

A correlational study of teacher's attitude and perceived self-efficacy towards inclusive education

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Abstract:

The present study aims to examine the correlation between high school teachers' attitudes and their perceived self-efficacy regarding inclusive education in regular classrooms. A descriptive survey method was employed in this research. A sample of 400 teachers including 200 males and 200 females were selected by purposive sampling from 50 randomly chosen senior secondary schools of District Bijnor in Uttar Pradesh. All schools were affiliated by U.P. Board Prayagraj. The researchers utilized the Teachers' Attitude Scale towards Inclusive Education (TASTIE) developed by Dr. Vishal Sood and Dr. Arti Anand (2011) to measure teachers' attitudes. Additionally, the standardized tool "Teachers' Self-Efficacy for Inclusive Practices (TEIP)" developed by Sharma, Loreman, and Forlin (2012) was adopted to assess teachers' perceived self-efficacy towards inclusive education. Data analysis was conducted by using SPSS 21 software. Shapiro-Wilk statistics was used to test normality of the data. The level of overall teachers' attitudes and perceived self-efficacy was assessed through mean values and the frequency of the Z score. To determine the correlation between teachers' attitude and their self-efficacy, the parametric Pearson Correlation (r) was employed. The findings of present study revealed that the majority of teachers exhibited moderately high, (most favourable) positive attitudes and an "average level" of self-efficacy towards inclusive education. Furthermore, the study indicates a significant strong positive correlation between the attitudes and self-efficacy of high school teachers towards inclusive education. Analysing the attitudes and self-efficacy of teachers at the high school level has broader implications for the schools, parents, and policymakers. Moreover, the correlation between attitude and self-efficacy suggests that a positive attitude enhances teachers' belief and confidence in managing classes with diverse learners, or by enhancing teachers' self-efficacy, a positive attitude may be fostered, which is a vital factor in the implementation of inclusion and inclusive education.

Key words: *Inclusive education, implementation, Teachers' attitude, self-efficacy, mainstream classroom.*

Introduction:

Inclusive education is an educational strategy that embraces and supports all students in regular classroom environments, regardless of their physical, intellectual, social, emotional, linguistic, or other circumstances. The objective is to eliminate exclusion and discrimination, thereby ensuring that children with diverse abilities, including those with disabilities, can access and participate fully in quality education alongside their peers (UNESCO, 2009) [1]. The reputation of inclusive education lies in its power to foster equality, social justice, and empowerment by creating an environment that respects diversity and promotes the holistic development of all learners. It encourages collaborative learning, enhances peer relationships, reduces stigma, and prepares students for inclusive participation in society (Ainscow, Booth & Dyson, 2006) [2]. Moreover, inclusive education is seen as a means to improve overall educational outcomes by addressing barriers to learning and increasing engagement across student groups (Mittler, 2000) [3]. Inclusive education in India has its roots in the country's constitutional commitment to providing equal opportunities for all citizens. The concept gained momentum in the 1994 with India's participation in international declarations such as the Salamanca Statement and Framework for Action on Special Needs Education.

Over the years, the Indian government has introduced various policies, acts and programs to promote inclusion of special need persons in regular education system, such as Sarva Shiksha Abhiyan (Education for All) and the Right to Education Act of 2009. This act marked a crucial milestone, authorising free and compulsory education for all children between age of 6 to 14 and emphasizing the inclusion of disadvantaged groups. Subsequently the Rights of Persons with Disabilities Act (RPWD act 2016), which emphasize the right to education without discrimination and recently the National Education Policy 2020 further reinforced the commitment to inclusive education by advocating for the integration of children with special needs into mainstream schools and promoting multilingual education to accommodate linguistic diversity. Although India has established strong legal and policy frameworks for inclusive education, its implementation encounters numerous obstacles. These challenges encompass insufficient teacher preparation and training in inclusive teaching methods, a scarcity of resources and assistive technologies, and infrastructural issues like inaccessible school facilities. Additionally, negative perceptions of disability (Singal, 2016) [4], a

