

Exploring the Knowledge and Attitudinal Perspectives of Regular School Teachers Toward Inclusive Education

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Inclusive education is a transformative approach that emphasizes the right of every learner, rooted in principles of equity, diversity, and social justice. This approach seeks to eliminate barriers to learning and promote meaningful participation for all diversify students within mainstream classrooms. Teachers' knowledge of inclusive education forms the foundation for successful implementation of inclusivity in classrooms. Without adequate knowledge, teachers may feel unprepared to adapt lessons, differentiate instructions, or manage diverse classrooms effectively. Equally important are teachers' attitude toward inclusion, which significantly influence their willingness to embrace inclusive practices. Positive attitudes foster acceptance, creativity in teaching, and collaborative problem-solving, whereas negative attitudes can create barriers to meaningful participation for students with disabilities or special needs. The present study sought to find out the present status of high school teachers' knowledge and their attitude regarding inclusive education in regular classrooms in District Bijnor of Uttar Pradesh. This study further try to find out impact of teachers' demographic and professional factors as age, teaching experience and professional education on their knowledge level. Researcher is also keen to seek correlation between knowledge and attitude of teachers regarding inclusion and their impact on implementation. In this study descriptive survey method has been used. 400 high school teachers have been selected through purposive sampling from 50 stratified random selected schools from all over District Bijnor. Researcher in supervisor's guidance, developed the Teachers' Knowledge of Inclusive Education Scale (TKIES) to collect data for knowledge of teachers regarding inclusive education. Another standardised tool Teacher Attitude Scale Towards Inclusive Education (TASTIE) developed by Vishal Sood and Arti Anand (2011) was used to collect data of attitude towards inclusive education. . Descriptive statistics (frequency, percentage, mean, SD) were applied to find out status of knowledge and attitude, while independent t-tests and ANOVA examined mean differences, and Pearson's r assessed the relationship between knowledge and attitude. Statistical analysis done with the help of SPSS 21 software. Result of the study revealed that high school teachers in Bijnor district possess an overall average level of knowledge regarding inclusive education. Younger teachers (<35 years, M = 126.52) demonstrated higher knowledge compared to those aged 35–50 years (M = 124.14) and above 50 years (M = 121.10), likely due to recent training programs that incorporate inclusive education. Higher qualifications also correlated with greater knowledge, as teachers with P.G./M.Ed. (M = 129.24) outperformed U.G./B.Ed. (M = 122.60) and P.G./B.Ed. (M = 124.23). Similarly, early-career teachers (<10 years, M = 126.12) scored higher than those with 10–20 years (M = 122.91) and >20 years (M = 124.29) of experience. Overall, teachers reported a “moderately high positive attitude” toward inclusion, and a positive correlation was observed between knowledge and attitudes.

Keywords: Inclusive education, mainstream classroom, teacher's knowledge of inclusive education, TKIES, TASTIE, attitude.

Introduction:

The core principle of the inclusive school is that every child should be educated together wherever feasible, irrespective of any disabilities or differences they may have. Inclusive schools are required to identify and address the varied needs of their students by

adapting appropriate curricula, organizational structures, teaching methods, resource allocation, and collaboration with the community. This ensures that all students receive a high-quality education that accommodates different learning styles and paces (UNESCO 1994)[1] Inclusive education

is a system of education wherein students with and without disability learn together and the system of teaching and learning is suitably adapted to meet the learning needs of different types of students with disabilities (RPWD act, 2016)[2]. The practice of ‘mainstreaming’ children with disabilities should be an integral part of national plans for achieving education for all (UNESCO 1994). Overall, this approach fosters a more diverse, accepting, and supportive learning environment where all students can develop their academic, social, and emotional potential.

In the context of India, the Right of Children to Free and Compulsory Education Act (RTE, 2009) National Policy for People with Disabilities (2006) RPWD act 2016, and the National Education Policy (NEP, 2020) emphasize inclusive education as a critical element for ensuring educational access and equity. Despite these policy mandates, the actual implementation of inclusive practices in mainstream schools remains a significant challenge.

Teachers, as the primary agents of classroom instruction, play a pivotal role in the success of inclusion by shaping their own attitudes, delivering differentiated instruction, using personalised plans and managing diverse learning needs in regular classrooms. The effectiveness of inclusive education largely depends on teachers’ knowledge of disabilities, legal frameworks, and inclusive pedagogical strategies, as well as their attitudes towards the inclusion of students with disabilities. Knowledge encompasses understanding the types of disabilities, appropriate teaching strategies, and necessary

accommodations. Attitude reflects teachers’ beliefs, perceptions, and willingness to accept students with disabilities as valuable members of the classroom community (Avramidis & Norwich, 2002) [3]. Conversely, limited knowledge can perpetuate resistance and exclusionary practices. (Hodkinson, A. (2006) [4]. Hodkinson suggests that teachers’ knowledge and attitudes are interdependent and continuously shape one another. As teachers expand their knowledge, their attitudes toward teaching tend to become more positive. In turn, a positive attitude encourages them to seek further learning and professional growth. This reciprocal relationship enhances teaching effectiveness and contributes to improved student outcomes in inclusive classrooms.

