Students' Perceptions of Physical Education Objectives

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This study surveyed 2559 students enrolled in the physical education program at the University of North Carolina at Chapel Hill to determine which physical education objectives students considered to be most and least important and to assess if there were any differences based on gender and class in the responses. Descriptive statistics revealed that having fun, getting regular exercise, and keeping in good health and physical condition were most important. Providing vocational preparation, learning about human kinetics and exercise science, developing emotional stability, and developing selfrealization were rated least important. Results of a principal component factor analysis with varimax rotation revealed that the 24 participation motives loaded on four factors: (a) self-worth, (b) physiological parameters, (c) social affiliation, and (d) lifetime use. ANOVAs on each factor revealed significant effects for class and gender on all the factors except the lifetime use factor. These findings extend those of Soudan and Everett (1981) and provide important information relative to class and gender as mediators of participation motives of students involved in a physical education activity program.

The objectives of physical education have often been the subject of discussion by various leaders in the field. Hetherington (1910) discussed four phases of the educational process: organic, psychomotor, character, and intellectual. He advocated that as physical education was uniquely qualified to meet these objectives, it therefore was fundamental to the overall process of education. Since then, Hetherington's four broad categories have formed the basis for discussing the general objectives of this field.

A different approach was taken by McCloy (1931) in which he recommended studying physical education objectives by establishing three categories. Direct

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objectives were those significant to the student. Associate objectives enabled students to achieve their direct objectives. And the third category, indirect objectives, consisted of teachers' objectives and was labeled indirect only from the students' viewpoint.

Since McCloy's article appeared, the majority of research in this area has focused on indirect objectives. The Committee on Curriculum Research of the College Physical Education Association conducted an extensive review of the literature identifying 10 categories and a total of 174 objectives (LaPorte, 1936). Price (1946) ranked the significance of the profession's objectives during three periods of history: prior to 1900, 1900 to 1920, and 1920 to 1936.

Many studies have been reported in which university students who were enrolled in physical education activity classes were presented a list of possible objectives. Students were instructed to indicate the objectives they wished to achieve through participation in these classes (Broer & Holland, 1954; Soudan & Everett, 1981; Weick, 1975). The objectives the students most often cited as highest in importance were having fun, getting regular exercise, developing skills in various sports, learning activities that can be continued outside of school, and keeping in good health and physical condition.

Physical educators at various stages in their professional careers were asked to rank physical education objectives in three separate studies employing the same list of 10 broad objectives (Loucks, 1979; Rosentswieg, 1969; Tillman, 1976). Although there was disagreement as to the rankings, the objectives appearing in the top three in at least two of the studies included neuromuscular skills, self-realization, and mental development.

Soudan and Everett (1981) investigated the participation motives of university students enrolled in the physical education activity program using a questionnaire containing 24 physical education objectives. These objectives were determined following a review of the literature regarding possible reasons for participation in physical education activities. The present study's purpose was to replicate the Soudan and Everett research using a larger sample size and a different geographic location and then to compare the results.

Procedures

Subjects (N=2559) signed informed consent forms and were administered the following 24-item questionnaire developed by Soudan and Everett (1981) to assess the students' perceived values attained through physical education.

The following are possible outcomes of physical education. What value do each of these have for you as you participate in physical education activities?

- Developing adequate organic vigor for performance of daily activities with skill and ease;
- 2. Having fun;
- 3. Making new friends;
- 4. Getting regular exercise;
- 5. Understanding with other people;
- 6. Improving self-confidence;
- 7. Preventing, detecting, and correcting physical defects;
- 8. Developing the habit of spending a portion of time in enjoyable physical activity;

- 9. Keeping in good health and physical condition;
- 10. Achieving success;
- 11. Having ability to move freely and with control;
- 12. Providing vocational preparation;
- 13. Understanding the mechanical principles of movement and the effects of exercise on the human body:
- 14. Developing positive mental qualities;
- 15. Developing skill in various sports;
- 16. Learning activities which could be continued outside of school;
- 17. Developing sociability and social cooperation;
- 18. Developing emotional stability;
- 19. Developing self-realization;
- 20. Keeping weight controlled;
- 21. Developing sportsmanship;
- 22. Developing and maintaining sound and proper physical functioning;
- 23. Developing leadership;
- 24. Maintaining an optimal level of physiological efficiency.

