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In-Service Physical Educators' Multicultural Attitudes in Nebraska Schools Affected by The New Latino Diaspora

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IN-SERVICE PHYSICAL EDUCATORS' MULTICULTURAL ATTITUDES IN NEBRASKA SCHOOLS AFFECTED BY THE NEW LATINO DIASPORA

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DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy

Physical Education, Sports and Exercise Science

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DEDICATION

To my family, for if you forget where you came from you will never appreciate where you are.

DEDICATORIA

A mi familia, porque si olvidamos de donde venimos nunca valoraremos a donde hemos llegado.

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ABSTRACT

The purpose of this study was to examine the relationships between in-service physical educators in communities affected by the New Latino Diaspora in Nebraska and the following variables: (a) gender, (b) educators' ethnicity or race, (c) percentage change of Latino population in a community, (d) percentage Latino students in a school district, (e) teacher certification held and, (f) educators' place of residence. In addition, this study seeks to discern: (a) whether or not significant relationships exist between the indicated variable and multicultural attitudes; (b) provide a demographic description of physical educators in selected communities.

A sample size of 122 in-service physical educators was identified. Out of the 122 identified physical educators, 102 responded. This resulted in a return rate of 84%. Despite this return rate, assuming a power of 80% as acceptable, all variables and their levels did not attain power to meet this level of acceptance. The male to female ratio in the sample of the physical educators was approximately 3:2. All but one of the participants was of white ethnicity. At the time of the survey, more than half of the

sample population held professional certificates (57.80%); nearly one- third held standard certificates (35.30%); 5% held initial level certificates and 2% reported that they did not hold a physical education certificate.

The Munroe Multicultural Attitude Scale Questionnaire (MASQUE) was used to collect information related to participants' multicultural attitudes and five additional questions were used to collect demographic data. This study used the analytical survey method to collect data. Research questions were examined using parametric statistics in order to identify whether significant relationships existed. The statistical analyses included T-tests, ANOVAs, F-tests and appropriate Post-Hoc tests.

Examination of the research questions identified only one significant relationship. A post-hoc test confirmed that non physical education certificate holders had significantly different multicultural attitudes compared to the multicultural attitudes of the physical education certificate holders. Findings of the study suggest that providing physical educators and physical educator candidates with opportunities to develop a more multicultural responsive approach to teaching.

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Chapter 1

Introduction

In August 2005, the Omaha World-Herald had a page one headline that stated "Big increase of Hispanics in Nebraska." This headline was an indication of a demographic trend that a growing number of rural Nebraska towns were experiencing unprecedented growth in Latino populations referred to by scholars as the New Latino Diaspora (Hamann & Harklau, 2007; Murillo & Villenas, 1997; Wortham, Enrique, & Hamann, 2002). It has been suggested that the demographic changes brought about by the New Latino Diaspora have not been experienced since white settlers first entered these areas (Hamann & Harklau, 2007). These demographic changes present rural communities with unanticipated social and cultural dilemmas (Potter, Cantarero, & Pischel, 2008).

One of the social dilemmas is manifested in the schools of these communities affected by the New Latino Diaspora. Schools often lack the resources, personnel, and knowledge of how to respond to cultural differences to effectively address the needs of the children of the New Latino Diaspora (Dentler & Hafner, 1997). The children of the New Latino Diaspora have been referred to as New-Comers and are often characterized as having lower academic achievement and lower graduation rates in comparison to non-Latino peers (Wortham, Enrique, & Hamann, 2002).

Researchers and the National Council for Accreditation of Teacher Education (NCATE) have suggested that a teacher's beliefs and attitudes are precursors to teachers' dispositions and that dispositions ultimately impact student achievement (Diez, 2007; NCATE, 2006; Villegas, 2007). NCATE (2006) defines dispositions as "The values, commitments, and professional ethics that influence behaviors toward students" (p.53).

NCATE (2006) also identified the following dispositions as expected outcomes of accredited teacher education programs: a) respecting individual differences in students, b) creating instructional opportunities adapted to diverse learners, and c) all students can learn. These identification of such dispositions suggests that NCATE is concerned about educators' abilities to meet the needs of populations like New-Comers. In addition, teachers' beliefs, manifested in their dispositions, can ultimately impact student learning and achievement (Agne, 1994; Diez, 2007; NCATE, 2006; Noddings, 2005; Owen & Ennis 2005; Villegas, 2007). Multicultural beliefs may then influence teachers' actions or dispositions toward their students. The relationship between beliefs, dispositions and student achievement may partially explain the reported lower levels of academic success and graduation rates of New-Comers.

Although no research indicates New-Comers' levels of achievement in physical education, the reported lower levels of academic success suggest that New-Comers achievement in physical education may be similar. As of yet, there has not been an attempt to identify the multicultural attitudes and beliefs of in-service physical educators in schools affected by the New Latino Diaspora. Some research on pre-service physical educators, business and marketing teachers, and family and consumer science teachers' attitudes toward cultural diversity and pluralism do exist (Adams & Hall, 2002; Dee & Henkin, 2002; Stanely, 1992, 1996). Dee and Henkin indicated that pre-service physical educators reported lower values of diversity than other pre-service educators. However, research on in-service physical educators is lacking. If one extrapolates from the reported findings of Dee and Henkin (2002), in-service physical educators may also harbor similar beliefs in regards to diversity. The diversity beliefs of in-service physical educators may

then be manifested in their dispositions, which may result in the overall lower levels of academic achievement of New-Comers and may play a role in the reported higher rates of obesity and overweight of Latino populations like New-Comers (National Association for Sport and Physical Education (NASPE), 2006).

The *2006 Shape of the Nation Report: Status of physical education in the USA* (NASPE, 2006) reported, "four in 10 Mexican-American and African-American youth age 6 to 19 are overweight or at risk of being overweight" (p.1). The report also stated, "children and adolescents who are overweight by age 8 are 80 percent more likely to become overweight or obese adults" (NASPE, 2006, p. 1). These findings suggest that schools affected by the New Latino Diaspora will potentially have a student population that is more likely to be overweight, or at risk of being overweight and therefore at risk of becoming overweight or obese adults. Due to the vulnerability of this student population, it is essential that in-service physical educators be able to provide them with a high quality and effective physical educational experience.

Conversely, if physical educators harbor attitudes that place a low value on cultural diversity and pluralism, their actions as teachers may not be optimal for student learning. In essence, physical educators' multicultural attitudes may act as barriers to New-Comers' opportunities to become physically educated individuals. In turn, this lack of learning opportunities may compound or increase these students' risks of being overweight or obese.

No single theoretical framework can sufficiently capture multicultural attitudes of physical educators within the New Latino Diaspora. Similarly, no single theoretical framework can sufficiently capture how physical educators' attitudes may then affect

student learning. To capture the effects of held multicultural attitudes and the possible impact on student achievement three theoretical frameworks seem pertinent: Agne's model of teaching/learning effectiveness (1994), Bandura's (1982) *Self-Efficacy Mechanism in Human Agency,* and Banks' (1999) *Transformative Model.*

Agne's model of teaching/learning effectiveness provides an overlaying framework that provides a rationale for how teachers' beliefs may affect teaching behaviors or dispositions and eventually student achievement (Agne, Greenwood, & Miller, 1994). However, this model lacks an explanation of how held attitudes and beliefs may influence the actions or dispositions of a teacher. Bandura (1982) theorized that held beliefs often override knowledge resulting in perceived irrational behavior, so he referred to this dynamic between beliefs, knowledge and behavior as the *Self-Efficacy Mechanism in Human Agency*. Other researchers working from Bandura's model have suggested that held beliefs act as a filter that may lead to behaviors that at times are less than optimal for student learning (Bandura, 1982; Fang, 1996; Owen & Ennis, 2005; Pajares, 1992; Pohan & Aguilar, 2001). Banks' (1999) *Transformative Model*, the third theoretical framework relevant to this study, summarizes that for teachers to be more effective in a multicultural context they need to be more than just knowledgeable about multiculturalism. They need to care about multiculturalism and act in ways that are inclusive and responsive (Munroe & Pearson, 2006).

In the broadest sense, physical educators' multicultural attitudes may lead to teaching behaviors that are not optimal for New-Comers. These teaching behaviors may then have a negative impact on New-Comers' opportunities to become physically educated individuals. However, documentation of the impact of physical educators'

attitudes and beliefs manifested in teachers' behaviors toward Latino student populations like New-Comers is beyond the scope of this study.

Problem Statement

NASPE (2004) charges physical educators with the duty of educating all students in a learning environment that among other things is inclusive of all students. Research describing held multicultural attitudes of in-service physical educators is sparse, and research of multicultural attitudes of in-service physical educators in schools affected by the New Latino Diaspora in Nebraska could not be located. This lack of research on physical educator's multicultural attitudes in schools affected by the New Latino Diaspora is a gap in the research that needs to be addressed. Consequently, with the influx of Latino immigration and migration to communities historically void of Latino populations in Nebraska, a need is present to study existing multicultural attitudes of teachers in communities and schools affected by the New Latino Diaspora.

Purpose of the Study

The purpose of this study is to examine relationships of in-service physical educators' estimated multicultural attitudes in Nebraska school communities affected by the New Latino Diaspora and therefore is a descriptive study (Locico, Spaulding, & Voegtle, 2006). The central dependent variable is estimated multicultural attitudes of in-service physical educators. This study seeks to discern relationships between estimated multicultural attitude and the following variables: (a) gender, (b) educators' ethnicity or race, (c) percentage change of Latino population of a community, (d) percentage Latino students of a school district, (e) teacher certification held and, (f) educators' place of residence. In addition, this study seeks to provide a demographic description of physical

educators in selected communities. Reported multicultural attitudes, will be determined using the Munroe Multicultural Attitude Scale Questionnaire (MASQUE) (Munroe & Pearson, 2006). See Appendix A for permission to use the MASQUE in this study.

Research Questions

The following research questions are proposed for this study:

1. What is the relationship between gender and multicultural attitudes of in-service physical educators within Nebraska communities affected by the New Latino Diaspora?
2. What is the relationship between self identified ethnicity or race and multicultural attitudes of in-service physical educators within Nebraska communities affected by the New Latino Diaspora?
3. What is the relationship between the percentage of Latino population in the host community and in-service physical educators' multicultural attitudes in Nebraska communities affected by the New Latino Diaspora?
4. What is the relationship between the percentage of Latino students of a school's population and in-service physical educators' multicultural attitudes in Nebraska communities affected by the New Latino Diaspora?
5. What is the relationship between certification held and multicultural attitudes of in-service physical educators in Nebraska communities affected by the New Latino Diaspora?
6. What is the relationship between place of residency of the educator and multicultural attitude on in-service physical educators in Nebraska communities affected by the New Latino Diaspora?

7. What is the relationship between grade level taught of the educator and multicultural attitude on in-service physical educators in Nebraska communities affected by the New Latino Diaspora?

Delimitations

This study will be delimited by the following:

1. Only in-service physical educators in Nebraska schools affected by the New Latino Diaspora were included in the sample.
2. Data collection took place during the Spring of 2009 in specific Nebraska schools.
3. Multicultural attitudes were estimated using the Munroe Multicultural Attitude Scale Questionnaire (MASQUE) (Munroe & Pearson, 2006).
4. The central dependent variable was multicultural attitudes of in-service physical educators. The relationship of the central dependent variable and the following four independent variables (correlates) were analyzed: gender, percentage Latino students, certification held, grade level taught.

Assumptions

The following assumptions were made in this study:

1. The measurement tool, Munroe Multicultural Attitude Scale Questionnaire (MASQUE) (Munroe & Pearson, 2006) was a valid and reliable estimation of multicultural attitudes.
2. Participants understood the 18 questions in the MASQUE.
3. Participants responded to the survey honestly, accurately, and completely.

Limitations

This study was limited by the following:

1. Findings could only be generalized only to comparable samples in comparable settings outside Nebraska.
2. Measurement was limited by the psychometric qualities of the Munroe Multicultural Attitude Scale Questionnaire (MASQUE) (Munroe & Pearson, 2006).
3. The response rate did not provide sufficient power and effect size to confirm or past research.
4. The Variable, *percent change of Latinos in communities* reflect only populations accounted for by the 2000 census and may not capture migrant and or illegal populations within the community.

Significance of the Study

Because many rural communities have experienced an influx of New-Comers from the New Latino Diaspora, there is a need to begin understanding the attitudes and beliefs of physical educators toward providing culturally relevant instruction to the New-Comers. It is through gaining a stronger understanding of these attitudes and beliefs that professionals in physical education may determine strategies to engage future and in-service physical educators in training opportunities for inclusive, culturally relevant instruction for all students. These strategies could encompass field experiences that are culturally diverse and course work that explicitly addresses the challenges of teaching physical education in culturally diverse and pluralistic classes. A need may be found for increased professional development for in-service physical educators to assist them in teaching culturally diverse and pluralistic classes.

Definition of Terms

The following key terms are defined as follows for the proposed study.

Attitudes: an individual's beliefs, values, expectations, and perceptions toward a matter, that are based on past experiences, that then effects that individuals framing of a matter and resulting behaviors (Dee & Henkin, 2002; Pajares, 1992; Pohan & Aguilar, 2001).

Cultural Diversity: description of a context that is characterized by a variety of ethnicity, race, gender religious affiliation, socioeconomic level, social class, language, exceptionality and age (Banks & McGee, 1989; Stanely, 1992).

Cultural Pluralism: ideology that gives value to cultural diversity promotes equality for all people and is evidenced in individuals' actions, beliefs, attitudes and actions (Stanely, 1992).

Dispositions: as defined in the glossary section of on the National Council for Accreditation of Teacher Education's *Professional Standards for the Accreditation of Schools, Colleges, and Department of Education 2006 Edition*:

> The values, commitments, and professional ethics the influence behavior toward students, families, colleagues, and communities and affect student learning, motivation, and development as well as the educator's own professional growth. Dispositions are guided by beliefs and attitudes related to values such as caring, fairness, honest, responsibility, and social justice. For example, they might include a belief that all students can learn, a vision of high and challenging standards, or a commitment to a safe and supportive learning environment. (p. 53)

Race and Ethnicity: according to the *Provisional Guidance on the Implementation of the 1997 Standards for Federal Data on Race and Ethnicity* (US Census Bureau, 1999), prepared by the Tabulation Working Group Inter-agency Committee for the Review of Standards for Data on Race and Ethnicity, all federal agencies, including the U.S. Census Bureau, are "required to offer respondents the option of selecting one or more of the following five racial categories…" (p. 7).

1. **American Indian or Alaska Native.** A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
2. **Asian.** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
3. **Black or African American.** A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."
4. **Native Hawaiian or Other Pacific Islander.** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
5. **White.** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

In regards to ethnicity all federal agencies must offer at least the "Hispanic or Latino" culture of origin option defined as follows:

> **Hispanic or Latino.** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino" (p. 7).

New Latino Diaspora: a pattern of Latino migration and immigration to communities, usually rural ones, historically insulated from Latino populations (Murillo & Villenas, 1997; Wortham, Enrique, & Hamann, 2002).

Physical Educator: according to Title 92 of Nebraska Department of Education Rule 24-Certificate Endorsements (2006), a person who holds a Health and Physical Education certification or a Physical Education subject endorsement have met all requirements to teach physical education and or health in kindergarten through grade 6, or grades 7 through 12, or kindergarten through grade 12. In addition, according to Title 92 of Nebraska's Department of Education Rule 24 a physical educator may hold a one of the following three certifications:

1. **005.02 Initial Teaching Certificate**. The initial teaching certificate shall be valid for teaching in all Nebraska school systems… The initial teaching certificate shall expire on the applicant's date of birth in the fifth year following the year of issuance or renewal (p. 14)
2. **005.05 Standard Teaching Certificate**. The Standard teaching certificate shall be valid for teaching in all Nebraska school systems… [Applicant must] hold a Nebraska initial teaching certificate or hold a comparable

equivalent certificate; and within five years prior to the date of application, have taught half-time or more to two (2) consecutive school years in the same Nebraska school (p 15)

3. **005.07 Professional Teaching Certification**. The professional teaching certificate shall be valid for teaching in all Nebraska school systems… Applicant is required to hold or qualify for a Nebraska standard teaching certificate, hold a comparable and equivalent certificate, or verify two (2) consecutive years of teaching experience during the period of validity of a regular certification; and have received a master's degree, other than a Master of Arts in Teaching or a masters degree that was required initially for the area of endorsement from a standard institution or have received a six-year specialist's certificate or a doctorate degree from a standard institution of higher education in an area related to the applicant's area of endorsement completed at the master's degree level (p. 15).

(Nebraska Department of Education Rule 21, 2007)

Schools affected by the New Latino Diaspora: schools that showed an increase in Latino student population since the passage of the 1986 Immigration Reform and Control Act IRCA (Personal correspondence, Edmund T. Hamann, Ph.D., 2007). The amount of increase that constitutes if a school is affected by the New Latino Diaspora will be subjectively determined by the primary researcher.

Chapter 2

Review of Literature

Introduction

The purpose of this review is multifold. First it is necessary to explore demographic changes occurring in American society and associated changes in public schools. Secondly it is important to review the literature on of the role physical education in today's public school setting. Third, the review will examine teacher dispositions and teacher attitudes. Fourth, this review will explore past investigations germane to the current study. Fifth, this review will examine what variables should be accounted for based on similar past studies. Finally, a summary of the reviewed material and the gaps that the reviewed research has revealed will be reported.

National Demographics and Trends in Latino Population Patterns

According to *The Hispanic Population Census 2000 Brief*, the Latino population in the United States increased by nearly 60% between 1990 and 2000 (Guzman, 2001). Latinos are the largest ethnic minority group in the United States today, and the U.S. Census Bureau's *Population Estimates* indicated that by the year 2050 Latinos populations may constitute about one-fourth of the total US population (http://www.census.gov/popest/estimates.php). It is estimated that along with this overall population growth, the number of Latino immigrants and their children has also increased. According to the United States Census Bureau, it is estimated that nearly half of the immigrant children in the United States are of Latino heritage (http://www.census.gov/popultion/www/cen2000/phc-t10.html). The 2000 Census also indicated that a growing number of Latinos are settling in rural areas. This growth in

Latino population nationwide corresponds to growth in Latino student populations referred to by researcher Murillo & Villenas, (1997) as Cultural and Linguistic Divers (CLD) or New-Comers students.

According to the National Clearinghouse for English Language Acquisition (NCELA) (2002), Cultural and Linguistic Diverse (CLD) student populations that include New-Comers are still growing in states such as Florida, California and Texas. However, Midwestern states such as Kansas, Iowa and Nebraska are experiencing dramatic increases in CLD populations that have exceeded 200 percent per year (NCELA, 2002). The dramatic increase in CLD being experienced by Midwestern states like Nebraska is in part accounted for by what social demographic scholars referred to as the New Latino Diaspora.

The New Latino Diaspora

The growth in diversity among student population in states like Nebraska is so profound that educational scholars suggest that educators in all subject matters, levels, and geographic regions need to realize that, "diversity is not a trend; rather it is the reality that everyone lives with" (Valentin, 2006, p. 199). Part of this reality includes the current patterns in Latino migration and immigration termed by some scholars as the New Latino Diaspora (Murillo & Villenas, 1997; Hamann & Harklau, 2007; Wortham, Enrique, & Hamann, 2002). To better understand the New Latino Diaspora, one first needs to examine the term "diaspora" from a socio-historical and cultural perspectives.

