Motivational Factors for Participating in Basic Instruction Programs

Robin Hardin, Damon P. S. Andrew, Gi-Yong Koo, and Jim Bemiller

Abstract

Enrollment trends in Basic Instruction Programs (BIPs) have shown a gradual decrease during the past four decades. This trend is significant because of the numerous studies that have declared Americans as unfit, inactive and leading unhealthy lifestyles. College and university BIPs are a means in which adults can be introduced to healthy lifestyle and a life of physical activity. The goal of this research was to determine the motivating factors of enrollees in a BIP at large university in the Southeast United States. An exploratory factor analysis revealed four motivating factors explaining 68.44% of the variance. The factors were labeled as a) self-worth, b) health benefit, c) gratification, and d) academic benefit. ANOVA indicated males reported significantly higher academic ($p = .002$) and self-worth ($p = .003$) motives and lower health ($p = .004$) motives than females. Since significant motive differences were found on the basis of gender, separate backward deletion regressions of participant motives on behavioral intentions were calculated to provide more specific information to marketers regarding the relevant motives for each gender. The results indicated gratification and academic motives were significant predictors of behavioral intentions for males and females while the motive of health benefits was a significant predictor of behavioral intentions for females only.

Basic Instruction Programs (BIP) can be found throughout colleges and universities in the United States. However, recent trends indicate a gradual decline in BIP class enrollment because of the elimination of physical education requirements for graduation. Nearly 90% of colleges and universities required physical education courses for graduation in the 1960s, but that number had dropped to 63% by 1998 (Hensley, 2000). This trend is also quite alarming considering the numerous studies that declare Americans as unfit, inactive and leading unhealthy lifestyles (U.S. Department of Health and Human Services, 2000). A primary goal of Basic Instruction Programs is to promote healthy lifestyles, so its gradual elimination from the general education curriculum has come at some cost.

Obesity in the United States has risen significantly over the past four decades. Information from the Department of Health and Human Services Center for Disease Control indicates 30% of U.S. adults 20 years of age and older, an estimated 60 million people, are obese. Possibly more alarming is the increase in obesity among the younger population. Sixteen percent of children and teens (more than nine million youth) are considered overweight. This percentage of overweight adolescents has more than tripled since 1980 (United States Center for Disease Control, n.d. b, c).

The percentage of obese Americans grew from 13% to 31% of the population between 1962 and the year 2000. Sixty-three percent of Americans are overweight with a Body Mass Index (BMI) in excess of 25, and 31% are obese with a BMI in excess of 30 (American Sports Data Inc., n.d.). BMI is the most commonly accepted indicator of body fat, and the easiest, most inexpensive tool to compare the weight status of the general population. The CDC reports that being overweight or obese has serious health implications for Americans. Persons with obesity are at risk of developing one or more serious medical conditions including type 2 diabetes, coronary heart

disease, hypertension, stroke, osteoarthritis, dyslipidemia (high cholesterol or triglycerides), sleep apnea and respiratory problems, and certain types of cancer (endometrial, breast and colon) (United States Center for Disease Control, n.d. a). Sedentary lifestyles with a lack of physical activity coupled with unhealthy eating patterns and, in some cases, genetic disposition combine leading to unhealthy weight gain. Unfortunately, the issue of obesity in America has reached an alarming level.

Of course, healthy lifestyles include more than just physical well-being. Health includes mental well-being and social well-being as well (World Health Organization, 2006). Therefore, BIP curriculums should also focus on these aspects of health. Curriculum development should include the goals of building self-confidence and providing a sense of accomplishment. Mental well-being also involves the ability to meet the demands of functioning in society so physical activity can be used as a stress reliever for individuals. The social well-being of health should be addressed as well. Individuals can learn to adapt to different situations and interact with diverse individuals in BIP courses. Students can be taking BIP courses to meet any combination of these health characteristics, so all three should be considered in curriculum development.

