This study compared physical education majors' attitudes toward teaching students classified as behaviorally disordered (BD), mildly mentally retarded (MiMR), and learning disabled (LD). These types of students are likely to receive physical education in a regular class setting. Currently enrolled in an introductory adapted physical education course, physical education teaching majors (n=1,081) from colleges and universities in 30 states completed the Physical Educators' Attitude Toward Teaching Individuals with Disabilities (PEATID-III) Preservice Version during the last 2 weeks of the semester or quarter. All institutions meeting criteria were given the opportunity to participate. Based on the 5-point Likert scale of the PEATID, results showed that preservice teachers had a mean total attitude score of 3.51 toward teaching students with these disabilities. Favorable attitudes, in descending order, among the participants were LD, MiMR, and BD. Results suggest the need for offering preservice physical education teachers structured practical experiences to foster acceptance of students with behavioral disorders and mild mental retardation. (Contains 21 references.) (Author/ JB)
Attitudes of Preservice Physical Education Teachers Toward Teaching Students with Mild Disabilities

Sherry L. Folsom-Meek, PhD
Department of Human Performance
Mankato State University
Mankato, MN

Ruth J. Nearing, PhD
Department of Physical Education, Recreation and Sport Science
St. Cloud State University
St. Cloud, MN

Harry Krampf, PhD
Department of Human Performance
Mankato State University
Mankato, MN

[This paper was presented at Research Consortium Poster Session: Special Populations (Saturday, 4/1/95; 10:45 A.M.–12:00 P.M.) at the 1995 Annual Convention of the American Alliance for Health, Physical Education, Recreation and Dance, Portland, OR.]

Running head: Preservice PE Teacher Attitudes
Abstract

The purpose of this study was to compare physical education teaching majors' attitudes toward teaching students classified as behaviorally disordered (BD), mildly mentally retarded (MiMR), and learning disabled (LD). Students with these labels are very likely to receive physical education in a regular class setting. Currently enrolled in an introductory adapted physical education (APE) course, physical education teaching majors (N = 1081) from colleges and universities in 30 states, which offered both a physical education teaching major and an introductory APE course, completed the PEATID–III Preservice Version [PS] (Rizzo, 1993) during the last two weeks of the semester or quarter. All institutions meeting criteria were given the opportunity to participate. In this study, reliability for PEATID–III PS was .88. Based on the 5-point Likert scale of the PEATID, results showed that preservice teachers had a mean total attitude score of 3.51 (SD = .43) toward teaching students with the three disabilities. Mean attitude scores toward the three disabilities were in the following descending order: LD, MiMR, and BD. Results of a repeated measures analysis of variance revealed a significant difference among mean scores (p < .05). A post-hoc analysis indicated significant differences [F (2, 2124) = 153.22, p < .01] in attitudes between BD and MiMR, BD and LD, and MiMR and LD.
Attitudes of Preservice Physical Education Teachers Toward Teaching Students with Mild Disabilities

As stipulated by federal mandates, Public Laws 94–142 (U.S. Office of Education, 1977) and 101–476 (Individuals with Disabilities Education Act, 1990), instruction in physical education is a direct service that must be provided to children and youth with disabilities who are between 3 and 21 years of age. In fact, physical education is the only subject–matter area specifically mentioned in the mandates; classroom and home instruction, which are service delivery settings, are also mentioned. Therefore, one of the purposes of the federal mandates is to ensure that all students with disabilities receive appropriate instruction in physical education.

Public Law 101–476 (Individuals with Disabilities Education Act, 1990) has also mandated that students with disabilities be educated in the least restrictive environment, which is the regular classroom whenever feasible. When regular class placement is not appropriate for the student with a disability, alternative placements on a service delivery continuum are to be considered.

Traditionally, the regular physical educator has provided instruction for students with mild and moderate disabilities and the adapted physical education specialist for students with more severe disabilities. However, regular physical education teachers are now expected to teach students with varying abilities, from mild through severe, in the regular classroom service delivery setting (gymnasium, etc.). Physical education, art, and music are three curricular areas in which students with disabilities are often integrated with their nondisabled
Based on results reported in the literature regarding preservice training of physical education teachers, it is evident that regular physical education teachers do not appear to have been adequately prepared to teach students with disabilities integrated into their regular classes (Craft, Santomier, Hogan, & Wughalter, 1985; Dummer & Davis, 1985; Folsom–Meek, 1988; Folsom–Meek, Bernard, & Mull, 1989; Marston & Leslie, 1983; Oakley, 1985). This poor preparation may account for children and youth with disabilities not receiving adequate, appropriate, and effective instruction in physical education.