The term "*diaspora"* according to the Merriam-Webster dictionary (1993) refers to "people settled far from their homeland" (p. 351). Diaspora and Zionism scholar Norman Berdichevsky (2007) cites that diasporas can be found from biblical to the

modern area. Berdichevsky's examination and comparison of the Chinese, Greek, Armenian, Hungarian, and Jewish diasporas reveals three common themes. The first theme is that the individuals who make up the diasporas often left their homelands out of fear of genocide, political extinction, loss of identity, and or dispossession. Dispossession refers to the loss of property and or economic means and opportunities (Berdichevsky, 2007). The second common theme is that, upon arrival in the new community or region of settlement, the members of the Diaspora were seen as outsiders of the host culture and treated as outcasts. Berdichevsky explains that the outcast status experienced by some was "akin to anti-Semitism" (p. 119). The third common theme identified by Berdichevsky was that the "diasporatic" populations "had undue economic influences in local economies and, for this reasons the *native* populations often resented it" (p. 119). The "undue economic influence" was due in part to the cheap labor force the "diasporatic" populations provided for the host communities. In the case of the Chinese diaspora of the 1800's, "They were feared as cheap 'coolie labor,' needed to work in the gold mines and in railroad construction, but were later resented" (p. 119).

Hamann and Harklau (2007) state the term diaspora in context of the New Latino Diaspora connotes being forcibly expelled by religious, political or economic forces. In addition the New Latino Diaspora is characterized with newcomer populations that are seen as outsiders of the host communities and as a source of cheap labor (Murillo & Villenas, 1997; Hamann & Harklau, 2007; Wortham, Enrique, & Hamann, 2002). In summary, the common themes cited by Berdichevsky are analogous with conditions and characteristics associated with the New Latino Diaspora.

The term "New Latino Diaspora" was first used in the research of Murillo and Villenas (1997). The term itself denotes "Increasing numbers of Latinos (many immigrant and some from elsewhere in the United States) are settling both temporarily and permanently in areas of the United States that have not traditionally been home to Latinos" (Hamann, Wortham, & Murillo, 2002, p. 1). Hamann and Harklau (2007) characterize the New Latino Diaspora as often being a rural settlement pattern. The rural characteristic is attributed to "changing patterns of labor markets in the U.S. where several industries in particular are driving Latino immigration and immigration to new, often rural areas." (p. 2). Henness (2002) reports that beginning in the 1960's the meat processing industry started locating plants in rural areas. The need for a cheap labor force in meat processing industry is what draws Latino populations to rural areas (Hamann, Wortham, & Murillo, 2002; Henness, 2002).

Potter, Cantarero and Pischel (2008) contend that the "ruralization" of the meat packing industry had two effects: "(1) the industry became decentralized, with greater number of plants located further away from their principle markets; and (2) the communities that house corporate processors experienced sudden demographic diversifications" (p. 43). This sudden demographic diversification, that includes New Latino Diaspora populations, has given rise to many social and cultural dilemmas (Wortham, Enrique, & Hamann, 2002; Hamann & Harklau, 2007; Henness, 2002; Potter, Cantarero, & Pischel, 2008). Murillo and Villenas (1997) assert that the New Latino Diaspora is forcing many schools to address issues of cultural and linguistic diversity that is historically unparalleled.

In summary, the geographical characteristic of the New Latino Diaspora is generally associated with, but not solely limited to, rural communities historically void of substantial permanent Latino populations (Hamann & Harklau, 2007; Wortham, Enrique, & Hamann, 2002). A consensus among scholars exists in regards to the "where" of the New Latino Diaspora (rural communities historically void of a Latino population), however; the defining of the New Latino Diaspora in terms of "when" the New Latino Diaspora began becomes problematic (Hamann & Harklau, 2007). A date or event to indicate the beginning of the New Latino Diaspora has not been identified. Hamann suggests that communities affected by the New Latino Diaspora can be identified by having Latino population growth after the passage of the 1986 Immigration Reform and Control Act (IRCA). (personal correspondence June, 6 2007). Henness (2002) described the IRCA (1986) as an example of US immigration policy that was in accordance with the newly developing global economic interest. Due in part to these economic interests the IRCA (1986) allowed existing Latino populations to adjust their legal status. This adjustment in legal status then accounted for documented growth in Latino populations after 1986.

New-Comers.

The New Latino Diaspora is hallmarked by a Latino rural settlement pattern after 1986. These settlement patterns are associated with social and cultural dilemmas in these rural host communities. One of these dilemmas is manifested in the schools of host communities. Some scholars question the ability of the schools in these rural areas to deal with the needs and challenges the New Latino Diaspora presents. One of these challenges

is that rural schools are often faced with rapidly growing student populations of the New Latino Diaspora referred to as New-Comers (Wortham, Enrique, & Hamann, 2002).

One of the challenges of serving New-Comers populations is that many of them are considered to be English Language Learners (ELL) or Cultural and Linguistic Diverse (CLD) (Valdes, 2001)). The National Center for Educational Statistics (2006) reports that students who have difficulty speaking English, like many New-Comers, constituted 5.3% of the total population of 16- to 24-year olds, but constituted 44.3% of the dropouts within that age group. These numbers suggest that New Latino Diaspora schools may not be able to meet the needs of New-Comers. Hamann, Worthhan, and Murillo (2002) conclude that "few Latino Diaspora schools so far are able to help Latino school children overcome the economic and social barriers they face… high school completion rates, representation in high school tracks, … are not encouraging" (p. 7). Schools affected by the New Latino Diaspora may be ill prepared for meeting the needs of newcomer populations.

The use of graduations rates may indicate the overall academic achievement for New-Comers populations, but these statistics fail to provide details about achievement in specific subjects. This void in the research, if examined, may provide useful insight about New-Comers populations.

The Latino paradox.

The Latino Paradox has been described as an "epidemiological paradox" wherein research has suggested that second and third generation immigrant children are generally at a higher health disadvantage than first generation immigrant youth (Harker, 2001; Popkin, 1998; Wickrama, Elder, & Abraham, 2007). Markides and Coreil (1987) and

more recently Wickrama, Elder, and Abraham (2007) suggest that "more acculturated/assimilated immigrant youth who should experience the benefits associated with living in the United States face higher health risks than do youth who are comparatively less acculturated/assimilated and therefore potentially less likely to be reaping the benefits of health services available to most" (p. 229).

A proposed explanation for this "paradox" is that Latino students become more acculturated and begin to adopt behaviors that prevail in the United States. These behaviors may then erode health advantages present in early generations. Wickrama, Elder, and Abraham (2007) conclude, based on data from the National Longitudinal Study of Adolescent Health that "acculturation level associates positively with health risk behaviors" (p. 229). Foreyt (2005) bluntly captures this association of acculturation and health as follows, "Acculturation is also a factor: As people assume for themselves the values of white population, they become heavier" (p. 2). In general, the research suggests that as acculturation increases so does the prevalence of health risk behaviors. For Latino youth these health risk behaviors and attitudes associated with increased acculturation are identified as early sex, drug use, smoking, poor eating habits, increased food consumption, and a lack of exercise (Arcia, Skinner, Bailey, & Correa, 2001; Cobas, Balcazar, Benin, Keith, & Chong, 1996; Foreyt, 2003; Harker, 2001; Popkin, 1998; Wickrama, Elder, & Abraham, 2007)).

According to the U.S. Census Bureau (2007) and the Centers for Disease Control and Prevention (2004), the number of Latinos experiencing health and socioeconomic problems is greater than ever. A pressing Latino youth health concern is that Latino youth obesity and overweight rates are higher than non-Latino white males and females and

black males (Delva, O'Malley, & Johnston, 2006; Jollife, 2004; Ogden, et al. 2006). Latinos run a higher risk of life loss than whites, due to obesity-related diseases (Centers for Disease Control and Prevention, 2004). Delva, O'Malley, and Johnston (2007) summarize the findings of this CDC report as follows: "Compared to non-Latino whites, Latinos suffer from more age-related years of potential life lost per 100,000 population because of a number of obesity-related diseases such as diabetes, heart disease, stroke, and cancer" (p. 12).

Overweight and obesity is a serious problem among Latino youth in the United States and is a problem that manifests at an early age (Beets & Pitetti, 2004). As with other youth indicators of overweight and obesity, the behaviors of frequency of vigorous exercise and time spent watching television per day are evident among Latino youth. Interventions to increase physical activity and decrease time watching television can be implemented at an early age and may influence the manifestation of overweight and obesity. Following this logic, the next section will examine the potential impact that a quality physical education program could have on issues of Latino youth obesity and overweight.

Role of Quality Physical Education

In 2000 the Secretary of Health and Human Services and the Secretary of Education issued a report to the president titled *Promoting Better Health for Young People Through Physical Activity and Health* (CDC, 2000). This document lists six recommendations that schools can use to promote physical activity and healthy habits. The recommendations include (1) establishing policies that promote physical activity; (2) providing environments that encourage safe and enjoyable physical activity; (3)

implementing quality daily physical activity instruction, and curricula; (4) implementing health education that provides students with knowledge and needed behavior skills; (5) providing sufficient training for personnel involved in physical activity instruction; and (6) providing inclusive extracurricular approaches that meet the needs and interests of all students. Of interest to the current study are the recommendations of providing daily quality physical education and inclusive approaches that meet the needs of all students. Meeting the needs of all students would include New-Comers populations.

The CDC's six recommendations assume that physical educators are willing and able to implement these recommendations. What is not taken into account is the complexity of knowledge, beliefs, and behaviors teachers may hold in regards to Latino student populations. In the following sections, the complexity of the relationship between teachers' knowledge, beliefs, and behaviors that collectively manifest as dispositions will be examined to help contextually, and theoretically frame the current study.

Teacher dispositions.

Diez (2007) states, "It is probably fair to say that the current interest in dispositions in teacher education has resulted from the mandate by at least thirty states and the National Counsil for the Accreditation of Teacher Education (NCATE) (2006) to incorporate dispositions along with knowledge and skills in the design of teacher education programs and the assessment of teacher education candidates" (p. 388). Teacher dispositions are currently at the forefront of teacher education reform. This statement however begs the following questions: (a) What is a disposition? and, (b) Why are teacher dispositions at the forefront of teacher education reform?

What is a disposition? To answer this question, a brief review of personality theory and research is required. Contemporary teacher disposition researchers often draw from personality theory and research in their attempts to define what constitutes a disposition (Diez, 2007; Murray, 2007; NCATE, 2006; Villegas, 2007). Buss and Craik (1983) report that the earliest research, into what we call today dispositions, is traceable to the work of Allport (1979) and personality traits in the 1920's. Hampshire (1953) described a disposition as the summation of an individual's behaviors, thoughts, and feelings over time. The work of Hampshire led to the development of more objectively rigorous protocols for defining a disposition.

The research of Buss and Craik (1983) is based on Hampshire's assertion (1953) that a disposition is a summary of behavior trends of an individual. To test Hampshire's assertions Buss and Craik employed the *Act Frequency Approach to Personality*. The Act Frequency Approach to Personality (AFAP) is described: "Within this approach (AFAP), the fundamental measure of an individual's disposition is a multiple-act composite index, provided by frequency summary across a specified period of observation" (Buss & Craik, 1983, p. 106). Buss and Craik examined six established interpersonal dispositions: "agreeable, aloof, dominant, gregarious, quarrelsome and submissive" (p. 109). Male and female undergraduates were required to list acts that would constitute each of the six interpersonal dispositions. The reported acts were then compiled into lists for each disposition. Next, participants were placed into panels and asked to rate each act in each of the six categories "on a 7-point scale on how good an example each act was of the dispositional category at issue" (Buss & Craik, 1983, p. 109). Buss and Craik reported alphas that "are high, indicating that each rating panel displayed adequate composite

reliability in judging which acts were more of less prototypical of the dispositional category…" (p. 109).

From these findings, Buss and Craik conclude that dispositional constructs are "sociocognitive devices or inventions emergent of sociocultural evolution" (p. 122) and that dispositions are summative of individual's acts. In summary, a specific disposition is defined by "socio context and dispositions indicate trends in individual's behaviors or summaries of act frequency" (p. 105). Buss and Craik report that their conclusions are confounded due to a lack of precision in the categorization of acts and the defining of individual dispositions. In acknowledgement of this lack of preciseness, Buss and Craik advocated for more precise approaches in the measurement, categorizing, and defining of dispositions. Despite this lack of preciseness, Buss and Craik's research is cited and drawn from in some of the first discussions about teacher dispositions.

Katz and Raths' (1986) research has been identified as "one of the earliest references to teacher dispositions" (Diez, 2007, P. 388). In this early study of teacher dispositions, Katz and Raths (1986) draw from the research and conclusions of Buss and Craik (1983). Katz and Raths use Buss and Craik's 1983 definition of disposition and similar procedures in their earliest examination of teacher dispositions. The study identified and defined the following four dispositions:

1. coverage: the teacher's need to take pupils through a prescribed list of topics or complete a textbook or syllabus,
2. mastery: the teacher's need to ensure that pupils achieve adequate mastery of the subject, topics and skills that are covered.,

3. affect: The teacher's need to make pupils feel accepted, to make the class interesting, at least moderately appealing, and the classroom climate somewhat pleasant.

4. discipline: The teacher's need to enforce school rules, support community behavioral norms and values and to obtain pupils' attention and compliance in learning tasks and assignments" (Katz & Raths, 1986, p. 23).

Trained observers were used to observe and record teacher candidate behaviors using these dispositions. The findings of the study were statistically inconclusive due to problems with observer's categorization of behaviors. However, Katz and Raths concluded, "As a result of our efforts, we are much more sanguine about being able to devise procedures for assessing dispositions than we are about finding ways of limiting the number and scope of the dispositions programs might reasonably take on as goals" (p. 27). This marks one of the earliest statements of advocacy for the inclusion of dispositional goals in teacher education. The conclusions of Katz and Raths also mark a shift in educational reform that helped to bring the issues of dispositions to the forefront of teacher education.

The shift to the inclusion of dispositions as a goal of teacher education is best captured by Murray (2007). Murray in his discussion about the superfluous construct of teacher dispositions states:

> Historically, a community granted permission to a person to teach on the basis of at least one of the following: (a) an assessment of the prospective teacher's character, values, and beliefs, usually by a member of the clergy; (b) and assessment of the prospective teacher's knowledge in selected domains, usually

> by a common or standardized test in the teaching subject; and/or (c) an assessment by a faculty with regards to the prospective teacher's course of professional study, usually with a major emphasis on pedagogy and teaching skill. (p. 381)

Murray continues that this historical precedent "to have the permission to teach" and the inclusion of the teacher's character, values, and beliefs leads to the creation of teaching dispositions like those developed by the Interstate New Teacher Assessment and Support Consortium (INTASC) (1992) and NCATE (2006). Murray contends that the "field of education is littered with terms, neologisms, and jargon that turn out under examination to have limited meaning despite their conveying an impression that something is known and explained" (p. 382). In regards to teacher dispositions, as defined by NCATE and INTASC, Murray concludes that they are superfluous and for dispositions to have true value to teacher education much research is required to establish true meaning.

Murray is not alone in the questioning of the value of dispositions. Hess (2006), argued that there is a lack of rigorous empirical evidence that can substantiate the relationship between dispositions and teacher effectiveness. Johnson, Johnson, Farenga, and Ness (2005) stated that "nowhere in the literature can one find reliable and valid measures of candidate's (or anyone's) dispositions (p.193).

The critics of dispositions seem to suggest that the construct of dispositions lack true meaning in their present state. However, dispositions are not a totally useless construct. Some education scholars perceive dispositions as tools for selecting teacher education candidates and inclusion of teacher candidates into the profession (Borko, Liston, & Whitcomb, 2007; Diez, 2007; NCATE 2006; Villegas, 2007). Both proponents

and critics of dispositions tend to agree that dispositions are a summary of behavioral trends and that a disposition is a manifestations of beliefs and attitudes. The relationship between dispositions and attitudes can be perceived as one in which attitudes set the stage for trends in behavior that then are perceived as an individual's disposition. For one to understand how dispositions are formed, one needs to first examine attitudes and how attitudes may influence behavior.

Attitudes.

A main component of the current study is an examination of teachers' attitudes. Attitudes have been defined as being synonymous with beliefs (Dee & Henkin, 2002; Pajares, 1992; Pohan & Aguilar, 2000). Pajares (1992) identified the study of beliefs as problematic because "belief does not lend itself easily to empirical investigation. Many see it so enigmatically that it can never be clearly defined or made a useful subject of research" (p. 308). To complicate the issue the term belief has been used synonymously with other terms including attitudes, values, expectations, dispositions, and perceptions (Dee & Henkin, 2002; Pohan & Aguilar, 2000; Pajares, 1992). Despite the ambiguity associated with the term, Pajares (1992) stated that beliefs can be effectively studied if researchers first develop an operational definition of what they wish beliefs to mean.

Despite Parjares' optimism, defining beliefs is a complicated issue. Dewey (1933) described beliefs as a third meaning of thought, "it makes an assertion about some matter of fact or some principle or law… [and] covers all matters of which we have no sure knowledge" (p. 6). Nespor (1987) described beliefs as being based on past experiences and are evaluative and judgmental in nature. Pajares (1992) concluded that "beliefs are far more influential than knowledge in determining how individuals organize and define

tasks and problems and are stronger predictors of behavior" (p. 311). A synthesis of these descriptions and in the context of the theoretical models, beliefs will be operationally defined to mean "an individual's attitudes, values, expectations, and perceptions toward a matter, that are based on past experiences, that then effects that individuals framing of a matter and resulting behaviors." As illustrated, the study of beliefs is a complicated issue and one that cannot be neatly pigeon holed by one theory.

Theoretical Foundations

To best capture the theoretical foundations of the current study, three theoretical frameworks will be reviewed: (a) Agne's model of teaching/learning effectiveness (b) Bandura's Self-Efficacy Mechanism in Human Agency and, (c) Banks' Transformative Model. When taken together these frame works provide an adequate theoretical context for the current study. Each theoretical foundation will be reviewed in the following examinations.

This framework provides a perspective on the effect teachers' beliefs may have on teaching behaviors and eventually student achievement (see figure 1) (Agne, Greenwood, & Miller, 1994). Agne's model serves as a starting point that can bring to light assumptions associated with teachers' beliefs. One of these assumptions is that teachers' beliefs affect teachers' behaviors (Bandura, 1982; Fang, 1996; Owen & Ennis, 2005; Pajares, 1992; Pohan & Aguilar, 2001). Agne, Greenwood, and Miller (1994) described teachers' beliefs as the fundamental building blocks for the development of a caring effective classroom environment. This is now what we refer to as dispositions.

Agne (1999) asserted that a teacher who realizes and believes that there is nothing to control and is "accepting of the magnificent complexity of humanness" is then able to

provide students with a caring effective classroom environment (p. 174). The key to the development of this caring effective classroom is described by Owen and Ennis (2005) as "more a function of who teachers are and what they believe than what they do" (p. 419). Owen and Ennis (2005) explain that a teacher's actions or what we refer to today as dispositions are manifestation of their beliefs. In other words, teachers' beliefs affect teachers' behaviors (dispositions), which then impact students' beliefs, students' behaviors and eventually students' achievements.

