



The Effect of the Adapted Physical Education Course on the Attitudes of the University Students towards the Education of Individuals with Disabilities

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Abstract

The aim of this study was to determine the effect of an undergraduate Adapted Physical Education (APE) course on the attitudes of Sports Science students towards the education of individuals with disabilities. A single group (no control group) pre-test and post-test model was used in the study. The study group consisted of 119 Sports Coaching Education Department students studying at Aksaray University. The data were collected with the "Personal Information Form" and the "Attitude toward Disabled Persons Scales" (ATDP). The course was given to the participants theoretically for 14 weeks and 60 minutes a week. After the descriptive statistics of the study data were determined, the normality of the data was tested with the Shapiro-Wilk test and the comparison of pre-test and post-test scores was conducted with Paired Samples t-Test. It was concluded that the APE course positively affected the attitudes of the Faculty of Sports Sciences students towards the education of individuals with disabilities.

Keywords: Attitude, Individuals with Disabilities, Sports Sciences, Adapted Physical Education

INTRODUCTION

Attitudes are the starting point for success (22,46) and attitudes of instructors are an important determinant of their behavior in educational settings (13). Negative attitudes towards individuals with disabilities (IDs) arise from the lack of information about these individuals (25,33), and from prejudices such as misperceptions and negative emotions. For the reasons mentioned above, active participation of IDs in community life is limited (24).

Attitude expresses whether the individual is in favor of performing a certain behavior or not. According to Ajzen (4), attitudes towards certain behaviors are determined by specific beliefs in a

society. Behavioral beliefs associate a relevant behavior with expected outcomes (31). One of the key factors for successful inclusive education is a positive social environment that includes the positive attitudes of stakeholders such as trainers, peers, and parents (39). It has been determined that when information and experience are used together, they affect attitudes towards IDs more positively (21). In changing attitudes positively, giving information and interacting are accepted as effective variables (52). Al-Hadabi et al. (6), stated that the more information university students have about individuals with intellectual disabilities, the more positive attitudes they show towards individuals with intellectual disabilities doing sports. In

addition, they stated that attitudes as a form of behavior are acquired as a result of the experience and interaction of the individual with his environment. Kowalski and Rizzo (28) stated that experience, perceived professional competence, age and gender variables affect attitudes. It is stated that professional preparation and experience have a significant impact on the attitudes of physical education teachers and candidates and also good preparation for the profession is an important factor in physical education teachers sense of professional competence and effective teaching (35).

Sports Coaching Education programs should prepare future coaches to work in different environments and with athletes with different skills. In Turkey, APE course was given as an optional course in 56% of the Faculty of Sport Sciences between 1990-2000 (27), and since 2001 it has been a compulsory course (36). In studies with physical education teachers; negative attitudes of teachers have been identified as an obstacle to the inclusive and integrative education of IDs (14,15,29). For this reason, university programs should develop strategies to prepare university students to work with IDs (46,56). In studies examining the demographic characteristics and attitudes of the students of the Faculty of Sport Sciences; it was determined that female students had higher attitude scores than males (26,38). There are also studies in which the class variable did not affect students' attitudes towards inclusion (6,7,19). It has also been stated that negative internship experiences contribute to the formation of negative attitudes (45). Negative teaching experiences can be attributed to a lack of quality education in APE (51).

Besides students of the Faculty of Sport Sciences, in studies conducted in different fields such as health workers (11); health students (50), classroom teachers (43), it has been determined that attitudes against IDs are negative. When the literature is examined, limited study has been reached that examines the attitudes of the students of the Faculty of Sport Sciences towards the education of IDs. For this reason, it is thought that it would be beneficial to collect data on the attitudes of the stakeholders about Physical Education and Sports (PES) in IDs. Determining the attitudes of sports science students, one of these stakeholders, towards the education of IDs, and the effect of APE course on attitude scores constitutes the reason of this study.

In this context, the study was conducted to determine the effect of the APE course on the attitudes of Sports Science students towards the education of disabled individuals.

MATERIALS AND METHODS

Research model

In this study, one of the quasi-experimental designs, a single group (without control group) pre-test and post-test model was used to determine the effect of the APE course on the attitudes of Sports Science students towards the education of IDs.

Participants

119 students studying at Aksaray University, Faculty of Sport Sciences Coaching Education Department voluntarily participated in the study.