The attitude of the regular physical education teacher toward students with disabilities is important in contributing toward the success of students with disabilities in regular physical education classes. Excluding speech/language impairments, the most prevalent categories of disabilities in the public schools are: (a) mild mental retardation, (b) learning disabilities, and (c) serious emotional disturbance (Sherrill, 1993). Students with one of these labels are very likely to be integrated into regular physical education classes.

Results of previous research have demonstrated that the attitude of regular physical education teachers toward students with disabilities is a key variable to the success of mainstreaming/inclusion (Craft, Santomier, Hogan, & Wughalter, 1985; Marston & Leslie, 1983). There is a growing knowledge base in the special education and physical education literature regarding teacher attitudes toward students with disabilities. Early research examined teacher attitudes toward students with generic physical and learning-type disabilities (Rizzo, 1984). More recently, physical education researchers have examined the
Preservice PE Teacher Attitudes

hierarchy of teacher attitudes toward specific disabilities (Block & Rizzo, 1993; Folsom-Meek, 1991; Rizzo, Snell, & Courtney, 1988; Rizzo & Block, 1993; Rizzo & Vispoel, 1991; Rizzo & Wright, 1988).

Prior research with regular physical education teachers has yielded somewhat discouraging results; attitudes of these teachers are very difficult to change. Therefore, current research should broaden its examination of the attitudes of regular preservice physical education teachers toward individuals with disabilities. With these results, it may be possible to instill positive attitudes toward individuals with disabilities in undergraduate professional preparation courses.

The purpose of this study was to compare preservice physical education teaching majors' attitudes toward teaching students with classifications of behaviorally disordered (BD), mild mental retardation (MiMR), and learning disabled (LD). It was hypothesized that regular preservice physical education majors would hold similar attitudes toward the three disabilities.

Method

Subjects

Sampling procedures began with locating all possible colleges and universities with physical education teaching majors in the 30 states. Two primary resources were used to locate potential institutions of higher education—Physical Education Gold Book 1987–1989 (Human Kinetics, 1987) and 1992–1993 National Directory Of College Athletics (Collegiate Directories, 1992).

After obtaining all possible institutions, the investigators mailed
correspondence soliciting participation and detailing criteria of the study to instructors of the introductory adapted physical education (APE) course at all institutions. Criteria were that the institution offered a physical education teaching major and that an introductory APE course was offered during the data collection period. Respondents indicated whether their institution met criteria and if they wanted their class to participate. Surveys were sent to all college and university introductory APE course instructors who met criteria and who indicated their willingness to participate in the study.

Subjects, preservice undergraduate physical education teaching majors who were enrolled in the introductory APE course, completed the surveys during last two weeks of the academic term. Informed consent was obtained for all subjects according to institutional guidelines. Data were collected during the 1992–1993 and 1993–1994 academic years. Subjects (N = 1081) represented 118 colleges and universities within 30 states. Of the 1081 subjects, 331 (31%) were females and 749 (69%) were males.

Instrumentation

The instrument used for the study was Physical Educators’ Attitude Toward Teaching Individuals with Disabilities [PEATID–III] (Rizzo, 1993). The PEATID—III was modified for preservice physical education teaching majors participating in this study [PEATID—III Preservice Revision (PS)]. See Figure 1 for sample of the PEATID—III PS.

---

Insert Figure 1 about here

---

PEATID—III PS is divided into two sections: (a) 12 statements expressing
beliefs about teaching students for each of the three aforementioned disabilities in regular physical education classes (36 item total), and (b) 15 demographic and descriptive questions. The 12 statements expressing beliefs and attitudes are rated using a 5-point Likert scale (1 = strongly disagree through 5 = strongly agree). Statements are phrased positively and negatively; the range of possible scores is 36 through 180. The range of possible subtest scores (BD, MiMR, and LD) is 12 through 60.

For this study, reliability of total scores of PEATID–III PS using coefficient alpha was .88. Reliability for each subtest was: (a) BD = .73, (b) MiMR = .72, and (c) LD = .72.

**Data Analyses**

To interpret the total score according to Likert scale values, raw scores were transformed to scaled scores by dividing the total score by 36 (average total score). To interpret data according to Likert scale values for each subtest, raw subtest scores were transformed to scale scores by dividing the subtest score by 12, yielding average subtest score.

