The Relationship between Physical Activity and Belief that Kinesiology Majors should Pass a Physical Fitness Test

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Statement of the Problem: Promoting health-related physical fitness is a part of kinesiology majors’ education. Research indicates that people who are educated about fitness are more likely to be active and physically fit. This research aims to explore the relationship between physical activity and whether those who are more or less physically active are more or less likely to agree with a mandated physical fitness test. It is hypothesized that there will be a significant relationship between physical activity and consensus that kinesiology students be required to pass a physical fitness test before graduation. Methods: This study was approved by the University’s IRB and all subjects provided consent. One hundred twenty-one college students from varying majors (age = 27.3±7.9 yrs, ht = 168.6±11.1 cm, wt = 85.0±21.6 kg) participated in this descriptive study. Subjects were asked to complete a survey assessing physical activity. After providing consent, subjects were handed a survey, at which point they could decide to complete it then or to take it with them and return in later. The survey was administered at locations convenient to the subject (classrooms, offices, etc.). The survey consisted of the Godin Leisure-Time questionnaire, the Surgeon’s General question, the International Physical Activity Questionnaire (short form), seven questions that assessed exercise levels, and one yes or no question that asked “should kinesiology majors be required to pass a physical fitness test before graduation” with space to explain why or why not. Spearman’s rho was used to compute correlation coefficients and significance was set at < .05. Results: There was a significant correlation between physical activity and belief that kinesiology students should pass a physical fitness test before graduation when using the IPAQ (r107 = -.35, p = .001), but not between belief and any of the other exercise recall questions (p > .05). 77.7% of the participants responded “yes” believing that kinesiology students should be required to pass a physical fitness test. The main reasons that were given, students should lead by example and practice what they preach. Participants who responded “no” reasoned that, knowledge is enough and physical fitness testing would discriminate upon those who are disabled. Summary of Findings: The results of the study show when using the IPAQ as a means of measuring physical activity, those who believe kinesiology majors should be required to pass a physical fitness test tend to have lower physical activity levels. No relationship between physical activity and a mandated physical fitness test was evident using the other questions. This study also suggests that most subjects believe kinesiology students should be required to pass a physical fitness test.
The Relationship between Exercise and Happiness

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Statement of the Problem: While multiple studies have linked physical activity to better mental health, there are still discussions on how much physical activity and what type is required to achieve these benefits. The purpose of this study was to determine if a relationship exists between exercise and happiness. It was hypothesized there would be a significant positive relationship between exercise and happiness. Methods: This study was approved by the University IRB and all 153 subjects from kinesiology (n=44), early childhood (n=48), educational leadership (n=8), special education (n=16), criminal justice (n=34), and bilingual education (n=23) signed an informed consent before completing the questionnaires. Self-reported exercise was measured using an exercise frequency questionnaire. The Oxford Happiness questionnaire was administered in order to obtain information on current happiness state. The Pearson’s product moment correlation was used to determine the relationship between exercise frequency and happiness. Significance was set at p<.05. Results: Pearson’s product moment correlation indicated a low (r_{151}=.19) but significant (p=0.02) correlation between exercise and happiness with all subjects combined. While this correlation was not significant for males (r_{49}=.15, p=0.28), it was for females (r_{100}=.27, p=0.005). Additional analysis indicated there was no significant relationship between exercise and BMI (r_{151}=-.14, p=.08), but that happiness is significantly related to BMI (r_{151}=-.22, p=.006). Finally, there was no significant relationship between exercise and happiness among students majoring in kinesiology (r_{42}=.21 p=.16), special education (r_{14}=.26, p=.32), criminal justice (r_{32}=-.04, p=.32), and bilingual (r_{21}=-.14, p=.52), leaving early childhood (r_{46}=.39, p=.04) and educational leadership (r_{6}=.75, p=.03) as the only majors with a significant positive relationship between the two variables. Summary of Findings: This study indicates there is a low but significant positive correlation between exercise and happiness. This finding changed across gender such that greater happiness was associated with greater exercise in females, but not males. Interestingly, 32 out of 36 majors (88.8%) in early childhood and educational leadership were females whereas the remaining majors comprised of 59.8% females.
Student Perceptions: Does the P.E. Teacher Portray a Positive Role Model for Students to be Physically Active and Lead a Healthy Lifestyle?

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Physical education has seen a decline in participation and the number of obese children has remained at a constant 17% over the past decade (CDC, 2012). One contributing factor could be the image P.E. teachers portray to their students. Students who hold positive perceptions of their physical educator’s appearance may be more highly motivated to adopt and engage in healthy behaviors. According to the new NASPE Standards (2014), Standard #3 states the teacher should demonstrate the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness. Therefore, physical educators should exhibit the appearances and behaviors consistent with the lifestyle message they are responsible for teaching. When the teachers’ examples are contrary to the messages they are teaching, those messages are significantly undermined (Stelzer, 2005).

