

Effect of Child Care Costs on Women's Involvement in the Labour Force: Evidence from Tharaka Nithi County, Kenya

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Abstract

Women's participation in childcare and the workforce is currently a significant topic of scientific interest and policy significance. However, the availability of child care facilities has not kept pace with the rise in mothers with small children, especially in less developed countries. Reliable data about the correlation between Kenyan women's labour market participation and childcare expenses are lacking. Cultural barriers make it impossible to extrapolate these findings to a country like Kenya, despite some evidence from the US and Europe suggesting a positive correlation between women's labour force participation and child care expenses. Therefore, the aim of this study was to ascertain the degree to which child care expenses impact a woman's decision to engage in the workforce in Tharaka Nithi County, Kenya. The rational choice hypothesis served as the foundation for this study. According to the County Development Plan for 2018–2022, the survey reached 24,000 mothers with infants and toddlers spread over 577 daycare centres. The study employed a descriptive research method. A total of 384 participants were selected randomly to participate in the study. The quantitative information gathered from questionnaires was examined using descriptive and inferential statistics. The results showed a significant relationship between childcare expenses and women's labour force participation.

Key Words: Child Care costs, Women's Participation, Labour Market, Children.

Sub-theme: Care Work and its Effects on WEE

1. Introduction

Background to the Study

In the modern world, it is common for mothers with young children to work, in contrast to the past when women's primary duties were centred on the home, where they were responsible for childcare and housekeeping. However, the difficulties associated with women's employment have drawn significant attention from around the world. Childcare refers to providing care and supervision for a child or children, often from birth until age thirteen (Ch, Hassan & Zafar, 2015). In the context of this study, childcare will be applied to mean the care of children, especially as a service while parents are working or searching for work. Care includes both custodial care, such as supervision, feeding, shelter, and other physical necessities that enhance children's physical, social, and emotional needs, as well as activities that support and encourage learning (Ch et al., 2015). Women's employment engagement has grown dramatically in recent years in a number of nations, particularly among mothers with small children. The impact of this phenomenon on women's participation in the labour market has drawn criticism. According to Stenberg, Axelson, Sheehan, Anderson, Gülmezoglu, Temmerman, and Bustreo (2014), women's participation in gainful employment is an underutilised source of economic and community development. Every day, women and mothers, in particular, make crucial decisions regarding who will be taking care of

their children, whether they do it themselves or rely on formal or informal childcare arrangements (Ferrant, Pesando, and Nowacka, 2014).

The flexible range of options mothers have for child care is known as childcare choice. The choice of childcare arrangements involves making complicated decisions that take into account the requirements, preferences, circumstances, resources, and limits of the kid and the family (Liu, 2015). Many families with young children are forced to make the decision between giving up their employment entirely to care for their children full-time, finding a less expensive but potentially inferior choice, or spending a sizeable portion of their income on child care. Childcare issues are displacing parents, especially mothers, from their jobs at an increasing rate due to excessive costs, lack of availability, or inconvenient program hours (Scott & Abelson, 2016). To design a high-quality childcare system that supports parents' goals for their children, it is essential to comprehend what influences parents' choices about childcare. According to Del Boca, Flinn, and Wiswall (2014), it is commonly acknowledged that having access to cheap outdoor childcare options enhances the possibility that women would join in the labour force.

According to research done in Kenya, mothers are becoming less active in community development initiatives and leaving the workforce due to high childcare expenses and insufficient financial aid (Clark, De Almada, Kabiru, Muthuri & Wanjohi, 2021). The lack of accessible and reasonably priced childcare options is frequently recognised as a barrier to women's participation in the workforce (Clark, Kabiru, Laszlo & Muthuri, 2019). Women's labour force participation has fallen during the past 20 years in Kenya, while it has increased in other key industrialised nations, according to Clark et al. (2019).

In Tharaka Nithi, like in many other places, the nature and extent of women's participation in community development and economic activities have been constrained by exogenous factors. For instance, Caroline (2018) asserts that women working in informal jobs in Tharaka Nithi County experience difficulties like lengthy work hours and settings that discourage nursing or bringing infants to work with them. Additionally, compared to males, working mothers with children under the age of four spend more time providing unpaid care for their children. Unpaid care employment involves watching children while also performing household chores, organising children's routines, and caring for sick children. Unpaid care work also includes providing direct care to individuals, doing domestic chores, and volunteering in the community. All of these works severely impede women's capacity to contribute to and profit from economic progress. Supporting their childcare needs thus offers a huge chance to address any problems they could have with childcare providers. Women can significantly contribute to the processes of economic production and societal development when interventions directly offer them alternatives to traditional childcare options and grant them more freedom of choice and activity. As a result, the county government of Tharaka Nithi has implemented interventions, such as the construction of a crèche (day childcare centre) at Chuka Market in 2018, which opened in 2020, to address the issue of child care for working mothers. Therefore, launching a study to look into how childcare affects women's engagement in the workforce in Tharaka Nithi County, Kenya, is justifiable.

