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Consumers Motivations and Perceptions at a 5K Race
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Statement of Problem
Currently there is a lack of research focusing consumer perceptions of 5K events. Therefore, the purpose of this abstract is to better understand why people attend 5K events and what they look for in these events. Specifically we seek to address the following research questions: 1) What are the primary motivators for 5K runners? 2) Do motivations differ based on runner characteristics? 3) What are 5K attendees’ perceptions of the event?

Method
The method of data collection occurred at a 5K race in conjunction with a Homecoming weekend at a small southwestern private university. This race included subjects from the community, students at the university, faculty and staff, and alumni. Students enrolled in a research methods class conducted face-to-face interviews that lasted 5 to 10 minutes. Our final sample size was 81 subjects (included race participants and spectators).

Procedures
The students approached subjects before, during, and after the race and asked questions related to their perceptions of spending, motivations to participate, and perceptions of the event. The motivations scale was adopted from the Motivation of Marathoners Scale (MOMS) (Doppelmayr & Molkenthin, 2004). The price sensitivity scale was based on Lichtenstein, Bloch, & Black’s (1988) work. A purchase intentions scale came from Zeithaml, Berry, & Parasuraman (1996). In addition, a satisfaction scale was adapted from Greenwell (2007). Open ended questions related to consumer perceptions were developed from the current recreation and sport management literature. Finally, demographics were taken from participants. Basic descriptive statistics were used. In addition, MANOVA was used to compare difference between groups.

Results
Motivations to run the 5K focused primarily on reasons to improve health (M = 6.37), for the fun of running the 5K (M = 6.23), and pushing themselves (M = 6.15). To improve self-esteem was higher rated for the 31-60 year olds versus college students, Wilks’ λ = .574, F (8, 68) = 2.72, p = .012, F (4, 35) = 8.821, p = .004, partial η² = .343. Those that were running with someone else ran to make their life more purposeful, rather than those that ran alone Wilks’ λ = .729, F (2, 37) = 6.885, p = .003, F (1, 38) = 13.881, p = .001, partial η² = .268. Men were more likely to compete with others than women, F (1, 38) = 12.854, p = .01, partial η² = .253. In response to an open ended question, the majority of runner stated that they ran to “finish” or “to compete.”

Subjects that responded to the consumer perceptions questions were less price sensitive (M = 3.84), had high purchase intentions (M= 6.44), and high satisfaction with the event (M = 6.52). The consumers had little price sensitivity for the Cru 5K, but had very strong purchase intentions and a very high level of satisfaction. Finally, word-of-mouth was only effective in increasing participation by 38.75% of subjects.

Summary of Findings
We found that many subjects ran for social and health reasons rather than competition. However, competition was strong in the younger males, usually those in college. The price of the entry fee was not a big concern for the runners. This suggests that if the runners are highly identified with the race promoting organization, price is not a big concern.
Risk Taking Effects of Exercise
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Abstract Text:
Background/Purpose:
Research has shown that exercise increases levels of dopamine in certain sub-cortical brain regions (Dishman & O’Conner, 2009; Read & Brown, 2003). Dishman and O’Conner (2009) state that one explanation for this is the release of endorphins during exercise will cause an increase in dopamine. Increased dopamine activity in the brain has been linked to increased risk-taking. Studies have shown a decrease in cravings for alcohol and tobacco after a bout of exercise (Taylor, Ussher, & Faulkner, 2007; Ussher, Sampuran, Doshi, West & Drummond, 2004). Black, Hochman, & Rosen conducted a study to evaluate exercise’s effect on risk-taking behavior in adolescent male athletes (2013). Their study indicates that exercise’s attenuating effects on substance use does not extend to other risk taking behaviors. The purpose of this study was to determine if an increase in risk-taking is apparent in male and female athletes and non-athletes after strenuous exercise.

Method:
In order to evaluate the effect of exercise on risk-taking behaviors in a college population of athletes and non-athletes, the current study followed the protocol establish by Black, Hochman, and Rosen (2013) but studied 10 athletes and 10 non-athletes in a university setting. Exercise was defined as participation in a bout of intense, noncompetitive cardiovascular activity.

Analysis/Results:
ANCOVA’s showed that there was significant difference between athletes (m=24.92) and non-athletes (m=42.76), p<.009 on the risk behavior test . Post hoc tests showed that for non-athletes there was also a significant difference for those that exercise immediately before the risk behavior test, p=.003. This was not the case with athletes, p =.683. Results indicate that while exercise increased risk-taking in the non-athlete subjects, it did not have an effect on the athlete population

Conclusions:
This study is inconsistent with the findings from Black, Hochman, & Rosen, 2013 and may suggest that exercise impacts risk-taking behaviors differently in athletes during and after competition. Since Black, Hochman, & Rosen used a competitive tennis match as the exercise intervention (2013) and this study used strenuous exercise, the complex nature of competition could explain an increase in risk-taking behavior as a competitive activity will inherently involve risk taking to win a match; yet non-athletes should be studied in a competitive activity to be certain.
The purpose of this class research project was to determine the attitudes of the participants towards wheelchair and disability sports, and to determine if participating in a wheelchair sports event will alter their initial attitudes. Participants (N=21), consisting mostly of undergraduates currently enrolled at Texas Woman’s University (TWU), received a pre-survey before participation in the Glow-n-Dark Wheelchair Basketball Hoops for Heart event.

The participants then participated in a wheelchair basketball game and activities in the dark. The TWU gym was utilized for the event. The basketball court lines and rims were equipped with reflective tape and glow in the dark basketballs were purchased. Participants were given instructions of how to play wheelchair basketball and how to use the wheelchairs before the games begin. Then the participants were divided into several different teams in order to play two games of wheelchair basketball. One team won the grand prize and several individuals were given individual prizes. After the event participants filled out a post-survey.

