

Gender and Athleticism in High School Physical Education Class

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by  
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My own personal experience with physical education class began in 1990 when I enrolled in kindergarten at a small, rural public school in central Pennsylvania. While I have few memories of elementary physical education class, or gym as we called it, I know I loved it. Of the specific activities that I remember, most were fun games with simple rules, such as snowball: a game involving baseball sized balls made of soft cloth pieces which were flung at opposing teams in a dodge ball-like fashion. I also fondly remember the obstacle courses and the units on gymnastics and tumbling. When I moved to the middle school, which housed fifth through eighth grade, I began to hate gym class. Suddenly, we were required to get changed in an open locker room, a very embarrassing experience for the first year or two. I eventually got over the embarrassment of having to change, but it was the activities that made me really dislike gym. The start of every class involved running the perimeter of the basketball court for five minutes as a “warm up.” I hated this the most, partially because I disliked running for no purpose and also because I suffered from asthma. The elementary obstacle courses, tumbling mats, and snowball games were replaced by “pillow polo,” (a modified form of floor hockey, using sticks wrapped in foam and a foam ball, presumably so we could not injure each other) jumping rope, and national fitness tests that required us to do pull ups, push ups, sit ups, and every other kind of exercise I dislike.

High school gym class was better than middle school gym, but it still seemed pointless to me, especially because I played for the school softball team. I felt that students, like myself, already engaged in varsity-level athletics should not have to waste what could be valuable study hall time learning the finer points of “pickle ball” and volleyball. I was stuck participating in gym with girls whose reaction to a hard served volleyball was to scream and duck. I also took issue with the grading system, which moved from pass/fail to an actual number grade based on how well the student could perform skills. I have never believed that athleticism can be taught and thought it was unfair that

students, who were legitimately trying, but just lousy at sports, were getting low grades, which in turn affected their overall grade point averages. Except for those happy years in elementary school, physical education class was never a favorite class of mine. Apparently my experiences are not unique as there is a growing body of literature focusing on why students, especially females, are so unhappy with physical education.

### PHYSICAL EDUCATION IN THE UNITED STATES

The requirements for physical education classes vary widely by state and even by school district. Arizona and Idaho, for instance, only require physical education for first through eighth grades and leave high school level physical education decisions to the individual school districts. Other states, such as Kentucky and Pennsylvania, require physical education from first through twelfth grades, while Nevada only requires physical education for high school students (National Association for Sport and Physical Education 2006). Despite the differing requirements between states, physical education (PE) classes are taken by most American students within the public school system during some point in their academic experiences (National Association for Sport and Physical Education 2006). Unlike other more traditional school subjects, such as math, science and literature, which track students and divide them based on ability, physical education classes typically fit a student's schedule, not skill level. Thus, physical education classes often force students of differing athletic skill levels to compete together. Individual students' perceptions of gender roles also affect their attitudes toward physical education class, as does the role of voluntary participation in extra-curricular sports.

While a small body of literature addresses the intergender variation in perceptions and experiences in physical education (Flintoff and Scraton, 2001; Cockburn and Clarke, 2002; Daley and

Buchanan, 1999; Garret, 2004), even less has been done to examine the intragender experiences of students. In the diverse world of high school, where students are grouped into strict peer groups such as “prep,” “geek,” and “jock,” physical education can have deeply different effects, not only between males and females, as much of the literature illustrates (Flintoff and Scraton, 2001; Cockburn and Clarke, 2002; Daley and Buchanan, 1999; Garret, 2004), but among males and among females. The purpose of this project is to further the literature on the ways in which high school physical education is experienced differently among males in relation to their own self-defined athletic skill levels as well as their level of self-identification with hegemonic male values.

## THEORETICAL FOUNDATION

Before delving into the literature concerning student experiences in physical education class and sports, it is first important to explain the concepts of femininity and masculinity. One of the most important concepts in feminist gender theory is that of “doing” gender (West and Zimmerman 1987). We are all born sexed, that is biologically male or female depending upon our genitalia, but we become gendered in the ways in which we express qualities of femininity and masculinity through a socialization process in which we learn what society expects of our sex.<sup>1</sup> Kimmel furthers this explanation when he writes, “Gender is not simply an aspect of what one is, but, more fundamentally, it is something that one *does*, and does recurrently, in interaction with others. We are constantly ‘doing’ gender, performing the activities and exhibiting the traits that are prescribed for us” (2004:107). Gender, Kimmel theorizes, is constructed at three levels: identity, interaction, and institution. Gender identity reflects how we personally develop our gendered selves. Examples include the masculinity or femininity of our clothing and hairstyles. At the interaction level we

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<sup>1</sup> Of course it is possible to be born a hermaphrodite in which the individual has elements of both male and female sex organs, but for the purpose of this research project, I limit my analysis to the sex categories of male and female.

perform our gender when interacting with others, which includes body language and word choices. Finally, the institutional level refers to institutions within society which are themselves gendered. For example, the institution of sports is traditionally a masculine gendered institution. As social beings, we have learned to move fluidly between these three levels without noticing them. The individual and interaction levels are reinforced by the institutional level. As Kimmel points out, “The gendered identity of individuals shapes those gendered institutions, and the gendered institutions express and reproduce the inequalities that compose gender identity” (2004:101).

It would, of course, be too simplistic to state that there is one form of masculinity that all men embody and one form of femininity that all women embody. What it means to be masculine or feminine varies across culture, race, sexual orientation, location, religion, and social class, to name but a few variables. Each culture, however, usually has a stereotypic notion of what it means to be feminine or masculine. The most common terms for these stereotypes are “hegemonic masculinity” and “emphasized femininity” (Kimmel 2004). Hegemonic masculinity means that is “imperative to most men that they make it clear—eternally, compulsively, decidedly—that they are unlike women” (Kimmel 2004:10). Thus the quintessential American male is constructed as “young, married, white, urban, northern, heterosexual, Protestant, father, of college education, fully employed, of good complexion, weight, and height, and a recent record in sports” (Kimmel 2004:10). Hegemonic masculinity refers to patterns of patriarchy that allow “men’s dominance over women to continue” (Connell and Messerschmidt, 2005:832). Connell and Messerschmidt write that hegemonic masculinity embodies “the currently most honored way of being a man,” though it may be enacted by only a minority of men (2005:832). It is impossible to conform completely to hegemonic notions, but some men will have more traditionally hegemonic masculine ideas, beliefs, and attitudes than other men.

Emphasized femininity, on the other hand, is described as “the display of sociability rather than technical competence, fragility in mating scenes, compliance with men’s desire for titillation and ego-stroking in office relationships, and acceptance of marriage and childcare as a response to labor-market discrimination against women” (Kimmel 2004:11). Emphasized femininity also idealizes “the notion of an ideal feminine body as thin and toned” (Krane, Choi, Baird, Aimar, and Kauer 2004:316). The media often reinforces these notions of hegemonic masculinity and emphasized femininity by ignoring the diversity among types of masculinities and femininities and the types of situations in which they occur. As McIntyre writes, “both women and men know how to be aggressive, how to be helpful, how to smile, and how to be rude. What they actually do is determined less by differential abilities than by the context in which they are acting” (2002:235).

Hegemonic masculinity, while defined as the dominant masculinity in a given culture, is by no means the only form of masculinity found in that culture. The idea of “multiple masculinities” refers to these “different understandings of masculinity and different ways of ‘doing’ masculinity” (Connell 2002:17). Multiple masculinities lead to a hierarchy of masculinities, where the hegemonic form of masculinity occupies the top rung, while other masculinities subsist below it. These other masculinities may be viewed in different ways. “Some may be actively dishonored, for example homosexual masculinities in modern Western culture. Some are socially marginalized, for example the masculinities of disempowered ethnic minorities. Some are exemplary, taken as symbolizing admired traits, for example the masculinities of sporting heroes” (Connell 2002: 17). Thus, the ideas of what is masculine can change over time. “There could be a struggle for hegemony, and older forms of masculinity might be displaced by new ones” (Connell and Messerschmidt 2005: 833). As the following literature will show, men and women display many differing forms of masculinity and femininity, but these forms are constantly being compared to the hegemonic forms. The

conceptualization of multiple masculinities in which they are arranged in social relations somewhat hierarchically with the hegemonic form of masculinity, regardless of how few men actually embody all elements of this ideal form of performing masculinity, is central to the development of this research project. While a similar analysis could be conducted utilizing multiple forms of femininity, this is beyond the scope of the current project.

### GENDERED EXPERIENCES WITH PHYSICAL EDUCATION

Although there is a limited amount of research available about student perceptions of physical education class in the United States, there is a large body of this literature in other countries, mainly the United Kingdom and Australia. Stelzer, Ernest, Fenster, and Langford (2004) found in their cross-cultural comparison of attitudes towards physical education class among Austrian, Czech, English, and American students that there was no significant difference between attitudes of American students and English students of both sexes. Additionally, a comparison cross-culturally tends to show that American girls have the same complaints about being dissatisfied with gym class as girls in the United Kingdom (Carlson 1995 and Flintoff and Scraton 2001). Given the similarities in findings among Western nations, I draw on studies from a variety of nations in this literature review. The literature review is structured to move from analysis of gender and physical education from an institutional perspective, to that of the interactional perspective, and finally to the level of individual identity; however, given that they are completely interrelated, this is a somewhat artificial separation for organizational purposes.

The vast majority of the available literature focuses on female perceptions and experiences, leaving a significant gap in the research dealing with male experiences in physical education. It is for this reason I have chosen to work with male perceptions. Because so much of the literature focuses



on females, a brief summation of the research focusing directly on female perceptions is presented in the main body of this text. For a full description of female experiences in physical education, please see Appendix D. The remainder of this literature review will focus more extensively on male perceptions or studies that focus of both male and female perceptions.

### *Physical Education At The Institutional Level: Title IX*

Despite similar findings between Western cultures, American physical education is unique in the laws and stipulations surrounding it, namely Title IX. This 1972 law “prohibits institutions that receive federal funding from gender discrimination in educational programs or activities” (Sands 2001:74). Title IX has had an incredible impact on high school sports, with statistics indicating that between its passage in 1972 and the early 1990s “girls’ participation in interscholastic sports increased from 300,000 to 1.8 million,” though that number is still about half the number of boys who participate in school sports (Sadker 1994:126). Title IX also affects high school physical education classes. Section 106.31-34 of Title IX lists five regulations pertaining explicitly to physical education classes.

- 1: Physical education classes cannot be segregated by sex except when the activity falls into the following group: wrestling, football, boxing, basketball, rugby, ice hockey, sports which have body contact as their purpose or major activity.
- 2: When the activity is one of the groups listed above, classes *may*, but do not need to be, segregated by sex.
- 3: Facilities and equipment must be comparable for both male and female students.
- 4: Curriculum, testing, and grading requirements cannot differ based on sex.

5: Behavior and dress codes must be applied equally to male and female students

(Carpenter and Acosta 2001:6).

While the purpose of Title IX is to ensure gender equity in both extra-curricular sports and the physical education classroom, it may also be the source for some of the alienation students feel toward physical education. Treanor, Graber, Housner, and Wiegand (1998) took part in a study where teachers at a southwestern U.S. school taught one semester of co-educational classes followed by one semester of single-sex classes. After both semesters, the students were surveyed. Not only did they have a preference for same-sex physical education, but both the girls and boys felt that same-sex classes allowed them to learn skills and play better, as well as made them less fearful of injury. Other studies have noted teachers' attitudes toward co-education and same-sex physical education classes. Martino and Beckett (2004) interviewed Australian physical education teachers, noting that one saw the need to separate girls from boys because "the girls can feel a little bit inhibited because the boys are very boisterous and tend to take over the physical side" (242). Studies by Flintoff and Scraton (2001), and Garrett (2004), showed that girls also felt their bodies were on display for the boys when involved in coeducation physical education classes.

In addition to Title IX, another institutional problem is the physical education curriculum. The girls in Garrett's study talked about physical education classes that "reflected dominant ideologies around competition, individualism and a dependence on games and sport as a basis to the curriculum" (2004:228). In other words, the curriculum was too masculine and often did not give the girls enough choices in the types of activities they wanted to participate in. At the same time, the masculine curriculum may also cause problems for those boys who do not fit the hegemonic masculine ideal.

## *Physical Education At The Interaction Level*

### *Teenage Girls*

The research focusing on teenage girls indicates that the main reason teenage girls are dissatisfied with their physical education class is because of the inherent masculinities involved in the activities (Cockburn and Clarke, Shakib). The studies found that girls developed coping mechanisms to deal with the masculinity and emphasize their femininity (Shakib, Adams, Schmitke, and Franklin). Other researchers sought solutions to negative female experiences. Daley and Buchanan (1999) found that giving female students stereotyped “feminine” activities such as yoga or aerobics increased positive experiences in physical education. Ennis (1999) developed a program that allowed male and female students to participate together, but in such a way that everyone got a chance to play every position in a non competitive atmosphere. Although females are often portrayed as having more negative attitudes to physical education class than men, it is also important to know that negative experiences do not hamper female physical activity. Flintoff and Scraton (2001) and Klomsten (2005) both report that dissatisfied girls still partook in activities outside of physical education, such as dance lessons or aerobics.

### *Teenage Boys*

Although a vast majority of the available studies concentrated on females’ perceptions of sport and physical education, there are some studies available on male perceptions. Messner found in his study of masculinity and organized sports that most of the professional male athletes he interviewed initially reported joining an organized sport in their youth because they perceived “it was natural” (1990:423). They internalized the socially derived concept that being a man means playing sports, though, through further prodding on Messner’s part, some confessed that it was their fathers who “pushed” them into sports, thus countering the notion that boys come to play sports as a natural

progression of biological traits. Other studies have focused on males who did not play sports and the social stigmas attached to them because of it. In his piece on high school football, Foley describes how the football players assigned the male band members the title of “band fags” and liked to test their masculinity by punching them in the biceps and seeing if they flinched; a flinch was definitive proof “he was a wimp or a fag” (1990:115).

These homosexual taunts were also addressed by Eder in her book *School Talk: Gender and Adolescent Culture*. “Homosexual insults were often directed toward boys who fail to engage in stereotypical masculine behavior. Since these labels are viewed so negatively by adolescent boys, their extensive use suggests that strong pressure is needed to reinforce traditional masculine behavior” (1997:64). In other words, if traditional masculinity is really “natural” why is there so much peer pressure required through taunts and threats in order to force classmates to conform? To high school students, the mere membership on a sporting team makes a man unquestionably masculine; everyone else has to prove their masculinity. In his book, *Taking the Field: Women, Men, and Sports*, Messner shows how this socially constructed idea begins very early in life. As he describes the interactions between two young AYSO (American Youth Soccer Organization) teams, he points out how “the institution of sport historically constructs hegemonic masculinity as *bodily superiority* over femininity and over non-athletic masculinities” (2002:20). Boys learn the inherent masculinity involved in just playing a sport as children and carry it with them through life.

