Preservice Teachers' Attitudes Toward Persons with HIV Disease

David M. Shannon
Jamie S. Carney
Auburn University

This study examines the attitudes toward children or adolescents with HIV among a sample of 211 preservice teachers. Attitudes consisted of beliefs and social comfort levels in social, personal, and work related (e.g., classroom) situations. Their attitudes toward children or adolescents with HIV were compared to their attitudes toward persons with eight other disabilities. Pre-service teachers had the most negative beliefs toward persons with psychological disabilities. They also reported the least amount of social comfort in situations with students with psychological disabilities. While participants reported moderate to positive beliefs about children or adolescents with HIV disease, they reported the lowest levels of social comfort with them.

The AIDS (Acquired Immunodeficiency Syndrome) epidemic has presented an important challenge to educators. There are clear indications that the number of children and adolescents infected with HIV (Human Immunodeficiency Virus) is increasing at a dramatic rate (Centers for Disease Control [CDC], 1997; DiClemente, 1993; Office of National AIDS Policy, 1996). As these numbers increase so does the likelihood that a teacher will have a student in their classroom who has or is effected by this disease (Foley & Kittleson, 1993; Landau, Pryor, & Haefli, 1995). This situation will require teachers to be prepared to deal with the complex educational, social, and psychological issues that may face these students and their families. In addition, teachers may be in a position to help address the concerns of peers, parents, or other school personnel and provide prevention and educational training to students about HIV disease (Ballard, White, & Glascoff, 1990; DiClemente, 1993; Landau, Pryor, & Haefli, 1995).

Preparing teachers to deal with the students effected by HIV disease (encompassing HIV infection through the development of AIDS) requires not only an assessment of their knowledge but also their attitudes toward students or others with this disease (Cinelli, Sankaran, McConatha, & Carson, 1992). Previous research indicates that teachers and other school personnel may hold negative attitudes and/ or misperceptions about persons with HIV disease (Cinelli et al., 1992; Evans, Melville, & Cass, 1992; White & Ballard, 1993). Several studies have suggested that teachers' negative attitudes toward students with disabilities are likely to influence instructional and interpersonal interactions.

(Barowsky, 1986; Brophy & Good, 1979; Good & Brophy, 1972; Gottlieb & Gottlieb, 1977; Hannah, 1988; Rosenthal, 1991). Hannah and Pilner (1993) also suggest that negative attitudes toward students with disabilities may impact students' ability to learn and prosper in the classroom environment.

Several factors appear to mediate teachers' attitudes toward students with disabilities, specifically, the type of disability and contact the teacher will have with the student (Barowsky, 1986; Martinek & Karper, 1981; Miner, 1982; Tolor & Geller, 1988). Attitudes appear to be more negative toward students with psychological or mental impairments (Hannah, 1988). Remafedi (1993) has suggested that teachers' attitudes toward persons with HIV disease and their discomfort with issues related to the disease (e.g., death, myths about the disease) can limit the impact of HIV disease prevention and educational training.

While the majority of states require some form of AIDS education in the classroom and a large number of teacher preparation programs have introduced training on the topic, few address attitudes and classroom interactions (Quinn, Thomas, & Smith, 1990; Remafedi, 1993). The majority of research on teachers' attitudes toward students with disabilities has focused on experienced teachers and hasn't included students with HIV disease. This study examines preservice teachers' attitudes towards persons with HIV disease and includes a discussion of implications for the education of future teachers. It examines preservice teacher beliefs and social comfort levels. Social comfort levels were further examined in relation to three types of interactions;

social, personal, and work-related (e.g., classroom teaching).

Method

Participants

The sample consisted of preservice teachers ($N = 211$) enrolled in a course on human relations that is required of all education majors at a large Southern University. Among the participants reporting demographic data, 27% were male and 73% were female, with the majority of the participants, 82%, in the 19-22 year age range. In addition, 94% of the sample reported being Caucasian, 5% identified themselves as African-American, and 2% as Native American.