Statement of the Problem

Women's participation in the labour market is crucial for advancing Kenya's social and economic transformation agendas. Despite this, the ratio of women to men in the labour market has remained at 1:2 over the past decade, even though census data from 2019 shows a slightly higher population of women. This disparity suggests that fewer women engage in gainful employment compared to men. Existing literature has not sufficiently explored the role of childcare management strategies in women's labour market participation. Childcare costs significantly influence women's ability to participate in the labour force, as they often bear primary caregiving responsibilities. High childcare expenses can deter women from seeking employment or compel them to accept lower-paying, flexible jobs that accommodate their caregiving roles. This perpetuates economic disparities and undermines the county's economic growth potential. However, childcare, especially in developing countries, is also affecting women's participation in the labour force in ways that are yet to be fully understood. While studies in developed nations link affordable childcare with higher rates of women's employment, little research has been conducted in developing countries like Kenya. This knowledge gap limits the development of policies that could promote women's labour force participation by addressing childcare costs. Without clear evidence of this relationship, achieving gender pay equity and economic progress through women's contributions remains challenging. To address this gap, researchers used Tharaka Nithi County of Kenya to examine how childcare availability impacts women's participation in the labour market.

Objective of the Study

To evaluate how childcare costs affect women's involvement in the labour force in Tharaka Nithi County, Kenya,

Research Question

How do childcare costs affect women's involvement in the labour force in Tharaka Nithi County, Kenya?

2. Literature Review

Families' decisions about child care are complex processes that frequently coincide with the family's choices about employment (particularly the mother's career). Choosing child care for a child can be overwhelming (Bordone, Arpino & Aassve 2017). The proposed study aims to examine the childcare costs that influence working mothers to select one type of child care over another because it is challenging to accurately gauge the level of financial commitment made by the national and local governments in the child-care sector without such crucial data. The underlying assumption is that public assistance impacts childcare facilities' overall utilisation and distribution among various care kinds and family types.

Childcare is a vital responsibility for families, regardless of wealth, race, or family structure (Brady & Perales 2016). With more women entering the workforce, childcare has become one of the most pressing demands, especially for families with young children. Finding and paying for quality childcare has become challenging for many parents, especially working mothers with young

children. As a result, childcare has become a barrier to joining the labour sector, particularly for mothers who predominately carry out unpaid caregiving duties, especially when their families cannot pay or find alternative childcare arrangements. Given the growing number of mothers working full-time, formal childcare has been one of the most important areas of family policy change in the United States, the United Kingdom, and Northern Europe (Béland, Blomqvist, Andersen, Palme, and Waddan, 2014). According to research findings, childcare options in these areas varied significantly regarding availability, cost, and quality (Boerma, Requejo, Victora, Amouzou, George, Agyepong & Zaidi, 2018). The majority of the time, the choices represent compromises between the expectations of the family and the perceived needs of the kid, as well as the constraints of the childcare options that are available to them. Studies conducted in Italy, Greece, and Spain found that additional services influence whether working mothers choose to employ formal services in addition to cost. This includes opening hours (Angelov, Johansson & Lindahl, 2016). In Southern Europe, many working mothers still prefer the care of their grandparents to official daycare for their younger children. According to Müller and Wrohlich (2020), having a relative residing in the home negatively and considerably impacts the decision to seek formal childcare. This may result from family preferences for gender roles and values, where mothers' traditional duties are still highly valued and seen as the greatest careers for their children, as well as financial considerations. In the context of African culture, the current study aims to evaluate how childcare expenditures affect women in gainful employment.

In Nigeria, OlaOlorun and Tsui (2020) established that the location of childcare services near a worker's home or workplace impacts uptake because of the low costs involved. According to Boateng-Pobee (2018), working parents and guardians are more likely to use childcare services if they are close to where they live. Boateng-Pobee (2018) went on to prove that a crucial requirement for a child's enrollment in daycare is trust in the provider. Trust and opinions of quality are tightly related. The early child development literature evaluates the calibre of childcare services using structural and procedural traits. Affordability and quality are the top concerns for working mothers with children aged five or under in Ghana. According to Polack, Adams, O'banion, Baltussen, Asante, Kerac and Zuurmond (2018), many working mothers with two-year-olds in Ghana currently opt for childcare settings that are deemed affordable. According to Sekondi Takoradi Metropolis, Ghana, Kumatia, and Quartey (2021), working women employ non-related and relative childcare as alternatives that are thought to be both economical and high-quality. They claim that this quality impacts how successfully a mother and child interact if it is lacking. Kumatia and Quartey (2021) state that among the qualities that should be taken into account are primary care, responsive caregiving, responsive surroundings, competent personnel, cultural and linguistic continuity, and high staff-to-child ratios. However, the cost of excellent daycare is significantly more than that of a daycare lacking in quality components.