As Cockburn and Clarke (2002) pointed out, physical education is comprised of traditionally masculine activities, which might lead one to believe that boys would have no quarrels with it. However, as in sports, physical education classes are yet another arena where boys who do not exhibit traditional masculinity come into conflict with the ideals placed on them by traditional social values and their peers. Although Ronholt studied a physical education class in Denmark, it is not hard

to see how his findings could easily relate to an American student's experiences. Ronholt (2002) observed a class preparing for a two-kilometer run, where the class was split into two groups: one would run without breaks, the other would stop for occasional breaks. The groups split almost entirely along gender lines, with all but two boys in the no-breaks group, and all but one girl in the break group. The boys in the no-break group called out "it's only the sissies" that are running with breaks, referring to the two boys in the break group, thus advancing the belief that truly masculine behavior means having the stamina to run the whole time without a single break (p.29). Klomsten, Marsh, and Skaalvik define masculine sports as consisting of: "danger, risk, violence, speed, strength, endurance, challenge, and team spirit" (2005:626). In Ronholt's study, the boys recognize this and see endurance as equaling masculinity. This will also be an issue for boys in United Kingdom schools.

In his research on physical education in a United Kingdom school, Parker (1996) discovered a correlation between violence in physical education class and academic performance. The "Hard Boys" were the major contributors of aggressive, often violent behavior during physical education class. Parker attributed their behavior to their failure at another competition, the school grading system, and thus saw violence during physical education class as the only way to reestablish their masculinity in a system where academics were given more importance than physical strength. Thus, physical education was the only time the "Hard Boys" could view themselves as dominant over their "Victims," the more bookish, scholarly students (p.11). Azzarito and Solomon also noted that "in boys-only classes where hegemonic forms of masculinity were emphasized, boys who either were low skilled or did not perform their masculinity through aggressive and competitive behaviors were marginalized and bullied" (2005:28). Except for Foley's study, where one could avoid being deemed a "band fag" by becoming a "cool guy" through the use of drugs or having a rock and roll band, there

seem to be very few ways for a boy who does not conform to the hegemonic form of masculinity to escape having his masculinity or sexuality questioned (p.115). This is opposite from the girls in Shakib's study, who were able to negotiate their femininity while still participating in sports deemed masculine. Klomsten (2005) reports "an increasing number of girls getting involved in soccer, which previously has been stereotyped as a masculine sport" yet "boys do not seem to have taken up any traditional girls' sports" (p.632). Girls have discovered they can play masculine sports, and with a little finagling, still retain their femininity. The acceptance level of females playing masculine sports is rising, but the girls are still required to act feminine otherwise. Even as girls are beginning to encroach on traditionally male sports, the Title IX statistics show there are still twice as many boys participating in sports than girls (Sadker 1994).

In review, masculinity affects both males and females in physical education. Females face conflicting role requirements: conform to socially set standards of being feminine, but also conform to the curriculum of physical education class. It is no wonder that girls who do play sports must then carefully negotiate their sexuality. While boys may get "pumped up" for the big baseball game by wearing their jerseys to school, the women on the softball team get "pumped up" by putting school-colored ribbons in their hair and displaying their jersey number on the side of their face in colored eye-liner. They maintain their femininity through such rituals. For the males in physical education, it is yet another arena to display masculinity. For those males who do not play sports or can not perform well at physical tasks, their masculinity is questioned by others. They may even be classified as "sissies" or "fags."

#### *Physical Education At The Identity Level: Body Image*

Tied in to social perceptions of which sports are or are not appropriate for males and females are similar concepts of body image. Gorely, Holroyd, and Kirk (2003) performed a study where they

showed students aged 11-14 pictures of various athletes and asked them to comment on their bodies. A theme that developed was “muscles are unnatural for girls and women,” though many students added stipulations like she “could be fun and sporty...if she had a long sleeved top on and you couldn’t see her muscles” (p.433-4). This suggests that women can be athletic and masculine if they cover it up in other venues. This was already discovered by the girls in Shakib’s study, who used feminine clothing as a tool to prove their femininity while continuing to play basketball. However, Gorely’s study showed, conversely, that pictures of highly muscular men were associated with action heroes, while a picture of a male ballet dancer induced the response of, “the man looks like a wimp because he has got (sic) a feminine body. It’s really thin and flexible” (435). No one commented that it would be acceptable for the man to have a feminine body if he wore clothes to cover it up. A similar Australian study by Kirk and Tinning had almost identical results. When the teenage boys in the study were asked who they thought had really healthy, strong looking muscles, they replied with Arnold Schwarzenegger and Australian soccer stars who are “pretty solid” (1994:615-6). When the girls were asked about masculinity in boys, they replied that the “nerds” were not masculine, not only because of their accomplishments in academics, but because they were really bad at sports. However, when asked about muscles on women, they reacted like the students in Gorely’s study, replying that women can be strong but should not show too many muscles, because it makes them look too much like a man.

Parks and Read surveyed football and cross-country players to discover their perceptions of their body image and what they would like to change about themselves. They discovered that football players “reported more positive responses for body satisfaction and more positive attitudes/behaviors toward eating/weight control....This may reflect the fact that their reported current average weight was approximately 37 pounds greater than that of the cross-country runners. This greater weight

suggests a greater ‘mesomorphic’ profile, which is generally perceived as the male ideal body type” (1997:4). Salokun, in writing about the importance of sports and physical education for identity forming teenagers, also shows the social importance placed on body physique. “For boys to be popular, they must first be recognized for their superior masculine attributes among their peers. An individual whose physique type falls short of the expected standard is quite often treated with contempt and most invariably rejected by the reference group” (Salokun 1994:26). Krane led a study that looked at how female athletes negotiated their femininities while playing masculine sports. The girls in the study “viewed their own bodies as contrary to the ideal” and noted at various times that they had to be careful not to gain too much muscle, since the muscle they already had made them different from “normal” girls (320). The football players in Parks’ and Read’s study are akin to the popular boys in Salokun’s reference, while the male ballet dancer from Gorely’s study is the rejected individual.

So, not only are girls fighting the social stigma of being “feminine” in physical education, they are also fighting the social stigma that women should not have visible muscles. Since physical education currently focuses mostly on building skills and strength, there is yet another contradiction between what physical education expects and what girls feel society expects. An opposite problem may be occurring for the males, whose self-esteem may be tied into how muscular they appear. Physical education clothing requirements make it very easy to tell who has muscles and who does not, adding to the problems for males who do not conform to hegemonic masculinity.

#### AN INTRAGENDER FOCUS ON MALES IN PHYSICAL EDUCATION

As already noted, most of the research on physical education specifically deals with females and their apparent dissatisfaction with physical education. The little literature available on males



focuses on the differences between males' and females' perceptions. A major gap in the literature is the way physical education classes bring together groups of students for an education experience with no regard to skill level or their abilities. Unlike the academic pursuits of high school, where students may be on college-prep or career-prep curriculums, or divided into math and English class based on their academic skills, physical education is a meeting of all types of students with varying skill levels. Thus, I have extended this research to include the role of the athlete within gender groups. I have explored the ways perceptions of physical education class differ between high school males who play sports associated with more hegemonic masculinity, such as football and baseball, versus those boys who play traditionally less masculine sports such as cross country or track, and those who are uninvolved in high school varsity-level sports. This research attempts to predict factors that influence how positively or negatively a male student experiences physical education class. Additionally, using the adolescent masculinity scale developed by Chu, Porche, and Tolman (2005), I also assess self-identification with masculinity and attitudes towards physical education classes. While much could be addressed in intragender differences among female students, given the larger gap in the literature on intragender differences among males, I focused this study on college freshmen and sophomore male recollections of their high school physical education experiences and attitudes.

## HYPOTHESES

The purpose of this research project is to begin an exploration of the above noted gaps in the literature, specifically the lack of research on the "one size fits all nature" of physical education and the lack of research looking at the perceptions of athletes versus non-athletes in physical education class. I will test three hypotheses.

Hypothesis 1: Male students of high athletic skills will have more positive attitudes towards their high school physical education experiences than those students of lower athletic abilities.

As the literature review revealed, the curricula of most high school physical education classes are based on competitive sport activities. Therefore, it seems reasonable to hypothesize that students who rate themselves with a high degree of athleticism will feel more positively toward the competitive sport activities in physical education class and also have more positive experiences.

Hypothesis 2: High school male students involved in sports with a stronger connection to hegemonic masculinity will have more positive attitudes towards high school gym classes than those involved in less strongly defined masculine sporting activities or no sporting activities at all.

In Parks and Read's survey of body image perceptions, they found football players were less likely to want to change their body than cross country runners. This is likely tied to the perceptions that the more visible muscles a man has, the more masculine he is. Similarly, I have hypothesized that the sport(s) played by an individual will affect his attitudes toward physical education class.

Hypothesis 3: Males who score higher on the adolescent masculinity scale will have more positive attitudes towards gym class than will those males who score lower on the adolescent masculinity scale.

The adolescent masculinity scale measures how much the ideas of hegemonic masculinity have been internalized by an individual. Since many studies focused on the inherent hegemonic masculine ideals in physical education class as a reason for dissatisfaction among female students, it is logical to assume the opposite might occur for men. The more a man personally believes in the ideals of hegemonic masculinity the more positive his attitudes may be toward physical education, as opposed to a man who has not internalized as many of the hegemonic masculine ideals.

## METHODOLOGY

These hypotheses were tested using quantitative surveys that were analyzed using SPSS. The sixty-one question surveys were distributed using convenience sampling to all the freshmen and sophomore male students (approximately 300) at a small liberal arts college in Pennsylvania. Only freshmen and sophomores were surveyed since it was hoped, being the youngest students, they would retain the most vivid memories of high school physical education class. Freshmen were surveyed first, and sophomores were later added in hopes of increasing the overall number of responses. The surveys were electronic and posted on a personal website. The surveys were sent to the students via an e-mail that included the informed consent statement and prompted them to follow the provided link to the online survey. For the freshman students, the e-mail was sent twice, two weeks apart, in hopes of increasing response rates. The sophomore students received only one e-mail. Once the students completed the survey, the results were e-mailed anonymously back to the researcher. Response rates for the freshman students were twenty-nine percent, while response rates for the sophomore students were nine percent. The overall response rate was nineteen percent. See Appendix A for a copy of the informed consent statement and the survey.

*Measurement:**Demographic Variables*

Demographic information is requested in questions five through seven, seventeen through twenty, twenty-eight, and twenty-nine. Questions five and six are concerned with whether physical education was required and personally taken by the respondent. If the respondent did not take any physical education courses in high school, he is thanked for his participation and informed that he does not need to complete the rest of the survey. Question seven asks how many years of physical education the respondent took. Questions seventeen through twenty are concerned with high school demographics, such as size of graduating class, private or public status, co-educational status, and physical education requirements concerning varsity athletes. The final demographic questions, twenty-eight and twenty-nine, ask respondents to mark the proportion of their physical education classes that were co-educational and to write in the types of activities that were typically co-educational.

*Independent Variables*

Athleticism: This is a self-assessment of athleticism as compared to the young men in their high school. Questions eight through sixteen measure athleticism by utilizing a nine-item Likert scale that measures how the respondent feels about individual aspects of their athleticism compared to other males in their high school. Respondents mark one of five responses (superior, excellent, good, fair, and poor) after statements about their athleticism. Questions asked included, "In comparison to other males in my high school, I would have rated my: overall coordination, agility, physical endurance, leg strength, arm strength, overall strength, overall hand-eye coordination, overall speed, and overall athleticism." The scale was quantified by assigning scores to the answers. Poor scored a

one, fair scored a two, good scored a three, excellent scored a four, and superior scored a five. The scores were then added together to get a total number for the scale. The higher the number, the more athletic the respondent reports he is.

Internalized Hegemonic Masculinity: This is an assessment of how much the respondent has internalized hegemonic masculine ideas. Questions forty-seven through fifty-eight incorporate Chu, Porche, and Tolman's (2005) Adolescent Masculinity Scale. This twelve item Likert scale asks respondents to choose strongly agree, agree, disagree, or strongly disagree in relation to their feelings about each particular statement. Some statements include "in a good dating relationship, the guy gets his way most of the time" and "a guy never needs to hit another guy to get respect." Question fifty-nine is independent of the Likert scale and asks the respondent to mark how many gay-male friends he has. This scale was quantified in a similar way to the athleticism scale. Positively scored questions were questions where a "strongly agree" answer meant a high level of internalized hegemonic masculine. An example of this type of question is "In a good dating relationship, the guy gets his way most of the time." Thus, the responses to positively scored questions would be as follows: strongly disagree scores a one, disagree scores a two, agree scores a three, and strongly agree scores a four. Negatively scored questions were questions where a "strongly agree" answer meant a low level of internalized hegemonic masculinity, or internalization of more feminized ideals. An example of a negatively scored question is "A guy never needs to hit another guy to get respect." Thus, the responses to negatively scored questions would be as follows: strongly agree scores a one, agree scores a two, disagree scores a three, and strongly disagree scores a four. Hence, when all the responses are added up, the higher the score the more internalized hegemonic masculine ideals the respondent has. The highest possible score on this scale is a forty-eight and the lowest possible score is a twelve.

Sports Played: This is the assessment of which sports and activities the respondent participated in during and prior to high school. The first question asks the respondent to mark the varsity-level school affiliated sport(s) played and the number of years participated in each sport. This includes a place to mark that no varsity-level sports were played, as well as an “other” category for responses not already available. Varsity sports are school affiliated sport programs that compete against other schools in the same division, with division set rules and referees. Sports played outside of school were also assessed. Question three asks for intramural and non-school affiliated club sports. Intramural sports consist of student assembled teams playing against other student assembled teams. Non-school affiliated sport programs are teams put together by other organizations, such as a church or YMCA to compete against other non-school affiliated sport teams. Question four asks for athletic activity not associated with any type of organized sports, such as hobbies or personal recreation. Respondents are asked to mark activities or sports they participated in at least once per week for a least one year or season.

The responses for sports played were ranked into three categories: higher masculinity sports, middle masculinity sports, and low masculinity sports. Higher masculinity sports must include at least three of the following: bodybuilding to increase overall body mass/strength; competition with a high degree of physical aggression and/or violence; high contact sports; historically have cheerleaders and/or large school support; slow to include direct female sports versions; emphasis within the sport on team mentality rather than individual performance/competition; and has high degree of professional presence in the American sports scene. Baseball, football, ice hockey, basketball, wrestling, lacrosse, weight lifting, and boxing were all classified as higher masculinity sports.

