

# An Empirical Mixed-Methods Analysis of Teacher Perceptions Regarding Classroom Management Strategies for Teenage Pregnancy Prevention

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## Abstract

The current research explores the impact of classroom management techniques on improving teachers' readiness to counteract the identified risk factors concerning teen pregnancies at secondary schools. The purpose of the research is to analyze whether structured and iterative classroom management can enhance teacher readiness, classroom atmosphere, and preventive behavioral results. The research design selected for the study is a convergent mixed-methods design involving Co-operative Inquiry across four iterative cycles and 5 experienced teachers. The collection of the data involved reflective journals, group discussions, and structured Likert scale questionnaires. Quantitative data analysis was carried out using SPSS 29, namely, the Shapiro–Wilk normality test, the Friedman test, the Wilcoxon signed-rank test, and Spearman correlation analysis. The qualitative data analysis was done using thematic analysis. Reliability was tested using Cronbach's alpha (0.89). Significant results were obtained across all dimensions. The mean values increased from Cycle 1 to Cycle 4: effectiveness (3.42 to 4.61), practicality (3.51 to 4.56), inclusiveness (3.36 to 4.53), and sustainability (3.40 to 4.58). Significant differences were found among the cycles through the use of Friedman tests ( $p = 0.005–0.010$ ). Significant differences were also noted between the initial and the last cycle of observations by means of the Wilcoxon signed-rank test ( $p \approx 0.040–0.043$ ;  $r \approx 0.63–0.65$ ). There was a very significant positive relationship between classroom management effectiveness and teacher confidence ( $\rho = 0.88$ ,  $p = 0.019$ ). The conclusion of this study is that an iterative and collaborative process of classroom management can greatly improve teachers' readiness and, thus, create a preventative classroom environment addressing adolescent risky behaviors. These results show a framework for the reflection and professional development of teachers within adolescent health programs' implementation frameworks.

**Keywords:** Teenage Pregnancy, Classroom Management, Co-operative Inquiry, Mixed-methods Research, Teacher Confidence, Secondary Education, Behavioral Intervention.

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## **Introduction**

The problem of teenage pregnancy remains an ongoing issue around the globe with many consequences for the education sector, public health, and social development (Nsanjabera et al., 2024; Charles et al., 2016). In many respects, it has been established that adolescent pregnancy affects not only schooling continuity but also leads to socio-economic inequalities, including higher chances of dropping out of school, reduced chances of finding a job, and greater dependency (Groves et al., 2022). Adolescents are at the age when their behavior, peers, and institutional environment are among the key factors affecting decision-making processes (Achora et al., 2018). This means that classroom atmosphere and teacher management play a significant role in forming students' behavior and involvement into educational process. At the same time, the growth in cases of teenage pregnancy makes one consider whether preventive measures implemented at the school level and within classroom context are effective and adequate enough to solve this problem (Manwong et al., 2022; Nunu et al., 2020). While there are a lot of studies dedicated to the issue of teenage pregnancy from psychological, sociological and medical aspects, almost all of them are focused on the external factors determining its occurrence, such as family environment, socio-economic status, media influences and reproductive health awareness (Wu et al., 2021). Little attention was paid to the classroom context as a behavioral intervention environment.

The existing body of knowledge is mostly conceptual or descriptive rather than empirical and lacks sufficient connections between classroom management approaches and behavioral outcomes of students. In addition, the lack of an integrated framework for analyzing the relationship between qualitative classroom observations and quantitative statistical assessment of the effect of the school-based initiatives on behavioral outcomes represents another research gap. In order to fill it, it is important to develop a systematic framework to examine how classroom management approaches can be analyzed and optimized in order to decrease the adolescent risk behavior associated with early sexual activities and teenage pregnancy (Ram & Mohammadenzhad, 2020).

That is why the purpose of the current study will be to perform an empirical investigation of teachers' perceptions of classroom management strategies in order to prevent teenage pregnancies through addressing behavioral risk factors in secondary schools with the help of a cooperative inquiry approach. Specifically, the study will be aimed at identifying behavioral risk factors in classroom settings, assessing the efficacy of teacher-based strategies in preventing risky behaviors through the use of several inquiry cycles, as well as examining the role of collaboration between schools and communities in preventing risky behaviors among teenagers.

This research has brought about a new perspective into the existing knowledge base through its empirical approach to classroom management in relation to adolescent behavior. In particular, the research results are likely to have practical implications for both teachers and school administrators as well as policymakers in order to develop structured intervention programs aimed at improving the levels of student engagement, behavioral regulation, and lowering teenage pregnancy rates in secondary education institutions.

This research has made a number of important contributions by developing an empirical classroom intervention model for teenage pregnancy prevention based on the cooperative inquiry cycles and overcoming the limitations of conventional theory-based research design. The mixed methods approach used in the research allows for the development of a well-grounded evidence base on the issues of classroom management through the use of both qualitative thematic analysis and quantitative statistical testing. Moreover, the research identifies a set of important behavioral indicators that play the role of influential factors in adolescent risk behavior, including student engagement, teacher intervention quality, and peer effects. It also reveals the fact that iterative classroom management practice considerably improves the confidence of the teachers and leads to better results of their intervention work.

