



Attitudes of Special Education Student Teachers at Hashemite University towards their Specialisation: A Mixed-Methods Design Study

Eman Al-Zboon, Merfat Fayez, Mustafa Alkhalwaldeh

Queen Rania Faculty for Childhood, Hashemite University, Jordan.

Received: 12/5/2018

Revised: 25/3/2019

Accepted: 27/1/2020

Published: 1/9/2020

Citation: Al-Zboon, E. ., Fayez, M. ., & Alkhalwaldeh, M. (2020). Attitudes of Special Education Student Teachers at Hashemite University towards their Specialisation: A Mixed-Methods Design Study. *Dirasat: Educational Sciences*, 47(3), 462–469. Retrieved from <https://dsr.ju.edu.jo/djournals/index.php/Edu/article/view/2432>



© 2020 DSR Publishers/ The University of Jordan.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY-NC) license <https://creativecommons.org/licenses/by-nc/4.0/>

Abstract

This study examines the attitudes of special education (SE) student teachers at Hashemite University towards their specialisation. A mixed-methods design was employed and 73 students were asked to rank their attitudes towards their specialisation on an attitude scale, with 15 students later participating in semi-structured interviews. The results revealed the neutral attitudes of students toward their specialisation, with 47.9% reporting negative attitudes. The findings of this study revealed that there was no significant effect of marital status, secondary school grade average or university grade average on these attitudes. The university selection process should be changed to include desirable criteria and interviews should be conducted with students to determine their level of desire and awareness of their specialisation. A number of recommendations and suggestions are presented for improving student teachers' attitudes towards SE specialisation. These improvements may include changes to the programme acceptance process, practicum conditions, and conducting awareness and induction programmes for students to better understand SE and the categories and work opportunities for individuals with disabilities.

Keywords: Persons with disabilities, attitudes, special education, pre-service teacher.

اتجاهات طلبة تخصص التربية الخاصة في الجامعة الهاشمية نحو تخصصهم: دراسة باستخدام المنهجية المختلطة

إيمان الزبون، ميرفت فايز، مصطفى الخوالدة

كلية الملكة رانيا للطفولة، الجامعة الهاشمية، الأردن

ملخص

تهدف هذه الدراسة إلى تعرّف اتجاهات طلبة تخصص التربية الخاصة في الجامعة الهاشمية نحو تخصصهم. تم استخدام المنهجية المختلطة وتم تطبيق البحث على 73 طالب ليقدموا اتجاهاتهم نحو تخصصهم على استبيان الاتجاهات، ثم تم إجراء مقابلات شبه مقننة مع 15 طالب. وأظهرت النتائج أن اتجاهات الطلبة كانت متوسطة نحو تخصصهم، كما أظهر ما نسبته 47,9% من الطلبة اتجاهات سلبية نحو تخصصهم. ولم يكن هناك أثر دال لكل من الحالة الاجتماعية، ومعدل الثانوية العامة، ومعدل الجامعة التراكمي على اتجاهات الطلبة. ينبغي تغيير عملية الاختيار لتشتمل على معايير مفضلة وإجراء مقابلات مع الطلبة لتحديد مستوى الوعي والرغبة بالتخصص. وفي نهاية البحث تم تقديم مجموعة من التوصيات والاقتراحات لتحسين اتجاهات الطلبة نحو تخصص التربية الخاصة وتشتمل التحسينات على تغييرات في البرنامج مثل عملية القبول وشروط الممارسة وإجراء برامج وعي وتدريب أولي لتحسين فهم التربية الخاصة، وفرص العمل لذوي الإعاقة. الكلمات الدالة: الأشخاص ذوي الإعاقة، الاتجاهات، التربية الخاصة، معلم مرحلة ما قبل الخدمة...

Introduction

Teachers' positive attitudes are a major contributor to the success of a special education (SE) programme (Bain & Dolbel, 1999), and teachers' attitudes and beliefs will influence their expectations and practices when dealing with students with disabilities (SWDs). Teachers' perceptions are important for achieving enhancements to their work conditions and improvements to their quality of their working life (QOWL), and during any change process (Al-Zboon, Dababneh, & Ahmad, 2015; Al-Zboon, & Ahmad, 2016). Professional attitudes may act to facilitate or constrain the implementation of policies which may be considered radical or controversial, and thereby affect the success of an innovation. Teachers' attitudes can have a significant influence upon the success of educational policies (Avramidis, Bayliss & Burden, 2000).