Middle masculinity sports include at least three of the following: weight training, when done, is for specific speed, toning, or endurance; if a team sport involves less physically aggressive contact, particularly as indicated by lack of padding; historically no cheerleaders; sports that are based upon individual performance rather than building team spirit; physically demanding in terms of leg or arm strength; and the sport has less professional counterparts in American sports scene. Downhill skiing, snowboarding, mountain biking, road cycling, roller/street hockey, martial arts training, fencing, swimming/diving, tennis, volleyball, soccer, and track and field are all classified as middle masculinity sports.

Low masculinity sports include at least three of the following: slim bodies are an asset to the sport; historically no cheerleaders and/or institutional support at the high school level; combination of precision, grace and/or flexibility a cornerstone of the sport; sport not associated with getting “pumped up” to perform; easy female counterpart to the sport; no padding needed to perform the sport; sport completely individual or partner activity; and the sport has less professional counterparts in American sports scene. Cross country skiing, cross country running, bowling, rifle/archery, golf, dancing, horseback riding, walking, yoga, ice skating, snow-shoeing, canoeing/kayaking, and hiking were all classified as low masculinity sports.

### *Dependent Variables*

The main dependent variable is attitude towards high school physical education class. Questions thirty-two through forty-six utilize a fifteen-item Likert scale that provides statements about attitudes, feelings, and experiences in physical education and asks respondents to respond, strongly agree, agree, disagree, or strongly disagree. Such statements include, “I felt that PE was a way for me to show off my athleticism,” “I was a target of harassment by peers in PE,” and “I was uncomfortable whenever the girls were present or participating in PE with our class.”

Additional variables measured other experiences in physical education class. Questions twenty-one through twenty-seven ask questions about potentially embarrassing physical education activities, such as swimming requirements, group showers, physical education clothing, and changing in a public setting. First respondents are asked if they were required to take part in any of these activities, then, if they answer yes, they are asked how comfortable they felt during these activities by assigning a number to their comfort level (1 being extremely uncomfortable and 5 being extremely comfortable). Question thirty-one is a yes-no question that asks if the respondent ever felt pressure to perform well in physical education class. Questions sixty and sixty-one are open ended, and ask respondents to briefly summarize their best and worst memories of high school physical education class.

## FINDINGS

### *Univariate Analysis: Demographics*

For full frequencies of demographic and gym class variables, see Table 1 in Appendix B.

*Class Makeup*— There were a total of fifty-six respondents to the survey. The majority of the sample (71.4%) is from the freshmen class, with the remaining sample (28.6%) is made up of sophomores.

*Who Actually Took PE Class*— Out of those fifty-six respondents, only a small minority (7.1%) were not required to take a physical education in high school and did not take an optional class. Because they did not take physical education class, there was no need for them to complete the remaining survey, and thus the remaining respondents (92.9%) are utilized in the data analysis.

*Number of Years of PE Taken*— Although there is some variation in the number of years of physical education taken, the majority of respondents (76%) enrolled in four years of physical education classes in high school.



Type of Schools — All of the respondents went to coeducational schools, with the vast majority (92.3%) attending a public institution, while the remaining eight percent attended private institutions. There was a wide distribution when it came to the size of schools attended by respondents, but the majority (25%) went to larger-sized schools.

High School PE Requirements — In most cases (80.8%), schools required varsity athletes to take physical education classes. The majority of respondents (69.2%) did not have a swimming requirement in their high school physical education classes. Out of those who said they did have a swimming requirement, nearly three-quarters (73.3%) reported feeling extremely comfortable in their bathing suits. No one reported feeling uncomfortable or extremely uncomfortable. When asked whether they were required to shower after physical education classes, the majority (86.3%) said they were not required to shower. Out of those who reported having to shower, a little under half (42.9%) responded as 'neither comfortable nor uncomfortable' in the showers, while the majority of respondents responded with 'comfortable' or 'extremely comfortable.' Again, no one reported feeling uncomfortable or extremely uncomfortable. A majority of the sample (76.5%) were required to wear specific clothes for physical education classes. Out of those who report needing specific clothes, the majority (69.2%) state they felt extremely comfortable in those clothes. When asked how they felt about having to change in front of other men in the locker room, again the majority (60.5%) reported feeling extremely comfortable. No one reported feeling uncomfortable or extremely uncomfortable.

Number of PE Classes in a Week — Although there was variation when it came to the number of physical education classes the sample took in a given week, most took two (21.6%), three (27.5%), or five (31.4%) classes a week.

Type of PE Class — The majority of the sample (60.8%) reported having only coeducational classes, while a third (33.3%) reported having a mixture of both sex-segregated and coeducational classes.

*Univariate Analysis: Independent Variables*

Pressure to Perform Well — When asked if they ever felt pressured to perform well in their physical education class, about three-quarters (72.5%) reported they had not felt pressured. Out of the quarter who did report feeling pressured, the source of the pressure was equally distributed amongst themselves, their peers, and their teachers/coaches.

Number of Gay-Male Friends — This question was originally part of the independent variable of internalized hegemonic masculinity. However, it was not included in creating the internal hegemonic masculinity score, and so therefore will be treated as a demographic variable. Over half of the respondents (58.8%) did not report having any gay-male friends. Out of those who did report having at least one gay male friends, the majority (19.6%) reported having two gay-male friends and 11.8% reported having one.

Best Memory of High School P.E. Class — One of two opened-ended questions at the end of the survey, the best memory question, asked respondents to write what their best memory of high school gym class was. Respondents who reported their best memories were simply of a physical education activity, such as dodge ball or basketball were categorized as part of the “participating in a specific activity” category. Some respondents stated they did not have a best memory, so they were put into the “did not have a best memory” category. This only included those who actually wrote they did not have a best memory, and not those who wrote nothing at all. The respondents who wrote they enjoyed being volleyball champions or beating their physical education teacher at basketball were classified as part of the “winning/competition” category. The “just taking the class/being with

friends” category is composed of those respondents who wrote that their best memory was gym class period or who wrote that their favorite memory was being able to participate with friends. The “not having to take the class/end of the class” category is composed of respondents who actually wrote their best memory was when they no longer had to take P.E. class. There were some respondents who stated their best memories were either checking out the girls in P.E. class or participating with or meeting their girlfriend in P.E. class. Their responses were placed in the “girls” category. Those respondents who responded that a specific teacher or something the teacher did, such as cartwheels for each A in the class, was their favorite memory were placed in the “teachers” category. The respondents who had memories that did not fall into any of the above categories and were not similar enough to each other to create their own category were grouped into the ‘miscellaneous’ category. There was a tie for the majority of responses. A little over a quarter of the respondents (27.3%) classified their favorite memory as pertaining to either a particular activity or to a particular instance of winning or competition.

*Worst Memory of High School P.E. Class* — The second opened-ended question at the end of the survey asked respondents for their worst memory of high school physical education class. The categories for worst memory are similar to the categories for best memories. The respondents who wrote their worst memory was participating in physical fitness tests or activities, being required to run a mile, or playing volleyball were grouped into the “a particular activity/curriculum requirement” category. Some respondents wrote they did not have a worst memory, and were thus classified into the “didn’t have a worst memory” category. This did not include those who wrote nothing in response. The respondents who replied their worst memories were when they lost the volleyball tournament or found their peers too competitive, were placed in the “losing/competition” category. Those who wrote they dislike everything about physical education class were grouped in the “having

class in general” category. The “embarrassing situations” category is composed of those who retold specific instances where they were embarrassed, such as when they had to wear clothes that did not fit properly or did something in class that embarrassed them. “Fights/aggression/teasing” is grouped together out of responses that retold fights, near fights, or episodes of aggression or being teased by other students. The category “injury/sickness” was made up of the respondents who said their worst memories were specific instances of injury or sickness, such as dropping weights on their feet, getting hit in the head with a volleyball, or spraining ankles. Other respondents replied that their worst memory was a specific teacher who was particularly nasty or mean, so their responses were grouped into the “teachers” category. Finally, those respondents who had worst memories that did not fit into any of the above categories and were not similar enough to warrant new categories were placed in the “miscellaneous” category. A majority (29.3%) of the respondents said they did not have a worst memory of physical education class. For those who did report some sort of bad memory, 19.5% reported it was due to injury or sickness.

For full frequencies of the following variables, refer to Table 2 in Appendix B.

*Sports Played*— The first independent variable is type of sport(s) played. When asking about varsity sports played, the majority (80.4%) reported they had played varsity sports. Out of those who report playing varsity sports, about a third of them (35.6 %) played high masculinity sports only and another third (31.1%) played both high and middle masculinity sports. A little over half (57.1%) of the respondents did not participate in intramural or club sports. Out of those who participated in intramural or club sports (42.9%), the majority (40.0%) played only high masculinity sports and another fifth (20.0%) reported playing only middle masculinity sports. The majority of respondents (80.4%) were engaged in some type of physical activity outside of organized sports. Here, a quarter of respondents (26.7%) were engaged in activities that were high masculinity only and another fifth

(20.0%) were in low masculinity activities only. A surprisingly small number (2.2%) were in middle masculinity activities only.

*Athletic Ability*— Those who responded to the survey are quite comfortable in their athletic skills (Table 3 in Appendix B). Graph 1 in Appendix C is a histogram that shows level of athletic skill is toward the higher end of the scale. The lowest possible score is zero and the highest a forty-five; the higher the score, the more athletic the respondent.

When asked to rate their overall coordination to other males their age, about a third of the respondents (32.7%) rated themselves as “excellent.” Almost another third (30.8%) rated themselves as “good.” When asked to rate their overall agility to other males their age, again about a third of respondents (34.6%) rated themselves as “excellent,” though there was slightly more variation among the other responses. When asked to rate their overall physical endurance to other males their age, the responses tended to vary more for physical endurance than for the other comparisons. The majority of respondents (30.8%) rated themselves as “good.” Again, the majority of respondents (36.5%) reported their leg strength as being “excellent” compared to other males their age. Another 34.6% reported that their leg strength was “superior.” The responses for arm strength had more variation than many of the other variables, but a clear majority (40.4%) rated their arm strength as “excellent,” with “good” coming in second (28.8%). When asked how their overall strength compared to other males their age, the majority of respondents (40.4%) again rated themselves as “excellent.” The majority of responses for hand-eye coordination were closely split between “excellent” (34.6%) and “good” (38.5%). Once again, this was a variable that showed more variation in responses. A small majority (30.8%) rated themselves as “excellent.” Overall athleticism saw similar responses to the rest of the variables in the athletic ability scale. About a third (34.6%) of respondents rated themselves as “excellent” and another 30.8% rated themselves as “good.”

Internalized Masculinity — The results of the internalized masculinity scale show that there is little variation among the respondents in terms of their commitment to hegemonic masculine ideals. Table 4 in Appendix B is a breakdown of the responses by question and Graph 2 in Appendix C is a histogram that shows that the level of internalized masculinity is toward the lower end of the scale. Twelve is the lowest possible score, while forty-eight is the highest score. The higher the score, the more the respondents have internalized the ideas of hegemonic masculinity. The mean score is 24.51 with a standard deviation of 3.64. Thus, approximately 68% of the sample fell between 20.87 and 28.15. No one scored either on the highest end or lowest ends of the scale, and overall this group of respondents is more accepting of feminine ideals of masculinity. Due to the skewed results of the masculinity scale, the results were further broken down. In essence, the masculinity scale measures three constructs: physical power, sexual power, and emotional expression. The questions dealing with emotions (questions 1, 5, 7, 8, 10, and 12 in Table 4) were broken down into the “emotional expression subscale.” When displayed graphically (See Graph 3 in Appendix C), the emotional expression subscale falls along the normal curve better than the entire masculinity scale. The responses for the sexual and physical power questions tend to fall on the lower end of the scale, while the emotional questions had a wider variety of responses, suggesting the respondents were less sure of the “correct” responses for emotional questions. This suggests that the men of this sample have relatively progressive ideas about masculinity in terms of physical power and sex, but much more ambivalent ideas of appropriate masculine emotional responses.

#### *Univariate Analysis: Dependent Variable*

Attitudes Toward High School Physical Education Class — Univariate analysis of the dependent variable shows that for the most part, the majority of respondents enjoyed their physical

education class and have very positive attitudes toward their gym experiences. Table 5 in Appendix B shows the breakdown of responses by percent for each question. When the responses were quantified on a scale ranging from fifteen to fifty- six was created, with the higher the score indicating more positive attitudes toward gym class. The mean was 45.92 with a standard deviation of 6.52. Thus, 60% of the sample fell between 39.40 and 52.44. Graph 4 in Appendix C is a histogram that shows how skewed the results are. Again, because the results for the entire scale are so skewed, specific characteristics were picked out and looked at together. In this case, questions 2, 12, and 13, which deal with jock culture, were separated out from the rest of the scale to create the “jock culture subscale.” This subscale indicates questions that are closely related to how jock culture is viewed by the respondent. When graphed in a histogram (Graph 5 in Appendix C) the jock culture subscale follows a normal curve more closely than the entire attitudes towards gym class scale.

### *Bivariate Analysis*

*Hypothesis 1: Athletic Ability and Attitudes Toward High School Physical Education* — A statistically significant relationship was found to exist between athletic ability and attitudes toward high school physical education class, with a moderately strong positive relationship ( $r^2 = .324$ ,  $s = .000$ , See Table 6 in Appendix B and Graph 10 in Appendix C). This supports the hypothesis that male students with higher athletic skill will have more positive attitudes toward physical education class than those males with lower athletic skills. When the jock culture subscale is tested against total athletic ability, there is a slightly stronger positive relationship ( $r^2 = .415$ ,  $s = .000$ , See Table 6 in Appendix B and Graph 11 in Appendix C). This means there is a stronger correlation between the independent variable of athletic ability and attitudes toward physical education class when only the jock culture subscale is examined.

*Hypothesis 2: Level of Sports Involvement and Attitudes Toward High School Physical*

*Education* — When comparing the ‘all sports played masculinity score’ to attitudes toward gym class, there is a moderate positive correlation ( $r^2=.153$ ,  $s=.005$ ) which is statistically significant (See Table 6 in Appendix B and Graph 6 in Appendix C). This supports the hypothesis that high school male students involved in sports with a stronger connection to hegemonic masculinity will have more positive attitudes towards high school gym class. When looking at only the masculinity score of varsity sports, the correlation is slightly stronger ( $r^2=.258$ ,  $s=.000$ , See Table 6 in Appendix B and Graph 7 in Appendix C). This suggests that just looking at varsity sports, rather than all sports played, is a stronger predictor of attitudes toward physical education than examining all sports played.

