Exercise self-efficacy in college students enrolled in a basic studies wellness course

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Introduction

To combat the significant issue of sedentary lifestyles and to promote lifelong physical activity, PED 101, a wellness-based basic studies course, offers various activities from running to yoga.
Exercise self-efficacy is the belief in one's capability to successfully perform incremental bouts of physical activity,[1] and has been previously studied among college students and other populations.[2-4]
Exercise self-efficacy is a reliable predictor of physical activity behavior,[2,4] and has been described as a "critical variable for exercise behavior regardless of population."[5] Exploring exercise self-efficacy in PED 101 students may disclose information to improve the curriculum and help students become more physically active.

The purpose of this research was to assess the exercise self-efficacy of students enrolled in PED 101.

Methods

Participants

611 of 1037 students enrolled in a required mid-Atlantic coastal university basic studies course, *Physical Activity & Wellness* (PED 101) participated in the study during the Spring 2008 semester.
Majority of the enrolled PED 101 students were sophomores (53%), followed by juniors (21%), seniors (19%), and freshmen (7%).
Eighty-four percent were white and 54% were females.
After IRB approval, all 1037 enrolled PED 101 students were sent an initial email inviting them to participate in an online survey for extra credit (a separate extra credit opportunity was offered to those who chose not to participate), and specifying a 2-week time frame for survey completion. This email contained informed consent information and a direct link to the survey, which was administered through Select Survey (SelectSurvey.NET 1.6.1, ClassApps.com, 2006). It was made clear that clicking the link to take the survey indicated consent. Upon entering the survey, participants completed demographic questions including gender, age, ethnicity, race, full-time or part-time student status, employment status, and collegiate athlete status. Students were sent an email reminder one week following the initial email (which was one week prior to survey closure).

Instrument

The Self-Efficacy for Exercise Habits Survey, a 12-item, 5- point Likert scale with responses from "I know I cannot" to "Maybe I can" to "I know I can" measures respondents' exercise self-efficacy and motivation levels. An example of an item is "Get up early, even on weekends, to exercise."

Methods *continued*

Data Analysis

Using SPSS, descriptive statistics were computed as well as the total self-efficacy score and subscales. To prepare data for statistical analysis, the items in the exercise self-efficacy instrument were collapsed into means for each subscale, and a grand mean for a total self efficacy score was computed. Bivariate analysis was conducted to explore relationships between the variables using Pearson's r. Prior to computing the bivariate correlations, the demographic variables were also coded for statistical analysis.

Results

The overall response rate was 59%. Seventy-one percent of females responded, while only 44% of males responded. A majority of respondents were female (66%) aged 17-20 (80%), white (89%), going to school full time more than 6 credit hours for the semester (98%), and working a part time job (95%). A small percentage of the sample were college athletes (9%).

The sample as a whole felt they had a greater ability to stick to their exercise program (M = 3.63) than having time for it (M = 3.43). See Table 1.
Gender was significantly correlated to making time for exercise ($r = -.127$, $p < .01$), meaning, males in this sample were more likely to feel they had time for exercise.
For student athletes, total self-efficacy score ($r = .232$, $p < .01$) and the two self-efficacy subscales of sticking to an exercise program ($r = .141$, $p < .01$) and making time for it ($r = .227$, $p < .01$) revealed student athletes felt more empowered to have time for exercise and the ability to stick with it.

Table 1. Unadjusted Descriptives of Self-efficacy

	M	SD
Self efficacy	3.53	.620
Sticking to it	3.63	.739
Having time for it	3.43	.808

Discussion

In this study, the Self-efficacy for Exercise Habits Survey rated exercise self-efficacy by asking participants about their confidence in their abilities to make time for exercise and to stick to an exercise program consistently for at least six months. In this study, participants reported a greater ability to stick to their exercise program than having time for it. This result was similar to the findings reported by Sullum, Clark and King.[6] They found that college students with higher self-efficacy at baseline were less likely to experience exercise relapse eight weeks later. Previous research examining the effectiveness of a self-efficacy and knowledge-based walking intervention among a group of obese, sedentary college students revealed that changes in self-efficacy and knowledge could be used to predict changes in exercise-related behaviors.[7]

Conclusion

In order to promote a lifetime of health and wellness, it is essential to develop cognitions and beliefs associated with successful, long-term health behavior change. University basic studies courses provide a valuable and potentially influential opportunity to improve the knowledge, skills, and beliefs of an entire college student population at a critical time in the development of their decision-making skills and lifelong behaviors. Results indicated that students' gender and participation in a college athletic team affect exercise self-efficacy. This information can be applied to curriculum and facilitation of health basic studies courses to improve effectiveness.

References

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