The structure of the paper is as follows: Section 1 deals with the research background, purpose, and contributions. Section 2 provides a review of previous research concerning teenage pregnancy prevention and classroom management methods. Section 3 describes the research methodology, including data gathering and analysis techniques used. Section 4 gives the experimental results and statistical conclusions. Sections 5 and 6 discuss the findings and make conclusions about the research.

## **Literature Review**

Teenage pregnancy remains an essential educational and public health issue with serious consequences on dropout from school and development of behavioral problems and long-term socioeconomic status. The literature has found that teenage pregnancy is caused by several interconnected factors, such as poverty, lack of information, and structural issues in society (Shukla et al., 2023; Ahinkorah et al., 2019). Furthermore, the intergenerational factor, that is, family

history of giving birth at a teenage age, highly increases the likelihood of pregnancy during adolescence (East et al., 2007). Therefore, one should conclude that adolescent reproductive behavior cannot be viewed separately from a broader socio-economic context.

A series of educational research studies proves that teenage pregnancy has a negative effect on school attendance and increases dropout rates. It is proven by longitudinal studies conducted in different countries where it is stated that consistent involvement in learning activities and commitment to school help to reduce dropout rates among adolescents (Kaffenberger et al., 2023). Moreover, the same conclusion was made about the effect of classroom interventions designed to improve behavioral regulation and increase engagement of students (Sarnquist et al., 2017).

Further evidence on the efficacy of school-based structured programs in reducing teen pregnancies is obtained in systematic reviews. There are many examples of controlled trials showing that interventions in schools can significantly affect awareness, attitude, and prevention behavior of adolescents (Bennett & Assefi, 2005). Meta-analyses have proved the efficacy of school-based interventions as long as they are consistently conducted in the educational system (Marseille et al., 2018). Moreover, combined interventions involving sexuality education together with reproductive health services were shown to lead to a significant decrease in the number of early and unplanned pregnancies among adolescents (Mbizvo et al., 2023).

Interactive and peer-led interventions have also been considered influential in terms of adolescent behavior. Interactive programs based on the Internet and peer-led programs improve adolescents' intention not to engage in early pregnancies; however, this is possible if there is structure and monitoring in the process (Jaworsky et al., 2013; Lohan et al., 2017). There are suggestions that participation of adolescents in the design of interventions makes them more relevant and effective (Wood & Hendricks, 2017).

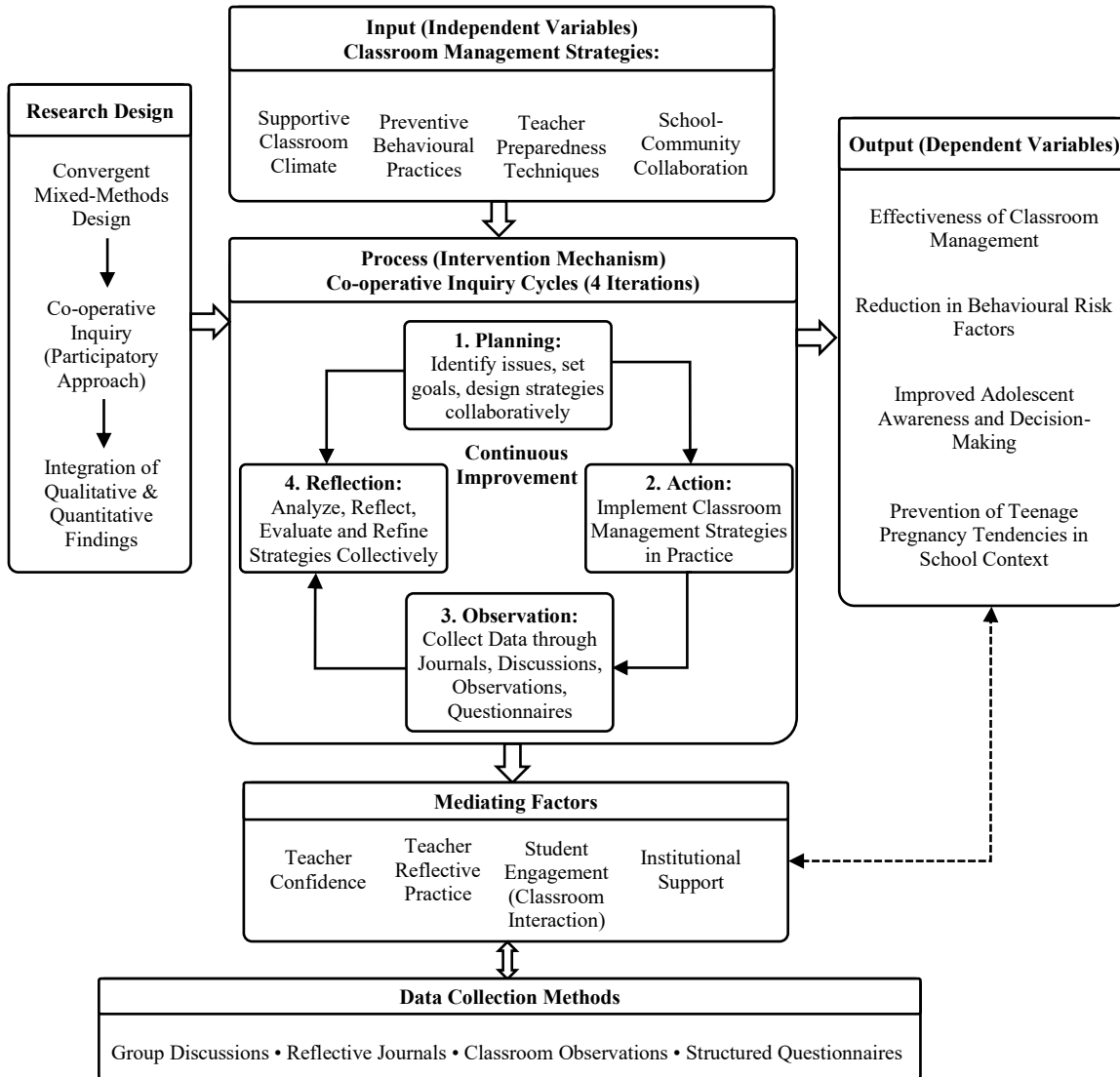
It can be said that from a pedagogical point of view, classroom management and teacher behavior influence students' engagement and behavior. Classroom management plays an important role in the creation of good discipline and an environment (Zakaria et al., 2013). Although much research has been done on the subject, there is a dearth of research combining the use of classroom-based interventions and mixed-method evaluation of the process of evolution of teacher-driven interventions in the prevention of teenage pregnancies, thus showing an apparent research gap (Kaffenberger et al., 2023; Wood & Hendricks, 2017).