When comparing how the masculinity of all sports played effects just the jock culture subscale of the attitudes toward high school gym, it is found to have a moderately strong correlation ( $r^2=.198$ ,  $s=.001$ ) and is statistically significant (See Table 6 in Appendix B and Graph 8 in Appendix C). When the masculinity of only varsity sports played is compared to the jock culture elements, the correlation rises to  $.278$  and remains statistically significant at  $.000$  (See Table 6 in Appendix B and Graph 9 in Appendix C). This suggests that examining the masculinity inherent in varsity sports played is a better indicator of jock culture elements of attitudes toward physical education than examining the masculinity of all sports played.

*Hypothesis 3: Internalized Masculinity and Attitudes Toward High School Physical Education*

*Class* — The results show that the very weak positive correlation is not statistically significant ( $r^2=.029$ ,  $s=.230$ , See Table 6 in Appendix B and Graph 12 in Appendix C). This means that the hypothesis that males who scored higher on the adolescent masculinity scale would have more positive attitudes toward physical education than those who scored lower is *not* supported by the data.



When the emotion subscale is compared to the attitudes toward physical education class the relationship is still found to not be statistically significant. While the correlation shows a very weak positive relationship ( $r = .133$ ), the statistical significance level is only .351, well above the .01 level that is needed for statistical significance (See Table 6 in Appendix B).

However, when the total masculinity scale is compared to the jock culture subscale, a statistically significant positive relationship appears ( $r^2 = .137$ ,  $s = .007$ , See Table 6 in Appendix B and Graph 13 in Appendix C). This suggests that while the masculinity scale is not a good predictor of all elements of attitudes towards high school physical education class, it may be a good predictor for elements dealing with jock culture. Finally, the emotion subscale was tested against the jock culture subscale. A positive and statistically significant relationship was found ( $r^2 = .127$ ,  $s = .01$ , See Table 6 in Appendix B and Graph 14 in Appendix C). This suggests that using the emotion subscale is a fair predictor of the jock culture.

Some of the demographic information was also compared to the dependent variables to see if any of the demographics had a statistically significant impact on attitudes toward physical education class. The demographic information that was tested included the public versus private status of the high school, the coeducational versus same-sex gym classes, the class year of the respondent, the number of gay friends the respondent had, whether or not the respondent felt pressured to do well in physical education class, and the number of years of physical education taken. The only demographic variable that resulted in a statistically significant relationship with attitudes towards physical education class was the number of years taken ( $r = .307$ ,  $s = .032$ ). However, because the vast majority of respondents took four years of physical education classes in high school, there is not enough variation in responses to imply that the number of years of physical education causes a positive relationship with attitudes towards physical education class. All the other demographic variables that

were tested did not result in statistically significant results; however, given the small sample size, all analysis is interpreted with some caution.

## DISCUSSION

The analysis of the variables showed that my first and second hypotheses are supported, while my third hypothesis is not supported. Thus, it appears that the amount of athletic ability a student perceives himself to have, the more positively he will rate his attitudes toward physical education. This relationship becomes stronger when only jock culture elements of the attitudes toward physical education are analyzed. This relates back to Ronholt's piece, in which he found that during a jogging activity, the boys who chose to run without any breaks (believing themselves to be more athletic than the boys in the group with breaks, at least when it came to endurance) called the boys in the break group "sissies." Ronholt's study does not reveal, however, whether or not the boys in the no break group enjoyed the class any more or any less than the boys who called them "sissies." My research suggests that perceived level of athleticism has a positive correlation to overall attitudes towards gym class.

The same can be said of Parker's article that looked at how the "Hard Boys" acted in physical education class compared to the more scholarly boys. These "Hard Boys" were likely more athletic than the bookish boys and that is why they could dominate the other boys only during physical education class. Parker's study did not measure satisfaction about physical education class. It might be assumed that the more bookish boys did not like physical education because they got bullied by the "Hard Boys," but that must remain only an assumption, since there are no data to support this relationship. In both these cases, athletic ability was used to put down those boys with lower athletic abilities. In my study, however, no one agreed that they were harassed during P.E, regardless of their

athletic ability. Perhaps no one was willing to fess up to the potential embarrassment of being harassed, or perhaps no one considered teasing to be the same as harassment. Since the jock culture elements had a stronger relationship, it seems that those with high athletic skills seem more likely to respond positively to the jock culture elements of physical education class. Therefore, perhaps athletic ability best predicts only certain elements of attitudes towards physical education class, such as jock culture. However, one must remember that the relationships for both total attitudes toward physical education class and jock culture were only weakly positive, which means there are other forces affecting the dependent variable than just the independent variable.

My second hypothesis linking higher masculine sports to more positive attitudes toward high school physical education class is also supported by my analysis. This relates to the study by Parks and Read who found that football players, having more visible muscles and thus fitting more closely to ideas about ideal male body image, were less likely to want to change their bodies than cross-country runners. The football players were involved in a much more masculine sport than the cross-country runners. However, Parks and Read were measuring attitudes towards body-image and not attitudes towards physical education class. Once again, it must be guessed at whether or not the football players then liked physical education better than the cross-country runners because of their sports and their physic. My analysis showed that the vast majority of the respondents felt comfortable in their physical education uniforms and changing in the locker room or showering after class. Therefore it does not appear that the masculinity of their sport or their athletic ability affected their comfort level. Perhaps if questions more related to body image and satisfaction were used, rather than just comfort level, more variation in responses would have been seen. There remains, however, some sort of correlation between masculinity of sports and attitudes toward physical education class. This relationship increases when only varsity sport masculinities are compared to only jock culture

elements. Perhaps Parks and Read's football players and cross-country runners reflect this relationship more than the relationship between masculinity of all sports and overall attitudes towards physical education. Once again, one must remember that although these relationships are statistically significant, they are only moderately strong. Thus, other variables that were not included in the study must be in play.

My third hypothesis concerning higher levels of internalized hegemonic masculinity positively affecting attitudes towards physical education is not supported by the data. Many of the researchers (Cockburn and Clarke, Shakib, and Daley and Buchanan) touted that the activities in physical education classes were traditionally masculine in form, which is the reason they believe many girls do not like physical education class. It is also the reason Parker saw for the "Hard Boys" to belittle and dominate the more bookish boys. The idea of endurance as a form of masculinity prompted the boys in Ronholt's study to tease the boys who could not run without breaks. However, my study shows that most boys have positive attitudes toward physical education regardless of their own ideas of masculinity. My study also shows that the men I surveyed tended to have masculine views that were toward the middle to lower end of the hegemonic masculinity scale. Thus, it appears that athletic ability and sports have more of an affect on attitudes towards physical education than do personal ideas of masculinity. However, when the masculinity scale was applied only to the jock culture elements of the attitudes towards physical education scale, a statistically significant relationship appeared. This means that while the masculinity scale does not accurately predict all attitudes towards physical education class, it does predict to some degree attitudes concerning jock culture, which involves competition and athleticism.

All three independent variables more accurately predict attitudes towards jock culture than to the entire attitudes scale. The researchers (Cockburn and Clarke, 2002; Shakib, 2003; Daley and

Buchanan, 1999) who saw inherent masculinity in physical education usually pointed to competition and athleticism as the main components of that masculinity. Competition and athleticism questions make up the jock culture elements of the attitudes towards physical education scale. These questions had responses that tend to vary more than responses to other elements of the attitudes scale. It appears, then, that it is competition and athleticism that seem to affect the way boys feel about physical education class, more so than the rest of the attitudes questions.

### THE MAN BEHIND THE COMPUTER SURVEY

As the survey results show, the vast majority of men who participated in this study were athletically strong and had very positive attitudes toward their high school physical education experiences. Thus, it must be asked, were they more likely to fill out the survey because they had such good memories? While men are often discouraged to talk about their feelings or themselves in general, it may be an even stronger impetus for those men who have had particularly negative experiences. Perhaps those students who did not respond did not want to dredge up negative memories of high school physical education. These students may have been less athletically inclined than those students who responded. Certainly, the open-ended qualitative questions at the end of the survey show that those who responded had few negative memories. In terms of worst memories, most responses centered on accidental injury, which were negative because of physical pain and loss of ability to play sports. Very few of the responses to the worst memory question had anything to do with emotionally negative memories. The best memory responses further show that the men who responded had particularly good experiences in physical education. The top two responses for the best memory question dealt with winning, competition, or specific physical education activities.

Along with the possibility that those students with particularly negative experiences purposefully chose not to respond to the survey is the influence of the researcher: in this case, the influence of a female researcher on a male population. Would more men have been willing to respond if the researcher was also a man? Would their answers have varied? These questions call the validity of the survey responses into question, as well as suggest an intriguing avenue of future research. The severe lack of variation on the internalized hegemonic masculinity scale may also point to an area where the sex of the researcher may have affected responses. There are two possibilities. First, the men in the survey really do have gender-equity attitudes, or two, they have learned what is and is not acceptable for them to say, regardless of what they personally believe. A man who openly admits he agrees strongly to “In a good dating relationship, the guy gets his way most of the time” may very well be labeled a sexist pig by his peer group. In a generation that has been heavily influenced by political correctness, the feminist movement, and a widening definition of multiple masculinities, these young college freshmen and sophomores may be savvy enough to know what to admit to and what not to admit to, especially to a woman. Certainly their ambivalence on the emotional questions suggests less adherence to gender equity than do their responses to sexual and physical power questions. Perhaps if the researcher was a man, they would have been more likely to answer honestly and less politically correctly, if indeed, such was the problem.

### LIMITATIONS

The main limitation with this research is the lack of participation. I originally planned to further explore the variables in focus groups of freshmen students from the same college. The focus groups would have allowed me to go more deeply into student experiences and obtain detailed accounts of how these experiences affected individual attitudes. Five focus groups were planned of

about six students in each focus group. Students would have been grouped according to their athletic status while they were in high school. One group would have contained only male non-athletes. Two more groups would have contained only male athletes who played less masculine sports. The final two groups would have contained only male athletes who played masculine sports. These groups were to be a result of cluster sampling of freshmen students contacted through the sports they played, their resident student advisor, and through flyers put up in the freshmen dorms. I intended to meet with each group separately for about an hour per group. Each focus group meeting would have been recorded with the permission of participants and transcribed after each meeting. Unfortunately, I was not able to elicit the amount of participation required to make the focus groups a reality. With the qualitative portion of the study now abandoned, I decided to try and elicit more responses to my quantitative portion.

It was at this point that I added the sophomore students into my sample, hoping to boost the participation rate. However, my survey results among sophomore men were also limited by lack of participation. I obtained only forty viable surveys from the one-hundred-fifty freshmen surveyed, after e-mailing them twice, at two-week intervals. The sophomore men were added to the sample, but I received only seventeen viable responses from the sophomore men, leaving me with only forty-seven returned surveys. This falls far short of the one hundred to one hundred twenty-five surveys I had hoped to collect between the two groups to make up for the lack of qualitative data. The choice to make this an electronic survey probably added to the lack of responses. My response rate would have been much higher if I had gone door to door handing out paper surveys.

Another limitation to the research was the fact that most of my respondents seemed to have enjoyed high school physical education class. The lack of variation in responses made analysis more difficult. Perhaps more people in the study would have provided more variation. The lack of variation

may also have to do with how the questions in the scale were worded and how honest the respondents were. While, in the open-ended questions at the end of the survey, several respondents wrote that their worst memories were times they got teased in physical education class, no one agreed to the question in the attitude scale “I was a target of harassment by peers in P.E.” Perhaps harassment was the wrong word choice, and most respondents did not equate being picked on or teased to being harassed. It was also suggested to me that the mere act of filling out a survey may not be considered manly, and that might be why I had such a hard time getting men to respond, especially those that who had negative experiences.

#### FUTURE RESEARCH

There are many possibilities to continue this research. First, collecting more surveys would allow for the results to be applied to a larger sample, and also better indicate the relationships between and among variables. Also, qualitative research would be very beneficial to the study of intra-gender physical education attitude differences. Actually talking to students allows for more knowledge of the way experiences such as sport participation and athleticism change physical education attitudes between men. The open-ended qualitative questions at the end of the survey show that everyone has a slightly different story or memory. Further qualitative research might expand on these memories and explore exactly what makes one man love physical education class and another man hate it. Additional research could also explore the variables that were found to affect physical education attitudes more closely. Also, expanding the research to survey students from other colleges would expand upon the relationships I have found between sports, athletic ability, and physical education attitudes. Female students could also be surveyed to see how their attitudes toward physical education change depending on the type of sports they play and how athletic they see themselves.



Another possible direction of future research could involve working with high school students directly. Working with college students about their high school experiences leaves out the experiences of those high school students who chose not to go to college, thus leaving out a segment of the high school population from research. By working directly with high school students, the memories would be freshest, and all high school students could be sampled. So little intra-gender research has been done that the field is wide open for physical education research.

### CONCLUSION

So what can be done to improve the attitudes of all students, both male and female, when it comes to physical education class? One suggestion, at the institutional level, would be to create a Title X, which still mandates equality between the sexes but not in a coeducational way. Flintoff and Scraton (2001) and Garrett (2004) were involved in studies that showed female students often had negative attitudes towards physical education class because of coeducational activities. Treanor, Graber, Housner, and Wiegand (1998) found that both boys and girls were more satisfied with physical education class when it was divided into same-sex classes. Another institutional fix lies in the curriculum. Allowing the students more choices in the types of physical education activities they participate in often increases positive attitudes. Flintoff and Scraton (2001), Carlson (1995), and Garrett (2004) remarked that the girls in their studies were happier once they reached a grade level where they had more choices to help them escape the masculine curriculum activities of previous years. Male students might also benefit from more choices in the physical education curriculum. As Ronholt's (2002) experiences with name calling in physical education class and Parker's (1996) "Hard Boys" research shows, those boys who do not necessarily conform to hegemonic masculine ideals might be more comfortable if they could choose less masculine activities. Of course, allowing

more choices is only helpful if less masculine activities are offered in the first place. In addition to more choices is the option of treating physical education class like other high school courses. If physical education class was divided by skill level, the same way math and reading classes are divided, students of both sexes might feel far more comfortable. Ennis' Sport For Peace research (1999) also suggests that less competitive grading practices and allowing students to play all positions increases enjoyment of physical education for both boys and girls.