Scores on this scale were derived from a 5-point Likert-type scale (1 = not important; 5 = very important). It should be noted that all subjects were enrolled in the University of North Carolina's physical education activities program at the time of testing. Descriptive data on the sample are presented in Table 1.

A principal component factor analysis with varimax rotation was used to generate the underlying dimensions for the 24 participation motives. The latent root criterion (eigenvalue > 1) was employed to determine the number of factors to extract. Factor loadings had to be greater than .40 to be considered signifi-

Table 1

Descriptive Data on Sample

Description	Number	%
Year in college		
Freshmen	1351	52.7
Sophomores	593	23.1
Juniors	288	11.2
Seniors	299	11.6
Graduate students	28	1.1
Gender		
Females	1472	57.4
Males	1077	42.0
Experience		
First required activity	546	21.4
Second required activity	1440	56.3
First elected activity	314	12.3
Second elected activity	93	3.6
More than second elected activity	160	6.3

cant. Factor scores were generated and ANOVA procedures were conducted with the factor scores as the dependent variable and gender and class as independent variables (2×4). Responses from 266 subjects were removed from the analysis because of missing values; therefore the analyses were conducted on 2293 responses.

Results

Descriptive statistics generated from the participation motives questionnaire indicated that having fun (M=4.32), getting regular exercise (M=4.29), and keeping in good health and physical condition (M=4.26) were identified as the most important values by university students enrolled in the physical education activities program. Conversely, providing vocational preparation (M=2.24), knowledge of human kinetics and exercise science (M=2.91), developing emotional stability (M=2.98), and developing self-realization (M=2.99) were items rated only somewhat to slightly important.

Results of the principal component factor analysis with varimax rotation revealed that the 24 participation motives loaded on four factors accounting for 60.6% of the total variance. The statements grouped within each factor are presented below and the rotated factor structure is presented in Table 2. Interpretation of these factors and the percent of explained variance accounted for is as follows: self-worth (40.90%), physiological parameters (29.94%), social affiliation (15.65%), and lifetime use (13.50%).

Factor 1-Self-worth

Improving self-confidence;

Preventing, detecting, and correcting physical defects;

Achieving success:

Providing vocational preparation;

Understanding the mechanical principles of movement and the effects of exercise on the human body;

Developing positive mental qualities;

Developing sociability and social cooperation;

Developing emotional stability;

Developing self-realization;

Developing sportsmanship;

Developing leadership.

Factor 2—Physiological parameters

Developing adequate organic vigor for performance of daily activities with skill and ease;

Getting regular exercise;

Developing the habit of spending a portion of time in enjoyable physical activity;

Keeping in good health and physical condition;

Having ability to move freely and with control;

Keeping weight controlled;

Developing and maintaining sound and proper physical functioning;

Maintaining an optimal level of physiological efficiency.

Factor 3—Social affiliation

Having fun;

Making new friends;

Understanding with other people.

Factor 4—Lifetime use

Developing skills in various sports;

Learning activities which could be continued outside of school.

The ANOVA on the self-worth factor with gender and class as the independent variables indicated a significant class effect F(4, 2293) = 6.69, p < .001. Freshmen differed from sophomores, juniors, seniors, and graduate students in their listing of the Factor 1 objectives, although the other classes did not differ from each other. The ANOVA on the physiological parameters factor revealed a significant class effect F(4, 2293) = 4.27, p < .002; a significant gender effect F(4, 2293) = 68.87, p < .0001; and a significant Class × Gender interaction F(4, 2293) = 2.70, p < .03. Graduate student, junior, and freshman responses

