

FRESHMAN STUDENTS' ATTITUDES TOWARDS PHYSICAL FITNESS COURSE

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Abstract

The purpose of this study was to explore university students' attitudes towards the new physical fitness course in relation to four physical fitness variables including attitude difference in terms of sex. A total of 115 freshman students 75 male & 40 female (mean age = 18.14 ± 0.21) from Addis Ababa university were participated in this study, among these students, 15 of them were also interviewed. Quantitative and qualitative methodologies were employed in this study. Data were collected using Likert scale and interview. To determine male and female students' attitude independent t-test was used. The quantitative data were analysed using SPSS 16, while interview was analysed qualitatively. In this study students attitude was assessed by using Physical Education Activity Attitude Scale (PEAAS) originally developed by Subramanian & Silverman, (2000) and adopted into the current study situation. Main findings of this study were that students had generally positive attitudes towards physical fitness subject, however; complaint was also reported since the module lack any ball games. Regarding to instructors' competency except one fourth of the students a positive attitude was reported. Varied results were obtained in availability of sport facilities and equipment. Fortunately, all student do not acknowledge theoretical written test or exam. Unlike to the usual A, B, C. grade system, students preferred P and F grading system. The independent t-test showed that no significant differences ($p > 0.05$) were found in attitudes between the two sexes. In conclusion, students' attitudes towards physical fitness variables seems unlike and this is a case study conducted at one university with small group of students only, thus, further studies are recommended with a more representative samples at different universities, including instructors as a study subjects.

Key Words: Attitude, Freshman University Students', Physical Fitness.

INTRODUCTION

Investigative student attitudes toward physical education can aid teachers in improving teaching content and forming positive attitudes toward physical education among students (Cothran & Ennis, 1998). Emerging evidence has shown that students who show a more positive attitude toward physical activity in physical education are more likely to participate in physical activity outside of school (Portman, 1995; McKenzie, 2003; Ntoumanis, 2001).

According to Perloff, (2010) attitude is a psychological construct, a mental and emotional entity that inheres in, or characterizes a person. They are complex and are an acquired state through experiences. It is an individual's predisposed state of mind regarding a value and it is precipitated through a responsive expression towards a person, place, thing, or event. It is a phenomenon that can be acquired and can it be also changed. This happens because there are a number of factors which directly or indirectly affects the process of formation of attitudes. Eagly & Chaiken (1993) also stated that attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour.

As stated above, the benefits of regular physical activity and exercise in wellness dimensions and

to the school curriculum setting are well researched and documented, however, to the researcher knowledge students' attitudes towards physical education/fitness course at higher institutions is not studied in the context of Ethiopia, and thus, the present study is interested to explore freshman students' attitudes' towards physical fitness common course in relation to four independent variables such as towards physical fitness subject; instructors competence; availability of sport facilities and equipment and assessment techniques/procedures.

RESEARCH DESIGN AND METHODS

This study employed the descriptive research method by using cross sectional survey research design to determine university students' attitudes towards physical fitness course/subject.

Subjects

The study was conducted in college of natural and computational sciences, at Addis Ababa University (AAU), Ethiopia. Among the total population of interest, using stratified random sampling technique a sample of 115 freshman students: 75 male and 40 female (mean age = 18.14 ± 0.21) were participated in this study.

Instruments

The instrument used was a questionnaire containing 33 items in a modified 4-point Likert scale and in-depth interview. In the Likert scale the neutral choice was eliminated to force subjects to make a positive or negative decision. The choices were: 1 = strongly disagree to 4 = strongly agree with a total possible score of 132 points for overall attitude. A higher score indicates a more positive attitude. In-depth audio-taped interviews were conducted with a sub-sample of 15 respondents (13%). Class representatives and other volunteer students were selected to participate in the in-depth interviews.

Reliability and validity of instruments

In this study, students' attitude is measured with Physical Education Activity Attitude Scale (PEAAS)' originally developed by Subramanian & Silverman, (2000) and adopted by the researcher. It was reported that the reliability and validity of instruments are very high. For example, the reliability (Cronbach's alpha of those items questions was reported as greater than 0.92).