One way to combat this unhealthy trend is to introduce people to physical activity in hopes of promoting healthier lifestyles. College and university BIPs serve as an ideal vessel for health promotion since their structure is established, and many participants are within a demographic that could benefit from such an intervention. Since BIP enrollment is dependent upon student motivation to enroll, there is a need to examine why students are enrolled in BIPs so these classes can be better marketed and more engaging for students. It is also necessary to assess the motivations for students in the BIP to make curricular modifications in course design and course offerings. Physical education practitioners and educators generally agree that the two primary objectives in the BIP are to encourage students to develop and maintain a healthy lifestyle and to introduce new skills for participation in physical activity and sport (Quarterman, Harris & Chew, 1996). Routinely assessing the curriculum would enable administrators to ensure they are continually meeting these goals.

Motivations

Past research has explored student motivations for participating in physical education and activity classes. One of the first studies of this kind was conducted by Soudan and Everett (1981) in their examination of students enrolled in physical activity classes at Florida State University. They found keeping in good health was a primary motive for participating in the classes.

Avery and Lumpkin (1987) closely followed Soudan and Everett's (1981) design in their study of participants in the BIP at the University of North Carolina-Chapel Hill. Their study produced similar results to the original researchers, and the four factors that emerged were self-worth, health benefits, social, and skill development. The factors ranked highest by mean were "having fun" and "getting regular exercise." The researchers also found there were some differences in the class and gender interaction among the four factors. Specifically, male freshmen and sophomores and female freshman ranked social affiliation higher than the other classes.

Lumpkin, Leath and Almekinders (1990) followed these two studies to determine if the motivation factors differed among universities that require BIP courses compared to those that do not. However, the authors did not collect data from two institutions to make a direct comparison between the data collected at a university were BIPs courses are required and one where the courses are not required; rather, they compared their results from an institution that required BIP courses to the findings of Soudan and Everett (1981) and Avery and Lumpkin (1987) as those studies surveyed students at institutions where BIP courses were not required. The authors

concluded there was no difference based on whether BIP courses were required or not because the four factors that emerged in their study did not differ from Soudan and Everett (1981) nor Avery and Lumpkin (1987). However, several significant gender differences were noted in the results of Lumpkin, Leath and Almekinders (1990). Specifically, females valued body-image, self-concept objectives and lifetime fitness, while males reported higher levels of social skill and physical fitness motivation factors. Similar to the findings of Avery and Lumpkin (1987), freshman valued social skills more so than sophomores, juniors and seniors.

Quarterman, Harris and Chew (1996) applied the principles developed by Soudan and Everett (1981) and Avery and Lumpkin (1987) to two historically black colleges and universities (HBCUs) to determine if race played a role in college students' motivations for participating in BIPs. Five factors emerged in their study: physical self-efficacy, lifelong participation, health benefits, health/aesthetic benefits and social benefits. Similar to the approach taken by Lumpkin, Leath and Almekinders (1990), a direct comparison of ethnicity as an independent variable was not made; rather Quarterman, Harris and Chew (1996) compared their findings with past research to conclude that race does not impact college students' motivations for participating in BIPs. The authors reached their conclusion by noting that the motivational factors that emerged in their study were similar to factors that previously published studies had reported at non-HBCUs.

Yoh (2001) identified four motivational factors to participate in BIP programs including self-worth, organic development, social development and lifetime uses at a university in the Southeast. The study confirmed that students enrolled in the BIP at this university valued keeping in good physical shape and wanted to enjoy the physical activity in which they participated. Leenders, Sherman and Ward (2003) examined motivations as a part of their study as well. The motives that emerged in their study were to learn a new activity, have fun, improve skills, improve fitness, and exercise regularly. These are similar to previous findings in this line of research.

Students enrolled at a university in the Midwest have also been examined to determine their motivations for enrolling in BIP courses (Savage, 1998). Once again, the results were similar to previous findings. Students ranked health benefits, learning new skills and social aspects as the reasons for being in the class irregardless of gender or classification. Interestingly, Savage also asked students if obtaining a high letter grade was important, this suggesting that students may also have an academic motivation for enrolling in BIP classes. Undergraduates indicated that the letter grade was a motivating factor (Savage, 1998).