Rational of the Study

Research indicates that teachers’ attitudes play a crucial role in the successful implementation of inclusive education. (Shade and Stewart, 2001) [5]. and Singh et al. (2020) [6] emphasized that positive teacher attitudes significantly influence the integration of students with special needs in mainstream classrooms. Similarly, Qandhi et al. (2019) [7] found that pre-service teachers’ attitudes toward inclusion were shaped by their direct interaction, training, and teaching experience with children with special needs, with training having a significant effect. Lu et al. (2020) [8] further revealed a strong positive relationship between teachers’ knowledge of autism spectrum disorder (ASD) and their attitudes, highlighting that greater knowledge leads to more favourable attitudes. Priyadarshini et al.

(2017[9]) and Kumar (2016) [10] found that demographic and professional factors such as age, gender, experience, and teaching level significantly influenced teachers' attitudes toward inclusion, reinforcing the importance of context in shaping teacher perspectives.

Several studies demonstrate that knowledge and attitudes are strongly interlinked, and insufficient knowledge often results in neutral or negative attitudes toward inclusion. Dar et al. (2023) [11] and Dapudong (2014) [12] reported significant knowledge gaps among teachers, which hinder effective inclusive practices and foster neutral attitudes. Morgan (2019) [13] found that positive attitudes toward inclusion were a significant predictor of teachers' self-efficacy in implementing inclusive practices. Alkahtani (2022) [14] similarly concluded that greater knowledge of emotional and behavioral disorders (EBD) correlated with more positive attitudes, advocating for targeted professional development. Lisa Tometten et al. (2021) [15] confirmed that teachers' knowledge about special educational needs (SEN) positively influenced both the social participation and academic performance of students with SEN. However, studies by Sharma et al. (2018) [16] and Florian & Black-Hawkins (2011) [17] highlighted that many teachers remain inadequately prepared, suggesting a persistent gap between policy and practice due to insufficient training and professional development in inclusive education. Several studies suggest that while some teachers demonstrate positive attitudes towards inclusion, many lack sufficient knowledge or feel inadequately prepared to handle the

diverse challenges of an inclusive classroom (Sharma et al., 2018; Florian & Black-Hawkins, 2011). Negative attitudes and insufficient knowledge often lead to ineffective teaching practices, marginalization of students with disabilities, and ultimately, a gap between inclusive education policy and classroom practice.

Therefore, this study aims to explore the current level of knowledge and attitudinal perspectives of regular schoolteachers towards inclusive education. By identifying strengths, gaps, and challenges, the research seeks to provide empirical insights that can contribute to the development of targeted teacher training programs and policy improvements. This exploration is critical to advancing the quality of inclusive education and ensuring that students with disabilities receive meaningful and equitable learning opportunities within mainstream schools.

Objectives

This topic aims to investigate how teachers' knowledge, and their attitudes (perceptions and beliefs about inclusion) collectively influence their effectiveness in inclusive classrooms. So, the objectives of the present study are-

1. What is the current level of knowledge among high school teachers regarding inclusive education?
2. How demographic or professional factors (e.g., age, years of experience, and qualification) influence the knowledge level of teachers?

3. What is the level of attitude among high school teachers regarding inclusive education?
4. How does teachers' knowledge of inclusive education correlate with their attitudes towards inclusion?

Hypothesis

H001- There is no significant difference in high school teachers' knowledge about inclusive education across their age group.

H002- There is no significant difference in high school teachers' knowledge about inclusive education across their various lengths of teaching experience.

H003- There is no significant difference in high school teachers' knowledge about inclusive education across their professional qualification.

H04-- There is no significant correlation between high school teachers' knowledge and attitude towards inclusive education.

Methodology of the study

Design of the Study

In this study descriptive survey method has been used to know current status of teachers' knowledge and attitude regarding inclusive education, in district Bijnor Uttar Pradesh.

Sampling Method

The study used stratified random sampling to select 50 secondary schools (25 rural, 25 urban) from Bijnor district. From 560 teachers available in these schools a purposive sample of 400 was chosen, comprising 200 males and 200 females, equally divided between rural and urban areas.

Tool for data collection

As no suitable standardized tool was available, the researcher, with supervisor's guidance, developed the Teachers' Knowledge of Inclusive Education Scale (TKIES) to measure knowledge level of secondary school teachers. The scale covers four dimensions: (1) concepts, philosophy, and policies of inclusive education, (2) administrative roles and partnerships, (3) learners and learning environment, and (4) instructional planning, methods, and evaluation. It consists of 30 self-administered items on a five-point Likert scale, with total scores ranging from 30 to 150. Higher scores indicate greater knowledge of inclusive education among high school teachers. To assess teachers' attitudes toward inclusive education, the Teacher Attitude Scale Towards Inclusive Education (TASTIE) developed by Vishal Sood and Arti Anand (2011) was used. The scale contains 47 items (29 favourable, 18 unfavourable) across four domains: psychological and behavioural, social and parent-related, curricular and co-curricular, and administrative aspects of inclusion. It follows a three-point Likert format, with scoring reversed for unfavourable items. Total scores range from 47 to 141, where higher scores reflect more positive attitudes toward inclusive education.

Data Collection Procedure

Data was collected from sample 400 selected high school teachers from district Bijnor through both scales-TASTIE and TKIES. Raw scores were organised, tabulated and converted in Z scores to convert raw scores in meaningful information.