lack of awareness, and inadequate plans and policies for effective implementation (Perveen and Qounzar 2018) [5], contribute to societal attitudes, misconceptions, and biases that lead to the isolation and discrimination of disabled students (Bindhani and Gopinath 2024) [6]. Teachers frequently express feeling unprepared to handle diverse classrooms due to a lack of ongoing professional development and institutional support (Sharma & Depeler, 2005) [7]. Moreover, bureaucratic obstacles and insufficient budget allocations further impede the grassroots implementation of inclusive practices. Therefore, while the vision for inclusive education in India is clearly defined, achieving it necessitates systemic reforms, including capacity building, changing attitudes, community engagement, and effective monitoring systems to ensure that inclusive principles are transformed into meaningful educational experiences for all children.

The attitudes of teachers are essential for the effective execution of inclusive education, acting as both a catalyst and a barrier depending on their perceptions, beliefs, and readiness to embrace diversity in the classroom. Allport (1935) [8] describe attitude as a mental and physical state of preparedness, shaped by experience, that influences how a person responds to different objects and situations. Attitudes are multidimensional, involving cognitive (beliefs), affective (feelings), and behavioural (intentions) components. Many studies have proven that positive attitudes of teachers are considered essential for the successful enactment of inclusive practices. Self-efficacy of teachers is another major factor affecting inclusion in a regular classroom. Albert Bandura (1997) [9] defined self-efficacy as a person's belief in their ability to plan and carry out the actions needed to handle future situations. Tschanen-Moran & Woolfolk Hoy (2001) [10] expanded this concept specifically for teachers as a teacher's belief in their ability to engage students and promote learning, even with students who are difficult or unmotivated. In the context of inclusive education, teacher self-efficacy refers to "*A teacher's confidence in their own ability to successfully teach and support students with diverse needs, including those with disabilities, in a general education classroom.*" (Sharma, Loreman, & Forlin, 2012) [11]. This belief directly affects teachers' willingness to adopt inclusive strategies, instructions, and creating a supportive inclusive classroom environment for all learners despite of their individual differences.

Literature Review:

Inclusive education is based on the idea that all children, including those with disabilities, should learn together in regular mainstream classrooms. Teachers play a vital role in the effective implementation of inclusive education, especially their attitudes towards inclusion and their self-

efficacy, or belief in their capability to communicate all students. Research advises that both these factors are closely linked and influence each other. When teachers have a positive attitude towards inclusion, they feel more confident in using inclusive teaching strategies. Likewise, when teachers believe in their own abilities to handle diverse learners, their attitude towards inclusion also improves (Woodcock et al., 2022; [12] Moosa et al., 2021) [13]. Research shows that there is a strong connection between teachers' attitudes and perceived self-efficacy. Positive attitudes towards inclusion have been shown to enhance teachers' self-efficacy in inclusive settings. For example, a study conducted in Saudi Arabia found that teacher attitudes are a primary predictor of their self-efficacy for working in inclusive environments (Alnahdi & Schwab, 2021) [14]. Similarly, a Finnish study using a longitudinal approach revealed that self-efficacy positively impacted on teachers' attitudes over time, suggesting a bidirectional relationship where efficacy can foster more positive attitudes, and vice versa (Savolainen et al., 2020) [15]. The interplay between attitudes and self-efficacy has a direct impact on the enactment of inclusive practices. Teachers with higher self-efficacy and positive attitudes are more willing to implement strategies that promote inclusivity, such as peer tutoring, which effectively accommodates students with varying needs within mainstream classrooms (Avramidis et al., 2019) [16]. Additionally, positive attitudes and high self-efficacy are associated with more effective handling of classroom challenges, thereby reducing implementation problems (Hofman & Kilimo, 2014) [17].