Attitudes that allow teachers to work successfully with SWDs should consistently be focused upon during pre-service and in-service preparation (Monahan et al., 2000). Murphy (1996) stated that if teachers graduate from tertiary education with negative attitudes, then these are very difficult to change, leading to low expectations of SWDs, as well as reduced learning opportunities for SWDs in the long term.

While there is little existing research that is directly related to the topic of SE teachers' attitudes toward their specialisation, there is some research which has examined teachers' attitudes in general. One study explored the attitudes of SE students towards their major studies, and the results indicated that this was positive; however, the researchers recommended that further studies should be conducted taking in consideration other variables (Al-Jaddou, & Esam, 2015). A study by Jobe and Rust (1996) reported that male teachers tended to hold more negative attitudes about SWDs than female teachers, while Nonis and Jernice (2011) found that pre-service teachers' attitudes towards SWDs were generally quite positive. Petrovay (2000) examined the factors that influence the selection of teachers for the education of SWDs through interviews with two teachers. The results indicated that this profession is of high value to them and their work is driven by their love for these students and their concern for SWDs' happiness. In addition, the teachers expressed their job satisfaction in teaching SWDs. In a study in Nigeria, Obani and Doherty (2000) surveyed the attitudes of student teachers towards the instruction of SWDs. The results revealed positive attitudes among teachers, with females again displaying higher positive attitudes than males, while younger teachers had higher positive attitudes than older teachers.

Al-Aed, Arab and Haouna (2012) surveyed the attitudes of Saudi male student teachers towards SWDs and the reason for their decision to teach these students. The results revealed positive attitudes, with no significant differences noted between teachers due to their level of study, achievement, and the level of their parents' education. Al-Khaldeh, Al-Zboon and Ahmad (2016) examined the attitudes of students at Queen Rania's Faculty for Childhood at the Hashemite University towards the specialisation of child education, and the results revealed neutral attitudes.

Study problem

To date, there have been no studies on the attitudes of SE pre-service teachers toward their specialisation in the Queen Rania Faculty for Childhood (QRFFC) at the Hashemite University, which is dedicated to preparing teachers in Jordan for early childhood education. The SE teacher preparation programme at the Hashemite University consists of a four-year programme of study at the undergraduate level. This programme includes courses taught by lecturers who specialise in SE and field training (Al-Zboon & Ahmad, 2016).

Educational reforms cannot be ensured without considering the enhancement of teachers' QOWL (Al-Zboon, Alkhateeb, & Alkhaldeh, 2015), and teachers' attitudes towards their specialisation are considered a vital element of this. Attitudes are learned disposition which direct feelings, thoughts and actions (Packer, Iwasiw, Theben, Sheveleva, & Metrofanova, 2000; Paris, 1993), and as this is a learned disposition can be changed in order to enhance teachers' attitude. A better understanding of this specific group of SE student teachers will provide a new perspective for the university decision-makers and will be crucial in creating an SE preparation programme which enhances attitudes in Jordan. Therefore, the primary objective of this study was to examine the attitudes of SE pre-service teachers in the QRFFC toward their specialisation.

Methodology

Design

A mixed methods design was used, which employed both qualitative (a survey) and quantitative (semi-structured interviews) methods. Utilising mixed methods can help in counteracting the weaknesses present in both quantitative and qualitative research (Creswell & Plano Clark, 2011).

Participants

The survey was performed using a purposive sample of 73 (3 male and 70 female) SE student teachers at Hashemite University, Jordan, and participants were asked to complete a questionnaire. The second sample of 15 SE student teachers was also a purposive sample drawn from the original sample of survey respondents. Interviews were conducted with these 15 participants, all of whom had to meet the following criteria: a SE student teacher at the QRFFC, and had completed all the courses and field training for the fourth year of the Bachelor SE programme. The study complied with the ethical code of the International Review Board (IRB) at Hashemite University, and Table 1 presents the demographics of the participants.

Table 1: Demographics of the participants

Variable	N
<i>Gender</i>	
Males	3
Females	70
<i>Cumulative grade average in secondary school</i>	
60-69	1
70-79	30
80-89	40
90-100	2
<i>Cumulative grade average in university</i>	
2-2.49	10
2.5-2.99	27
3-3.59	26
3.6-4	10
<i>Marital status</i>	
Never Married	58
Married	15

Instrument

A teachers' attitudes survey was developed, which consisted of 34 items using a 5 point Likert-type scale, and teachers were asked to rate their perception of each item. To establish the content validity of the instrument, eight experts in the field were asked to review the items and provide feedback, and items were revised until there was 100% agreement amongst the reviewers on the content validity and the wording of each item. The reliability of the instrument was determined using Cronbach's alpha as 0.883, reflecting a good level of internal consistency.