Most participants saw themselves as “same” as an individual with a disability in the pre-survey. This differed from the post-survey results, where only half of the responders saw themselves as the “same”. Future research should address why is the wheelchair basketball event changing their attitude, is this a positive change or a negative change in their attitude; and do participants see individuals with disabilities as heroes or as someone better than themselves?
Developing and Executing an Event and Research

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The purpose of this class project was twofold (a) to learn how to develop and execute a physical activity event and (b) to conduct a class research project (topic of class research project was to determine the stress management tools that undergraduate and graduate students use to manage stress levels during the semester). Participants (N=44) consisted mostly of undergraduate and graduate students currently enrolled at Texas Woman’s University, ranged in age from 18 to 32 years old with both genders represented (F=30; M=13).

Participants received a pre-survey before participation in the physical activity event. The Dive and a Movie event included free food, a movie playing, and physical activities in the indoor pool, along with a Hawaiian Luau theme. The event was intended to allow students to relax, step away from their busy stressful student lives, and enjoy a night full of “stressless” fun. Qualitative and Quantitative, mixed method, was used to analyze the survey data. The demographic information and the close ended questions were calculated. The research team separately qualitatively analysis of the three open ended questions then, the research team came to consciences on the main themes for each question.

Most participants in the past twelve months have dealt with one or more stressful life event(s). After calculating the participant’s stress scores it was determined that 41% of the participants had a 1-in-3-chance of a serious health change, 23% had a 50-50 chance of a serious health change, and 15% were at high health risk levels. When participants were asked if they use exercise as a stress management tool, 86% answered yes. The top eight types of exercise used to get rid of stress were: cardio, running, swimming, lifting weights, indoor soccer, basketball, exercise bike, and leg exercises. Future research would define the terms used in the survey better and answers to the following questions: what do you USE to get rid of stress and what do you DO to get rid of stress?
Body Image and the Media: Do Age and Gender Matter?

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The influence of media images on body esteem is a complex issue (Levine & Smolak, 1996). Research indicates body dissatisfaction can be a mediator of the effects of sociocultural pressures and the exposure of ideal body images portrayed in the media (Stice et al., 1994). However, not all media has the same effects on body image (Tiggemann, 2003). This study examined how the media (television and magazines) affected an individual’s body image perception with increased age. Following IRB approval, participants were selected from a regional university and various other locations such as sporting events and health clubs. Participants were asked to self-report: height, weight, athletic status, and body satisfaction level and complete the Sociocultural Attitudes Towards Appearance Questionnaire (v.3) by Thompson et al., 2004. The study yielded a total of 184 participants ranging in age from 18 to 60 years. Of the sample, 87 were male ($m=32.1$ years, $sd=12.1$) and 97 were female ($m=34.6$ years, $sd=13.4$). A significant inverse relationship existed between the effects of television exposure and age $r(181)=-.231$, $p=.002$, but there was no significant $r(181)=-.118$, $p=.110$ relation between magazine exposure and age. Factorial ANOVA demonstrated a significant gender difference $F(1, 181)=5.504$, $p=.020$ for body image perception in response to overall media (TV and magazines combined) with women being more strongly affected by the media than men. When comparing television items to magazine items, a paired t-test revealed no significant perceptual difference ($p=.059$) between the two. Finally, regression analyses revealed the internalization of television exposure had a significant ($p=.002$) inverse relation to age, but no significant ($p=.110$) relation to magazine exposure. These results are similar to the findings of Tiggemann (2003) that not all media are alike. Future research should examine differences in: 1) the role ethnicity plays in media effects on body image and 2) if males (like their female counterparts) are influenced by television images with increased age in regards to body image.
The Correlation of Future Higher Education Attainment Plans and Teens’ Perceptions of Peers and Self-efficacy
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The program Reducing the Risk incorporates skills and strategies to provide teenagers tools to reduce teen pregnancy, STD rates, and early sexual debut. One skill assessed prior to program implementation but is not emphasized in the lessons is educational goal setting. This project used baseline survey responses to determine if a correlation existed between a student’s higher education goals, peer norms about sexual behavior, and self-efficacy when using condoms. Determining a correlation between these variables will provide evidence if further studies focusing on higher education goal setting in sex educational curriculums are warranted.

Methods
During the 2011-2013, high school youth participated in a pregnancy prevention program, Reducing the Risk. Schools were selected in the Austin, TX, independent school district (AISD) based upon on school pregnancy and birth rates. Students who returned the parent permission form were allowed to take the survey. Each student created a randomized code to ensure no names were attached to the responses when completing the survey. Responses from the survey were entered into the Snap Survey software data bank. Student responses that (N=133) allowed permission to take the survey were entered and coded into the statistical software program IBM SPSS Data Collection.

Results
Students had the option of not answering a question thus creating missing data. The expectation-maximization algorithm filled in the missing data using the Missing Value Analysis function of the SPSS software. This algorithm estimates missing data using the given variables for the questions regarding peer norms and self-efficacy. Once the missing data were computed, educational goals were used as the independent variable and compared to the dependent variables of peer norms and self-efficacy. A linear regression model was used to find correlations between the two variables.

Discussion
Based upon the results of the baseline survey responses, the correlation between educational goals and peer norms and self-efficacy does not indicate a strong impact on the dependent variables. Therefore, it is likely increasing goal setting skill activities will not positively impact peer norms and self-efficacy, which can lead to reducing teen pregnancy, STD rates, and early sexual debut. However, further examination between different social-economic groups and different dependent variables such as knowledge could provide different results. This study was limited to a small group size and focused on schools in the same district. Replicating this study with a different sample group could provide insights on benefits of education goal setting and reducing teen pregnancy, STD rates, and early sexual debut not found in this sample group.
Construction of a Nutrition Knowledge Test for College Students.

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Nutrition and its assessment are important factors for maintenance and improvement of health-related fitness. With BMI assessed obesity in college aged Americans reaching 20.6% and obesity overall being related to an estimated 200 Billion dollars a year in health related expenditures, the importance of nutritional education is apparent.

University students are in a unique time in their lives as the transition from having meal choices determined by external factors the importance of mastery in the domain of nutrition becomes apparent. The lack of mastery of this knowledge domain is evident in the cultural phenomenon commonly referred to as “the freshman fifteen” and the high rates of eating disorders among this population. In order to make healthy nutrition decisions it is important that students’ knowledge over nutrition is carefully taught and assessed to further improve instruction and learning.