In the Indian context, researches on inclusive education has grown in recent years, However there is still a scarcity of research examining the connection between teacher attitudes and their sense of self-efficacy. A recent study conducted in Madhya Pradesh (Mamgain, 2024) [18]. found a positive relationship between teachers' self-efficacy and their attitudes toward inclusion. However, the study also revealed that other factors like school location (urban vs. rural) had a stronger influence on teachers' attitudes, while variables such as gender and teaching experience showed minimal impact on self-efficacy. Similarly, Sarkar and Kundu (2021) [19] highlighted that teachers with higher self-efficacy were better at managing inclusive classrooms, which further strengthened their attitudes toward inclusive teaching practices.

Despite these findings, there are still gaps in Indian research. Very few studies have explored how attitudes and self-efficacy influence each other over time, or how other factors like teacher training, school type, or teaching background may shape this relationship. Additionally, there is a need for more comprehensive research that examines this relationship across different regions and educational levels in India.

Methodology:

Aim of the study:

Present study aims to explore the relationship between teachers' attitudes and their perceived self-efficacy toward inclusive education. It also seeks to examine overall level of attitude and self-efficacy among High school teachers towards inclusion in a regular classroom. By doing so, the study hopes to contribute valuable insights for improving teacher preparation programs and promoting inclusive education practices in Indian schools.

Limitation of the study

- This research is confined to the Bijnor district in Uttar Pradesh.
- It involves a sample of 400 TGT teachers who teach 9th and 10th grades.
- The study focuses on educators from government inter colleges, government-aided colleges, and private self-financed inter colleges, all of which are affiliated with the U.P. board in Prayagraj.

Objectives of the study

- To study the level of attitude among high school teachers towards inclusive education.
- To study the level of perceived self- efficacy among high school teachers towards inclusive education.
- To study relationship between high school teachers' attitude and their perceived self-efficacy towards inclusive education.

Sample and sampling method:

Descriptive survey research method had been used for this study. Sample of 400 higher secondary school teachers was selected from all higher secondary and senior secondary schools affiliated to U.P. Board of secondary education Prayagraj in District Bijnor Uttar Pradesh India. Both Male and female teachers who are appointed to teach students of class IXth and Xth of all govt/aided and self-finance schools from rural and urban areas of District Bijnor were covered in this study. The present study adopted stratified random sampling method to select representative schools from each category of govt. aided and self-finance secondary schools of both rural and urban areas of district Bijnor. There

was total 50 schools selected to collect data. All high school teachers fallen in these 50 schools (25 from rural and 25 from urban areas) were treated as sample size. There were 560 teachers (both male and female) who get ready to fill the questionnaire. But researcher selected only 400 teachers including 200 males (100 rural& 100 urban) and 200 females (100 rural&100 urban) by purposive non- probable sampling method.

Tools used to collect data:

For any kind of research data is collected through appropriate tools. To measure level of attitude of teachers towards inclusive education a standardised tool named TASTIE prepared by Sood and Anand, 2011 was used. This scale comprises of total 47 statements in which 29 were favourable and 18 were unfavourable. It was a three-point Likert- scale. The possible range for score on this scale was 47 as minimum and 141 as maximum. Another standardised tool TEIP- Teachers self-efficacy for inclusive practices prepared by Sharma, Loreman and Forlin, 2012 was adopted by researcher to measure perceived self-efficacy of teachers. This scale is a six point Likert-scale comprised having 18 items focused on various areas of perceived teaching efficacy in inclusive classrooms. The total score, ranges from 18 to 108, calculated by summing the responses to each item.

Data analysis:

After collection of raw data from respondents it was organised and tabulated to convert data in meaningful information. After that suitable statistics have been employed to analyse data and to test hypothesis of the study. Descriptive and inferential statistics both were applied. Normality was tested by Shapiro-Wilk statistics. To test the hypothesis, mean, standard deviation, z-score t-test, and Pearson Correlation (r) were calculated by using SPSS21 software.

