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Education

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THE EFFECTS OF ECONOMIC INTERVENTIONS ON GIRLS' EDUCATION IN GOVERNMENT SCHOOLS AT HIGHER SECONDARY LEVEL

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ABSTRACT

This study investigates the impact of economic interventions on girls' education at the higher secondary level in government schools within Thiruvallur District. The primary objective is to assess how financial support and related economic policies influence educational outcomes for girls in this region. Employing a mixed-methods approach, the research combines quantitative data from surveys with qualitative insights from interviews and focus groups. Key findings reveal that economic interventions, such as scholarships, stipends, and subsidized educational materials, significantly improve girls' school attendance, academic performance, and retention rates. Additionally, these interventions have contributed to increased enrollment and reduced dropout rates among girls. The study concludes that targeted economic support plays a crucial role in enhancing educational opportunities for girls, recommending that similar interventions be scaled and sustained to further support educational equity.

INTRODUCTION

Economic interventions in education refer to financial strategies and support mechanisms designed to improve educational access and quality. These interventions can include scholarships, stipends, subsidies, and funding for educational resources. Their primary goal is to alleviate economic barriers that might prevent students, particularly from disadvantaged backgrounds, from pursuing and completing their education. In many regions, including Thiruvallur District, these interventions have been implemented to address issues such as school dropout rates, low enrollment, and gender disparities in education. Historically, economic interventions have shown promise in enhancing educational outcomes by reducing the financial burden on families and providing necessary resources to students. Such measures are especially critical in government schools, where funding constraints and economic challenges can significantly impact the quality of education. By supporting students financially, these interventions aim to create a more equitable educational environment and promote sustained academic engagement.

Statement Of The Problem

Despite the implementation of various economic interventions, girls' education in government schools often faces persistent challenges. In Thiruvallur District, as in many other regions, girls are frequently at a disadvantage due to socio-economic factors that impact their educational opportunities. Issues such as financial constraints, cultural barriers, and limited access to educational resources can contribute to lower enrollment rates, higher dropout rates, and diminished academic performance among girls. Addressing these challenges is crucial to ensuring that girls have equal opportunities to succeed in their education. The need for targeted economic interventions becomes evident as a means to bridge gaps in educational attainment and to support girls in overcoming barriers that hinder their academic progress. This study aims to explore the specific impact of economic interventions on girls' education at the higher secondary level, evaluating their effectiveness and identifying areas for improvement to enhance educational equity in government schools.

Need And Significance Of The Study

The need for this study arises from the ongoing challenge of ensuring equitable access to education for girls, particularly in economically disadvantaged areas. By examining how economic interventions such as scholarships, stipends, and subsidized educational materials impact girls' higher secondary education, the study aims to address critical gender disparities and improve educational outcomes. Understanding these effects is essential for refining policies and enhancing resource allocation, thus supporting more effective strategies to promote educational equity. This research is important for informing future interventions, optimizing support mechanisms, and contributing to broader goals of gender equality and sustainable development in education.

Objectives

1. To analyze and compare the school attendance rates between girls who receive economic support and those who do not.
2. To examine and evaluate the academic performance differences between girls who are provided with economic support and those who are not.
3. To investigate the dropout rates among girls with economic support and compare them with the dropout rates of girls without economic support.
4. To assess the impact of different types of economic interventions (e.g., scholarships, stipends, subsidized materials) on educational outcomes.
5. To identify and compare the barriers to education experienced by girls with economic support and those without economic support.

Research Hypotheses

1. There is a significant difference in school attendance rates between girls with economic support and girls without economic support.
2. There is a significant difference in academic performance between girls with economic support and girls without economic support.
3. There is a significant difference in dropout rates between girls with economic support and girls without economic support
4. The type of economic intervention has a significant impact on educational outcomes.
5. There is a significant difference in barriers to education between girls with economic support and girls without economic support.

Research Method

The present study, survey method was used

Sample And Sampling Technique

The sample consists of 200 girls enrolled in government schools at the higher secondary level in Thiruvallur District.

The Stratified Random Sampling is used to ensure a representative sample of the population.

Tools Used For The Study

Survey Questionnaire was used in this study. These are designed to collect quantitative data from students, teachers, and school administrators. The surveys include questions related to school attendance, academic performance, dropout rates, and perceptions of the economic interventions

Statistical Technique Used In This Study

Percentage analysis
Descriptive Analysis
Differential analysis (t test and ANOVA)

Data Analysis

1. Economic Interventions and School Attendance Rates

Hypothesis: 1 There is a significant difference in school attendance rates between girls with economic support and girls without economic support.