Construction of a knowledge test for university students covering the domains of healthy living is a trial and error process before an adequate instrument can be developed. The purpose of this project was in developing and validating a test of nutrition and nutrition assessment knowledge for university students. Test items were constructed (40 total) and then validated by four university professors within the health and nutrition field. These items were then given twice (one week apart) to 26 undergraduate student enrolled in a physical education teacher education course to examine the test-retest reliability. Data analyses were performed focusing on test-retest validity (Pearsons’ r), item difficulty (p), and item discrimination (d).

Test-retest reliability was acceptable as the test showed a strong correlation of 0.89. Item difficulty and item discrimination yielded 30 questions of the original 40 meeting the parameters to be valid for adequately assessing nutrition and nutritional assessment knowledge.

Of the original 40 items, 30 met the parameters for inclusion in the test. These 30 multiple-choice items could be used with confidence for measuring college student nutrition and nutrition assessment knowledge. Re-validation studies using a larger sample size are needed in the future.
Measurement of Health Related PA knowledge test in College Student

Jungyun Hwang and Xiaofen Deng Keating

While our understanding about the role of knowledge in behavior changes is still limited, it is widely believed that physical activity (PA) participation might be influenced by the health related PA knowledge related to basic physiological responses to PA and PA prescription. Thus, the purpose of this study was to develop a health related PA knowledge (HPAK) test focusing on basic physiological responses and PA prescription for college students. Seventy nine college students (i.e., 41.7% of male; 44% of White, 22% of Asian, 19% of Hispanic, 9% of Black and 5% of Other) were recruited to examine a test-retest reliability (i.e., two weeks apart) and item difficulty of the test. A total of 40 items on HPAK were selected based on the fitness education domains recommended by NASPE for college students (2013). The content validity was examined by surveying four experts in the field of exercise physiology and PA and fitness using a four-point Likert scale. The experts were asked to weigh the content validity of each domain using a 4-point Likert scale with 1 and 4 for the least and most valid content, respectively. The mean score of the experts on HPAK items was 3.1 out of 4; indicating all items of 2 domains were valid. The test-retest reliability of the HPAK items was .661 with statistically significance (p = .0001). In items of item difficulty, 36 items were at a range of 0.3 to 0.7, suggesting that the items had appropriate difficulty level. There were 4 items which did not have acceptable item difficulty and therefore were deleted from the test. Overall, the HPAK test with 36 items has demonstrated acceptable validity, reliability, and item difficulty for the population of college students. The test could be used to collect data concerning college student HPAK knowledge.

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Health-Related Fitness in Texas Children: 2010-2011 and 2011-2012 FITNESSGRAM® Results
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The FITNESSGRAM® (FG) is the assessment program being used in the public schools of Texas to
determine the health-related physical fitness of Texas children. In the academic year 2013 –
2014, the FG will become the testing program of the Presidential Youth Fitness Program
sponsored by the President’s Council on Fitness, Sports & Nutrition. **STATEMENT OF PROBLEM:**
The purpose of the present investigation was to profile health-related fitness status of Texas
school children. Specifically, the percent of students in the Healthy Fitness Zone (HFZ) and the
Needs Improvement–High Risk (NIHR) for aerobic capacity (AC) and body composition (BC) were
compared across gender, grade level (3–8) and academic years 2010–2011 (2011) and 2011 –
2012 (2012). **METHODS:** Data were retrieved from the Texas Education Agency website.
Participants included all Texas students in grades 3-8 that were administered FG testing,
including AC (PACER) and BC (Body Mass Index), during the 2011 and 2012 school years
(populations in these two years are different). Results are reported for AC (2011: n=1,908,049;
2012: n=1,419,742) and BC (2011: n=1,614,194; 2012: n=1,301,614). **PROCEDURES:** For AC and
BC, the prevalence of students in one of two categories (HFZ and NIHR [NI-Some Risk was
omitted from the current presentation]) was determined as a percent of the total students
tested by grade and gender for both years. **RESULTS:** Prevalence for achieving HFZ and
classification as NIHR for AC and BC for grades 3-8 boys and girls in the 2011 and 2012 school
years is presented below:

<table>
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<tr>
<th>AEROBIC CAPACITY (PACER TEST)</th>
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<td>Grade 3</td>
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<tr>
<td>HFZ</td>
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<td>2011</td>
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<td>Boys</td>
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<td>Girls</td>
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<td>2012</td>
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<td>Boys</td>
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<td>Girls</td>
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<table>
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<tr>
<th>BODY COMPOSITION (BMI)</th>
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<tr>
<td>Grade 3</td>
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<td>HFZ</td>
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**CONCLUSION:** The prevalence of needing improvement in AC and BC are important considering
the impact of childhood health-related fitness on risk of chronic disease and mortality in
adulthood. Several trends are noted in the results across both years. For AC, both genders’
performance worsened with increase in grade level. For those students in the NI zone, the
majority are considered NIHR, and the prevalence of students in the NIHR zone increases with
grade level. For BC, the prevalence of achieving HFZ remained consistent across grade levels for
both years. Alternatively, those in NIHR increased with grade level for both genders. A recent
report from the Institute of Medicine recommends incorporating physical activity into curriculum
as a core subject to combat the pandemic of physical inactivity among youth. These data support
such suggestions along with continued adherence to the Texas physical activity mandates for K-8th
grade students.
Technology Use in Physical Education: Preservice Teachers’ Perspectives
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Background/Purpose: Technology has developed rapidly in the past few decades and appears to play an important role in our daily life, personally and professionally. In the field of physical education (PE), a number of studies have shown that technology had a significant impact on teacher effectiveness and student learning (e.g., Cain, 2010; O’Loughlin, 2013). Furthermore, as a national standard for Physical Education Teacher Education (PETE) programs (NASPE, 2008; NCATE, 2008), preservice teachers are required to demonstrate competency for applying technology in teaching. Given that teachers’ beliefs about technology can influence their use of technology in teaching (Bai & Ertmer, 2008), the current study examined preservice teachers’ views on technology use in PE. The results of this study will facilitate PETE programs to better prepare preservice teachers to use technology in PE.