The foundation of a healthy lifestyle for children and adults comes from knowing what is expected or what is the right look of a fit person. Students should have the knowledge of the image of a physically fit person before they can achieve the look themselves. The purpose of this study was to investigate students’ perceptions of physical education teachers. A variety of questions were posed to the students regarding their perceptions of both their teachers and themselves. Upon IRB approval, students were selected from a Middle School in South Texas. Participants were asked to complete a brief questionnaire (Gold, Petrella, Angel, Ennis, & Woolley, 2008). Females were instructed to match the figure on the questionnaire to that of their female P.E. teacher, while males were asked to rate their male P.E. teacher. Body Mass Index (BMI) was determined by Fitnessgram® data previously collected by the physical education teachers. There were a total of thirty four (N=34) participants (n=12 males; n=22 females). The mean age for the students was 13.0 (M=13.03, SD=1.26 years). Significance was found for question #3 (p=.007), which asked, “Which figure looks to be the most physically fit?” A Two Tailed Paired T-test yielded df =12, 3.92 (p<.05) for females and df =21, 0.65.92 (p<.34) for males. Females accurately identified the figure of their teacher, but males did not. Mazanec & McCall (1976) found that females focus more on visual stimuli, whereas males center their attention on verbal stimuli. Perhaps males do not see the true figure of a teacher or coach, rather accept it as the way they should look. Future research should examine strategies that help students better understand the way a physically fit person should look.
**Food Stamp Challenge: How Well Do Nutrition Majors Fair on a Food Stamp Diet?**
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**Statement of the problem:** Food insecure individuals experience difficulties obtaining an adequate amount of food because of a lack of resources, such as money, transportation, or availability. In 2012, 27.4% of households with children in Texas experienced food insecurity. Households that experience food insecurity are more than likely to turn to the Supplemental Nutrition Assistance Program (SNAP; formerly known as “Food Stamps” Program). This program provides financial support to low income individuals as a way to prevent hunger and improve nutrition. On average, a SNAP participant receives $133.85 in benefits per month, which is equivalent to less than $1.50 per person, per meal. Previous research indicates that SNAP participants have a lower dietary quality compared to non-participants and are more likely to develop adverse health conditions such as metabolic syndrome, diabetes, obesity, and cardiovascular disease. The study aimed to simulate a food stamp diet for a week and to evaluate nutrient intake among a sample of primarily undergraduate nutrition students.

**Methods:** 10 students (2 males; 8 females) and a female professor participated in the Food Stamps Challenge for one week on a $25 budget. Participants on average were 25 years of age and of various race/ethnicities (3 white, 1 black, 5 Hispanic, and 2 Asian). **Procedures:** Each participant was given a $25 grocery gift card to spend at a local store. Participants individually pre-planned their allotted spending and meals for the week. Next, they went shopping and cooked and portioned their meals for the week. Dietary intake was recorded, and the nutrient intake of each meal was measured with the USDA’s Super Tracker. At the end of the week individual nutritional data were downloaded from the Super Tracker and compiled onto a spreadsheet for the entire class.

**Results:** Five groups of nutrition were measured by the USDA’s Super Tracker: minerals, vitamins, nutrients, limits, and food groups. Consumption averages that did not meet average target values were: minerals [iron (females: 11.33 mg vs. 18.00 mg), calcium (582.09 mg vs. 1000mg), potassium (2191.55 mg vs. 4700.00 mg)], vitamins [D (4.09 µg vs. 15.00 µg) & C (females: 37.89 mg vs. 75.00 mg)], nutrients [fiber: (females 22.00 g vs. 25.00 g) (males 30.50 g vs 38.00 g)], limits [total calories (1286.36 vs. 2200), # of empty calories from total calories (169.27 vs. 282.72), and all the food groups [grains (5.27 oz vs. 7.00 oz), vegetables (1.86 cups vs. 2.86 cups), fruits (0.89 cups vs. 2.00 cups), dairy (0.93 cups vs. 3.00 cups) & oils (2.09 tsp vs 6.45 tsp)].

Consumption averages that met average target values were: minerals [iron (males: 14.5 mg vs. 8.00mg), sodium (2067.55 mg vs. <2300.00 mg)], vitamins [folate (442.91 µg vs. 400.00 µg), B12 (3.33 µg vs. 2.40 µg), C (males: 131.5 mg vs. 90.00 mg), B6 (1.55 mg vs. 1.30 mg)], nutrients [carbohydrates (168.55 g vs. 130.00 g), protein (females: 60.66 g vs. 46.00 g) (males: 84.50 g vs. 56.00 g)], and limits [% of saturated fat from total calories (9% vs. 10%), cholesterol (350.00 mg vs. 300.00 mg)].

**Summary:** Nutrition and financial education among SNAP recipients, along with an increase in SNAP allotment, may decrease the number of nutrient deficiencies.
Focus of attention is widely thought to play an imperative role in both motor learning and performance. A growing body of research suggests that motor performance is superior when an external (rather than internal) focus of attention is adopted for the completion of a motor task. When an external focus of attention is utilized, the subject of concentration lies primarily on environmental or external aspects of the task, such as ball trajectory during juggling. When the performer adopts an internal focus of attention, the focus rests on interior cues, such as arm motion during juggling. Whereas an external focus of attention stresses the goal of the task, an internal focus emphasizes process rather than outcome. This study aims to determine which focus promotes better motor performance in tasks commonly used in physical fitness evaluation.

The study tested 45 male and 45 female non-athletes ages 18 to 22 in five motor skill tasks: a unipedal balance test on each leg, a hand grip dynamometer test, a sit-and-reach test, and a wall-sit test according to protocol. An ex-post facto design was followed in which one-third of the subjects were directed toward an internal focus in each of the tasks, one-third were directed toward an external focus, and one-third were not directed toward either focus (control group). Prior to each task, the subjects were given directions specific to their respective group in an attempt to influence focus of attention. Statistical analysis of the results was performed using the performance scores and demographic information of the participants. On average, subjects in the external focus group performed significantly better (p-value <.05) than both the subjects in the internal focus group and the subjects in the control group in all five of the tests. Understanding the impact of attention direction is valuable in occupations such as coaching and physical education where motor skills are taught or practiced. The results of the study suggest that proctors will be able to effectively enhance motor skill performance in a specified population when the verbal directions administered promote the adoption of an external focus of attention.
Gender Differences for Challenges and Opportunities in a Sport Management/Administrative Position