As per literature, there are numerous socio-economic, familial, and awareness-related factors that lead to teenage pregnancy, and these have a significant effect on causing school dropout and poor academic performance among students. Interventions in schools, including classroom management and sexuality education, are effective in preventing teenage pregnancies and improving academic achievement. Teacher-driven interventions and interactive learning are helpful in this regard by increasing behavioral intentions. There is an evident research gap regarding the use of a mixed-method framework to evaluate classroom-level interventions.

## **Methodology**

### **Research Design**

A convergent mixed-method research design was utilized in the current study, which allowed combining qualitative and quantitative methods to gain a holistic perspective on classroom management techniques in dealing with teenage pregnancy in secondary schools. Qualitative methodology was based on Co-operative Inquiry, which is defined as a participant research approach where researchers collaborate with participants in an iterative cycle of planning, action, observation, and reflection. In the course of such a collaborative process, participants acted as co-researchers, generating, examining, and improving their professional experience in terms of strategies that could be employed. On the other hand, the quantitative part of the research allowed the evaluation of participants' views on the effectiveness, feasibility, and applicability of the techniques proposed within the framework of qualitative inquiry. The combination of qualitative insights with quantitative data facilitated triangulation of the research results, which contributed to increasing the validity, credibility, and practical relevance of the study.



**Fig. 1 Conceptual Framework of Classroom Management Strategies for Preventing Teenage Pregnancy Using Co-operative Inquiry Cycles**

Fig. 1 illustrates the correlation between the classroom management techniques, cycles of Co-operative Inquiry, mediators, and effects on the prevention of teenage pregnancies.

Supportive classroom environment, prevention techniques, teachers' readiness, and cooperation between the school and community are included in the process of iterative planning, actions, observations, and reflections.

### Participants

In this research, there were 5 participants who were all co-researchers during the whole research process. Purposive sampling was used in the recruitment process of participants because they had to possess adequate professional knowledge and experience in the management of classrooms as well as the education of adolescents. In order for the participants to be able to make a meaningful contribution to the inquiry, they had to have more than 5 years of teaching experience in secondary schools and at least three years of teaching experience in higher education institutions. Through this, all participants had to possess enough expertise to be able to critically evaluate and devise strategies in dealing with teenage pregnancy in educational settings. In line with the Co-operative Inquiry theory, all participants were to contribute equally in the processes of decision-making, reflection, analysis, and interpretation of data. The lead researcher doubled as a co-researcher and a participant-observer. Reflexive journaling and peer debriefing were done to counter the problem of evaluation bias caused by these roles.

### **Data Collection**

The data was collected through four iterations of the Co-operative Inquiry process. Each iteration involved collaborative planning, implementation of classroom management techniques, reflective observation, and assessment of results achieved. Throughout these iterations, participants carried out semi-structured group discussions, kept their own reflective journals, recorded their classroom experiences, and held collaborative reflection sessions. This multiplicity of qualitative sources allowed for a detailed description of participants' experiences and changing perceptions about effective classroom management. In addition to qualitative data, participants filled out a structured questionnaire at the end of each inquiry cycle. It used a five-point Likert scale from 'strongly disagree' to 'strongly agree' to measure perceptions about the effectiveness, feasibility, inclusiveness, sustainability, and general usefulness of the suggested classroom management strategies. This was made possible due to the integration of qualitative stories and quantitative ratings.

