

**INFLUENCE OF AN INTRODUCTORY SPECIAL EDUCATION
COURSE ON ATTITUDE CHANGE OF PGDE STUDENTS OF
UNIVERSITY OF BOTSWANA**

Sourav Mukhopadhyay*, Serefete M Molosiwa**

ABSTRACT

This study investigates the influence of an introductory special education course in changing attitudes of pre-service secondary teachers towards persons with disabilities. Pre and post study research design was used to measure the attitude of the pre-service Post Graduate Diploma in Education (PGDE) student-teachers of University of Botswana towards disability and to determine whether an introductory course can influence in changing attitude of the student teachers. Adapted SADP scale was used to measure attitude towards individuals with disabilities. Results indicate that large numbers of students joined the PGDE programme with positive attitudes towards people with disabilities. For those who joined the programme with negative attitude, the introductory course was not effective in changing the attitude towards individual with disabilities.

INTRODUCTION

Attitude towards people with disabilities has attracted many researches. Rao (1), in a seminal research documented that there are 30 definitions of terms used to explain the concept of attitude. Attitude is a complex, multidimensional, and cognitive, affectively, and behaviourally constructed phenomenon. The cognitive component refers as an individual's ideas, thoughts, perceptions, beliefs, opinions or mental conceptualisation of the referent (2). The affective component is said to reflect the emotional foundation of an attitude (3) which may be positive or negative feelings towards referent. Behavioural components guide an individual's willingness to behave in favour or against an object, person or issue (2).

Teachers play an important role in the process of teaching learning. Teacher's attitude towards learners with a disability is paramount for integrating them into inclusive environments. Negative

attitude towards persons with disability serves as hidden barriers for persons with disabilities to participate fully in the society (4, 5). The importance of having positive attitudes toward inclusive education amongst educators has been long recognised. Educators' positive attitudes towards persons with disabilities may facilitate inclusive practices (6, 7, 8). Positive attitudes can be and need to be fostered through both training and positive experiences with students with disabilities (9).

Additional training in how to teach students with disabilities leads to improvements in individual attitudes and following on from that, improvements in the school ethos towards educating students with diverse learning needs.

Highlighting the need for positive attitudes, Murphy (10) states that if teachers leave from university with negative attitudes then those attitudes are difficult to change. Positive attitudes can be and need to be fostered through both training and positive experiences with students with disabilities (6). Pre-service training may be the best time to address educators' attitudes and possibly modify their negative attitudes toward persons with disabilities as well as about inclusive education.

Preparing teachers for regular class teaching has undergone a major pedagogical shift in recent years. Training institutions should make sure that pre-service teachers are competent to cater for the needs of large numbers diverse learners. This move has been propelled by international bodies such as UNESCO which promote the idea of including content on inclusion as part of teacher training programs (11). In preparing teachers for inclusive classrooms their attitudes, beliefs, expectations and acceptance of people with diverse needs should be addressed. Keeping this in mind, the teacher preparation programme of the University of Botswana has incorporated an introductory course in special education for regular teachers.

Teacher Preparation Programme of University of Botswana

Although, education of students with disabilities in Botswana started in special schools, currently, the global movement of inclusive education is being implemented in the education scenario of Botswana. Inclusive education demands that the regular education teachers should have basic knowledge and skills in managing students with disabilities and have positive attitude towards people with disabilities. This has forced training institutions to train pre-

service and in-service teachers to cater for the needs of an increasing range of diverse learners. In preparing teachers for inclusive classrooms, their attitudes, beliefs, expectations and acceptance of people with diverse needs should also be considered.

Teacher education programmes should ensure that pre-service teachers acquire the necessary knowledge, and skills. At the same time, they should develop favourable attitude towards students with disabilities before they get to the real classroom. However, a requirement for coursework in special education for those planning to teach in general education classrooms varies from programme to programme and from institution to institution as well as from country to country. In Botswana, there is a two track model for preparing teachers for educating learners with disabilities. That comprised of preparation of special and preparation of regular educators.

Although this is such an important area, unfortunately, limited studies have been carried out to understand pre-service teachers' attitude towards students with disabilities in Botswana. Research examining attitudes may shed light on attitude factors in the context of Botswana and help in reviewing the current programme. This may have useful implications both for teacher trainers as well as policy makers. Dart (12) studied the attitude of pre-service teachers of a College of Education in Botswana in a qualitative research design. The result revealed that an introductory course can influence the attitude of pre-service teachers. However, his research focused on a particular group of students; therefore, there was a need to generalise his finding in other situations through different research methods.