Figure 1. Agne's Model or Teaching/Learning Effectiveness

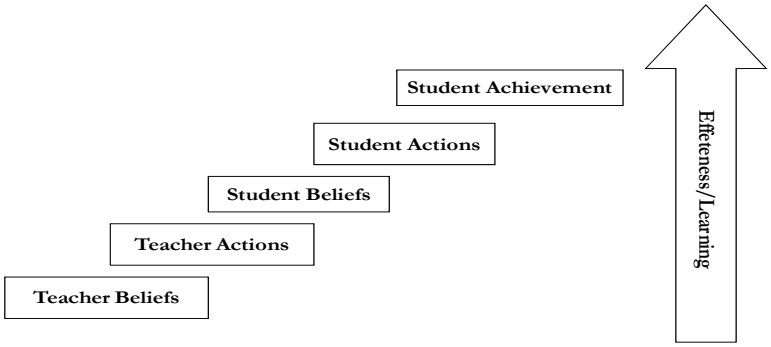

Figure 1. Adapted from "The Ethic of Care in Teaching: An Overview of Supportive Literature," by L.M. Owen & C. D. Ennis, 2005, *57*, pp. 392-425.

Pohan and Aguilar (2001) concluded that beliefs guide and direct teachers' responses toward students. Pohan and Aguilar (2001) also concluded, based on studies reviewed, that these beliefs than lead to differentiated expectations and treatment of students based on race/ethnicity, social class, and gender differences, thus adding

credence to the assumptions of the Agne model. In summary, the Agne framework views teachers' beliefs as fundamental building blocks for teacher effectiveness, and research shows that teachers' beliefs do influence teachers' behaviors. What the Agne model lacks is an effective explanation of how teachers' beliefs actually impact teachers' behaviors.

Pintrich (1990) asserted that the study of teacher beliefs will ultimately become a valuable psychological construct to teacher education. Pohan and Aguilar (2001) concluded that teachers beliefs must be studied for "clearly, if schools are to better serve the needs and interests of all students, particularly students from groups that have not fared well in the U.S. educational system, then low expectations, negative stereotypes, biases/prejudices, and cultural misconceptions held by teachers must be identified, challenged, and reconstructed" (p. 160). These researchers draw attention to two important issues. First, they assert that attitudes do impact teaching practices. Second, that to "reconstruct" these attitudes, these attitudes must first be identified. Pajares (1992) succinctly summed up the importance of examining teachers' beliefs or attitudes, "understanding the belief structures [attitudes] of teachers and teacher candidates is essential to improving their professional preparation and teaching practices" (p. 307). Despite the ambiguity of the term it is suggested by some scholars that the study of beliefs is an essential stream of research in education. However, the two frameworks examined so far fail to explain just how beliefs may affect behavior or dispositions. The following section will describe a theoretical framework that attempts to explain how beliefs or attitudes may affect behaviors.

Bandura's self-efficacy mechanism in human agency.

Bandura (1982) proposed a theoretical framework that addresses how beliefs may impact behaviors. Bandura named this the *Self-Efficacy Mechanism in Human Agency*. In order to understand this framework one first needs to define and examine the two central terms. Human agency is defined as the "core belief that one has the power to produce change by one's actions" (Bandura, 2002, p. 3). For example, if individuals believe that they can influence the general condition of their life via their actions, these individuals could be characterized as having positive agency. Self-efficacy is described by Bandura (1997) as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments (p. 3). Unlike agency, self-efficacy is more domain, task, and context specific (Bandura, 1982; Bong 2002). For example, individuals may believe that their ability to solve mathematical puzzles is very good but their ability to run a mile in under 10 minutes is non-existent. These individuals could then be described as having a high self-efficacy in solving mathematical puzzles and a low self-efficacy in running a mile in under 10 minutes. If one would conceive agency as the forest then self-efficacy would be analogous to the trees that make up that forest. Flora analogies aside, one's agency is in part the summation of one's self-efficacies.

The *Self-Efficacy Mechanism in Human Agency* is a framework that attempts to describe the relationship between agency and self-efficacy. This mechanism is germane to the current study because it captures how beliefs or self-efficacies can impact behaviors. Bandura proposes that beliefs act as a filter of sorts that can result in actions that at times may seem in contrast to optimal behavior. Bandura explains that even though people might know what to do based on knowledge, "self-referent thought

[beliefs/attitudes] mediates the relationship between knowledge and action" (p. 122). In short beliefs or efficacies at times may have a bigger impact on actions than knowledge.

Drawing from and building on the Self-Efficacy Mechanism in Human Agency framework, Ashton (1984) refers to *teacher efficacy* as "the extent to which teachers believe that they have the capacity to affect student performance" (p. 28). One can extrapolate from this definition that teachers' may hold beliefs about their abilities to teach and taking into account the contextual nature of efficacies the students themselves may have an impact on a teacher's teacher efficacy or beliefs and ultimately their teaching behavior. In the context of teaching, this means that a teacher's beliefs may at times have more influence on their classroom behaviors than their knowledge; resulting in behaviors or dispositions that may not be optimal for student learning (Fang, 1996; Owen & Ennis, 2005; Pajares, 1992; Pohan & Aguilar, 2001). Teacher-efficacy has been further delineated into general and personal teacher- efficacy (Ashton & Webb, 1986). However, for the purpose of this study, Ashton's (1984) general definition of teacher-efficacy will suffice.

In summary, beliefs and attitudes can influence how people feel, think, motivate themselves and behave (Bandura 1993). The Self-Efficacy Mechanism in Human Agency helps frame the relationship between beliefs and behaviors in that beliefs act as filter to knowledge that at times leads to behaviors that may seem illogical. In reference to the context of teaching, teachers' beliefs about a particular teaching situation may result in behaviors that may act as barriers to student learning.

Bank's transformative model.

The Bank's Transformative Model was originally developed to help understand how multicultural attitudes develop or change due to multicultural education. In addition the Bank's Transformative Model was predicated on the notion that teachers attitudes and beliefs toward multicultural contexts could act as barriers or benefits to culturally diverse student populations. Banks' Transformative Model is described as a three component model that defines and describes the development of multicultural attitudes (Munroe & Pearson, 2006). The three components are as follows, listed from the most basic to the highest level: *Know*, *Care*, *Act* (Banks, 1999). Banks (1999) and Munroe and Pearson have related the 'Know' level to Bloom's (1956) '*Cognitive level*' a level at which "basic multicultural knowledge is achieved" (p. 821). Banks (1999) contends that at the Know level individuals are simply aware of multicultural issues. The 'Care' level is characterized as the level in which positive or negative affective emotions in regards to multicultural issues are recognized and fostered (Banks, 1999; Munroe & Pearson, 2006). The 'Act' level is the level at which individuals are able to be proactive and participatory in affirming and bringing about change in regards to held multicultural perspectives (Banks, 1999; Brown, 1997; Munroe & Pearson, 2006). Banks (1999) suggests that educators need to be able to operate at the Act level in order to best impact culturally diverse student populations and teach students how to know, to care, and to act when faced with multicultural issues.

Measures of Multicultural Attitudes

The current review of measures to assess teacher's multicultural attitudes will focus on only empirical measures. Although several studies have used empirical and /or

qualitative measures, due to the quantitative nature of this study a review of qualitative measures is beyond the scope of this review.

Instruments measure teacher beliefs.

Pohan and Aguilar (2001) reviewed a total of 14 studies and the measures used to assess teachers' beliefs about issues pertaining to diversity. Diversity is defined by Pohan and Aguilar in an inclusive fashion that includes "historically marginalized socio-cultural groups... [because] we [Pohan and Aguilar] do not ascribe to the narrower race or ethnic group approach" (p. 161). Based on this definition, diversity can be seen as being analogous to multiculturalism; therefore this review is germane to the current study. A summary of the studies reviewed is provided in Table 1. Pohan and Aguilar's review led them to the following four conclusions about past studies and measures used to assess teachers' beliefs about issues pertaining to diversity.

- "Studies of teachers' beliefs about diversity using empirical measures, reliability and validity data were seldom reported" (p. 163).
- "Many of the measures focused on one of two specific characteristics of diversity" (p. 163).
- Measures "focused on selected aspects of diverse learners (i.e., academic achievement abilities and stereotypical sensitivity)" (p. 163).
- "Data derived from these empirically based measures were interpreted with limited or no discussion on instrument reliability and validity." (p. 163).

Table 1.

Summary of Studies and Measures Used on Teachers' Attitudes/Beliefs about Diversity:

Study	Attitudes Investigated	Measure	Specific Underlying Theoretical Framework of Measure	Reported Reliability
Amodeo & Martin (1982)	Teachers' stereotypical attitudes about culturally different students	44-item Cultural Attitude test	None reported	None reported
Bynes & Kiger (1989)	Differences in racial attitudes scores between teacher candidates and the general population	Bogardus Social Distance Scale and 12-item Social Scenarios Scale	None reported	None reported
Cooper, Baron, & Lowe (1975)	Importance of race and social class information on performance expectations	The Crandall Intellectual Academic Responsibility Scale	None reported	None reported
Davis & Whitner (1994)	Cultural sensitivity level of preservices teachers	The Cultural Diversity Awareness Inventory	None reported	None reported
Davis & Turner (1993)	How perservice teachers and culturally diverse families perceive one another	The Cultural Diversity Awareness Inventory	None reported	None reported

Study	Attitudes Investigated	Measure	Specific Underlying Theoretical Framework of Measure	Reported Reliability
Guttmann & Bar-Tal (1982)	Stereotypic perceptions of teachers	Scale to measure performance expectations	None reported	None reported
Henry (1986)	Investigating cultural awareness	The Cultural Diversity Awareness Inventory	None reported	None reported
Larke (1990)	Cultural sensitivity levels of student teachers	The Cultural Diversity Awareness Inventory	None reported	None reported
Law & Lane (1987)	Compared teacher racial attitudes with those of the general population over six decades	Bogardus Social Distance Scale	None reported	None reported
Moore & Reeves-Kazelskis (1992)	Preservice teacher's beliefs about multicultural education concepts	18-item Survey of Multicultural Education Concepts	None reported	None reported
Tabachnick & Zeichner (1984)	Impact of student teaching on teacher's perspectives	47-item Teacher Beliefs Inventory	None reported	None reported

Study	Attitudes Investigated	Measure	Specific Underlying Theoretical Framework of Measure	Reported Reliability
Tran, Young, & Dilella (1994)	Eliminating stereotypic attitudes in ethnically diverse classrooms	26 paired items on a 7-point semantic differential	None reported	None reported
Washington (1981)	Teachers' opinions about school desegregation and multicultural education	16-item scale	None reported	None reported
Wergin (1989)	Assessing student attitudes toward cultural diversity	81-item survey	None reported	Alphas ranging from .92 - .85
Pohan & Aguilar (2001)	Measuring educators beliefs about diversity in personal and professional contexts	40-item survey	None reported	Alphas ranging from .71 - .90
Munroe & Pearson (2006)	Multicultural attitudes	18-item Munroe Multicultural Attitude Scale Questionnaire	Banks's transformative approach	Alpha .80

Note. Data from "Measuring educators' Beliefs About Diversity in Personal and Professional Contexts," by C. A. Pohan & T E. Aguilar, 2001, *American Educational Research Journal, 38*, pp. 159-182 and primary researcher.

Pohan and Aguilar's 2001 review suggested that the measures used were too narrow in focus and were not necessarily psychometrically sound. Pohan and Aguilar

revealed three paucities in the research that the current study seeks to addresses. First, in-service teachers' multicultural attitudes are less frequently examined compared with pre-service or teacher candidates' multicultural attitudes. Secondly, physical educators' multicultural attitudes are examined in only one of the studies. Finally, no study intentionally examines multicultural attitudes of Physical Educators in schools affected by the New Latino Diaspora in Nebraska.

The Munroe Multicultural Attitude Scale Questionnaire.

The central dependent variable for this study was the estimated multicultural attitudes of physical educators in Nebraska schools affected by the New Latino Diaspora. These attitudes were estimated via the Munroe Multicultural Attitude Scale Questionnaire (MASQUE) (Munroe & Pearson, 2006). Physical educators' multicultural attitudes could impact Latino students' enfranchisement or disenfranchisement from becoming physically educated individuals and the benefits of being physically educated.

The MASQUE is the only tool identified as having a specific underlying theoretical framework. Munroe and Pearson (2006) report that the MASQUE was developed using "a specific model, Banks' transformative approach, as an underlying theoretical framework" (p. 820). Munroe and Pearson suggest that the importance of a measurement tool that is linked to a specific theoretical framework is that finding can then be placed and discussed in the context of the framework as opposed to trying to find a theory to help explain findings and develop interventions. In the case of the MASQUE an individual's stage of multicultural development can be estimated based on the Banks' Transformative Model. The findings of the MASQUE can then be directly linked to the

Transformative Model, and curriculum and or interventions can be developed based on the very theoretical framework used to develop the measurement tool. .

Variables to be Examined in This Study

There will be six variables used in this study: Gender, Teachers Ethnicity, percentage of Latino population in the host community, percentage of Latino students of a school's population, and certification held.

Gender: Wergin (1989) found that women held more positive multicultural attitudes than men. This finding has been supported by the results of other multicultural additional studies (Munroe & Pearson, 2006; Pohan & Aguilar, 2001). Munroe and Pearson (2006) reported that statistical significance was revealed for gender, "$F(1,410) = 25.82$, $p<.001$, yet the effect size was small ($\eta^2 = .06$)" (p. 829). Based on the findings of the studies reviewed, gender if not controlled for, could be a compounding variably.

Ethnicity or Race of Physical Educator: Munroe and Pearson (2006) reported that no significant difference existed between ethnic groups, $F(3,405) = 2.24$, $p> .05$. An examination of the cell sizes for each ethnicity group reveals that this lack of statistical significance may in part be due to the extreme range of participants per group. For example, 266 self identified European Americans were reported to take part in the study and the next largest group (Not represented on the list) was comprised of only 56 individuals and the smallest group (Asian/Pacific American) had only 6 individuals thus hampering statistical analyses.

Despite this lack of statistical significance, ethnicity will not be ignored. Some researchers argue that ethnicity along with age and gender are attributes that affect societal perceptions, which then effect attitudes which then can produce behaviors in

society at large (Adams & Zhou-McGovern, 1994; Banks, 1999; Hooks, 2000). Following this rationale, this study's validity could be compromised if ethnicity was not controlled.

Percentage Change of Latino Population in Host community/ Place of Residence of Physical Educator: The addition of these two variables is founded on the research of Pohan and Aguilar (2001). They reported that educators' *cross cultural experiences* have shown to have statistically significant impact on educators' multicultural beliefs. Pohan and Aguilar (2001) report that ANOVA analysis indicated that cross-cultural experiences were significantly associated with more accepting multicultural personal beliefs, $F(2, 186) = 4.44$, $p \leq .05$. They indicated cross cultural experience could include domestic or foreign travel, Peace Corps of Vista volunteer, work/schooling in a foreign country, and cross cultural experiences with cultures other than the educator's culture. Based on the findings of Pohan and Aguilar the following relationships were be examined: (a) physical educators' multicultural beliefs and host community demographics, and (b) physical educators' multicultural beliefs and physical educators' place of residency.

Percentage of Latino Students in School Districts Population: The rationale for the use of this variable is based in part on the observation that teachers have "preferences for teaching students from their own cultural group" (Ahlquist, 1991; Dee & Henkin, 2002; Williams, 1999). This may be due in part to a lack of perceived ability reported by both novice and veteran educators for teaching students from diverse cultures (National Center for Education Statistics, 1999). Following this line of logic, the primary researcher wants to explore the relationship between the percentage of students from a culture different from the teacher and the teachers estimated multicultural attitudes.

Summary

As evidenced by demographic trends, Latino populations are a growing nationwide trend. This growth in Latino populations is not limited to regions of the nation that have historically hosted Latino populations. Due to labor demands in meatpacking and agricultural industries, Latino immigration and migration patterns have shifted to rural communities. Scholars refer to this shift as the New Latino Diaspora. The New Latino Diaspora represents unprecedented challenges for many of the rural communities that have become hosts to newly established Latino communities. One of the challenges New Latino Diaspora communities face is meeting the educational needs of these Latino populations. New Latino Diaspora scholars refer to the children of these newly established Latino populations as New-Comers. The educational success of New-Comers populations has come into question and scholars suggest that the schools in New Latino Diaspora communities have not successfully met the challenges of this student population.

This lower rate of academic success associated with New-Comers populations may be in part explained from the perspective of teacher dispositions. Teachers in the New Latino Diaspora communities may not possess dispositions optimal for New-Comers academic success. This lack of optimal dispositions may be due to teachers' multicultural beliefs. Although studies exist on teacher dispositions and multicultural beliefs, few studies have been found that specifically examine the multicultural beliefs of physical educators in schools affected by the New Latino Diaspora. The current study aims to address this paucity in the research and the possible effects of those beliefs on New-Comers health and attitudes toward physical activity in the public school setting.

Chapter 3

Methodology

Introduction

This chapter describes the methods used in the current study, including the description of the research design; the time line and setting; the selection of participants and communities; procedures; the measurements to be used; and data analyses. The final section of the chapter will document Institutional Review Board compliance as set forth by the University of New Mexico and the University of Nebraska-Kearney.

Research Design

This study used the analytical survey method to collect physical educators' attitudes toward diversity and demographic information. Analytical studies examine the data collected using parametric statistics in order to test stated hypotheses or examine the possibility of the existence of relationships (Patten, 2004). The relationships were tested using parametric statistical analyses. The statistical analyses included T-tests, ANOVAs, F-tests and appropriate Post-Hoc tests.

Procedures

Time line.

Data were collected during April of 2008. Data were analyzed during the summer of 2009 and the reporting of the findings occurred during the same time frame. Final interpretations and conclusions based on the results of the data analyses were completed by December 2009.

Selected participants and communities.

This study took take place within a sample of public schools in communities in the state of Nebraska. Only schools that met the inclusion criteria of being in communities affected by the New Latino Diaspora were included in the study. The participants for the study were in-service Nebraska physical educators in public schools in communities affected by the New Latino Diaspora. Participants included certified and non-certified physical educators at the elementary, middle, and high-school levels.

Communities selected for this study met the following criteria: 1) the community was not a large urban community; 2) the community was associated with being a site of Latino immigration or migration and or hosting a Latino population after 1986. The use of these criteria eliminated the communities of Omaha, Lincoln, and Scottsbluff despite increasing Latino populations. Omaha and Lincoln were excluded from this study because they are respectfully the largest and second largest urban communities in Nebraska. Omaha and Lincoln, in addition, historically, have been associated with the hosting of Latino populations (Gouveia & Powelll, 2005). Scottsbluff, located in western Nebraska, was excluded from this study because it, too, historically, has hosted a Latino population and has some of the oldest Latino generations in the state (Gouveia & Powelll, 2005).

Fifteen communities were found to meet the inclusion criteria. See Appendix B for geographic locations of selected communities. A total of 122 physical educators were identified. 102 of the physical educators returned survey that resulted in a return rate of 84%. Identification of these schools and physical educators came from the Nebraska Education Directory 2008-2009 (http://www.nde.state.ne.us). School sites were

categorized for this study as found in the directory: high school/senior high, middle school, and elementary schools. The determination of the category "grade levels taught" was also determined from the Nebraska Education Directory. The directory provided the number of physical educators at each site and corresponding grade level. Out of the 122 certified physical educators, 56 were identified as teaching at elementary sites, 33 at middle school sites, and 38 at high school/ senior high sites. However, the identified 'grade levels taught' derived from the Nebraska Education Directory may have been misleading, for in some cases the educator taught at multiple grade levels at multiple sites. In order to accurately classify participants according to 'grade level taught,' participants were asked to indicate on the survey (1) high school/senior high only (2) middle school (3) elementary school, or (4) multiple levels.

