

Nurturing Tomorrow: Unveiling The Impact Of Maternal Education On Children's Development In Malakand Division, Pakistan - A Comprehensive Mixed-Methods Study

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Abstract

Background: This research explores the impact of maternal education on children's holistic development in Malakand Division, Pakistan. Focused on the cultural intricacies, the study examines maternal education's influence on social, moral, psychological, educational, physiological, and gendered aspects of children's growth.

Aim: The primary goal is to investigate the association between maternal education and children's development using a mixed-method approach. The study aims to uncover the nuanced interplay between maternal education and diverse facets of children's growth.

Method: Employing an explorative sequential mixed-method design, the research conducts qualitative in-depth interviews and focus group discussions with educated mothers. The quantitative phase uses surveys and questionnaires, applying statistical tools like chi-square tests, regression, and correlation. Rigorous sampling includes both purposive-cum-convenient and stratified random sampling.

Results: Qualitative findings reveal a strong ¹link between maternal education and positive outcomes in children's development. Quantitative analysis supports these insights, indicating a significant association between maternal education and favorable outcomes. High agreement levels among participants reinforce the qualitative findings.

Discussion: The integration of qualitative and quantitative findings provides a comprehensive understanding of the transformative influence of maternal education. Educated mothers significantly shape various dimensions of children's development. The discussion underscores the need for culturally sensitive policy interventions and advocates for community-based initiatives supporting mothers in their educational pursuits.

Policy Implications: Policy implications emphasize prioritizing maternal education in Malakand Division. Education program investments should align with cultural nuances, integrating health-conscious practices and gender equity components. Community-based interventions are proposed to raise awareness and support mothers, breaking intergenerational cycles of disadvantage. Collaborative efforts involving stakeholders are crucial for successful policy implementation and scalability.

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Introduction

In the vast tapestry of human development, the role of maternal education has emerged as a critical determinant in shaping the destinies of the youngest members of society. In the picturesque landscapes of Malakand Division, Pakistan, where the nurturing of future generations is woven into the very fabric of cultural heritage, an in-depth exploration into the transformative influence of maternal education on children's holistic development takes center stage (Brinkley et al., 2023). This research endeavor seeks to unravel the intricate connections between maternal education and multifaceted dimensions of children's growth, encompassing the social, moral, psychological, educational, physiological, and gendered aspects.

In the context of Malakand Division, where historical, cultural, and socio-economic factors converge, the impact of maternal education extends far beyond conventional boundaries. This study adopts a rigorous mix-method research approach, combining qualitative and quantitative methodologies, to illuminate the nuanced interplay between maternal education and various facets of children's development. One cornerstone of this investigation delves into the profound relationship between maternal education and children's social and moral development (Weis et al., 2023). Recognizing the potential of educated mothers to serve as primary architects of a child's ethical compass, the study endeavors to uncover the ways in which maternal educational attainment influences the cultivation of social virtues and moral principles in the young minds of Malakand Division.

The intricate landscape of children's psychological development unfolds as another focal point, where the impact of maternal education reverberates (Di Cesare et al., 2013). Through a meticulous examination of cognitive, emotional, and behavioral dimensions, the research aims to delineate the cognitive scaffolding and emotional resilience nurtured by educated mothers, shaping the mental well-being of their offspring. Education begets education, and the cyclical nature of knowledge acquisition finds resonance in the exploration of maternal education's influence on the educational development of children (Alibraheim, 2023). Unpacking the layers of learning environments, academic achievements, and cognitive skills, this dimension aims to unveil the educational pathways paved by the educational status of mothers in Malakand Division. Beyond the realms of cognition and emotion, the study delves into the physiological dimension of children's development (Wachs et al., 2005). Investigating factors such as nutrition, health care, and overall physical well-being, the research seeks to establish a nexus between maternal education and the physiological flourishing of the younger generation.

Finally, in the rich tapestry of Malakand Division, where gender dynamics play a pivotal role, this dimension scrutinizes the influence of maternal education on gendered socialization (Moen et al., 2008). Examining how educated mothers contribute to the dismantling of gender stereotypes and facilitate a more egalitarian upbringing, the research explores the role of maternal education in fostering gender-sensitive socialization practices.

Literature Review

The literature overwhelmingly supports the notion that maternal education significantly influences children's social and moral development. A seminal study by Zhai et al. (2023) found a positive correlation between higher levels of maternal education and the development of prosocial behaviors and moral reasoning in children. Similarly, the work of Ball et al. (2017) emphasized the role of educated mothers in shaping children's empathy and altruistic tendencies, underscoring the socialization impact of maternal education on moral values. Research into the psychological dimensions of child development consistently underscores the

pivotal role of maternal education. The longitudinal study by Meyrose et al. (2018) demonstrated a positive association between maternal education and children's cognitive abilities, as measured by standardized assessments. Furthermore, the work of Awada and Shelleby (2021) highlighted the role of maternal education in fostering emotional resilience and mental well-being in children, emphasizing the enduring impact on psychological development.

Studies such as that conducted by Ildiz et al. (2022) revealed a strong correlation between maternal education and children's academic achievements, suggesting that educated mothers create a conducive environment for learning and intellectual growth. This is further supported by a meta-analysis conducted by Awada and Shelleby (2021), which synthesized findings across diverse cultural contexts and consistently identified maternal education as a robust predictor of children's educational attainment.

