

THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

The Attitude of Students without Disabilities towards the Integration of Students with Disabilities in to the Regular Classroom: the Case of Selected Primary Schools of South Gondar Administrative Towns, Ethiopia

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Abstract:

The purpose of this study was to assess the current attitude of students' without disabilities towards the integration of students with disabilities in to the regular classroom in the selected primary schools of south Gondar administrative zone. 384 students were selected from the five schools based on their population and grade level proportion by using simple random sampling technique. Both descriptive and inferential statistics were used as quantitative methods of analyzing the data obtained through questionnaire. The result showed that students without disability had slightly positive attitude to the inclusion of students with disabilities in to the mainstream classroom. In addition, the result of this study indicated that there was no statistically significant difference of SWODs' attitude related to sex., age, grade level, and types of residence at $t(-0.875), df = 446, p = .383 > 0.05$; $t(.461), df = 346, p = .645 > 0.05$; $F(3, 344) = 1.365, p = .253$, and $t(.346), df = 346, p = .281 > 0.05$ respectively. It is also found out that there was slightly statistical significant differences at the $p < 0.05$ level on attitude scores among the five groups [$F(4, 343) = 2.670, p = .032$]. Therefore, the schools should create an opportunity for students without disabilities to interact, play, work and go and back on to their homes together with their peers with disabilities.

Keywords: Attitude, students with disabilities, attitude of teachers, students with disability

1. Introduction

The WHO report 2011 on disability revealed that the number of people with disabilities is growing worldwide. It stems because of ageing of the populations and the rise of chronic diseases as well as because of environment changes, natural disasters, road traffic accidents, conflicts, diet and substance abuse (Dionne et al., 2013; WHO, 2011). These people with disabilities are a part of our society. Moreover, studies indicated that about 80 percent of all persons with disabilities live in isolated rural areas in developing countries (UNESCO, 2000). African countries seem to share the same problem; even worse. Children with disabilities make up the world's largest, and most disadvantaged minority in terms of education. They are just like us, they want to live fully, and be useful. However, due to the restrictions caused by the condition of health, they face barriers to attend their education in integrated classroom, and their needs are often given low priority (WHO, 2011). In addition, people with disabilities are seen as a burden to others, to their family, to themselves, and to society. Due to this reason, people with disabilities have not been treated well by society. Over centuries they have been the subject of varying degrees of pity, ridicule, rejection and seclusion as the result of being 'different' (Linton 1998). Attitudes are likes and dislikes- affinities for or aversions to objects, persons, groups, situations, or any other identifiable aspects of the environment, including abstract ideas, and social policies (Atkinson et al., 1990). It comprises of three components; affective, behavioral and cognitive (Mishra 2006). Affective is shown by positive or negative emotional expression towards people, events or object. Behavioral is the tendency to behave in a particular way towards people, events, and actions. And, cognitive refers to our beliefs formed about the object or person (Mishra 2006). He further elaborated, the attitude of non-disabled treating the disabled as different. Mishra reported that they were not included in the competitive cliques that form among active adolescents. They are treated as an outcast whom people may like but exclude from their inner circle for sports and leisure activities. They live with their disabilities in the community but they never fully accepted by the teen age peers. School societies try to support full participation of students with disabilities in all areas of their lives on equal terms and conditions (Campbell & Gilmore, 2003). Even though the concept and provision of special education services seem to have a relatively short history in Ethiopia, recently, the development of the provision of special education to children with disabilities appears to be at a growing rate. UNESCO's (2011) report, Ethiopia is included in the list being one of the countries with a policy that implement integration in regular education. As a matter of fact, special education itself is a relatively new phenomenon in Ethiopia. A review of outcome studies concerning the integration of students with severe and profound disabilities into general education classrooms by Halverson and Sailor (1990) suggests that the students with disabilities benefited in numerous ways from the increased interaction with

nondisabled peers. From the literature it could be seen that some people argued that attitudes are a reflection of social constructs such as economic factors and that only a change in the social construct can bring about changes in attitude. Such a scenario supports the contention of Cocks (1998) and Wolfensberger (1994a), that it is the changing of modernistic values, and economic rationalism that are increasing the likelihood of negative attitudes towards and treatment of vulnerable people in society.

