



Influence of Knowledge and Attitude on Sex Education Among Teaching Faculties in Selected High Schools in Palakkad District

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Abstract

This study investigates the influence of knowledge and attitudes towards sex education among high school teachers in Palakkad District, Kerala, considering the variables of gender and locale. Employing a descriptive survey research design, the study encompasses a sample of 150 high school teachers from government and aided schools, selected through stratified random sampling. Data were collected using a structured knowledge questionnaire and a Likert scale attitude survey. The findings reveal that teachers possess a moderate to high level of knowledge about sex education, with significant differences observed based on gender and locale. Female teachers and those in urban areas exhibit higher knowledge levels compared to their male and rural counterparts. Attitudinal analysis indicates generally positive attitudes towards sex education among teachers, with notable differences based on demographic factors. Female teachers and urban teachers tend to have more favourable attitudes. A significant positive correlation between knowledge and attitude towards sex education is established, with variations based on gender and locale.

Key Words: Influence, Knowledge, Attitude, Sex Education, Teaching Faculties High Schools, Palakkad District

Introduction

Sex education is a pivotal component of the educational curriculum, designed to equip young people with the knowledge, skills, and attitudes necessary for making informed decisions about their sexual health and well-being. Globally, the implementation of sex education in schools is a subject of considerable debate, influenced by diverse cultural, religious, and social perspectives. In India, and specifically in Kerala, this discourse is particularly nuanced due to the state's traditional values juxtaposed with its high literacy rates and progressive outlook on education. Palakkad District, known for its adherence to traditional values, presents a unique context for exploring the dynamics of sex education. Despite the progressive educational environment, the implementation of sex education faces several challenges. Teachers, as primary agents of delivering this education, play a crucial role in shaping the effectiveness and acceptance of sex education programs. Their knowledge and attitudes towards sex education are instrumental in either facilitating or hindering its successful implementation. The World Health Organization (WHO, 2006) defines sexual health as "a state of physical, emotional, mental, and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction, or infirmity." This definition underscores the importance of a comprehensive approach to sex education, one that fosters a positive and respectful understanding of sexuality and sexual relationships. Previous studies have highlighted the critical need for comprehensive and age-appropriate sex education in schools. Positive sex education, delivered through authentic sources such as schools and trained teachers, is essential in guiding young people towards healthy sexual behaviours and preventing the adverse effects of misinformation. The current study aims to investigate the influence of knowledge and attitudes towards sex education among high school teachers in Palakkad District, considering the variables of gender and locale. By examining these factors, the study seeks to identify the levels of knowledge and attitudes among teachers, the relationship between these variables, and the barriers and facilitators to implementing sex education in schools.

Need of the Study

The necessity of this study arises from the critical role that sex education plays in the holistic development of adolescents. In the digital age, adolescents often turn to unreliable sources for information about sex, leading to misinformation and unhealthy sexual practices. This study aims to highlight the need for school-based sex education programs delivered by knowledgeable and positively attuned teachers to ensure accurate, reliable, and age-appropriate information. Teachers' knowledge and attitudes towards sex education significantly influence the effectiveness of these programs, making it essential to assess and enhance teacher preparedness. In Kerala, specifically Palakkad District, the coexistence of traditional values with modern educational aspirations presents unique cultural challenges that must be addressed. Understanding these contextual factors is crucial for designing culturally sensitive and socially acceptable sex education programs. The findings of this study are expected to contribute to policy and curriculum development, supporting the formulation of comprehensive and age-appropriate sex education mandates in schools. By ensuring that teachers are well-informed and hold positive attitudes towards sex education, the study aims to foster an educational environment conducive to healthy sexual behaviours, reduced rates of sexually transmitted infections, and

lower incidences of sexual violence, ultimately promoting positive sexual health outcomes among adolescents.