The need for alternative forms of childcare in Ghana is affected by a number of circumstances, as detailed in the World Bank's Gender Database (2001). The country's high unemployment rate is one such factor. One of these is the disparity in treatment between the sexes. The mother's occupation, the location of her place of work (at home or elsewhere), the ages of her children, the number of children she has, and the family's financial position are all crucial considerations. The term "accessibility" refers to the ease with which working parents may seek and utilise childcare facilities that are located conveniently close to their homes or places of employment and are open at convenient hours. When societies offer easily available, high-quality child care and early

education choices, children, their parents, and the economy in which they operate all benefit (Whitebook, Phillips, & Howes, 2014). According to a study done in Tanzania by Dillip, Kimatta, Embrey, Chalker, Valimba, Malliwah, and Johnson (2017), the mother's educational status affects her childcare options. While women who work as informal childcare providers are less likely to use formal childcare, women who have completed high school or obtained a bachelor's degree are more likely to use it than women who have not. Here, obtaining a bachelor's degree or finishing high school are considered forms of education. The use of organised childcare is more common among moms who have completed at least some college education, according to research by Dilip et al. (2017). However, it doesn't seem that a mother's educational attainment influences the kind of childcare arrangement she selects for her young children (those under three years old) (Mongai, 2018).

On the other hand, there is minimal information that specifically shows efforts to explore the relationship between the forms of child care that are utilised, the factors that determine childcare choices, and mothers' participation in economic and community development in Kenya. Only a handful of research takes into account employment and childcare decisions together. These studies did not clearly account for the distinctions between part-time and full-time jobs and how they relate to community development. Instead, the primary attention was placed on forecasting the effects of decisions regarding child care. The current study made predictions about mothers' preferences for, and engagement in, community development activities in order to analyse the degree to which decisions about women's jobs and childcare are intertwined.

Theoretical Framework

The theoretical method used in this study was based on Smith's (1990) Rational Choice Theory. The "rational choice theory" school of thought explains human behaviour and decision-making. It is commonly known as a decision theory or a theory of rational behaviour. This theory holds that people act in their own best interests by making choices based on what will benefit them the greatest. People weigh their options before choosing what they think is the best course of action for them. The theory also assumes that people make judgments based on sound thinking to get results consistent with their personal goals. People's perceptions of what will benefit them the greatest are influenced by their personal preferences. The idea holds that a person will consider both the rewards and the expenses before selecting which course of action is best for them. According to Smith (1990), one should carefully consider any decision's benefits, drawbacks, and costs before making it. A decision that one person may deem illogical may make perfect sense to another, depending on what that person desires. According to rational choice theory, each person chooses for themselves. They don't let emotions, peer pressure, or anything else influence their choice-making. The implications and potential benefits are weighed against rational criteria.

According to proponents of the rational choice theory, an individual's self-driven rational decisions will help the economy as a whole (Akers, 2017; Young, 2016). Rational choice theory's central concept is that individual actors' decisions ultimately impact societal behaviour as a whole. The concept also assumes that people have preferences among the numerous possibilities available to them. Rational choice theory's central concept is that individual actors' decisions ultimately impact societal behaviour as a whole. So each person makes a decision based on their tastes and the options available to them. According to the notion, an agent will decide on an action (or outcome)

that they find personally satisfactory. The rational person will choose the action with the greatest net benefit if the actions (or outcomes) are weighed in terms of costs and benefits. In all kinds of areas that have an impact on human populations, rational choice theory offers a wide range of applications (Burns, 2014). In the social sciences, the use of rational choice theory has grown, particularly in areas like the study of community interest groups. Social phenomena can be explained by the rational choice theory. This is so because every institution and social development results from human acts. Therefore, the current study will apply rational choice theory to quantify human decision-making and behaviour into interpretable data, assisting in predicting behaviours and outcomes and enabling us to critically understand the childcare choices made by working mothers to enable them to maintain their employment and earn an income. The rational choice theory may be able to explain some decisions, even though they are not always fully logical. Understanding both social and individual behaviour is made easier by applying the rational choice theory. Understanding why individuals, groups, and society as a whole take different actions in response to particular costs and incentives is helpful.