Method: Participants were 12 (4 females, 8 males, aged 21-40) preservice PE teachers recruited from a major university in Texas, where they were completing a Physical Education Teacher Certificate Program. Data were collected from the participants’ final written exam, which included an open-ended question requiring them to demonstrate what they thought of using technology in PE.

Results: Data were analyzed through content analysis. Trustworthiness was ensured by employing qualitative research techniques such as peer review and data triangulation (Merriam, 2009). Three major themes emerged from the data. First, no barrier was perceived for using technology in PE. This was because today’s students are acquainted with and enjoy using technology. Second, the participants indicated that technology supports teaching effectiveness and student learning outcomes. Through use of technology, PE teachers are able to deliver clear instructions, provide specific feedback, and motivate students to participate in the learning process. Third, there was a belief that teaching students to use technology in class also helps them develop self-regulated learning abilities and lifetime physical activity attitudes.

Conclusions: Results of this study showed that preservice teachers in this study had a good understanding of beneficial effects of technology use in PE. These preservice teachers’ perception of using technology in PE suggested PETE faculty should incorporate technology in PETE programs. Future research should examine factors that contribute to such understanding.
Relationship between Self-reported and Activity Monitor-determined Physical Activity
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Statement of the problem
Researchers are interested in the effectiveness of intervention programs to increase PA level. However, a major issue in assessing programs is the accurate measurement. Both self-reported and device-measured methods have been used and each method has advantages and disadvantages. The aim of this study was to report the results of a pilot study to investigate the relationship between self-reported PA and accelerometer-determined PA.

Methods
The design was a one-group descriptive correlational study. Participants consisted of 53 freshmen (28.3% male, 71.7% female) in a conceptual physical education class in a Southern University. Physical activity was measured using a 7-day PA recall questionnaire and an activity monitor during the first week of class. Participants reported their PA through Weekly Leisure Time Exercise Questionnaire (LTEQ) and wore the activity monitor for a consecutive 7 days.

Procedures
The LTEQ collected estimated times of vigorous (VPA), moderate (MPA) and light (LPA) activity and times engaged activities that worked up a sweat (MVPA). The activity monitor collected information about the actual minutes of type of activity. Spearman’s correlation was used to investigate the relationship between measurements of the two instruments.

Results
The activity monitor reported an average of 101.48 ± 40.89 min moderate to vigorous PA (MVPA), with 20.70 ± 15.68 min of vigorous activity and 81.28 ± 28.95 min of moderate activity. The results indicated a significant negative correlation between the minutes of MVPA recorded by the activity monitor and number of times engaged in activities that worked up a sweat (Spearman’s rho = - .46, p = .001). The minutes MPA recorded by the activity monitor are positively associated with MET scores based on LTEQ (Spearman’s rho = .310, p = .034).
Improving Competency in PETE Students Preparing for TExES Examinations

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Although the curriculum in the PETE program is designed to attempt to meet all the competency areas covered on the TExES, students may still not pass the state certification examination in the physical education content area or may not pass to a high enough standard to satisfy the university faculty standard. The purpose of this study was to examine the level of performance across each of the thirteen competency areas assessed on a practice TExES examination, design a plan improve performance of students in the competency areas, and then compare initial performance with results on the TExES examination. A total of 229 PETE students in a senior level capstone course completed an 80 question qualifying examination that assessed the same thirteen competency areas assessed on the TExES examination. Qualifying exam data was collected during the first five weeks of each semester over seven semesters. Data was also collected in the same semester from score reports obtained from TEA of students completing the TExES examination in the physical education content area. Although the overall scores on the qualifying exam were close to meeting criteria during some semesters, they were still below the 80% criteria set by the program for meeting the standard. In particular there were two competency areas where students consistency scored below 70% across all semesters. These two areas, motor development and motor learning (Competency 1) and movement concepts and biomechanical principles (Competency 3) were targeted for improvement. Through the on-line teaching system two modules were developed, one for each of these competency areas. Each module consisted of over 100 multiple choice questions that students could take in random, 20-question sets, which allowed students to have an opportunity to have multiple attempts to practice questions in those competency areas. Students were encouraged to first study concepts within the competency area in which they scored poorly, and then take the practice module questions, focusing on making note of concepts that they didn’t understand, had forgotten, or just did not know, so they could further focus their study. They were encouraged to repeat the process over the course of several weeks prior to making their initial attempt at the TExES examination, which usually occurred later in the semester and just prior to student teaching. For Competency 1, the results were mixed and indicated no clear trend in improvement across semesters. For Competency 3 there was a demonstrated trend towards higher scores every semester. This seems to indicate that dedicated emphasis in practice questions and focus on materials can be beneficial for improving content knowledge. An analysis of questions and the lack of improvement in Competency 1 indicated a need for improvement in the program and highlighted the importance of adding motor learning content to our curriculum. We believe that further emphasis in the courses in which the content assessed in these competencies is necessary to help foster further improvement and to help ensure that student pass the qualifying exam on the first attempt. Additional suggestion for improvement include working closely with faculty to help them to develop content, scenarios, and questions, which are more pedagogy specific and therefore may reflect more appropriate transfer to the assessment instrument used in the State of Texas for certification.
Effects of Motivational Intervention on Physical Activity Behavior among Adolescents
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BACKGROUND/PURPOSE: Behavior change models such as protection motivation theory (PMT) (Rogers et al., 1997) and transtheoretical model (TTM) (Prochaska & DiClemente, 1983) have been used to explain and predict physical activity (PA) behaviors in adolescents. However, few studies have utilized both theories to examine the effect of PMT-based intervention on PA behavior changes among this population. This study examined the effects of PMT-based intervention on adolescents’ PA behaviors, self-efficacy, response efficacy, and intention as well as whether these effects were associated with PA stage transitions.

METHOD: A total of 233 7th to 9th grade adolescents (114 boys, 119 girls; M_age=13.39; 73% non-Hispanic white) were recruited from a Title I junior high school. All participants completed a four-week period PMT-based intervention by reading a leaflet. They self-reported PA behavior, intention, self-efficacy, response efficacy, and stages of PA behavior change within a physical education lesson one week before the intervention and after the intervention separately. PA stage transition was assessed by subtracting pretest stages from posttest stages. A positive difference indicates stage progression and a negative difference indicates stage regression. A difference of zero represents no changes.