Statistical Analysis

Since parametric tests require normally distributed data and homogeneity of variances (especially for ANOVA), the raw scores of knowledge and attitude were tested in SPSS 21 and found to follow a normal distribution. Accordingly, null hypotheses were formulated and analyzed using appropriate parametric methods. Descriptive statistics (frequency, percentage, mean, SD) were applied, while independent t-tests and ANOVA examined mean differences, and Pearson's r assessed the relationship between knowledge and attitude.

Results and analysis:

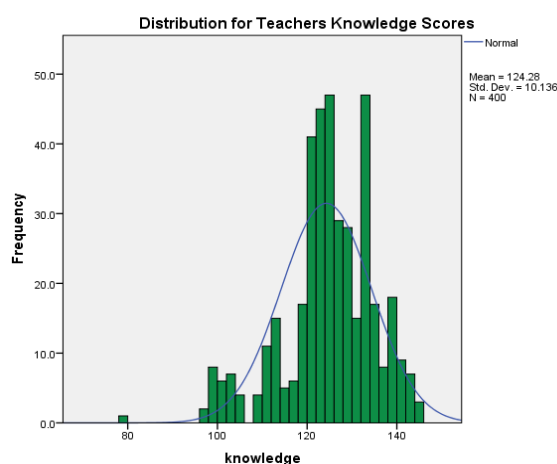
Teachers Knowledge	Shapiro- Wilk Test			Mean 124.29 (SE .507)	Range 79-145	Skewness -.769 (SE .122) Z-score: -6.303	Kurtosis 1.087 (SE .243) Z-score: 4.473
	Statistics	Df	Sig.				
	.956	400	.000				

From the table 1.2 Skewness and kurtosis values (within ± 2) indicate an approximately normal distribution. Although the Shapiro–Wilk test ($W = 0.956$, $p < 0.001$) rejects perfect normality, but the large sample size ($N = 400$) and acceptable distribution indices support the use of parametric analysis.

Objective 01: What is the current level of knowledge among high school teachers regarding inclusive education?

In this study raw data scores on teachers' knowledge scale were first tested for their normality through skewness and kurtosis along with Shapiro-Wilk Test to decide whether parametric or non-parametric statistics would be applied for analysis of these data.

Table-1.1 Normality Test for Knowledge Score on TKIES



Graph 1.1 NPC for Teachers knowledge scores on TKIES

Overall knowledge level of high school teachers regarding inclusive education

To determine overall teachers' knowledge towards inclusive education, from descriptive table 1.3 it could be found that the range of raw score was from 79 -145, mean score was 124.28 with its Z-score 0.0020. The mean score of 124.28 indicates that high school teachers in Bijnor district possess an overall "average"

level of knowledge of inclusive education in mainstream schools.

Table 1.2 Level of Teachers' Knowledge towards Inclusive Education

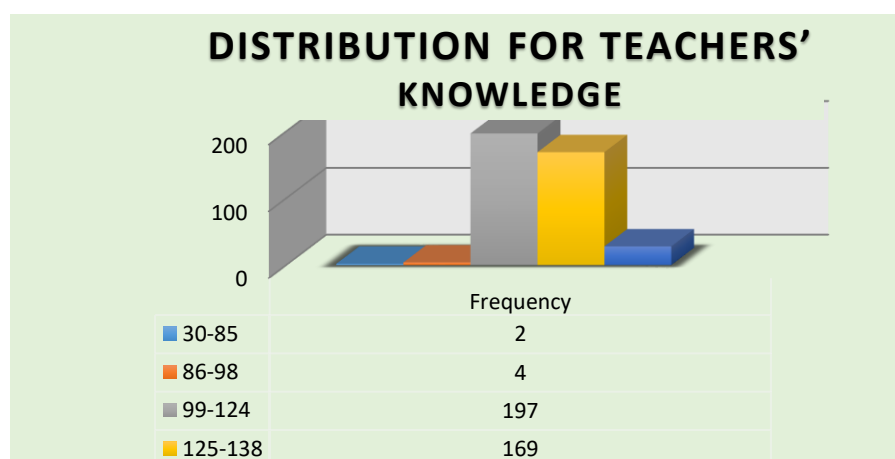
Total Number of Teachers (N)	Mean	Range	Standard Error (SE) of Mean	SD	z-score	Level of Knowledge
400	124.28	79-145	.507	10.136	0.0020	average

Further analysis of the frequency distribution (Table 1.3, Graph 1.1) shows that 49.3% of teachers fell within the "average" range (scores 99–124), 42.3% demonstrated a high level of

knowledge, while only 7.0% achieved an extremely high level of knowledge.

Table 1.3 Frequency Distribution for Teachers' knowledge score

Range of raw score	Frequency	Percentage	Level of attitude
30-85	2	.5	Extremely low
86-98	4	1.0	Low
99-124	197	49.3	Average
125-138	169	42.3	High
139-150	28	7.0	Extremely High



Graph 1.2 mean distribution for teachers' knowledge scores

Objective 02: How demographic or professional factors (e.g., age, years of experience, and qualification) influence the knowledge level of high school teachers?