Objectives

1. To assess the level of knowledge about sex education among high school teachers in Palakkad District.
2. To compare the knowledge levels about sex education between male and female teachers.
3. To compare the knowledge levels about sex education between teachers in urban and rural locales.
4. To evaluate the attitudes of high school teachers towards sex education.
5. To compare the attitudes towards sex education between male and female teachers.
6. To compare the attitudes towards sex education between teachers in urban and rural locales.
7. To examine the relationship between knowledge and attitude towards sex education among high school teachers.
8. To analyse if the relationship between knowledge and attitude varies based on gender.
9. To analyse if the relationship between knowledge and attitude varies based on locale.

Hypotheses

1. High school teachers in Palakkad District possess a moderate to high level of knowledge about sex education.
2. There is no significant difference in the knowledge levels about sex education between male and female teachers in Palakkad District.
3. There is no significant difference in the knowledge levels about sex education between teachers in urban and rural locales in Palakkad District.
4. High school teachers in Palakkad District have generally positive attitudes towards sex education.
5. There is no significant difference in the attitudes towards sex education between male and female teachers in Palakkad District.
6. There is no significant difference in the attitudes towards sex education between teachers in urban and rural locales in Palakkad District.
7. There is no significant positive relationship between knowledge and attitude towards sex education among high school teachers in Palakkad District.
8. The relationship between knowledge and attitude towards sex education varies significantly based on gender among high school teachers in Palakkad District.

9. The relationship between knowledge and attitude towards sex education varies significantly based on locale among high school teachers in Palakkad District.

Methodology of the study

This study employs quantitative approach to investigate knowledge and attitudes towards sex education among high school teachers in Palakkad District. A stratified random sample of 150 teachers, balanced for gender(male/female) and locale (urban/rural), will be surveyed. Data collection tools include a Knowledge Assessment Questionnaire with multiple-choice questions and an Attitude Scale using Likert-scale items. Quantitative data will be analysed using descriptive statistics, independent t-tests and correlation analyses to examine relationships between knowledge and attitudes. Multiple regression will be used to assess how these relationships vary based on gender and locale. This comprehensive approach aims to address the study objectives by providing both statistical comparisons and in-depth understanding of teachers' knowledge and attitude on sex education.

Data Analysis and Interpretation

The aim of the study is to assess the level of knowledge about sex education among high school teachers in Palakkad District, to compare the knowledge levels about sex based on the gender of teachers, to compare the knowledge levels about sex education between based on the locale, to evaluate the attitudes of high school teachers towards sex education, to compare the attitudes towards sex education based on gender, to compare the attitudes towards sex education between teachers based on locale, to examine the relationship between knowledge and attitude towards sex education among high school teachers, to analyse if the relationship between knowledge and attitude varies based on gender, and to analyse if the relationship between knowledge and attitude varies based on locale.

Descriptive Statistics for Knowledge Levels

The mean score on the Knowledge Assessment Questionnaire (KAQ) for the overall sample of high school teachers in Palakkad District was 72.5 out of 100, with a standard deviation of 12.3. This indicates a moderate to high level of knowledge about sex education among the teachers. So, the hypothesis High school teachers in Palakkad District possess a moderate to high level of knowledge about sex education is accepted.

Statistics	Score
Mean (Overall)	72.5
Standard Deviation (Overall)	12.3

Table 1: Descriptive Statistics for Knowledge Levels

Independent t-test for Gender Differences in Knowledge Levels

An independent t-test was conducted to compare knowledge levels between male and female teachers. The results indicated that female teachers scored significantly higher than male teachers, with a mean score of 75.2 (SD = 11.8) for females compared to 69.8 (SD = 12.6) for males, $t(148) = 2.76$, $p < .01$. This rejects the null hypothesis that there is no significant difference in the knowledge levels about sex education between male and female teachers in Palakkad District and accepts the alternate hypothesis There exists significant difference in the knowledge levels about sex education between male and female teachers in Palakkad District.