Result and interpretations:

➤ Objective 01: To study the level of attitude among high school teachers towards inclusive education

From the table 1.1 the values of skewness (-0.522) and kurtosis (-0.379) fall within acceptable thresholds (± 1), suggesting that the data is approximately normal in shape, despite small deviations. Shapiro-Wilk statistics 0.963 and its associated p-value 0.000 was less than .05 significant levels ($p<0.05$) at 400 df (degree of freedom). Since $p < 0.05$, so we do not accept the null hypothesis of normality that is H_0 “Attitudinal score on TASTIE is not normally distributed” This refers that the distribution of attitude scores is normal in statistical terms. However, given the large sample size and acceptable skewness/kurtosis, the data is suitable for parametric testing.

Table-1.1 normality test of attitudinal scores on TASTIE

Teachers' Attitude	Shapiro- Wilk Test			Mean	Range	Skewness	Kurtosis
	Statistics	df	Sig.	119.66 (SE .498)	90-140	-.522 (SE .122) Z-score: -4.28	-.379 (SE .243) Z-score: -1.56
	.963	400	.000				

Distribution for Teachers' Attitude Scores

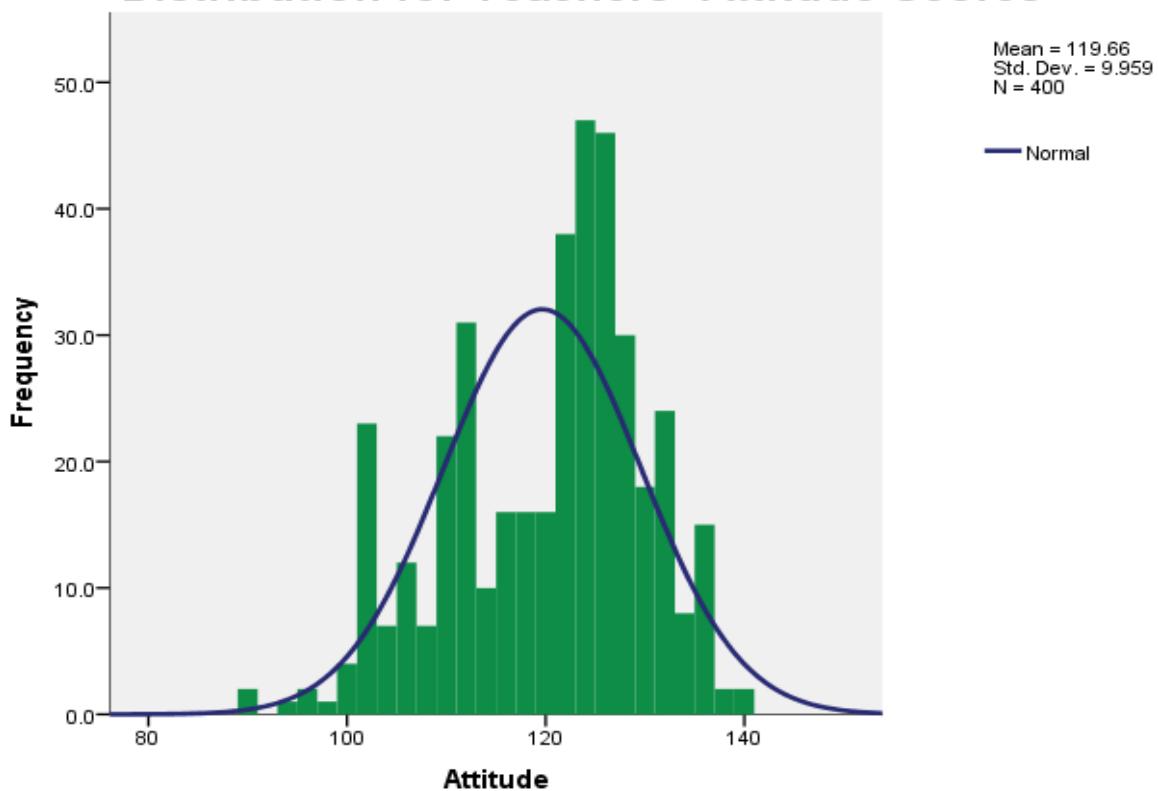


Figure 1.1 Histogram of normal distribution of attitude score on TASTIE scale

In order to determine overall teachers' attitude towards inclusive education, their responses on TASTIE scale were examined using descriptive statistics as shown in table1.1. From this table it could be observed that the range of raw score of teachers' attitudes towards inclusive education was from 90-145, and the mean score 119.60 with its Z-score 0.0677 was obtained by the secondary school teachers in this study. A mean score