ANALYSIS/RESULTS: A two-way repeated measure MANOVA yielded a significant main effect for time, Wilks’ Lambda = .63, F(4, 177) = 25.52, p < .01, η² = .37, and stage transition, Wilks’ Lambda = .89, F(8, 354) = 2.57, p < .05, η² = .06. There was also a significant time by stage transition interaction, Wilks’ Lambda = .91, F(8, 354) = 2.05, p < .05, η² = .04, which was likely to reflect that stage transition had different effect on intervention. Follow-up analysis revealed that self-efficacy, response efficacy, intention, and PA were significantly higher at posttest than at pretest (p < .01). No stage change group had higher values of response efficacy, intention, and PA than progressive group and regressive group (p < .05). The interaction of time by stages transition for response efficacy was significant. Participants in progressive and no change groups had higher response efficacy at posttest than pretest, whereas regressive participants reported decreased response efficacy over time.

CONCLUSIONS: The findings indicate that PMT-based intervention were effective to improve self-efficacy, response efficacy, intention, and PA behavior among adolescents. No stage change adolescents reported higher response efficacy, intention, and PA levels than regressive and progressive adolescents. The progressive and no change adolescents had more improvements on response efficacy than regressive adolescents from pretest to posttest. This suggests that PMT-based intervention combined with TTM seem to work in this population.
Exercise self-efficacy has been found to be one of the critical factors to student physical activity (PA) engagement. Although it has been found that exercise self-efficacy is positively related to PA levels, our understanding about the relationship between the two variables involving university students has been limited. The purpose of the present study was to examine student perceived exercise self-efficacy and their PA levels. The exercise self-efficacy scale developed by Saunders et al. (1997) was used to collect exercise self-efficacy data. The scale consisted of 12 items using a 5-point Likert scale with a higher score representing stronger self-efficacy. The average score of the 12 items was calculated to assess student exercise self-efficacy. The PA data were collected at the same time when the exercise self-efficacy data were collected using the pre-validated weekly leisure-time exercise questionnaire, measuring weekly vigorous [VPA], moderate [MPA], and mild/light exercise [LPA]. Because exercise times at different intensity levels cannot simply be summed, PA MET was computed. As a result, there were four PA indices: VPA (i.e., the frequency of VPA X 9), MPA (i.e., the frequency of MPA X 5), LPA (i.e., the frequency of LPA X 3), and total PA (TPA) (i.e., the sum of VPA, MPA, and LPA). In total, 374 university students participated in the study. There were 52.9% of males with a mean age of 18.5 (SD = 1.25). The correlations of the four PA indices and exercise self-efficacy were examined. It was found that the correlations between exercise self-efficacy and TPA (r = .24, p < .001), and VPA (r = .39, p < .001) were significant. However, no significant correlations between exercise self-efficacy and MPA, and LPA were found. The data from the current study suggested that exercise self-efficacy may be needed only for more VPA which usually is not embedded in daily routine activities.
Eating and Exercise Habits of Hispanic College Students in South Texas: A Ten Year Follow-up

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Ethnic minorities comprise an increasingly large proportion of the U.S. population, yet they continue to face disparities in the incidence of many chronic diseases, including coronary heart disease, diabetes, and some cancers (National Center for Chronic Disease Prevention & Health Promotion, 2002). The Behavioral Risk Factor Surveillance System (2009) reported the prevalence of obesity for Hispanic adults is 28.7%. Because behavioral risk factors such as obesity and sedentary lifestyle increase the risk of chronic health conditions, differences in health behaviors may explain why ethnic minorities develop chronic diseases at disproportionate rates. A study was conducted to determine whether Hispanic students are more overweight than their peers of other ethnic groups. Upon IRB approval, a survey was conducted in 2003 using a sample of students enrolled in classes at a predominantly Hispanic university in south Texas. A follow-up was conducted in 2013 to determine if the scenario had changed. Variables studied included body weight, eating patterns, type and amount of exercise per day and/or week. A questionnaire that included demographics and self-report exercise was used to assess the relation between ethnicity and health behaviors in an undergraduate student sample of 228 (78% Hispanic; 22% other) for 2013 compared to 122 (72% Hispanic; 28% other) for 2003. In both studies, significantly more Hispanics reported being overweight than other ethnic groups. In 2003, 44% of Hispanic students reported themselves overweight compared to 34% of non-Hispanic students while in 2013, 51% of Hispanics reported being overweight compared to 25% of non-Hispanic students. After ten years of increasing emphasis on diet and exercise coupled with additional government funding, Hispanic college students continue to be overweight more than other college students even though they are exercising more and spending more of their leisure time engaged in physical activities than in 2003. Results suggest education efforts concerning diet and exercise demonstrate mixed success not only with the Hispanic college population, but with college students in general. A lack of healthy behaviors within certain ethnic groups may also contribute to disparities in obesity and incidence of chronic disease. An understanding of the causes of weight gain, poor diet, and lack of physical activity among college students could lead to more effective intervention strategies and preventative programs for minority students.
The Emergence of Flow in Physical Education compared to Classroom-Based Subjects

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Introduction: Many of today's school students report being bored in everyday school classes (Center for Evaluation & Education Policy, 2009). To their opinion, school seems to fail to establish a learning environment that establishes a combination of motivation, concentration, interest, and enjoyment (Shernoff, & Hoogstra, 2001). However, these qualities are essential to the concept of flow. Flow is the mental state of operation in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity. In essence, flow is characterized by complete absorption in what one does (Csikszentmihályi, 1990). Thus, classes which provide students' engagement in regard to flow may boost the students’ learning efforts and outcomes as well (Shernoff, Csikszentmihályi, Schneider, & Shernoff, 2003).

Purpose: The purpose of the study was to investigate the emergence of flow in physical education in comparison to classroom-based school subjects. Moreover, the influence of selected factors such as age, class period, class size, and gender on the emergence of flow in physical education was examined.