To find out Variances across all groups (for different age groups, various length of teaching experience and different level of professional qualifications) are equal or not Levene's test for homogeneity of variance was applied.

Table-1.4 Homogeneity of variance for teachers' knowledge score across variants age and teaching experience and professional qualification

Categorical Factors	Categories	Levene's Statistics	df1	df2	Sign. 'p' Value	Result
Teachers Age	Below 36 yrs	.097	2	397	.907	Variances are equal
	36-50 yrs					
	>50 yrs					
Teaching Experiences	Up to 10 yrs	.243	2	397	.785	Variances are equal
	10-20 yrs					
	Above 20 yrs					
Educational Qualification	10+2	.698	2	397	.498	Variances are equal
	Graduation B.Ed.					
	Post-Graduation B.Ed.					
	P.G. M.Ed.					

Table-1.4 presents the results of Levene's test for homogeneity of variance across different categorical factors of teachers, namely age, teaching experience, and professional qualification, in relation to their knowledge of inclusive education. Since all the p-values are greater than the threshold of 0.05, the assumption of homogeneity of variance is satisfied for teachers' knowledge across age, teaching experience, and professional qualification. This means that the groups are statistically comparable, and further

parametric analyses such as ANOVA or t-tests can be appropriately applied.

For this objective three null hypothesis were formulated. Result and analysis of these null hypotheses were described one by one as follow-

H01-There is no significant difference in high school teachers' knowledge about inclusive education across their age groups.

ANOVA Table 1.5 – Knowledge across Age Groups

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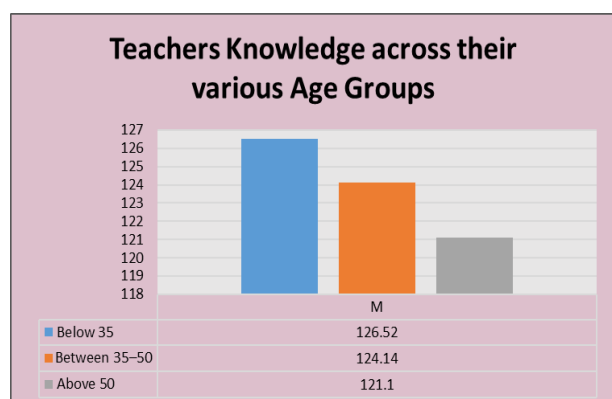
Source of Variance	Sum of Squares	df	Mean Square	F-value	p-value	Remark
Between Groups	1300.710	2	650.355	6.505	.002	Significant (rejected)
Within Groups	39692.800	397	99.982			
Total	40993.510	399				

ANOVA Table 1.5 and computed F-value is 6.505 with an associated p-value of 0.002. Since the obtained p-value is less than the significance level of 0.05 ($p = 0.002 < 0.05$), the result indicates a statistically significant difference in the knowledge scores of high school teachers across different age groups. This finding suggests that age significantly influences teachers' knowledge about inclusive education. Hence, the null hypothesis H_{01} : "There is no significant difference in high school teachers' knowledge about inclusive education across their age groups" is rejected.

Descriptive Table 1.6 -Teachers Knowledge across their various Age Groups

Age Group	N	M	SD	SE	Lower Bound	Upper Bound	Minimum	Maximum
Below 35	115	126.52	9.847	.918	124.70	128.34	79	145
Between 35–50	214	124.14	9.928	.679	122.80	125.48	97	145
Above 50	71	121.10	10.449	1.240	118.63	123.57	99	143

Furthermore descriptive statistics (Table 1.6 graph 1.3) suggested that young teachers below 35 years obtained highest mean score of 126.52, while those in the 35–50 years age group scored a mean of 124.14 which is slightly low, while teachers above 50 years recorded lowest mean of 121.10. This analysis concluded that young teachers have higher knowledge about inclusive education as compared to others.



Graph 1.3 Mean distribution of knowledge across their various age groups

H002- There is no significant difference in high school teachers' knowledge about inclusive education across their different professional qualification.

ANOVA Table 1.7 – Teachers Knowledge across Professional Qualification

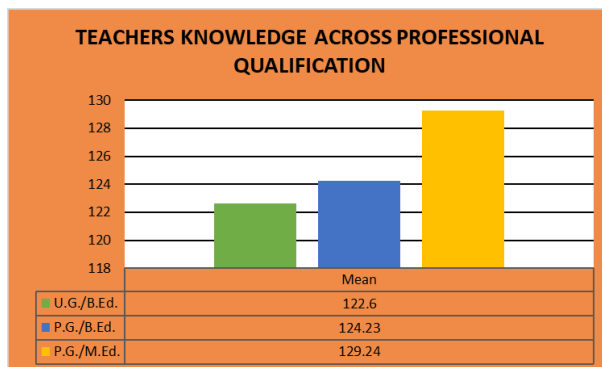
Source of Variance	Sum of Squares	df	Mean Square	F-value	p-value	Remark
Between Groups	926.365	2	463.183	4.589	.011	Significant
Within Groups	40067.145	397	100.925			rejected
Total	40993.510	399				

A one-way ANOVA was conducted to examine differences in teachers' knowledge about inclusive education across groups. From table 1.7 calculated F-value is 4.589 with an associated p-value of 0.011, which is less than 0.05 ($p=0.011<0.05$). This indicates that there is a statistically significant difference in teachers' knowledge scores across the compared groups. This means null hypothesis "There is no significant difference in high school teachers' knowledge about inclusive education across their different professional qualifications." is rejected.