of 119.60($M=119.60$) suggests a positive "most favourable" attitude toward inclusive education among high school teachers from district Bijnor. This indicating that high school teachers of mainstream schools have positive and moderately high favourable attitude to implement inclusive education in regular schools.

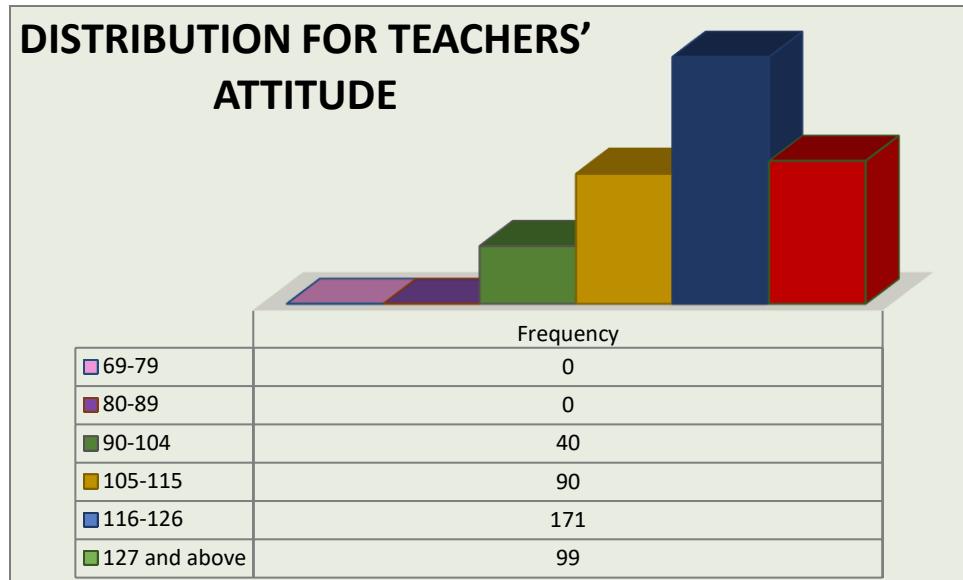
Table-1.2 Level of Teachers' Attitude towards Inclusive Education

Total Number of Teachers (N)	Mean	Range	Standard Error (SE) of Mean	SD	z-score	Level of Attitude
400	119.66	90-140	0.038	0.494	0.0738	Most favorable

However, from the frequency distribution Table 1.2 and mean plot graph 1.2 it is further concluded that the teachers who scored 'most favourable' attitude (Score in between 116-126) were 42.80 %(N=171) while 24.80 %(N=99) scored extremely favourable attitude level (scores above 127) and only 22.50 (N=90) teachers scored above average scores(scores between 105-115) .Thus it is very clear that majority of high school teachers have positive moderately high level of attitude towards inclusion in District Bijnor.

Table-1.3 Frequency Distribution for Teachers' Attitude towards inclusive education

Range of raw score	Frequency	Percentage	Level of attitude
69-79	0	0.00%	Most unfavorable (moderately low)
80-89	0	0.00%	Below average
90-104	40	10.0	Moderate attitude
105-115	90	22.5	Above average
116-126	171	42.8	Most favorable (moderately high)
127 and above	99	24.8	Extremely favorable



Graph 1.2 Mean distribution of teachers' attitude towards inclusive education

Objective 02: To study the level of perceived self- efficacy among high school teachers towards inclusive education.