Identifying the study sample.

According to Edmund T. Hamann co-editor and contributing author of *Education in the New Latino Diaspora: Policy and the Politics of Identify* (Wotham et al, 2002), communities considered affected by the New Latino Diaspora are "sites that are newly hosting Latino populations that never have before" (personal correspondence, Edmund T. Hamann, Ph.D., 2007). He also suggested that the 1986 Immigration Reform and Control Act (IRCA) should be used as a temporal indicator for "new" in the New Latino Diaspora. Based on this rationale, communities that had growth in Latino populations after 1986 were considered affected by the New Latino Diaspora. Physical educators in the schools in these communities were then considered eligible for participation in the study. Ten communities were identified as meeting the criterion of being affected by the New Latino Diaspora (see Table 2). These communities were included in the current

study based on reported percent change in Hispanic/Latino populations from a 1990 base in conjunction with Gouveia and Powell (2005) identification of these communities as sites of new Latino population growth.

Table 2.

Percent Change in Hispanic/Latino Populations from a 1990 Base in Rural Nebraska Communities Affected by New Latino Diaspora.

Community	Hispanic./Latino Population		
	1990	2000	Percent Change
Columbus	167	1,395	735%
Fremont	165	1085	558%
Crete	40	262	55%
Grand Island	1887	6845	263%
Hastings	268	1343	401%
Kearney	667	1118	68%
Lexington	329	5121	1457%
Norfolk	299	1790	499%
Schuyler	164	2423	1377%
South Sioux City	545	2958	443%

Source: U.S. Census Bureau, Census 1990 Summary Tape File 1 (STF1) and Census 2000 Summary File1 (SFT 1).

The remaining five communities included in this study were identified by The Platte River Corridor Project (PRCP) (Hof, et al 2007). The five communities of the PRCP were determined to meet the criterions of being affected by the New Latino Diaspora in accordance with the criteria of the current study: Cozad, Wood River, Gibbon, Harvard, and Shelton. Change in these communities Latino populations are summarized in Table 3.

Table 3.

Percent Change in Hispanic/Latino Populations from a 1990 Base in Rural Nebraska Communities Affected by New Latino Diaspora Identified by The Platte River Corridor Project.

Community	Hispanic./Latino Population 1990	2000	Percent Change
Cozad	228	456	100%
Gibbon	152	369	142%
Harvard	8	123	1,437%
Shelton	51	190	272%
Wood River	91	150	64%

Source: U.S. Census Bureau, Census 1990 Summary Tape File 1 (STF1) and Census 2000 Summary File1 (SFT 1).

A list of schools within selected communities was generated from the Nebraska Educational Directory 2007-2008 (Nebraska Department of Education, 2007). From this directory, a database of all schools and designated physical educators in selected communities was created. Table 4 summarizes this data.

Table 4.

Summary of Number of School Sites, Types, and Physical Educators

Types	# of sites	# of Physical Educators
Elementary	76	52
Middle	15	34
High School	14	36
Total	105	122

Source: *2007-2008 State of the schools report: A report on Nebraska schools*.

Gaining access and obtaining permission.

In order to obtain permission to survey physical educators, permission was obtained from the superintendent of each school district that had school sites meeting the criterion of this study. The process used to obtain superintendents permission to distribute surveys was:

1) Initially all superintendents were sent an electronic or conventional letter requesting written permission to conduct research within the school district (see appendix C). In five cases the principal investigator met the superintendent and provided the same information as those contacted via mail. Superintendents, names and contact information were acquired from the Nebraska Education Directory 2007-2008 (Nebraska Department of Education, 2007).
2) After a period of one week, a follow up phone call was made to those superintendents who had not responded to the electronic or conventional letter request. At this time, the superintendents were asked for written permission to distribute surveys. A letter of consent (see appendix B) was then sent to those superintendents who verbally granted permission and who wanted to review the study.
3) Superintendents were asked how they wished to receive the letter of consent: (a) conventional mail with a self-addressed stamped envelope, (b) electronic mail, (c) fax, or (d) delivered in person by the principal investigator. A total of 14 superintendents granted their written permission for a return rate of 100%.

Distribution of surveys.

After receiving written consent from district Superintendents, letters of consent were hand delivered or mailed with self addressed stamped envelopes to site supervisors. In all but four districts the superintendents distributed surveys via intra-district mail. In these cases packets were made for each physical educator and hand delivered by the primary investigator to corresponding superintendents or a designated school district contact. These packets included the following items: (a) Informed Consent for Participation Letter, (b) the survey, and (c) a self-addressed stamped envelope addressed to the primary researcher. In the remaining four districts, the primary researcher delivered packets to individual school sites. In these cases, written permission was obtained from the site supervisors (see appendix D). After site supervisor permission was obtained, the site supervisors then distributed surveys to participants that included a participant consent form (see appendix E).

Data collection.

Data for this study were collected, held, and accounted for by the primary researcher. Data collection took place from March 15th, 2009 thru April 17th, 2009. Upon receiving returned surveys and informed consent forms, a coded database of participants who responded was created. After a period of two weeks, participants who did not respond were sent a follow-up packet via conventional mail. A total of 102 out of 122 surveys were accounted for, resulting in a return rate of 84%. The return rate on the follow-up packet was 0%.

All returned surveys were systematically accounted for and anonymously stored in a locked file cabinet in the office of the principal investigator. Returned surveys were

accessible only by the primary investigator for statistical analyses of data. The database was stored on a computer only accessible by the principal investigator to ensure anonymity and quality of all data. All data collected were recorded and reported in data tables. These data tables are found in appendix F.

Instrumentation

The Munroe Multicultural Attitude Scale Questionnaire.

The survey instrument used in this study was The Munroe Multicultural Attitude Scale Questionnaire (MASQUE) that is theoretically based on Banks' transformative approach (Munroe & Pearson, 2006). The MASQUE was developed to measure respondents attitudes toward multiculturalism. The MASQUE is an 18-item survey, with each item rated on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Munroe and Pearson report that a 6-point scale was used. The MASQUE consists of three subscales derived from Banks' transformative approach "knowledge (know), empathy (care), and active experience (act)" (p. 824). The use of a 6-point Likert scale produces data at the interval level of measurement and thus enhances opportunities for statistical analysis.

Content validity for the MASQUE was established by a panel of academic experts "representing sociology, educational research, communication, language acquisition, and multicultural-multiethnic studies" (Munroe & Pearson, 2006, p. 824). The MASQUE had acceptable internal consistency reliability with an overall Cronbach alpha coefficient of .80. The MASQUE is comprised of the following three subscales: Know, Care, Act. The sub-scales of the MASQUE draw directly from Banks' transformative approach that is a transformation of Bloom's taxonomy (Bloom, 1956).

Banks' transformative approach translates the taxonomy into components that mold an attitude, which are firmly established in cognitive thoughts, beliefs, perceived facts and knowledge about the attitude (know); the affective emotion felt toward the object, through both positive or negative evaluation (care); and the behavioral course of action regarding the object (act) (p. 821)

Despite the theoretical foundation of the subscales, reported internal consistency is not sufficient to justify their use independent of each other. The subscale of "Act" was reported to result in an alpha coefficient of .58. Munroe and Pearson report alpha coefficients for "Care" at .70 and "Know" at .70 and recommend that the subscales be used collectively due to the .80 alpha coefficients for the complete 18-item survey. Munroe and Pearson concluded that despite the low internal validity of the sub-scales, overall scores on the survey suggest participants' less positive multicultural attitudes and participants' more positive multicultural attitudes. The collective scores from the three sub-scales were used as the central dependent variable in the current study.

Independent variables.

As indicated in the research questions, this study examined the relationship of seven independent variables and in-service physical educators' estimated multicultural attitudes. These variables are gender, educator's race/ethnicity, community Latino demographics, percentage of Latino students per school, certification held, grade level taught, and place of residency.

- *gender* : Participant self- reports. The data for this variable resulted in nominal level data.

- *race/ethnicity*: Participant self- reports. Race and ethnicity options and categories were in compliance with U.S. Census Bureau protocols as mandated by the Tabulation Working Group Interagency Committee for the Review of Standards for Data on Race and Ethnicity (1999). The data for this variable were nominal level data.
- *percent change host community Latino demographics*: Selected communities needed to meet the criteria to be effected by the New Latino Diaspora. The data for this variable resulted in nominal level data.
- *percentage of Latino students in school district*: Calculated from Nebraska's State Education web site. The data for this variable were nominal level data.
- *certification held*: Participant self-reported. According to the Nebraska Department of Education Rule 21 (2007) three types of certification could be held by a physical educator in the state of Nebraska. The certifications identified by Title 92, of Nebraska's Administrative Code (20070) are Initial Teaching Certificate, Standard Teaching Certificate, and Professional Teaching Certification. The data for the variable, *certification held*, were in nominal level data.
- *grade level taught*: Participant self- reports. The data for this variable were in nominal level data.
- *Place of residency*: Participants self-reports. The data for this variable were nominal level data.

Participants self-identified the following variables: gender, race ethnicity, certification held, grade level taught, and residency. The remaining two variables, percent

change host community Latino demographics and percentage Latino students in school district were obtained from 2000 U.S. census data and Nebraska's State Education web site. The primary investigator electronically calculated the *percent change host community* variable using the following formula: ((Y2-Y1)/Y1 × 100). Note: Y1 = 1990 percent Latinos in community, Y2 = 2000 percent Latinos in community; all data came from U.S. Census Bureau, Census 1990 Summary Tape File 1 (STF1) and Census 2000 Summary File1 (SFT 1).

The survey packet.

The actual survey packet distributed to participants consisted of three parts (see Appendix G). The first part was a *Consent to Participate* agreement statement. The second part of the survey consisted of the MASQUE with no modifications. The third part consisted of the questions developed to obtain the data needed for quantifying the independent variables. These data included participants self identification of gender, race ethnicity, certification held, place of residence and grade level taught. Participants also were asked to identify the school site and host community in which they taught. Returned surveys were coded, entered into an electronic data base and stored in a locked file cabinet in the primary researcher's office. All electronic data bases were stored on a secure computer to ensure the integrity and anonymity of the data.

Statistical Analyses

Data analysis.

Data were analyzed using SPSS version 15.0 software. The primary aim of the current study was to examine multicultural attitudes of in-service physical educators in Nebraska school communities affected by the new Latino Diaspora. In line with this

objective, parametric tests were used. ANOVA tests were used to compare group means as a measure of the relationships between physical educators' multicultural attitudes and the following variables: gender, educator's race/ethnicity, host community percent change in Latino populations, percentage of Latino students in school district's population, certification held and teacher place of residence. Levene's test for equality of variance was used to test homogeneity of variances ($p > 0.05$). The parametric tests included T-tests when variances of two groups were homogeneous, Welch's test and Game-Howell tests when variances of the two populations were not homogeneous (Keppel & Wickens, 2004).

The underlying assumptions for the t-test were:

1. Normal distribution of the data was tested using normality tests, such as the Shapiro-Wilk and Kolmogorov-Smirnov tests.
2. Equality of variances (tested using the F-test, the more robust Levene's test, Bartlett's test, or the Brown-Forsythe test)
3. Samples have to be independent

ANOVA was used when more than two means were to be analyzed (Keppel & Wickens, 2004). Significance for all tests was held at a ($p \leq .05$) level of significance.

A secondary aim of the study was to provide a description of in-service physical educators in school communities selected for this study. This description included frequency counts and percentages of the following independent variables: (a) gender, (b) ethnicity, (c) certificate held, (d) level taught, and (e) Residential Status.

Sample size, Return Rate, Effect Size & Power.

This study identified a sample size of 122 participants. A total of 102 participants responded to distributed surveys. This resulted in a return rate of 84%. Using Cohen's *d* (1988) protocol for determining effect size resulted in low to moderate effect sizes. Cohen's gradient for effect size is as follows: (a) low < .4, (b) Moderate =.5-.69, (c) good = > .7. Apriori, power analyses of individual variables and their multiple levels resulted in powers that suggest findings of the study may be the results of Type II errors. This is to say that significant relationships may exist; however, when cell numbers were analyzed low powers were indicated and may indicate false negative results (Park, 2008). Actual powers are identified and discussed in Chapter 5.

Human Protection and IRB Compliance

Approval of the proposed study by the Institutional Review Board at the University of New Mexico and the University of Nebraska at Kearney are documented (see Appendix H & I respectfully). Compliance with Conflict of Interest protocols from the University of New Mexico are documented (see Appendix J). Consent from superintendents was recorded, stored, and documented in a secure electronic data bases only accessible to the primary investigator. Physical copies of superintendents' written consents were stored in a locked file cabinet in the primary researcher office. The same protocol was followed for site supervisors' written consent and participants' informed consent letters and surveys.

Chapter 4

Results

Introduction

The data collected to examine the multicultural attitudes of physical educators in Nebraska school communities affected by the New Latino Diaspora are presented in this chapter. The first section will present a demographic description of the sample and discuss the study's variables. The next section describes the statistical tests used for analysis. Finally, study findings will be presented along with the data analyses of the individual research questions germane to this study.

Research Questions

The following research question guided this study. What arein-service physical educators' estimated multicultural attitudes in Nebraska school communities affected by the New Latino Diaspora. This over arching question is addressed by the following six relationship examinations.

What is the relationship between gender and multicultural attitudes of in-service physical educators within Nebraska communities affected by the New Latino Diaspora?

What is the relationship between self identified ethnicity or race and multicultural attitudes of in-service physical educators within Nebraska communities affected by the New Latino Diaspora?

What is the relationship between the percentage of Latino students of a school's population and in-service physical educators' multicultural attitudes in Nebraska communities affected by the New Latino Diaspora?

What is the relationship between the percentage of Latino population in the host community and in-service physical educators' multicultural attitudes in Nebraska communities affected by the New Latino Diaspora?

What is the relationship of grade level taught and multicultural attitudes of in-service physical educators in Nebraska communities affected by the New Latino Diaspora?

What is the relationship between teacher's residential status and multicultural attitudes of in-service physical educators in Nebraska communities affected by the New Latino Diaspora?

What is the relationship between certification held and multicultural attitudes of in-service physical educators in Nebraska communities affected by the New Latino Diaspora?

Description of the Sample and the Study Variables

Description of the sample.

The frequency count and percentage of the sample demographics are presented in Table 5. The male to female ratio in the surveyed sample of the physical educators was approximately 3:2. All but one participant in the sample population (N= 102) self-identified as being black/AA. The remaining participants self-identified as being white. At the time of the survey, more than half of the sample population held professional certificates (57.80%); nearly one- third of them held standard certificates (35.30%); 5% held initial level certificates and 2% reported that they did not hold a physical education certificate. One-third of the sample reported teaching at elementary level (33.33%); nearly 25% reported teaching at the middle school level; approximately 30% of the

sample population reported teaching at the high school level; there was equal percentage of physical educators who taught at multiple levels (5.90%) and those who refrained from report

The physical educators were categorized based on the percentage change in Latino population in their schools' community and based on the percentage of Latino students in their school's population. In order to derive an unbiased analysis, groups were formed so that there were sufficient numbers of physical educators in each of these groups. Based on the criteria of the percentage change in Latino population, the dataset (hereafter Community Change Level) was divided into three groups: Low (Percentage change value is less than 400), Medium (Percentage change value is between 400 and 700) and High (Percentage change value is more than 700). Similarly, the percentage of Latino students in the school's population dataset (hereafter Students' Level) was divided into three groups: Low (Percentage value is less than 20), Medium (Percentage value is between 20 and 35), High (Percentage value is more than 35).

Table 5.

Frequency Counts and Percentages for Demographic Variables (N=102)

Variable	Frequency Count	Percentage
Gender		
Male	63	61.80
Female	39	38.20
Ethnicity		
Black/AA	1	01.00

White	101	99.00
Certificate Held		
Initial	5	04.90
Variable	Frequency Count	Percentage
Standard	36	35.30
Professional	59	57.80
No physical education certificate	2	02.00
Level Taught		
Elementary	34	33.33
Middle	26	25.50
High	30	29.40
Multiple	06	05.90
Not Reported	06	05.90
Place of Residents		
Resident	89	87.30
Non-Resident	13	12.70
Community Change Level Group		
Low	47	46.10
Medium	30	29.40
High	25	24.50
Students' Level Group		

Low	38	37.30
Medium	27	26.50
High	37	36.30

Study variables.

The multicultural attitudes of in-service physical educators in the Nebraska school communities affected by the New Latino Diaspora was measured using the Munroe Multicultural Attitude Scale Questionnaire (MASQUE). The questionnaire consisted of 18 questions, and the participants were required to mark their response on a scale of 1 (Strongly disagree) to 6 (Strongly agree) for each question. However, the following questions: 8, 13, 15, 17 &19 were presented in the opposite manner (e.g. Q8 was I do not understand why people of other cultures act differently where as Q7 was I am sensitive to differing expressions of religious differences). Thus for these questions reverse scoring was done.

The response of all the questions was summed to get a total score for each participant. The highest score possible was 108. This score represented his/her multicultural attitude where lower scores showed a negative attitude and high scores showed a positive attitude of the physical educator in regards to multi-cultural teaching environments. Table 6 shows the descriptive statistics for the entire sample of 102 physical educators who responded to the survey. It can be clearly seen that the mean (82.81) and median (82.00) values are very close. Further, the skewness (0.032) and kurtosis (-0.469) fell close to 0. Thus, it was assumed that the dataset was normally distributed.

Table 6.

Descriptive statistics for the total score of the surveyed physical educators

	Statistical Value	Standard Error
Mean	82.81	1.126
Median	82.00	
Variance	129.321	
Std. Deviation	11.372	
Minimum	54	
Maximum	108	
Range	54	
Skewness	.032	.239
Kurtosis	-.469	.474

Further analysis of the data was required to confirm the normality of the data. It is clear from the histogram plot in Figure 2 that the data were very close to normal distribution. Moreover, the test for normality (Kolmogorov-Smirnov test and Shapiro-Wilk) results in Table 7 also confirmed normal distribution of the data ($p > 0.05$).

Table 7.