3. Methodology

Research Design

The investigation was conducted using a descriptive research design. The design enabled a description of how childcare affects women's engagement in the labour market.

Study Location

The study location was Tharaka Nithi County, Kenya.

Target Population

The study focused on working mothers of children aged 4 years and below enrolled in childcare centres that included Early Childhood Development Education (ECDE) centres, day care centres and crèche in Tharaka Nithi County. The population of preschool children in Tharaka Nithi County is 24,000 spread across 577 childcare centres (County Development Plan, 2018 – 2022).

Sampling Techniques and Sample Size

From the population of working mothers in Tharaka Nithi County childcare facilities with children under the age of four, a sample size of 384 was obtained.

Research Instruments

The main method used to collect data for this inquiry was a questionnaire.

Data Analysis

Descriptive and inferential statistics were used to analyse quantitative data. Chi-square testing and correlation analysis were used to assess the relevance of the effect of childcare on women's labour force participation.

4. Results and Discussion

Response Rate

The study targeted 384 mothers with children below 4 years of age randomly selected from childcare centres in Tharaka Nithi County. Out of the targeted respondents, 376 mothers with children below 4 years of age successfully filled out the questionnaires, giving a response rate of 98 %. Only 8 (2%) questionnaire copies were not returned or were not correctly filled. A response rate of more than 70 per cent is considered excellent, according to Babbie and Edgerton (2023). Different estimations and data analysis are possible because the current study's response rate is above the threshold. The response rate is presented in Figure 2.

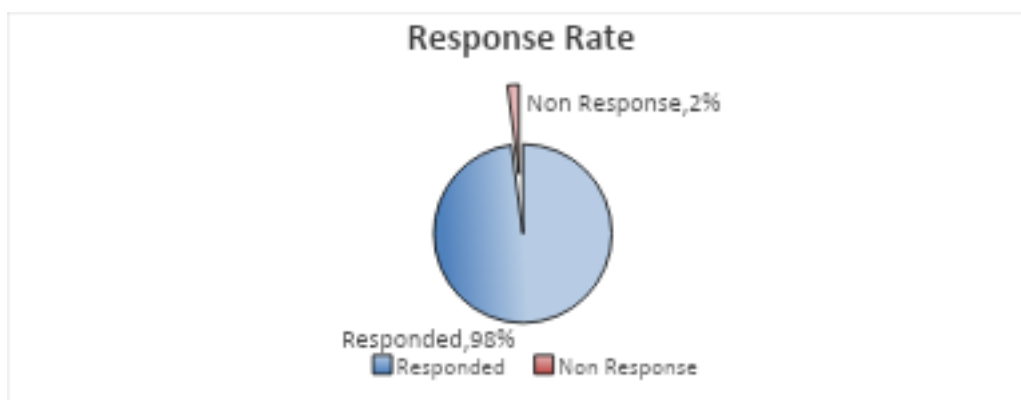


Figure 1. Response Rate

According to Neal (2020), a more than 70 per cent response rate is considered excellent, and Babbie and Edgerton (2023) agree. Because the current study's response rate is above the threshold, different estimations and data analyses are possible.

Respondents' demographic characteristics

The study's objective was to determine the participants' demographic characteristics. The following subsections discuss the findings.

Table 1: Marital Status and Women's Labour Market Participation

		labour market participation				Total
		very great extent	great extent	moderate extent	low extent	
Marital Status	Single	10.9%	0.3%	10.4%		21.5%
	Married	34.3%	5.1%	22.9%	12.2%	74.5%
	Widowed	0.8%		1.9%	0.3%	2.9%
	Separated		0.3%	0.5%	0.3%	1.1%
Total		46.0%	5.6%	35.6%	12.8%	100.0%
$\chi^2=31.816^a$, d.f = 9 p-value Asymptotic Significance (2-sided) (0.00)						
Symmetric Measures						
		Value	Asymptotic Error ^a	Standard	Approximate Significance	
Interval by Interval	Pearson's R	.464		.038		.000 ^c
Ordinal by Ordinal	Spearman Correlation	.393		.040		.000 ^c
N of Valid Cases		376				

Source: Survey Data, (2023)

The data reveals that among women actively participating in the labour force, 34.3% were married, 10.9% were single, and 0.8% were widowed. This suggests that married women were more active in the labour market than single, widowed, or separated women. Additionally, single women showed higher participation than widowed or separated women.

