health teacher was believable because...
   For example,
APPENDIX C

PHOTO ELICITATION
PHOTO ELICITATION INSTRUCTIONS (Appendix C)

Parents, this activity is part of the study titled "STUDENTS’ PERCEPTIONS AND CONSTRUCTION OF A PHYSICAL EDUCATION TEACHER’S CREDIBILITY" conducted by Nilo Ramos from the Department of Kinesiology at the University of Georgia (542-4210) under the direction of Dr. Bryan McCullick, Department of Kinesiology, University of Georgia (542-3621). It is designed to have your child take pictures about things that inform their construction of Physical Education (PE) teacher credibility. In other words, I want to know from where your child develops his or her ideas about PE. For example, if your child thinks PE is good because she or he heard about it on TV, then your child should take a picture of a TV representing the source of information. If your child thought about his or her PE teacher on the dinner table because the PE teacher talked about nutrition, then a picture of the dinner table would be appropriate. These pictures will be later used to help your child talk during the individual interview about the credibility of PE teachers.

To help your child complete this activity successfully, please do the following:

1 – Remind your child that this assignment should be completed in one week

2 – Make sure your child knows how to use a digital camera

3 – Encourage your child to take at least 25 pictures

4 – Avoid telling your child of what he or she should be taking pictures

5 – Remind your child that she or he should take pictures of things that make her/him think about physical education

6 – Remind your child that she or he should not take pictures of other people in order to respect their privacy

7 – If your child cannot use his/her own digital camera, or one provided by you, the researcher will provide one with no penalty to the child or you in case the camera is damaged, stolen or not returned

Once your child completes the activity, please have your child bring the camera or memory stick in which the pictures are stored. If you prefer, please e-mail the pictures to nramos@uga.edu. The pictures will not be published anywhere and they will be safely stored in a computer where the researcher is the only person who has access to it.

If you have any question, do not hesitate to contact me at (229) 343-1363 or nramos@uga.edu

Thank you very much for your time and cooperation.

Sincerely,
Nilo Ramos.
APPENDIX D

GROUP INTERVIEW GUIDE (S)
GROUP INTERVIEW GUIDE (S) (Appendix D)

Part 1: Co-researcher Contribution

Did you like to do the activities we worked on before? What about the orientation activity? Open-ended questionnaire? Drawing? Picture taking? Did you like or dislike any of the activities? Why?
Do you think the drawings we worked on before helped me understand what students think about their PE teachers being believable?
Do you think the pictures we worked on before helped me understand what students think about their PE teachers being believable?
As co-researchers in this project, could you think of questions to ask other students about things their PE teachers do to be believable?
As co-researchers in this project, could you think of activities such as drawing and taking pictures that would help students talk about things their PE teachers do to be believable?
How do I know students believe in their PE teacher? Is there anything I can do to know if they believe in their PE teacher?
Do you have any other suggestion you think would help with the project?

Part 2: Group Interview

Do you enjoy PE? Why?
What do you learn in PE?
Do you listen to your PE teacher? Why?
Do you believe in your PE teacher? Why?
What are some of the things he/she does that make him/her believable?
What is the most important thing a PE teacher could do to make her/him believable?
What is the second/third/fourth most important think a PE teacher could do to make her/him believable?
Is there anything in your school that reminds you of your PE teacher? Why?
Besides your school, is there anything that you see, hear or do that reminds you of your PE teacher? Why?
Do you hear or see anything in the radio, TV or anywhere else that reminds you of your PE teacher? Why?
What do your parents talk about your PE teacher? Do you think they believe in your PE teacher? Why?
If I could make the perfect PE teacher, what would she/he look like? Why?
What he/she should be able to do?
APPENDIX E

INDIVIDUAL INTERVIEW GUIDE
INDIVIDUAL INTERVIEW GUIDE (Appendix E)

Do you enjoy PE? Why?
Could you give me one example when you really enjoyed your PE?
What do you learn in PE?
Do you listen to your PE teacher? Why?
Could you give me one example that you have listened to your PE teacher?
Do you believe in your PE teacher? Why?
Could you give me one example that you have believed in your PE teacher?
What are some of the things he/she does that make him/her believable?
Could you give me one example about something he/she did that made him/her believable?
What is the most important thing a PE teacher could do to make her/him believable? Could you give me one example?
What is the second/third/fourth most important think a PE teacher could do to make her/him believable? Could you give me one example?
If you could make the most credible PE teacher, how would she/he look like? Why?
What should he/she be able to do?
Is there anything in your school that reminds you of your PE teacher? Why?
Besides your school, is there anything that you see, hear or do that reminds you of your PE teacher? Why?
Do you hear or see anything in the radio, TV or anywhere else that reminds you of your PE teacher? Why?
What do your parents talk about your PE teacher? Do you think they believe your PE teacher? Why?