Although sample size is more than 100 normality was checked by the Shapiro-Wilk test, Skewness, and Kurtosis with its converted z-scores. From the table 1.4 Shapiro-Wilk statistics was .951 and it's associated Significance value .000 which was less than .05 significant levels at 400 Degree of freedom. Hence null hypothesis for the normal distribution of attitudinal score which was *H0 sampling distribution is not normal* is rejected and it is concluded that score on teachers' attitude scale TEIP were distributed normally.

Table 1.4 Normality test for scores on scale TEIP

Teachers' Self - Efficacy	Shapiro- Wilk Test			Mean	Range	Skewness	Kurtosis
	Statistics	df	Sig.				
	.951	400	.000	70.15 (SE .465)	50 - 99	.621 (SE 0.122) Z-score: 5.09	.671 (SE 0.245) Z-score: 2.74

Both skewness (0.621) and kurtosis (0.671) fall within acceptable limits (± 1), implying that the distribution shape is approximately normal, even if not perfect. However, given the large sample size and acceptable skewness/kurtosis, the data is suitable for parametric testing.

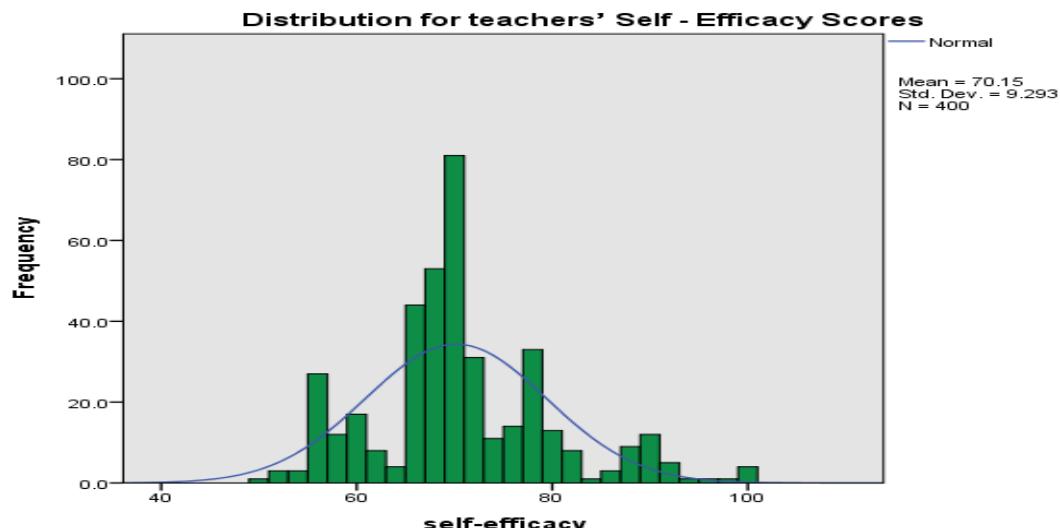


Figure-1.3 Histogram of normal distribution of self-efficacy score on TEIP

In order to find out overall self- efficacy of high school teachers towards inclusive education, their responses on scale TEIP were examined through Descriptive analysis as shown in table 1.3. From this table it could be observed that the range of raw score for teachers' self-efficacy was 50 to 99, and the obtained mean score was 70.15 with its associated Z-score 0.0006. A mean score of 70.15 ($M=70.15$) suggested that teachers of high school from district Bijnor presented “average” level of self-efficacy regarding inclusive education in regular classrooms. This indicating that most teachers possess a reasonable average level of confidence in their capability to carry out inclusive education practices effectively.