The findings indicate a statistically significant relationship between marital status and women's labour market involvement in Tharaka Nithi County ($\chi^2 = 31.816$, d.f. = 9, $p < 0.001$). The Pearson correlation, measuring the association between women's employment and marital status, was 0.464 ($p < 0.001$), signifying a moderately positive correlation between the two variables. This trend aligns with Murshed (2022), who noted that married couples may share childcare responsibilities, positively influencing their labour market participation. Lassassi and Tansel (2022) similarly observed that single parents, facing financial constraints, often turn to alternative childcare arrangements and seek employment to meet childcare costs. Additionally, Chattopadhyay et al. (2022) found marital status to be a significant factor influencing labour market participation, alongside other socio-economic and demographic factors.

Table 2: Highest Level of Education and Extent of Labour Market Participation

Level of education	Labour market participation	Total
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	very great extent	great extent	moderate extent	low extent	
No Schooling	1.9%		1.3%		3.2%
Primary	1.3%	0.5%	0.5%	0.5%	2.9%
Secondary	1.6%		1.6%	0.5%	3.7%
Post-Secondary/College	38.6%		22.9%	9.8%	71.3%
Graduate/Post-Graduate	2.7%	5.1%	9.3%	1.9%	18.9%
Total	46.0%	5.6%	35.6%	12.8%	100.0%
$\chi^2=104.957^a$, d.f = 12 p value Asymptotic Significance (2-sided) (0.00)					

Source: Survey Data, (2023)

The findings revealed that 46% of respondents participated extensively in the labour market. Among these, 38.6% held college qualifications, 2.7% held university degrees, 1.9% had no formal education, 1.6% completed secondary education, and only 1.3% had primary education. A chi-square test conducted at a 5% significance level showed a significant correlation between respondents' education levels and their degree of labour market participation, with a chi-square value of 104.957 and a p-value of 0.000. The Pearson correlation, measuring the strength of this relationship, was 0.424 with a p-value of 0.016, indicating a moderately positive association between women's education level and their labour market participation. This suggests that women's engagement in the labour market also moderately increases as education levels rise. Education provides awareness of available opportunities and opens up diverse paths for labour market participation.

Number of Women and Children in the Labour Market

The study sought to know the number of kids that working women in childcare had. This was cross-tabulated with their labour participation to ascertain whether having children affected their level of labour involvement. This is presented in Table 3.

Table 3: Number of Children and Women's Labour Market Participation

		Labour Market Participation				
		very great extent	great extent	moderate extent	low extent	Total
Number of children	1	19.9%	0.3%	12.0%	0.3%	32.4%
	2	16.8%	5.1%	9.6%	10.6%	42.0%
	3	3.5%	0.3%	12.2%	1.9%	17.8%
	4	5.6%		1.3%		6.9%
	5			0.5%		0.5%
	6	0.3%				0.3%
Total		46.0%	5.6%	35.6%	12.8%	100.0%

$\chi^2=116.285^a$, d.f = 15 p-value Asymptotic Significance (2-sided) (0.00)					
Symmetric Measures					
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Interval by Interval	Pearson's R	-.510	.049	-2.135	.033 ^c
Ordinal by Ordinal	Spearman Correlation	-.473	.047	-2.404	.001 ^c
N of Valid Cases		376			

Source: Survey Data, (2023)

The results showed that the majority of respondents (42%) had two children, while 32.4% had one child, 17.8% had three children, and 6.9% had four children. Additionally, the data revealed that 16.8% of women with two children were actively participating in the labour force, compared to 19.9% of women with one heavily employed child. A Chi-square test was conducted at a 5% significance level to examine the relationship between labour market engagement and the number of children. The results indicated a significant association, with a computed Chi-square value of 116.285 and a p-value of 0.000. The Pearson correlation coefficient, which measures the strength and direction of the relationship between the variables, was -0.510, with a p-value of 0.033. This negative correlation indicates that women's labour force participation is inversely related to family size, suggesting that labour force engagement tends to decrease as the number of children increases. Given that the p-value was below 0.05, we conclude that this association is statistically significant and unlikely to be due to chance. These findings highlight that mothers with fewer children have more time available for employment. This underscores that, without adequate childcare options, working women are less likely to participate fully in the labour market, a conclusion supported by Buddelmeyer et al. (2017), who demonstrated the impact of childcare availability on women's employment.

Income Level and Childcare Options for Women

The study sought to know the respondents' income levels and how often women used the childcare services offered by Tharaka Nithi County child care centers. The purpose of this was to ascertain whether their choice of daycare was influenced by their income level. This is presented in Table 4.