Kolmogorov-Smirnov test of normality

	Statistic	Degrees of freedom	Significance value
Kolmogorov-Smirnov[a]	0.059	102	.200*
Shapiro-Wilk	0.990	102	.683

*p>0.05

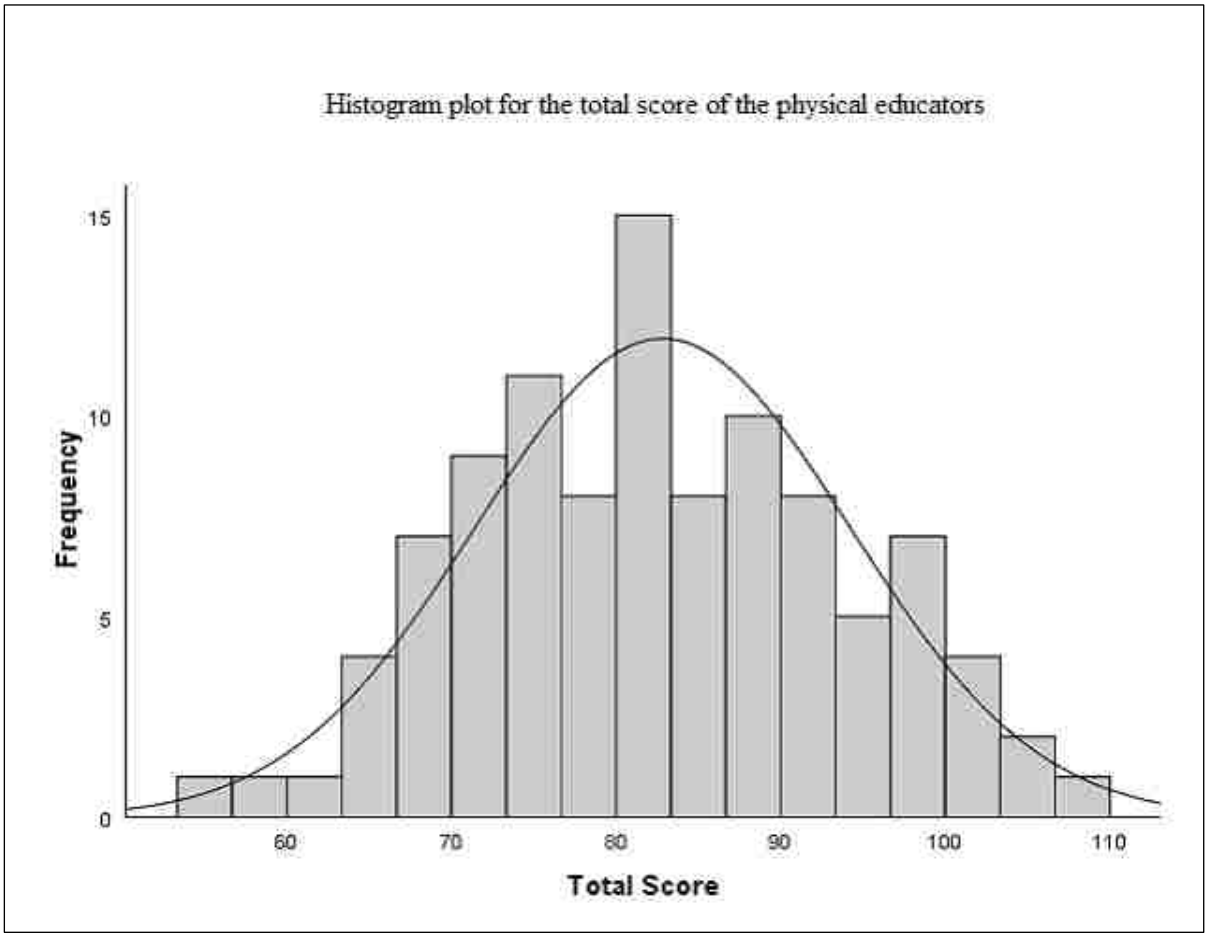

Figure 2. Histogram plot for the total score of the physical educators.

The normal Q-Q plot for the total score also confirmed that the data were normally distributed as most of the data points were on the line of normality (Figure 3).

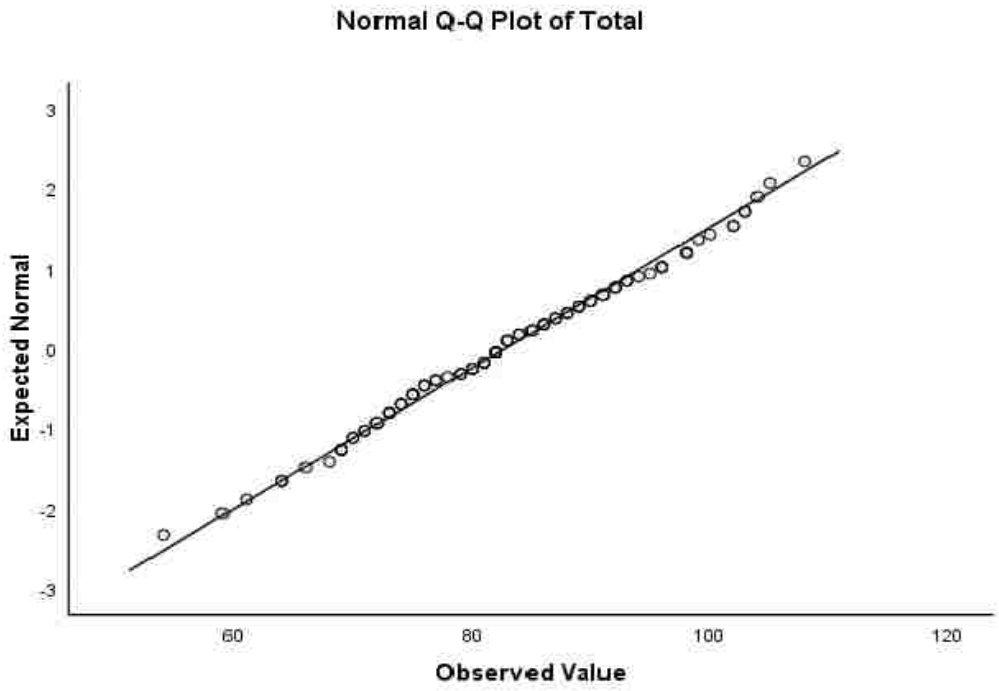

Figure 3. Normal Q-Q plot for the total score of the physical educators.

Description of Statistical Tests used for Analysis

The normal data distribution of the dependent variable allowed for the use of parametric tests in comparison means between the groups as a measure of multicultural attitude difference.

Findings of the Study

Multicultural attitude difference between the two gender groups.

The statistical results of the study of the relationship between multicultural attitudes of the in-service physical educators in Nebraska school communities affected by the New Latino Diaspora and the two gender groups are shown in Table 8. The standard deviation from the mean value for the two groups indicates that there was a negligible difference in multicultural attitude of both the groups.

Table 8.

Preliminary statistical results for the two gender groups.

	N	Mean	Std. Deviation
Male	63	82.17	10.816
Female	39	83.85	12.291

Levene's test for equality of variances shows that the two groups had equal variances ($p > 0.05$). Further, the t-test statistics (-0.720 @ df= 100, p=0.473) presented in Table 9 confirms that there was no statistical difference in the multicultural attitudes of the two gender groups.

Table 9.

Independent samples t-test for multicultural attitude difference between the two gender groups.

	Levene's Test for Equality of Variances	t-test for Equality of Means

	F	Sig.	t	Df	Sig. (2-tailed)
Equal variances assumed	1.117	.293	-.720	100	.473
Equal variances not assumed			-.698	72.896	.487

Multicultural attitude difference among different community change levels.

The statistical findings of the relationship between the multicultural attitude of the in-service physical educators in Nebraska school communities affected by the New Latino Diaspora and the percentage change in Latino population in their communities are shown in Table 10. The standard deviation of the mean value for the three levels indicates that there was no significant difference in multicultural attitudes among the different community population change levels.

Table 10.

Preliminary statistical results for the three community population change levels.

	N	Mean	Std. Deviation	Std. Error
Low	47	83.00	11.002	1.605
Medium	30	82.40	10.702	1.954
High	25	82.96	13.173	2.635

The test of homogeneity of variances indicated that the total scores of the physical educators falling under the three categories had equal variances as $p > 0.05$ (Table 11). Further, there was no statistical difference in multicultural attitudes of the physical educators falling into these three community population change levels as $p > .05$ (Table 12).

Table 11.

Test of homogeneity of variances for the three community population change levels.

Levene Statistic	df1	df2	Sig.
.560	2	99	.573

Table 12.

ANOVA test for multicultural attitude difference among the three community population change levels.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7.301	2	3.650	.028	.973
Within Groups	13054.160	99	131.860		

Multicultural attitude difference among different student population levels.

The statistical findings which examined the relationship between the multicultural attitudes of the in-service physical educators in Nebraska school communities affected by the New Latino Diaspora and the percentage of Latino students in school's population are presented in Table 13. The standard deviation from the mean value for the three levels indicated there was no significant difference in participants' multicultural attitudes among the different student population levels.

Table 13.

Preliminary statistical results for the three student levels.

	N	Mean	Std. Deviation	Std. Error
Low	38	82.76	10.294	1.670

Medium	27	83.00	12.893	2.481
High	37	82.73	11.568	1.902

The test of homogeneity of variances indicated that the total scores of the physical educators in all these three levels had equal variances ($p > 0.05$) (Table 14). In addition, the F-test statistic shows that there was no statistical difference in the multicultural attitudes of the physical educators belonging to these three student levels ($p > 0.05$) as shown in Table 15.

Table 14.

Test of homogeneity of variances for the three student population levels.

Levene's Statistic	df1	df2	Sig.
.928	2	99	.399

Table 15.

ANOVA test for multicultural attitude differences among the physical educators belonging to three community groups.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.295	2	.648	.005	.995
Within Groups	13060.166	99	131.921		

Multicultural attitude difference among different certificate levels.

The statistical findings of the study to examine the relationship between the multicultural attitude of the in-service physical educators in Nebraska school

communities affected by the New Latino Diaspora and the certificates held are presented in Table 16. The standard deviation from the mean value for different categories indicates that there was a slight differences in multicultural attitudes of non physical education certificate holders compared to other certificate holders. The test of homogeneity of variances indicated that the total scores of the physical educators holding different certificates had unequal variances as p-value was not less than 0.05 (Table 17). Moreover, the Welch-test and Brown-Forsythe test results found there was a significant difference among the groups (Table 18). In order to determine where the difference occurred among the different certificate groups, Games-Howell post-hoc test was carried out. The post-hoc test results in Table 19 confirmed that non physical education certificate holders had statistically significantly different multicultural attitudes compared to the multicultural attitudes of the physical education certificate holders. The caveat to this finding is that only an N=2 were reported for Non Physical Educator.

Table 16.

Preliminary statistical results for the different certificate holder categories.

	N	Mean	Std. Deviation	Std. Error
Initial	5	86.00	4.301	1.924
Standard	36	82.94	11.293	1.882
Professional	59	82.95	11.789	1.535
Non Physical Educator	2	68.50	.707	.500

Table 17.

Test of homogeneity of variances for the different certificate holder groups.

Levene's Statistic	df1	df2	Sig.
2.692	3	98	.050

Table 18.

ANOVA test for multicultural attitude difference among the physical educators belonging to different certificate categories.

	Statistics	df1	df2	Sig.
Welch	57.207	3	16.558	.000
Brown-Forsythe	2.903	3	76.478	.040

Table 19.

Games-Howell Post-hoc test results

	Certificate Held (I)	Certificate Held (J)	Mean Difference (I-J)	Std. Error	Sig.
Games-Howell	Initial	Standard	3.056	2.691	.675
		Professional	3.051	2.461	.617
		Not Physical Educator	17.500*	1.987	.002
	Standard	Initial	-3.056	2.691	.675
		Professional	-.005	2.429	1.000
		Not Physical Educator	14.444*	1.948	.000
	Professional	Initial	-3.051	2.461	.617
		Standard	.005	2.429	1.000
		Not Physical Educator	14.449*	1.614	.000
	Not Physical Educator	Initial	-17.500*	1.987	.002
		Standard	-14.444*	1.948	.000
		Professional	-14.449*	1.614	.000

Multicultural attitude difference between the residential and non-residential groups.

The relationship of the multicultural attitude of the in-service physical educators in Nebraska school communities affected by the New Latino Diaspora on the location of residence of the physical educator is highlighted in Table 20. The standard deviation from the mean value for the two groups indicated that there was no significant difference in multicultural attitudes of physical educators in these two groups.

Table 20.

Statistical results for the residential and non-residential groups

	N	Mean	Std. Deviation	Std. Error Mean
Residential	89	83.09	11.177	1.185
Non-Residential	13	80.92	12.958	3.594

Levene's test for equality of variances shows that the two groups had equal variances ($p > 0.05$). Further the t-test results presented in Table 21 confirmed that there was no statistical difference between the multicultural attitude of residential and non-residential physical educators groups ($t = .640$, $df = 100$, $p > 0.05$).

Table 21.

Independent samples t-test for multicultural attitude difference between the two groups

	Levene's Test for Equality of Variances		T-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Equal variances assumed	.374	.542	.640	100	.524
Equal variances not assumed			.573	14.726	.576

Multicultural attitude difference among physical educators teaching at different levels.

The relationship of multicultural attitudes of the in-service physical educators in Nebraska school communities affected by the New Latino Diaspora on the level taught by the physical educator is presented in Table 22.

Table 22.

Preliminary statistical results for the different levels of teaching.

	N	Mean	Std. Deviation	Std. Error
No Response	6	82.17	14.497	5.918

High	30	82.20	11.547	2.108
Middle	26	83.50	10.285	2.017
Elementary	34	83.88	12.504	2.144
Multiple	6	77.50	4.593	1.875

The test of homogeneity of variances shows that the total scores of the physical educators falling under the different categories had equal variances with p-value = 0.167 which is larger than the alpha of 0.05 (Table 23). Further, the F-test statistic shows that there was no statistical difference between the multicultural attitudes of the physical educators teaching at different levels with F = .443 and the corresponding p-value was 0.777 which is larger than the 0.05 alpha (Table 24).

Table 23.

Test of homogeneity of variances for the different teaching levels.

Levene's Statistic	df1	df2	Sig.
1.656	4	97	.167

Table 24.

ANOVA test for multicultural attitude difference among the physical educators teaching at different levels.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	234.298	4	58.575	.443	.777
Within Groups	12827.163	97	132.239		

Summary of findings.

What is the relationship between gender and multicultural attitudes of in-service physical educators within Nebraska communities affected by the New Latino Diaspora? Analysis of the data resulted in no statistically significant findings. Therefore, no significant relationship between gender and multicultural attitudes was reported in this study.

What is the relationship between self identified ethnicity or race and multicultural attitudes of in-service physical educators within Nebraska communities affected by the New Latino Diaspora? Analysis of the data resulted in no statistically significant findings. Therefore, no significant relationship between race/gender and multicultural attitudes was reported in this study.

What is the relationship between the percentage of Latino students of a school's population and in-service physical educators' multicultural attitudes in Nebraska communities affected by the New Latino Diaspora? Analysis of the data resulted in no statistically significant findings. Therefore, no significant relationship between percentage Latino students in school's population and multicultural attitudes was reported in this study.

What is the relationship between the percentage of Latino population in the host community and in-service physical educators' multicultural attitudes in Nebraska communities affected by the New Latino Diaspora? Analysis of the data resulted in no statistically significant findings. Therefore, no significant relationship between *the percentage of Latino population in the host community* and multicultural attitudes was reported in this study.

What is the relationship between level taught and multicultural attitudes of in-service physical educators in Nebraska communities affected by the New Latino Diaspora? Analysis of the data resulted in no statistically significant findings. Therefore, no significant relationship between *level taught* and multicultural attitudes was reported in this study. *How multicultural attitude vary between locations of residence:* Analysis of the data resulted in no statistically significant findings. Therefore, no significant relationship between *locations of residence* and multicultural attitudes was reported.

What is the relationship between certification held and multicultural attitudes of in-service physical educators in Nebraska communities affected by the New Latino Diaspora? Analysis of the data resulted in a statistically significant findings. Therefore, a significant relationship was reported between *certification held* and multicultural attitudes. Using Games-Howell post-hoc test indicated that non physical education certificate holders reported a significantly different multicultural attitude compared to physical education certificate holders.

Chapter 5

Discussion, Conclusion, and Recommendations

Introduction

The purpose of this study was to examine the multicultural attitudes of in-service physical educators in Nebraska school communities affected by the New Latino Diaspora. Physical educators' multicultural attitudes were obtained by utilizing the Munroe Multicultural Attitude Scale Questionnaire (MASQUE). The responses of all the questions on the MASQUE were summed to get a total score for each participant. The scores represented individual's multicultural attitudes and served as the dependent variable in the study. Higher scores on the MASQUE were associated with more positive multicultural attitudes. In addition, the discussion, conclusions and recommendations based on the study's findings and not limited to the analytical results. The study was designed to examine the following guiding research question: "What are reported multicultural attitudes of in-service physical educators in Nebraska school communities affected by the New Latino Diaspora?" The following six relationships were examined:

1. What was the relationship between gender and multicultural attitudes of in-service physical educators within Nebraska communities affected by the New Latino Diaspora?
2. What was the relationship between self identified ethnicity or race and multicultural attitudes of in-service physical educators within Nebraska communities affected by the New Latino Diaspora?

3. What was the relationship between the percentage of Latino population in the host community and in-service physical educators' multicultural attitudes in Nebraska communities affected by the New Latino Diaspora?
4. What was the relationship between the percentage of Latino students of a school's population and in-service physical educators' multicultural attitudes in Nebraska communities affected by the New Latino Diaspora?
5. What was the relationship between certification held and multicultural attitudes of in-service physical educators in Nebraska communities affected by the New Latino Diaspora?
6. What was the relationship between place of residency and multicultural attitudes of in-service physical educators in Nebraska communities affected by the New Latino Diaspora?

Guiding Research Question

The mean attitudinal score for all participants on the MASQUE was 82.81. The range of scores on the MASQUE was from a Maximum of 108 to a minimum of 54 with a range of 54. Normal distribution was reported.

In-service Teachers' Multicultural Attitudes and Certification Held

Examination of the data found that certified physical educators had higher multicultural attitude scores than educators who were teaching physical education but were not certified in physical education. This finding when examined from the perspective of past studies and the theoretical foundations of this study provides six interesting points of discussion.

The first point of discussion is that the course work in physical education teacher education (PETE) may increase awareness of inclusive instruction and foster a more positive attitude toward establishing a teaching environment that promotes success for all. Additionally, certified physical educators in the New Latino Diaspora communities may provide a more pedagogically sound learning experience than has been previously reported (Hamann & Harklau, 2007; Murillo & Villenas, 1997; Potter, Cantarero, & Pischel, 2008; Wortham, Enrique, & Hamann, 2002).

The second point of discussion is that certified physical educators' immersion in New Latino Diaspora schools may foster less negative attitudes toward multicultural settings in comparison to their non-certified peers. Pohan and Aguilar (2001) reported that cross-cultural experiences, domestic or international had a positive effect on individuals' attitudes and multicultural beliefs. The daily exposure to multicultural classes in combination with pre-service training may foster a more positive attitude toward multicultural educational settings. In addition certified physical educators may posses the disposition that all students can learn in comparison to educators teaching physical education that are not certified.

A third point of discussion is based on Agne's model. According to this model, a teacher's attitude is the basis for a teacher's actions and ultimately student learning. Consequently, experience in a multicultural setting in combination with pre-service training may foster the development of a more positive teacher efficacy in a multicultural physical educational setting.

A fourth point of discussion is that the findings support NASPE's recommendation that individuals trained to teach physical education should teach

physical education to ensure a high-quality physical educational program. According to NASPE (2004), "a high-quality physical education program includes the following components: opportunity to learn, meaningful content, and appropriate instruction" (p. 5). Germane to this discussion is the component of "opportunity to learn." According to NASPE (2004) one element of opportunity to learn is "Qualified physical education specialists providing a developmentally appropriate program" (p. 5). Certified physical education teachers may be prepared better to teach in a multicultural physical education environment than non-certified peers. This may be due to the certified physical educator's pre-service course work. Certified physical educators theoretically should have a higher level of content knowledge in physical education and this may allow them to better deal with diverse students in the classroom.