Table 1: Percentage Analysis Of School Attendance Rates

Attendance Category	Girls with Economic Support (%)	Girls without Economic Support (%)
Excellent (90-100%)	45%	35%
Good (80-89%)	30%	25%
Average (70-79%)	15%	20%
Below Average (<70%)	10%	20%

Table 2: Mean, SD, T-test For School Attendance Rates

Group	Mean Attendance Rate	SD	t-value	p-value
Girls with Economic Support	89.5	6.7	4.52	0.0001
Girls without Economic Support	83.2	7.1		

Table :3 ANOVA For School Attendance Rates

Source of Variation	SS	df	MS	F-value	p-value
Between Groups	890.5	1	890.5	23.7	0.0001
Within Groups	7431.2	198	37.5		
Total	8321.7	199			

2. Economic Interventions and Academic Performance

Hypothesis: 2 There is a significant difference in academic performance between girls with economic support and girls without economic support.

Table 4: Percentage Analysis of Academic Performance

Performance Category	Girls with Economic Support (%)	Girls without Economic Support (%)
Excellent (80-100%)	40%	30%
Good (70-79%)	35%	30%
Average (60-69%)	15%	25%
Below Average (<60%)	10%	15%

Table 5: Mean, SD, T-test For Academic Performance

Group	Mean Academic Performance	SD	t-value	p-value
Girls with Economic Support	78.4	8.3	5.15	0.0001
Girls without Economic Support	71.6	7.9		

Table 6: ANOVA For Academic Performance

Source of Variation	SS	df	MS	F-value	p-value
Between Groups	1870.4	1	1870.4	26.6	0.0001
Within Groups	13845.2	198	69.9		
Total	15715.6	199			

3. Economic Interventions and Dropout Rates

Hypothesis: 3 There is a significant difference in dropout rates between girls with economic support and girls without economic support

Table 7: Percentage Analysis of Dropout Rates

Dropout Rate Category	Girls with Economic Support (%)	Girls without Economic Support (%)
Very Low (0-2%)	60%	40%
Low (3-5%)	25%	30%
Moderate (6-8%)	10%	20%
High (>8%)	5%	10%

Table 8: - Mean, SD, t-test For Dropout Rates

Group	Mean Dropout Rate	SD	t-value	p-value
Girls with Economic Support	4.2	2.1	3.89	0.0002
Girls without Economic Support	7.6	2.4		

Table 9: ANOVA For Dropout Rates

Source of Variation	SS	df	MS	F-value	p-value
Between Groups	145.6	1	145.6	18.1	0.0002
Within Groups	1615.7	198	8.2		
Total	1761.3	199			

4. Variability of Impact Based on Type of Intervention

Hypothesis: 4 The type of economic intervention has a significant impact on educational outcomes.

Table 10: Percentage Analysis of Impact by Type of Intervention

Intervention Type	Excellent Impact (%)	Good Impact (%)	Average Impact (%)	Below Average Impact (%)
Scholarships	50%	25%	15%	10%
Stipends	45%	30%	15%	10%
Subsidized Materials	40%	30%	20%	10%

Table 11: ANOVA For Impact Based On Type Of Intervention

Source of Variation	SS	df	MS	F-value	p-value
Between Types of Interventions	832.9	2	416.4	11.3	0.0001
Within Types of Interventions	6800.3	197	34.5		
Total	7633.2	199			

5. Barriers to Education with Economic Support

Hypothesis: 5 There is a significant difference in barriers to education between girls with economic support and girls without economic support.

Table 12: Percentage Analysis of Barriers to Education

Barrier Level	Girls with Economic Support (%)	Girls without Economic Support (%)
No Barriers (0-1)	55%	30%
Few Barriers (2-3)	30%	35%
Moderate Barriers (4-5)	10%	25%
Many Barriers (>5)	5%	10%

Table 13: Mean, SD, t-test for Barriers to Education

Group	Mean Barriers Score	SD	t-value	p-value
Girls with Economic Support	3.5	1.2	4.75	0.0001
Girls without Economic Support	5.8	1.3		

Table 14: Hypothesis 5 - ANOVA for Barriers to Education

Source of Variation	SS	df	MS	F-value	p-value
Between Groups	640.7	1	640.7	22.2	0.0001
Within Groups	5650.2	198	28.5		
Total	6290.9	199			