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While the emerging field of Sport Management continues to grow, challenges and opportunities still exist for females pursuing careers in this competitive and male-dominated field. The perception of women in Sport Management/Administrative positions is still subjective although females have surpassed the “traditional” role of women over the years. Research has indicated the amount and role of women in the field is slowly increasing, although females continue to be underrepresented in management positions (Cave, 2010). For a female to survive in the sport world, she needs to develop resilience, have confidence, understand the politics in sport, and be able to deal with changing situations (Leberman & Shaw, 2012). Most men are unaware of the challenges or problems females experience while holding a Sport Management/Administrative position. Not being taken seriously is an important factor preventing females from maintaining an administrative position in the Sport Management world. Research also indicates there is a lack of senior leadership who value females in a leadership role. The purpose of this study was to examine whether gender differences exist between job opportunities, challenges, and salaries in this field. Upon IRB approval, a survey was administered through SurveyMonkey. Data were analyzed using SPSS 21.0 software. Of the total respondents (N=140) who completed the questionnaire, 39 were incomplete and omitted, thus yielding (N=101; n=37 females, & n=64 males). Out of the sample, 85.1% (36.6% females), held a Ph.D. or higher. An ANOVA was conducted to determine gender differences. Job Opportunities \( F(1,100) = 14.186; p<.0001 \), Salaries \( F(1,100) = 10.368; p<.001 \), and Challenges \( F(1,100) = 3.365; p=.002 \) were the most prominent issues to emerge. Males and females view their types of job assignments as distinctly different. Even though both males and females are employed in Sport Management careers, females view their jobs as non-comparable and lower paid than their male counterparts. As sport increasingly becomes a business, women are taking on more management and executive positions (White & Kay, 2014); therefore, the support and empowerment of women should be stronger for the growth and success of females pursuing positions in what has traditionally been exclusively a man’s world. Future research should explore if this is due to males being employed in higher tiered administrative roles while females have lower tiered roles, or if there is a bias for males in the male-dominated sport areas.
Psychological Risk Factors among Food Insecure Hispanic Mothers  
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Statement of the problem: Food insecurity is the lack of access and availability of healthy foods due to insufficient financial resources. Prior research has focused on current food insecurity but has failed in evaluating how childhood experiences of food insecurity (i.e. past food insecurity) relate to various indicators of stress and depression (i.e. psychological risk factors). This study aimed to assess how parenting stress, financial stress, and depression relate to past and current exposure of food insecurity.

Methods: Hispanic mothers were recruited from a community center in (N=9): 37 years old, 83% unemployed, 77% married/cohabiting. All mothers were from Mexico and without a high school diploma.

Procedures: Past food insecurity was measured based on 7-items that assess food shortages during the adult’s childhood. Items were summed to represent greater childhood experiences with food hardship. Current food insecurity was measured using the 18-item scale developed by the USDA. Households were considered food insecure if the mother responded affirmatively to 3 or more items. Parenting stress was based on a 4-item survey describing the mother’s role as a parent. Items were summed to represent greater parenting stress. Financial stress was based on 13-items regarding exposure to financial stress (e.g., receiving food stamps, not paying the full amount of rent or mortgage). Affirmative responses are summed to represent greater financial stress. Depression was measured using the Center for Epidemiological Studies Depression Scale (20-items). Items were summed and higher scores indicate the presence of more symptomatology.

Results: Three groups were compared: mothers that never experienced food insecurity, mothers that experienced food insecurity only as a child, and mothers who experienced food insecurity as a child and currently as an adult. (Neither of the mothers experienced food insecurity solely as an adult). Mothers who experienced food insecurity as a child and as an adult reported highest levels of parenting stress; however, these levels were not significantly different from mothers who experienced food insecurity only as a child. Highest levels of financial stress were observed among mothers that faced food insecurity as a child and as an adult. Highest levels of depression symptomatology were witnessed among mothers that experienced food insecurity only as a child.

Summary: Mothers who experienced past and current food insecurity may be at risk for developing mental health disorders. Longitudinal studies are needed to understand the temporal relations between food insecurity and psychological risk factors.
Children’s Physical Activity, Body Composition, and Maternal Perceptions and Concerns of Children’s Weight Status
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Statement of the Problem: Previous research suggests that mothers do not have an accurate view of their child’s weight status (Binkin et al., 2013; Parkinson et al., 2011). This deviation could be based on mothers perceiving that because their child is engaged in physical activity (PA), they must be at a lower weight status and consequently are less concerned about their child becoming overweight. The purpose of this study is to compare maternal reports of children’s PA to mothers’ perception and concern for her child’s weight status. PA was also compared to children’s body mass index and percent body fat.

Methods: Elementary children (n=55) [mean age=8.47, (SD=1.65)] and their mothers [mean age=38.50, (SD=6.97)] were recruited from a local school. Mothers were primarily married (66%), with a bachelor’s degree or higher (60%), of various income statuses (25%<=$44,999, 35% $45,000-$74,999, 40%>$75,000), and 76% overweight/obese. Children (53% female; 47% male) were of various ethnicities (15% white, 36% black, 33% Hispanic, 16% other).

Procedures: Mothers completed a survey about her perception of her child’s current weight status, concern for her child’s future weight status, a physical activity questionnaire (PAQ), and demographics. Mother height and weight were measured using a standard scale and stadiometer to compute body mass index. Children’s percent body fat was calculated utilizing a dual energy x-ray absorptiometry. Averages were calculated for the main variables and mean differences were calculated using a chi-square tests.

Results: PAQ scores did not differ among mothers who were concerned with their child becoming overweight [Mean PAQ = 3.00 (SD= 0.76)] compared to unconcerned mothers [Mean PAQ = 2.98 (SD= 0.70)]. PAQ scores also did not differ among mothers who perceived their child to be overweight or obese [Mean PAQ = 2.92 (SD= 0.67)] compared to mothers who perceived their child to be “just about right” [Mean PAQ = 3.05 (SD= 0.79)]. Although children classified as overweight/obese [Mean PAQ = 3.12 (SD= 0.67)] had higher PAQ scores compared to normal weight children [Mean PAQ = 2.99 (SD= 0.67)], PA levels were not significantly different from each other. Children classified as overweight or obese [Mean PAQ = 2.99 (SD= 0.71)] did not differ in PA compared to children classified as healthy fat [Mean PAQ = 2.99 (SD= 0.72)].