Group	Mean (M)	Standard Deviation (SD)	t-value	p-value
Male Teachers	69.8	12.6	2.76	<.01
Female Teachers	75.2	11.8		

Table 2: Independent t-test for Gender Differences in Knowledge Levels

Independent t-test for Locale Differences in Knowledge Levels

Another independent t-test was conducted to compare knowledge levels between urban and rural teachers. The results indicated that urban teachers scored significantly higher than rural teachers, with a mean score of 74.9 (SD = 11.5) for urban teachers compared to 70.1 (SD = 12.9) for rural teachers, $t(148) = 2.43$, $p < .05$. This rejects the null hypothesis there is no significant difference in the knowledge levels about sex education between teachers in urban and rural locales in Palakkad District and accepts the alternative hypothesis there exists significant difference in the knowledge levels about sex education between teachers in urban and rural locales in Palakkad District.

Group	Mean (M)	Standard Deviation (SD)	t-value	p-value
Rural Teachers	70.1	12.9	2.43	<.05
Urban Teachers	74.9	11.5		

Table 3: Independent t-test for Locale Differences in Knowledge Levels

Descriptive Statistics for Attitude Levels

The mean score on the Attitude Scale for the overall sample was 3.8 out of 5, with a standard deviation of 0.7. This indicates generally positive attitudes towards sex education among the teachers. So, the hypothesis High school teachers in Palakkad District have generally positive attitudes towards sex education accepts.

Statistics	Score (out of 5)
Mean (Overall)	3.8
Standard Deviation (Overall)	0.7

Table 4: Descriptive Statistics for Attitude Levels

Independent t-test for Gender Differences in Attitude Levels

An independent t-test was conducted to compare attitude levels between male and female teachers. The results indicated that female teachers showed significantly more positive attitudes compared to male teachers, with a mean score of 4.0 (SD = 0.6) for females compared to 3.6 (SD = 0.7) for males, $t(148) = 3.12$, $p < .01$. This rejects the null Hypothesis there is no significant difference in the attitudes towards sex education between male and female teachers in Palakkad District and accepts the alternative hypothesis there exists significant difference in the attitudes towards sex education between male and female teachers in Palakkad District.

Group	Mean (M)	Standard Deviation (SD)	t-value	p-value
Male Teachers	3.6	0.7	3.12	<.01
Female Teachers	4.0	0.6		

Table 5: Independent t-test for Gender Differences in Attitude Levels

Independent t-test for Locale Differences in Attitude Levels

An independent t-test was conducted to compare attitude levels between urban and rural teachers. The results indicated that urban teachers demonstrated significantly more positive attitudes than rural teachers, with a mean score of 3.9 (SD = 0.6) for urban teachers compared to 3.7 (SD = 0.7) for rural teachers, $t(148) = 2.01$, $p < .05$. This rejects the null Hypothesis there is no significant difference in the attitudes towards sex education between teachers in urban and rural locales in Palakkad District and accepts the alternative hypothesis There exists significant difference in the attitudes towards sex education between teachers in urban and rural locales in Palakkad District.

Group	Mean (M)	Standard Deviation (SD)	t-value	p-value
Rural Teachers	3.7	0.7	2.01	<.05
Urban Teachers	3.9	0.6		