Methods: Data was collected on 280 High School students. The Flow Short Scale (FSS) (Engeser, & Rheinberg, 2008) was used to assess flow during regular classes. Each lesson of a comprehensive unit of the subjects physical education, mathematics, history, English, and science was included in the study. The students completed the FSS questionnaire right after a flow-conducive moment during class occurred. A flow-conducive moment was defined by the fulfillment of at least three of six components of flow (Nakamura, & Csikszentmihályi, 2009) that was assessed by a trained investigator who observed each examined class.

Results: Flow mean values for physical education were significantly higher compared to the other examined classroom-based subjects (p<0.001). Furthermore, flow occurs significantly more frequently in physical education than in the other subjects (p<0.01). No significant gender differences were identified. Correlations and regression analysis showed that age and class size influence the emergence of flow in physical education negatively (p<0.01), though longer class periods have a positive influence (p<0.001).

Conclusion: Results suggest that physical education fosters the emergence of flow “naturally” in comparison to classroom-based subjects. Nevertheless, it appears, that the older the students become, the fostering effect of physical education weakens. Higher-level grades therefore need more cautious planning to achieve more flow-conducive instructional designs. Moreover, smaller class sizes and extended class periods should be aimed at, to achieve an even more flow-friendly learning environment in physical education.
Physical Activity Levels during the School Day of High School Students

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Introduction: The school day delivers a significant amount of daily physical activity (PA) in children and adolescents, as students spend the major time of day in school, (Trost et al., 2002). Depending on subject, period, or break, the school day offers several opportunities for students either being physically active or physically inactive as part of their daily routine.

Purpose: The purpose of the study was to investigate the physical activity levels (PALs) of school-aged students during their exposure to daily school life in detail. Therefore, the PAL significance of the different school day segments such as school transportation, recess, class time, and physical education (PE) was examined. In addition, the weekend PALs were also assessed to compare weekend PALs with school day PALs.

Methods: Twenty-six ninth grade High School students took part in the study. PALs were objectively measured using the Actiheart activity monitor (Crouter et al., 2008). The Actiheart device is supposed to be the current gold standard for objective activity energy expenditure measurement (Butte et al, 2010), integrating accelerometry and heart rate monitoring. Students wore the Actiheart each day for one week, including the weekend.

Results: School transportation didn’t reach moderate-to-vigorous physical activity (MVPA), as active transportation wasn’t common in the study group. Recess (M=2.4 METs) provided significantly (p<0.01) higher PALs compared to class time (M=1.58 METs). Only PE reached MVPA and had a mean activity level of 4.76 METs. Days including PE (M=2444 kcal) achieved significantly (p<0.01) higher PALs than days without PE (M=2174 kcal). Students showed significantly (p<0.05) lower PALs during the weekend (M=1.7 METs) than during the school week (M=1.86 METs).

Conclusion: Results confirm the school day’s significant contribution to the overall amount of PA in school-aged students. Moreover, study results indicate that PE is the only school day segment that reaches MVPA, manifesting its importance for higher PALs during the school day (Slingerland et al., 2011). Nevertheless, to improve on PALs during the school day, transport, recess, and class time should be targeted via intervention designs, using their potential of proving higher PALs as well (Holt et al., 2013).
The body of research on American intercollegiate athletics recruiting is comparatively small and largely uniform in that the focus of these studies is most frequently student-athlete selection criteria among different sports and competitive levels. Indeed, most studies about recruiting student-athletes in American college sports are focused on identifying specific factors (e.g., athletic scholarship, degree-options, playing time, academic reputation) that are important to student-athletes’ selection decisions. In contrast, minimal attention has been paid to examining the impact of recruiters (i.e., college coaches) and “why” and “how” they are influential in student-athletes’ decision-making processes. Therefore, the purpose of this study is to explore the interaction of recruiter dispositional (i.e., affectivity) and social effectiveness (i.e., political skill) characteristics on recruiting outcomes (i.e., quality of recruits signed, recruiter satisfaction with recruiting class, and recruiter perceived recruiting effectiveness). Recruiter (head women’s soccer coach) political skill was measured using the 18-item (α = .94) political skill inventory (PSI; Ferris et al., 2005). Recruiter positive affectivity was assessed using the 10-item PA portion of the PANAS scale, developed by Watson et al. (1988). Recruiter job (recruiting) satisfaction was assessed using 5-items adapted from Greenhaus et al.’s career satisfaction scale and one item developed by the researchers. Perceived recruiting effectiveness was measured using a 3-item scale developed by the researchers. Finally, recruit total quality was determined through the following website: www.topdrawersoccer.com. Similar to Rivals.com, this national website’s staff ranks American high school soccer players from 1-star (fair) to 5-stars (best of the best). In this study, recruiters were asked to identify both the number and quality of the recruits they personally had a significant (primary) role in recruiting for the 2011-2012 women’s soccer season based on the topdrawersoccer.com information provided to them. Then, to determine a head coach’s overall recruiting effectiveness (total quality of recruiting class), the researchers used the following formula: Total Quality = Star Total/Total Number of Recruits. For example, if a head women’s soccer coach indicated he/she personally recruited two student-athletes with four-star ratings, the total quality for this coach would be four (i.e., 4 = 8/2). A total of 322 paper surveys were sent out to NCAA Division I head women’s soccer coaches. A total of 131 coaches responded (41% response rate). There were 88 male (67.2%) and 43 female (32.8%) respondents. In terms of ethnicity, 117 head coaches were Caucasian (89.3%) and five were African American (3.8%). Less than 10% of the participants indicated they were Asian American, Hispanic American, multiracial or another category (e.g., European, South American). The participants’ average age was 41 (M = 40.97, SD = 7.41). Athletic conferences with at least five head soccer coaches participating included the Atlantic 10, Atlantic Coast Conference (ACC), Big 12, Big West, Horizon, Metro Atlantic, Mid-American, Southeastern Conference (SEC), Southern, Southland, Summit, and Sunbelt. To assess the psychometric properties of the scales, we conducted a CFA using Mplus7. The measurement model fit the data well (S-B χ²/df = 65.74/59 = 1.11, CFI = .99, SRMR = .05, RMSEA = .03, WRMR = 0.70). All reliability coefficients, factor loadings, and AVE were sufficient, demonstrating good convergent validity and reliability. Additionally, correlations for all pairs of latent factors were significantly different from 1.0, rendering support for discriminant validity. The proposed model was tested using simultaneous equations modeling (SEM). The overall fit measures of the simultaneous equations model indicate good fit of the model to the data (S-B χ²/df = 77.63/68 = 1.14, CFI = .99, SRMR = .05, RMSEA = .03, WRMR = 0.70). We found support for all specified relationships. Affectivity had a significant impact on Political Skills (γ = .29, p < .01). In addition, Political Skills had a significant influence on Satisfaction (β = .51, p < .01), Recruiting Quality (β = .48, p < .01), Perceived Effectiveness (β = .55, p < .01). The results indicate that Political Skills mediates the impact of Affectivity on all three recruiting outcomes of this study.
Impact of a Personal Responsibility and Wellness Curriculum on Student Health-Related Fitness