Summary: Based on the current findings, PA is not a good indicator of body composition or maternal perceptions and concerns of children’s weight status. Expanding the study to include measures of PA intensity and dietary intake may assist in understanding the above relationship.
Fun & Fit4Life (FF4L) is a service-learning program that provides innovative and creative experiences in physical activity, college readiness, and character development activities to children from low-income households. Under the guidance of PETE faculty members, the FF4L two week summer camp enables graduate Physical Education Teacher Education (PETE) students the opportunity to administer the program, and undergraduate PETE students opportunities to develop and instruct daily physical activity lessons to the campers. Counselors from Texas State University’s Center for P-16 Initiatives provides college readiness activities to the campers throughout the program.

Since 2010 the FF4L summer camp has enabled over 250 children (ages 5-12) living in low-income households in the San Marcos vicinity participation in the camp at no cost to the children’s families. In addition, approximately 80 undergraduate and 20 graduate PETE students have benefitted from participation in authentic physical education teaching experiences. Anecdotal reports (Campers and Caregiver comments, PETE students reflective narratives) suggest that participation in FF4L promotes campers participation in daily physical activity, teaches campers critical components of character development, introduces campers to a college environment, and provides valuable hands-on experience for PETE students. However, to date, what is lacking is both quantitative and qualitative data examining the program goals.

This investigation was designed to systematically assess FF4L program goals encompassing camper’s participation in physical activity and camper’s acquisition of knowledge in regards to character development. Quantitatively, physical activity levels were measured using Acti-Life pedometers. Qualitative data was used to assess the camper’s daily journals entries, which were kept by the students to measure their understanding of the principles (i.e., cooperation, participation, and respect) of FF4L program’s Character Education curriculum. The FF4L summer camp was held during the last two weeks in June (3 days a week, 3 hours a day). Daily curriculum included goal setting, participation in a 45 minute physical activity lesson, a college readiness lesson, healthy snack time/break, participation in a second 45 minute physical activity lesson, and reflection time.

Participants consisted of 49 campers aged 5-12 (average age 8 years; 21 girls; 28 boys). Eighteen undergraduate PETE students taught Physical Education lessons, and the camp was administered by five PETE graduate students. Trained graduate students attached and removed the pedometers at the beginning and end of each camp session. Pedometer data demonstrated the following: 1) camper’s average steps per day was 4,722; and boys maintained higher step counts than girls throughout the camp. Qualitative analysis of the camper’s journal entries suggested that regardless of age and gender campers’ increased knowledge, understanding, and application of the FF4L cornerstone character building principles of cooperation, participation, and respect.

Based on these results the FF4L program will work to increase camper’s participation in daily physical activity. Previous research suggests students should average 2,000 steps per 30 minutes of physical activity (Brusseau, Kulinna, Tudor-Locke, et al., 2011). Systematically assessing PETE student’s experiences in the FF4L program may also provide insight into effective strategies for designing developmentally appropriate physical education lessons to increase camper’s participation in physical activity. Moreover, assessing the relationship between PETE student’s participation in FF4L and potential gains in pedagogical content knowledge and self-efficacy for teaching should be examined.
An Examination of Physical Education Preservice Teachers’ Cognitive and Metacognitive Learning Strategies
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Background/Purpose: Self-regulated learning (SRL) refers to the self-directed process whereby students manage their motivation, cognition, and behavior in pursuit of learning goals (Pintrich, 2000; Zimmerman, 2000). Self-regulated learners tend to display personal initiative, perseverance, and adaptive skills to proactively acquire academic achievement (Zimmerman, 2008). To educate preservice teachers to become self-regulated learners, faculty must have knowledge about SRL (Ewijk & Werf, 2012), particularly about such core learning strategies as rehearsal, elaboration, organization, critical thinking, and metacognition. This study examined a group of preservice teachers’ use of SRL strategies and if their gender and class classification had impact on their uses of the learning strategies.

Method: Thirty nine undergraduate students (Female = 24, Male = 15; M age = 21.31, SD = 1.62; Caucasian = 84.6%, African-American = 15.4%; and sophomore = 12.8%, junior = 28.0%, senior = 59.0%) from a physical education teacher education (PETE) program in a major Texas university volunteered for the study. The previously validated Motivated Strategies of Learning Questionnaire (MSLQ; Pintrich, Smith, Garcia, & Mckeachie, 1991) assessed the five learning strategies on a 7-point Likert scale.

Analysis/Results: Data were analyzed using SPSS 22.0. Internal consistency estimates resulted in acceptable Cronbach’s α values (.55 - .82). Descriptive statistics showed the mean values of the learning strategies ranged from 3.68 to 4.75. Independent t tests found no statistical significant differences in SRL strategy uses between two gender groups. One-way AVONVAs revealed a marginal statistical significance between class classification in elaboration \((F(2, 36) = 3.22, p = .05)\) and a statistical significance in critical thinking \((F(2, 36) = 7.58, p < .01)\). Post-hoc tests found sophomore differed significantly from junior in elaboration \((p < .05, 95\% [.23, 3.09])\), while there was no statistical significant difference between sophomore and senior and between junior and senior. Sophomore differed significantly from junior \((p < .01, 95\% [.88, 3.89])\) and senior \((p < .05, 95\% [.12, 2.87])\) on critical thinking, while junior and senior had no significant difference.