### **Qualitative Data Analysis**

The data collected from the transcripts of discussions, reflective journals, field notes, and collaborative documents were analyzed using thematic analysis, which is supported by grounded theory procedures. The process started with open coding, wherein meaningful statements and concepts were found throughout the data collected. Codes were then grouped into categories through axial coding to create connections between classroom management techniques, beliefs about teaching, supports in the institutions, and problems regarding teenage pregnancy in schools. Selective coding was then conducted to combine the categories into themes that represent the core classroom management techniques as gleaned from the study. As the analysis went on, validation of the emerging interpretations was done collaboratively with the participants themselves through the reflection sessions, thus improving the credibility of the results. Through reflexive journaling, analysis memos, triangulation of various data sources, and member checking, trustworthiness, confirmability, dependability, and transferability of the qualitative findings were ensured. In this inquiry, while Co-operative Inquiry offered the participatory framework, grounded theory procedures were applied in analyzing the data. Iterative cycles acted as the phase of data collection, and the constant comparative method facilitated the generation of the themes based on the shared reflections of the participants.

### **Quantitative Data Analysis**

Quantitative information that was obtained from the use of the structured questionnaires was analyzed using the Statistical Package for the Social Sciences (SPSS) Version 29 software. Methods such as descriptive statistical analyses were used to obtain information about participants' views concerning the efficacy and practicability of the classroom management approaches identified in the research. Internal consistency and reliability of the questionnaire were tested using Cronbach's Alpha method, where alpha values of 0.70 or above indicated good reliability of the questionnaire. Quantitative results were then compared to qualitative themes in order to establish similarities and differences.

### **Statistical Analysis**

Despite the small number of participants used in the study, proper statistical analyses were conducted to determine whether there were any changes in the participants' perceptions during the inquiry cycles. Normality of quantitative data was first assessed before conducting inferential analyses by utilizing the Shapiro-Wilk test. Changes in participants' perception ratings were analyzed across inquiry cycles using the Friedman test, while those between paired observations were tested using the Wilcoxon signed-rank test. The Spearman's rank correlation coefficient was also used to analyze the correlation between participants' perceptions of classroom management effectiveness and confidence in dealing with teenage pregnancies. Statistical significance was accepted at the probability level of  $p < 0.05$ , while the effect size was calculated to interpret the significance of the observed difference. Due to the extremely small sample size ( $n=5$ ), the statistical significance values (Friedman and Wilcoxon  $p$ -values) were only presented heuristically for this particular participant sample.

The formulae for statistical measures applied in this study include

- **Cronbach's Alpha (Reliability Analysis)**

$$\alpha = \frac{k}{k-1} \left( 1 - \frac{\sum_{i=1}^k \sigma_i^2}{\sigma_T^2} \right) \quad (1)$$

In equation (1), where  $k$  denotes the number of questions,  $\sigma_i^2$  denotes the variance of an individual question, and  $\sigma_T^2$  denotes the variance of the whole questionnaire.

- **Shapiro–Wilk Normality Test**

$$W = \frac{\left(\sum_{i=1}^n a_i x_{(i)}\right)^2}{\sum_{i=1}^n (x_i - \bar{x})^2} \quad (2)$$

In equation (2), where  $x_{(i)}$  are the ordered sample scores and  $a_i$  are test coefficients.

- **Friedman Test**

$$\chi_F^2 = \frac{12}{nk(k+1)} \sum_{j=1}^k R_j^2 - 3n(k+1) \quad (3)$$

In equation (3) where  $n$  refer to the number of respondents,  $k$  refers to the number of conditions/cycles, and  $R_j$  is the rank sum of each cycle.

- **Wilcoxon Signed-Rank Test**

$$W = \sum R^+ \quad (4)$$

In equation (4) where  $R^+$  denotes the sum of positive ranks of paired observations.

- **Spearman Rank Correlation Coefficient**

$$\rho = 1 - \frac{6\sum d_i^2}{n(n^2-1)} \quad (5)$$

In equation (5), where  $d_i$  are the differences in paired ranks and  $n$  denotes the number of observations.

### **Integration of Qualitative and Quantitative Findings**

After conducting individual analyses of both the qualitative and quantitative data sets, the process of integrating the findings was done using the process of triangulation that is common in convergent mixed methods research. The qualitative themes were then compared to the statistical findings from the quantitative data to see where there was convergence, complementarity, and discrepancy. Through this kind of integrated analysis, the researcher was able to achieve a well-rounded understanding of the classroom management techniques by considering the lived experience of the subjects and the empirical evidence of the efficacy of the suggested interventions.

### **Research Quality and Trustworthiness**

The integrity of the qualitative component of research was assured through such strategies as prolonged engagement, validation by participants, data triangulation from several sources, reflective journaling, peer debriefing, and an extensive audit trail of all decisions made during the analysis process. These measures helped to improve the credibility, dependability, confirmability, and transferability of the results obtained. As for the quantitative component of the research, the reliability of instruments was assessed with the help of the coefficient Cronbach's alpha, and content validity was ensured through the expert evaluation conducted by specialists in such areas as educational psychology, classroom management, and adolescent health.

## **Results**

### **Participant Characteristics**

All 5 participants, including the chief investigator, took part in all four phases of the Co-operative Inquiry method. All 5 fulfilled the criterion of being experienced in teaching secondary school students for more than 5 years, as well as teaching higher education students for at least three years. Their professional backgrounds helped in conducting reflective sessions in the classroom and also facilitated the discussion about the management of teenage pregnancies in the classroom setting.