Descriptive Table 1.8 Teachers Knowledge across their professional Qualification

Qualification	N	Mean	SD	SE	Lower Bound	Upper Bound	Min	Max
U.G./B.Ed.	75	122.60	10.554	1.219	120.17	125.03	97	143
P.G./B.Ed.	296	124.23	10.096	0.587	123.07	125.38	79	145
P.G./M.Ed.	29	129.24	7.922	1.471	126.23	132.25	110	143

From descriptive Table 1.8 it could be observed that teachers with P.G./M.Ed. scored highest ($M=129.24$) as compared to U.G./B.Ed. ($M=122.60$) and P.G./B.Ed. ($M=124.23$). Thus, it can be concluded that higher qualified teachers demonstrated significantly greater knowledge about inclusive education as compared to others.



Graph-1.4 mean plot of teachers' knowledge across professional qualifications

H₀ 03- There is no significant difference in high school teachers' knowledge about inclusive education across their various lengths of teaching experience.

ANOVA Table 1.9 Teachers' Knowledge across various length of Teaching Experience

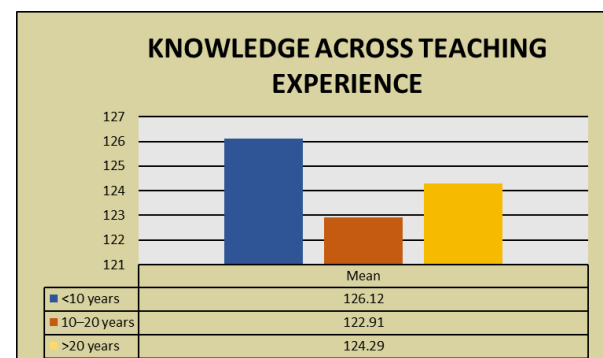
Source of Variance	Sum of Squares	df	Mean Square	F-value	p-value	Remark
Between Groups	825.061	2	412.530	4.077	.018	Significant
Within Groups	40168.449	397	101.180			Rejected
Total	40993.510	399				

One-way ANOVA was conducted to examine differences in teachers' knowledge about inclusive education across various length of teaching experience. From the table 1.9 the obtained F-value is 4.077 with an associated p-value of 0.018, which is less than 0.05 ($p=0.018<0.05$). This indicates that there is a statistically significant difference in the knowledge of high school teachers toward inclusive education across different lengths of teaching experience. Therefore, H₀ "There is no significant difference in high school teachers' knowledge towards inclusive education across their various lengths of teaching experience" is rejected.

Table 1.10 Teachers' Knowledge across their Teaching Experience

Experience	N	Mean	SD	SE	Lower Bound	Upper Bound	Min	Max
<10 years	140	126.12	10.667	0.901	124.34	127.90	79	145
10–20 years	188	122.91	9.863	0.719	121.50	124.33	97	143
>20 years	72	124.29	9.317	1.098	122.10	126.48	99	143

Descriptive table 1.10 and graph 1.5 suggests that early-career teachers (<10 years) reported significantly higher knowledge ($M=126.12$) about inclusive education compared to those with 10–20 years of experience ($M=122.91$) and more than 20 years ($M=124.29$). The difference between <10 years and >20 years groups was relatively smaller. Therefore it could be concluded that teaching experience has a significant effect on teachers' knowledge. Specifically, teachers in their early career stage (<10 years) appear to possess greater knowledge about inclusive education than their counterparts with 10–20 years of experience, whereas the >20 years group falls in between.



Graph-1.5 Mean plot of teachers' knowledge across various length of teaching experience

Objective 03: What is the level of attitude among high school teachers regarding inclusive education?

To determine overall teachers' attitude towards inclusive education, their responses on TASTIE scale were examined using descriptive statistics. As shown in table 1.12 teachers' attitude mean score was 119.60 with its Z-score 0.0677. This suggested that teachers of secondary school from district Bijnor harbour the "most favourable" attitude towards inclusive education in mainstream schools.

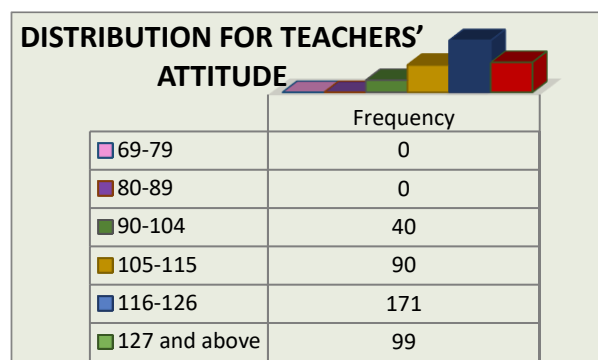
Table 1.11 Level of Teachers' Attitude regarding Inclusive Education

Total Number of Teachers (N)	Mean	Range	Standard Error (SE) of Mean	SD	z-score	Level of Attitude
400	119.6	90-140	0.4980	9.959	0.0677	Most favourable

However, from the frequency distribution Table 1.13 it is further concluded that the teachers who scored 'most favourable' attitude (Score in between 116-126) were 42.80 % (N=171), 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). This suggested that attitude of high school teachers towards inclusive education is moderately high.