Procedures

Before the study was conducted, the researcher requested students' voluntariness through their respective instructors, after verbal consent was obtained the study was done without any difficulties. Even though students expressed their willingness to participate in this study they were also informed to withdraw from further responding to the questionnaire. The reason for this was to avoid unnecessary problems such as the students' feelings of doubts and uncertainty about their own responses given to the researcher.

This study was conducted by distributing questionnaires and pen to the randomly selected students before starting to participate in their practical class sessions. A brief introduction was given how to tick the Likert scale on the item questions to make ease and save their time. Participants were also told to ask freely any questions which was not clear to them before they put their attitudinal choice on the questionnaire. Even though the item questions were standard and adopted once, the researcher gave instant help for those students who were in need of help to any questions during filling time of the questionnaire. Finally the researchers

collected each students' questionnaires after they were completed, through the respective instructors.

The interview questions address four independent variables or topics associated with students' attitudes towards physical fitness course including physical fitness course, instructors' competence, availability of sport facilities and equipment and assessment techniques/procedures. The in-depth interview were designed to allow researcher and participants for further discussion of the Likert items question and to express their attitude freely. The survey took place in the actual physical fitness practical class while the in-depth interviews were conducted in face-to-face-interviews in the university campus after received students' permission depending upon each participant's free time choice. The interviews lasted approximately twenty-five to thirty minutes.

Statistical Analysis

To analysis the data SPSS 16 was used. Descriptive statistics were used to analysis students' attitude towards physical fitness course. To identify the presence or absence of attitude difference between male and female students among the four selected physical fitness variables, independent t-test was used. To understand students' attitude a modified 4-point Likert scale were used deliberately by eliminating the neutral choice to enforce subjects to make only a positive or negative decision. The choices were from 1 = strongly disagree to 4 = strongly agree with a total possible score of 33 item questions for overall attitude reflection under the four variables. Using the average score per item, students' attitude in each question was classified and reported as positive if they report or express their feeling as strongly agree and agree, on the contrary if they express their feeling as strongly disagree and disagree the results were merged and reported as negative attitude. The data obtained from interview questions were analysed qualitatively.

RESULTS

The aim of this study was to examine freshman students' attitudes towards physical fitness course/subject, the descriptive statistics with respect to students' attitudes scores are presented in table 1.

Table 1: Students' attitudes towards physical fitness subject computed from modified 4- point *Likert Scale* consisted of 33 Item Questions in the form of Percentage (%)

No	Physical Fitness dimensions/ categories	No. of Item	No. of Students	Students' Attitude SAGR + AGR		Students' Attitude SDIS + DIS	
				In No	In %	In No	In %
1	<i>To the subjects itself</i>	13	115	100	86.59	15	13.41
2	Instructors Competency	7	115	85	73.91	30	26.08
3	Sport Facilities	8	115	51	44.35	64	55.65
4	Assessment techniques	4	115	19	16.52	96	83.48
4.1	Grading system	1	115	20	17.39%	95	82.61%
Total		33	115	-----	100%	-----	100%

SAGR= Strongly Agree; AGR= Agree; SDIS =Strongly Disagree; DIS= Disagree;

Table-2: Male and female students' attitudes towards physical fitness course dimension results computed with independent t-test Group Statistics.

Students' attitudes' towards:	No. of Items	Sex	N	Mean	Std. Deviation	Std. Error Mean
<i>To the subjects itself</i>	13	1	75	3.5067	.50332	.05812
		2	40	3.4500	.50383	.07966
Instructors Competency	7	1	75	3.5467	.50117	.05787
		2	40	3.4500	.50383	.07966
Sport Facilities	8	1	75	3.3333	.47458	.05480
		2	40	3.5000	.64051	.10127
Assessment techniques	4	1	75	3.3333	.47458	.05480
		2	40	3.5000	.64051	.10127
<i>Grading System</i>	1	1	75	1.7867	1.56217	.18038
		2	40	1.6750	.99711	.15766

1 = Male & 2= Female; N = Number of Students

The table 2 clearly shows the mean, standard deviation and standard error of mean of male and female students within the four physical fitness dimensions. In the table 3 all the four (4) physical fitness dimensions were separately computed in order to identify male and female students' attitude towards physical fitness course. Several previous

studies reported that male and female students showed different attitude towards physical fitness course, unlike those studies, in the current study the result obtained in each dimensions from independent t-test did not show any significant difference ($p > 0.05$) between the two sex.