Pear point (1990) states that including youngsters with disabilities in general education classrooms will benefit schools and society because both will be able to recognize and use the talents of individuals that would otherwise go unnoticed. These "outsiders" Will bring new talents and perspectives to "policy conundrums where we are in a rut and need fresh ideas," (Pearpoint, 1990.). Roberts and Zubrick (1992) studied a number of factors that may be related to the acceptance of students with disabilities by their peers. These include: academic achievement, teachers' perceptions, and attitudes toward integration, peer perceptions, and social status of students with disabilities who were integrated into general education classrooms. Recent research that examines the impact of including children with disabilities in regular educational classroom on the attitudes of students towards their peers with disabilities was quite substantial. Results, however, varied Chadbourn 1997; Clunics-Ross & O'Meara, 1989; Liffick, 1999; Rosinski, 1997). Battista, 1999; Hasting & Graham 1995). Mishra (2006) elaborated the attitude of non-disabled treating the disabled as different. Some studies conclude that students without disabilities have positive attitudes towards their peers with disabilities in mainstream education (Chadbourne 1997; Clunics-Ross & O'Meara, 1989; Gerson, 1995; Lawrence 1995; Marino, 1994; Roberts & Lindsell, 1997; Arampatzi, Mouratidou, Evaggelinou, Koidu, and Barkoukis (2011)); Chesley & Calaluca, 1997; Lipsky & Gartner, 1997) whilst others have shown that it may have a negative impact (Liffick, 1999; Rosinski, 1997; Kalyva and Agaliotis (2009); Clunies-Ross & O'Meara, 1989; Marino, 1994). Other still, have found that participating in mainstreaming education has had no significant impact on student attitudes towards peers with disabilities (Battista, 1999; Hasting & Graham 1995; Howell, 1996; Nowicki, 1998).

Thus, these research findings found out that students without disabilities had different attitude towards the mainstreaming of students with disabilities in to the regular classroom. That is, some are positive; some are negative and others are neutral. In addition, no local research is conducted on this area, Hence, researchers do not reach an agreement on the attitude of students without disabilities towards including students with disabilities in to the regular classroom. This controversy clearly showed that it needs further research to determine the attitude of students towards the mainstreaming of students with disabilities in to the regular classroom of South Gondar Administrative towns. In addition, assessing the attitude of students without disabilities towards the mainstreaming of students with disabilities in to regular classroom in the selected primary schools is worthwhile for the students with disabilities, their teachers and the schools in order to improve students' attitude and in turn facilitates the academic and social capabilities of students with disabilities in the regular school and classroom. Based on this assumption, the researcher is initiated to conduct a research on the attitude of students without disabilities towards the mainstream of students with disabilities in to the regular classroom.

To this end, the researcher formulated the following leading questions:

- What attitude students without disabilities have towards students with disabilities in to the integration classroom?
- Is there a significant difference in the attitude of Students without Disabilities (SWODs) towards the integration of students with disabilities in to the regular classroom in relation to their age, sex, residence areas and grade level?
- Which socio-demographic variables (age, sex, residence area and grade level) is /are predict students' attitude on the integration of students with disabilities in to the regular classroom?
- Is there a significant difference in students' attitude among the selected primary schools?

2. Research Method

2.1. Research Design

This study assessed the current attitude SWODs have towards the inclusion of students with disabilities in to the regular classroom in the selected primary schools of south Gondar administrative towns. To attain this, descriptive survey method was employed. According to Koul (2006), descriptive survey method is useful not only to analyze, interpret and report the status of an existing condition, but also to determine the adequacy of status by comparing it with established standards. It can also elicit information about attitudes that are otherwise difficult to measure using observational techniques.

2.2. Study Site

The study was carried out in the selected primary schools found in the administrative towns of south Gondar zone. South Gondar administrative zone is found in Amhara Region. This zone is named for the city of Gondar, which was the capital of Ethiopia until the mid-19th century, and has often been used as a name for the local province. South Gondar is bordered on the south by Misraq Gojjam, on the southwest by Mirab Gojjam and Bahir Dar, on the west by Lake Tana, on the north by North Gondar, on the northeast by Wag Hemra, on the east by Semen Wollo, and on the southeast by Debub Wollo; the Nile River separates South Gondar from the two Gojjam Zones. In this Zone, there are five administrative towns. These are Woreta, Debre Tabor, Addis Zemen, Mekane Eyesus and Nifas Mewocha. Thus, this study is focused on primary schools found in these administrative towns.

2.3. Participants of the Study, Population, Sample and Sampling Technique

The participants of this study were students without disabilities in the selected primary schools of the south Gondar administrative towns. In each administrative town, there is one school which accepts students with disabilities in to the regular classroom after grade 3 for students with intellectual disabilities & visual impairments, and grade 4 for students with hearing impairments. Hence, in all these administrative towns, there were five primary schools which accept students with disabilities in to the regular classroom previously they attended in the segregated classroom. Therefore, all these schools were selected purposely for this study. These are Tabor, Nefas Moucha, Woreta, Mekane Eyesus and Addis Zemen primary schools.