Table 1.12 Frequency Distribution for Teachers' Attitude scores on TASTIE

Range of raw score	Frequency	Percentage	Level of attitude
69-79	0	0.00	Most unfavourable
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 favourable
127 and above	99	24.8	Extremely favourable



Graph-1.6 Mean plot for teachers attitude scores

Objective 04: How does teachers' knowledge of inclusive education correlate with their attitudes towards inclusion?

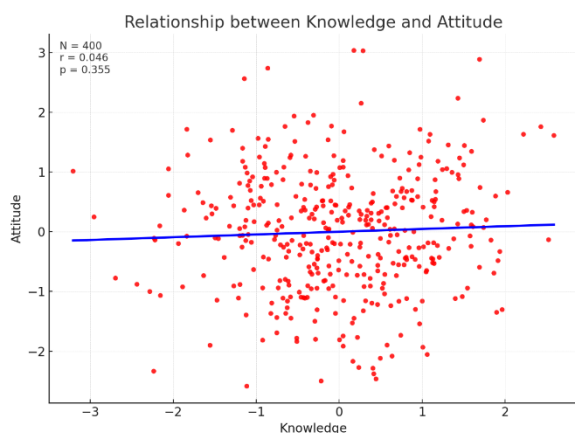
To know correlation between teachers' knowledge and their attitude a Pearson r correlation was calculated with the help of SPSS21 software.

Table 1.13: correlation between teachers' Knowledge and their Attitude

Variables	N	Pearson Correlation (r)	Sig. (2-tailed)	Remark
Knowledge & Attitude	400	0.046	0.355	Not Significant

From table 1.13 and scattered graph it could be concluded that the Pearson correlation coefficient ($r = 0.046$) shows a very weak positive relationship between knowledge and attitude of teachers toward inclusive education. The p-value = 0.355 is greater than 0.05, which means the relationship is not statistically significant. Therefore, the null hypothesis H_0 — "There is no significant relationship between knowledge and attitude of high school teachers towards inclusive education" — is accepted. This suggests that teachers' knowledge is positively related to

their attitudes toward inclusive education, but relationship is not significant for this sample.



Scattered diagram 1.7 showing correlation between teachers' attitude and knowledge scores

Discussion

The present study revealed that knowledge regarding inclusive education in high school teachers in Uttar Pradesh's district Bijnor is "Average". 49.3% of teachers fell within the "average" range while 42.3% demonstrated a high level of knowledge, and only 7.0% achieved an extremely high level of knowledge. Furthermore, it is found out that teachers' knowledge is higher in young teachers below 35 years with mean score of 126.52, as compared to those in the 35–50 years age group ($M=124.14$) and teachers above 50 years who recorded lowest mean of 121.10. This analysis concluded that young teachers have higher knowledge about inclusive education as compared to others. The most probable reason of this may be that teachers training programs included with inclusive education as the part of training syllabus in U.P. so new teachers are better skilled to deal with inclusive classrooms. From further analysis it has been observed that teachers with

P.G./M.Ed. scored highest ($M=129.24$) as compared to U.G./B.Ed. ($M=122.60$) and P.G./B.Ed. ($M=124.23$). This result emphasizes that higher qualified teachers demonstrated significantly greater knowledge about inclusive education as compared to others. This study also found out that early-career teachers (<10 years) reported significantly higher knowledge ($M=126.12$) about inclusive education compared to those with 10–20 years of experience ($M=122.91$) and more than 20 years ($M=124.29$). The difference between <10 years and >20 years groups was relatively smaller. Therefore, it could be concluded that teaching experience has a significant effect on teachers' knowledge regarding inclusion and inclusive education. The level of high school teachers' attitude towards inclusive education in District Bijnor is positive and "Most favourable". Result of this study also reveals a positive correlation between teachers' knowledge and their attitudes toward inclusive education.

Many researches have proven that in general teachers tend to have positive attitude towards inclusion of special children in inclusive classrooms. (Mondal S. 2023,[18] Thomas, F. B., Kumar, L. 2023) [19]. Furthermore, researches have consistently highlighted a positive relationship between teachers' knowledge and attitudes regarding inclusive education. Several key studies ((Savolainen et al., 2020,[20] Alnahdi & Schwab, 2021,[21] Carvalho, M. et., al.,2024)[22]) underline this association, indicating that knowledge of inclusive policies and practices can enhance teachers' attitudes, ultimately fostering more effective implementation of inclusion in

schools (Kuyini, A. B. &Desai, I. 2007)[23] Teachers with higher levels of knowledge tend to demonstrate more favourable attitudes, which enhances their readiness to implement inclusivity and effective teaching practices (Almalky, H. A. et al. 2023)[24]. The findings emphasize the need to incorporate inclusion concepts into teacher preparation programs and offer several practical recommendations and directions for future research.