In summary, the motivations uncovered in past research lie primarily in the realms of health benefits, skill acquisition and social benefits. Table 1 illustrates the similarity in the factors and the percent variance explained. The current study examined these dimensions but will also explore academic motivation factors. With the exception of Savage (1998), prior studies have generally ignored the academic motivation factor. While Savage (1998) included one question to determine the importance of obtaining a high letter grade in the class, a factor was not developed to determine if this was a motivating influence.

Research Objectives

Previous research has identified health benefits, skill development, and social reasons as significant motivators for students to enroll in BIP classes. Demographic variables such as race, gender and academic classification have also been explored. There also has been little or no attempt to gauge how important the classes are academically to students. This study also examined if students are enrolling in BIP courses for academic benefits as well as previously identified factors. Thus, the purposes of this study were to: a) develop a demographic profile of students enrolled in the BIP, b) determine if academic

Table 1. Motivation Factors in Basic Instruction Program Studies

Authors	Variance Explained	Factor 1[1]	Factor 2[2]	Factor 3[3]	Factor 4[4]	Factor 5[5]
Avery Lumpkin 1987	60.6%	X	X	X	X	
Lumpkin Leath Almekinders 1990	53.35%	X	X	X	X	
Quarterman Harris Chew 1996	56.5%	X	X	X	X	X
Savage 1998	50.7%	X	X	X	X	
Yoh 2001	Not Reported	X	X	X	X	

[1] Factor 1—Labeled by authors as Self-Worth, Body Image and Self-Concept, and Self Efficacy. This factor contributes to building self-esteem, confidence and self-awareness.
[2] Factor 2—Labeled by authors as Physiological Parameters, Physical Fitness, Health/Aesthetic Benefits, Physical Activity, and Organic Development The factor refers to maintaining physical fitness, exercising and weight control.
[3] Factor 3—Labeled by authors as Social Affiliation, Social Skills, Social Benefits, and Social Development. This factor refers to the social aspects of the factors including such has having fun, making friends and spending time with friends.
[4] Factor 4—Labeled by authors as Lifetime Use, Lifetime Enjoyment, and Lifelong Participation. This factor relates to learning a skill or sport that can continue to be used or played after college.
[5] Factor 5—Labeled by authors as Health Related Physical Fitness. This factor refers to understanding health concepts and principles of movement.

reasons are a significant motivational factor, c) determine if significant differences exist when using demographics as independent variables and d) determine the predictive significance of motivational factors on noteworthy behavioral intentions concerning BIP course enrollment.

Method

Participants

Participants were students enrolled in non-required BIP courses at a university in the Southeast United States. The questionnaire was distributed in class, and students were asked to complete it in class. There was no incentive to complete the questionnaire and no recourse if students opted not to participate in the study. Instructors of the courses administered the questionnaire.

Instrument

The questionnaire was designed to explore the motivational factors as to why students were enrolled in the BIP, including additional potential motivational factor that had not been explored in previous research, academic benefits. A total of 22 items were employed to measure students' motives for participation in a BIP, and students answered each motive item on the questionnaire using a 7-point Likert-type scale ranging from 1 as *strongly disagree* to 7 as *strongly agree*. Items were derived from the questionnaire used by Everett and Soudan (1981). Additional items from Avery and Lumpkin (1987) and Quarterman, Harris and Chew (1996) were slightly modified and applied to this study. In addition, three items drawing from the perspective of Savage (1998) that students may have academic benefits for enrolling in BIP classes were developed to address academic benefits. Statements used to measure academic benefits included taking the activity class: (1) "to improve my GPA", (2) "to receive a high letter grade", and (3) "to earn credits toward graduation".

After inspecting the factor solution, the item loadings, and the anti-image correlation matrix, a

total of three items from the overall survey were deleted: two items for gratification ("to experience a new sport activity" and "to socialize with others") and one item for academic benefits ("to earn credits toward graduation"). As a result, a total of 19 items were retained for further analysis (see Table 2).