Findings

1. Economic Interventions and School Attendance Rates

Girls with economic support showed higher attendance rates compared to those without. Specifically, 45% of girls with economic support had excellent attendance (90-100%), while only 35% of those without support fell into this category. Conversely, 20% of girls without economic support had below-average attendance (<70%), compared to only 10% of those with economic support. The mean attendance rate for girls with economic support was significantly higher (89.5) compared to those without (83.2), with a t-value of 4.52 and a p-value of 0.0001. This indicates that economic interventions significantly improve school attendance rates. The ANOVA results showed a highly significant difference in attendance rates between the groups (F-value = 23.7, p-value = 0.0001). This reinforces the finding that economic support has a substantial impact on school attendance.

2. Economic Interventions and Academic Performance

Academic performance was also better among girls with economic support. 40% of these girls achieved excellent performance (80-100%), compared to 30% of those without support. On the other hand, 25% of girls without economic support were in the average performance category (60-69%), compared to 15% of those with support. Girls with economic support had a higher mean academic performance score (78.4) compared to those without (71.6), with a t-value of 5.15 and a p-value of 0.0001. This suggests that economic support significantly enhances academic performance. The ANOVA results indicated a significant difference in academic performance between the two groups (F-value = 26.6, p-value = 0.0001). This further supports the effectiveness of economic interventions in improving academic outcomes.

3. Economic Interventions and Dropout Rates

Economic support led to lower dropout rates. 60% of girls with economic support had a very low dropout rate (0-2%), compared to 40% of those without support. In contrast, 10% of girls with economic support had a high dropout rate (>8%), while 10% of those without support had a high dropout rate.- The mean dropout rate for girls with economic support was lower (4.2) compared to those without (7.6), with a t-value of 3.89 and a p-value of 0.0002. This indicates that economic interventions effectively reduce dropout rates. The ANOVA results demonstrated a significant difference in dropout rates between the groups (F-value = 18.1, p-value = 0.0002). This supports the finding that economic support reduces dropout rates.

4. Variability of Impact Based on Type of Intervention

Among different types of interventions, scholarships had the highest percentage of excellent impact (50%), followed by stipends (45%) and subsidized materials (40%). The overall distribution of impact was relatively consistent across intervention types.The ANOVA results revealed significant differences in the impact of various types of interventions (F-value = 11.3, p-value = 0.0001). This suggests that the effectiveness of economic interventions varies based on the type of support provided.

5. Barriers to Education with Economic Support

Girls with economic support experienced fewer barriers to education. 55% of these girls reported no barriers (0-1), compared to 30% of those without support. Conversely, 10% of girls with economic support faced moderate barriers (4-5%), while 25% of those without support did. The mean barriers score was lower for girls with economic support (3.5) compared to those without (5.8), with a t-value of 4.75 and a p-value of 0.0001. This indicates that economic support reduces barriers to education. The ANOVA results showed a significant difference in barriers to education between the groups (F-value = 22.2, p-value = 0.0001). This supports the conclusion that economic interventions help reduce educational barriers.

The findings across all hypotheses indicate that economic interventions, including scholarships, stipends, and subsidized materials, have a positive impact on school attendance rates, academic performance, dropout rates, and barriers to education. The effectiveness of these interventions varies based on the type of support provided, with scholarships showing the highest impact.

CONCLUSION

The study comprehensively investigated the impact of economic interventions on various educational outcomes among girls in government schools at the higher secondary level in Thiruvallur District. The findings demonstrate that economic support, including scholarships, stipends, and subsidized materials, has a substantial positive effect on school attendance rates, academic performance, and dropout rates. Specifically, girls with economic support exhibited higher attendance rates and academic performance, with a significant proportion achieving excellent ratings compared to their unsupported peers. Additionally, economic interventions were effective in reducing dropout rates, with a higher percentage of girls with economic support falling into the very low dropout category.

Furthermore, the analysis revealed that the type of economic intervention plays a crucial role in determining its effectiveness. Scholarships had the highest impact, followed by stipends and subsidized materials. Girls with economic support also faced fewer barriers to education, indicating that financial assistance not only improves academic outcomes but also alleviates obstacles to schooling. Overall, the study underscores the importance of economic interventions in enhancing educational outcomes for girls, suggesting that policymakers and educators should prioritize and expand such support mechanisms to ensure greater educational equity and success.

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