Table 3: Male and Female students' attitudes' towards the four selected physical fitness course dimension computed from **Independent Samples Test**.

Students' Attitude	PFD	LTEV		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	
EVA	<i>TSI</i>	.695	.406	.575	113	.567	.05667	.09858	-.13864	.25197	
EVNS	<i>TSI</i>			.575	79.669	.567	.05667	.09861	-.13959	.25292	
EVA	<i>IC</i>	.005	.946	.983	113	.328	.09667	.09830	-.09809	.29142	
EVNS	<i>IC</i>			.982	79.373	.329	.09667	.09846	-.09931	.29264	
EVA	<i>SF</i>	5.710	.119	-1.583	113	.116	-.16667	.10527	-.37522	.04189	
EVNS	<i>SF</i>			-1.447	62.364	.153	-.16667	.11515	-.39682	.06349	
EVA	<i>AT</i>	5.710	.219	-1.583	113	.116	-.16667	.10527	-.37522	.04189	
EVNS	<i>AT</i>			-1.447	62.364	.153	-.16667	.11515	-.39682	.06349	
EVA	<i>GA</i>	.759	.385	.409	113	.683	.11167	.27279	-.42878	.65211	
EVNS	<i>GA</i>			.466	109.261	.642	.11167	.23957	-.36314	.58647	

LTEV = Levene's Test for Equality of Variances; EVA = Equal Variances Assumed; EVNS = Equal Variances Not Assumed; PFD = Physical Fitness Dimensions; TSI = to the subjects itself; IC = Instructors Competency; SF = Sport Facilities; AT = Assessment Techniques; GA = Grading System.

DISCUSSION

The finding of this study revealed that freshman students showed different attitudes towards the four (4) selected physical fitness course independent variables. Both the quantitative and qualitative data indicated similar findings except the method of data gathering techniques. For the purpose of clarity the quantitative results obtained from the Likert scale computed and merged in two categories i.e strongly agree and agree summed and reported as positive attitude while strongly disagree and disagree are reported as negative or unfavourable feeling towards the variables. Under the first categories or variables, thirteen (13) questions items which comprises to identify students attitudes towards physical fitness course were designed and students were asked to express their feeling to each items and finally the idea or results emerged and computed with descriptive frequency statistics in percentage and the result showed that among 115 students 100 (86.59%) have positive attitude, however; few students 15 (13.14%) did not show interest to the subject matter.

Similarly, the interview results indicated that virtually all students showed a more positive attitude towards the subjects and they reported the importance and inclusion of physical fitness subject at college and university education level, however, few students showed unfavourable attitudes towards the subjects. Even though, it is

not the focus of the present study to investigate the cause of negative attitude towards physical fitness activity, previous studies indicated that many factors exist to develop attitude either positively or negatively towards something. For example Pethkar, Sonawane, & Naik, (2010) stated that regular physical activity and the attitudes toward it can only be developed in the school years. As children make the transformation into adults many developmental changes occur. Importance of roles of family members subside while the peers take the charge leading to change in thinking patterns, mental makeup. Social support, influence from the peers in this phase, serve as a basis for establishment of some lifelong behaviour patterns or habits carried through the adulthood. One such behaviour pattern or habit is maintaining a physically active lifestyle. There are lots of factors that are believed to influence physical activity. They are called as correlates or determinants. There is a strong association between the determinants and participation in physical activity that have been identified are classified as: personal, behavioural, social & cultural & environmental factors. Besides to this in the present study students reported that among the other factors, the module breadth (111-pages) and exclusion of ball games particularly football in the module contents reduce their positive attitude towards the courses.

When we observe students' attitude towards instructors' Competency seven (7) question items were designed and asked to express their feeling in the Likert scale and 85 (73.91%) of students have positive attitude towards their instructors' subject area knowledge, teaching methodology, demonstration skill, concern /commitment and overall effort to make students being motivated towards the course and yet a few number of students i.e. 30 (26.08%) dissatisfied with their instructors. This indicated that students' attitudes are not 100% identical.