In this study, the researcher used the following formula to determine sample size in the study area. This formula is appropriate especially for survey research (Scott, 2013).

$$\text{Necessary Sample Size} = (Z\text{-score})^2 + SD(1-SD) / (ME)^2$$

Where:

Z = Confidence level (95% = 1.96 for SWODs)

SD= Standard Deviation (0.5)

ME= Margin of error (5%)

Based on the above formula, the minimum sample size for this study was 384. Therefore, 384 students without disabilities were selected from the five schools found in the administrative towns of the zone by the total population proportions by using simple random sampling techniques.

2.4. Variables of the Study

The dependent and independent variables that were employed in this research for statistical comparison includes:

Independent Variables

- Socio-demographic characteristics such as age, gender, grade level and residence area of students without disabilities
- The settings in which the research is conducted (the selected five primary schools)

2.5. Dependent Variable

2.5.1. Attitude

The attitude of students without disabilities in the selected primary schools were assessed using standardized questionnaire set through a four- point Likert scale type.

2.6. Data Gathering Instruments

In order to survey the attitude of students without disabilities (SWODs) towards the integration of students with different disabilities in the regular classroom of South Gondar Administrative towns, structured questionnaire was used by the researcher using adapted instrument from other sources. Therefore, the data collection tool was questionnaire to gather relevant information from the respondents.

In order to gather quantitative data for measuring the attitude of students without disabilities towards students with disabilities in to the regular classroom, "Cherokee-McMaster Attitudes Towards Children with Handicaps (CATCH) scale "with some modification was used to measure attitudes which is developed by Rosenbaum et al. (1988)). It has a high validity and reliability, and has been used in previous studies to measure attitudes in children up to the age of 16 years (Rosenbaum, 1986; Vignes, 2008). It is one of the most complete instruments as it measures all the three components of attitudes: affect, behavior and cognition (Feldman, 1993 & Tirosh E, 1997). The CATCH scale is a self-administered questionnaire which elicits response on a Likert scale numbered 1 to 4 (1-strongly disagree up to 4-strongly agree). Questionnaires were distributed to the students with the assistance of the class teachers, and it took 20 -25 minutes to fill them in. The contents of the questionnaire included: socio-demographic data which was designed to gather information regarding sex, age, grade level and types of residence area of the respondents. The second part of the questionnaire consists of those items that were directly assess the attitude of students without disabilities towards the inclusion of students with disabilities in to the regular classroom. The nature of questionnaire was a four- point Likert scale type used to assess the attitude of students without disabilities towards the inclusion of students with disabilities in the regular classroom. A questionnaire was distributed to those students without disabilities who have been attending their education from grade 5-8 of the sample schools. The items of the questionnaire were close-ended type. This item consists of 36 questions. Some of the items in the closed ended questions were positively worded and others were negatively worded in order to counter possible bias. Moreover, the questionnaire was set and translated in to Amharic language for easy communication.

3. Method of Data Analysis

In this study, quantitative approaches were used to analyze the data obtained through the aforementioned instruments. Both descriptive and inferential statistics were used as quantitative methods of analyzing the data obtained through questionnaire. That is, inferential statics like, t-tests, one Way ANOVA, and multiple regression analysis were employed. Whereas, descriptive statistics using means, frequency counts, standard deviations and percentages were used to calculate, and examine students' attitudes towards the inclusion of students with disabilities towards the regular

classroom and their socio-demographic variables. Hence, t- test was used to investigate if there is a statistical difference in students' attitude across sex, age and types of residence area. Moreover, One Way ANOVA was administered to study the relationship between student's grade level and their attitudes towards inclusion. Multiple regression was also used to see which socio demographic variable (sex, age, residence area, and grade level) predicts student's attitude on the inclusion of students with disabilities in the regular classroom. One Way between groups ANOVA was used to analyze the attitude of students without disabilities towards inclusion of students with disabilities across the selected primary school. Furthermore, Po-Hoc test was computed to examine the statistical difference between students' attitude in relation to the selected sample schools. SPSS version 20 (SPSS Inc., Chicago, IL, USA) software program was used to statistical analysis.

The data from questionnaires were analyzed to obtain descriptive statistics, frequency, percentage, mean and scale for their relationships according to the study objectives, theoretical and conceptual framework using Likert's scales of 4- points to analysis variables. The rating scales in the questionnaires to attitude were analyzed by valuing (1, 2, 3, and 4) as follows:

Interval=Maximum-Minimum/maximum (4-1/4=0.75)

Interval=0.75

Therefore, SWODSs' personal data, the degrees of attitude and contributions to positive development scales varied each by 0.75 points, which could be clarified for all sections as follows:

- 1-1.75 = very low, strongly disagree and strong negative attitude
- 1.76-2.5=low, disagree and negative attitude
- 2.11-3.25 =low, agree and positive attitude
- 3.26-4 =high, agree and strong positive attitude

Thus, quantitative analysis was used for the quantifications of major themes and phenomena that consisted of quantifiable variables expressed in numerical figures and magnitudes.