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Recent data suggest that an increasing number of college students are considered overweight or obese, and less than half of students are currently meeting national physical activity recommendations. University recreational settings provide timely opportunities to prevent and treat overweight and obesity and improve health outcomes among students by promoting various modes of physical activity, particularly within university curricular requirements. This longitudinal study examined the effects of the Personal Responsibility and Wellness Physical Fitness curriculum on students' health related fitness outcomes at a private southwestern university. Class modes included: power yoga, weight training, weight training for women, jogging, spinning, individual fitness, judo, walking, group fitness, and aikido. All classes included the following activities: cardiorespiratory and resistance exercise workouts, workshops and lectures, individual and/or group goals and training counseling. Students enrolled in a Spring 2013 Personal Responsibility and Wellness Physical Fitness class (N=328, M age=19.3 years, 57.3% female) completed health-related fitness assessments within the first two weeks and within the last two weeks of the academic semester. Using American College Sports Medicine protocols, class instructors used the following tests to measure each health-related fitness outcome: Bioelectrical Impedance Analyses, a 12-minute walk or run, grip strength, a one-minute timed sit-ups test and sit-and-reach. Appropriate descriptive and bivariate analyses were performed to examine distributional characteristics and associations among participants and to inform longitudinal analyses. Overall, health-related fitness variables did not significantly change, but there were improvements made in each of the components for females (M body fat= 21.7% ± 5.0, M VO2max=34.2 ml/kg/min ± 9.2, M grip strength=26.8 kg ± 5.0, M sit-ups=39.1 ± 14.0, M sit-and-reach=21.0 inches ± 3.2) and males (M body fat= 14.7% ± 5.3, M VO2max=40.9 ml/kg/min ± 8.9, M grip strength=44.4 kg ± 7.8, M sit-ups=48.1 ± 15.3, M sit-and-reach=18.1 inches ± 3.8). Due to a lack of variability among the classes, no class comparisons could be made. Findings suggest that other lifestyle and potential confounding factors should be measured and addressed in the course to help significantly improve health-related fitness outcomes. Future studies should consider other factors (e.g., stress, diet, lifestyle) that affect health-related fitness and include a more balanced sample among the various classes offered.
Families Moving Together: Increasing Physical Activity by Targeting Parents Exclusively Versus Parents Together With Children
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The “Families Moving Together” study was a community-based education intervention designed to help parents work with their children to live a healthier lifestyle. The “WeCan!” curriculum, a community specific program offered by NIH, was chosen for this study because of the theoretical framework and alignment to Social Cognitive Theory. Sixteen families participated in an 11-week education intervention, which included four sessions designed to increase physical activity levels and improve exercise self-efficacy. Families were assigned to a treatment group, either the parents-only group (POG, n= 29), or the parents-children group (PCG, n= 35). Only parents attended the education session in the POG, while children and parents attended in the PCG. During baseline and post-assessment, participants: 1) completed self-efficacy instruments and self report activity questionnaires, 2) were measured for height and weight, and 3) were given a pedometer. The outcome variables for participants in the study included physical activity, body weight, and exercise self-efficacy. No intervention effects were detected for changes in self-report physical activity data, while the paired samples t-test revealed a small decrease in the pedometer readings \( t=-2.10, df=21, p=.048 \) from pre- to post-test for all participants. Independent samples t-test revealed no significant change in pedometer readings for children between groups \( t=1.07, df=8, p=.32 \) and a small, but statistically significant change in pedometer readings for adults between the two treatment groups \( t=2.32, df=10, p=.04 \). With regards to weight change, the children increased in weight from pre- to post-test while the parents’ weight status did not change. There were no significant changes in exercise self-efficacy for either group. Although results were not favorable, findings suggest that a family-based intervention may be effective for promoting increases in physical activity and weight maintenance in participating adults. The information obtained from this study can contribute to the development of sound strategies for family-based interventions. The increasing prevalence of problems related to low physical activity levels, including obesity and related diseases, suggest the continued need for research in this area. Limitations of the study included a small sample size, the short time frame of the intervention, and a lack of father involvement.
A Cross-Sectional Analysis of Nutritional and Physical Activity Behaviors of International Students in Texas State Universities