A semi-structured interview schedule was developed based on open-ended questions, including teachers' attitudes, the role of the preparation programme in teachers' attitude, and suggestions for enhancing teachers' attitudes.

Data Analysis

Means, percentages and standard deviations were calculated, and statistical analysis was performed an independent sample t-test and a one-way ANOVA to check for any significant mean difference according to the independent variables of the study, using the SPSS software package. Furthermore, content analysis was used to analyse the qualitative data.

Results

Attitudes

Attitudes were evaluated using the following scale: <2.34 indicated a negative attitude, 2.34 to <3.67 indicated a neutral attitude and 3.67 to 5.00 indicated a positive attitude. The results of the survey indicated neutral attitudes (a mean total score of 2.8) of students in the QRFFC towards specialisation. For each item the mean score was between 1.6 and 4.8, however, 47.95 % of students demonstrated negative attitudes.

"I really love my specialisation, it has humanistic value." (Shadi)

"I plan on completing my graduate studies in this major." (Fadia)

"I like it, I always try to develop my ability and gain deep knowledge and skill in it and do practical experiences." (Rasha)

Some students reported negative attitudes because of the absence of work opportunities, community attitudes, programme acceptance conditions (a low average is sufficient to enrol in the SE specialisation), a fear of low achievement for SWDs and low expectations. The following excerpts exemplify participants' sentiments on these issues:

"I feel blame for studying SE as there aren't jobs in the field. Lot of SE teachers tell me this and some who find a job don't take a fair salary. I advise SE students to change their specialisation." (Samar)

"SE specialisation is considered in our country related to low average so it has a negative attitude from our community as it is not an important specialisation. However, all of education specialisations have this temptation." (Ali)

"I really fear from my future profession. I doubt if I can deal with this group. I always ask myself if I can achieve progress with them." (Shaker)

Differences in attitudes

Differences in mean scores for attitudes showed no significant difference based on marital status between never married and married ($t = -1.217$, $p < 0.228$, t-test) (Table 2), and there was also no significant difference in attitudes based on grade average in secondary school ($t = 0.564$, $p < 0.577$, t-test) (Table 3). Likewise, there was no significant difference in attitudes based on grade average at university ($F = 0.629$, $p = 0.599$, one-way ANOVA) (Table 4, Table 5).

Table (2) Mean, Standard Deviation and t-test of Teachers' Attitudes According to marital status

Scale		No.	Mean	Std. Deviation	df	t	P
Attitude	Never Married	58	2.7515	0.19558	71	-1.217	0.228
	Married	15	2.8157	0.11143			

Table (3) Mean, Standard Deviation and t-test of Teachers' Attitudes According to Cumulative grade average in secondary school

Scale	Cumulative grade average	No.	Mean	Std. Deviation	df	t	P
Attitude	very good	39	2.7534	0.20989	71	0.564	0.575
	good	34	2.7777	0.14754			

Table (4) Mean and Standard Deviation of Teachers' Attitudes According to Cumulative grade average in university

Variable	N	Mean	SD
Cumulative grade average in university			
2-2.49	10	2.7712	.21198
2.5-2.99	27	2.7560	0.19335

Variable	N	Mean	SD
Cumulative grade average in university			
3-3.59	26	2.7941	0.14363
3.6-4	10	2.7029	0.22885

Table (5) F-test of the Cumulative grade average in university on Teachers’ attitudes

Differences	Sum of Squares	Df	Mean of Squares	F-Value	p-Value
Between groups	0.064	3	0.021	0.629	0.599
Within groups	2.339	69	0.034		
Total	2.403	72			

Note: degrees of freedom (Df).