3.1. Ethical Consideration

Before gathering data from students without disabilities, the researcher was asked permission from the aforementioned informant and school principals. Formal letter was given to the sample schools in order to get permission from the school officials. Furthermore, the participants were informed about the significance and the purpose of the study. Likewise, the researcher was also promised to the participants that the information which they gave was used for only research purposes and its confidentiality was kept. Informed verbal consent was obtained from study participants to confirm their willingness for participation after having explained the objectives of the study. Only those who are interested to participate was involved in the study and those who were not willing to participate was given the right to do so. Respondents were notified that they have the right to refuse or terminate at any point of the participation. In addition, privacy of the respondents was maintained, and cultural norms were also being respected properly.

4. Result

4.1. Socio-Demographic Information of the Participants

Totally, 384 study participants were participated in filling a questionnaire in a response rate of 100%. The background characteristics of students included in this study are then presented in Table 1. Regarding sex, 184 (52.9%) and 164(47.1%) were males and females respectively. In terms of age, 177 (50.9 %) respondents had between 10-20 years, 171(49.1%) were between 21 and 30 years. In addition, 86 (24.7%) were grade five, 99 (28.5%) were grade six; 55 (16.8%) were grade seven, and the remaining respondents 108(31%) were from grade eight. Furthermore, 169 (48.6%), and 179(51.4 %) of study participants were came from rural and urban residences respectively. All the participants were from the five schools which accept students with disabilities in to the mainstream schools from grade 5 to 8.

Sex	f	%
Male	184	52.9
Female	164	47.1
Age (in years)		
10-20	177	50.9
21-30	171	49.1
Grade level		
5	86	24.7
6	99	28.5
7	55	16.8
8	108	31.0
Residence Area		
Rural	169	48.6
Urban	179	51.4

Table 1: Socio-Demographic Characteristics of Participants in the Selected Schools, South Gondar Administrative Town 2019 (N=384)

4.2. Students' Attitude

The respondents indicated their response from a four-point Likert scale of strongly agree, agree, disagree and strongly disagree with 4, 3, 2 and 1 marks apportioned to their response respectively. The researcher was adapted 36 attitude scale level questions. The minimum mean scores were 36 (1*36 questions). The decision rule was determined at $2.5 \times 36 = 90$ (cutoff point) by obtaining the mean score of the scoring values. The maximum mean score is $4 \times 36 = 144$ (strongly positive attitude). Thus, items score less than 90 was rejected, and students without disabilities (SWODs) have negative attitude on the integration/inclusion of students with disabilities in to the mainstream class. On the other hand, those scores above the decision value (cut point mean) were accepted, and SWODs have positive attitude on the inclusion of these students in to the mainstream classroom. Hence, the mean statistics were used to answer the research question. That is, the general actual mean score of this scale and the cut point mean decision valued scores derived from the four-scale questionnaire was 95.244 and 90 respectively. The scale yields a total score, the value of which could range from 36 to 144. This means the higher the score a respondent achieves, the more positive attitude he/she has for integration. Therefore, the actual mean score (95.244) of students without disability attitude scale is fairly greater than the cut point mean score (90). Due to this fact, students without disability had slightly positive attitude to the inclusion of students with disabilities in to the mainstream classroom from grade 5 to 8.