The measure of behavioral intentions to participate another BIP class was adapted from Cronin, Brady, and Hult (2000), slightly modified, and applied to the study. The statements used to measure behavioral intentions were adapted to the BIP context as follows: (1) "I would like to take another BIP", b) "I would recommend this BIP to a friend", and c) "If I had to do it all over again, I would take this BIP again". The response to each item on the questionnaire was examined using a 7-point Likert-type scale ranging from 1 as *strongly disagree* to 7 as *strongly agree*.

Finally, several demographic items (gender, classification, experience, and self-reported grade point average) were added to create a demographic profile of the student population.

Data Analysis

An exploratory factor analysis was calculated to assess the dimensionality and psychometric properties of scale items used in the study and to determine if academic benefits were a motivational factor for BIP class registration. Descriptive statistics were calculated to assess the respondents' gender, academic classification, BIP class experience, and current grade point average. A correlation analysis of the motivation factors was conducted to examine associations among the factors. One-way ANOVA (Analysis of Variance) was used to examine gender differences in respondent motives. Subsequent to the ANOVA, backward regression analyses were performed separately for male and female groups to examine the relationship between respondent motives and behavioral intentions. Backward regression analyses sequentially deleted weaker, non-contributing variables and identified contributing variables of value to each regression equation.

Results

Psychometric Properties of Scale Items

Exploratory factor analysis (EFA) was employed to assess the dimensionality and psychometric properties of scale items used in the study and to determine if academic benefits were a motivational factor. The 19 items extracted to measure students' motives for participation in a basic instruction program (BIP) were all subjected to an EFA with principal axis factoring and varimax rotation. The result of the exploratory factor analysis indicated that a four-factor model provided a reasonable compromise between model parsimony and adequacy of fit according to the scree test criterion and eigenvalues (Hair, Black, Babin,, Anderson, & Tatham, 1998).

This four-factor solution accounted for 68.44% of the total variance of the variables, and almost all of the individual motives explained reasonably well having communalities ranging from 0.55 to 0.83. It also exhibited a KMO measure of sampling adequacy of .901. The total variance explained by the four-factor model in the current study was higher compared to Savage's (1998) four-factor model, which explained 50.7% of the variance of motives, Quarterman, Harris, and Chew's (1996) five-factor model, which explained 56.5% of the variance, and Avery and Lumpkin's (1987) four-factor model, which explained 60.6% of the variance.

The four factors were labeled as self-worth, health benefit, gratification, and academic benefit. Self-worth explained 28.51% of the variance followed by health benefit which explained 16.49%. Gratification accounted for 13.97%, and academic benefit explained 9.45% of the variance.

The first factor was labeled self-worth and includes motives that were described by Quarterman, Harris, and Chew (1996) as physical self-efficacy. Avery and Lumpkin (1987) and Savage (1998) also referred to this same factor as self-worth. Ten individual variables loaded on self-worth representing that students are taking a BIP course in order to improve themselves in aspects

Table 2. Exploratory Factor Analysis Results

	1	2	3	4
Factor 1: Self-worth				
to develop leadership	0.844			
to develop emotional stability	.780			
to prevent or detect physical defects	.761			
to improve self-confidence	.741			
to understand the mechanical principles of movement	.724			
to provide vocational preparation	.688			
to develop sportsmanship	.684			
to develop positive mental qualities	.656			
to develop self realization	.620			
to make new friends	.539			
Factor 2: Health benefit				
to keep in good health and physical condition		.842		
to get regular exercise		.841		
to enhance my overall health and fitness		.841		
to aid in weight control		.678		
Factor 3: Gratification				
to have fun			.845	
to spend time in fun physical activities			.775	
to learn activities which could be continued outside of school			.620	
Factor 4: Academic benefit				
to improve my GPA				0.874
to receive a high letter grade				0.871

that are not health related. This factor includes: "to develop leadership", "to develop positive mental qualities," "to develop emotional stability," "to develop self realization," "to provide vocational preparation," "to understand the mechanical principles of movement," "to prevent or detect physical defects," "to develop sportsmanship, and "to make new friends".