The fifth point of discussion examines the finding that certified physical educators may have a more positive attitude toward multicultural educational settings compared with educators who are not certified in physical education. From the perspective of the Banks *Transformative Model* (1999). When the multicultural attitudes of physical educators are examined from Banks' Transformative Model (1999), some interesting insights emerge. Certified physical educators may provide the students of the New Latino Diaspora with a more effective learning environment because they may be able to teach at a level closer to multicultural "action" level as opposed to simply "being aware" that multiculturalism exists. Banks indicates that being at a level of "action" is not simply an issue of content. Banks suggests that for a teacher to operate at the "action" level the educator must first have attitudes manifested in their dispositions. These dispositions include that all students can learn, individual differences exist, and that teachers work to

develop learning opportunities for all students. To develop learning opportunities for students of the New Latino Diaspora, physical educators need to become culturally responsive teachers. Being culturally responsive includes the teacher becoming culturally literate, incorporating students' languages and culture into the curriculum and lessons, and developing a relationship with stakeholders so there is community participation in the students' education (Graham, Holt/Hale, & Parker, 2007). In addition, the culturally responsive physical educator encourages students to participate in physical activities within the community. In summary, the "Action" level in a physical education setting requires the educator, to not only be knowledgeable and competent in their content, but be able to use the cultural differences as funds of knowledge to better engage students in the lesson (Gonzales et al., 1995).

The final discussion point examines the effect size and power associated with this finding. The effect size for the comparison of the multicultural attitudes between certified physical educators and non-certified was -1.29. This effect size was used to calculate a power of less than 10% (Cohen, 1998), which meant that at least a 90% chance existed for a Type II error to occur. Assuming a power of 80% and P = .05 no sample size could be determined that would result in a power of 80%. In summary the findings of this study may not be able to provide a valid comparison to previous studies.

All Other Research Questions

The remaining relationships examined in this study were found to be insignificant. Parametric analysis aside, the findings of this study bring into question some accepted norms in regards to attitudinal studies. This study's findings may indicate that the impact

of the New Latino Diaspora on educators' attitudes is not a thoroughly understood phenomenon.

Gender. Researchers have suggested that women hold a more positive multicultural attitude toward multicultural environments than men (Munroe & Pearson, 2006; Pohan & Aguilar, 2001; Wergin, 1998). This study's findings do not support this conclusion. Perhaps the demographic changes experienced by the New Latino Diaspora host communities are so drastic that the more positive multicultural attitude associated with women (n=39) is negated. The lack of a significant finding may also be due to a Type II error. The calculated effect size for the comparison between male multicultural attitudes and female multicultural attitudes was .16. This effect size was then used to calculate a power of 15%. This means that an 85% chance exists that a Type II error has occurred. Assuming a power of 80% and P = .05 a sample size of 1223 would have been required to detect an effect of this size (Kraemer & Thiemann, (1987). The lack of statistical power prevents a valid comparison to previous studies.

Percentage Changes in Latino Populations in Host Community/ Location of Residence. Educators' cross cultural experiences, domestic and international, have been shown to have a statistically significant impact on educators' multicultural attitudes (Pohan & Aguilar, 2001). They define domestic cross cultural experiences as social interaction between individuals in an individual's home country. For example a participant of this study who lives in a New Latino Diaspora host community may encounter Latino culture in their day to day routes. International cross cultural experiences are defined as cross cultural interactions in a country outside of an individual's home country. Pohan and Aguilar (2001), suggest that this includes travel to

foreign countries and or experience like being a Peace Core volunteer. However, a low effect size and a power of less than 10% prevents valid comparison to previous studies. In this study, the variables of *Percentage Changes in Latino Populations in Host Community and Location of Residence* examined whether a significant relationship existed between participants' multicultural beliefs and potential domestic cross cultural experiences. The findings indicated that no significant relationship existed in either variable, which is in contrast to previous studies (Ahlquist, 1991; Dee & Henkin, 2002; Pohan & Aguilar 2001). Perhaps the results indicate that physical educators in these host communities have no more or no less cross cultural experiences than a physical educator that lives or works in a community that is not impacted by the New Latino Diaspora. Another explanation for the contrast in results is that the effect size and power was too small to permit a psychometrically appropriate analyses regarding statistical significance. For the variable 'place of residency of the educator,' effect sizes were calculated for each level of this variable (see table 25). These effect sizes were then used to calculate power. Calculations resulted in a power for all levels of this variable of 10% or less. This means that at least a 90% chance exists that a Type II error has occurred. Assuming a power of 80% and P = .05 a sample size of 3136 would have been required to detect an effect of this size (Kraemer & Thiemann, 1987). Results of this study may be indicative of reported low statistical power and therefore do not warrant conclusions that can be validly compared to previous studies (see table 25 for effect sizes and powers for percent change in the community).

Table 25.

Effect Size and Power Summary of Percent Change of Latino Population in Host Communities.

Variable	Effect Size	Power
Low Change Compared to Medium change	-0.0267	Below 10
Low Change Compared to High Change	-0.004	Below 10
Medium Change compared to High Change	-0.005	Below 10

Level Taught. This study found no significant relationship between educators' multicultural beliefs and the grade level taught. The findings of this study support two similar studies in which the beliefs of educators toward diversity did not differ based on grade level taught (Adams & Hall, 2002; Adams, Sewell, & Hall, 2004). However, due to effect size, the results of this study may be indicative of a lack of statistical power and a valid comparison to previous studies was not warranted. .

For the variable '*Level Taught*,' effect sizes were calculated for each level of this variable (see table 26). These effect sizes were then used to calculate powers. Power calculations resulted in a power of below 10% for all levels of this variable. This means that at least a 90% chance exists that a Type II error has occurred. Assuming a power of 80% and P = .05 a sample size of 78485 would have been required to detect an effect of

this size. (Kraemer & Thiemann, 1987). Results of this relationship may be indicative of low statistical power and therefore do not warrant a valid comparison to previous studies.

Table 26.

Effect Size and Power Summary of Level Taught.

Variable	Effect Size	Power
High School to Middle School	.011	Below 10
High School to Elementary	0.146	Below 10
High School to Multiple Grades	-0.407	Below 10
Multiple High School to No Grades reported	-0.003	Below 10
Middle School to Elementary	0.037	Below 10
Middle School to Multiple	-0.583	Below 10
Middle School to No Level Reported	-0.129	Below 10
Elementary to Multiple levels	-0.510	Below 10
Elementary to No Levels Reported	-0.137	Below 10
Multiple Levels to No Levels reported	1.017	Below 10

Percentages of Latino Students in School's populations. No significant relationship existed between educators' multicultural beliefs and the percentage of Latino students in a school districts' population. These results may be indicative of the resulting effect sizes and negligible powers of less than 10. In addition, no conclusions in regards to this variable are statistically warranted and subject to interpretation.

This study's primary focus was not to examine educators' preferences for teaching students from their own cultural group (Ahlquist, 1991; Dee & Henkin, 2002; Williams, 1999). However, the current study's results may indicate that further

examination of physical educators' disposition that all students can learn and teaching preferences may be insightful.

Ethnicity or Race of Physical Educator. No significant relationship existed between the ethnicity or race of the physical educator and multicultural attitudes, which supports the research of Munroe and Pearson (2006). A lack of significance may be attributed to the large variance in group sizes that made statistical analyses an invalid way to examine this data (Keppel & Wickens, 2004). Only one participant out of the 102 participants self-identified as not being white. This demographic result may be an indication of what some educational scholars identify as an area of concern in our public schools (Banks & McGee-Banks, 2004; Melville & Hammermeister, 2006; Valentin, 2006). As the nation and the nation's student population becomes more diverse, diversity is not reflected in the teacher population which is 87% Caucasian (Banks & McGee-Banks, 2004). Although being Caucasian does not preclude one from being an effective teacher, scholars question why there is not more diversity found in teacher populations and whether teachers are being prepared to meet the nation's multicultural needs (Melville & Hammermeister, 2006).

Some scholars suggest that ethnicity and race of a teacher are not as important to student academic success in a diverse setting as class size, and teachers' educational level (Okpala, Smith, Jones, & Ellis 2004). However, this point of view is not shared by all educational scholars. The race/ethnicity of the physical educator may have a positive impact on diverse populations like New-Comers (Hamann & Harklau, 2007). A Latino physical educator in a community affected by the New Latino Diaspora may provide a role model for Latino students. Latino physical educators may be able to make a stronger

impact on the physical habits of New-Comers. The caveat to this is that if the physical educator lacks the disposition that all students can learn, teacher effectiveness may be minimal.

Demographics and The New Latino Diaspora. The findings of the study support the demographic characteristic of The New Latino Diaspora. According to scholars, communities affected by The New Latino Diaspora demonstrate unprecedented growth in Latino populations (Hamann & Harklau, 2007; Murillo & Villenas, 1997; Wortham, Enrique, & Hamann, 2002). The communities included in this study demonstrate this characteristic. The percent changes in Latino populations ranged from a 55% to 1,437% growth between the years of 1990 to 2000 (U.S. Census Bureau, Census 1990 Summary Tape File 1 (STF1) and Census 2000Summary File1 (SFT 1).

In addition to the unprecedented growth of Latino populations these communities were hallmarked by a need for a cheap labor force (Hamann & Harklau, 2007; Murillo & Villenas, 1997; Wortham, Enrique, & Hamann, 2002). According to New Latino Diaspora scholars, the need for a cheap labor force willing to work in the meat packing industry is what fosters the growth in Latino populations in these rural Nebraska communities. All communities in this study were associated with the existence of a meat packing plant and the meat packing industry. In addition the majority of these communities are located along the Platte River Valley corridor that parallels U.S. Inter-State 80 for easy market access (Hof, D., et al. 2007).

The seasonal and economic variables in the meat packing industry dictate the need for a cheap labor force. The result of this varying need of the work force results in

both permanent and migratory Latino populations (Hamann & Harklau, 2007; Murillo & Villenas, 1997; Wortham, Enrique, & Hamann, 2002).

Implications for Physical Education Teacher Education

At least three possible implications for Physical Education Teacher Education (PETE) have been identified in this study. These implications reflect the Banks Transformative Model: (1) PETE should develop an awareness of the existence of cultural diversity in today schools, (2) PETE should foster a desire to care about providing all students with a quality physical education, and (3) PETE should provide physical education teacher candidates with pedagogically sound strategies and teaching modes for the delivery of quality physical education in a multicultural setting.

To achieve the PETE course work implications, physical education teacher candidates need to become aware of what is meant by cultural diversity and the growth of diversity in today's schools. One way to achieve this awareness is to provide them with field experiences in schools impacted by The New Latino Diaspora. In doing so, PETE programs may provide future teachers with exposure to the diversity that exists in these schools. Field experiences may bring about more cross-cultural experiences than the future teacher has ever experienced. In conjunction with these field experiences, course work must help future teachers see multicultural differences not as a liability to learning but an asset or "*funds of knowledge*" (Gonzales et al., 1995). The concept of "funds of knowledge" is a paradigm shift that requires educators to become culturally literate and then use this knowledge to help create pedagogically sound lessons and curriculum.

According to the research of Gonzales et al. (1995), teachers traditionally have perceived linguistic and cultural diversity as a deficit. This belief has been reported to

lead to less than desirable educational experiences for culturally diverse students. According to researchers, some of these less than desirable educational experiences are reported to be students not feeling welcome at a school and less desire and actual participation in physical education (Carroll & Hollinshead, 1993).

If future physical educators are to provide inclusive, relevant learning experiences for all students, including those of the New Latino Diaspora, then it is imperative that these individuals develop less negative and more positive attitudes toward the existence of diversity in the physical education. This includes understanding the concept of "funds of knowledge" and developing cultural literacy. A paradigm shift may be required of educators to view diversity as a learning tool, not a liability. The development of cultural literacy and the recognition of "funds of knowledge" through multicultural field experiences and course work can be scaffold throughout PETE programs (Gonzales et al., 1995). This scaffolding may help foster within the future teacher the attitudes and disposition that all students can learn.

Finally, PETE courses need to provide future teachers with pedagogically sound strategies and teaching techniques for the delivery of quality physical education in a multicultural setting. These teaching strategies and teaching techniques indirectly correspond with what Banks refers to the "action" level of multiculturalism and Agne's "teacher actions." The research of Myers and Boothe (2000) recommends four instructional strategies: (a) combine materials using language that students can understand, (b) incorporate vocabulary development in activities, (c) use cooperative learning, and (d) provide positive and immediate feedback in regards to both skill and langue learning.

The four recommended instructional strategies listed above can be addressed by physical educators' with training and the implementation of the Sheltered Instructional Observation Protocol (SIOP) (Echevarria, Vogt, & Short, 2004). The SIOP model's "theoretical underpinning… is that language acquisition is enhanced through meaningful use and interaction" (Echevarria, Vogt, & Short, 2004. p. 13). The SIOP model suggests that despite content area, educators in multicultural settings can be more effective within their content area and at the same time develop English language proficiency by identifying language objectives for a lesson. By providing physical education teacher candidates with training in the SIOP Model, they may then be better prepared for teaching in a multicultural environment. For Physical educators in a community affected by the New Latino Diaspora training and implementation of the SIOP model could make them more effective physical educators. What the SIOP model may provide physical educators is pedagogical tool that then may positively impact their teacher efficacy regards to their ability to educate in a multicultural setting. In conclusion, the principle investigator suggests that PETE curriculums include the SIOP model and training should be provided to in-service physical educators on the use of the SIOP model.

Limitations of the Study

The limitations of this study are three fold. These limitations can be best capture in the following categories: (a) low statistical power, (b) demographics of the participant population, (c) lack of descriptive data.

Statistical analyses of the data revealed only one significant relationship. This relationship was that certified Physical Educators in this study had a statistically significant more positive multicultural attitude than educators not certified in Physical

Education but were teaching physical education. However, power analyses of this relationship resulted in a power of approximately 15% (Kraemer & Theimann, 1987). In addition, power analyses of the other five variables resulted in equally low power. Therefore statistical results may be indicative of this low power and results and conclusions of this study are subject to statistical and subjective interpretation.

The second limitation of this study is one of participant demographics. Of the 102 participants who responded, only one identified as not being white. The ethnic/race homogeneity of the participants made statistical analyses of the relationship between ethnicity/race statistically impractical.

The third limitation to this study is a lack of descriptive data. Although the survey tool captured self-reported multicultural attitudes it did not provide any description of how these attitudes manifested in the participants' pedagogical dispositions. Therefore, no evidence exists that collaborates self-reported multicultural attitudes and classroom practices.

Conclusions

This study was designed to examine the relationships of multicultural attitudes of in-service physical educators in Nebraska schools effected by the New Latino Diaspora and the following relationships: (a) gender, (b) ethnicity/race, (c) percentage changes in Latino populations in host community, (d) location of residence, (e) percentages of Latino students in school's populations, (f) level taught, (g) certification held. Only one relationship was found to be significant. The significant relationship was that physical educators had a significantly higher MASQUE scores than non-certified physical

educators. This significant finding may support the conclusion that certified physical educators are better prepared to deliver pedagogically sound physical education.

Based on the study, course work associated with physical education certification in Nebraska seems to have a positive impact on multicultural attitudes. Also, certified physical educators in the New Latino Diaspora communities may provide a more pedagogically sound education than other researchers have suggested (Hamann & Harklau, 2007; Henness, 2002; Murillo & Villenas, 1997; Potter, Cantarero, & Pischel, 2008; Wortham, Enrique, & Hamann, 2002). Also, this finding may indicate that by only looking at overall academic achievement and not specific achievement in specific content areas, scholars of the New Latino Diaspora may be drawing too broad an array of conclusions about teacher effectiveness in Diaspora communities.

Future Research and Recommendations

The results of this study provided insight into the demographic make-up of the participants of this study. In addition, and the relationships between multicultural attitudes of in-service physical educators in Nebraska schools effected by the New Latino Diaspora and the following variables: (a) gender, (b) ethnicity/race, (c) percentage changes in Latino populations in host community, (d) location of residence, (e) percentages of Latino students in school's populations, (f) level taught, (g) certification held were examined. Based upon this study, the following recommendations for dissemination of the findings and further studies are deemed appropriate.

1. The Latino Paradox and Quality Physical Education. A weakness of this study was that it did not examine whether a relationship existed between The Latino Paradox and the delivery of quality physical education as defined by NASPE.

Researchers have described The Latino Paradox as an "epidemiological paradox" wherein the acculturation of second and third generation immigrant youth may place them at a higher health disadvantage than previous generations (Harker, 2001; Popkin, 1998). Beets and Pitetti (2004) suggest that one of these health disadvantages is that Latino youth may have higher rates of overweight and obesity. Taking into consideration that the CDC (2000) recommended quality daily physical and health education as a means to address issues of youth obesity and overweight, a follow up study that examines the relationship between The Latino Paradox and the delivery of quality physical education as defined by NASPE would be beneficial.

2. The data collected in this study could serve as a base for comparison for future correlation studies investigating the relationships between multicultural attitudes of physical educators in schools affected by the New Latino Diaspora.
3. The data collected in this study could serve as a base for comparison for future correlation studies between multicultural attitudes of physical educators in schools affected by the New Latino Diaspora and physical educators not in schools affected by the New Latino Diaspora.
4. The data collected in this study could serve as a base for comparison for future correlation studies of the multicultural attitudes of physical educators in schools affected by the New Latino Diaspora and other content area educators.
5. Demographic results could serve as a base for the examination of hiring practices of New Latino Diaspora schools.

6. Demographic results could serve as a base for the examination of teacher education content, teacher education recruitment practices, and retention rates of pre-service physical educators that demonstrate the disposition that all students can learn.
7. Similar studies in other states affected by the New Latino Diaspora should be conducted.
8. Future studies should be undertaken using other evaluative tools besides the Munroe Multicultural Attitude Scale Questionnaire. A qualitative study could be used to further examine participants' multicultural attitudes, pedagogical practices, and dispositions in the physical education class.
9. Future studies with a less homogeneous participant population should be conducted.
10. A more reliable and valid empirically based measurement tool for studying teachers' attitudes and beliefs should be developed to circumvent the short comings of the MASQUE.

APPENDICES

APPENDIX A

MASQUE Permission

Date: Fri, 15 Jun 2007 09:39:04 -0400
From: "Arnold Munroe" <amunroe@mail.ucf.edu> **Block Address**
To: "Francis J Lynott" <flynott@unm.edu>
Subject: **Re: Inquiry MASQUE**

Reply Reply All Forward Print Delete

Greetings,

Thank you for the feedback!

A multiple of studies are in progress following the research article of 2006 (article cite-location as below). Particularly the queries and request to utilize the MASQUE are across disciplines and are also tailored for the uniqueness of the intended inquires. I trust this would likewise be the probable case in your interest as well.

Notably the dissertation you seek is based on a prior/lesser study analysis and is not as scientifically robust as the more recent study found at: Munroe, A. G., & Pearson, C. L. (2006). The Munroe Multicultural Attitude Scale Questionnaire (MASQUE): A New Instrument for Multicultural Studies. Educational Psychology Measurement, 66 (5), 819*834.

In the past I have granted permission/consent for the utilization of the MASQUE instrument for the intended purpose/s brought forth, to include adaptive alterations of the modified MASQUE survey. Reciprocal in those agreements and per my pursuit, folks have agreed to share their outcomes/findings for my own extended inquiry-comparative study purposes (to include study copies and data sets) and accordingly in addition to any due authorship credit/acknowledgement. Likewise I would appreciate the same process herein to expand the field of inquiry.

I hope this possibility exists to collaborate with you, if in fact you decide to pursue the use of the MASQUE, especially given the very important research such an ever-increasing diversity awareness draws.

I trust this aids your process and please contact me for added questions and concerns. I look forward to your reply and best regards.