Factors that influence attitudes

During the interviews the student teachers suggested some common factors that enhance their attitudes towards SE specialisation, with all agreeing that enrolment in the SE specialisation programme had enhanced their attitude. Other factors included successful stories of SWDs, practicum, humanistic area of this specialisation, some college courses, college professors and voluntary initiatives. Factors that negatively affected their attitudes were related to practicum conditions and work issues, such as a poor work environment, few employment opportunities in SE and the low salary, depending on a lone SE teacher and the absence of other specialists belonging to a multidisciplinary team, the absence of technology, and dependence on traditional and primitive techniques. The following excerpts exemplify participants’ comments on these issues:

“Studying SE helps in increasing positive attitude. Our teacher in college give us successful examples of disabled who achieve a high level in studying, sport, governmental position and life.” (Hania)

“I think practical experiences help in this domain. I share in voluntary initiatives and field visiting which help me in knowing the humanistic aspect of SE.” (Marwa)

Suggestions to enhance and increase positive attitudes

During the interviews the student teachers provided many suggestions for improving student teachers’ attitudes towards SE specialisation, which included enhancing the environment during work and field training, the inclusion of practical tasks in all courses and not only in the field practicum which takes place during the final semester, voluntary groups to assist SWDs, group discussions and conferences, disability simulations (for example being blind folded or using a wheelchair), and field visits to outstanding centres or school for SWDs. An induction programme was proposed to increase awareness of the specialisation and its work area, and not depending on secondary school grade averages for enrolment in SE programmes, instead employing an entrance test and interviews before enrolment in the specialisation to ensure that potential students possess an awareness of the specialisation and have a desire to deal with SWDs. Other ideas suggested during the interviews were the establishment of a national committee of teachers to advocate for the rights of teachers and their status in the community and their salaries, the introduction of laws requiring the provision of a positive and suitable work environment for teachers, and increasing the supervision of schools to ensure that a suitable work environment is provided. Finally, the inclusion of SWDs in daily life, changing community attitudes towards the disabled and the SE profession, and the relating of stories of successful SWDs were suggested for enhancing attitudes.

The following excerpts exemplify participants’ comments on these issues.

“I think that the responsible should enhance the work environment to increase their attitude. We train in practicum in a poor frustrating atmosphere.” (Shreen)

“I think that studying SE based on informed consent, as students know the field and categories, is a good idea. And

conducting awareness meetings to work opportunity and improve student ability to be able to compete in the field.” (Ghazi)

Discussion

The quantitative results indicate the neutral attitudes of SE student teachers towards their specialisation, and almost half demonstrated negative attitudes. This is a really frustrating result which can be attributed to the status and negative attitude displayed towards the SE profession in Jordan. Many studies in the Jordanian context (e.g., Al-Jaddou, 2015; Abu-Nair, 2016) have indicated that educational and humanistic specialist students suffer from a lack of opportunities and services, negative attitudes, and marginalisation. Furthermore, practices in schools suggest that teachers' working conditions are poor, and the educational literature indicates that SE teachers experience many work-related issues that affect their QOWL and well-being (Al-Zboon, Dababneh, & Ahmad, 2015), which affects attitudes.

This finding is consistent with those of Al-Khawaldeh et al. (2016), who reported neutral attitudes amongst students specialising in child education, with 68 students having negative attitudes, while Al-Shahrani (2004) noted the negative attitudes of student teachers towards the teaching profession. However, these findings are inconsistent with those of Petrovay (2000); Al-Jaddou (2015); Nonis & Jernice (2011); Al-Aed, et al. (2012), who reported positive attitudes of SE students towards their specialisation.

This current study found no significant difference in attitudes based on marital status, secondary school grade average and university grade average, indicating that students have the same attitudes to individuals with disabilities regardless of these variables. This finding could be expected, because all students study and live in the same circumstances and receive similar training. However, negative attitudes are common in the Jordanian community and there is a low level of respect for the SE profession and educational specialisations in general, making the demographic data results not that relevant. Roush (1986) found that negative attitudes towards people with disabilities are common in society, but are not directly voiced. Cultural values, traditional beliefs, the educational environment and religion also influence attitudes towards individuals with disabilities (Al-Abdulwahab, & Al-Gain, 2003).

This result is in line with those of Al-Khawaldeh et al. (2016), who revealed no differences in the attitudes of students towards their specialisation based on their cumulative grade average whilst at university, although in contrast, Al-Shahrani (2004) did reveal differences based on this average. Al-Khawaldeh et al. (2016), as in this current study, reported no differences in the attitudes of students towards their specialisation based on social status, but noted that the secondary grade average variable did have some effect, which is supported by the findings of Al-Mgedel (2006).

However, the variation in attitudes presented in different studies may indicate that practice sites, experience, belief and culture affect these attitudes (Al-Abdulwahab, & Al-Gain, 2003), and therefore attitudes are connected to community variables, rather than college variables.