Data Collection Tools

"Personal Information Form" prepared by the researcher was used to reach the demographic information of the participants. The "Attitude Toward Disabled Persons scales" (ATDP) was used to evaluate the attitudes of the participants towards IDs. The scale was developed by Yüker et al. (1970) and adapted into Turkish by Özyürek (37). ATDP aims to measure attitudes towards IDs without separating disability groups. There are 20 items in the scale. It is a six-point Likert type scale with answers and (+3) I strongly agree, (+2) I agree, (+1) I somewhat agree, (-1) I somewhat disagree, (-2) I disagree, (-3) I strongly disagree. The 2., 5., 6., 11. and 12. items in the scale are scored by reversing. All items are summed up taking into account the signs and then sign of the found score (+/- or -/+) is reversed. The total score is found by adding +60 points to the obtained score. The lowest 0 and the highest 120 points can be obtained from the scale. A high score from the scale means that IDs are perceived as similar to individuals without special needs. A low score indicates that IDs are perceived differently from individuals without special needs (42). The Cronbach Alpha reliability coefficient of the scale was 0.67-0.83; test-retest reliability coefficient was calculated as 0.76 (21). In the current study, the Cronbach Alpha internal reliability coefficient of the scale was 0.77; test-retest reliability coefficient was calculated as 0.89.

Data Collection

It has been determined that the study is in compliance with ethical principles with the decision numbered 2020/13-49 of Aksaray University Human

Research Ethics Committee. The data was collected online survey form (Google Forms). APE course was given online and 60 minutes a week for 14 weeks between March 2021 and June 2021 to Aksaray University Faculty of Sport Sciences Coaching Education students. Only theoretical knowledge was given to the participants, lack of interaction with IDs and not being given the opportunity to experience through the APE course was considered as an important limitation.

Within the scope of the course, the participants were informed about the definition of Special Education, definitions of hearing impairment, vision impairment, intellectual disabled, physical disability and other disability types, such as classifications, causes of disability, prevalence, cognitive, affective, social and motoric features, teaching methods and techniques. An evaluation was made about the recommended books and movies.

Content of APE Course

Week	Subjects
1	Pre-test practice, informing about the purpose of the lesson
2	Disability and Causes of Disability
3	Types of Disabilities
4	Children with Hearing Impairment and Sports Activities
5	Children with Visual Impairment and Sports Activities
6	Children with Intellectual Disabilities and Sports Activities
7	Children with Physical Disabilities and Sports Activities
8	Children with Other Disabilities and Sports Activities
9	Individual and Team Sports for Children with Hearing Impairment
10	Individual and Team Sports for Children with Visual Impairment
11	Individual and Team Sports for Children with Intellectual Disabilities
12	Individual and Team Sports for Children with Physical Disabilities
13	Individual and Team Sports for Children with Other Disabilities. Evaluation of Books Read and Movies Watched Related to Special Education
14	Evaluation of Books Read and Movies Watched Related to Special Education, Post-Test Practice

Recommended Books

Auggie & Me: Three Wonder Stories (R. J. Palacio), Fingertips (Seran Demiral), Disabled Slope (Makbule Ölçen), Seeing Voices (Oliver Sacks), A Mind at a Time (Mel Levine).

Recommended Movies

I am a Sam, Forrest Gump, The Eighth Day, In Place Stars, Temple Grandin, My World, My Left Foot, Black, Mozart and the Whale, You are not You.

Data Analysis

The data were analyzed with the SPSS 22.0 statistical package program. The normality of the data was tested with the Shapiro-Wilk test and the distribution of the data was found to be normal ($p>0.05$). Pre-test and post-test data were compared with Paired Samples t-test. The margin of error for the analyzes was taken as 0.01.

FINDINGS

Variables	Groups	f	%
Gender	Female	61	51.3
	Male	58	48.7
The state of being a special needs individual in the family	Yes	12	10.1
	No	107	89.9
PES experience with a special needs individual	Yes	15	12.6
	No	104	87.4
The state of wanting to work with a special needs individual	Yes	99	83.2
	No	20	16.8

When Table 2 is examined, the participants; 51.3% female, 48.7% male, 89.9% of them do not have a family member with special needs, 10.1% of them have a person with special needs in their family, 87.4% of

them did not experience PES with IDs, 12.6% of them had PES experience with IDs, 83.2% want to work with IDs, 16.8% don't not want to work.