**Table 1: Demographic Characteristics of Participants**

| Characteristic                  | Category                 | Frequency (n=5) | Percentage (%) |
|---------------------------------|--------------------------|-----------------|----------------|
| Gender                          | Female                   | 3               | 60             |
|                                 | Male                     | 2               | 40             |
| Teaching Experience (Secondary) | 5–10 years               | 2               | 40             |
|                                 | >10 years                | 3               | 60             |
| Higher Education Experience     | 3–5 years                | 2               | 40             |
|                                 | >5 years                 | 3               | 60             |
| Professional Role               | Teacher Educator         | 3               | 60             |
|                                 | Senior Secondary Teacher | 2               | 40             |

Table 1 depicts the demographics of the participants who participated in the study. The study participants comprised educators with significant experience in managing classrooms and educating adolescents. The different backgrounds that they came from made an important basis for reflective collaboration and added to the validity of both qualitative and quantitative results.

### **Reliability of the Quantitative Instrument**

The reliability of the structured questionnaire was determined through the use of Cronbach's alpha. The tool had shown very good reliability in all 5 dimensions considered. This is an indication that the tool was reliable in measuring participants' perceptions concerning classroom management.

**Table 2: Reliability Analysis of the Questionnaire**

| Scale                            | Number of Items | Cronbach's Alpha |
|----------------------------------|-----------------|------------------|
| Classroom Strategy Effectiveness | 5               | 0.89             |
| Practicality                     | 4               | 0.87             |
| Inclusiveness                    | 4               | 0.85             |
| Sustainability                   | 4               | 0.91             |
| Overall Instrument               | 17              | <b>0.89</b>      |

Table 2 provides the reliability analysis of the quantitative tool used to measure the participants' perceptions of classroom management practices. It is possible to see that reliability is quite high for all dimensions measured, as the Cronbach's alpha coefficients vary from 0.85 to 0.91. The dimension demonstrating the highest reliability was sustainability ( $\alpha = 0.91$ ). It was followed by the classroom strategy effectiveness dimension ( $\alpha = 0.89$ ). The coefficient was equal to 0.87 for practicality and 0.85 for inclusiveness. Thus, the total instrument reliability was estimated as 0.89. This fact indicates that the questionnaire items were reliable enough to measure the classroom management perception across the inquiry cycles.

Reliability coefficients for all the dimensions are quite high (Cronbach's alpha coefficient is equal to 0.89). Coefficients for all the dimensions are higher than the acceptable level of 0.70.

### **Development of Classroom Management Strategies Across Inquiry Cycles**

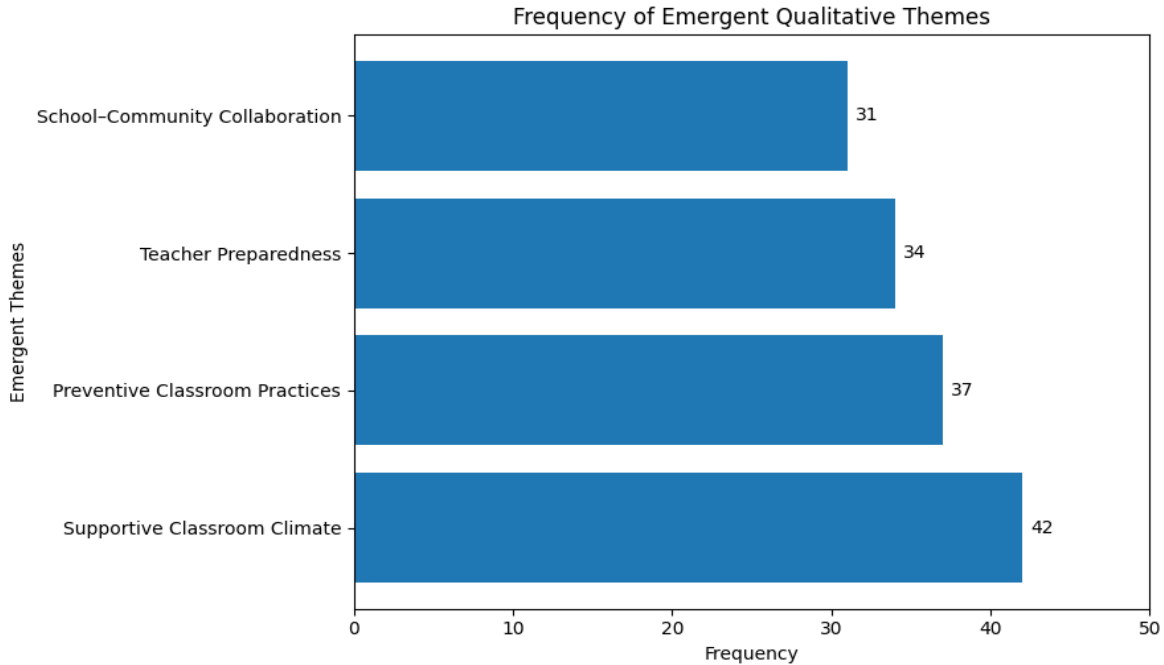
The thematic analysis came up with four themes, which are an illustration of the progressive development of classroom management techniques. The development was done throughout the four inquiry cycles through collaboration, planning, execution, and reflection.