Implications:

This study finds out that younger teachers and those with advanced professional qualifications often show greater awareness and adaptability, contributing positively to both their knowledge and attitudes. This combination supports equitable classroom environments, improves student participation, and leads to better learning outcomes. Strengthening teachers' knowledge base through continuous pre-service and in-service training, higher professional education, and targeted professional development is therefore critical for advancing inclusive education. Facts find through this study may provide several key implications that can inform policy, educational practices, and further research:

The positive relationship between knowledge and attitudes suggests a need to enhance teacher training programs to include more comprehensive modules on inclusive education. By expanding teacher knowledge about inclusive practices and relevant policies, educators can develop more positive attitudes, which are crucial for successful implementation (Mouchritsa et al., 2022[25],

Chitiyo et al., 2024,[26] Srivastava et al., 2017) [27]

Studies emphasize the importance of perceived school support for fostering positive attitudes towards inclusion. Ensuring that teachers have access to necessary resources and support from leadership can enhance their knowledge and self-efficacy, thereby positively influencing their attitudes towards inclusive practices (Ahmmed et al., 2012[28] Pappas et al., 2018[29].

There is a recognition of differences in attitudes based on demographic factors such as location and gender. Urban teachers often exhibit more favourable attitudes than rural teachers, and female teachers tend to have more positive views than their male counterparts. Efforts must be made to address these disparities through targeted interventions and professional development programs (Singh et al., 2025) [30].

The need for increased funding and policy adjustments to support inclusive education is evident. Educators express concerns about the sufficiency of resources and their confidence in teaching in inclusive settings. Policy-makers should focus on legislative support and adequate funding to address these issues and foster a supportive environment for inclusive education (Pappas et al., 2018).

Successful strategies and training initiatives identified in specific contexts, such as the positive impact of inclusive education modules during teacher training, should be replicated and adapted to broader contexts to enhance the reach and effectiveness of inclusive education practices (Chitiyo et al., 2024; Srivastava et al., 2017).

These implications underscore the essential role of teacher knowledge and attitudes in the implementation of inclusive education and highlight areas where policy-makers and educational institutions can focus their efforts to promote more inclusive learning environments.

Conclusion

The successful implementation of inclusive education largely depends on the integral role of teachers' knowledge and attitudes. Well-informed teachers with positive dispositions are better equipped to adapt curriculum, employ discriminated strategies, and foster equitable classroom environments that accommodate diverse learners. To strengthen these capacities, policy-makers and educational institutions must prioritize comprehensive teacher education programs, ongoing professional development, and access to adequate resources. Furthermore, supportive school systems, effective leadership, and targeted interventions addressing demographic disparities can enhance both knowledge and attitudes. By focusing efforts in these areas, stakeholders can create sustainable and inclusive learning environments that uphold equity and improve educational outcomes for all students.

References:

United Nations Educational, Scientific and Cultural Organization. (1994). The Salamanca statement and framework for action on special needs education: World conference on special needs education: Access and quality, Salamanca, Spain, 7–10 June 1994.)

<https://unesdoc.unesco.org/ark:/48223/pf000098427>

Government of India. (2016). The Rights of Persons with Disabilities Act, 2016. Gazette of India (Extraordinary), December 28, 2016. Ministry of Social Justice and Empowerment, Department of Empowerment of Persons with Disabilities. <http://www.disabilityaffairs.gov.in/upload/uploadfiles/files/RPWD/ACT/2016.pdf>

Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129–147. <https://doi.org/10.1080/08856250210129056>

Hodkinson, A. (2006). Conceptions and misconceptions of inclusive education: A critical examination of final-year teacher trainees' knowledge and understanding of inclusion. *Research in Education*, 76(1), 43–55.

Shade, R. A., & Stewart, R. (2001). General education and special education preservice teachers' attitudes toward inclusion. *Preventing School Failure: Alternative Education for Children and Youth*, 46(1), 37–41. <https://doi.org/10.1080/10459880109603342>

Singh, S., Kumar, S., & Singh, R. K. (2020). A study of attitude of teachers towards inclusive education. *Shanlax International Journal of Education*, 9(1), 189–197.

Qandhi, F. F., & Kurniawati, F. (2019). Pre-service teachers' attitudes toward inclusive education. *Proceedings of the International Conference on Innovation in Applied Psychology*, 50. <https://doi.org/10.2991/iciap-18.2019.50>

Lu, M., Zou, Y., Chen, X., Chen, J., He, W., & Pang, F. (2020). Knowledge, attitude and