All students in the current study agreed that enrolment in the SE specialisation programme had enhanced their attitudes. Other factors included hearing the success stories of SWDs, the practicum experience, the humanistic side of the specialisation, some college courses, college professors, and voluntary initiatives. It is interesting to note that most of these are related to contact with individuals with disabilities.

The literature has focused on the effect of contact with individuals with disabilities on improving positive attitudes (Li, Wu, & Ong, 2014; Gething, 1991; Bakheit, & Shanmugalingam, 1997) and on the role of pre-service preparation (Monahan et al., 2000). This has been shown to affect attitudes and allow teachers to work successfully with SWDs. Teaching values and understanding the possible effects of information on disability gained during undergraduate programmes have been identified as significant factors in the improvement of attitudes (Garven, & Stachura, 2003. Al-Shahrani (2004); Fraser (1997) have also revealed the importance of practicum experiences in students' attitudes towards education specialisations.

Student teachers noted the emotional and humanistic side of the profession and the role this has regarding their attitudes. This has also been reported by Petrovay (2000), who indicated that the profession highly values the education of SWDs and their work is driven by their love for these students and their concern for SWDs' happiness.

Students mentioned factors that negatively affected their attitudes, including few work opportunities in SE and the low salary, and practicum and work issues. These variables are also mentioned in the literature, and Folostina & Tudorache's (2012) reported on the variables that negatively affect teachers' attitudes and position in the community, including low salary, low status within the community and negative attitude of the community, poor work environment and inadequate resources within schools. The educational literature indicates that the SE field faces many challenges, including work-related issues that affect teachers' QOWL, with SE teachers experiencing burnout (Onder & Sarim, 2009) and negative community attitudes towards SE teachers (Haughey & Murphy, 2001).

The student teachers provided some suggestions for enhancing attitudes towards SE specialisation. These included: enhancing work and field training environments; an induction programme to increase awareness of the specialisation; not depending on secondary school grade averages for enrolment in SE training and instead employing an entrance test; and disability simulations. Other studies support these suggestions, and enhancing the working environment so that it is more comfortable, suitable and motivating for a teacher has been noted (Al-Zboon, Dababneh, & Ahmad, 2015; Jaradat (2003) mentioned that Jordanian standards for accepting students into university depend only on average grade scores, and consequently a large percentage of students have negative attitudes towards their specialisation, which leads to them trying to change courses during their first year. Therefore the university selection process should be changed to include desirable criteria and interviews should be conducted with students to determine their level of desire and awareness of this specialisation. Other suggestions in the literature are related to coursework interventions and technical instruction, such as disability simulations (Li, Wu & Ong, 2014).

Conclusions

This research has investigated SE student teachers' attitudes towards their specialisation. Many SE students in this sample were found to have negative attitudes, although it was reported that enrolment in the SE specialisation programme had enhanced their attitudes. Work and practicum conditions, together with community attitudes, lead to negative attitudes towards SE specialisation, and the findings of this study can be used by decision-makers to improve students' attitudes. These improvements may include changes to the programme acceptance process, practicum conditions, and conducting awareness and induction programmes for students in order that they can better understand SE and the categories and work opportunities for individuals with disabilities. The study has a major limitation due to the small sample size, which was drawn from a single college and consisted of only fourth-year students, which prevents generalisation of the results. Future studies could address this limitation through the collection of additional data from samples originating from different settings and populations in Jordan.

References

- Al-Abdulwahab, S., & Al-Gain S. (2003). Attitudes of Saudi Arabian health care professional towards people with physical disabilities, *Asia Pac Disabil Rehabil Journal*, 14(1), 63-70.
- Al-Aed, W., Arab, K. & Hasouna, M. (2012). Attitudes of Special Education Students Concerning Future Career and the Potential Motives for Joining Special Education in Majmaa University, *Arabian journal*, 26(1), 1-39.
- Al-Jaddou, E. (2015). Attitudes of Special Education Students towards their specialization on a sample of students of The World Islamic Sciences & Education University in Jordan. *DIRASAT: EDUCATIONAL SCIENCES*, 42(3). Retrieved from <https://archives.ju.edu.jo/index.php/edu/article/view/5405>
- Al-Khawaldeh, M., Al-Zboon, E., & Ahmad, J. (2017). Attitudes of child education students towards their specialization and future occupation, *Dirasat*, 45(4), 181-197.
- Al-Mgedel, A. (2006). Attitudes of education college in Omman towards teaching profession, *Kutian education journal*, 21(81), 91-142.
- Al-Shahrani, M. (2004). The attitudes of students-teachers towards teaching profession and its relationship with some factors, *Union of Egyptian universities libraries, education college Journal*, 15(2), 92-123.

