Effectiveness of Inclusive Education Awareness Programme on aspiring secondary school teachers

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Abstract:

The foundation for success in life focuses on education. Teachers are an essential instrument in raising the qualitative virtue of the lives of the learners. The development of inclusive education highlights the general functions of classroom teachers, who must be purposefully prepared to meet the educational requirements of impaired and non-disabled pupils. The principal objective of this research article pivots on the execution of an inclusive education awareness program for aspiring secondary school teachers. The study mustered a sample of 40 aspiring secondary school teachers for the experimental group and used a single-group pre-test, post-test design. A 4-week comprehensive program has considered to evaluate the impact of the awareness of this campaign. This program was held online in synchronous and asynchronous modes. It incorporated online sessions, educational films, pre-recorded video lectures, expert-recorded sessions, reference materials, and other components.

The questionnaire of this study was created using four modules and validated by professionals in the field of education, resulting in a high level of reliability and a Cronbach Alpha of 0.79. Mean, standard deviation, t-test, and regression have employed in analyzing the data. The findings showed that awareness of inclusive education had been significantly enhanced among aspiring secondary school teachers by the awareness-raising program.

Keywords: *Inclusive Education, Aspiring secondary school teacher, Single-group design, Inclusive Education Awareness Program.*

Introduction:

Our constitution provides the right to education as a fundamental right. So, every child has the unalienable right to an education, which provides the tools they need to study and develop regardless of the abilities or disabilities of their talents. The rationale of inclusive education involves accommodating every child, accepting their unique characteristics, and giving them equal chances while valuing their skills. General classroom teachers must be fully equipped and capable of meeting the challenges of the educational needs of both impaired and non-disabled pupils in the same learning setting if this inclusive approach is to succeed.

APJ Abdul Kalam's wise statements reaffirm the noble nature of the teaching profession by highlighting how it shapes personalities, skills, and prospects of learners for the future alongside conveying academic information. Through meaningful interactions with their students, teachers help students gain profound knowledge of the curriculum. Due to the notable ability of teachers to recognize and address each of the issues of students, they can provide practical answers. The secret to giving pupils the best support and direction is to hire expert and qualified teachers.

This study intends to increase the knowledge of inclusive education principles among aspiring secondary school teachers so they can interact skilfully with students who have disabilities right away. The researcher reviewed existing research concerning inclusive education and found that the requirement for teacher preparation to understand the particular needs of students with disabilities is necessary. According to Lang et al. (2014), explicit inclusive education ideas in teacher education programs have had positive results, resulting in stronger attitudes and skills for managing different students. Research has also shown the differences in the expectations of teacher candidates of classroom

competence, which ascribe to differences in the coursework and fieldwork experiences. According to Paul, S. (2017), self-directed professional competency-building packages effectively strengthen the understanding of inclusive educational ideas for prospective teachers. Sagrodnik et al. (2017), research also discovered that service-learning activities inside teacher education programs constructively fostered comprehension, self-assurance, motivation, and teaching skills among aspiring teachers. Besides, UDL training promotes using accessible lesson design and implementation strategies, claim Laura, R., and Mariam, S. (2023), deduce that the effects on teachers' ability to collaborate and engage in reflective practice are still unknown or understudied.

With approximately 61% of children with disabilities now enrolled in educational institutions, India, which counts nearly 78 lakh children with disabilities aged between 5 and 19, faces the issue of assuring their access to education. 15% of the population worldwide is estimated to be disabled (UNESCO Report, 2019). Aspiring secondary school teachers must learn about inclusive education because this will help to solve the common problems these kids experience. However, it is crucial to implement inclusive education across all educational institutions with a firm commitment to giving every child an equal chance, devoid of discrimination.

The widely accepted Education for All principle emphasizes the significance of creating inclusive learning settings where children with special needs and their peers without disabilities can coexist peacefully. Legislative initiatives, such as the National Education Policy 2020, strongly emphasised on equity and inclusion as the cornerstones of educational decision-making, with the ultimate objective of enabling all children to succeed in the educational system.

Objectives:

1) To evaluate the performance of an inclusive education awareness program among aspiring secondary school teachers.
2) To examine, based on educational background, the efficacy of an awareness program for inclusive education among aspiring secondary school teachers.
3) To examine, based on a graduate degree, the efficacy of an awareness program for inclusive education among aspiring secondary school teachers.