Table 3. Comparison of participants attitudes towards individuals with special needs pre-test and post-test scores

Scale Score	Mean	N	Ss	t	df	p
Pre Test	59.07	119	11.06	-12.131	118	0.000*
Post Test	69.18	119	7.33			

*p<0,01

When Table 3 is examined, a statistically significant difference was found between the pre-test and post-test attitude scores of the participating in the study towards IDs ($p<0.01$). According to this finding, it can be said that the APE course affects the attitudes of the participants positively.

DISCUSSION

This study was conducted to determine the effect of the APE course on the attitudes of the Sports Coaching Education students towards the education of IDs. It was concluded that the APE course positively affected the attitudes of the students participating in the study towards the education of IDs. In the literature, many study results have been reached that are in line with this study finding. In the study by Hodge and Jansma (23), APE course given to the students of Physical Education Teaching and Recreation Department, it has been determined that students have changed their attitudes towards giving education to IDs in a positive way. In the study conducted by Akbuğa and Gürsel (5), it was found that the education given to the students of the

Department of Physical Education and Sports Teaching through informing, it was determined that students changed their attitudes towards individuals with physical disabilities in a positive way. In the study conducted by Gürsel (21), it was found that the 14-week Physical Education and Sport Lesson for the Disabled, it has been reported that the students of the Department of Physical Education and Sports Teaching are effective in their attitudes against individuals with physical disabilities.

Thompson et al. (55) stated that negative social attitudes towards IDs are generally based on lack of understanding, fear of the unknown, and stereotypes learned from others. In the study conducted by Block and Rizzo (16), academic preparation for IDs positively affected the attitudes of physical education teachers towards educating students with severe degree special needs and

academic preparation helped teachers better understand the characteristics and abilities of IDs. Studies have been carried out to define and improve the attitudes of university students against these individuals. In the study conducted by Sezer (44) with teacher candidates studying in different departments of the Faculty of Education, a 10-week preventive guidance program was applied to teacher candidates' in order to develop a positive attitude towards IDs. It has been determined that the preventive guidance program has positively changed the attitudes of teacher candidates against these individuals. Gözün and Yıkmuş (20) applied an information program to teacher candidates studying in different programs at the Faculty of Education. It has been determined that the program has a positive effect on the attitudes of teacher candidates against inclusive education. In the study conducted by Şahin and Güldenoğlu (49) with the students of the Child Development department, the education program given with the information technique including special education and inclusion issues, it was reported that the participants changed their attitudes against IDs in a positive way. In the study conducted by Alptekin and Batık (8), it was found that the information given to the students of the Special Education course and the Deaf Education Department positively changed the attitudes of the students against IDs (vision impairment, hearing impairment, intellectual disability and physically disability). However, the study was stated that the information was forgotten over time and the change in attitudes returned to its former state. Melekoğlu (32) determined that the Special Education course, which includes interaction with IDs for teacher candidates studying in different departments, positively changed the attitudes of the participants towards students with special needs.

Contrary to these, in the study conducted by Alsalhe (9), it was concluded that the APE course given to physical education teachers candidates did not change the attitudes of the participants against IDs. Similarly, Rizzo (40) reported that there was no

relationship between the attitudes of physical education teachers and APE course. It is thought that the inconsistency of the current study findings with these study findings is due to the content of the applied programs.

In addition to the theoretical education based on information with IDs, the results of the study conducted with different sample groups showing that contact-based education increases positive attitudes have been reached. These were: High school students (17), physiotherapy students (34,48), medical school students (53), health professionals (54). Adler et al. (3) it was determined that a training program which includes both information and contact positively changed the attitudes of optometrist students against IDs. In the study done by Thompson et al. (55) with Nursing Department students, it was determined that the theoretical and practical training given to the students (in rehabilitation centers) changed the attitudes of the participants against IDs in a positive way.

CONCLUSION and RECOMMENDATIONS

This study shows that the APE course given by informing affects the attitudes of the Coach Candidates towards the education of IDs. It can also contribute to the development of perceived competence in addition to the attitude of the participants. It is seen that the attitudes of Coach Candidates towards IDs can be changed by providing individual and group information on problem solving, adapting equipment, and choosing activities suitable for the current performance level with APE course. In addition to information-based programs, future study can investigate how "applied" experiences affect students' attitudes towards IDs. In addition, after a certain period of time after the program, it can be determined whether the attitudes have changed with the permanence test that measures the continuity of the attitudes. The lack of physical education end sport experience as well as theoretical knowledge with IDs was considered as an important limitation in the studies to be conducted. In future research, information and experience can be used together, control group designs can be used, and studies can be carried out with larger sample groups.

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