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One of the goals of Healthy People 2020 is to promote quality of life, healthy development, and healthy behaviors across all life stages. Nutrition and a Physical Activity (PA) are two among the objectives for accomplishing that goal (Fielding & Kumanyika, 2009). Research indicates college students have had declining levels of PA and lack of proper nutrition (Brown, Huber, & Bergman, 2006). International students are not spared from this challenge and they face numerous challenges: food, climate, finances, language, and education system (Tseng, et al., 2010). Such challenges can potentially pose both dietary and inactivity issues among international students. This study examined nutritional and activity levels and behaviors of international students in Southeast Texas Universities. Data was collected using the “Health-Promoting Lifestyle Profile II” (Walker, Schrist, & Pender, 1995). Upon IRB approval, a sample of 214 international students (N=214) enrolled in three major Southeastern Texas universities was taken. Demographics yielded 57.9% (n = 124) were between the ages of 18-25 years and 56.3% (n=121) were male. One-hundred seventy one (79.5%) were single, primarily from Asia (57.5%, n = 115), and 67.6% (n = 140) had been in the U.S. for at least five years. Results indicated PA and nutritional behaviors differed among international students by age, gender, marital status, region of origin, and religious affiliation. A significant statistical gender difference was found regarding diet consciousness \( t(185) = -2.182, p =.030 \). Female students reported being more conscious regarding their diet (\( m =2.70, sd =.796 \)) than males (\( m =2.43, sd =.853 \)) students. In addition, more often than single students, married students limited use of sugar (\( p =.05 \)), read food labels (\( p=.037 \)), ate breakfast (\( p =.019 \)), and often ate 2-3 servings of fruits each day (\( p =.035 \)). There was a significant statistical religious difference in diet between Muslim students and other groups \( F(3,156) =3.426, p =.019 \)). Muslims (\( m=2.76, sd =.830 \)) often consumed more servings of poultry, fish, beans, nuts, and eggs than students in other religious groups. In terms of PA participation, a significant region of origin difference was found in PA behaviors such as participating in vigorous exercises three times per week \( F(4,171) =4.826, p=.001 \), swimming or dancing \( F(4,169)=4.354, p =.002 \), and using an elevator or parking afar and walking \( F(4,169) = 4.944, p=.001 \). Students from Europe (\( m=3.27, sd =.961 \)) and South America (\( m =3.11, sd =.963 \)) participated more often in PA than students from other continents. It was concluded that educational emphasis should concentrate on younger, unmarried, and primarily students from continents other than Europe and South America. Additionally, universities should consider providing a variety of food options in order to afford students with food choices that align with their religious practices.
School-Based Physical Activity: Classroom and Physical Education Teachers’ Views of the School/Administrator’s Role

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Statement of the problem:
The childhood obesity epidemic is a health issue that has garnered considerable attention. The latest Physical Activity Guidelines for Americans, issued by the U.S. Department of Health and Human Services (2008a), recommends that children have at least 60 minutes of moderate to vigorous physical activity (MVPA) each day. However, low levels of physical activity and poor dietary habits have led to a level of worldwide childhood obesity that the World Health Organization (WHO, 2004) calls one of the most serious public health challenges in the 21st century. Nearly 56 million American youth are in schools for nearly half of their weekday waking hours; therefore this context can play a critical role in helping children experience positive health benefits associated with regular physical activity (Pate, et al., 2006; Strong et al., 2005). School-based physical activity opportunities can contribute to healthy musculoskeletal tissues, healthy cardiovascular system, reduced risk for developing disease risk factors, and improved self-esteem (U.S. Department of Health and Human Services, 2008b).

Purpose: The purpose of this study was to examine classroom and physical education teachers’ beliefs about the role of the school/administrator in helping children get 60 minutes of daily physical activity.

Methods & Procedures: Participants included elementary classroom (CR) and physical education (PE) teachers (N= 380, CR=145 [Female= 93%, Male= 7%] PE=235 [Female=57%, Male= 43%]). Teachers participated in an electronic survey by responding in their own words to the open-ended question “What do you believe the role of the school/administrator role is in helping children meet the Centers for Disease Control (CDC, 2010) recommendation that children should get at least 60 minutes of physical activity each day.” Qualitative analysis of responses included using open and axial coding (Corbin & Strauss, 2008).

Results: Overall teachers believed administrators were in a position of “great power” to positively influence children’s daily physical activity levels. As a result both CR and PE teachers expected administrators to provide forms of support for school-based physical activity including: resources, policy creation and enforcement, scheduling regular recess, physical education, and classroom physical activity breaks, and serving as a role model. PE teachers especially believed administrators should have current knowledge of physical activity research.

Conclusion: Although both CR and PE teachers have an enthusiastic desire to change school physical activity opportunities, best stated by one participant as “our (administrators) hold the reigns when it comes to decisions regarding physical activity in schools.” Findings suggest increased communication and collaboration between CR and PE teachers and schools/administrators are critical for helping children experience increased school- based physical activity.
Revalidation of the Scale of Beliefs for Physical Activity
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Background/Purpose Youths’ beliefs and motives regarding physical activity derived from social-cognitive theories have consistently shown associations with physical activity. Because beliefs of a behavior ultimately determine intention, it is necessary to understand beliefs to create effective behavior change interventions. Therefore, a reliable and valid scale of measuring beliefs for physical activity could provide us with useful data to better understand it. In a sample of 422 children in Grade 6, Saunders and colleagues (1999) developed the Scale of Beliefs for Physical Activity. The Scale of Beliefs for Physical Activity contained two factors: social outcomes and physical activity outcomes. However, no studies have revalidated the scale in other populations. Thus, the purpose of the present study was to revalidate the scale among first two year college students.

Method The PACES was distributed to first two year university students (n = 372). There were 52.9% of males and the mean age of the participants was 18.5 (SD = 1.25). The original PACES consisted of 16 items with a 5-point Likert scale. Both positive and negative items were used in the scale and negative items were reversely coded so that a higher score represented more active choice.

Analysis/Results Confirmative factor analysis was first performed to test the construct validity of the original scale and the fit indices were not within acceptable range (i.e., GFI=.76, AGFI =.69,CFI=.59 and RSMEA=.14). Thus, exploratory factor analysis (EFA) was used to examine the structure of the scale and three domains were revealed (i.e., Image-oriented belief, Social-oriented belief and PA-oriented belief), which accounted for 61.21% of the total scale variance. Moreover, the EFA results identified six cross-loading items and therefore were removed, resulting in the retention of 10 items in the revised scale. The revised scale also demonstrated acceptable reliability. Cronbach’s alpha for the entire scale was .65

Conclusion /Discussion The findings indicated that the proposed structure of the Scale of Beliefs for Physical Activity provided an inadequate fit to the obtained data. The revised scale consisted of three domains (i.e., Image-oriented belief, Social-oriented belief and PA-oriented belief) with acceptable reliability and validity, providing us with a valid measure of PA enjoyment for first two year university students. Examining sources of beliefs for physical activity beyond first two year university students would create effective behavior change interventions.