- professional self-efficacy of Chinese mainstream primary school teachers regarding children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 72, 101513. <https://doi.org/10.1016/j.rasd.2020.101513>
- Priyadarshini, S. S., & Thangarajathi, S. (2017). Effect of selected variables on regular school teachers' attitude towards inclusive education. *Journal on Educational Psychology*, 10(3), 28–38. retrieved on 19-04-24 from <https://eric.ed.gov/?id=EJ1138675>
- Kumar, A. (2016). Exploring the teachers' attitudes towards inclusive education system: A study of Indian teachers. *Journal of Education and Practice*, 7(34), 1–4. <https://eric.ed.gov/?id=EJ1126676>
- Dar, D. R., Paul, F. A., & Badiger, T. (2023). Knowledge, attitude, and perception among school teachers towards inclusion of children with disabilities in Kashmir: A cross-sectional study. *Malaysian Journal of Psychiatry*, 32(1), 17–22. https://doi.org/10.4103/mjp.mjp_32
- Dapudong, R. (2014). Teachers' knowledge and attitude towards inclusive education: Basis for an enhanced professional development program. *International Journal of Learning and Development*, 4(4), 1-15. <https://doi.org/10.5296/ijld.v4i4.6116>
- Morgan, E. S. (2019). General education teachers' knowledge of, training in, attitudes toward, and self-efficacy in inclusive practices. (Doctoral dissertation). Rutgers The State University of New Jersey, Graduate School of Applied and Professional Psychology. ProQuest Dissertations & Theses. (Publication No. 22583890)
- Alkahtani, K. D. F. (2022). Teachers' knowledge and attitudes toward sustainable inclusive education for students with emotional and behavioral disorders. *Children*, 9(12), 1940. <https://doi.org/10.3390/children9121940>
- Tommetten, L., Heyder, A., & Steinmayr, R. (2021). Links between teachers' knowledge about special educational needs and students' social participation and academic achievement in mainstream classes. *Contemporary Educational Psychology*, 67, 102022. <https://doi.org/10.1016/j.cedpsych.2021.102022>
- Sharma, U., Aiello, P., Pace, E. M., Round, P., & Subban, P. (2018). In-service teachers' attitudes, concerns, efficacy and intentions to teach in inclusive classrooms: An international comparison of Australian and Italian teachers. *European Journal of Special Needs Education*, 33(3), 437–446. <https://doi.org/10.1080/08856257.2017.1361139>
- Florian, L., & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *British Educational Research Journal*, 37(5), 813–828. <https://doi.org/10.1080/01411926.2010.501096>
- Mondal, S. (2023). Attitude toward inclusive education among the primary school teachers in Purba Medinipur district. *International Research Journal of Modernization in Engineering Technology and Science*, 5(12), 108–114. Retrieved from www.irjmet.com
- Thomas, F. B., Kumar, L. (2023). A Study on Attitudes of General Education Teachers towards Inclusive Education for Students with Intellectual Disability in the Varanasi District of Uttar Pradesh. *Indiana Journal of Arts & Literature*, 4(12), 18-25 <https://doi.org/10.5281/zenodo.10451735>
- Savolainen, H., Malinen, O. P., & Schwab, S. (2020). Teacher efficacy predicts teachers'

- attitudes towards inclusion – a longitudinal cross-lagged analysis. *International Journal of Inclusive Education*, 26(9), 958–972. <https://doi.org/10.1080/13603116.2020.1752826>
- Schwab, S., & Alnahdi, G. H. (2020). Do they practise what they preach? Factors associated with teachers' use of inclusive teaching practices among in-service teachers. *Support for Learning*. <https://doi.org/10.1111/1471-3802.12492>
- Carvalho, M., Simó-Pinatella, D., Azevedo, H., & Adam Alcocer, A. L. (2024). Inclusive education in Portugal: Exploring sentiments, concerns and attitudes of teachers. *Journal of Research in Special Educational Needs*, 24(3), 729–741. <https://doi.org/10.1111/1471-3802.12663>
- Kuyini, A. B., & Desai, I. (2007). Principals' and teachers' attitudes and knowledge of inclusive education as predictors of effective teaching practices in Ghana. *Journal of Research in Special Educational Needs*, 7(2), 104–113. <https://doi.org/10.1111/j.1471-3802.2007.00086.x>
- Almalky, H. A., & Alwahbi, A. A. (2023). Teachers' perceptions of their experience with inclusive education practices in Saudi Arabia. *Research in Developmental Disabilities*, 140, 104584. <https://doi.org/10.1016/j.ridd.2023.104584>
- Mouchritsa, M., Garay, U., Romero, A., & Kazanopoulos, S. (2022). Teachers' Attitudes towards Inclusive Education at Greek Secondary Education Schools. *Education Sciences*, 12(6), 404. <https://doi.org/10.3390/educsci12060404>
- Chitiyo, J., Brobbey, G., & Asare, K. B. (2024). Teacher attitudes and perceptions of inclusive education: A case of Ghana. *Journal of International Special Needs Education*, 27(1), 23–35. <https://doi.org/10.9782/JISNE-D-23-00008>
- Srivastava, M., de Boer, A., & Pijl, S. J. (2017). Preparing for the inclusive classroom: Changing teachers' attitudes and knowledge. *Teacher Development*, 21(4), 561–579. <https://doi.org/10.1080/13664530.2017.1279681>
- Ahmmed, M., Sharma, U., & Deppeler, J. (2012). Variables affecting teachers' attitudes towards inclusive education in Bangladesh. *Journal of Research in Special Educational Needs*, 12(3), 132–140.
- Pappas, M., Papoutsi, C., & Drigas, A. (2018). Policies, practices and attitudes toward inclusive education: The case of Greece. *Social Sciences*, 7(6), 90–104. <https://doi.org/10.3390/socsci7060090>
- Singh, R., Jain, V. K., & Yadav, S. (2025). ATTITUDE OF SECONDARY SCHOOL TEACHERS TOWARDS INCLUSIVE EDUCATION. *International Journal of Research -GRANTHAALAYAH*, 13(3). <https://doi.org/10.29121/granthaalayah.v13.i3.2025.6037>