Statement	Mean	Std.	Decision
I wouldn't mind if a handicapped child sits next to me	2.43	1.094	Negative
I wouldn't introduce a handicapped child to my friend	2.51	1.174	Positive
Handicapped children can do lots of things for themselves	3.14	1.061	Positive
I wouldn't know what to say to a handicapped child	2.53	1.109	Positive
Handicapped children like to play	3.19	1.041	Positive
I feel sorry for handicapped children	3.12	1.109	Positive
I would stick up for a handicapped child who was being teased	2.16	1.217	Negative
Handicapped children want lots of attention from adults	3.10	1.069	Positive
I would invite a handicapped child to my birthday party	3.06	1.091	Positive
I would be afraid of a handicapped child	2.11	1.399	Negative
I would talk to a handicapped child I didn't know	2.7	1.152	Positive
Handicapped children don't like to make friends	2.22	2.862	Negative
I would like a handicapped child to live next-door to me	2.36	2.862	Negative
Handicapped children feel sorry for themselves	2.85	1.114	Positive
I would be happy to have a handicapped child for a special friend	3.05	1.075	Positive
I would try to stay away from a handicapped child	2.00	1.156	Negative
Handicapped children are as happy as I am	2.86	1.118	Positive
I wouldn't like a handicapped friend as much as my other friends	1.96	1.138	Negative
Handicapped children know how to behave properly	3.08	1.886	Positive
In class I wouldn't sit next to a handicapped child	2.20	1.564	Negative
I would be pleased if a handicapped child invited to me to his house.	3.22	3.162	Strong Positive
I try not to look at someone who is handicapped	2.26	1.067	Negative
I would feel good doing a school project with a handicapped child	3.14	1.470	Positive
Handicapped children don't have much fun	2.55	2.485	Positive
I would invite a handicapped child to sleep over at my house	2.94	1.192	Positive
Being near someone who is handicapped scares me	2.09	1.133	Negative
Handicapped children are interested in lots of things.	3.22	.996	Positive
I would be embarrassed if a handicapped child invited me to his birthday	2.06	1.145	Negative
I would tell my secret to a handicapped child	2.99	1.052	Positive
Handicapped children are often sad	2.74	1.062	Positive
I would enjoy being with a handicapped child	3.14	1.023	Positive
I would not go to a handicapped child's house to play	2.19	1.521	Negative
Handicapped children can make new friends	3.19	1.018	Positive
I feel upset when I see a handicapped child	2.02	1.121	Negative
I would miss recess to keep a handicapped child company	2.58	1.026	Positive
Handicapped children need lots of help to do things	3.24	.939	Positive

Table 2: Students' Without Disability Attitude to the Inclusion of Students with Disabilities

Table 2 above shows the attitude of SWODs to the integration of students with disabilities in to the mainstream class room per statement. In each statement, most SWODs in all schools had a positive attitude to the integration of these students in all grade levels. For instance, the specific questions 2,3,4,5,6,8,9,11,14,15,17,19,21,23,24,25,27,,29, 30, 31, 33 ,35,and 36 (Mean=2.51, 3.14, 2.53, 3.19, 3.12, 3.10, 2.7, 2.85, 3.05, 2.86, 3.08, 3.22, 3.14, 2.55, 2.09, 3.14, 3.19, 2.58 and 3.24 respectively) dealing with the positive attitude of SWODs to the inclusion of students with disabilities in to the mainstream classroom. Whereas, question numbers 1, 7, 10, 12, 13, 16, 18, 20, 22, 26, 28, 32 and 34 (Means=2.43, 2.16,

2.11, 2.22, 2.36, 2.00, 1.96, 2.20, 2.26, 2, 09, 2.06, 2.19 and 2.02 respectively) dealing with the negative attitude or perception of SWODs to the inclusion of students with disabilities in to the mainstream classroom. In addition, the specific question numbers 21 (Mean=3.22) indicated that SWODs had a strong positive attitude to inclusion.

4.3. Attitude of Students towards Integration in Relation to Socio Demographic Variables

4.3.1. Sex

A t-test in the table 3 is used to compare the mean overall attitude scores of SWODs that are male with those who are female. The general attitude to SWODs in the schools were positive ($M = 95.244$, $SD = 9.703$). According to this result, there is no statistically significant difference between the attitudes related to sex at $t (-0.875)$, $df = 446$, $p = .383 > 0.05$. Thus, the result of this study indicates there is no attitude difference between male and female students without disabilities in to the integration of students with disabilities in to the regular classroom.

	N	M	SD	t	df	P
Female	164	95.73	9.759			
				-875	446	.383
Male	184	94.82	9.64			

Table 3: T-Test Results between Male and Female Students for Overall Attitude

4.3.2. Age

A t-test comparing the mean scores of SWODs overall attitudes to the integration of students without disabilities in to the regular classroom based on age levels (10-20 vs. 21-30) indicated that there was no statistically significant difference at $t (.461)$, $df = 346$, $p = .645 > 0.05$. (See table 4 below). Thus, the result of this study indicates there was no attitude difference between 10 to 20 and 21 to 30 years of students without disabilities in to the integration of students with disabilities.

	N	M	SD	t	df	P
10-20	177	95.681	9.3773			
				.461	346	.645
21-30	171	95.000	10.0522			

Table 4: T-Test Results between Age Levels of Students for Overall Attitude

4.3.3. Grade Level

An analysis of variance (ANOVA) was comparing the mean scores of students without disabilities attitude to the integration of students with disabilities in to the regular classroom based on their grade levels indicated that there was no statistically significant difference between their grade levels that teachers had ($F (3,344) = 1.365$, $p = .253$). Thus, the result of this study indicates there was no attitude difference of SWODs between their grade levels (5,6,7, and 8) towards the integration of students with disabilities in to the mainstream classroom (see table 5 below).