Hypothesis:

1. There is no statistically significant difference between the experimental group's pre- and post-test mean scores on the inclusive education awareness level.
2. Concerning educational background, there is no statistically significant difference in the awareness of inclusive education experimental group's pre-and post-test scores.
3. Concerning graduate degrees, there is no statistically significant difference between the experimental group's pre-test and post-test mean scores for inclusive education awareness.

Conceptual definition:

1) Effectiveness
Being able to produce the identical desired results is effective.

2) Awareness
Awareness is the state of being aware of existing things.

3) Inclusive education
Inclusive means no student is excluded because of their caste, religion, gender, ancestry, origin, language, ability, or disability. Everybody can pursue a conventional education.

4) Aspiring secondary school teachers
Teachers are those who are teacher trainees. After the completion of training, they would be able to teach in the 9th to 10th grades. They are called aspiring secondary school teachers.

Operational Definition:

1) Effectiveness
In this context, effectiveness refers to a remarkable result brought out by the implementing an awareness program.

2) Awareness
In the present scenario, awareness refers to knowledge about inclusive education.

3) Inclusive Education Awareness Program:
It is a plan designed for aspiring secondary school teachers to raise awareness of inclusive education utilizing online training tools like Google Classroom and Zoom Meetings.

4) Aspiring secondary school teachers.
In the present scenario, it means who is pursuing teacher training.

5) Inclusive education:
In this study, inclusive education refers to all types of children listed below:
Physical Challenges:
Sensory impaired
Movement
Neurological disorder
Traumatic Brain Injury (TBI)
Intellectual Challenges:
Autism
Learning difficulties
Emotional and behavioral deviation:
ADHD
Juvenile delinquency

Variables:
Independent variable: Inclusive education awareness program
Dependent variable:
Awareness of inclusive education of aspiring secondary school teachers.

Demographic variables:
Educational qualifications
Graduation Degree

Sample of the Study:
For the present scenario, the researcher has adopted convenience sampling. A total of 40 aspiring secondary school teachers have selected from the New Mumbai region.

Tool of the study:
The researcher created the questionnaire for the Inclusive Education Awareness Program (AEIP). There were 36 questions total divided into four categories: an introduction to inclusive education, historical and policy context, identifying and fostering children with special needs, and development of teaching-learning practices. Each has four options scored "1" for correct answers and "0" for incorrect answers.

Delimitations of the study:
1. The study was limited to aspiring secondary school teachers who were teacher trainees.
2. Only one college of education has used as source of samples that was Oriental College of Education, Sanpada, New Mumbai.
3. Only four weeks and a total of 12 hours have allotted for the Inclusive Education Awareness Program.
4. The study focused on the New Mumbai area.

Research design of the study:
The current study used the experimental method.
The study used a single-group pre-post-test design. Below demonstrated is the illustration of the abbreviation of design.
O_1 -X -O_2

O_1: Pre-Test (No treatment)
O_2: Post Test (Treatment given)
X: Experimental Group

Data analysis

1. For descriptive analysis, data is analyzed using descriptive statistics viz percentage, mean, median, and standard deviation.

2. For inferential analysis, the hypothesis was analyzed using appropriate statistical techniques such as a t-test and regression.
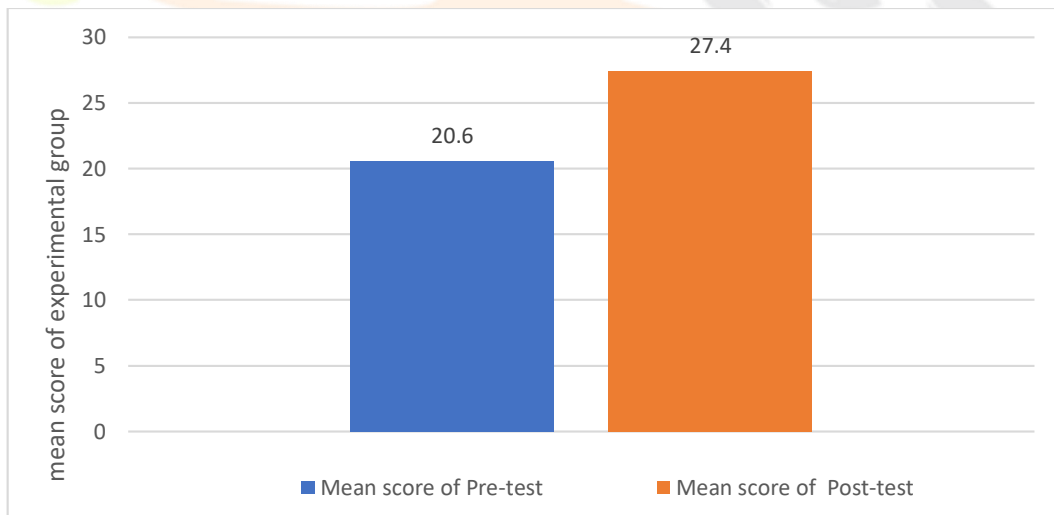
Table No. 1 compares the mean scores on inclusive education awareness between the experimental group's aspiring secondary school teachers at the pre-test and post-test levels.