Instruments

Attitudes were measured across two components: beliefs and social comfort. The first measure allows for the assessment of participants beliefs about the specific disability. The second measure focuses on perceptions concerning a variety of social interactions with a persons having different disabilities.

Demographic Questionnaire. Participants responded to demographic questions related to gender, race, educational major, and whether they had contact with anyone with one of the specific types of disabilities.

Beliefs Toward Persons with Disabilities. The belief measure consisted of a series of 15 statements presented in a 5-point semantic differential format developed by the authors. Each subject responded by selecting the point along the bi-polar scale (e.g., purposeful/aimless, productive/unproductive, careful/careless, virtuous/sinful) which best represented his or her beliefs about a person with the presented disability type. Nine disability types were categorized as follows: a) Disease/Illness (i.e., AIDS, Cancer, Diabetes), b) Psychological (i.e., Depression, Chemical Addiction, Anorexia), and c) Physical (i.e., Severe Visual Impairment, Severe Hearing Impairment, Paraplegia). The scale was developed based on the research on semantic differential scales (see Osgood, Suci, & Tannenbaum, 1978).

Social Comfort Measure. The social comfort measure consisted of a series of 15 statements describing social interaction in three specific areas; work contact (e.g., teaching a student, individual tutoring), social contact (e.g., neighbor, sharing an elevator), personal contact (e.g., roommate, dating). Work contact included items specific to teaching (i.e., classroom teaching, individual tutoring, conference with the parents of the student). The instrument was developed based on research related to the measurement of social comfort (see Berry & Jones, 1991; Gordon, et al., 1990; Grand, Bernier, & Strohmer, 1982; Strohmer, Grand, & Purcell, 1984; Sigelman, 1991).

Procedure

Participants were surveyed during the first session of a class. After provision of information about participation, the belief and social comfort measures were presented nine times, once for each of the nine separate disability types. The order in which the specific disability types were presented was random so results would not be influenced by order effects.

Analysis of Data

The items which comprised the belief and social comfort measures were summarized for each of the disability types. This resulted in a belief score and a social comfort score for each participant repeated across the nine disability types. Both the belief and social comfort scales yielded a high degree of internal consistency with Cronbach's alpha estimates ranging from .9170 to .9627 for the belief scales and from .9236 to .9667 for the social comfort scales.

Two repeated measures analyses were performed to determine the extent to which beliefs and social comfort varied across the nine disability types. The results were evaluated using an alpha (a) level of .05. Post-hoc comparisons were made to determine the differences in beliefs and social comfort detected by the overall analysis.

Results and Discussion

A significant effect was determined, both in terms of beliefs ($F = 365.57$, $p < .001$) and social comfort ($F = 272.09$, $p < .001$). Both analyses revealed a violation of sphericity, therefore, it was necessary to evaluate each obtained F value using adjusted degrees of freedom. Using the Geisser-Greenhouse correction (Greenhouse & Geisser, 1959; Keppel, 1993), each F test was evaluated against a much more stringent criterion ($df = 1$, and $df = n\text{-}1$). Thirty-six (36) paired-samples t-tests were necessary to evaluate specific differences across disability types. Each t-test was evaluated at a more stringent alpha (a) level calculated using a Bonferroni correction ($a = .05/36 = .0013$) in order to control for the inflation of Type 1 error.

Beliefs

Psychological disabilities were viewed most negatively while physical disabilities were viewed most positively. When examining responses to specific disabilities, the conditions of chemical addiction, depression, and anorexia received significantly more negative responses ($p < .001$) than all other disability types. On the other hand, diabetes and each of the three physical disabilities (i.e., visual impairment, hearing impairment, paraplegia) received significantly more positive responses ($p < .001$) than the other disability types.