Table 4: Level of Income and Women's Childcare Options

What is the monthly income you earn from working	which childcare options are the most common for working mothers in Tharaka Nithi County			Total
	relative	Kindergarten	professional Nanny	

Below 3000		4.5%			4.5%
3001-10000		3.5%			3.5%
10001-15000		16.8%	10.1%	12.8%	39.6%
15001-30,000		22.3%	0.3%	9.0%	31.6%
30001 and Above		9.8%	10.9%		20.7%
Total		56.9%	21.3%	21.8%	100.0%
$\chi^2=63.357^a$, d.f = 6 p-value Asymptotic Significance (2-sided) (0.00					
Symmetric Measures					
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Interval by Interval	Pearson's R	.45	.044	.877	.381 ^c
Ordinal by Ordinal	Spearman Correlation	.022	.048	-.431	.667 ^c
N of Valid Cases		376			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Based on normal approximation.					

Source: Survey Data, (2023)

The findings revealed that 22.3% of respondents who preferred having relatives care for their children earned between 15,001 and 30,000, while 16.8% who earned between 10,001 and 15,000 also preferred relatives. In contrast, only 10.9% who favoured kindergarten and 9.8% who preferred relatives earned over 30,001. A Chi-square test at a 5% significance level, yielding a p-value of 0.000, indicated a significant association between childcare choices and mothers' income levels. This p-value, significant at the 0.01% level, was supported by a Pearson correlation coefficient of 0.45, showing a moderate positive link between childcare preferences and income levels. The results suggest that greater access to daycare may increase women's participation in the workforce. Since the p-value is less than 0.05, we can confidently conclude that the relationship between these variables is unlikely due to chance.

Therefore, the Pearson correlation results in Table 11 show that the choice of a childcare programme and women's level of income is marginally but positively and significantly correlated. The implication of these results is that an increase in the women's level of income leads to a marginally significant increase in the utilisation of childcare options. This can be explained by the fact that childcare options, as posited by the International Labour Organization Report (2023), may be costly to afford for many women in rural counties. Moreover, a report by UN Women (2018) supports the findings of the current study: many women in their prime reproductive years live in extreme poverty in low-paid forms of work, and with the majority being self-employed in the informal economy, they cannot rely on the employer supported childcare services. These results contradict the results of a study by Hutchinson et al. (2023) which assessed whether childcare choice was related to household income. The contradictory results can be explained by the fact

that, unlike the current study, Hutchinson et al. (2023) study was contextualised in the United States, which is a developed country and hence has minimal application to the state of a developed country. Moreover, the study focused on the overall household income, while the current study focused on the mother's income levels. The current study results support the findings of Legazpe and Davia (2019), who found a positive correlation between childcare choices and the levels of income among working mothers in Spain during the Great Recession. Similarly, the findings of the current study support Du and Dong's (2010) results that implied that increased levels of income among women led to improved utilisation of childcare programmes in China during the period of economic transition.

Collaboratively, the study asked the respondents an open-ended question seeking to investigate whether being formally employed made a difference in regard to their involvement in childcare decisions at home. Most respondents opined that formal employment influenced their childcare decisions as it presents great regularity and certainty of income, enabling them to make childcare decisions and plan for their participation in the labour market. In addition, when respondents were posed with an open-ended question as to whether their incomes were adequate to enable them to seek alternative childcare, most respondents said that childcare options available were costly for them to afford on a regular basis as their incomes would not allow persistent utilisation of the childcare options. Most respondents pointed out that the government should set up cheap, accessible and well-equipped childcare centres as most women could not afford the childcare centres currently in place. Many respondents relied on their relatives since it was the cheaper option, a finding that collaborated with the quantitative findings of the current study.

The Cost of Childcare and the Employment Status of Women

The second goal of the research was to determine how much the high expense of childcare discourages women from entering the workforce in Tharaka Nithi County, Kenya. In order to accomplish this goal, research identified eight social and economic aspects that may affect parents' decisions on child care. Participants were asked to use a Likert scale to indicate how much they agreed with statements on the impact of economics on parents' decisions about child care in their neighbourhood. In contrast, 1 denotes severe disagreement, 2 is neutral, 3 agreement, and 4 is strong agreement. The outcomes are displayed in Table 5 below.