Experimental Group	N	Mean	Median	SD	df	t Value	P Value	Level of Significance
Pre-test	40	20.6	21	5.08	39			Significant at 0.05
Post-test	40	27.4	28.5	6.61	39	4.59	<.001	

Critical Value (df=39) = 2.70 at 0.01 & 0.02 at 0.05

After analyzing table no. 1, we infer that the post-test mean score (27.4) is greater than the pre-test means score (20.6) by a significant margin. There was a statistically significant difference between the two groups (t=4.59, df=39, p<.001). It indicates that the inclusive education awareness program influenced aspiring teachers' awareness.

As a result, we reject H0, the hypothesis that there is statistically no significant difference between the pre-and post-test mean scores of the experimental group on the inclusive education awareness level.

Figure 1 shows a bar graph of pre-and post-test scores for teachers in the experimental group. From this data may infer that statistically significant differences between the two groups. For educators, the post-test ranged from a high of 34 to a low of 10 out of 36.
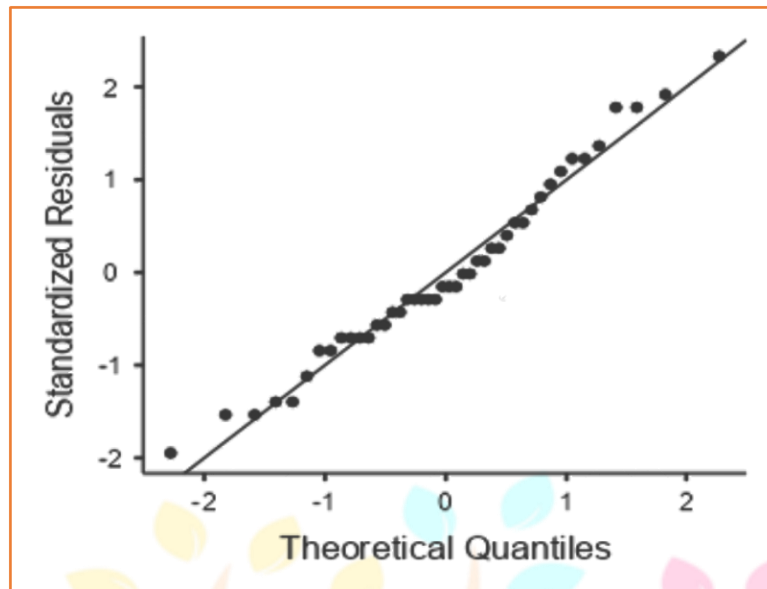

Figure 2 Highlights the proximity of data points to the regression line, suggested that the explanatory and response variables have a significant association.

Table No. 2 compares the mean scores on inclusive education awareness between the experimental group of aspiring secondary school teachers at the pre-test and post-test levels on the educational background.

Educational Qualification	N	Experimental	Mean	SD	df	t Value	P Value	Level of significance
Graduate	26	Pre-test	20.9	5.11	25	2.85	0.009	Significant at 0.05
		Post-test	26.5	7.67	25			
Post Graduate	14	Pre-test	20.1	5.4	13	4.39	<.001	Significant at 0.05
		Post-test	28.9	3.1	13			

Critical Value (df=25) =2.79 at 0.01 & 2.06 at 0.05
Critical Value (df=13) =3.01 at 0.01 & 2.16 at 0.05