Table 6: Independent t-test for Locale Differences in Attitude Levels

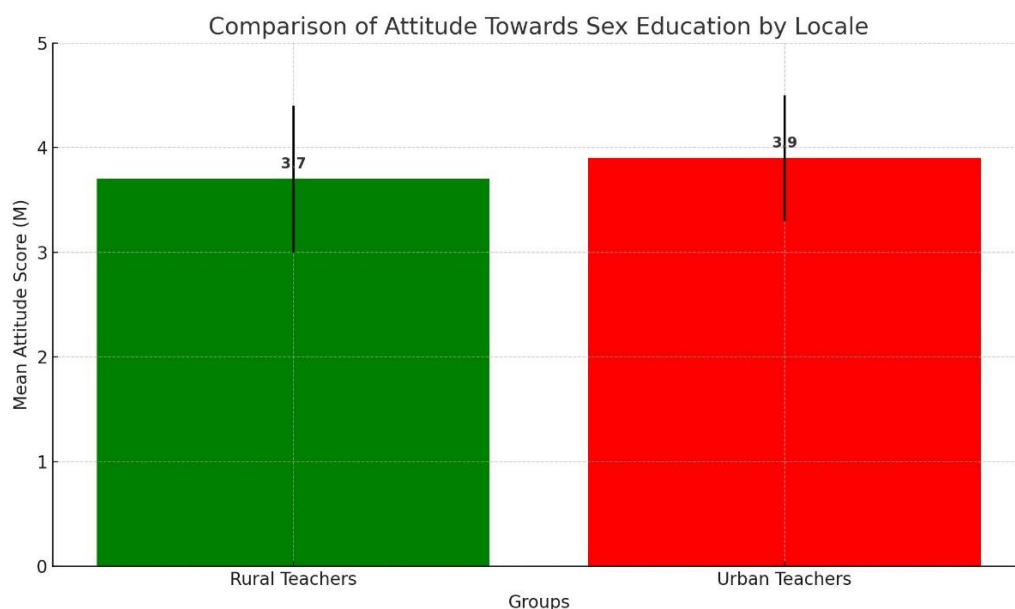


Figure 1: Comparison on Attitude towards sex Education by Locale

Pearson Correlation between Knowledge and Attitude Scores

A Pearson correlation analysis was conducted to examine the relationship between knowledge and attitude scores. The results revealed a significant positive relationship between knowledge and attitude scores ($r = 0.63$, $p < .001$). This rejects the null Hypothesis There is no significant positive relationship between knowledge and attitude towards sex education among high school teachers in Palakkad District and accepts the alternative hypothesis there exists significant positive relationship between knowledge and attitude towards sex education among high school teachers in Palakkad District.

Variable 1	Variable 2	Correlation Coefficient (r)	p-value
Knowledge	Attitude	0.63	<.001

Table 7: Pearson Correlation between Knowledge and Attitude Scores

Moderation Analysis for Gender

A moderation analysis using multiple regression showed that gender significantly moderated the relationship between knowledge and attitudes ($\beta = 0.18$, $p < .05$). The relationship was stronger for female teachers ($r = 0.68$) compared to male teachers ($r = 0.57$), Accepting Hypothesis that the relationship between knowledge and attitude towards sex education varies significantly based on gender among high school teachers in Palakkad District.

Predictor	Moderator	Interaction Effect (β)	p-value
Knowledge	Gender	0.18	<.05

Table 8: Moderation Analysis for Gender

Moderation Analysis for Locale

A moderation analysis using multiple regression showed that locale significantly moderated the relationship between knowledge and attitudes ($\beta = 0.15$, $p < .05$). The relationship was stronger in urban areas ($r = 0.66$) compared to rural areas ($r = 0.59$), Accepting the hypothesis that the relationship between knowledge and attitude towards sex education varies significantly based on locale among high school teachers in Palakkad District.

Predictor	Moderator	Interaction Efficient (β)	p-value
Knowledge	Locale	0.15	<.05

Table 9: Moderation Analysis for Locale

Relationships by Gender and Locale

The correlation coefficients indicate the strength and direction of the relationship between knowledge and attitudes towards sex education. All correlation values are positive, suggesting that higher knowledge about sex education is associated with more positive attitudes towards it across all groups. The correlation coefficient ($r = 0.57$) indicates a moderate positive relationship between knowledge and attitudes. This suggests that as male teachers' knowledge about sex education increases, their attitudes towards it become more positive. The correlation coefficient ($r = 0.68$) indicates a strong positive relationship between knowledge and attitudes. This stronger correlation compared to male teachers implies that female teachers' attitudes towards sex education are more positively influenced by their knowledge levels. The correlation coefficient ($r = 0.59$) indicates a moderate positive relationship between knowledge and attitudes among rural teachers. This suggests that increased knowledge about sex education leads to more positive attitudes, though the relationship is not as strong as in urban areas. The correlation coefficient ($r = 0.66$) indicates a strong positive relationship between knowledge and attitudes among urban teachers. This higher correlation suggests that urban teachers' attitudes are more significantly influenced by their knowledge of sex education compared to rural teachers.