Table 5: Childcare Costs

Descriptive Statistics			
	N	Mean	Std. Deviation
Family social support	376	3.9947	.46759
Family income levels	376	4.0133	.11470
Cost of alternative childcare	376	4.1090	.45175
Mothers education level	376	4.2048	.40408
Mothers occupation	376	4.2261	.53112
Mothers working life conditions	376	4.2234	.41708
Mother's employment status	376	4.0532	.22471

Affordability	376	4.1729	.37864
Aggregate Score	376	4.1247	.37371

Source: Survey Data, (2023)

The study found that women in Tharaka Nithi County, Kenya agreed with all statements regarding the eight socioeconomic factors influencing parents' decisions about childcare choices, with an overall mean score of 4.1247 and a standard deviation of 0.37371. Specifically, results indicated that family social support impacted childcare choices, with a mean score of 3.9947 and a standard deviation of 0.87343. Respondents also agreed that family income levels influenced their childcare decisions, with a mean of 4.0133 and a standard deviation of 0.11470. Similarly, the cost of alternative childcare options was seen as influential, with a mean of 4.1090 and a standard deviation of 0.45175, while mothers' education level had a notable influence on childcare choices, reflected by a mean score of 4.2048 and a standard deviation of 0.40408.

The study's secondary objective was to investigate causal relationships between socioeconomic factors and women's participation in the labour force in Tharaka Nithi County, Kenya. Correlational analysis was conducted to determine the relationship between parents' socioeconomic status and their childcare choices, using an index created from the eight identified factors. Pearson's Product-Moment Correlation Coefficient was applied to measure the strength and direction of this relationship. The correlation coefficient (r) ranges from -1 to +1, with +1 indicating a perfect positive linear relationship and -1 a perfect negative linear relationship. According to Hair et al. (2006), the interpretation of r values is as follows: 0.00 to 0.20 indicates no association, 0.21 to 0.40 a weak association, 0.41 to 0.60 a moderate relationship, 0.61 to 0.80 a strong relationship, and 0.81 to 1.0 a very strong relationship.

Table 6: Childcare Costs and Participation of Women in the Labour Market

		Correlations	
		Social, economic determinants	Labour Market Participation
Social economic determinants	Pearson Correlation	1	.648**
	Sig. (2-tailed)		.000
	N	376	376
Labour Market Participation	Pearson Correlation	.648**	1
	Sig. (2-tailed)	.000	
	N	376	376

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Data, (2023)

The findings in Table 16 reveal a significant positive correlation between social and economic factors and women's participation in the labour market ($r = 0.648$, $p = 0.00-0.01$). This result indicates that improving social and economic conditions would increase women's involvement in the workforce. The findings highlight that social and economic factors affecting childcare decisions significantly influence women's labour market participation. Consistent with Degotardi et al. (2018), these results suggest that practical social and economic considerations shape women's decisions around childcare. This study corroborates previous findings that women are more likely to engage in the labour market if they benefit from greater social support, higher family income, affordable alternative childcare options, higher levels of education, better occupational standing, and greater employability.

The study evaluated seven parameters to assess the influence of socio-cultural determinants on childcare choices. Respondents rated their level of agreement on a Likert scale with socio-cultural factors influencing childcare choices, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree. The descriptive statistics for these responses are presented in Table 7.

Table 7: Determinants of Childcare Choices

Descriptive Statistics	N	Mean	Std. Deviation
Gender roles perpetuated through social culture limit working women's choice for alternative childcare	376	4.0771	.85909
Sociocultural norms and values negatively influence working women's choice of childcare	376	4.1037	.53902
Social barriers Women's participation in community-based development projects is hampered by attitudes, both men's attitudes toward women and their own lack of confidence and willingness.	376	4.1197	.56003
One of the things that prevents women from participating in community-based projects is a low level of education.	376	3.8351	1.14050
Deep-rooted cultural stereotypes devalue women's interest in considering alternative childcare choices away from the family setting	376	3.8404	.94717
The belief that primary caregivers are largely responsible for the care of the family limits working women's choice for alternative childcare	376	4.0027	.95359
Negative attitudes and perceptions about optional childcare services limit working women's choice of alternative childcare	376	4.2580	.60658
Aggregate Score	376	4.0338	0.80085

Source: Survey Data, (2023)

The study's aggregate score revealed that women in Tharaka Nithi County, Kenya, generally agreed with statements regarding the seven identified sociocultural factors that influence parental decisions about childcare options, with an overall mean of 4.0338 and a standard deviation of 0.80085. Specifically, respondents indicated agreement that gender roles perpetuated by

sociocultural norms restrict working women's access to alternative childcare options. Additionally, the participants agreed that social norms and values negatively impact working women's childcare choices.

The study further highlighted societal barriers, such as men's negative attitudes toward women and women's lack of confidence and willingness, as obstacles to women's participation in community-based development programs. Respondents also concurred that a lack of knowledge is a significant barrier preventing women from engaging in these programs. Furthermore, deeply rooted societal biases were noted to devalue women's inclination to explore options beyond 'in-home' childcare. Respondents agreed that societal expectations, which view primary caregivers as primarily responsible for family care, can limit working women's options for alternative childcare. Finally, the results indicated that unfavourable attitudes and perceptions of alternative childcare providers further restrict the available options for working mothers.