After analyzing table no. 2 indicates that there was a statistically significant difference between the experimental groups before and after learning about inclusive education (order of 20.9, 26.5, t=2.85) and that the same was true for the post-graduate experimental group (order of 20.1, 28.9; t=4.39)
Therefore, hypothesis no. 2 stated that concerning educational background, there is statistically no significant difference in the awareness of inclusive education pre-and post-test scores of the experimental groups.
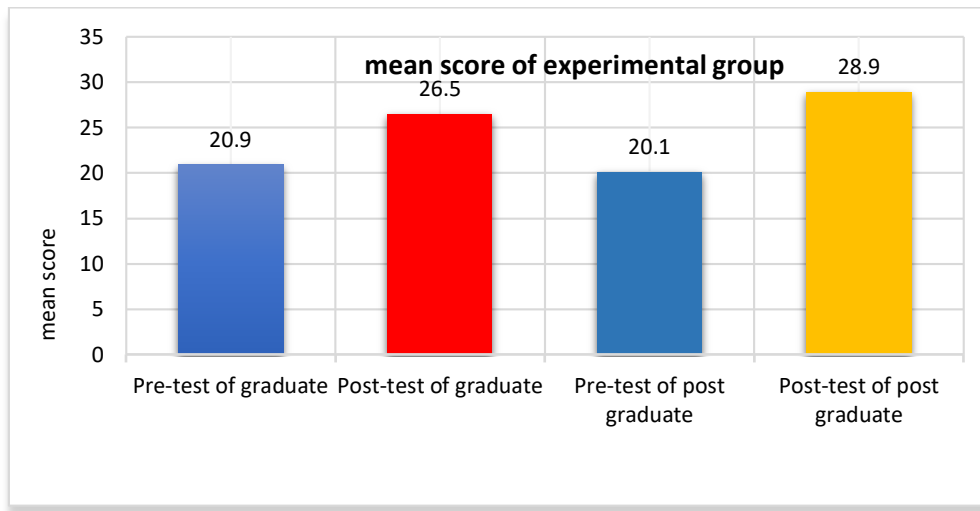
Figure 3 shows a bar graph of pre-and post-test scores for aspiring secondary teachers in the experimental group. From this data, we deduce statistically significant differences between the two groups' orderly graduate pre-test, post-test, post-graduate pre-test, and post-test mean scores.

According to graduation degrees, Table No. 3 compares the mean scores on inclusive education awareness amongst aspiring secondary school teachers in the experimental group at the pre-test and post-test levels.

Graduation Degree	N	Experimental	Mean	SD	df	t Value	P Value	Level of significance
Arts	9	Pre-test	18.3	6.04	8	2.84	0.022	Significant at 0.05
	9	Post-test	26.7	7.35	8			
Commerce	11	Pre-test	21.2	4.4	10	0.995	0.343	Significant at 0.05
	11	Post-test	23.5	9.5	10			
Science	20	Pre-test	21.4	5.08	19	3.39	0.003	Significant at 0.05
	20	Post-test	28.2	6.92	19			

Critical Value (df=9) =3.25 at 0.01 & 2.26 at 0.05

Critical Value (df=10) =3.17 at 0.01 & 2.23 at 0.05

Critical Value (df=19) =2.86 at 0.01 & 2.09 at 0.05

After analyzing Table no 3, we can say that there was a significant difference between the pre-test and post-test mean scores (order of 18.3, 26.7; t=2.84, p0.05) of the experimental group on awareness of inclusive education based on Arts Graduate and there was a significant difference between the pre and post-test mean score (order of 21.2, 23.5; t=0.995, p0.05), of the experimental group based on commerce graduate. Moreover, there was a significant difference between the pre-test and post-test mean scores (order of 21.4, 28.2; t= 3.39, p0.05) of the experimental group based on science graduates.

Thus, we cannot accept H0 3: Concerning graduate degrees, there is no statistically significant difference between the experimental group's pre- and post-test mean scores for inclusive education awareness.
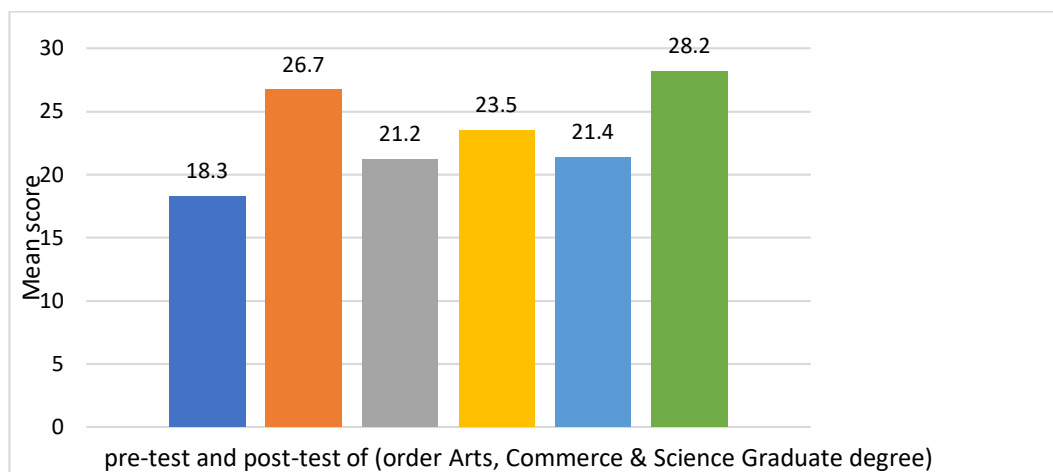
Figure 4 shows a bar graph of pre-and post-test scores for teachers in the experimental group. From this data, we deduce statistically significant differences between the three groups: orderly Arts, Commerce & Science degree of Graduation.