	Sum of	Df	Mean	F	P
	Squares		Square		
Between Groups	384.440	3	128.15	1.365	.253
Within Groups	16395.21	344	93.866		
Total	19067.03	347			

Table 5: Analysis of Variance – Overall Attitude Score by Grade Level

4.3.4. Types of Residence

A t-test comparing the overall attitude means scores of students without disabilities in terms of their residence (urban Vs rural) towards the integration of students with disabilities in to the mainstream classroom. The result indicated that there was no statistically significant difference between urban and rural residence of SWODs attitude on working with students with disabilities in the mainstream classroom at $t (.346)$, $df = 346$, $p = .281 > 0.05$. (See table 6 below). Therefore, this result indicates there was no attitude difference of SWODs between urban and rural residence towards the integration of students with disabilities in to the mainstream classroom.

	N	M	SD	t	df	P
Urban	179	94.6983	9.4184			
				-1.080	346	.281
Rural	169	95.8225	9.9925			

Table 6: T-Test Results between Residence Areas of Students for Overall Attitude

4.4. Determining Predictive Variable

The following table explains the regression model summary table. This table provides the R, R², adjusted R², and the standard error of the estimate, which can be used to determine how well a regression model fits the data. It found out that R² of the model of this study is .143 with the R² = .020. This means that the linear regression explains only 2% of the variance in the data. If there would have forced all variables into the multiple regression model, it would have seen a slightly lower R² and adjusted R² (.143 and .020 respectively). A value of 0.143, in this analysis indicates a lower level of prediction. The R² which is the proportion of variance in the dependent variable (attitude score) that can be explained by the independent variables (age, sex, grade level and type residence). You can see from the value of 0.143 that the independent variables only explain 2% of the variability of the dependent variable.

Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate
1	.143 ^a	.020	.009	9.66998

Table 7: Liner Regression Model

The next output table is the F-test. The linear regression's F-test has the null hypothesis that the model explains zero variance in the dependent variable (in other words R² = 0). The F-test in this study was not significant, thus we can assume that the model does not explain a significant amount of the variance in attitude scale. The F-ratio in the ANOVA table (see table 8 below) tests whether the overall regression model is good fit for the data. The table shows that the independent variables not statistical significantly predict the dependent variable, F (4,343) = 1.787, p > 0.05 (i.e., the regression model is not fit of the data).

Model	Sum of square	Df	Mean square	F	Sig.
Regression	667.126	4	166.781	1.787	.131 ^b
residual	32007.113	343	93.315		
total	32674.239	347			

Table 8: ANOVA test

The next table also focuses on the four predictors, if they are statistically significant individually and, if so, which variable(s) is/are highly predictive. The column "Sig." holds the significance levels for the predictors. As a rule of thumb, we say that a b coefficient is statistically significant if its p-value is smaller than 0.05. For instance, the average sex (b=-1.060) is not significant (p=0.310). Next, the effect of age (b=-.416, p=.719) is not significant, grade level b= -1.073 is significant (p=.031), and it is a predictive variable and finally, type of residence, b=-1.058, p=.147) seems to be unrelated to attitude. Thus, it is concluded that one of the four b coefficients are slightly statistically significant. For instance, grade level is a predictor factors of predicting the dependent variable-attitude. However, other independent variables were not significant in predicting the dependent variable.

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std. error			
Constant	95.619	2.159		44.286	.000
Sex of respondent	-1.060	1.0421	-.055	-1.017	.310
Age of respondent	.416	1.155	-.021	.360	.719
Grade level of respondent	-1.073	.494	-.129	-.2.171	.031
Resident of respondent	-1.535	1.058	-.079	1.652	.147

Table 9: Regression Coefficient
The Mean Difference Is Significant At The 0.05 Level

A multiple regression was run to predict dependent variable from sex, age, grade level and types of residence. Thus, the variables are not statistically significantly predicted the outcome, F (4, 343) = 1.787, R² = .143. One out of four variables added statistically significantly to the prediction, p < 0.05.

4.5. Difference of Students' Attitude as a Function of the Selected Schools

In order to answer the sub-question "Is there any statistical significant difference in attitude of SWODs as functions of place/schools (Tabor, Woreta, Addis Zemen, Mekane Eyesus and Nifas Mewocha)?" A One-way between Groups ANOVA were carried out to compute difference of attitude among students between the five schools.

	Sum of	Df	Mean	F	P
	Squares		Square		
Between Groups	986.767	4	246.692	2.670	.032
Within Groups	31687.472	343	92.383		
Total	32674.239	347			

Table 10: Analysis of Variance Overall Attitude Score by Schools in Which Students Have Taught

The One-way Between Groups ANOVA analysis for the attitude of SWODs found in different schools as a variable divided into Tabor, Woreta, Addis Zemen, Mekaneyesus, and Nifas Mewucha showed that there was slightly statistical significant differences at the $p < 0.05$ level on attitude scores among the five groups [$F(4,343) = 2.670$, $p = .032$] as indicated in Table 10. However, the Tukey HSD post hoc tests showed that there was no statically significant difference on students' attitude between the four schools. However, there is slightly significant difference between Tabor and Addis Zemen primary school.