Peace,

Arnold Munroe, Ed.D.
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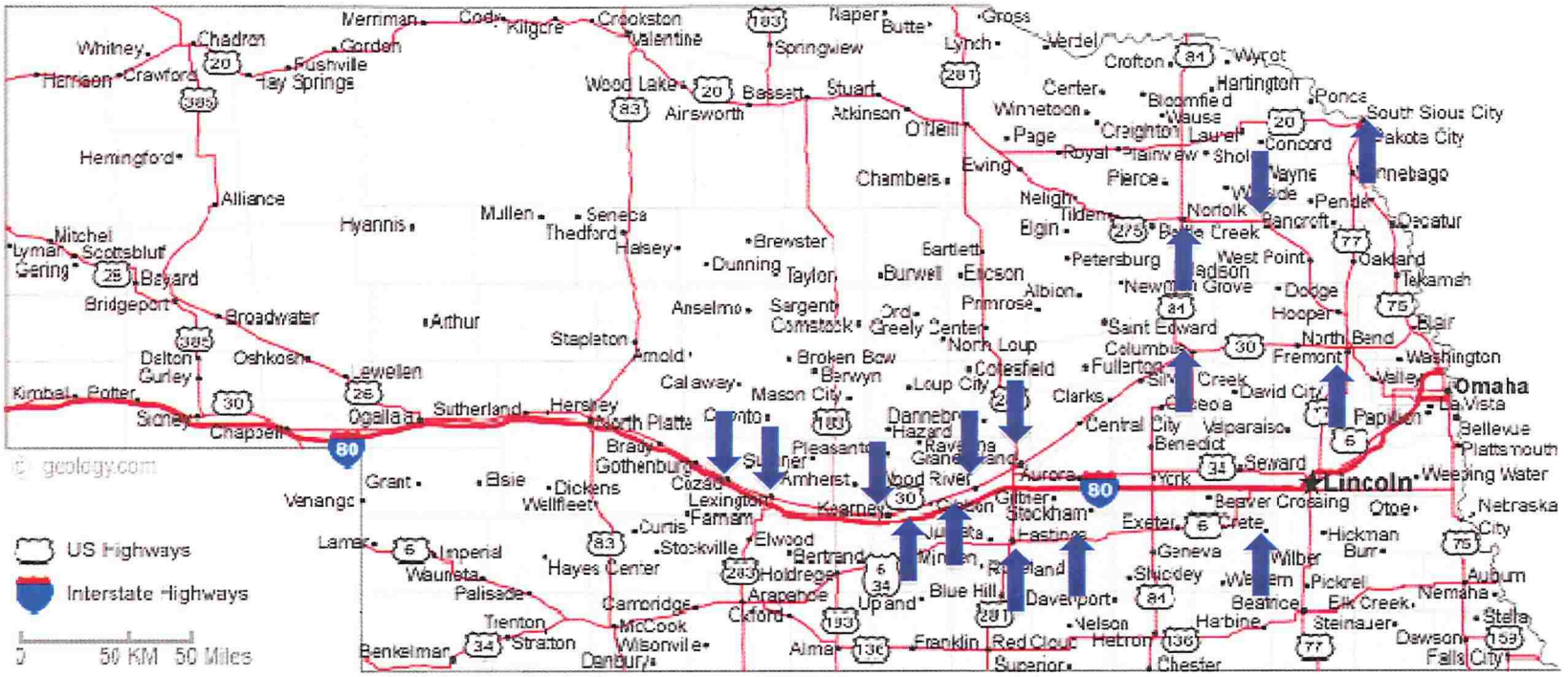
Phone: 407 823 0592
FAX: 407 823 5144

Wisdom becomes knowledge when it becomes your personal experience (Unknown yogi).

APPENDIX B
Geographic Location of Communities



Site Locations

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APPENDIX C

Superindendent Consent

University of Nebraska Kearney

COLLEGE OF EDUCATION
Department of Health, Physical Education, Recreation, and Leisure Studies

Dear Superintendent,

I am writing to request access to your district's Physical Educators for research. Your district's physical educators have been selected to respond to a short survey. Responses to this survey are very important and will provide information that may help improve delivery of physical education and preparation of future physical educators. In addition, findings from this study may provide you with initial information on your district's teacher attitudes toward diversity in their classrooms. These findings may then provide you with information for grounds for further research and investigation of your district's teacher attitudes toward diversity.

The research is being conduct by me, Francis J. Lynott, Assistant Professor at the University of Nebraska at Kearney in fulfillment of a PhD degree from the University of New Mexico. This study has been approved by the University of Nebraska at Kearney and the University of New Mexico Institution Review Board.

There are no known risks or discomforts associated with participation. All collected information will be anonymous and reported research findings will not be associated with specific school districts, school sites, or individual physical educators who participated in the study. I appreciate you taking the time to read this request and hope you consider granting me access to your district's physical educators.

If you need or require additional information on this study you may contact me the primary researcher at lynottfj@unk.edu. You may also contact the studies' chair person at napperow@unm.edu, or the Internal Review Board at the University of New Mexico at rcs@unm.edu.

Yours in Quality Physical Education,

Francis J. Lynott III

Cushing Facility / Kearney, NE 68849
(308) 865-8331 / FAX (308) 865-8073 / www.unk.edu

University of Nebraska Kearney

COLLEGE OF EDUCATION
Department of Health, Physical Education, Recreation, and Leisure Studies

Signed Consent Form

Your signature and date below indicates that you are granting Francis J. Lynott III permission to recruit your district's physical educators for participation in the previously discussed study. Please sign and return in the enclosed self-addressed stamped envelope, or fax to (308) 865-8073.

_____
District (Please print)

_____
Name & Title (Please Print)

_____
Signature/Date

Cushing Facility / Kearney, NE 68849
(308) 865-8331 / FAX (308) 865-8073 / www.unk.edu

APPENDIX D

Site SupervisorConsent

University of Nebraska Kearney

COLLEGE OF EDUCATION
Department of Health, Physical Education, Recreation, and Leisure Studies

Dear Site Supervisor,

I am writing to request access to your school's Physical Educators for research. The district's Superintendent has approved this study and your school's physical educators have been selected to respond to a short survey.

Responses to this survey are very important and will provide information that may help improve delivery of physical education and preparation of future physical educators. In addition, findings from this study may provide you with initial information on your school's teachers attitudes toward diversity in their class rooms. These findings may then provide you with grounds for further research and investigation.

The research is being conduct by me, Francis J. Lynott III, Assistant Professor at the University of Nebraska at Kearney in fulfillment of a PhD degree from the University of New Mexico. This study has been approved by the University of Nebraska at Kearney and the University of New Mexico Institution Review Board.

There are no known risks or discomforts associated with participation. All collected information will be anonymous and reported research findings will not be associated with specific school districts, school sites, or individual participants. I appreciate you taking the time to read this request and hope you consider granting me access to your school's physical educators.

If you need or require additional information on this study you may contact me the primary researcher at lynottfj@unk.edu. You may also contact the studies' chair person at napperow@unm.edu, or the Internal Review Board at the University of New Mexico at rcs@unm.edu.

Yours in Quality Physical Education,

Francis J. Lynott III

Cushing Facility / Kearney, NE 68849
(308) 865-8331 / FAX (308) 865-8073 / www.unk.edu

University of Nebraska Kearney

COLLEGE OF EDUCATION
Department of Health, Physical Education, Recreation, and Leisure Studies

Signed Consent Form

Your signature and date below indicates that you are granting Francis J. Lynott III permission to recruit your school's physical educators for participation in the previously discussed study. Please sign and return in the enclosed self-addressed stamped envelope.

_____
Name of Site (Please Print)

_____
Name of Site Supervisor (Please Print)

_____
Signature of Site Supervisor Date

Cushing Facility / Kearney, NE 68849
(308) 865-8331 / FAX (308) 865-8073 / www.unk.edu

APPENDIX E

Informed Consent for Participant Research

Project Title: In-service Physical Educators' Multicultural Attitudes in Nebraska Schools Affected by the New Latino Diaspora

Researcher: Francis J. Lynott III
Department: Health, Exercise and Sports Sciences
Research Advisor: Gloria Napper-Owen, Ed.D

Purpose

The purpose of this study is to investigate in-service physical educators' multicultural attitudes in schools in Nebraska communities that have experienced growth in Latino populations over the last 10 years, known as the New Latino Diaspora.

Procedure

The proposed study will take participants 15 minutes. This study will attempt to capture participants' estimated multicultural attitudes using the Monroe Multicultural Attitude Scale Questionnaire. This questionnaire consists of 19 Likert questions and 5 demographic questions. This questionnaire has been shown to be a statistically sound estimate of educators' multicultural attitudes.

The data collection sources to be utilized in this study are the participants' responses to the questionnaire. Questionnaires will be provided to participants during a site visit by the researcher. Site visits will be scheduled with participants via electronic mail or by phone. At the time of the visit, participants will be given the option of filling out the questionnaire via OPINO, an electronic survey platform or by paper and pencil. If participant chooses the paper and pencil survey the researcher will leave the vicinity of the participant until questionnaire is completed. If participant prefers, a self-addressed stamped envelope can be left with the participant and the participant can mail completed survey to the researcher. All data will be collected and anonymously stored. Answers will then be entered into the OPINIO platform by the researcher at a later date.

Confidentiality/Anonymity

The names and identities of the participants will be kept confidential. Only my academic advisor and I will have access to participants' identities. The research data will be kept in a secure, locked location. All electronic paper based questionnaires will be destroyed three years after any publications of the study.

Risks and Benefits

This study is not designed to cause risk or discomfort to the participants. However, possible risks of the study may be that the participants may experience uncomfortable feelings while completing the questionnaire. The researcher will answer any questions you may have prior to or after participation in survey. There may or may not be benefit to the participant by being part of

this study. However, the attitudes this study may reveal, could be used as an indicator for the need of further study and/or future interventions to help promote student learning in physical education classes in schools affected by the New Latino Diaspora. Participants will likely feel respected and valued for providing important information to the field of physical education pedagogy.

Participation and Withdrawal

I understand that by agreeing to participate in this study I have not waived any legal or human rights. I also understand that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be allowed without coercion, prejudice, or negative consequences.

Identification of Investigators and Review Board

If you have any questions or concerns about the research, please feel free to contact:

Francis J. Lynott III
Cushing 131
1410 W. 26th Street
Kearney, NE, 68845
308-865-8650

Gloria Napper-Owen
University of New Mexico
Health, Exercise and Sports Sciences, Johnson Center
Albuquerque, NM 87131
505-277-2783

If you have other concerns or complaints, contact the Institutional Review Board at the University of New Mexico, 1717 Roma NE, Room 205, Albuquerque, NM 87131

Signature of Research Participant

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been provided a copy of this form.

_____
Name of Participant (Please print)

_____
Signature of Participant Date

Signature of Investigator

In my judgment the participant is voluntarily and knowingly providing informed consent and possesses the legal capacity to give informed consent to participate in this research study.

_____
Name of Investigator or Designee

_____
Signature of Investigator of Designee Date

APPENDIX F

Raw Data

Gender	Ethnicity	Level Taught	Per Cha Com	Per SD	Cert	Res	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Total
Male	White	Multiple	100	18	standrd	Res	6	5	6	1	4	5	5	3	3	1	6	3	6	6	6	6	6	4	82
Male	White	Middle	100	18	standrd	Res	6	6	6	6	6	6	6	6	6	4	6	3	6	5	3	4	6	5	96
Male	White	High	272	19	standrd	Non-res	4	5	4	5	5	5	6	5	5	5	5	4	5	4	5	3	5	5	85
Female	White	Elem	272	19	profsnl	Non-res	5	6	4	2	5	5	5	2	2	4	3	4	5	5	4	4	5	5	75
Male	White	Multiple	1,437	20	standrd	Non-res	5	5	5	5	3	6	5	3	3	4	4	3	4	5	3	3	4	3	73
Male	White	High	142	32	standrd	Res	3	5	4	2	2	2	4	5	5	2	4	4	6	6	5	5	4	5	73
Female	White	Elem	142	32	profsnl	Res	4	4	6	4	1	4	1	5	5	1	5	2	5	4	3	5	4	1	64
Male	White	High	1,457	74	profsnl	Res	6	6	5	5	5	5	6	3	5	2	6	5	6	6	3	1	6	5	86
Male	White	Elem	1,457	74	standrd	Res	6	6	6	6	4	6	6	2	1	4	6	6	6	6	2	3	5	1	82
Female	White	Elem	1,457	74	profsnl	Res	6	6	6	6	4	5	6	6	6	5	6	6	6	6	4	5	5	4	98
Male	White	Middle	1,457	74	profsnl	Res	6	5	6	6	4	6	5	5	5	6	5	3	6	5	4	3	3	5	88
Male	White	Middle	1,457	74	profsnl	Res	5	5	6	4	4	4	5	3	5	3	5	5	6	5	5	5	3	5	83
Female	White	High	1,457	74	standrd	Res	6	5	5	5	5	4	6	4	5	4	5	5	6	6	4	2	5	5	87
Female	White	Middle	1,457	74	profsnl	Res	6	6	6	6	6	6	4	5	5	2	5	3	6	3	3	3	5	5	85
Male	White	High	1,457	74	profsnl	Non-res	2	5	2	6	2	4	6	2	1	2	2	5	5	6	3	3	5	5	66
Female	White	High	401	18	profsnl	Res	5	5	5	5	5	4	4	4	4	3	5	4	4	3	2	5	4	4	75
Male	White	Multiple	401	18	profsnl	Res	3	4	3	2	3	5	5	5	2	4	6	2	6	6	6	3	2	5	72
Male	White	Middle	401	18	standrd	Res	6	6	6	4	4	6	2	4	5	2	5	6	6	5	3	2	4	5	81
Female	White	Elem	401	18	profsnl	Res	6	5	6	6	6	6	6	2	3	3	6	3	6	5	2	4	3	4	82
Female	White	Elem	401	18	profsnl	Res	6	6	6	6	5	6	6	5	6	5	6	6	6	3	3	2	4	3	90
Male	White	Middle	401	18	profsnl	Non-res	6	6	6	6	6	6	5	4	4	1	6	3	6	2	1	3	5	1	77
Male	White	High	401	18	standrd	Res	4	3	6	4	3	6	5	2	2	3	6	1	6	1	3	6	6	4	71
Male	White	High	401	18	standrd	Res	5	6	6	6	6	6	6	5	5	4	6	5	6	6	5	5	5	5	98
Female	White	Middle	401	18	profsnl	Res	6	6	6	6	5	5	5	6	6	5	6	5	6	6	5	5	5	6	100
Male	White	High	401	18	standrd	Res	5	5	6	4	6	5	5	6	6	4	5	3	6	6	4	3	3	6	88
Male	Black/AA	Elem	401	18	standrd	Res	6	5	6	6	6	6	5	5	5	5	5	6	6	6	4	3	3	5	93
Male	White	Elem	401	18	profsnl	Res	3	3	4	4	3	5	5	5	5	4	5	4	6	5	5	5	5	6	82
Male	White	Elem	263	37	profsnl	Res	6	6	6	5	6	5	5	3	3	5	5	3	6	6	2	3	3	3	81
Male	White	High	263	37	profsnl	Res	6	5	6	5	1	6	5	6	4	2	5	1	6	5	3	6	2	2	76
Male	White	Elem	263	37	profsnl	Res	6	5	5	5	5	5	5	5	5	5	5	5	5	3	4	3	6	5	87
Female	White	High	263	37	profsnl	Res	6	6	5	4	6	6	3	2	3	3	4	4	5	5	3	2	3	4	74
Female	White	Middle	263	37	profsnl	Res	6	6	6	6	4	6	6	5	5	4	6	4	6	6	3	1	6	5	91
Male	White	Elem	263	37	profsnl	Res	6	6	6	6	6	6	4	4	4	4	4	3	6	6	6	6	6	6	95
Male	White	Elem	263	37	profsnl	Res	6	6	6	6	6	6	1	4	4	3	3	4	6	6	6	6	1	6	86
Female	White	High	263	37	profsnl	Res	4	4	5	5	5	6	3	6	5	4	6	3	5	6	6	6	6	6	91
Male	White	High	263	37	profsnl	Res	6	6	6	6	6	6	6	3	6	1	3	1	3	6	3	4	4	4	80
Male	White	High	263	37	standrd	Res	5	5	6	5	5	6	1	4	5	3	4	3	4	4	3	2	2	2	69
Female	White	Elem	263	37	profsnl	Res	6	5	5	5	5	3	5	6	6	5	6	3	6	6	3	5	5	4	89
Female	White	Elem	263	37	profsnl	Res	6	5	6	5	6	6	6	6	6	6	3	6	6	6	6	6	6	6	103
Male	White	Middle	558	16	profsnl	Res	6	6	5	6	6	6	2	3	1	3	1	5	4	1	6	1	6	1	69
Female	White	Elem	558	16	not pe	Res	3	3	3	3	3	3	3	3	3	3	6	4	6	5	5	4	3	5	68
Male	White	High	558	16	profsnl	Res	4	4	5	4	4	4	4	4	4	3	5	4	4	5	3	3	4	4	72
Male	White	High	558	16	standrd	Res	5	5	6	5	3	6	5	4	2	3	5	5	6	6	3	3	5	5	82
Female	White	Middle	737	26	profsnl	Res	5	5	6	6	4	6	2	2	3	1	5	4	6	5	3	4	4	3	74
Male	White	Middle	737	26	standrd	Res	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	108
Female	White	Elem	737	26	profsnl	Res	6	6	6	6	6	6	1	6	6	6	6	6	6	6	6	6	6	6	103
Male	White	Middle	737	26	initial	Res	6	6	5	5	5	6	5	3	6	5	4	5	6	6	3	3	5	2	86
Female	White	Middle	737	26	profsnl	Res	5	6	5	5	6	5	5	5	5	5	5	5	6	6	4	5	5	5	93
Male	White	Elem	737	26	standrd	Res	5	5	5	5	4	5	5	4	4	3	5	4	5	6	2	4	6	6	83