Statistical analyses for this study were descriptive statistics on average scores—total, BD, MiMR, and LD and a repeated measures analysis of variance. Dependent variables for the repeated measures ANOVA were BD total score, MiMR total score, and LD total score.

**Results**

**Descriptive Statistics**

For average total attitude score, there was a mean of 3.51 (SD = .43). Descriptive statistics on the average scores of three dependent variables are
illustrated in Figure 2. As depicted in this figure, highest favorable attitude was toward students with LD label, middle favorable attitude was toward students with MiMR label, and least favorable attitude was toward students with BD label. Variability was similar for the three groups.

Repeated Measures Analysis of Variance

The dependent variables for the repeated measures analysis of variance were total scores for each of the three disability categories. Results of this analysis yielded significance (Table 1). Bonferroni post-hoc tests revealed significant differences ($p < .05$) between BD and MiMR, BD and LD, and MiMR and LD.

In conclusion, favorable attitudes, in descending order, of preservice physical education teachers toward teaching students with mild disabilities were: learning disabled, mildly mentally retarded, and behaviorally disordered. Results of this study suggest the need for offering preservice physical education teachers structured practical experiences to foster acceptance of students with behavioral disorders and mild mental retardation. These practical experiences may be a component of the introductory APE course.
References


Dummer, G., & Davis, K. (1985, April). Adapted physical education service delivery and teacher training needs in Indiana. In E. Bundschuh (Chair), *Teacher training needs in adapted physical education: The nationwide implications of five independent survey investigations.* Symposium conducted at the American Alliance for Health, Physical Education, Recreation and Dance Convention, Atlanta, GA.


Table 1

Summary Table for Repeated Measures Analysis of Variance on BD, MiMR, and LD Scores

<table>
<thead>
<tr>
<th>SV</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trials</td>
<td>2</td>
<td>26.96</td>
<td>13.48</td>
<td>153.22</td>
<td>.0001*</td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subjects</td>
<td>1062</td>
<td>577.81</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>2124</td>
<td>186.87</td>
<td>0.09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Probability value is exact.
Figure Caption

Figure 1. Sample of *PEATID–III PS.*
Please circle the response which best corresponds to your agreement with each statement for each labeled disabling condition.

KEY
SD = Strongly disagree  SA = Strongly agree
D = Disagree  U = Undecided  A = Agree
EXAMPLE OF NEGATIVELY PHRASED QUESTION:

Students labeled ____________ should not be taught in my regular physical education classes with nondisabled students because they will require too much of my time.

28. behaviorally disordered
29. mildly mentally retarded
30. learning disabled

EXAMPLE OF POSITIVELY PHRASED QUESTION:

Students labeled ____________ should be taught with nondisabled students in my regular physical education classes whenever possible.

34. behaviorally disordered
35. mildly mentally retarded
36. learning disabled
Figure Caption

Figure 2. Descriptive Statistics on the Three Dependent Variables.
Descriptive Statistics on the Three Dependent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (M)</th>
<th>Standard Deviation (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BD</td>
<td>3.38</td>
<td>.51</td>
</tr>
<tr>
<td>MiMR</td>
<td>3.54</td>
<td>.48</td>
</tr>
<tr>
<td>LD</td>
<td>3.59</td>
<td>.48</td>
</tr>
</tbody>
</table>

Best Copy Available
Acknowledgements

• Mankato State University Faculty Research Grant from College of Graduate Studies for funding this project
• Mankato State University Academic Computer Center
  - Walt Groteluschen and Gregg Asher for statistical consultation
  - Nancy Flynn and Norleen Turensky for data entry
• Jill Binstock and Tonya Chmielewski for their invaluable assistance in many aspects of the project
• Karin Dockhorn and Kim Zarling, Research Assistants in Developmental/Adapted Physical Education at Mankato State University, for survey scoring
• Course instructors and students in introductory adapted physical education courses from the 118 colleges and universities who participated in this study
Table 1

Summary Table for Repeated Measures Analysis of Variance on BD, MiMR, and LD Scores

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between trials</td>
<td>2</td>
<td>26.96</td>
<td>13.48</td>
<td>153.22</td>
<td>.0001*</td>
</tr>
<tr>
<td>Between subjects</td>
<td>1062</td>
<td>577.81</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>2124</td>
<td>186.87</td>
<td>0.09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Probability value is exact.