(I) school	(J) school	Mean Difference (I-J)	Std. Error	Sig.
Tabor	Woreta	-.25079	1.66918	1.000
	Nefasmewucha	-1.86339	2.05103	.894
	Mekane Eyesus	-1.3584	1.52444	.910
	Addis Zemen	-4.34725*	1.2806	.038

Table 11: Post Hoc tests
The Mean Difference Is Significant at the 0.05 Level

5. Discussion, Conclusion and Recommendation

5.1. Discussion

Yuker and Block (1986) reported that attitudes toward individuals with disabilities are positively correlated with attitudes toward mainstreaming. In line with this literature, the result of this study showed that the actual mean score (95.244) of students without disability attitude scale is fairly greater than the cut point mean score (90). Due to this result, students without disability had slightly positive attitude to the inclusion of students with disabilities in to the mainstream classroom in all grade levels. More specifically, in each statement, most SWODs in all schools had positive attitude to the inclusion of these students. In relation to this finding, Haring and Breen (1992), Block (1995); Loovis & Loovis (1997); Woodward (1995); Tripp, French & Sherrill (1995); Slininger et al. (2000) and Lewis (1993) found out that attitudes of students without disabilities towards students with disabilities in inclusion becomes more positive over time as a result of interacting with them.

The researcher also investigated the attitude of SWODs in relation to their socio- demographic variables. The result indicated that there was no statistically significant difference between the attitude of SWODs related to sex at $t(-0.875)$, $df = 446$, $p = .383 > 0.05$. In line with this finding, Avramidis et al. (2000) found out that the factor of gender in inclusive education does not contribute to significant differences in the attitude component. In addition, the researcher found out that there was no statistically significant difference of SWODs' attitude related to age at $t(.461)$, $df = 346$, $p = .645 > 0.05$. However, the study of Swaim & Morgan (2001), and Tang, Davis, Wu, & Oliver, (2000) indicated there is a significant difference of SWODs' attitude in age that younger students were more positive while older children express more negative feelings. The result also indicated that there was no statistically significant difference between the attitude related to grade level at $F(3,344) = 1.365$, $p = .253$. This finding is contrary to the other study indicated that students with higher levels of schooling expressed more favorable attitudes compared to lower graders, who displayed less favorable attitudes toward fairness and accommodations (Bowditch et al., 2008). Furthermore, this result indicated that there was no statistically significant difference of SWODs in types of residence at $t(.346)$, $df = 346$, $p = .281 > 0.05$. In relation to residence area of students, research findings however showed that statistically there was a significance difference between urban and rural students towards the inclusion of students with disabilities in to the mainstream classroom. That is, ninety-one per cent of educators in urban school are in favor of inclusive education, whereas nine percent of educators have the negative attitude towards inclusion (Mashiya, 2003). The reverse is true in rural setting.

The value of regression model is 0.143, and the values of R-square are .02. This indicated that the independent variables only explain 2% of the variability of the dependent variable. In addition, the independent variables were not statistically significant to predict the dependent variable at $F(4,343) = 1.787$, $p > 0.05$. A multiple regression was run to predict dependent variable from sex, age, grade level and types of residence. However, the variables are not statistically significant to predict the outcome, $F(4, 343) = 1.787$, $R^2 = .143$. Only grade level of the four variables added statistically significantly to the prediction, $p < 0.05$. Research on the personal and social determinants of attitudes towards peers with special needs has predominantly focused on the effects of gender, age, contacting with peers with special needs, and information received about disabilities. However, students' goals affect attitudes towards accepting and cooperating with peers in educational contexts (Levy, Kaplan & Patrick, 2004 as cited in Mariana and Gocalves, 2013) and significantly

predicted attitudes' scores. Personal goals as the unique predictor is the best model to explain attitudes variance (Mariana and Gocalves, 2013). The attitude of SWODs across schools was also investigated through One Way between ANOVA. The result showed that there was slightly statistical significant differences at the $p < 0.05$ level on attitude scores among the five groups [$F(4, 343) = 2.670$, $p = .032$]. However, the Tukey HSD post hoc tests showed that there was no statically significant difference on students' attitude between the four out of the five schools. This can be explained by the fact that attitude is culture and environment dependent as shown by previous studies (Gaad, 2004). The majority of the studies examined the relationship between one or several personal and environmental variables and the attitudes of students. (Boar, A, Minmaer, A. Piil, J., 2012). Previous research, in a school setting, has highlighted the importance of not only active and structured social support but has also recommended extensive disability awareness campaigns via peer tutoring or buddy programs (Thomas & Graham, 2002).