Gender	Ethnicity	Level Taught	Per Cha Com	Per SD	Cert	Res	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Total
Female	White	Middle	737	26	initial	Res	5	6	4	4	5	6	5	6	6	4	5	5	6	6	5	3	4	6	91
Male	White	Middle	737	26	standrd	Res	5	5	6	6	4	5	5	6	0	1	2	4	5	5	3	3	3	4	72
Male	White	High	737	26	profsnl	Res	4	5	2	5	2	5	6	1	1	1	1	2	6	6	5	1	5	3	61
Female	White	High	737	26	profsnl	Res	6	6	6	6	6	6	5	6	6	4	5	2	6	6	5	5	6	6	98
Male	White	High	737	26	profsnl	Res	4	3	6	6	3	4	6	1	1	3	6	3	6	6	2	5	4	5	74
Male	White	Elem	737	26	profsnl	Res	5	5	5	5	5	5	6	5	4	4	5	4	6	5	5	5	5	5	89
Male	White	Multiple	142	32	standrd	Non-res	4	4	6	4	4	6	6	5	5	4	6	3	6	5	3	4	5	3	83
Female	White	Elem	100	18	standrd	Res	6	6	6	6	4	4	6	6	6	3	6	3	6	6	6	1	6	5	92
Male	White	Multiple	100	18	standrd	Res	4	4	4	4	4	5	5	4	4	2	5	3	6	5	5	3	5	4	76
Male	White	High	1,377	67	standrd	Non-res	6	6	6	6	6	6	6	6	6	6	4	6	5	5	3	4	6	3	96
Female	White	0	1,377	67	not pe	Res	4	5	3	3	3	2	3	3	3	2	5	3	6	6	6	4	4	4	69
Male	White	Elem	1,377	67	standrd	Res	5	5	5	5	5	5	2	3	3	3	3	6	6	6	3	2	6	2	75
Female	White	Elem	1,377	67	standrd	Res	5	5	1	1	4	1	1	1	1	0	1	1	6	5	4	5	6	6	54
Male	White	Middle	443	56	profsnl	Res	6	6	6	6	4	6	6	1	1	1	3	4	6	6	3	4	6	3	78
Female	White	Elem	443	56	profsnl	Non-res	4	4	5	4	4	6	6	1	1	4	6	6	6	5	5	5	5	5	82
Male	White	High	55	39	standrd	Res	6	4	6	6	5	6	6	5	4	1	5	5	6	6	2	3	2	4	82
Male	White	Elem	55	39	profsnl	Res	5	5	5	4	5	4	5	2	2	2	1	2	6	6	5	3	6	5	73
Male	White	Middle	55	39	standrd	Res	4	4	4	4	4	5	5	5	2	4	5	5	6	5	3	4	6	5	80
Male	White	High	55	39	profsnl	Res	4	5	6	4	3	3	2	2	3	2	5	1	6	5	1	2	4	1	59
Female	White	0	55	39	standrd	Res	4	4	4	4	4	4	5	4	4	4	4	5	5	5	4	6	5	6	81
Female	White	Middle	55	39	profsnl	Non-res	5	3	3	2	2	6	4	2	2	2	4	6	5	6	2	5	2	3	64
Male	White	High	68	10	profsnl	Res	6	5	6	5	5	6	5	4	5	4	3	5	2	5	5	2	5	5	83
Female	White	Elem	68	10	profsnl	Res	4	4	5	5	4	4	5	3	3	4	5	3	6	5	4	3	4	4	75
Male	White	Elem	68	10	profsnl	Res	4	4	2	2	1	6	4	6	6	2	4	4	6	6	5	1	6	1	70
Male	White	0	68	10	profsnl	Res	6	6	6	5	4	6	6	6	6	3	6	6	6	5	6	4	6	5	98
Female	White	High	68	10	profsnl	Res	3	4	4	6	6	5	3	5	5	4	3	5	6	6	4	5	5	5	84
Male	White	Elem	68	10	profsnl	Res	6	6	6	6	6	6	6	5	6	3	4	4	6	5	6	1	6	4	92
Female	White	Middle	68	10	profsnl	Res	6	6	6	4	5	6	4	3	5	3	3	5	4	6	5	2	4	5	82
Male	White	High	68	10	profsnl	Res	6	6	6	6	5	6	6	4	6	5	6	6	6	6	5	5	6	6	102
Female	White	Middle	68	10	initial	Res	6	6	6	5	5	6	6	5	5	4	5	4	5	3	3	3	5	2	84
Female	White	Elem	68	10	profsnl	Res	6	5	6	4	4	6	6	5	5	6	6	3	5	5	6	2	4	4	88
Male	White	Elem	68	10	profsnl	Res	5	5	5	1	5	6	6	4	2	2	3	2	4	3	1	2	2	6	64
Male	White	High	68	10	standrd	Res	6	6	6	6	5	6	6	5	5	4	5	5	5	5	3	5	4	5	92
Male	White	High	68	10	profsnl	Res	6	6	6	6	5	6	1	5	6	5	5	5	6	5	3	5	5	4	90
Female	White	Elem	499	20	standrd	Res	5	5	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	105
Female	White	Middle	499	20	standrd	Res	5	5	3	5	5	6	4	3	3	3	5	4	5	4	5	4	2	4	75
Female	White	0	499	20	profsnl	Res	4	4	5	5	3	1	5	4	4	2	5	5	4	5	4	4	4	5	73
Male	White	Multiple	499	20	profsnl	Res	5	5	3	4	3	6	6	5	5	3	4	4	6	5	3	4	5	3	79
Male	White	Middle	499	20	initial	Res	5	5	5	5	5	5	5	3	5	3	1	4	6	6	4	3	5	5	80
Male	White	Middle	499	20	standrd	Res	4	2	5	4	2	4	5	3	4	3	5	4	6	6	6	5	5	6	79
Female	White	0	499	20	profsnl	Non-res	6	6	6	6	6	6	6	6	5	5	6	6	6	6	4	5	5	6	102
Female	White	Middle	499	20	profsnl	Res	5	5	6	6	6	5	4	2	2	3	3	2	4	3	4	4	2	5	71
Male	White	High	499	20	profsnl	Res	5	5	6	4	5	2	6	5	5	3	3	3	6	6	5	1	4	3	77
Male	White	High	499	20	profsnl	Res	6	6	6	6	6	6	5	5	5	5	6	5	6	6	5	4	5	6	99
Male	White	Elem	263	37	initial	Res	5	6	4	4	5	5	5	5	6	5	6	6	6	6	3	3	5	4	89
Female	White	Middle	263	37	standrd	Res	6	6	6	4	4	6	5	5	5	5	4	5	5	5	4	2	4	5	86
Male	White	Elem	263	37	profsnl	Non-res	6	6	6	6	6	6	6	5	5	5	6	5	6	6	6	6	6	6	104
Male	White	Middle	263	37	standrd	Res	6	6	6	6	6	4	1	6	6	6	6	3	6	6	6	6	6	6	98
Male	White	Elem	0	0	standrd	Non-res	3	3	5	1	2	6	1	6	5	5	6	4	6	6	5	1	3	1	69
Female	White	High	558	16	profsnl	Res	6	5	6	6	5	6	5	5	5	5	4	5	6	5	6	5	6	5	96
Male	White	0	0	0	standrd	Res	4	4	4	3	3	5	3	3	3	4	3	4	3	5	3	5	5	6	70
Female	White	Elem	499	20	standrd	Non-res	4	4	4	4	4	4	6	2	2	3	5	5	5	5	4	5	5	5	76
Male	White	Elem	263	37	standrd	Res	6	6	6	6	6	6	6	5	5	5	5	5	6	5	4	4	4	4	94

APPENDIX G

Operational Measurement Tool

1. I agree to participate in the following survey and that all information provided can be anonymously disseminated for the purpose of educational research.

Yes	
No	

Munroe Multicultural Attitude Scale Questionnaire (MASQUE)

2. I realize that racism exists.

	1	2	3	4	5	6	
strongly disagree							strongly agree

3. I know that social barriers exist.

	1	2	3	4	5	6	
strongly disagree							strongly agree

4. I understand religious beliefs differ.

	1	2	3	4	5	6	
strongly disagree							strongly agree

5. I understand sexual preferences may differ.

	1	2	3	4	5	6	
strongly disagree							strongly agree

6. I understand that gender-based inequalities exist.

	1	2	3	4	5	6	
strongly disagree							strongly agree

7. I accept the fact that languages other than English are spoken.

	1	2	3	4	5	6	
strongly disagree							strongly agree

8. I do not understand why people of other cultures act differently.

	1	2	3	4	5	6	
strongly disagree							strongly agree

9. I am sensitive to differing expressions of religious differences.

	1	2	3	4	5	6	
strongly disagree							strongly agree

10. I am sensitive to differing expressions of ethnicity.

	1	2	3	4	5	6	
strongly disagree							strongly agree

1. I am emotionally concerned about racial inequality.

	1	2	3	4	5	6	
strongly disagree							strongly agree

2. I am sensitive toward people of every financial status.

	1	2	3	4	5	6	
strongly disagree							strongly agree

3. I am not sensitive to language uses other than English.

	1	2	3	4	5	6	
strongly disagree							strongly agree

4. A person's social status does not affect how I care about people.

	1	2	3	4	5	6	
strongly disagree							strongly agree

5. I do not act to stop racism.

	1	2	3	4	5	6	
strongly disagree							strongly agree

6. I actively challenge gender inequalities.

	1	2	3	4	5	6	
strongly disagree							strongly agree

7. I do not actively respond to contest religious prejudice.

	1	2	3	4	5	6	
strongly disagree							strongly agree

8. I respectfully help others to offset language barriers that prevent communication.

	1	2	3	4	5	6	
strongly disagree							strongly agree

9. I do not take action when witnessing bias based on people's preferred sexual orientation.

	1	2	3	4	5	6	
strongly disagree							strongly agree

Demographic Data

10. Please identify your gender.

Male	
Female	

21. Select the one race or ethnicity you best self-identity with.

- O American Indian or Alaska Native
- O Asian
- O Black or African American
- O Native Hawaiian or Other Pacific Islander
- O White
- O Hispanic or Latino

22. Please identify the school site(s) at which you teach below.

23. Please select the Physical Education certification you currently hold from the list below.

- O Initial Teaching Certificate
- O Standard Teaching Certificate
- O Professional Teaching Certification
- O I am not a certificated Physical Educator.

24. Please identify if your permanent residence is the same community that you teach in.

Yes. My permanent residence is in the same community that I teach in.	
No. My permanent residence is not in the same community that I teach in.	

APPENDIX H

UNM Institutional Review Board

THE UNIVERSITY *of*
NEW MEXICO

Main Campus Institutional Review Board
Human Research Protections Office
1717 Roma NE, MSC05 3180
1 University of New Mexico~Albuquerque, NM 87131-0001
http://hsc.unm.edu/som/research/HRRC/

09-Mar-2009

Responsible Faculty: Gloria Napper-Owen
Investigator: Francis John Lynott III
Dept/College: Health Exercise & Sports Science

SUBJECT: IRB Approval of Research - Modification
Protocol #: 08-591
Project Title: In-service Physical Educatiors' Multicultural Attitudes in Nebraska Schools Affected by the New Latino Diaspora
Type of Review: Expedited Review
Approval Date: 03-Mar-2009
Expiration Date: 02-Mar-2010

The Main Campus Institutional Review Board has reviewed and approved the above referenced protocol. It has been approved based on the review of the following:

1. IRB Application, revised, received 021109
2. Munroe Multicultural Attitude Scale Questionnaire (MASQUE) & Demographic Data Collection Sheet received 021109
3. Letter of Consent (Superintendent) v021109
4. Letter of Consent (Participant) v021109
5. Consent Form v021109

NOTE: PLEASE SUBMIT COPIES OF THE SIGNED LETTERS FROM EACH SCHOOL DISTRICT GRANTING PERMISSION FOR THE STUDY ONCE THEY ARE AVAILABLE. THESE MUST BE SIGNED PRIOR TO DATA COLLECTION.

Consent Decision:
Requires a signed consent form

When consent is required, it is the responsibility of the Principal Investigator (PI) to ensure that ethical and legal informed consent has been obtained from all research participants. A date stamped original of the approved consent form(s) is attached, and copies should be used for consenting participants during the above noted approval period.

As the principal investigator of this study, you assume the following responsibilities:

Renewal: Unless granted exemption, your protocol must be re-approved each year in order to continue

the research. You must submit a Progress Report no later than 30 days prior to the expiration date noted above.

Adverse Events: Any adverse events or reactions must be reported to the IRB immediately.

Modifications: Any changes to the protocol, such as procedures, consent/assent forms, addition of subjects, or study design must be submitted to the IRB for review and approval.

Completion: When the study is concluded and all data has been de-identified (with no link to identifiers), submit a Final Report Form to close your study.

Please reference the protocol number and study title in all documents and correspondence related to this protocol.

Sincerely,

J. Scott Tonigan, PhD
Chair
Main Campus IRB

*** Under the provisions of this institution's Federal Wide Assurance (FWA00004690), the Main Campus IRB has determined that this proposal provides adequate safeguards for protecting the rights and welfare of the subjects involved in the study and is in compliance with HHS Regulations (45 CFR 46).**

APPENDIX I

UN at Kearney Institutional Review Board

University of Nebraska Kearney

Institutional Review Board
University of Nebraska at Kearney
Founders Hall Room 2131
Kearney, NE 68849
Ph: (308) 865-8500
Fax: (308) 865-8837

February 4, 2009

Francis John Lynott III
c/o Dr. Nita Unruh
Department of Health, Physical Education, Recreation and Leisure Studies
University of Nebraska at Kearney

IRB # 020309-1

TITLE OF PROPOSAL: In-service Physical Educators' Multicultural Attitudes in Nebraska Schools Affected by the New Latino Diaspora

Dear Mr. Lynott:

The IRB has completed its review of the modification for the above-titled research project. According to the information provided, this project is Exempt under 45 CFR 46:101(2). The IRB approves your revision of the research project. You are therefore authorized to begin the research.

It is understood this project will be conducted in full accordance with all applicable sections of the IRB Guidelines. It is also understood that the IRB will be immediately notified of any proposed changes that may affect the exempt status of your research project.

Sincerely,

Carol S. Lomicky, Ph. D.
Director, IRB

csl/js

APPENDIX J

UNM Conflict of Interest Disclosure

UNM CONFLICT OF INTEREST DISCLOSURE

Cover Sheet

Principal Investigator: Francis J. Lynott III

Department: HESS

Funding Agency: none

Dates of Project: Dec/2008 to May/2009 PDS # /SPAS # (if known)_____

Project Title: In-service Physical Educators' Multicultural Attitudes in Nebraska Schools Affected by the New Latino Diaspora

Each investigator must complete the COI disclosure form and submit it with each proposal for new or renewal support of sponsored UNM research or nonsponsored UNM research that involves human subjects, animal subjects, or research funded by an award from internal UNM sources based on submission of a proposal (e.g., RAC).

The principal investigator is responsible for identifying each person who will be involved with the project who would be considered by the definition in the policy to be an "investigator" (see definition on reverse). The principal investigator needs to submit this cover sheet with his/her own disclosure, and needs to advise every other investigator listed below of the disclosure requirements. Proposals cannot be approved administratively in the Office of Research Services until a Disclosure Form is obtained from each investigator.

A. Investigators to be paid through UNM as employees:

1. _____ 5. _____
2. _____ 6. _____
3. _____ 7. _____
4. _____ 8. _____

B. Investigators to be paid through UNM as consultants:

1. _____ 3. _____
2. _____ 4. _____

C. Investigators to be paid through Subcontractors (If the Subcontractor has comparable policies and procedures in place to review and manage potential conflict situations, please attach Subcontractor policy or reference Subcontractor URL):

1. _____ 3. _____
2. _____ 4. _____

D. Investigators not paid by UNM or unpaid investigators (could include UNM faculty, staff or students, or consultants):

1. Francis J. Lynott III 3. _____
2. _____ 4. _____

UNM CONFLICT OF INTEREST DISCLOSURE FORM

Investigator: Francis J. Lynott III Department: HESS

Funding Agency: _____ Proposal # (if known) _____

Each investigator must complete this disclosure form and submit it with each proposal for new or renewal support of sponsored UNM research or nonsponsored UNM research that involves human subjects, animal subjects, or research funded by an award from internal UNM sources based on submission of a proposal.

1. **Do you (including your spouse, domestic partner, and dependent children) have any of the financial interest(s) described below that are related to the research being proposed? Interests are "related to the research" if they are:**

    - **in the sponsor of the research (even if unrelated to the research being proposed),**
    - **in another entity conducting research or business in the same general field as the proposed research (such as a competitor of a drug company or other research sponsor),**
    - **in an entity whose interests could be affected by the research (such as a company with ties to the research or whose business might be affected by the outcome of the research), or**
    - **that themselves could be affected by the research (such as where the research outcome might affect the value of stock or the necessity for continued consulting services):**

YES ☐ NO ☐ Aggregated salary, royalties or other payments, such as consulting fees and honoraria, other than through UNM or STC, that are expected to total more than $10,000 over the next 12 months?

YES ☐ NO ☐ Equity interests in a single entity, such as stocks, stock options and other ownership interests, that are more than $10,000?

YES ☐ NO ☐ Equity interests in a single entity, such as stocks, stock options and other ownership interests, that represent more than a 5% ownership interest?

YES ☐ NO ☐ Intellectual property rights, such as patents and copyrights, or royalties from these rights, other than through UNM or STC?

2. Do you have any of the following:

YES ☐ NO ☐ An agreement with one or more private parties that could appear to give them preferential treatment over a government funding agency or other sponsor of the project (e.g. first delivery of project data).

YES ☐ NO ☐ An agreement to receive financial benefits from the research beyond what is described in the proposal budget submitted to UNM.

YES ☐ NO ☐ Outside employment that could appear to cause a potential conflict with this research, or raise questions about your professional commitments in undertaking the research or your primary allegiance to UNM.

YES ☐ NO ☐ A position as a director, officer, partner, trustee, manager or employee of an outside entity that conducts business in an area related to the research.

3. Are you aware of any other potential or actual conflict of interest situations in this research?
YES ☐ NO ☐

If I have answered YES to any of the above questions, I have described the situation in detail on a separate sheet and attached it to this form. I know of no other potential or actual conflict of interest situations in this research. I will report any change within 30 days after it occurs.

_____ _____
Signature of Investigator Date

9/01

Conflicts of Interest in Research Policy

An excerpt of the University of New Mexico Conflicts of Interest in Research Policy, approved by the UNM Board of Regents on April 11, 2000, is shown below. A copy of the full policy is available from the Office of Research Services.

Introduction

Conflicts of interest may occur when an investigator's research responsibilities compete with his or her private interests, such as financial interests, raising questions of objectivity and improper gain. Conflicts of interest are inevitable in modern research universities and do not imply any impropriety on the part of the investigator. A conflict of interest may exist despite the highest standards of conduct and candor. Most conflicts can be successfully resolved without impeding research activities.

Definitions

Conflict of interest means a situation associated with an investigator's participation in UNM research where it reasonably appears, on an actual or potential basis, that the investigator's significant financial interest could directly and significantly affect the design, conduct or reporting of UNM research activities; or the investigator's situation could directly and significantly compromise his or her professional commitments or allegiance to UNM.

Examples of the types of situations that may come within this definition include:

- Holding a direct or indirect interest in an outside entity that conducts business in an area closely related to the UNM research or serving as a director, officer, partner, trustee, manager or employee in such an entity.
- Undertaking or steering UNM research to serve the research or other needs of an outside entity, without approval of UNM or the research sponsor.
- Directing potential research efforts away from UNM and toward the investigator's outside entity, or an outside entity in which the investigator has a financial interest.
- Transmitting to an outside entity without the sponsor's consent, or otherwise using for personal gain, sponsored work products, results, materials, records or information that are not generally made available. This does not necessarily preclude contracts between faculty start-ups and either UNM or the Science & Technology Corporation @ UNM, although these contracts may give rise to conflict of interest situations.
- Using privileged information acquired in connection with the investigator's sponsored UNM research activities for personal gain or for unauthorized purposes. Privileged information includes medical, personnel or security records of individuals, anticipated material requirements or price actions, possible new sites for government operations, and knowledge of forthcoming programs or selection of contractors or subcontractors in advance of official announcements.
- Negotiating or influencing the negotiation of contracts related to the investigator's sponsored UNM research between UNM and outside entities with which the investigator has consulting, equity or fiduciary relationships.
- Accepting gratuities or special favors from entities with which UNM does or may conduct business in connection with sponsored UNM research, or extending gratuities or special favors to employees of the sponsor, under circumstances that reasonably might be interpreted as an attempt to influence the recipients in the conduct of their duties.

Investigator means the principal investigator, the co-principal investigator and any other person (including faculty, staff and students) who is responsible for the design, conduct or reporting of UNM research. Any individual responsible for a task that could have a significant effect on the research design, conduct or reporting is considered to be an investigator, even if the individual does not have sole or primary responsibility for the task or the research.

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