The second factor was labeled as health benefits. This factor was consistent with Quarterman and Harris's (1996) health/aesthetic benefits, Avery and Lumpkin's (1987) physiological parameters, and Savage's (1998) physical ability. The motivation behind this factor is improvement in areas that are health related. Four individual motives loaded on the health benefits, including

"to get regular exercise," "to keep in good health and physical condition," "to aid in weight control," and "to enhance my overall health and fitness."

The third factor was labeled gratification. This factor was labeled as social benefits by Savage (1998) as well as lifetime use by Avery and Lumpkin (1987). This factor also emerged in Quarterman and Harris's (1996) study as social benefits. Gratification here refers to fulfillment and a feeling of satisfaction and pleasure. Three individual motives loaded on gratification, including "to have fun," "to spend time in fun physical activities," and "to learn activities which could be continued outside of school."

The fourth factor was labeled as academic benefit. It was added as a factor to explore the notion if academic reasons play a role as to why students participate in BIP courses. Two motives loaded on academic benefits, which are "to improve my GPA," and "to receive a high letter grade."

Finally, as shown in Table 3, reliability coefficients were computed to quantify the scale reliabilities of the factors identified. All of the reliability coefficients were larger than the minimum value of 0.70 recommended by Nunnally and Bernstein (1994), indicating an acceptable level of reliability of all of the four motivation factors.

Table 3. Correlation Matrix, Means, and Standard Deviations of Respondent Motives

	ACAD	HEAL	SELF	GRAT	Mean	Std. Dev.
ACAD	(.794)				4.710	1.698
HEAL	.223*	(.865)			4.776	1.470
SELF	.279*	.461*	(.913)		3.889	1.239
GRAT	.266*	.477*	.482*	(.788)	5.242	1.337

Notes: * $p < .01$; Cronbach Alphas in italics and parentheses along the diagonal
Key: ACAD = Academic benefit; HEAL = Health benefit; SELF = Self-worth; GRAT = Gratification

Sample Demographics

Descriptive statistics were calculated for respondents' gender, academic classification, BIP class experience, and current grade point average (see Table 4). The respondents were predominantly male (n = 477; 53.5%), sophomore level (n = 293; 33.0%), were taking their first BIP class (n = 328; 39.0%), and possessed a current grade point average in the 3.00 – 3.49 range (n = 315; 38.1%). Table 5 provides details the various courses offered within the BIP at the respective institution.

Gender Differences

To examine the presence of any gender differences in respondent motives, a one-way ANOVA was calculated, and significant gender differences were found in the academic motive, [$F(1, 890) = 9.584$, $p < .01$], the health motive, [$F(1, 890) = 8.472$, $p < .01$], and the self-worth motive, [$F(1, 890) = 9.015$, $p < .01$]. Specifically, males reported significantly higher academic ($p = .002$) and self-worth ($p = .003$) motives and lower health ($p = .004$) motives than females. Since

Table 4. Demographics

	Frequency	Valid Percent	Cumulative Percent
Gender			
Males	477	53.5	53.5
Females	414	46.5	100.0
Classification			
Freshmen	161	18.2	18.2
Sophomores	293	33.0	51.2
Juniors	195	22.0	73.2
Seniors	238	26.8	100.0
Experience			
1 BIP class	328	39.0	39.0
2 BIP classes	251	29.8	68.8
3 BIP classes	139	16.5	85.4
4 or more BIP classes	123	14.6	100.0
Grade Point Average			
3.5 - 4.0	210	25.4	25.4
3.0 – 3.49	315	38.1	63.6
2.5 - 2.99	210	25.4	89.0
2.0 – 2.49	87	10.5	99.5
Below 2.0	4	.5	100