AIM

The aims of this research were to determine if:

- pre-service PGDE student teachers' attitudes towards persons with disabilities favourable or not
- the introductory course is adequate to change the pre-service PGDE student teachers' attitude towards persons with disabilities if they possess negative attitude.
- Prior contact with people with disability has any impact on the attitude of preservice PGDE student teachers of this programme.

METHOD

Participants

The participants of this research were students of Post Graduate Diploma in Education (PGDE) programme of University of Botswana. PGDE is a two semester's per-service undergraduate teacher training teacher preparation programme prepares pre-service teachers to teach in regular education classrooms at secondary school level. The sample comprised of 96 students teachers of PDDE students of 2007-2008 cohort. All the participants were second language English-speaking.

Instrumentation

A two-part survey instrument was employed for this research. Part one of the instrument was designed by the researchers to obtain information about participants' demographic backgrounds. Pre-service teachers were asked to provide information for five variables. These were: gender, age, and contact with people with disabilities (having a family member or close friend with a disability), initiate to interact and preferences to work with individuals disabilities. The part two of the instrument focused on measuring the attitudes toward individuals with disabilities.

Development of the instrument

An 18 statement self-administered Likert-type scale was adapted from *The Scale of Attitudes toward Disabled Persons (SADP)* originally developed by Antonak (13). The original SADP scale contained 24 items. Initially, original scale was administered to 50 third and fourth year special education students of University of Botswana. Fifty students participated in the pilot testing exercise. Since the original scale failed to obtain more than 0.5 reliability coefficient of Cronbach's alpha, systematic deletion of items was deemed to improve reliability of the instrument. Six items which were omitted in the adapted scale. A split-half reliability as determined by the Spearman-Brown reliability coefficient of 0.77 and a Cronbach's alpha homogeneity coefficient of 0.79 was found. Simultaneously, in the adapted scale 'individuals with disabilities' were used instead of 'disabled'. The adopted scale contains 18 positively and negatively worded statement options rated on a 6-point Likert scale ranging from disagree

very much (14) to agree very much (15). Out of the 18 items, 10 items were positive statement and 8 were negatively stated. In this study, only the total score of the scale was used in the analyses, higher score indicating a more favourable attitude.

Procedure

PGDE students completed the above questionnaires during the first tutorial for a core unit on *Introduction to Special Education*. During the 14 week semester, students were provided with formal instruction (a 2 hour lecture) on special education. Throughout the study of special education processes, the unit incorporated a strong focus on individual differences and inclusive education, and provided specific information about characteristics and educational implication and strategies of helping students with disabilities in the regular education classroom. Answers to questionnaire items were never directly discussed in class. Students were not asked to reflect on responses to the SIDP, and at no point was information on the structure and interpretation of this scale given to students. In the last tutorial for the subject, at the end of a 14 week semester, students were asked to complete the same questionnaires for the second time. This was completely separate from any assessment work, and students were assured it would not be marked and would have no bearing on their grades.

RESULTS

Demographic information

Of the 96 participants, 87 (90.62%) participants responded. A total of 87 matched pairs of questionnaires were obtained from students who attended both the first and last tutorials were used for analysis. The female students represented 90.8% ($n = 79$) of the sample and the male constituted 9.2% ($n = 8$) of the participants. The mean age of the female students was 25.15 years with a SD of 2.51, whereas the mean age of the male participants were 29.5 years with a SD of 4.05. As majority of the students join the programmes immediately after completing the undergraduate programme it is not surprising to see that the vast majority of the students were less than 30 years old.

Contact with individuals with disabilities

Approximately 53% ($n=46$) of the participants initiated to interact with people with disabilities before they took this course, whereas 47% ($n = 36$) of the percipients reported that they never initiated any contact with people with disabilities at the beginning, two participants did not respond this item. However, in the information gathered at the end of the semester did not show any improvement in the initiation of the contact. This means the participants do not initiate unless it is mandatory for the part of the course. This information should be taken seriously, and should be used for programme implementation. Only 33.8% ($n=24$) of the participants never had any contact with people with disabilities. Quite a large number of them had previous contact with a person with a disability either as a family member or friend, although just over one half had not had any previous contact. Notably, at this stage of their teacher training, only 17% indicated that they had undertaken any training focusing on the education of students with disabilities. Almost exactly half of the cohort had previously taught a student with a disability.