Table 1.5 Level of Teachers' Self- Efficacy towards Inclusive Education

Total Number of Teachers (N)	Mean	Range	Standard Error (SE) of Mean	SD	z-score	Level of Self-Efficacy
400	70.15	50-99	.465	9.29	-0.0006	Average

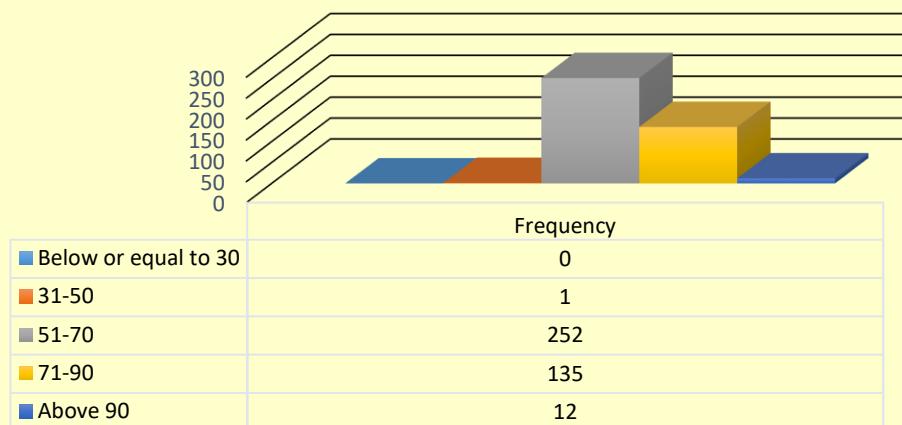
However, from the frequency distribution Table 1.3 and graph 1.3 it was further concluded that the teachers who scored ‘moderately high’ self-efficacy (Score in between 70-90) were only 33.80

%(N=135) And 63.0 %(N=252) scored average self-efficacy level (scores between 51-70) and only 03.0% (N=12) teachers scored extremely high self-efficacy (scores above 90). So from this discussion again verified that majority of high school teachers of District Bijnor show average level of self-efficacy towards inclusive education.

Table 1.6 Frequency Distribution for Teachers' Self-efficacy towards inclusive education

Range of raw scores	Frequency	Percentage	Level of self-efficacy
Below or equal to 30	0	.0	Extremely low
31-50	1	.3	low
51-70	252	63.0	average
71-90	135	33.8	Moderately high
Above 90	12	3.0	Extremely high

DISTRIBUTION TABLE FOR TEACHERS' SELF-EFFICACY



Graph 1.4 showing mean distribution of teachers' self-efficacy towards inclusive education

Objective 03- To study relationship between high school teachers' attitude and their perceived self-efficacy towards inclusive education.

Hypothesis

H_0 -There is no significant relationship between high school teachers' attitude and self-efficacy towards inclusive education.