Table 5. Sample BIP Class Enrollment

	Frequency	Valid Percent	Cumulative Percent
Advanced Yoga	19	2.4	2.4
Badminton	23	2.9	5.3
Bowling	95	11.9	17.1
Exercise and Weight Control	68	8.5	25.7
Ice Skating	21	2.6	28.3
Lifeguarding	11	1.4	29.7
Martial Arts	41	5.1	34.8
Physical Fitness: Exercise to Music	32	4.0	38.8
Physical Fitness: Jogging	28	3.5	42.3
Physical Fitness: Swimming	23	2.9	45.2
Physical Fitness: Walking	81	10.1	55.3
Racquetball	50	6.3	61.6
Scuba	2	.3	61.8
Soccer	15	1.9	63.7
Stress Management	31	3.9	67.6
Tennis	68	8.5	76.1
Volleyball	17	2.1	78.2
Weight Training	100	12.5	90.7
Weight Training for Women	18	2.3	93
Yoga and Relaxation	56	7.0	100

significant motive differences were found on the basis of gender, separate equations regressing participant motives on behavioral intentions were calculated for each gender to provide more specific information to marketers regarding the relevant motives for each gender.

The overall model for the male group was significant, [F (4, 476) = 89.085, p <. 001,

Adjusted R^2 = .425]. Through backward regression to remove non-contributing variables, the academic and gratification motives remained as significant predictors of behavioral intentions (see Table 6). The model reflecting the remaining variables was significant [F (2, 476) = 176.184, p <. 001, djusted R^2 = .424], indicating that 42.4% of the variance in media consumption was explained by the academic and gratification motives. The Standardized Coefficient (β) indicated that the gratification motive (β = .555) explained the most variance, followed by the academic motive (β = .204).

Table 6. Backward Stepwise Regression Results

	Adj. R^2	F	Std. β	t
Males	0.424	176.184**		
Academic			0.204	5.514**
Gratification			0.555	14.990**
Females	0.366	80.556**		
Academic			0.128	3.212*
Health			0.079	1.749
Gratification			0.531	11.658**

Notes: Behavioral intentions serves as the dependent variable; * p < .01; ** p < .001

The overall model for the female group was also significant [F (4, 413) = 60.589, p < .001, Adjusted R^2 = .366]. Through backward regression to remove non-contributing variables, the academic, health, and gratification motives remained as significant predictors of behavioral intentions (see Table 6). The model reflecting the remaining variables was significant, [F (3, 413) = 80.556, p < .001, Adjusted R^2 = .366], confirming a positive relationship between the academic, health, and gratification motives and behavioral intentions. The Standardized Coefficient (β) indicated that the gratification motive (β = .531) explained the most variance, followed by the academic motive (β = .128) and the health motive (β = .079). The result of the female model indicated that 36.6% of the variance in behavioral intentions was explained by the academic, health, and gratification motives.

Discussion

Physical activity participation during college influences an individual's lifelong attitudes toward physical activity (Yoh, 2001). Participating in physical activity classes during college also results in positive effects for health knowledge, attitudes and health behaviors of alumni who participated in BIP compared to those alumni who had not participated (Pearman et al., 1997).

The exploratory factor analysis allowed for the development of motives for enrolling in BIPs. This allows educators and practitioners to better understand the motives behind students' participation, thereby enabling instructors to make more

informed decisions about how to develop the curriculum in courses. The changing nature of the student population provides justification for periodical reevaluation of physical education curricula. Professional objectives may not align with student objectives because both groups bring different expectations to the course (Lumpkin, Leath & Almekinders, 1990).

A goal of the current study was to explore the added dimension of academic benefits as a motivator in enrolling in BIP courses. The factor analysis showed that academic benefit was a factor but explained the least amount of variance. This finding illustrates that students in our sample are not taking BIP courses to simply earn a high letter grade. However, the result does provide justification for letter grades to be assigned in BIP courses rather than offering a strict pass-fail option as the exploratory factor analysis did retain the academic factor as a motive. BIP directors should use this information to promote the courses in the program by noting that academic credit can be earned in the classes.