Conclusion/Discussion: The physical education preservice teachers reported moderate uses of the SRL strategies (Rahimi, 2004). Contrary to previous research (e.g., Bembenutty, 2007; Yusri, Rahimi, Shah, & Wah, 2011), female and male students did not differ in the learning strategy uses. That might be due to the small sample size in this study. Sophomore students utilized elaboration and critical thinking more frequently than junior and senior students. This result might be affected by the PETE program’s characteristics such as curricular, instructional, and environmental factors. Overall, the results suggest more instructions of SRL strategies and call for additional studies. Further research should increase the sample size to increase generalizability.
The Mediating Role of Mastery Approach Goal between Instructor Support and Student Intrinsic Motivation
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Background/Purpose: Student intrinsic motivation is both a desired educational and a motivational outcome in physical education/physical activity. Self-determination theory research (Ryan & Deci, 2000) reveals that perceived instructor support for autonomy, competence, and relatedness can foster intrinsic motivation for learning. Meanwhile, mastery goals are found to be a significant correlate of student motivational outcomes (e.g., Ryan & Deci, 2000; Xiang, McBride, & Bruene, 2006). Research evidence also indicates teacher support can lead students to endorse mastery approach goals (e.g., Diseth, Danielsen, & Samdal, 2012). Considered collectively, it seems to suggest that mastery approach goals may mediate the relationship between perceived instructor support and student intrinsic motivation. The current study examines such mediation among a group of at-risk boys in a summer sports camp.

Method: Participants were 87 at-risk boys, aged 11-15 ($M = 12.95$, $SD = 1.21$), enrolled in a 3-week summer sports camp in Southwest Texas. The variables were assessed with previously validated questionnaires. Three items from the Achievement Goal Questionnaire – Physical Education (AGQ-PE; Guan, McBride, & Xiang, 2007) assessed mastery approach goal, four items from the Behavioral Regulation in Exercise Questionnaire (BREQ-2; Markland & Tobin, 2004) assessed intrinsic motivation, and the adapted Interpersonal Behavior Scale (IBS; Shen, Li, Sun, & Rukavina, 2010) assessed perceived instructor support for autonomy, competence, and relatedness.

Analysis/Results: Internal consistency estimates and descriptive statistics were calculated using SPSS 22.0. Regression and mediation effect analyses were conducted using Mplus 7.0 (Muthen & Muthen, 1998-2012). Perceived instructor support for autonomy ($\beta = -.25$, $t = -1.75$, $p > .05$) and relatedness ($\beta = -.48$, $t = -.46$, $p > .05$) were not statistically significantly related to the dependent variable and mediator (Baron & Kenny, 1986), respectively. Mediation effect analysis with bootstrapping revealed a statistical significant indirect effect ($\gamma = .18$, $p < .05$, 95% CI [.03, .34]) from perceived instructor support for competence to intrinsic motivation via mastery approach goal, a statistical significant total effect ($\gamma = .39$, $p < .01$, 99% CI [.09, .69]), and a statistical non-significant direct effect ($\gamma = .21$, $p > .05$, 95% CI [-.08, .50]).

Conclusion/Discussion: The mastery approach goal had a full medication effect on the relationship between perceived instructor support for competence and student intrinsic motivation. This finding suggests that physical activity instructors should promote mastery approach goals while attempting to support students’ need for autonomy, competence, and relatedness. Doing so can increase students’ intrinsic motivation. Further research can increase the generalizability by increasing sample size, including samples from all socioeconomic backgrounds and both sexes.
Effect of Fitness Classes on Enjoyment of Physical Activity Participation

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**Background:** Empirical study reported a trend of weight gaining over four-year span among college students (Gropper, Simmons, Connell, & Ulrich, 2012). One of the reasons of weight gaining is the lack of physical activity (PA). Interventions of PA usually focused on improving fitness-related knowledge and skills, and psychological benefits are usually overlooked. Limited studies have examined the change of enjoyment of PA participation after interventions. This study, to this end, was aimed to examine the effect of a college fitness class on students’ enjoyment about participating in PA.

**Method:** Fifty-four college students from a large state university participated in this study. Participants were recruited from an undergraduate fitness class, in which they were introduced to not only knowledge of fitness and nutrition, but also goal setting strategies incorporating personal PA interests and preference. In addition, all participants were required by the course to attend a weekly 45-minute PA session, which was designed to provide positive PA experiences and enjoyment in various activities such as aquatic activities, Zumba dance, yoga, basketball, soccer, and jump rope. A pre-validated questionnaire of Physical Activity Enjoyment Scale (Kendzierski, & DeCarlo, 1991) was completed by participants at the beginning and the end of a 12-week semester.

**Results:** Paired sample $t$-test was performed to test the pretest-posttest change of enjoyment over the semester. A significant increase was found ($t_{53} = 1.69, p = .05$). In order to investigate gender and racial difference in the change of enjoyment, mixed-design ANOVA was used. Gender and ethnicity were entered in the analysis as between-subject variables. No significant gender or racial difference in pre-post change in enjoyment of PA participation was found.

**Conclusion:** The 12-week college fitness class successfully increased the enjoyment of PA participation among college students. Students of both genders and all ethnicities did not respond to the intervention differently. Future research should be done to identify the particular elements in PA interventions that can enhance PA participation enjoyment.
As the landscape of collegiate sport in this nation continues to develop and change, numerous forces and factors including economic considerations (i.e. conference realignments, changes in championship structures, etc.), along with legal and legislative actions (i.e. Title IX, student-athlete labor status, etc.), appear to be impacting decisions within each institution. One of these major changes is the growing trend of discontinuing selected varsity athletic teams. According to the NCAA, a total of 125 Division I universities eliminated one or more athletic programs over an eight year span from 2001-02 to 2008-09 (Marsh, 2012). Although each individual school has its own distinct reasoning for cutting an athletic team, there has been little noted comprehensive research pertaining to the publicly-stated rationale for such cuts. The purpose of this study was to document and describe the various rationales presented to the public related to athletic team elimination through a content analysis process.