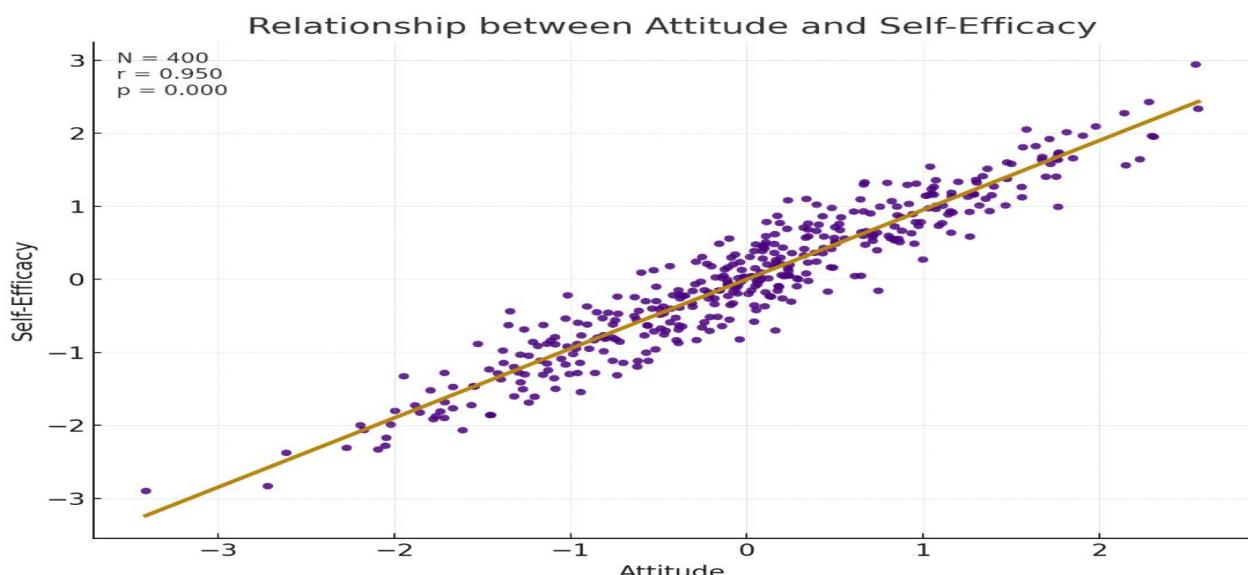
Scores of teacher's attitudes on TASTIE scale and teacher's self-efficacy on TEIP scale were distributed normally. Therefore, Pearson's parametric correlation (r) was used to determine the relationship between teachers' self-efficacy and their attitudes.

Table 1.7 Correlation between Attitude and Self-Efficacy of teachers towards inclusive education

Variables	N	Pearson Correlation (r)	Sig. (2-tailed)	Remark
Attitude & Self-Efficacy	400	0.950	0.000	Significant

From correlational table 1.5 the correlation coefficient was 0.950 ($r = 0.950$) and its corresponding p-value was 0.000 Since p-value was less than significance value 0.05 ($p = 0.000 < 0.05$) the result is statistically significant. So null hypothesis H_0 that ‘there is no significant relationship between high school teachers’ attitude and self-efficacy towards inclusive education” was rejected.

Correlational value is near to 1.0 which indicated that an extremely strong positive correlation between attitude and self-efficacy of high school teachers were found in District Bijnor. This result suggests that teachers who hold higher positive attitudes tend to exhibit much higher self-efficacy in implementing inclusion in classrooms and vice-versa.



Graph 1.5 representing correlation between attitude and self-efficacy towards inclusive education

Implications:

The findings of the present study suggest noteworthy implications for the successful implementation of inclusive education in regular classrooms in District Bijnor. A high level of positive attitude among high school teachers indicates that they are generally supportive of the principles of inclusive

education and identify the value of educating special students along with regular students. Such positive attitudes are essential to motivate teachers for accepting and embracing inclusive practices rather than counterattack them. However, the finding of an average level of self-efficacy among high school teachers suggests that while teachers are keen, they may not yet feel fully assured in their skill to implement inclusive approaches effectively. Such gap highlights the need for more focused professional development and in-service hand-on-training programmes, enabling teachers to translate their positive attitudes into effective classroom practices. Importantly, the discovery of a strong positive correlation between attitude and self-efficacy of high school teachers implies that improving one of these variables is likely to strengthen the other. For example, when teachers receive effective training that enhances their self-efficacy, their attitudes toward inclusion are likely to become even more positive. Similarly, fostering positive attitudes through awareness programs and success stories of inclusion can increase teachers' belief in their own abilities.

Conclusion:

Together, these findings suggest that for inclusive education to be successfully implemented in regular classrooms in District Bijnor educational policymakers and school administrators should focus on integrated strategies that simultaneously enhance teacher attitudes and build self-efficacy. This dual approach can lead to more confident, motivated, and skilled teachers who are able to adopt and sustain inclusive practices, ultimately promoting a more equitable learning environment for all students.

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