Confidence in managing learners with disabilities

Approximately, 74% of the student teacher believed that they would be able to manage learners with disability. Mobility impairment was the category next most frequently endorsed by teachers (47.3%). Less than a quarter of the respondents believe they could effectively accommodate students with visual or hearing disabilities (22.8%). Even fewer teachers believed they could effectively accommodate students with mental retardation (13.6%).

Attitudes towards learners with disabilities

Reliability of the modified SADP for PGDE student teachers was determined to be 0.76 using a split-half procedure (as determined by the Spearman-Brown reliability coefficient). Eight items on the SADP had reverse wording and were recoded so that higher scores represented more favourable attitudes toward integration. In order to proceed with the scoring, each respondent's responses were summed. As a result, scores ranged from 18 to 108.

Female student teachers ($M = 81.79$, $SD = 10.65$) on average had favourable attitudes toward individuals with disabilities like male ($M = 77.80$, $SD = 15.65$), $t(182) = 1.03$, $p = .31$.

Contrary to predictions, attitudes were uncorrelated with previous contact with people with disability, $r = .07$, $p = .33$ which was obtained using Pearson correlation.

Effectiveness of the introductory course

At the beginning of the semester, the mean attitude score was found 56 and by the end of semester the mean score of the students' attitude was 87, which was more favourable, towards individuals with disabilities. A paired t-test revealed a significant difference between students' scores at the beginning and end of the semester ($t \sim 9.932$, $df \sim 86$, $p = 0.001$). Student teachers who joined the programme with positive attitude remained positive. A paired t-test for students' total scores for attitude towards disabilities becoming more positive ($t \sim 4.752$, $df \sim 46$, $p = 0.001$). However, student teachers who joined the programme with negative attitude, introductory course was not effective in enhancing their attitude score.

DISCUSSION

One aim of this study was to determine if an introductory course is effective in changing the attitude of pre-service teachers' attitudes towards persons with disabilities. A statistically significant difference was also found in attitude of the students before and after the introductory course. The reasons for the more positive outlook after the lecturer could be due to PGDE students joining the program after their first degree and they were motivated to become teachers.

This study also set out to identify demographic variables that may account for differences in participants' attitudes towards people with a disability and the contact with people with disabilities. A number of demographic differences were evident. Female pre-service teachers were more positive in their views towards people with disabilities than were their male counterparts. This finding is consistent with past research which suggests that female teachers have more positive attitudes towards people with disabilities (4). Female teachers make up the majority of the teaching profession in Botswana. This is a blessing as more learners with disabilities are likely to benefit from these favourable attitudes. It also, however, highlights the need for the attitudes of the minority male students in education programmes to be addressed.

The researchers opine that pre-service teacher training programmes should consider the value of introducing meaningful opportunities for interaction initiating with people with disabilities. Some universities have already begun to include a range of opportunities for pre-service teachers to engage in activities with people with disabilities as part of their training (5). It would enhance a greater awareness of the needs of students with disabilities and improved comfort on interacting with them, especially for non-specialists.

This study was designed to investigate whether attitudes towards disability could be fostered through formal instruction. More particularly, it addressed the question of whether raising awareness of disability, through an introductory course could lead to changes not only in terms of knowledge, but also to attitudes towards disability in general. The changes are not surprising, since there is general agreement that university information-based courses do lead to changes in knowledge (15).

Positive changes in the students' attitude towards disability could be partially explained by changes in students' knowledge through the programme. By the end of semester, students had developed more positive (and accurate) views about the persons with disability, this findings is in line with findings from Center and Ward (15), and Scruggs and Mastropieri (16). However, this may not be the only reason why students' attitudes towards disability changed.

The present study has a number of limitations which suggest caution in interpreting the results. The first is that, through their course work during the semester, students may have become more aware of the social desirability of affirming positive attitudes both towards inclusive education for children with disabilities. Secondly, even if the observed changes over the semester are assumed to be an accurate reflection of attitudinal change, the one group pre-test and post-test design restricts ability to assign direct causes to these changes. The students would have had a variety of learning experiences during the semester, in units other than the one reviewed here, which cumulatively could have contributed to positive attitude change. The findings, however, are nevertheless congruent with those of other research studies regarding the importance of structured, experiential learning activities, in addition to university information-based course work, in fostering attitude change towards disability. The current study suggests that fieldwork experiences in the general community, followed

by tasks requiring reflection and integration of material, may be beneficial in enriching disability awareness courses.