## APPENDIX A

**Informed Consent Statement:**

---

Hi, my name is Celeste Purosky, and I am a senior sociology major undertaking an independent honors study. I am studying male students' attitudes toward high school physical education (PE) class. This survey is being sent to all male freshmen and sophomore students and should take about 15 minutes to complete. Your decision to complete this survey will be greatly appreciated. Participation in this survey is voluntary, and all of the answers you give are completely anonymous. Please do not put your name anywhere on this survey. The results of the survey will be based on aggregated data only; no individual survey will be singled out when presenting my research report to my honors committee. If there are any questions you are not comfortable answering, then you may skip that particular question. If you have any questions regarding this survey or study, please contact me at [purcele@lycoming.edu](mailto:purcele@lycoming.edu), my campus box #353, or Dr. Ross of the Sociology-Anthropology Department at [ross@lycoming.edu](mailto:ross@lycoming.edu). Thank you!

**Electronic Survey:**

---

Please select the appropriate answer from the menu boxes. If "other" is your answer you may be required to elaborate in a text field. Please Click the submit button at then end when you finish completing the survey. If you feel uncomfortable with any of the questions in this survey, you may choose to skip that question or stop the survey at any time. Thank You.  
Please select the appropriate answer for the following questions.

1. Thinking back to high school, which of the following varsity sport(s) did you participate in? Please select all that apply and note the number of years for which you participated. (If your sport(s) isn't listed below, please select 'other' and write in the sport(s) in the available text box.)

--Blank--  
 Baseball  
 Basketball  
 Bowling  
 Cross-country  
 Football  
 Ice hockey  
 Lacrosse  
 Rifle or Archery  
 Soccer  
 Swimming/diving  
 Tennis  
 Track and field  
 Volleyball  
 Weight lifting  
 Wrestling  
 Other

Years

--Blank--

1

2

3

4

5 or more

2. During your high school years, did you participate in any non-varsity organized school-sponsored sports (e.g. intramurals or club sports) or any non-school affiliated programs?

--Blank--

Yes

No, (Skip to question 4)

3. Which of the following club sport(s) (not affiliated with your school, such as AYSO) did you participate in? Please select all that apply, including club sport(s) played prior to high school. (If your sport(s) isn't listed below, please select 'other' and write in the sport(s) in the available text box.)

--Blank--

Baseball

Basketball

Bowling

Cross-country

Football

Ice hockey

Lacrosse

Rifle or Archery

Roller or street hockey

Soccer

Swimming/diving

Tennis

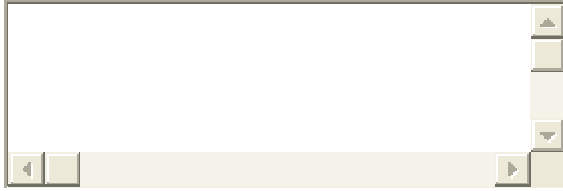
Track and field

Volleyball

Weight lifting

Wrestling

Other

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4. During high school were there any other types of physical activities you did on a regular basis? Note that some items are seasonal. Please select all activities for which you participated in at least one year or one season on about a weekly basis. (If your activity(s) isn't listed below, please select 'other' and write in the activity(s) in the available text box.)

--Blank--

None

Basketball

Boxing

Canoeing

Cross-country skiing

Dancing

Downhill skiing

Fencing

Hiking

Horseback riding

Ice hockey

Ice skating

Kayaking

Martial arts training

Mountain biking

Road cycling

Roller hockey

Snowboarding

Snow-shoeing

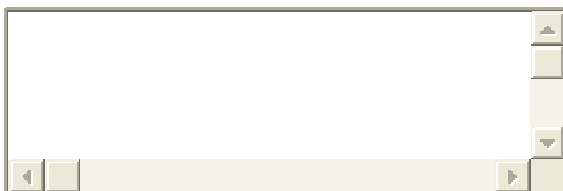
Tennis

Walking

Weight lifting

Yoga

Other

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5. Did your high school require physical education class?

--Blank--

No

Yes (skip to question 7)

6. Did you participate in an optional high school physical education class?

Yes

No (please click submit button at bottom of survey)

**If you answered "No" to question 6 you do not need to complete to remainder of the survey. Please scroll to the bottom of the page and click submit. Thank you for participating.**

7. How many years of physical education classes did you take in high school?

--Blank--

1

2

3

4

5 or more

Next, I'm going to ask you some questions regarding your opinions about yourself and high school PE. Please select the word that best represent your feelings toward the issue.

In comparison to other males in my high school, I would have rated:

8. My overall coordination:

--Blank--

Superior

Excellent

Good

Fair

Poor

9. My agility:

--Blank--

Superior

Excellent

Good

Fair

Poor

10. My physical endurance:

--Blank--  
Superior  
Excellent  
Good  
Fair  
Poor

11. My leg strength:

--Blank--  
Superior  
Excellent  
Good  
Fair  
Poor

12. My arm strength:

--Blank--  
Superior  
Excellent  
Good  
Fair  
Poor

13. My overall strength:

--Blank--  
Superior  
Excellent  
Good  
Fair  
Poor

14. My overall hand-eye

--Blank--  
Superior  
Excellent  
Good  
Fair  
Poor

15. My overall speed:

--Blank--  
Superior  
Excellent  
Good  
Fair  
Poor

16. My overall athleticism:

--Blank--  
Superior  
Excellent  
Good  
Fair  
Poor

Next, please select the appropriate response to the following questions about you and your high school.

17. Approximately how many total students were there in your high school's graduation class?

--Blank--  
0-50  
51-100  
101-150  
151-200  
201-250  
251-300  
301-350  
more than 351

18. Was your high school:

--Blank--  
Co-educational  
Same-sex

19. Was your high school:

--Blank--  
Public  
Private (non-religious)  
Private (religiously affiliated)

20. Were varsity athletes required to take physical education class at your high school?



--Blank--

Yes

No

21. Was there a swimming requirement in your high school physical education course?

--Blank--

Yes

No (skip to question 23)

22. If yes, then on a scale of 1-5, with 1 being extremely uncomfortable and 5 being extremely comfortable, how did you feel while wearing your bathing suit?

--Blank--

1

2

3

4

5

23. Were you required to shower after each physical education class?

--Blank--

Yes

No (skip to question 25)

24. If yes, then on a scale of 1 -5, with 1 being extremely uncomfortable and 5 being extremely comfortable, how did you feel about showering in a public setting?

--Blank--

1

2

3

4

5

25. Were you required to wear specific clothes for physical education class?

--Blank--

Yes

No (skip to question 28)

26. If yes, then on a scale of 1-5, with 1 being extremely uncomfortable and 5 being extremely comfortable, how did you feel when wearing your PE uniform?

--Blank--

- 1
- 2
- 3
- 4
- 5

27. If yes, then on a scale of 1-5, with 1 being extremely uncomfortable and 5 being extremely comfortable, how did having to change in an open locker room make you feel?

--Blank--

- 1
- 2
- 3
- 4
- 5

28. Approximately how many physical education classes did you participate in each week?

--Blank--

- 1
- 2
- 3
- 4
- 5 or more

29. Which of the following best describes your physical education classes?

--Blank--

- sex segregated only (skip to question 31)
- coeducation only mixture of sex segregated and coeducational classes

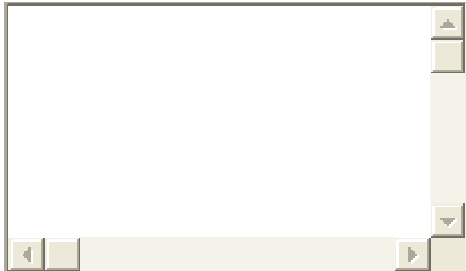
30. Please provide a few examples of the coeducational activities.

31. Did you feel pressured to perform well in physical education class?

--Blank--

No

Yes (if yes, please briefly include whom you felt pressured by)



Next, please answer the following questions concerning your attitudes about your high school physical education (PE) class. Please select the response that best describes your feelings or experiences.

32. I looked forward to attending physical education class.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

33. I felt that PE was a way for me to show off my athleticism.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

34. I tried to avoid participating in PE whenever possible.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

35. PE class was a waste of my time.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

36. My participation in a varsity sport made me better at PE.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

37. PE improved my athletic skill.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

38. My PE teacher(s) generally seemed to like me.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

39. I felt bad for students who were picked on in PE.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

40. I felt more comfortable when I had a choice in the activities I participated in.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

41. I was a target of harassment by peers in PE.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

42. PE class made me feel less like a man.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

43. People considered me to be a jock.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

44. I considered myself to be very competitive.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

45. Peers considered me to be weak.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

46. I was uncomfortable whenever the girls were present or participating in PE with our class.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

Next, please select how much you disagree or agree with the following statements.

47. It is important for a guy to act like nothing is wrong, even when something is bothering him.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

48. In a good dating relationship, the guy gets his way most of the time.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

49. I can respect a guy who backs down from a fight.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

50. It's ok for a guy to say no to sex.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

51. Guys should not let it show when their feelings are hurt.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

52. A guy never needs to hit another guy to get respect.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

53. If a guy tells people he worries, he will look weak.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

54. I think it's important for a guy to go after what he wants, even if it means hurting other people's feelings.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

55. I think it is important for a guy to act like he is sexually active even if he is not.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

56. I would be friends with a guy who is gay.

--Blank--

Strongly Agree

Agree

Disagree

Strongly Disagree

57. It's embarrassing for a guy when he needs to ask for help.

- Blank--
- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

58. I think it's important for a guy to talk about his feelings, even if people might laugh at him.

- Blank--
- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

59. How many gay-male friends do you have?

- Blank--
- 0
- 1
- 2
- 3
- 4
- 5
- 6 or more

60. What is the best memory from your high school physical education class?

61. What is the worst memory from your high school physical education class?



## APPENDIX B

**Table 1: Sample Demographics**

Variable	f	%	Variable	f	%
<b>Required to Take PE</b>			<b>Shower Requirement in H.S.?</b>		
No	4	7.1	no	44	86.3
Yes	52	92.9	yes	7	13.7
(N=56)			(N=51)		
<b>Years of PE Taken</b>			<b>Comfort Level in Showers</b>		
1	1	2.0	extremely uncomfortable	0	0.0
2	2	4.0	uncomfortable	0	0.0
3	4	8.0	neither uncomfortable nor comfortable	3	42.9
4	38	76.0	comfortable	1	14.3
5 or more	5	10.0	extremely comfortable	3	42.9
(N=50)			(N=7)		
<b>Public or Private H.S.</b>			<b>Clothing Requirement in H.S.?</b>		
Public	48	92.3	no	12	23.5
Private- non-religious	2	3.8	yes	39	76.5
Private- religious	2	3.8	(N=51)		
(N=52)			<b>Comfort Level in PE Clothes</b>		
<b>Varsity Athletes Required to Take PE?</b>			extremely uncomfortable	1	2.6
no	10	19.2	uncomfortable	0	0.0
yes	42	80.8	neither comfortable nor uncomfortable	2	5.1
(N=52)			comfortable	9	23.1
<b># of Student In Graduating Class</b>			extremely comfortable	27	69.2
0-50 students	3	5.8	(N=39)		
51-100 students	4	7.7	<b>Comfort Level While Changing Clothes</b>		
101-150 students	7	13.5	extremely uncomfortable	0	0.0
151-200 students	3	5.8	uncomfortable	0	0.0
201-250 students	8	15.4	neither comfortable nor uncomfortable	4	7.1
251-300 students	8	15.4	comfortable	11	19.6
301-350 students	6	11.5	extremely comfortable	23	41.1
more than 351students	13	25.0	(N=38)		
(N=52)					

				<b>Number of PE Classes in a Week</b>		
<b>Swimming Requirement in H.S.?</b>				1	2	3.9
no	36	69.2		2	11	21.6
yes	16	30.8		3	14	27.5
(N=52)				4	8	15.7
				5	16	31.4
<b>Comfort Level in Bathing Suit</b>				(N=51)		
extremely uncomfortable	0	0.0				
uncomfortable	0	0.0		<b>Did You Feel Pressured to Do Well?</b>		
neither uncomfortable nor comfortable	0	0.0		no	37	72.5
comfortable	4	26.7		yes	14	27.5
extremely comfortable	11	73.3		(N=51)		
(N=15)						
				<b>Who Did You Feel Pressured By?</b>		
<b>Sex Division in PE Class</b>				myself	5	35.7
sex segregated only	3	5.9		teachers/coaches	4	28.6
coeducational only	31	60.8		peers	5	35.7
a mixture of both	17	33.3		(N=14)		
(N=51)						
				<b>Worst Memory of High School P.E. Class</b>		
<b>Best Memory of High School P.E. Class</b>				don't have a worst memory	12	29.3
participating in a particular activity	12	27.3		injury/sickness	8	19.5
winning/competition	12	27.3		miscellaneous	5	12.2
just taking the class/being with friends	11	25.0		a particular activity/curriculum requirement	4	9.8
miscellaneous	3	6.8		losing/competition	3	7.3
girls	3	6.8		embarrassing situations	3	7.3
don't have a best memory	1	2.3		fight/aggression/teasing	3	7.3
not having to take class/getting out of class	1	2.3		teachers	2	4.9
teachers	1	2.3		having class in general	1	2.4
(N=44)				(N=41)		
<b>Number of Gay-Male Friends</b>						
0	30	58.8				
1	6	11.8				
2	10	19.6				
3	1	2.0				
4	1	2.0				
5	1	2.0				
6 or more	2	3.9				
(N=51)						

**Table 2: Sport Masculinities by Type of Sport**

Variable	f	%
<b>Varsity Sport Masculinities</b>		
high masculinity	16	35.6
middle masculinity	6	13.3
low masculinity	4	8.9
both high and middle masculinity	14	31.1
both high and low masculinity	1	2.2
both middle and low masculinity	3	6.7
all three masculinities	1	2.2
(N=45)		
<b>Intramural Sport Masculinities</b>		
high masculinity	10	40.0
middle masculinity	5	20.0
low masculinity	2	8.0
both high and middle masculinity	3	12.0
both high and low masculinity	0	0.0
both middle and low masculinity	1	4.0
all three masculinities	4	16.0
(N=25)		
<b>Physical Activity Sport Masculinities</b>		
high masculinity	12	26.7
middle masculinity	1	2.2
low masculinity	9	20.0
both high and middle masculinity	5	11.1
both high and low masculinity	6	13.3
both middle and low masculinity	7	15.6
all three masculinities	5	11.1
(N=45)		