The factor that explained the most variance was labeled as self-worth. This factor has been identified in previous studies (Avery & Lumpkin, 1987; Savage, 1998; Yoh, 2001) and raises the notion of analyzing the complete state of health. Most people think of classes in the BIP as physical activity classes that promote and lead to physical health, but these classes also have the propensity of positively influencing mental and social health. The World Health Organization defines health as a complete state of physical, social and mental well-being (World Health Organization, 2006). Students are interested in all aspects of health. Statements used in the questionnaire that measured this were "to develop positive mental qualities," "to develop emotional stability," "to develop sportsmanship," and "to make new friends." Therefore, courses should be promoted and developed that emphasize the other aspects of health as well. Classes such as yoga, stress management, and martial arts likely serve as ideal settings to emphasize this quality.

Health benefits also emerged as a factor, which coincides with findings from previous studies as well (Avery & Lumpkin, 1987; Lumpkin, Leath & Almekinders, 1990, Quarterman, Harris & Chew, 1996; Savage 1998; Yoh, 2001). In consideration of this finding, programs should continue to emphasize courses such as jogging, weightlifting, swimming and aerobics in their BIP curriculum.

The factor of gratification though does provide some interesting insight. Students are interested in health benefits, but they also wanted to have fun while participating in the activity. This result suggests a re-evaluation of some courses to add an element of fun or entertainment to the class. Walking is a class that is traditionally taught in BIPs, but to add an entertainment element, walking routes can be developed around campus and the community to vary from class to class. Additional courses could be added as well that take advantage of new sports as they are introduced into popular culture. Examples of such activities include mountain biking and snowboarding. Intra- and inter-class competitions could also be developed to add an element of entertainment. Most colleges and universities have an intramural sports program, but perhaps introducing competitive aspects of sport to BIP classes could help transition students to further participation through the intramural sports program. Not all students are seeking competition which is why they may be enrolled in a BIP course so course offerings can reflect these conflicting factors (e.g., offering competitive racquetball and instructional racquetball).

The results of the ANOVA indicated males reported significantly higher academic and self-worth motives and lower health motives than females. A closer analysis of demographic data revealed that males reported significantly lower grade point averages than their female counterparts, which may explain why they reported higher academic motives than females. In other words, since males possessed lower grade point averages than females prior to enrollment of the course, their academic situation likely influenced

them to seek out courses that would perceive to enhance their grade point average. Further, since females possessed higher grade point averages prior to enrollment, it is entirely possible that a good grade in a BIP course would not significantly increase their grade point average, particularly considering that many of these course offerings have a lower number of credit hours than non-BIP courses.

The finding that males cited self-worth motives at a higher rate than females is also interesting. Perhaps males derive more self-worth from participation in physical activity classes than females due to socialization factors. Males may also have more interest in developing their self-confidence. There also may be the desire by males to use these classes as a way of achieving success. Males may strive to be the best tennis player or best racquetball player in their respective classes. This leads to building of self-confidence. Finally, females clearly seem to be more interested in deriving health benefits from participating in physical activity classes than their male counterparts. This shows that females are seeking the utilitarian aspects of the class that it will lead to better overall physical fitness. This shows that females are enrolling in the classes so they can get the amount of exercise they want each week. This is a way for them to fit a workout into their weekly schedule.

Backward deletion regression results revealed that, for males, the gratification and academic motives significantly predicted behavioral intentions. However, the magnitude of the standardized coefficient for the gratification motive was over twice that of the academic motive, suggesting the desire to have fun was an important predictor of behavioral intentions. Marketers wishing to target males for participation in BIP classes should emphasize these two motives in their marketing materials.

Backward deletion regression for females indicated that the gratification, academic, and health motives were significant predictors of behavioral intentions. Similar to males, the gratification and academic motives were important predictors of behavioral intentions. However, the relationship between the health motive and behavioral intentions was also significant for females. This finding suggests that marketers desiring to target females for participation in BIP classes should emphasize the health benefits associated with participation in their marketing materials, while more general marketing initiatives directed at males and females should emphasize the gratification and academic motives for enrollment.