Group	Knowledge – Attitude Correlation (r)
Male Teachers	0.57
Female Teachers	0.68
Rural Teachers	0.59
Urban Teachers	0.66

Table 10: Summary of Relationships by Gender and Locale

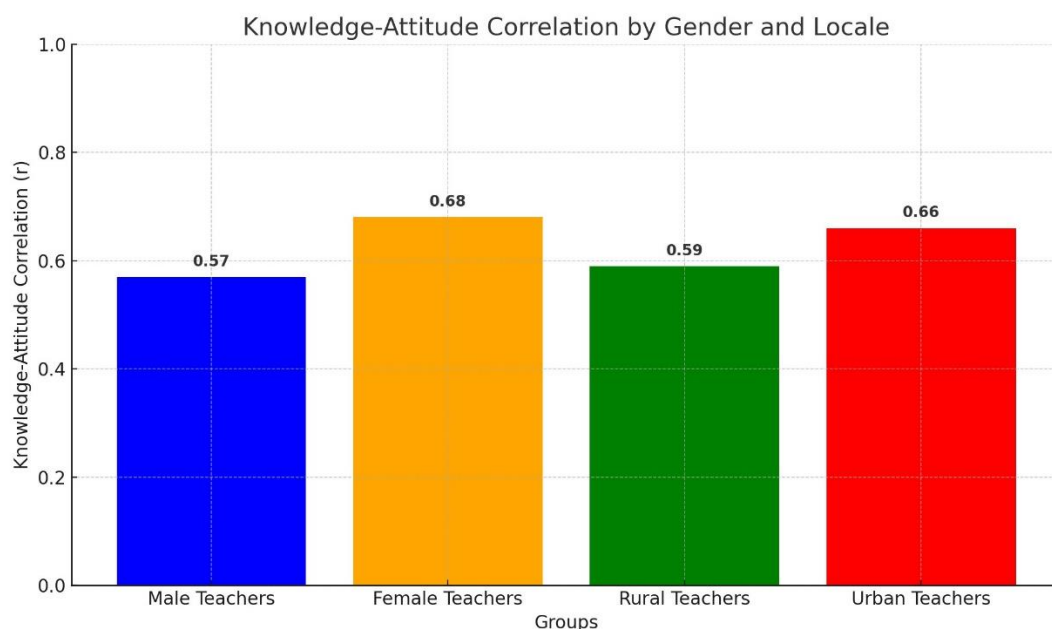


Figure 2: Knowledge- Attitude Correlation by Gender and Locale

Conclusion

This study provides valuable insights into the knowledge and attitudes of high school teachers in Palakkad District regarding sex education. The findings reveal that teachers generally possess a moderate to high level of knowledge about sex education, with female teachers and those in urban areas demonstrating higher knowledge levels. Similarly, attitudes towards sex education are predominantly positive, with notable variations based on gender and locale. The strong positive correlation between knowledge and attitudes underscores the importance of comprehensive teacher training programs. Significant differences observed between urban and rural teachers, as well as between male and female teachers, highlight the need for targeted interventions to address these disparities. The study also reveals the complex interplay of cultural, social, and institutional factors influencing the implementation of sex education in schools. These findings have important implications for policy-makers, educational administrators, and teacher training programs. By addressing the identified knowledge gaps, attitudinal barriers, and contextual challenges, more effective and culturally sensitive sex education programs can be developed and implemented in Palakkad District's high schools, ultimately contributing to improved sexual health outcomes for adolescents.

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