**Table 3: Major Themes Emerging from the Co-operative Inquiry**

| Theme                          | Representative Codes                      | Frequency |
|--------------------------------|-------------------------------------------|-----------|
| Supportive Classroom Climate   | Trust, empathy, openness                  | 42        |
| Preventive Classroom Practices | Guidance, awareness, participation        | 37        |
| Teacher Preparedness           | Professional confidence, communication    | 34        |
| School–Community Collaboration | Parents, counselors, health professionals | 31        |

Table 3 shows the main themes found using thematic analysis in the four Co-operative Inquiry cycles. The results indicate that the classroom atmosphere, which is friendly, is the most frequent theme (42 times), followed by preventive classroom practice (37 times), teacher readiness (34 times), and school-community partnership (31 times), as depicted in fig. 2. Such themes represent the major components in the creation and improvement of effective classroom management strategies in preventing teenage pregnancy.

Four themes that are interrelated were found repeatedly in all inquiry cycles. Participants kept focusing on preventive classroom practice underpinned by positive teacher-student relationships and partnerships with parents and community members. These themes combined constituted the framework of effective classroom management in dealing with teenage pregnancy.



**Fig. 2: Frequency of Emergent Qualitative Themes**

#### **Participants' Perceptions of Classroom Management Strategies**

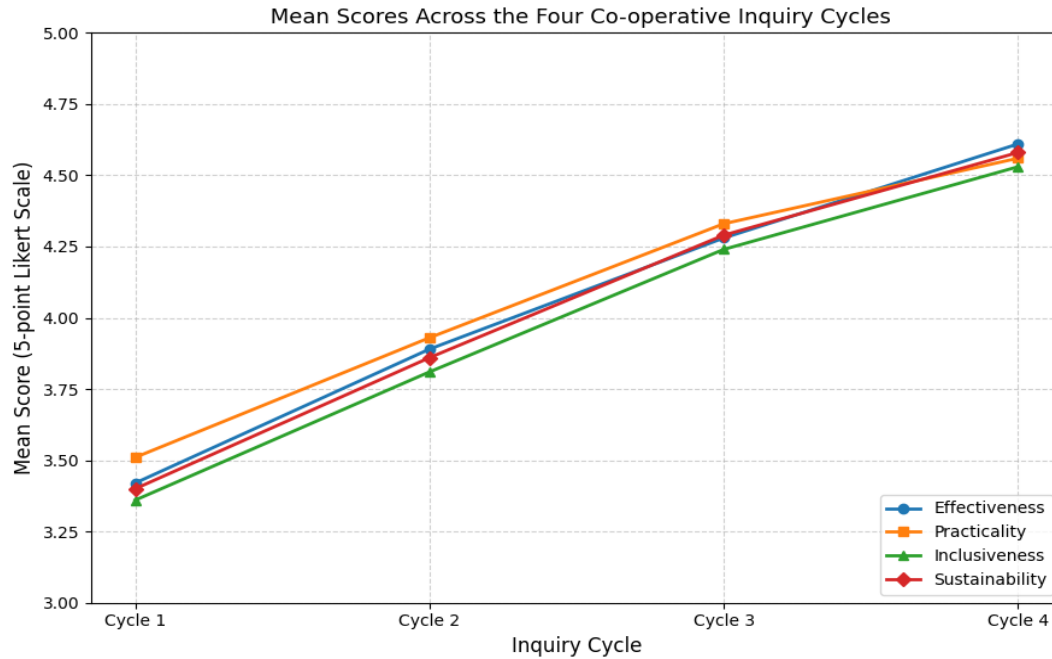
The participants gave increasingly positive perceptions about the effectiveness of classroom management strategies during the four Co-operative Inquiry cycles. Mean values for all the dimensions indicated consistent improvement.

**Table 4: Mean Scores Across Inquiry Cycles**

| Dimension      | Cycle 1   | Cycle 2   | Cycle 3   | Cycle 4   |
|----------------|-----------|-----------|-----------|-----------|
| Effectiveness  | 3.42±0.38 | 3.89±0.32 | 4.28±0.24 | 4.61±0.18 |
| Practicality   | 3.51±0.41 | 3.93±0.34 | 4.33±0.27 | 4.56±0.22 |
| Inclusiveness  | 3.36±0.36 | 3.81±0.30 | 4.24±0.21 | 4.53±0.17 |
| Sustainability | 3.40±0.40 | 3.86±0.29 | 4.29±0.20 | 4.58±0.19 |

Table 4 shows the mean scores of perceptions regarding classroom management strategies across the four Co-operative Inquiry cycles. Results reveal continuous improvement in all dimensions measured throughout the first four cycles from Cycles 1 to 4. Effectiveness improved from 3.42 to 4.61, practicality from 3.51 to 4.56, inclusiveness from 3.36 to 4.53, and sustainability from 3.40 to 4.58. It can be inferred that the process of planning, implementing, and reflecting helped improve participants' perceptions of classroom management strategies.

Fig. 3 shows the gradual increase in perceptions regarding classroom management techniques in the four stages of the Co-operative Inquiry process. A consistent increase was witnessed in the mean scores for effectiveness, practicability, inclusiveness, and sustainability. This shows that the repetition of the process increased confidence among the participants in managing classroom issues pertaining to teenage pregnancy.