**Table 3: Self Report of Athletic Skill**

Athletic Ability Measured	Superior	Excellent	Good	Fair	Poor	N/A- Did Not Answer
Coordination	28.8	32.7	30.8	5.8	0.0	1.9
Agility	25.0	34.6	28.8	7.7	3.8	0.0
Physical Endurance	26.9	23.1	30.8	13.5	5.8	0.0
Leg Strength	34.6	36.5	21.2	7.7	0.0	0.0
Arm Strength	13.5	40.4	28.8	13.5	3.8	0.0
Overall Strength	25.0	40.4	23.1	7.7	3.8	0.0
Hand-Eye Coordination	23.1	34.6	38.5	3.8	0.0	0.0
Speed	19.2	30.8	28.8	17.3	3.8	0.0
Overall Athleticism	23.1	34.6	30.8	7.7	3.8	0.0

(N=52)

**Table 4: Internalized Masculinity Scale**

Masculinity Scale	Strongly Agree	Agree	Disagree	Strongly Disagree
It is important for a guy to act like nothing is wrong, even when something is bothering him.	2.0	27.5	54.9	15.7
In a good dating relationship, the guy gets his way most of the time.	0.0	9.8	62.7	27.5
I can respect a guy who backs down from a fight.	35.3	62.7	2.0	0.0
It's ok for a guy to say no to sex.	33.3	62.7	2.0	2.0
Guys should not let it show when their feelings are hurt.	0.0	27.5	60.8	11.8
A guy never needs to hit another guy to get respect.	35.3	54.9	9.8	0.0
If a guy tells people he worries, he will look weak.	2.0	31.4	49.0	17.6
It's important for a guy to go after what he wants, even if it hurts other people's feelings.	2.0	27.5	43.1	27.5
It is important for a guy to act like he is sexually active even if he is not.	0.0	3.9	58.8	37.3
I would be friends with a guy who is gay.	13.7	58.8	17.6	9.8
It's embarrassing for a guy when he needs to ask for help.	0.0	13.7	66.7	19.6
It's important for a guy to talk about his feelings, even if people might laugh at him.	13.7	66.7	19.6	0.0

(N=51)

**Table 5: Attitudes towards Gym Scale**

Attitudes Towards Gym	Strongly Agree	Agree	Disagree	Strongly Disagree	NA/ Did Not Answer
I looked forward to attending physical education class.	41.2	45.1	7.8	5.9	0.0
I felt that PE was a way for me to show off my athleticism.	19.6	47.1	25.5	7.8	0.0
I tried to avoid participating in PE whenever possible.	5.9	2.0	29.4	62.7	0.0
PE class was a waste of my time.	5.9	9.8	35.3	49.0	0.0
My participation in a varsity sport made me better at PE.	43.1	23.5	17.6	7.8	7.8
PE improved my athletic ability.	13.7	51	21.6	11.8	1.9
My PE teacher(s) generally seemed to like me.	41.2	51	5.9	2.0	0.0
I felt bad for students who were picked on in PE.	15.7	55.4	17.9	3.6	7.4
I felt more comfortable when I had a choice in the activities.	41.2	39.2	9.8	7.8	2.0
I was a target of harassment by peers in PE.	0.0	0.0	41.2	58.8	0.0
PE class made me feel less like a man.	0.0	2.0	41.2	54.9	2.0
People considered me to be a jock.	11.8	29.4	33.3	25.5	0.0
I considered myself to be very competitive.	45.1	27.5	23.5	3.9	0.0
Peers considered me to be weak.	0.0	11.8	43.1	45.1	0.0
I was uncomfortable whenever girls were present or participating.	7.8	7.8	27.5	56.9	0.0

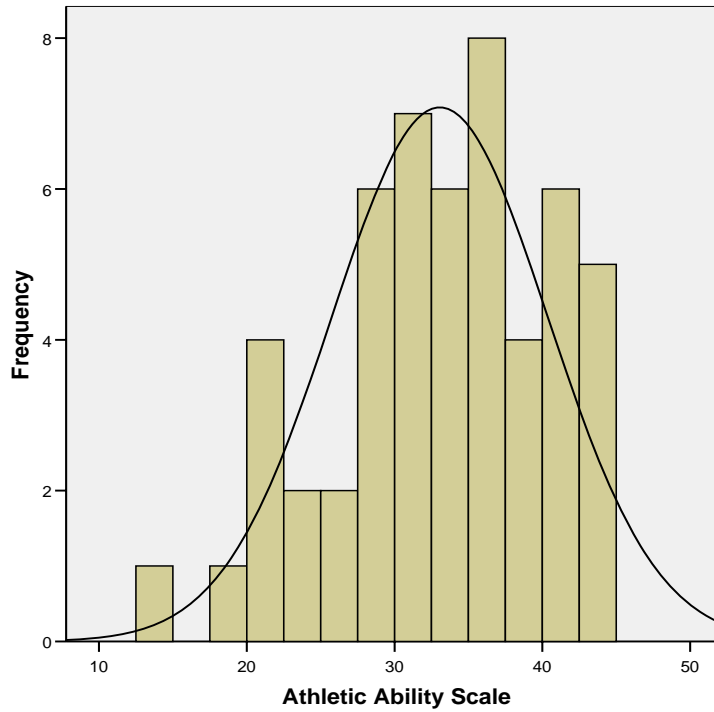
(N=51)

**Table 6: Bivariate Analysis**

Independent Variable	Dependent Variable	Pearson Correlation (r)	Statistical Significance Level (s)
All Sport Masculinities	Attitudes Toward PE	0.391	0.005
Varsity Sport Masculinities	Attitudes Toward PE	0.508	0.000
All Sport Masculinities	Jock Culture	0.445	0.001
Varsity Sport Masculinities	Jock Culture	0.527	0.000
Total Athletic Ability	Attitudes Toward PE	0.569	0.000
Total Athletic Ability	Jock Culture	0.644	0.000
Total Masculinity Scale	Attitudes Toward PE	0.171	0.230
Emotions in Masculinity Scale	Attitudes Toward PE	0.133	0.351
Total Masculinity Scale	Jock Culture	0.370	0.007
Emotions in Masculinity Scale	Jock Culture	0.357	0.010
(N=51)	Statistical Significance Measured at .05		

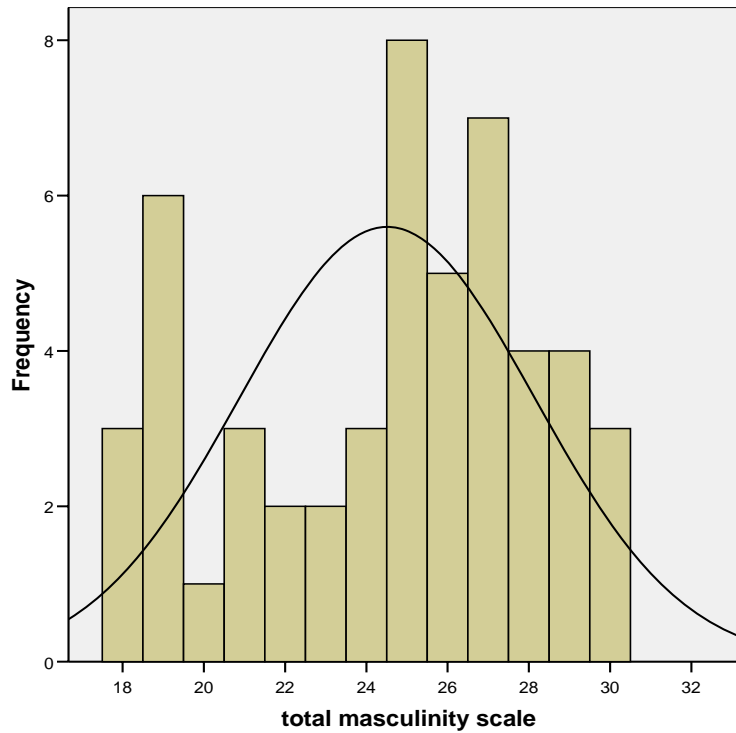
APPENDIX C

**Graph 1: Histogram of Athletic Ability Scale**  
N= 52



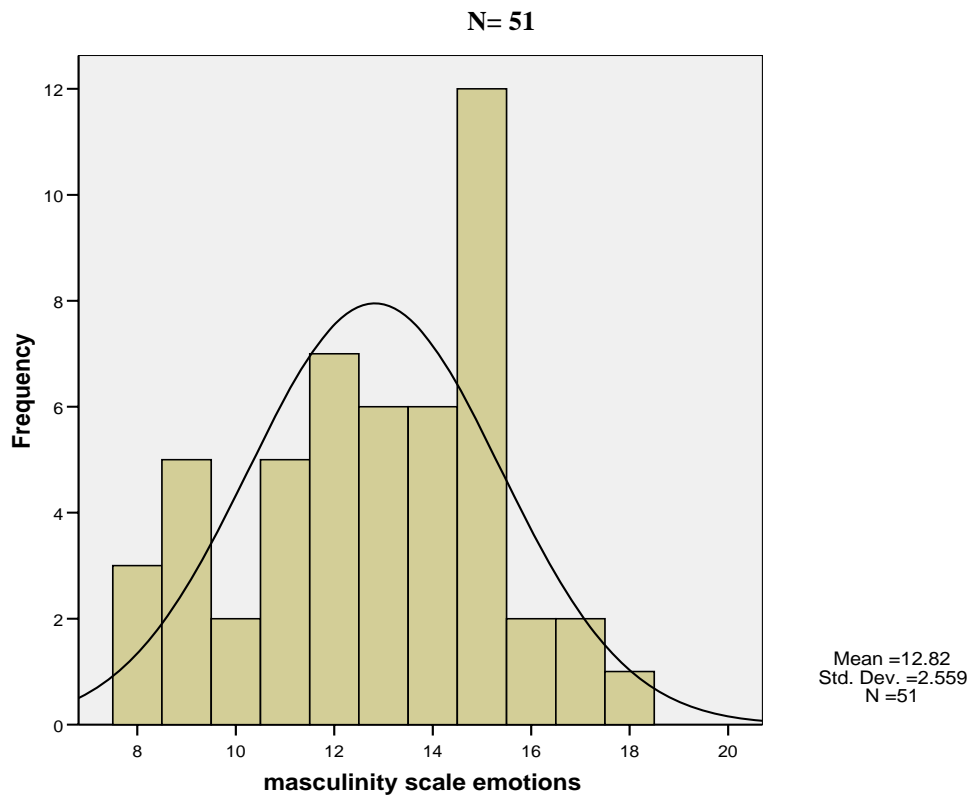
Mean =33.06  
Std. Dev. =7.323  
N =52

**Graph 2: Histogram of Masculinity Scale**  
N= 51

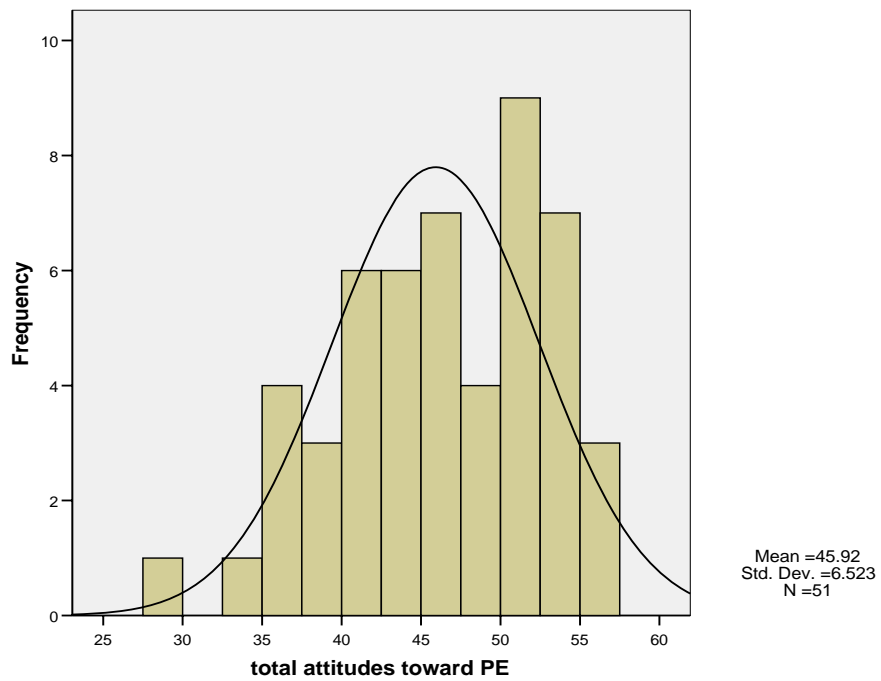


Mean =24.51  
Std. Dev. =3.635  
N =51

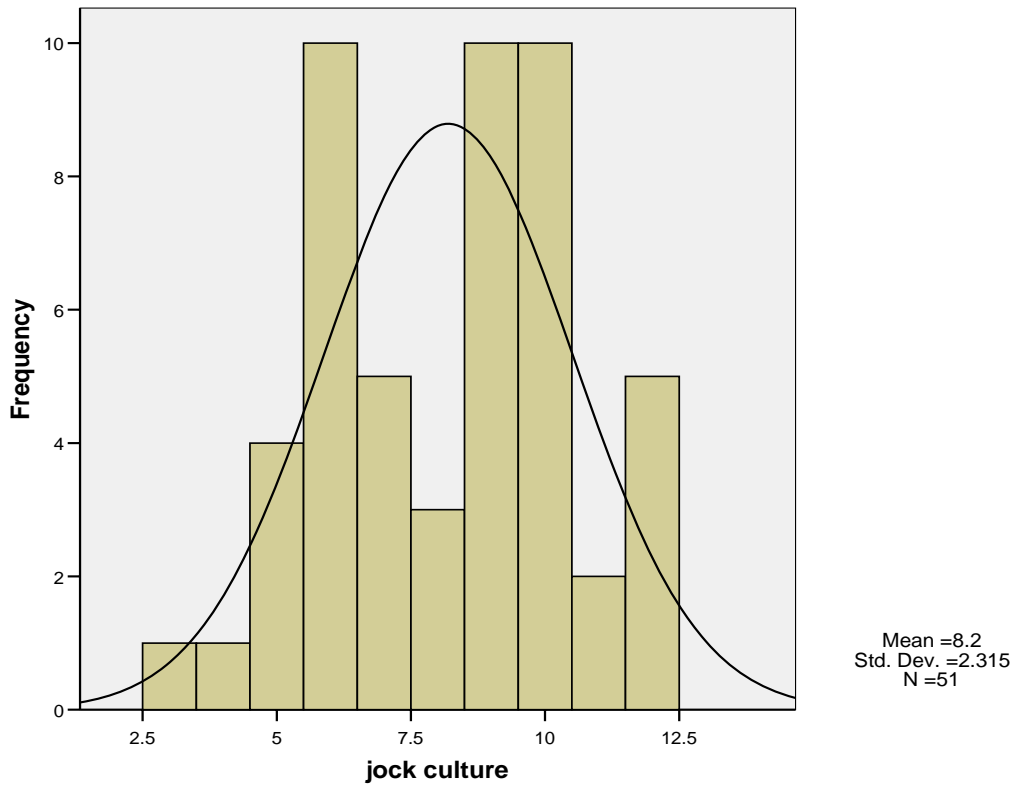
**Graph 3: Histogram of Emotion Questions in Masculinity Scale**