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Social Comfort

The findings related to social comfort were very similar to those found for beliefs. Participants reported their highest levels of social comfort with physical disabilities. When examining specific disabilities, the greatest amount of discomfort was found with persons having AIDS, followed closely by persons with chemical addictions. The amount of discomfort expressed toward these two conditions was significantly greater ($p < .001$) than all of the remaining disabilities. Participants expressed significantly higher comfort levels ($p < .001$) with persons with diabetes and cancer.

Comfort in Personal, Social, and Work Settings. Table 1 provides a summary of preservice teachers' level of comfort with individuals with having the nine disabilities in per-

sonal, social, and work settings. The greatest degree of discomfort was expressed toward individuals with all disabilities in intimate interpersonal situations. The greatest amount of comfort was expressed in less personal social interactions such as standing next to the person on an elevator, being seated next to the person in a restaurant, and attending a party with the person.

Social Comfort in Teaching Settings. Further analyses examined social discomfort in three different teaching situations: (a) teaching a student in class, (b) tutoring an individual student, and (c) having a conference with the student's parent(s). Preservice teachers were most comfortable with students having physical disabilites and most uncomfortable with students having psychological disabilities in all three teaching situations. When examining spe-

Table 1
Summary of Social Comfort With Disability Categories

	Type of Interaction		
	Personal	Social	Work
	M(SD)	M(SD)	M(SD)
Disease/Illness Disabilities			
AIDS	5.17(1.16)	3.86(1.63)	3.97(1.65)
Cancer	3.21(1.21)	1.87(1.15)	2.21(1.22)
Diabetes	2.01(0.98)	1.53(0.84)	1.70(0.93)
Psychological Disabilities			
Depression	4.42(1.20)	2.51(1.31)	3.32(1.28)
Chemical Addiction	5.11(1.21)	3.36(1.51)	4.15(1.38)
Anorexia	3.87(1.21)	2.36(1.29)	2.66(1.33)
Physical Disabilities			
Visual Impairment	3.22(1.27)	1.87(1.02)	2.47(1.23)
Hearing Impairment	3.23(1.35)	1.87(1.03)	2.60(1.18)
Paraplegia	3.50(1.23)	2.20(1.16)	2.43(1.29)

The following scale was used: 1 = very comfortable; 2 = moderately comfortable; 3 = comfortable; 4 = neutral; 5 = uncomfortable; 6 = moderately uncomfortable; 7 = very uncomfortable

cific disabilities, participants were most comfortable with a student with diabetes or cancer and least comfortable with students having AIDS or a chemical addiction.

Conclusions

Preservice teachers consistently expressed positive beliefs and higher levels of comfort with persons with physical disabilities or cancer and negative beliefs and higher levels of discomfort around persons with psychological disabilities. While preservice teachers generally expressed positive beliefs about individuals with AIDS, they indicated higher levels of discomfort with them in personal, social, and work situations. This discomfort was especially high in a situations that involved close interpersonal contacts. Preservice teachers expressed their highest levels of discomfort with students having AIDS in classroom teaching or individual tutoring situations.

Future research may be able to help clarify the factors that are related to the discomfort that preservice teachers may have about interacting with students with HIV disease or psychological disabilities. There is also a need for research and training to consider the effects of teachers' attitudes on students with psychological disabilities (Hannah, 1988).

These findings raise concerns about preservice teachers' potential interactions with students who have HIV disease. Similar concerns have been raised regarding experienced teachers (Cinelli et al., 1992; Evans et al., 1992; White & Ballard, 1993). The preparation of teachers to work with students infected with or impacted by HIV disease needs to address their attitudes about interacting with these students.

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Author Note

Please direct all correspondence to the first author at: 4036 Haley Center, Auburn University, AL 36849, (334) 844-3071, e-mail shanndm@mail.auburn.edu

David M. Shannon is an Associate Professor in Educational Research at Auburn University, Auburn, AL.

Jamie S. Carney is an Associate Professor in Counseling and Counseling Psychology at Auburn University, Auburn, AL.