**Fig. 3: Mean Scores Across the Four Co-operative Inquiry Cycles**

#### **Changes in Perceptions Across Inquiry Cycles**

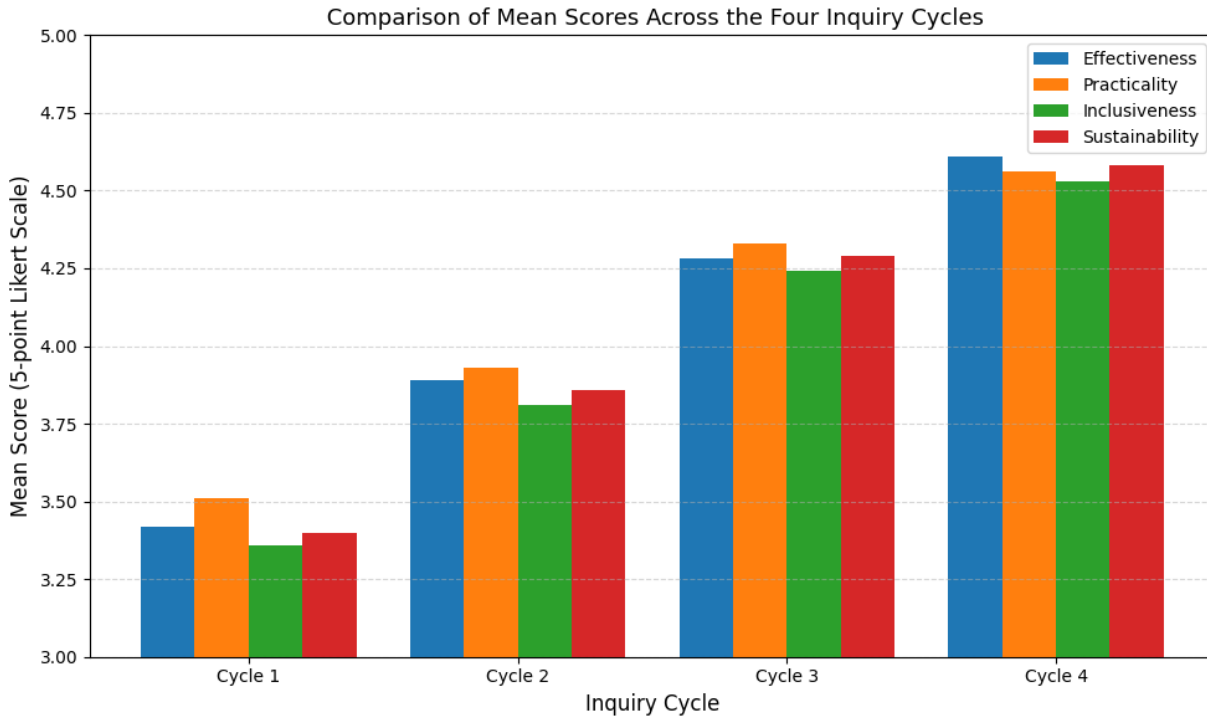
As per the Shapiro-Wilk Test, the quantitative data did not have a normal distribution ( $p < 0.05$ ); hence, the use of non-parametric analysis was deemed appropriate. The Friedman test showed significant changes in the participants' scores from the four inquiry cycles.

**Table 5: Friedman Test Results**

| Variable       | $\chi^2$ | df | p-value |
|----------------|----------|----|---------|
| Effectiveness  | 12.18    | 3  | 0.007   |
| Practicality   | 11.42    | 3  | 0.010   |
| Inclusiveness  | 12.75    | 3  | 0.005   |
| Sustainability | 11.86    | 3  | 0.008   |

Table 5 reveals the findings from the Friedman Test, with all the dimensions exhibiting statistical significance: effectiveness ( $p=0.007$ ), practicality ( $p=0.010$ ), inclusiveness ( $p=0.005$ ), and sustainability ( $p=0.008$ ). It is clear from the findings that iterative Co-operative Inquiry was very successful in improving the perception of classroom management strategies.

Fig. 4 presents a graphic representation of the increasing means of the scores during the four phases of inquiry. All four categories show a clear pattern of increase, from Cycle 1 to Cycle 4, where classroom management effectiveness increased from 3.42 to 4.61, practicality from 3.51 to 4.56, inclusiveness from 3.36 to 4.53, and sustainability from 3.40 to 4.58. These patterns are consistent with the results of the Friedman test, supporting the notion that repeated cycles of collaborative processes improve participants' views about the suggested classroom management approaches.



**Fig. 4: Comparison of Mean Scores Across the Four Inquiry Cycles**

#### **Pairwise Comparisons Using the Wilcoxon Signed-Rank Test**

Pairwise comparisons revealed statistically significant differences between the first and last inquiry cycles on all dimensions.

**Table 6: Wilcoxon Signed-Rank Test Comparing Cycle One and Cycle Four**

| Variable       | Z     | p-value | Effect Size (r) |
|----------------|-------|---------|-----------------|
| Effectiveness  | -2.03 | 0.042   | 0.64            |
| Practicality   | -2.02 | 0.043   | 0.63            |
| Inclusiveness  | -2.04 | 0.041   | 0.65            |
| Sustainability | -2.05 | 0.040   | 0.65            |

Table 6 illustrates the results of the Wilcoxon signed-rank test between Cycle 1 and Cycle 4 perceptions. Statistically significant differences were found in all dimensions, with p-values varying between 0.040 and 0.043 and large effect sizes ( $r = 0.63 - 0.65$ ), proving the effectiveness of Co-operative Inquiry in enhancing classroom management strategies.