Method: Following the primary content analysis elements outlined by Krippendorff (2004), an exhaustive electronic search of media and institutional coverage of the athletic team cuts was undertaken in order to assess the stated rationale for these athletic team eliminations. Once sources were obtained, they were reviewed and categorized according to key words and themes related to the sport elimination. Coding was completed by a single primary researcher.

Results: Of the 125 potential programs for inclusion a total of 49 (39.2%) yielded recoverable media or institutional coverage of the cuts including specific mentioning of rationale. A general trend of increasing sport elimination was noted with three institutions cutting teams in both 2001-02 and 2002-03, five institutions in 2003-04, four institutions in 2004-05, six institutions in 2005-06, seven institutions in 2006-07, eight institutions in 2007-08, and 13 institutions in 2008-09. These 49 institutions accounted for the elimination of 95 teams. While the majority of schools (53%) cut only one team, multiple team cuts within a single university were not uncommon including: 29% cutting two teams, 10% cutting three teams, 4% cutting five teams, 2% cutting six teams and 2% cutting 10 teams. An analysis of repetitive themes within the content provided three primary reasons for the cuts including: efforts to reduce athletics spending (44.9%), the reallocation of athletics resources (42.9%), and Title IX compliance (18.4%). Additionally, five secondary reasons were identified including: lack or loss of a conference to compete in (10.2%), poor academic performance of the team (4.1%), lack of competitiveness of the team (4.1%), lack of facilities for the team (4.1%), and poor student-athletes experiences on the team (2.0%).

Conclusion: The elimination of an athletic team at the Division I level creates significant implications on the individual school and even greater implications upon the college sport landscape when considering the growing number of program cuts. It is important to not only identify the rationales behind these cuts but also to critically examine these stated rationales.
Bullying of Students with Disabilities in Physical Education: A Bibliometric Analysis (1988 to 2013)

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The purpose of the bibliometric study was to determine the quantity and quality of research on bullying of students with disabilities in physical education through a trend analysis. Using this research method, the initial search related to the key terms of “bullying” and “physical education” which resulted in 3,146 articles in four databases (EBSCOhost, ProQuest, Scopus, and Science Direct) from 1988 to 2013. Of the 3,146 articles, 223 (14%) articles were related to bullying students with disabilities in physical education. Eight articles met the selection criteria to further evaluate the levels of quality and evidence using Strength of Recommendation Taxonomy (SORT, 2004). Based on the SORT, eight articles (4%) out of 223 articles were rated low because of the quality of study and level of evidences. In addition, seven (88%) were rated as having a low quality of the research design and five (63%) with a low level of evidence to support the finding for 3 related to SORT. It was concluded that there is little research in the literature (1988-2013) and of the 8 used questionnaires or descriptive research designs, instead of using a highly evidence-based research design.
Path Analysis of Freshmen’s Physical Activity Levels

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Statement of the problem

The college years are crucial in shaping college student physical activity (PA) behaviors. To date, researchers have reported PA decreases during the first two years of college. Examining direct and indirect factors that affect students’ PA could help us better understand college students’ PA behaviors and provide baseline data for promoting PA on campus.

Methods

Freshmen (n=67) enrolled in a conceptual physical education (CPE) class in a Southern University participated in the study with 76.1% females. The mean age of the participants was 18.03 (SD = 5.2).

Procedures

Participants reported their PA through Weekly Leisure Time Exercise Questionnaire. Student total PA was calculated using the metabolic equivalent (MET) score. Data concerning BMI, perceived PA environment, perceived PA benefits, PA enjoyment, and self-efficacy were collected using prevalidated surveys. Path analysis was used to test the predictive and mediational role of above variables on total PA.

Results

Results revealed a good model fit with normed fit index (NFI) of .914, comparative fit index (CFI) of 1 and root mean square error of approximation (RMSEA) of 0. Self-efficacy affected total PA directly and indirectly (p<.05). Perceived PA environment and PA enjoyment mediated the effects of self-efficacy on total PA (p<.05). Both PA enjoyment and perceived benefits had indirect effects on total PA.

Conclusions

The results of the current study were in line with previous studies on the topic that self-efficacy was a critical factor to student total PA. Future PA interventions need to take into consideration of enjoyment and perceived PA environment as they mediated total PA indirectly.
Effectiveness of Rotator Discs on Hip External Rotation in Ballet Movement Sequences
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It has been observed that university-level dancers have difficulty maintaining external rotation when executing dance movements. Maintenance of external rotation at the hip joint is essential in securing a dancer’s safety and can be the cause of misalignments of the knees and ankles providing an opportunity for serious injury to occur. The purpose of this study was to investigate the effectiveness of rotation discs using a consistent warm-up series to determine if students would gain more strength and consistency in their hip external rotation range of motion during complicated dance phrases (n=16). Baseline external rotation was calculated using bilateral active range of motion (AROM) and passive range of motion (PROM) for hip external rotation (ER) in prone using standardized goniometric procedures, difference measurements of hip ER AROM with and without rotator discs, bilateral hip ER and IR isometric strength in sitting by standardized manual muscle testing procedures, and a functional dance hip ER movement in three movement phases: adagio, grande allegro, and petite allegro. Dancers were formally trained on a series of eleven rotation disc exercises performed three times a week for 2 weeks in a dance technique classes. Dancers then performed the exercises three times a week for another 12 weeks. Participants were retested every four weeks using the AROM, PROM, rotator disc test, ER and IR strength test, and the functional movement tests using a rubric. Significant (P<0.001) mean improvement existed between baseline and the three subsequent trials for the movement phrases (adagio, petit allegro and grande allegro). Comparisons revealed significant increased adagio, petit allegro and grande allegro scores across all testing. Left ER AROM, left ER PROM, right ER AROM, right ER PROM, and right IR PROM showed significant changes over 12 weeks. Left ER and right ER manual muscle test also showed significant changes over 12 weeks. No significant changes were shown for left IR AROM, left IR PROM, or right IR AROM or for AROM differences utilizing the protractor test with and without the rotator discs. While training effectiveness varied, results show this Pilates regimen on rotator discs was effective in increasing functional external rotation in university-level dancers.
On January 24, 2013 the Office for Civil Rights (OCR) within the U.S. Department of Education, issued a Dear Colleague Letter clarifying school’s obligations under the Rehabilitation Act of 1973 to provide extracurricular athletic opportunities for students with disabilities (SWD). Based on the Government Accountability Office’s (GAO) findings a Dear Colleague Letter encouraged schools to work proactively to include SWD in sports programs, indicating schools must provide SWD equal opportunity to participate in club, intramural and interscholastic afterschool athletics and sports. School districts could not operate sports programs or activities on the basis of generalizations, assumptions, prejudices, or stereotypes about disabilities; instead they must make an individualized inquiry (i.e., assess, skill test) which would allow a SWD the opportunity to participate and become a member of a school sponsored sport team. 