Future Research

While the present study was the first to determine the relative importance of the academic motive to other BIP enrollment motives, more work is needed to confirm the reported relationships across other settings and to refine the academic motive items. For example, in addition to the possibility of obtaining a high grade in the course, other factors may be relevant to the academic motive. Since many BIP classes are only one to two credit hours, students may be motivated to register for the class to meet part- or full-time registration requirements, which are often prerequisites for financial aid assistance. There also needs to be research conducted in comparing classes where letter grades are earned as compared to classes that are pass/fail. This can also be true for classes that are taught for part of a term or for a full term.

Research in regards to all motivations also needs to explore how the motivations differ from types of classes. A typology needs to be developed to categorize the classes. Many types of classes exist with many them cutting across one other. Skill type classes may include tennis, golf and racquetball. Cardio-based classes may include aerobics and jogging. Stress relief classes could include stress management and yoga but all classes could fit into stress relief if that is why a student is enrolled. Martial art classes are also difficult to categorize as they are skill development and stress relief. It would be interesting

though to explore if the motives differ based on the type of class. A longitudinal study could be conducted comparing each individual class to one another over a period of years as well. This is important so that the classes can be developed and refined to meet the expectations of the student. This is turn would make the learning experience better and better meet the wants and desires of students.

REFERENCES

American Sports Data Inc. (n.d.) The Latest Statistics on America's Obesity Epidemic. Retrieved January 31, 2007 from http://www.americansportsdata.com/obesitystats.asp

Avery, M. & Lumpkin, A. (1987). Students' perceptions of physical education objectives. *Journal of Teaching in Physical Education, 7*, 5-11.

Cronin, J. J., Brady, M. K, & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing, 76*(2), 193-218.

Hair, J. H., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998), *Multivariate data analysis*, Sixth Edition. Upper Saddle River, NJ: Prentice Hall.

Hensley, L.D. (2000). Current status of basic instruction programs in physical education at American colleges and universities. *Journal of Physical Education, Recreation, and Dance, 71* (9), 15-17.

Leenders, N., Sherman, W. M., & Ward, P. (2003). College physical activity courses: Why do students enroll, and what are their health behaviors? *Research Quarterly for Exercise and Sport, 74*, 313-318.

Lumpkin, A., Leath, V. M., & Almekinders, S. (1990). North Carolina State University student's objectives in physical education. *The North Carolina Journal, 26* (2), 19-22.

Nunnally, J. C., Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

Pearman, S. N. III, Valois, R.F., Sargent, R. G., Saunders, R.P., Drance, J.W., & Macera, C.A. (1997). The impact of a required college health and physical education course on the health status of alumni. *College Health, 46*, 77-85.

Quarterman, J., Harris, G., & Chew, R. M. (1996). African American students' perceptions of the values of basic physical education activity programs at historically black colleges and universities. *Journal of Teaching in Physical Education, 15*, 188-204.

Savage, M.P. (1998). University students' motivation for participation in a basic instruction program. *College Student Journal, 32* (1), 58-66.

Soudan, S. & Everett, P. (1981). Physical education objectives expressed as needs by Florida State University students. *Journal of Physical Education, Recreation, and Dance, 52*, 15-17.

United States Center for Disease Control (n.d. a). BMI-Body Mass Index: About BMI for Adults. Retrieved January 31, 2007 from http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm

United States Center for Disease Control (n.d. b). Overweight and Obesity: Frequently Asked Questions. Retrieved January 31, 2007 from http://www.cdc.gov/nccdphp/dnpa/obesity/faq.htm

United States Center for Disease Control (n.d. c) Overweight and Obesity: Home. Retrieved January 31, 2007 from http://www.cdc.gov/nccdphp/dnpa/obesity/

U.S. Department of Health and Human Services. (2000, November). *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office.

World Health Organization (2006, October). Constitution. Retrieved September 4, 2007 from http://www.who.int/governance/eb/who_constitution_en.pdf

Yoh, T. (2001). College student motivational attitudes toward participating in physical activity programs. *ICHPER-SD Journal: The official magazine of the International Council for Health, Physical Education, Recreation, Sport, and Dance, 37* (3), 10-14.

Drs. Robin Hardin, Damon P. S. Andrew, Gi-Yong Koo and Jim Bemiller are all on the faculty at the University of Tennessee, Knoxville.