Statistically significant differences were found between the initial and final inquiry cycles. Large effect sizes show that participants felt real changes in perceptions about classroom management after engaging in collaborative inquiry several times and putting it into practice.

#### **Relationship Between Classroom Management Effectiveness and Teacher Confidence**

The correlation analysis by Spearman showed that there is a significant positive relationship between the perception of classroom management effectiveness and teacher confidence in handling the issue of teenage pregnancies.

**Table 7: Spearman Correlation Analysis**

| Variables                           | Spearman's rho | p-value |
|-------------------------------------|----------------|---------|
| Effectiveness vs Teacher Confidence | 0.88           | 0.019   |

Table 7 shows the correlation analysis by Spearman for classroom management effectiveness and teacher confidence. From the table, it can be seen that there is a significant positive correlation ( $\rho=0.88$ ,  $p = 0.019$ ). This shows that there is an increase in teacher confidence as the level of classroom management effectiveness improves.

There was found to be a strong positive correlation between the perceptions of classroom management effectiveness and teacher confidence in tackling teenage pregnancies.

## **Discussion**

It is evident that perceptions of classroom management techniques for the prevention of teenage pregnancies show consistent improvement in four cycles of the Co-operative Inquiry process. On the quantitative level, mean values were gradually increasing from Cycle 1 to Cycle 4 on all dimensions, while the effectiveness was growing from 3.42 to 4.61, practicality – from 3.51 to 4.56, inclusiveness – from 3.36 to 4.53, and sustainability – from 3.40 to 4.58. The results obtained during statistical analysis proved the significance of changes with the use of the Friedman test ( $p = 0.005-0.010$ ), the Wilcoxon signed-rank test ( $p \approx 0.040-0.043$ ), and the correlation between classroom management effectiveness and the teacher's readiness ( $p = 0.88$ ,  $p = 0.019$ ).

In this way, it can be concluded that reflective practice is an efficient approach to teachers' preparation for tackling behavioral risks of adolescents. Gradual rise of values points out the effectiveness of collaborative inquiry cycles not only regarding the development of classroom management skills but also professional self-awareness, and the significance of classroom context as the space of teenage pregnancy prevention. At the same time, it is necessary to emphasize some themes which have appeared: supportive classroom climate, preventive classroom practice, teacher's readiness, and collaboration between school and community.

This finding is important since it proves empirically that classroom management is an intervention mechanism that can be utilized proactively and not only during instructional activities. It is justified to incorporate structured behavioral approaches in school settings with a view to reducing adolescent risk behaviors.

This paper is largely constrained by a small number of participants involved, which does not provide the researcher with sufficient ground to make generalizations. The absence of any information related to the students and the results of their behavior monitoring means that the current findings relate to teachers' self-efficacy and not to actual behavioral modification achieved by students. Thus, all the findings are based solely on the self-reporting of the teachers' views and therefore do not correspond with the real impact of the discussed approach. Moreover, there is a high possibility of researcher bias caused by the fact that the lead researcher was at the same time a participant and evaluator.

## **Conclusion**

This research sought to resolve an ongoing issue of teenage pregnancies in secondary schools by studying the use of empirically-based classroom management techniques and their impact on the prevention of adolescent risk behaviors. It focused on examining whether structured, teacher-implemented interventions conducted via Co-operative Inquiry can contribute to improving classroom environments and minimizing behavioral risks associated with teenage pregnancies. In addition, it looked at the connection between iterative reflective teaching, teachers' confidence, and their perception of the effectiveness of preventive classroom strategies.

The results show a definite improvement in the situation in all dimensions under consideration through four cycles of inquiry. Scores improved from Cycle 1 to Cycle 4 in terms of effectiveness (3.42 to 4.61), practicality (3.51 to 4.56), inclusiveness (3.36 to 4.53), and sustainability (3.40 to 4.58). Friedman tests revealed significant differences across the cycles ( $p = 0.005-0.010$ ), whereas the Wilcoxon signed rank tests revealed great improvements between the first and last cycles ( $p \approx 0.040-0.043$ ,  $r \approx 0.63-0.65$ ). A further finding is that there is a strong positive relationship between classroom management effectiveness and teacher self-confidence ( $p = 0.88$ ,  $p = 0.019$ ). In summary, the research concludes that collaborative and iterative classroom management greatly improves the preparedness of teachers and helps build a preventative environment. The most important points to remember include the fact that structured classroom environments, preventative approaches to teaching, and collaboration between the school and the community can help teachers better prepare for dealing with adolescents' risky behaviors.

## **Ethical Considerations**

Approval for the ethical considerations of this study was sought from the appropriate research ethics committee before the start of data collection. Informed consent was obtained from all the respondents, and the participation of each participant was voluntary, and there was also an option for withdrawal from the study without any penalty. Pseudonymization and proper data storage were used to guarantee confidentiality and anonymity of the respondents, and all the research procedures followed the set ethical standards for research involving humans.

**Conflict of Interest:** The authors declare no competing interests regarding this study and publication.

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