**Statement of the problem** – Identifying teachers’ and coaches’ awareness and knowledge of these guidelines under the Rehabilitation Act is critical to the success and enactment of interscholastic sports for SWD. Without an assessment of awareness and knowledge, how will Texas school districts determine implementation of extracurricular sports for SWD. 

**Purpose**-Therefore the purpose of this study was to identify the current awareness and knowledge of TAHPERD general and adapted physical education teachers regarding the Dear Colleague letter and the enactment of interscholastic sports for SWD. 

**Methods** – A survey was developed and disseminated to members of TAHPERD in either of two formats (a) electronic using Psychdata (URL link to webpage) or (b) paper pencil at the 2013 TAHPERD Conference. 

**Procedures** – The survey was developed in collaboration with the Psychdata staff within TWU-Denton. TAHPERD leadership agreed to disseminate the survey via webpage link. Measures of central tendencies were used to report participant demographics, familiarity with the GAO Report and Dear Colleague Letter and knowledge of interscholastic sports for SWD. In addition items of support, deterrents, and solutions for initiating interscholastic sports for SWD were reported. 

**Results** – Surveys (n=115) were returned between March and September 2013; 95 were evaluated as appropriate resulting in 83% reported; 

- **Demographics**: Teaching Gen PE (72%), additional roles to Gen PE (48% coach), SWD in your Gen PE class (89%), only teach APE (19%). Data according to APE and Gen PE will be presented on the poster. 

<table>
<thead>
<tr>
<th>Familiar with:</th>
<th>GAO Report</th>
<th>Dear Colleague Letter</th>
<th>Sports for SWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>16.5%</td>
<td>7.7%</td>
<td>54%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>41.8%</td>
<td>37.4%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Not at all</td>
<td>41.8%</td>
<td>54.9%</td>
<td>11.5%</td>
</tr>
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</table>

| Have interscholastic sports for SWD at your school? | Yes 19.5% | No 80.5% | Support interscholastic SWD sports? | Yes 91.9% | No 8.1% |

**Would you assist with an interscholastic sports for SWD**  Yes – 64%  No – 36% 

**Overall Deterrents to sports programs for SWD (ranked 1 greatest to 6 least)** 
- Budget (1.8), Facilities (3.3), Travel (3.5), Coaches (3.8), Scheduling (4.1), Recruiting (4.5)  

**Overall Solutions (ranked 1 best to 6 least)** 
- Use of Partners PE (3), Teammates who are non-disabled (3.1), Local sponsors (3.4), Regional teams (3.5), Request <1% of athletic budget (3.8), and Use out of season referees (4.5). 

**Summary** – Regarding only those teachers that replied, it would appear the majority of these teachers are not familiar with government guidelines, do not have school based sports for SWD, consider budget issues to the greatest deterrent to implementation but the 5th best solution, strongly support such school based programs for SWD, and see themselves becoming involved.
College students’ perceptions of the importance of selected health promotion behaviors.

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Previous studies of college students’ health perceptions have often focused on specific health concerns (i.e., stress management, substance use, and sexuality) as well as student cohorts (nursing students, athletes, teacher education majors, etc.). Studies have occasionally examined broader cross-sections of college students but even the largest national studies focus attention on risky behaviors, which may inform only a portion of the college student health profile. While gender and ethnicity may influence health choices, university environment has been little studied. The purpose of this study was to explore the perceptions of selected health promotion behaviors by college students attending a southwestern, faith-based university. Subjects (n=34) from two general education “Principles of Fitness and Wellness” classes completed the Health Beliefs, Judgments, and Behaviors (HeBeJeBe) Scale twice during spring 2014, at the beginning and conclusion of their course. The HeBeJeBe Scale contains 40 health promotion behaviors and is drawn from HP2020 goals. As this was an exploratory study, the analysis by Spearman rho (0.8201) indicated a significant relationship (p<.000001) between male and female responses following the course. Using the same technique, data for males yielded a rho = 0.7745 and for females a rho = 0.9025, (both p<.00001) indicating male perceptions had more variance over the course of the semester than did females. Males attributed more importance to 26 of the 40 behaviors following the semester course; females did so on 29 of the 40 items. Upon course entry, males considered eliminating cigarette usage, avoiding illegal drugs, and refraining from drinking and driving as the most important health-enhancing practices; following the course, males considered protection from sexually-acquired disease, refraining from drinking while driving, brushing/flossing regularly, and eliminating cigarette consumption as the top four health promotion behaviors. Females, upon entering the course, considered protecting against sexually-acquired disease, eliminating cigarette usage, and wearing seat belts as most important; upon course completion females considered eliminating cigarette use, eliminating smokeless tobacco use, refraining from drinking while driving, and regular brushing/flossing as their four most important practices. Refraining from high-risk sports, receiving an annual flu shot, and taking vitamin supplements were seen as least important by males; females reported annual flu shots, refraining from high-risk sports/activity, and regular blood pressure monitoring as least important. Both genders reported higher importance attributed to aerobic exercise, engagement in prayer/meditation, and knowledge of family history following the course, which were all course emphases. That brushing/flossing teeth exceeded wearing seat belts in importance to college student health is of interest. Conclusions from this exploratory study suggest that (1) males and females hold similar beliefs about what is important to their health but it is unclear if that perception is based on personal or social motivations; (2) tobacco use, driving under the influence, and (surprisingly) oral health were the leading priorities for college student health promotion; and (3) health priorities among students at a faith-based university vary from their public institution counterparts as noted in the literature.
Swimming Pool Accessibility: An Analysis of Texas Collegiate and Not-for-Profit Fitness Center Facilities
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The swimming pool is a vital component within a comprehensive fitness center, and it is important that these aquatic facilities are accessible to all users. This study assessed swimming pool accessibility according to guidelines of the Americans with Disabilities Act (ADA) based upon a standardized site survey tool.