- Al-Zboon, E. Dababneh, K. & Ahmad, J. (2015). Quality of work life: perceptions of Jordanian special education teachers. *Education*, 135(3), 380-388.
- Al-Zboon, E., Alkhateeb, A. & Alkhaldeh, M. (2015). Quality of Life of Special Education Teachers in Jordan, *Mediterranean Journal of Social Sciences*, 6(2), 40-46.
- Al-Zboon, E. & Ahmad, A. (2016). Pre-service special education teachers' professionalism and preparation in terms of child sexual abuse, *European Journal of Special Needs Education*, 31(1),13-26.
- Avramidis E., Bayliss P. & Burden, R. (2000). Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school, *Teaching and Teacher Education*, 16, 277-293
- Bain, A. & Dolbel, S. (1991). Regular and special education principals' perceptions of an integration program for students who are intellectually handicapped, *Education and Training in Mental Retardation*, 3, 33-42.
- Bakheit A. & Shanmugalingam, V. (1997). A study of the attitudes of a rural Indian community towards people with disability, *Clinical Rehabilitation*, 11(4), 329-34.
- Creswell, J. & Plano Clark, V. (2011). *Designing and Conducting Mixed Methods Research*. (2nd ed.). Thousand Oaks, CA, USA: Sage.
- Folostina, R., & Tudorache, L. (2012). Stress management tools for preventing burnout phenomenon at teachers from special education, *Social and Behavioral Sciences*, 69, 933 – 941.
- Fraser, H. (1997). The Initial Teacher Education of Nursery Teachers: Do Teacher Training Competences Help or Hinder?, *Early Child Development and Care*, 132, 1-19.
- Garven F, & Stachura K. (2003). Comparison of occupational therapy and physiotherapy students' attitudes towards people with disabilities, *Physiotherapy*, 89, 653-64.
- Gething, L. (1991). Generality vs. specificity of attitudes toward people with disabilities, *British Journal of Medical Psychology*, 64, 55-64.
- Haughey, M., & Murphy, P. (2001). Are rural teachers satisfied with the quality of their work life, *Education*, 104(1), 56-66.
- Jaradat, D. (2003). Evaluation of prediction ability of secondary certification to cumulative average university: case study, *Yarmouk Research Journal*, 19(1), 383-400.
- Jobe, D. & Rust, J. O. (1996). Teacher attitudes toward inclusion of students with disabilities into regular classrooms, *Education*, 117, 148-154.
- Li, C., Wu, Y., & Ong, Q. (2014). Enhancing Attitudes of College Students towards People with Intellectual Disabilities through a Coursework Intervention, *Journal of Developmental and Physical Disabilities*, 26(6), 793-803.
- Monahan, R.G., Marino, S.B. & Miller, R. (2000). Rural teachers' attitudes toward inclusion, *Rural Goals: Building Programs That Work*, 301-305.
- Murphy, D. M. (1996). Implications of inclusion for general and special education, *Elementary School Journal*, 96, 469-449.
- Nonis, K. P., & Jernice, T. S. Y. (2011). Pre-service teachers' views about inclusion in Singapore, *Journal of the International Association of Special Education*, 12(1), 3-9.
- Obani, T., & Doherty, J.(2002). A study of some factors influencing attitudes to teaching the handicapped among Nigerian student teachers, *International Journal of Education Development*, 4(4), 285-291.
- Onder, F. & Sarim, M. (2009). The Quality of School Life and Burnout as Predictors of Subjective Well-Being among Teachers, *Educational Sciences: Theory & Practice*, 9(3), 1223-1236.
- Packer, T., Iwasiw, C., Theben, J., Sheveleva, P., & Metrofanova, N. (2000). Attitudes to disability of Russian occupational therapy and nursing students, *Int Journal Rehabil*, 23(1), 39-47.
- Paris, M. (1993). Attitudes of medical students and health-care professionals toward people with disabilities, *California School of Professional Psychology, Berkeley/Alameda, Arch Phys Med Rehabil*, 74(8), 25-818.
- Petrovay, D. (2000). Factors influencing a career choice as a teacher of the visually impaired, *PHD Unpublished manuscript, University of Arizona at Tucson*.
- Roush, S. (1986). Health professionals as contributors to attitudes toward persons with disabilities, *A special communication, Phys Ther*, 66(10), 1551-4.