The study's second objective was to examine the relationship between sociocultural factors and women's participation in the labour force in Tharaka Nithi County, Kenya. This relationship was analysed using Pearson's Product Moment correlation to assess the association between the social and cultural dimensions of the identified factors and women's labour force participation. Seven sociocultural and economic factors influencing parental decisions on childcare were indexed to clarify the nature and strength of the relationship between variables. The correlation coefficient from -1 to +1 indicates a perfect linear relationship between positively correlated variables at +1 and a perfect inverse relationship at -1 for negatively correlated variables. The findings of the connection are presented in Table 8.

Table 8: Sociocultural Determinants and Participation in the Labour Market

Correlations		Sociocultural determinants	Labour Market Participation
Sociocultural determinants	Pearson Correlation	1	-.348**
	Sig. (2-tailed)		.000
	N	376	376
Labour Market Participation	Pearson Correlation	-.348**	1
	Sig. (2-tailed)	.000	
	N	376	376

**, Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Data, (2023)

The findings presented in Table 8 indicate a marginally significant negative association between social and cultural variables and women's engagement in the job market, with a correlation coefficient of $R = -0.348$ and a p-value ranging from 0.00 to 0.01. This suggests that an increase in social and cultural variables correlates with a decrease in women's employment opportunities. Such results imply that social and cultural factors influencing childcare decisions adversely affect women's participation in the labour market. Specifically, traditional gender roles and social norms that assign primary childcare responsibilities to women can deter working mothers from seeking alternative childcare options, primarily due to concerns about community judgment. Furthermore, low education levels and entrenched cultural stereotypes can undermine women's willingness to explore childcare alternatives outside the family unit. However, the current study also identified a tenuous link between social and cultural factors and women's labour market participation, indicating that these influences may be diminishing due to changing lifestyles, liberalisation, and advancements in education. This finding contrasts with the research by Meyers, Jordan, and colleagues (2006), which posited that cultural influences significantly impact parental childcare and workforce participation decisions, affecting both choices and accommodations.

The discrepancies between these findings can be attributed to the demographic characteristics of the current study, which revealed that a majority of respondents possessed post-secondary or university degrees. This educational attainment likely liberalises them from deeply entrenched cultural values, allowing for more rational decision-making as suggested by the rational choice theory (Smith, 1990). In contrast, the findings from Meyers and Jordan (2006) may be less applicable to contemporary working women, as their research is based on older data. Additionally, Meyers and Jordan employed frequency and percentage analyses that did not adequately inferentially assess the relationships between the variables, making their conclusions less relevant to the context of Kenyan working mothers. Therefore, as highlighted by a critical review by Degotardi et al. (2018) and supported by the current study, social and cultural factors continue to influence women's childcare decisions, albeit in a changing landscape.

5. Conclusions and Recommendations

Conclusions

The findings from the second specific objective reveal a strong and positive correlation between social and economic determinants and women's participation in the labour market. The study suggests that businesses and organisations should prioritise addressing social and economic issues to effectively enhance women's involvement in the workforce. Offering social and economic incentives to encourage women's entry into the labour force would be particularly beneficial. Moreover, the study identifies several social and cultural factors that influence women's labour force participation, both positively and negatively. It indicates that the prevalence of certain social and cultural norms may lead to a decline in women's participation in the workforce. In summary, the results highlight that women's economic independence is significantly impacted by the social and cultural elements that influence decision-making around childcare.

Recommendations

Government programmes should be geared toward improving social and economic determinants as women with more family social support, better family income levels, lower cost of alternative childcare, better education levels, occupation, and employability are more likely to participate in the labour market. Tharaka Nithi County should establish and fund community-based childcare centres to provide affordable, high-quality childcare services and encourage collaboration between the county government and private organisations to expand affordable childcare services to promote equitable labour force participation among women. Stakeholders should launch programmes that diminish deep-rooted cultural stereotypes that devalue women's interest in labour market participation to consider alternative childcare choices away from the family setting.

Suggestions for Further Studies

The following areas are proposed for future study based on the study's findings:

A comparable study should be carried out on additional aspects of women's employment, such as difficulties in the workplace and work-life balance, as well as potential legal restrictions on their participation. The personal, contextual and organisational factors in other counties and urban centres are not the same as those in the Tharaka Nithi county government, Kenya and therefore would influence the study's variables differently. Therefore, similar studies on the relationships between the same variables can be conducted in other counties and jurisdictions in Kenya.

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