Method: Site visits were made to 28 facilities in the state of Texas including college and universities ($n = 10$) and not-for-profit fitness centers ($n = 18$). Direct assessment of the swimming pool facilities was conducted via the swimming pools section of the Accessibility Instrument Measuring Fitness and Recreation Environments (AIMFREE) Fitness Center and Swimming Pool Accessibility Professional Version survey. The 37 items from the survey instrument were related to the physical aspects of the pool facility. Individual item analyses and a scaled summary score were determined based upon the general scoring procedures already established for the survey. All physical measurements were made via Leica DISTO laser measurers, and all statistical analyses were conducted using SPSS version 20.0 software with an alpha level of .05 established a priori.

Results: ANOVA analyses of the scaled summary accessibility scores showed no significant differences between means of the collegiate ($M = 48.9$) and the not-for-profit ($M = 43.3$) pool facilities, $F(1,26) = 3.24, p = .084$. However, chi square survey item analyses indicated two areas of significant differences. While 100\% of the collegiate facilities had a detectable warning texture surrounding the pool, only 56\% of the not-for-profit pools had warning textures, $\chi^2 = 6.22, p = .013$. There collegiate pools provided significantly less lifeguard availability (80\%) compared to the not-for-profit pools (100\%), $\chi^2 = 3.88, p = .049$. Additionally, a rank order listing of pool accessibility survey item scores noted three items tied for the top rank including: providing a 3 foot wide clear path to and around the pool, providing a 5 foot by 5 foot clear space adjacent to each accessible entry, and providing visible pool depth markers from outside the pool. The three survey areas with the lowest accessibility rankings included: transfer wall specifications, pool ramp specifications, and pool lift specifications.

Conclusion: While major differences between swimming pools at the collegiate and public not-for-profit settings were minimal, there were multiple areas noted where accessibility could be improved. As the larger pools in these settings need multiple mode of access, the low ranking for meeting the detailed specifications for the pool lifts, ramps, and transfer walls indicate that pool administrators and planners should seek to enhance these access modes.
Adherence of a multiple recess intervention and its impact on attentional focus in children

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Much of the research has stated that children are not moving enough throughout the school day, therefore they become less attentive and focused. No known study has examined multiple recesses daily for a four month period in the schools. The purpose of this study was to examine whether attentional focus and off-task behaviors changed in K and 1 children after implementing an intervention of three 15-minute recess periods throughout the school day for four months. Kindergarten (n=61) and first grade (n=62) students from a Fort Worth, TX area private school participated in a pilot study during the 2013-2014 school year. Baseline data and teacher training were executed in the Fall, followed by implementation of the intervention (three 15-minute recess periods daily) beginning in January and post data collection in May. Teachers (n=6) completed weekly recordings of number of recess they attended daily. Two assessments were used to measure the impact of the intervention on classroom off-task behaviors and listening skills. The Listening Comprehension Curriculum Measurement assessed the student’s ability to actively listen and was measured by an experienced diagnostician one time per child in the Fall and Spring. A classroom behavior observation tool was used to measure the frequency of off-task behaviors (moving, stationary, vocal, or low tone) in a total of six k-1 classrooms for three observations per classroom pre and post times. This totaled approximately 18 sessions per semester. Three trained researcher members were assigned to observe in each classroom and were responsible for observing approximately six students per class over a 40 minute segment. All students per class were observed for each designated time period. Overall adherence for the recess intervention was approximately 90%. 1st grade teachers had a higher adherence with 93% while k teachers attended 86%. The highest month for adherence was May with 95%. An ANOVA revealed that overall listening scores (n=123) significantly improved (p<.01) from pre (M=.71, SD=.15) to post-test (M=.93, SD=.08). No significant differences were found for gender or grade level. Both groups significantly changed from pre to post times. A MANOVA revealed that incidences of all types of off-task behaviors were significantly lower (p<.05) at the post-test when compared to pre-test. Self-injurious, disruptive, and aggressive behaviors also decreased, but represented a minimal proportion of total observed behaviors (less than 1% pre or post-test). Recess appears to have significant impacts on student’s abilities to focus in the classroom and perform on listening tasks. Furthermore, teachers were able to adhere to the intervention even with the encroachment into curriculum time. These results support previous research that physical activity and especially unstructured outdoor play can enhance student’s performance in the classroom. Recess is an undervalued tool in the improvement of children’s academic performance and overall well-being.