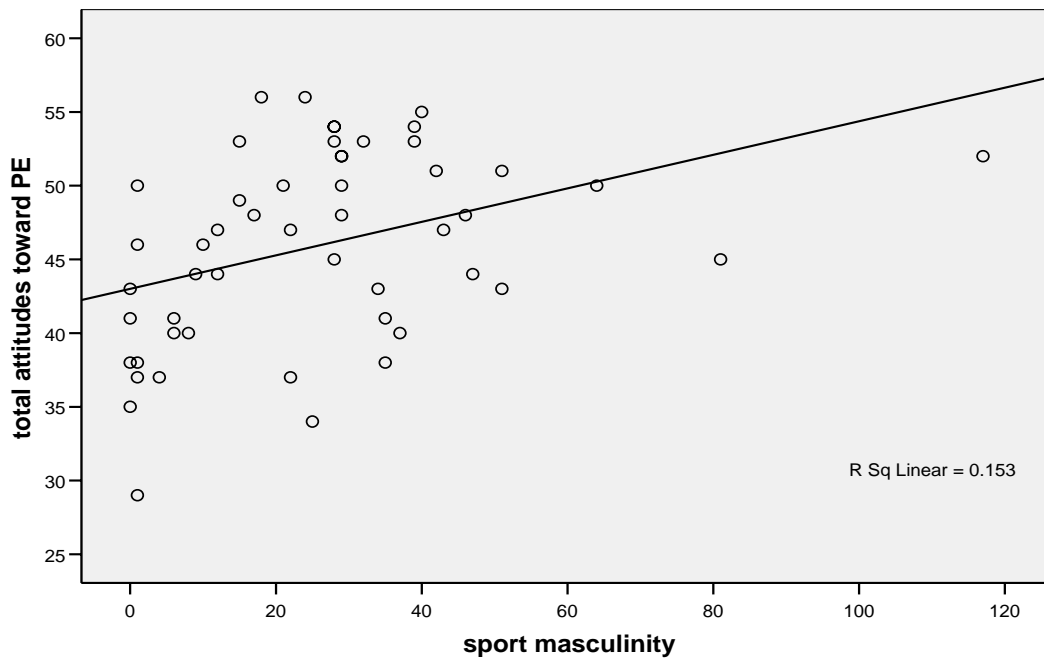
**Graph 4: Histogram of Total Attitudes Towards Physical Education**



**Graph 5: Histogram of Jock Culture Questions from Attitudes Toward Gym Scale**

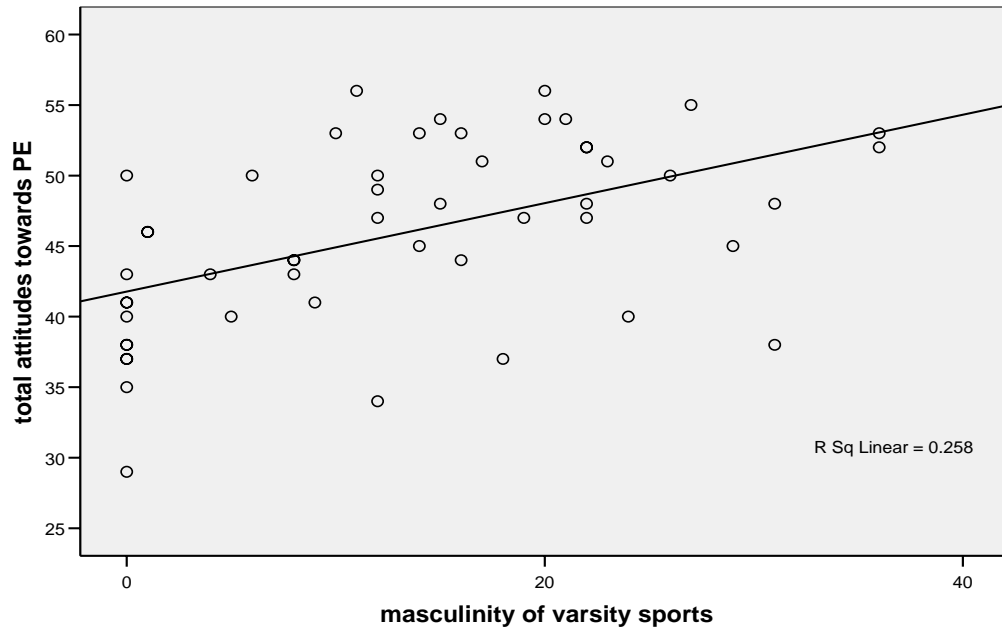


**Graph 6: PE Attitudes by Sport Masculinity**

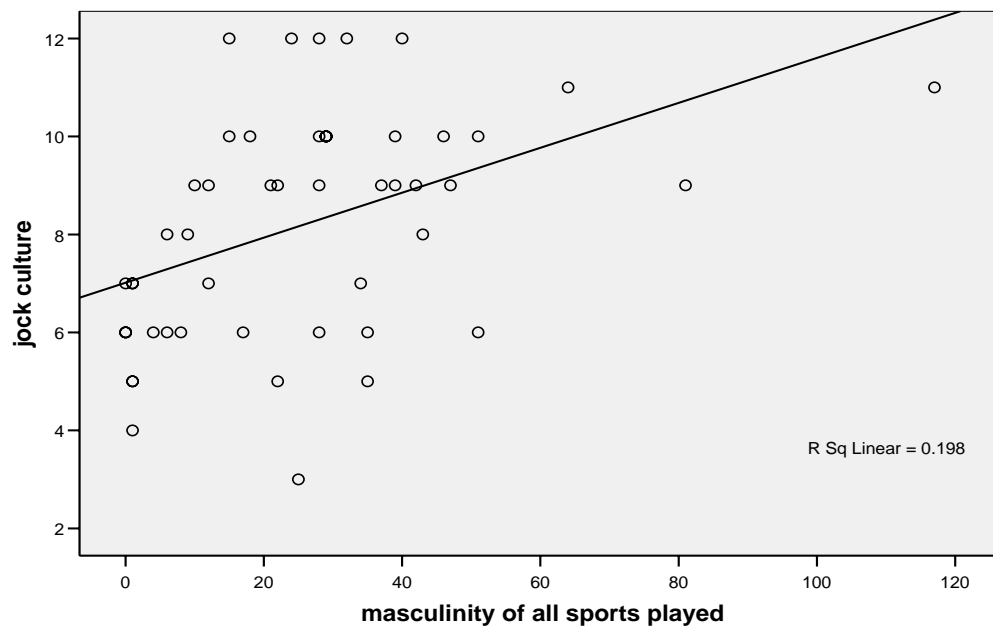




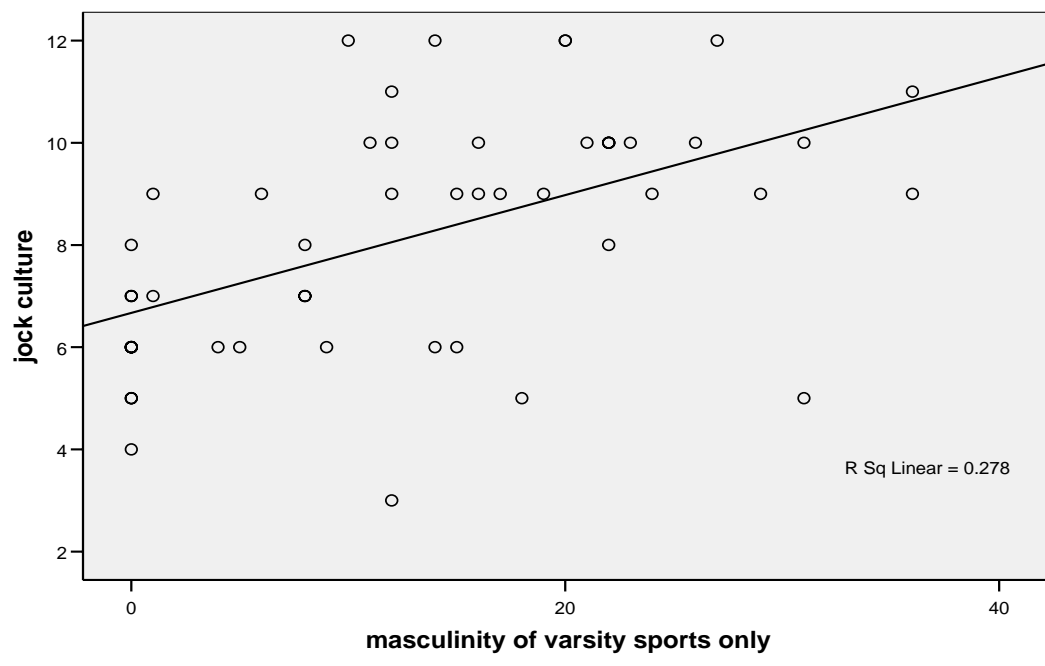
**Graph 7: PE Attitudes by Varsity Sport Masculinity**



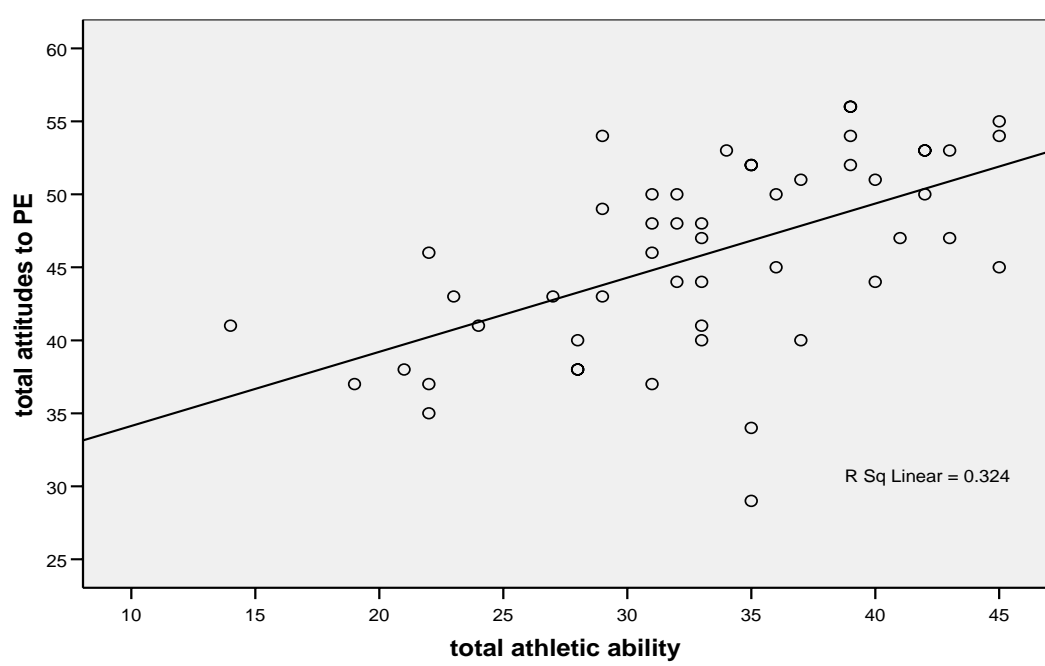
**Graph 8: Jock Culture by Sport Masculinity**



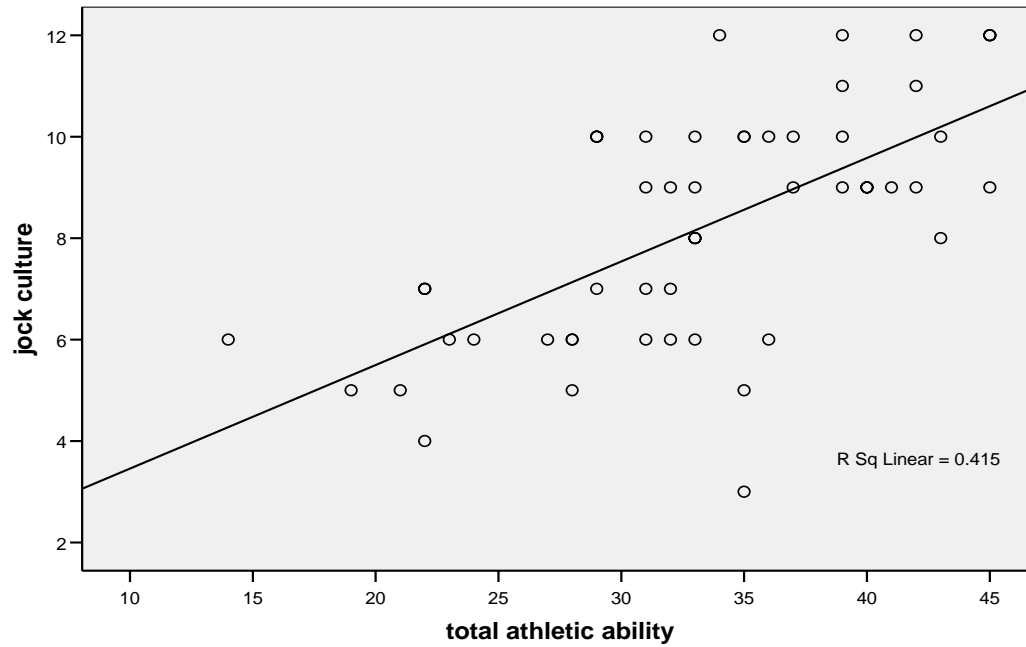
**Graph 9: Jock Culture by Varsity Sport Masculinity**