Table 2
Rotated Factor Pattern

Objective	Factor 1	Factor 2	Factor 3	Factor 4
1	0.17934	0.60232	0.10179	0.13657
2	- 0.05837	0.24726	0.67838	0.24036
3	0.29632	0.07191	0.79116	0.09226
4	0.04686	0.79842	0.21678	0.04604
5	0.57531	0.16185	0.60227	- 0.00527
6	0.56722	0.36724	0.40082	0.01187
7	0.60122	0.39660	0.08443	- 0.08181
8	0.21035	0.64384	0.25407	0.21466
9	0.06296	0.80939	0.19924	0.14906
10	0.47563	0.23825	0.09512	0.41103
11	0.42425	0.52304	0.11877	0.26595
12	0.66119	0.00972	0.00275	0.23254
13	0.64118	0.31810	- 0.02613	0.18008
14	0.62443	0.37735	0.20950	0.18617
15	0.21743	0.16252	0.16064	0.80152
16	0.17300	0.27557	0.14649	0.71790
17	0.65893	0.11580	0.44703	0.20434
18	0.81116	0.18571	0.17594	0.03844
19	0.76672	0.25071	0.10192	0.12111
20	0.41130	0.57729	- 0.06431	-0.00203
21	0.58877	0.26054	0.32684	0.16852
22	0.37926	0.65809	0.01220	0.23966
23	0.70411	0.07778	0.16786	0.26915
24	0.44675	0.51941	- 0.03778	0.25543
Eigenvalues Percent of explained	5.94462	4.35173	2.27513	1.96229
variance	40.90	29.94	15.65	13.50

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on Factor 2 were greater than those of seniors and sophomores and males favored this factor more than did females. Also, on Factor 2 male graduate students, male juniors, and female and male freshmen valued these objectives more highly than did female and male sophomores, female juniors, female and male seniors, and female graduate students. Both class F(4, 2293) = 20.40, p < .0001 and the Class \times Gender interaction F(4, 2293) = 2.51, p < .04 yielded significant differences on the social affiliation factor. Freshmen, sophomores, and juniors ranked Factor 3 objectives higher than did seniors, whose responses in turn exceeded those of graduate students. On this same factor female and male freshmen and male sophomores listed these values as more important than did all of the other groups. However, no significant effects were evidenced for Factor 4, the lifetime use factor. Although several findings did emerge from these analyses, caution should be applied in interpreting them since the N was quite large and the variance accounted for was quite small.

Discussion

This study verified that students enrolled in the University of North Carolina's physical education activities program valued having fun, getting regular exercise, and keeping in good physical condition. These participation motives were similar to findings reported by Broer and Holland (1954), Weick (1975), and Soudan and Everett (1981). The Soudan and Everett study and the present research found the same two least important objectives. However, the present study reported developing emotional stability and developing self-realization as only somewhat to slightly important whereas Soudan and Everett found achieving success, developing leadership, and developing skill in various sports among the least important objectives.

Grouping the objectives within four factors helped explain and interpret students' anticipated outcomes. Self-worth objectives accounted for the most variance, and consistency was reported among all classes except freshmen. This incongruency might be related to a general lack of direction on the part of college freshmen. Across the classes, males valued the physiological parameters more than did females. Younger students (i.e., freshmen, sophomores, and juniors) rated the social affiliation objectives more highly than did seniors and graduate students. These results are not surprising when one considers the socialization process that occurs in the college setting.

Conclusions

Administrators of college physical education activity programs should have a clear understanding of the perceived objectives of those enrolled in their programs. If students value having fun, getting regular exercise, and keeping in good physical condition, then these needs should be met through their class experiences. Although the faculty and administrators may emphasize skill development, cognitive understanding, and social outcomes, these should not be attained at the expense of students' perceived objectives. Also, implications are evident regarding the extent of skill practice versus game play, the decision to increase the emphasis on fitness activities, and the design of each class if students' desired outcomes increasingly change class foci. A willingness to adapt may not only

rescue programs viewed as irrelevant by many students, but may also increase enrollment in elective programs. According to this study's findings, student objectives also differ among class and gender categories. Since courses typically include both genders and often students from all classes, instructors must be encouraged to broaden and diversify drills, games, and activities to ensure meeting program as well as student objectives.

In order to promote the philosophy stated by many physical education departments of a lifetime commitment to physical activity, we must continually assess students' perceptions of physical education objectives. By doing so we can design programs that are more likely to meet students' perceived objectives and thus increase the likelihood that other beneficial program objectives will be realized.

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