It is also possible that these attitudinal changes may be transitory, and may not be maintained once these first year teacher education students are confronted with difficult classroom experiences with children with a range of behavioural and learning difficulties. The challenge is to educate future teachers in ways that promote and sustain understanding and acceptance of a range of disabilities. Additionally, they should be provided with the skills to support children with special needs in inclusive classroom settings.

CONCLUSION

This study highlighted that majority of the student teachers joined the programme with positive attitudes and the training programme enhanced their attitude towards individuals with disabilities. Contrary to this positive note, student who joined the programme with negative attitude, introductory course failed to change their attitude. Although, researchers have indicated that if someone develops negative attitude it is hard to go, but contact with people with disability and training can influence in development of positive attitude. Therefore, researchers of this study recommend that pre-service teachers should be exposed to learners with disabilities during the course work and their teaching practice which may influence in development of positive attitude.

*Address for correspondence
P.O. Box 46418, Village Plaza
Gaborone , Republic of Botswana
Southern Africa
Email: mukhopa@mopipi.ub.bw

REFERENCES

1. Rao S. *Faculty attitudes and students with disabilities in higher education: A literature review*. College Students Journal, 2004; 28, 191-198.
2. Findler L, Vilchinsky N, Werner S. *The multidimensional attitudes Scale toward persons with disabilities (MAS): Construction and validation*. Rehabilitation Counselling Bulletin, 2007; 50, 166-176.

3. Antonak R, Livneh H. *Measurement of attitude towards persons with disabilities*. Disability and Rehabilitation, 2000; 22, 211-224.
4. Brodwin MG, Orange R. *Attitude toward disability*. In J. A. Faubion, & J. A. Faubion (Ed.), Rehabilitation services: An introduction for the human services professionals (pp. 174-197). Osage Beach, MO: Aspen. 2002.
5. Hergenrather K. & Rhodes S. *Exploring undergraduate students' attitudes towards persons with disabilities: Application of the disability social relationship scale*. Rehabilitation Counselling Bulletin, 2007; 50, 66-75.
6. Hobbs T, Westling DL. *Promoting successful inclusion through collaborative problem solving*. Teaching Exceptional Children, 1998; 31 (1), 12-19.
7. Wilczenski F. *Development of a scale to measure attitudes toward inclusive education*. Educational and Psychological Measurement, 1995; 2, 291-299.
8. Wilczenski FL. *Measuring attitudes towards inclusive education*. Psychology in the Schools, 1992; 29, 307-312.
9. Sharma U, Forlin C, Lormam T, Earle C. *Pre-service teachers' attitudes, concerns and sentiments about inclusive education: An international comparison of the novice pre-service teachers*. International Journal of Special Education, 2006; 21 (2), 82-93.
10. Murphy D. *Implications of inclusion for general and special education*. The Elementary School Journal, 1996; 96 (5), 469-493.
11. UNESCO. *The Salamanca Statement and Framework for Action on Special Needs Education*. Paris: UNESCO 1994.
12. Dart G. *'My eyes went wide open'- an evaluation of the special needs education awareness course at Molepolole College of Education, Botswana*. British Journal of Special Education, 2006, 33 (3), 130-138.
13. Antonak R. *Development and psychometric analysis of the scale of attitudes toward disabled persons*. Journal of Applied Rehabilitation Counselling, 1982, 13, 22-29.
14. Al-Abulwahab SS, Al-Gain SI. *Attitude of Saudi Arabian health care professionals' towards people with physical disabilities*. Asia Pacific Disability and Rehabilitation Journal, 2003; 14, 63-70.
15. Center Y, Ward J. *Attitudes of school psychologists towards the integration of children with disabilities'*. International Journal of Disability, Development and Education, 1989; 36, 117-132.
16. Scruggs T, Mastropieri M. *Teacher Perceptions of Mainstreaming/Inclusion, 1958-1995: A Research Synthesis*. Exceptional Children, 1996; 63 (1), 59-74.