5.2. Conclusion

Based on the findings of the study, the researcher reached the following conclusions

- The result of this study showed that the actual mean score (95.244) of students without disability attitude scales is fairly greater than the cut point mean score (90). More specifically, in each statement, most SWODs in all schools had positive attitude to the integration of these students. This entails that the general and the specific statement attitude scale result showed that most teachers have slightly positive attitude to the integration of students with disabilities in to the mainstream classroom.
- The result of this study also indicated that there was no statistically significant difference of SWODs' attitude in relation to sex., age, grade level, and types of residence at $t(-0.875)$, $df = 446$, $p = .383 > 0.05$; $t(.461)$, $df = 346$, $p = .645 > 0.05$; $F(3, 344) = 1.365$, $p = .253$, and $t(.346)$, $df = 346$, $p = .281 > 0.05$ respectively. This entails that there is no attitude difference between male and female, urban and rural, different age and grade levels of students without disabilities towards the integration of students with disabilities in to the regular classroom.
- The finding of this study indicated that the independent variables were not statistically significant to predict the dependent variable. A multiple regression was run to predict dependent variable from sex, age, grade level, and types of residence of SWODs. However, the variables are not statistically significant to predict the outcome at $F(4, 343) = 1.787$, $R^2 = .143$. Only grade level of the four variables added statistically significantly to the prediction, $p < 0.05$. This indicated that there are other independent variables which were not included in this study that may explain or fit the dependent variable.
- The attitude of students across schools was also investigated through One Way between ANOVA. The result showed that there was slightly statistical significant differences at the $p < 0.05$ level on attitude scores among the five groups [$F(4, 343) = 2.670$, $p = .032$]. However, the Tukey HSD post hoc tests showed that there was no statistically significant difference on students' attitude between the four schools. However, there is a slightly significant difference between Tabor and Addis Zemen primary school. This shows that students without disabilities have similar attitude in all schools except one school.

5.3. Recommendation

According to Buswell and Schaffner (1990), primary schools are the best way to fight discrimination since they provide students with the appropriate space and experiences to achieve the learning objectives but also to enhance their social skills. Specifically, the embodiment offers many benefits to both children with and without disabilities, some of which reflect on their social development and specifically on their ability to ask, discuss, and interact with each other positive interactions and social behaviors are related to attitudes and intentions of people, in general, who have daily contact with children with disabilities resulted positive attitude towards them and the program. However, children with disabilities generally do not participate in outside of school activities there are less opportunities for interactions with typically developing peers. According to Smith-D'Arezzo (2003), students' perceptions of peers with disabilities are linked with exposure to students with disabilities and their family members. The finding that the attitude of students who had previously spent a lot of time in class with peers with a disability was significantly less positive than students who spent only some time in class is an anomaly that needs further investigation.

Based on the finding of the study, the researcher forwarded the following recommendations for the concerned bodies

- The schools should create an opportunity for students without disabilities to interact, play, work and go and back to their home together with their peers with disabilities. This helps students without disabilities get an opportunity to contact with their peers with disabilities that may lead to develop positive attitudes and perception to them and the integration program.
- The academic ability and achievement of students with disabilities in to the mainstream classrooms are highly depend on the attitude of SWODs have to the integration program, and to students with disabilities. Interventions aimed at improving students' attitudes towards their peers with disabilities. Therefore, teachers should get a continuous skills development training opportunity on how to help students to do activities cooperatively and collaboratively in the classroom. This in turn helps students without disabilities to develop positive attitude towards their peers with disabilities and to integration program.
- It has been found from the study that most SWODs are aware about the integration of students with disabilities in to the regular classroom. However, some did not have sufficient information about the program, and they have negative attitude to students with disabilities. This shows that still there is a need to spread the awareness regarding integration of students with disabilities in to the regular classroom. Thus, schools should design

awareness creation program in collaboration with special needs education professionals to maximize their awareness about integration.

- This study finding also showed that the socio- demographic variables like sex, age, and types of residence of SWODs do not appear to affect the attitudes of these students towards the integration of students with disabilities in to the regular classroom. So, the school official should consider this finding while they plan activities in integrated classroom.
- Provide training for SWODs and teachers in order to create awareness about integration and assist students to do activities cooperatively in the regular classroom, it requires a large amount of budget. Thus, the zonal & woreda educational bureau, and the school should allocate sufficient amount of budget to run the training.
- The socio-demographic variables were only explaining 2% of the dependent variable. Hence, the researcher invites other interested researchers to investigate the other independent variables that directly explain and fit the dependent variable (attitude) in the future.

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