Significance of the study:

This program is adaptable, time-saving, and cost-effective and encourages the application of online learning and evaluation. It is an awareness campaign on inclusive education that are both synchronous and asynchronous modes.

This program included pre-recorded videos, expert-recorded videos, cartoon films, and reference materials for learning that will remain safe for a long time. If attendees require this information in the future, they can benefit from this program.

The findings of this study can utilize as a guide to developing more focused strategies to increase levels of awareness of the instructor toward inclusive education. The teachers will be able to identify the needs of children with disabilities. It will encourage the development of inclusive abilities and mindsets. It might aid educators in overcoming environmental challenges both within and outside the classroom. The results might act as a prism through which teachers can become more aware of the effectiveness and promptness of learning.

Discussion:

The first approach of the researcher was to reach out to various B.Ed. College Principals. Among the ones who provided approval for a discussion with aspiring teacher trainees, a 4-week online inclusive education awareness program was held. At first, they were anxious, but after learning about the pros & cons advantages of the program, they relaxed and were prepared to sign up. However, one of the subjects covered in the teacher education course in the fourth semester is developing an inclusive school. As a result, the researcher has chosen a sample of second-semester students for the experimental group.

Although 53 students signed up for the program overall, only 40 aspiring secondary school teachers answered the pre-test. Due to the exposition of the advantages in the teaching and learning processes with children with impairments, candidates were eager to learn innovative things. They have learned the fundamentals of inclusive education in the first-week program. It accentuated the ideas, attributes, significance, and understanding of disability, impairment, and physical challenges. In addition, it defined inclusive education, mainstreaming, integrated education, and special education.

The second-week program started with a review of the global and Indian scenarios for inclusive education. Afterward, it concentrated on the PWD 1995, National Act 1999, RPWD 2016, Right to Education Act 2009, Sarva Shiksha Abhiyan, and Rashtriya Madhyamik Shikha Abhiyan through the introduction of international, national, and government policy. Additionally, they learned about the UNCRPD (2006), the Salamanca Statement 1994, and the concept of Education for All. In the third week, students learned about the traits of kids with special needs and how to treat them politely in the classroom. Recently Autism, ADHD, sensory impairment, and locomotor impairment have been recognized as special needs. Teachers can easily cater to these students when informed of various teaching strategies or tactics. Participants received ample information about varied teaching-learning methods constituting

universal design for learning, cooperative learning, peer tutoring, peer-mediated instruction, Buddy system, Co-teaching, Students Assistant teams, and circles of friends. These methods are of vital importance in their teaching-learning journey. This knowledge will help establish inclusive schools in all educational institutions. The researcher encountered many problems during the implementation of this program.

Results:

1. The study demonstrates the efficacy of programs to promote inclusive education. The program will assist aspiring secondary school teachers in the finding out more about how we can make classrooms inviting for all pupils?

2. There is a wide variety in the knowledge of secondary teachers of inclusive education between pre-and post-tests. However, the result is not always related to how well they teach. It demonstrated that the intended impact of the inclusive education awareness campaign on aspiring secondary educators have achieved.

3. There is a stark difference in the experience of aspiring secondary school teachers with inclusive education before and after the test. The researcher concluded that the program helped increase the understanding of the educators on inclusive education.

Conclusion:

Teachers play an essential part in the educational process by identifying student traits, unearthing latent abilities, and facilitating the development of skills of pupils. Teacher accountability rises when students come from a wide range of backgrounds. Moreover, educators have a growing part to participate in creating welcoming classrooms for all students. So, educators must be well-equipped to deal with any challenge they may face in the inclusive setting. The result appears that this awareness-raising program has imparted a positive potent on aspiring secondary school teachers understanding of inclusive education. In the future, they can apply this knowledge, understanding, or skills during teaching in the classroom in their internship period.

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