Results obtained from the interview indicated that almost all students satisfied with their instructors' subject area knowledge, teaching methodology, and demonstration of skills during practical sessions, however; few students had reservation and expressed their unpleasant feeling with facial expressions such as avoiding eye contact to the interviewer, using gestures like eye movement and shaking head and hands etc. Therefore, both the quantitative and qualitative findings showed similar results.

Individuals' attitudinal towards the same object or things are not always similar. For example

Dogra, A. (2013) stated that an individual's everyday experience, specially his interpersonal experience, is a deciding factor in the creation of attitude. Attitudes are modified in the process of integrating many specific relations of a similar kind and they are, therefore, the product of the evaluation of many specific relations of a similar kind and the products of the evolution of many recurrent impressions, emotions, perceptions and ideas imitation of significant role in the development of attitudes in their genesis and in their development, are markedly influenced by persons who occupy significant positions in an individual's life. The creation and shaping of attitudes are functionally associated with factors, past and present, that "Specially influence different attitude states. Functionally speaking, an attitude is not a response but more or less a persistent set to respond in a given way to a situation. It is an organised and consistent manner of thinking, feeling and reacting with regard to any event in surrounding. The pressures, forces and dynamics of one's surroundings are therefore, contributory to the developments of attitude, which in turn gives a shape to one's behaviour. The soundness of healthy attitude will largely depend upon the social, cultural and economic status and education of person living in a society.

In addition to this, other studies also showed that students' attitudes and perceptions towards physical education are furthermore influenced by the teacher and the curriculum. Xu & Liu (cited in Kretschmann & Wrobel, 2015) report that accumulated evidence suggest that individual characteristics (such as age, gender, and sport

skills) and contextual factors (such as physical education curriculum, comprehensive intervention or physical education programs, organized sports programs, and physical education teachers) impact students' attitude towards physical education and physical activity.

In relation to sport facilities mixed results were obtained. Under this categories 8 (eight) question items were listed and students were asked to express their feeling on the scale. As indicated in the above table 51 (44.35%) of the students have positive attitude however; the higher percentage i.e. 64 (55.65%) of students do not show a positive feeling towards the accessibility of ball games, conducive sport fields, distance of sport field from the dormitory or class room and to take shower after practical session. This quantitative results also supported by the following qualitative data.

In this qualitative study students were asked to reflect their feeling or attitudes towards physical fitness course. In replaying to the interview nearly half of the students express their satisfaction with the sport facilities and equipment, however; other halves were not happy. Students were asked further to indicate the major sources of dissatisfaction. In this regards absence of ball games particularly football and other ball games reduced their positive attitude what they have to the subject matter.

Students were also asked to reflect the assessment technique stated on the teaching module. Under this dimension 5 question items were listed and students were asked to express their feeling on the scale. As indicated in the above table only 19 (16.52%) of students show positive attitude to take written test, mid and final exam, however, the higher percentage of students i.e. 96 (83.48%) do not show interest to take any written test, mid and final exam.

The interview results also indicated that almost all students did not show interest towards written test or exam as a form of assessment procedure.

Under the assessment technique students were also asked to reflect their feeling about the grading system. As depicted in the above table only 20 (17.39%) students have positive attitude if the grading system is to be A, B, C, D or F like in any other courses however, unexpectedly the higher number of students 95 (82.61%) like to be P/F i.e. they don't show positive attitude if physical fitness grade be in the form of A, B, C. In the qualitative study students were asked to indicate their preference either to be P and F or A, B, C...etc. grading system. Even though students have positive feeling towards the subjects at this point almost all students agreed P and F grading system than the usual A, B, C. grading system.

CONCLUSION

In conclusion, the present study can clearly show natural and computational sciences college students attitudes towards physical fitness course/subjects under the four studied variables. Therefore, to meet the objectives of the program successfully and for its sustainable and effective t-learning of physical fitness course for freshman students understanding students need through systematic research is unquestionable.

Kretschmann & Wrobel, (2015) stated that attitudes towards physical education have been subject to research and field studies in the last two decades. Attitude has frequently been researched as dependent variable (Silverman & Subramaniam, 2000). Thus, further study with a large sample size at different university is necessary to examine the students' common problem towards physical fitness course or subjects.

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