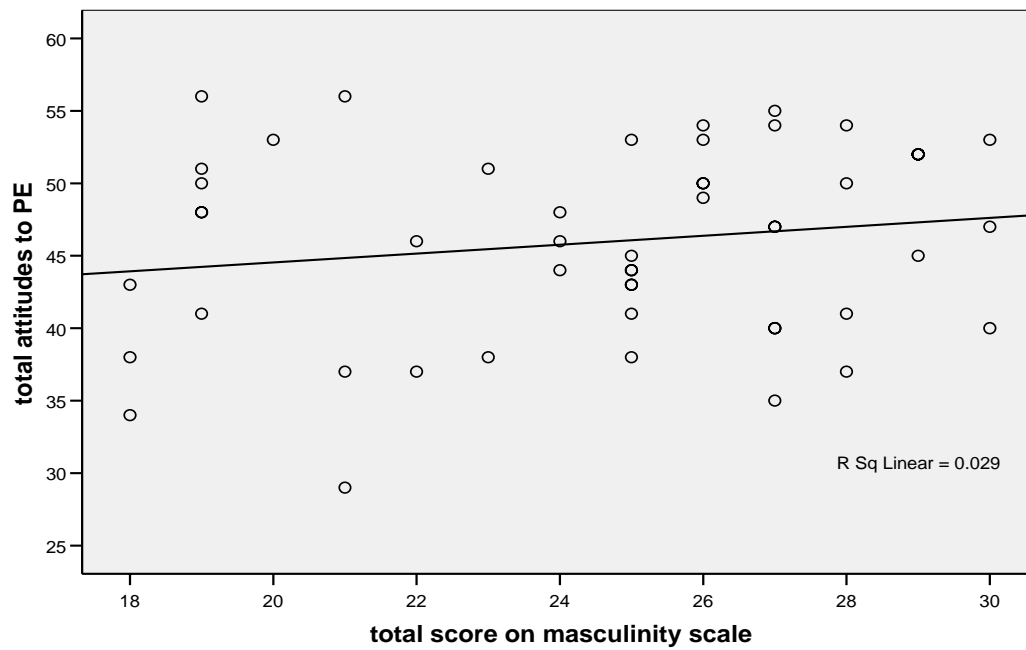
**Graph 10: PE Attitudes by Total Athletic Ability**



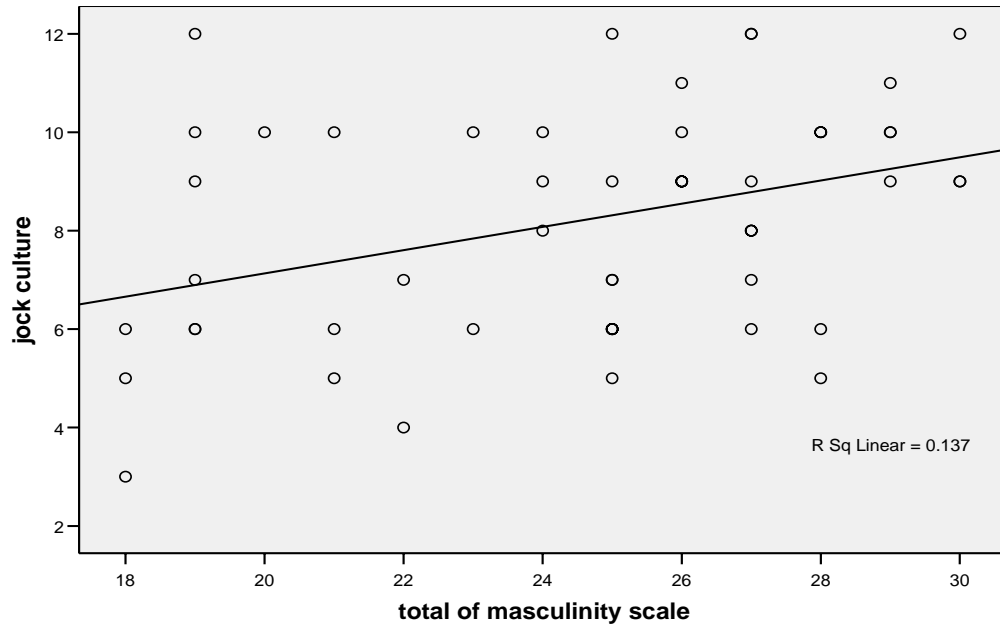
Graph 11: Jock Culture by Total Athletic Ability



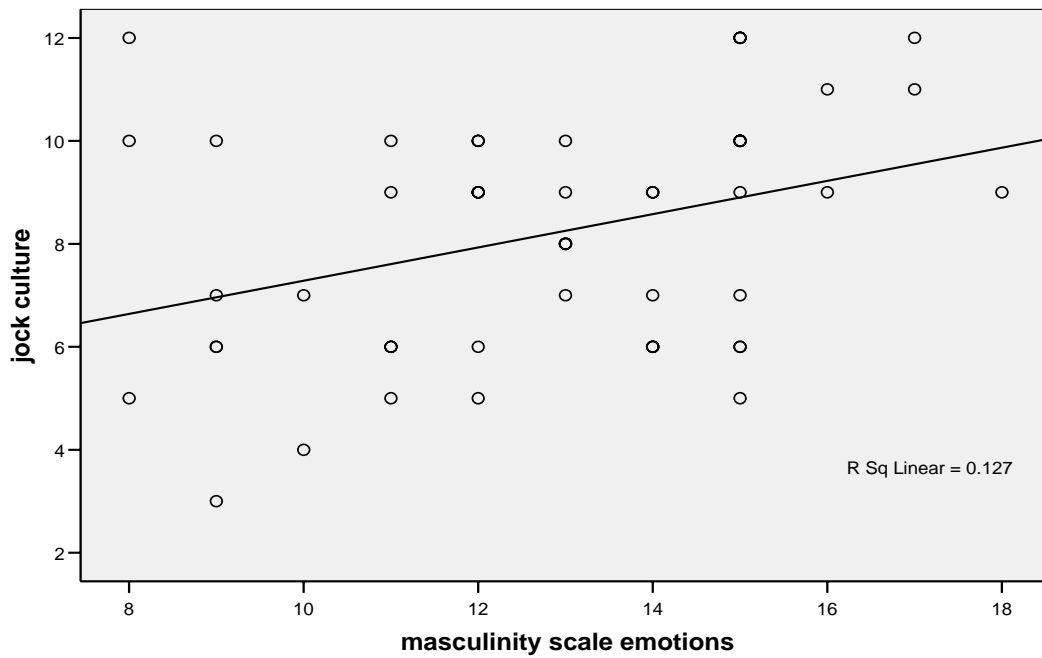
Graph 12: PE Attitudes by Total of the Masculinity Scale



Graph 13: Jock Culture by Total Score on the Masculinity Scale



Graph 14: Jock Culture by Emotions in the Masculinity Scale



## APPENDIX D

*Physical Education at the Institutional Level:**Teenage Girls*

As both Carlson's and Flintoff and Scraton's studies have shown, girls reported one of their causes for dissatisfaction in physical education were feelings of being on display or experiencing unwelcome attention by the boys in the class. Garrett's study on girls, their views of their bodies, and physical education also echoes this. She found the combination of activities that were almost entirely competitive, skill-based games reminded girls "that their bodies are on show for public consumption" (2004:230). The young women in Flintoff and Scraton's study "talked about the importance of single-sex PE, at least for some activities, to avoid scrutiny from the boys" (2001:15). This seems to suggest that single-sex classes would make these girls feel more comfortable; however, since no studies have currently taken dissatisfied girls in co-ed classes, placed them in single-sex classes, and then measured their satisfaction ratings, it remains only speculation. However, it is interesting that Title IX forbids single-sex classes in any non-bodily-contact activity, yet girls seem to view their forced physical activity in front of boys as uncomfortable.

In addition to Title IX, another institutional problem is the physical education curriculum. The girls in Garrett's study talked about physical education classes that "reflected dominant ideologies around competition, individualism and a dependence on games and sport as a basis to the curriculum" (2004:228). Garrett also found, like Flintoff, Scraton, and Carlson, the girls in her study felt physical education did nothing to help them learn the skills required to adequately play these sports and games, and thus they never developed confidence in relation to skilled use of the body. Another significant problem with the curriculum is the lack of choices it affords students, especially in early years. "Many of the young women commented favorably on how a choice of activities, introduced as

they progressed into Year 10, has significantly improved their experiences of PE” (Flintoff and Scraton 2001:11).

*Physical Education at the Interaction Level:*

*Teenage Girls*

According to the National Association for Sport and Physical Education, “the goal of physical education is to develop physically educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of physical education” (2006:1). However, that goal, as will be seen in the following studies, is not being met in many cases. Cockburn and Clarke (2002) set out to discover why many teenage girls were so reluctant to actively take part in physical education; they suspected it had something to do with the inherent masculinities of physical education and the expected femininity of teenage girls. “The qualities encouraged in PE and sport: independence, assertiveness, strength, physical skill, to be physically active, and enjoy sport, all run precisely counter to the socially sanctioned identity— this acceptable way of being ‘teenage girl’” (Cockburn and Clarke 2002:654). Indeed, their interviews showed that the girls felt participating in sport caused a “femininity deficit” in which they did not feel they could be “both physically active and (heterosexually) desirable” (p.661). Shakib (2003) found similar results in her interviews with female high school basketball players. Playing basketball, a stereotyped “male” sport, caused several problems for the girls involved, leading the girls to develop several strategies for maintaining their femininity. First, the girls reported having to gender-cross prior to puberty and “prove” themselves in order to be allowed to play with the boys. Puberty brought a whole different set of problems, and suddenly there was a fear that playing sports might classify them as “not heterosexually desirable and possibly lesbian” causing many of the interviewed girls to temporarily drop out of basketball in attempts to renegotiate their femininity (p.1416). Eventually they realized they enjoyed basketball

more than traditional femininity, but still developed strategies, such as wearing very feminine clothes during school hours and flaunting boyfriends, in order to maintain some femininity.

In a similar study by Adams, Schmitke, and Franklin (2005), the authors focus on two defense strategies when interviewing teenage girls who are active in sports that are deemed masculine. “The apologetic defense says that women counter the image of female athletes as mannish by exaggerating their femininity off the playing field through assuming traditional feminine markers, down playing their competitive component of sports, and emphasizing their heterosexuality. The reformed apologetic defense suggests that women athletes no longer have to downplay the masculine, competitive component of their participation in sports” (21). These defenses were not only used by the girls in Adams, Schmitke, and Franklin’s study, but also by the girls in Shakib’s and Cockburn and Clarke’s study.

While Cockburn and Clarke suggest the only way to resolve the “femininity deficit” is through a change on a social level where femininity and sport are compatible, Daley and Buchanan (1999) experimented with giving females stereotyped “feminine” activities in physical education. Their experiment split teenage girls into two groups, one who had both a physical education class and an after-school aerobics class and a second group that took only physical education. They found “significant changes in adolescent girls’ physical self-perceptions due to participation in 5 weeks of aerobics in addition to their regular 1 hr (sic) of physical education” (p.198). Daley and Buchanan conclude their article with a socially significant point about the role of physical education in the lives of female students. “If the role of PE is to challenge gender myths, then encouraging girls to participate in aerobics might conflict with this aim. However, if the primary role of PE is to promote healthy lifestyles and facilitate positive psychological health in children, then aerobics might be one

activity which meets these objectives in girls who are at risk of lifetime cessation from physical activity” (p.199).

Ennis (1999), like Daley and Buchanan, also experimented with different curricula in hopes of removing the overwhelming masculinity in physical education that kept female students alienated. Her program, called Sport for Peace, had three main components: first, it split students into teams of relatively equal skill level and playing ability; second, it did not grade competitively; and third, it mandated that the players rotate positions, including score keeper and statistician. She then interviewed fifteen of the girls involved in the program, most of whom had been displeased with physical education previously. She found the Sport for Peace program allowed the girls to feel they had an important role to play and they were grateful for a new cooperative environment that allowed them to have second chances without ridicule. The program was not only effective for females; teachers reported male students appeared to hold more positive attitudes toward girls’ ability to play sports than they had before the experiment.

Another experiment by Boyd and Hyrcenko (1997) also tested the relationship between self-esteem and exercise. However, unlike Daley and Buchanan, Boyd and Hyrcenko did not specifically look at “feminine” exercise. Their experiment involved both pre-adolescent and adolescent girls. For the pre-adolescent girls “the activities were skill-related (i.e., those which include factors such as coordination, speed and agility),” while the adolescent girls participated in activities of “endurance, such as aerobic dance and jogging, as well as calisthenics or strength training and dance” (p.696). Unlike Daley and Buchanan, who saw a statistically significant increase in self-perception of the girls who participated in aerobics, Boyd and Hyrcenko did not find a significant increase in self-esteem among adolescent girls. Surprisingly, the significant increase in self-esteem was among the pre-



adolescent girls partaking in the skill-related activities. Perhaps the results would have differed if the adolescent girls had only participated in aerobics and dance.

Flintoff and Scraton also address the “highly publicized studies presenting ‘new’ evidence about girls being turned off physical education and sport, highlighting the perceived problems this may have for their future health and well-being” (2001:5). In other words, it is important to make girls like physical education class because it is their withdrawal from it that leads to chronic obesity later in life. This seems to have the well being and health of female physical education students in mind, except that several studies have shown that at least some girls who dislike physical education remain active in sport outside school. Flintoff and Scraton found that the women in their study were “far from ‘dropping out’ of activity at reaching adolescence,” instead they found “young women being selective in when and where they ‘drop into’ activity” (2001:15). In fact, “the majority of these young women were physically active out of school in some way. Much of this involvement was in female-only settings, with friends or older female relatives” (13). Klomsten begins her research piece with the note “many girls, for example, take dance lessons, or do cheerleading, yoga, or aerobics. However, many of these activities are not affiliated members of a sport federation; thus these girls are neither considered by sport organizations nor by researches as active in sport” (2005:625). But they are active, and that is the important distinction. Perhaps schools can learn from Daley’s and Buchanan’s aerobics study, where implementing more feminine activities, like aerobics and yoga, into physical education may actually raise the level of involvement and enjoyment by young women in the classes. This could only serve to encourage more women, who perhaps never had an opportunity to try these activities outside of school, to add their numbers to the women already involved in such activities outside of school.

*Physical Education at the Identity Level*

One may question, where are the female athletes who should be working to show that women can have muscles and also retain their femininity? The problem is that the mass media also buys into the stereotypes perceived by the children in these body image studies. Messner talks about *Sports Illustrated*, which not only has few intelligent articles on female athletes, but has even fewer female athletes on its covers. “In the 123 issues of the magazine from 1998 until the Kournikova issue came out (June 2000), *Sports Illustrated* published only five covers featuring women athletes...that’s 4 percent of the covers devoted to women’s sports”(2002:102). Not only were there only five, but the pictured issue of Kournikova does not show a strong tennis player, it shows a very attractive blond posing quite femininely. Messner notes that one of the other women on the covers, soccer player Brandi Chastain, was pictured in her sports bra. Even on *Sports Illustrated* the women who grace the covers generally are not challenging the dominant social definitions of feminine beauty, they are confirming them.

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