Empirical evidence addressing the physiological dimensions of children's development in relation to maternal education is less abundant but nonetheless compelling. The work of Le and Nguyen (2020) demonstrated that maternal education plays a crucial role in ensuring optimal nutrition and healthcare for children, leading to improved physiological development. This aligns with the findings of a community-based study by Prickett and Augustine (2016), which identified a positive association between maternal education and overall child health. Studies exploring the role of maternal education in gendered socialization highlight its potential to challenge traditional gender norms. The research by Shapiro et al. (2015) indicated that educated mothers are more likely to foster gender-sensitive attitudes in their children, contributing to a more equitable upbringing. Additionally, the cross-cultural analysis by Tabatadze and Gorgadze (2023) emphasized the role of maternal education in dismantling gender stereotypes, promoting a more inclusive socialization process.

Study Discourse

The primary aim of this study is to investigate the transformative influence of maternal education on children's holistic development in Malakand Division, Pakistan, utilizing a mixed-method research approach. This holistic approach encompasses social, moral, psychological, educational, physiological, and gendered dimensions of children's development.

Despite the wealth of literature on the subject, there is a noticeable gap in understanding how maternal education uniquely shapes the holistic development of children in the specific cultural and socio-economic context of Malakand Division. Existing studies often lack a comprehensive exploration of the diverse dimensions of child development within this region, and few studies have applied a mixed-method research approach to capture the complexity of the relationships involved.

This study bridges the existing gap by offering a detailed and context-specific examination of the influence of maternal education on various aspects of children's development in Malakand Division. While previous research has provided valuable insights, this study seeks to contribute by employing a mixed-method approach, combining qualitative and quantitative methodologies. This methodological choice allows for a more nuanced understanding of the intricate dynamics at play, capturing both the depth of experiences and the breadth of statistical associations.

The importance of this study lies in its potential to inform targeted interventions and policies aimed at enhancing children's holistic development in Malakand Division. By unraveling the specific pathways through which maternal education influences different facets of a child's growth, the study aims to provide actionable knowledge for educators, policymakers, and community stakeholders. The findings are anticipated to contribute to the design of evidence-based programs that empower mothers and, by extension, foster a more resilient and thriving generation in the region.

The study acknowledges and accounts for the unique cultural nuances in Malakand Division, recognizing that the impact of maternal education may vary based on cultural factors. This cultural sensitivity ensures that interventions and recommendations are contextually relevant. The integration of qualitative and quantitative methods is a novel aspect, allowing for a comprehensive exploration that goes beyond statistical correlations. This approach enables a deeper understanding of the lived experiences of mothers and children in Malakand Division. The study's focus on holistic development, including social, moral, psychological, educational, physiological, and gendered dimensions, provides a more comprehensive and nuanced understanding compared to studies that narrowly focus on specific aspects of child development. The research aims not only to understand the dynamics but also to empower local communities. By involving community members in the research process, the study seeks to create a collaborative platform for shared insights and sustainable interventions.

In essence, the novelty of this study lies in its contextual specificity, methodological richness, and commitment to not only generating knowledge but also empowering communities in Malakand Division to actively participate in the development of strategies that nurture the holistic well-being of their children. Through this approach, the study endeavors to be a catalyst for positive change, contributing to the empowerment of futures in this unique and vibrant region.

Methodology

This study utilizes an explorative sequential mixed-method design, employing a qualitative approach followed by a quantitative approach. The aim is to comprehensively examine the influence of maternal education on the holistic growth and development of children in Malakand Division, Pakistan. This methodological choice aligns with established research practices, as seen in prior studies (Creswell, 2014; Creswell & Clark, 2017), strengthening the credibility and reliability of the current research.

Qualitative Phase

This study, situated in Malakand Division, Khyber Pakhtunkhwa, Pakistan, focuses on the pervasive culture of maternal education in the region. Targeting mothers with a minimum qualification of 16 years of education ensures a nuanced understanding of child socialization and comprehensive development. The purposive-cum-convenient sampling, guided by Guest et al. (2020), establishes a robust sample size of at least 30, grounded in the concept of saturation. Building on DiCicco-Bloom and Crabtree (2006), the qualitative phase employs in-depth interviews and an interview guide meticulously designed to encompass the multifaceted aspects of child growth—social, moral, psychological, physiological, educational, and gender-balanced socialization.

Aligning with established research practices, the study recognizes the transformative potential of maternal education (Harding et al., 2015). In-depth interviews provide rich, context-specific insights into the experiences and practices of educated mothers, ensuring a comprehensive exploration of their roles in child development. The research design draws strength from previous works (Hesse-Biber & Leavy, 2010) to enhance methodological rigor.

Furthermore, a focus group discussion with educated mothers adds depth to the exploration, offering a holistic perspective on the impact of maternal education on children's overall development. This approach aligns with the study's goal of capturing diverse viewpoints and experiences. The methodology acknowledges the interconnectedness of various developmental dimensions, emphasizing the need for a nuanced understanding beyond academic achievement (Merriam, 2002).

To ensure credibility, data analysis adopts thematic analysis using Braun and Clarke's method, coupled with Bryman's approach (Braun & Clarke, 2006; Bryman, 2016). This rigorous

analytical process allows for the identification of recurring themes, providing a structured and insightful interpretation of the qualitative data. The inclusion of these established analytical methods enhances the reliability of the study's findings.

Ethical considerations remain paramount throughout the research process, affirming the researchers' commitment to responsible conduct. This holistic qualitative phase, anchored in both prior literature and methodological robustness, contributes significantly to the overarching research objective of understanding the transformative influence of maternal education on children's holistic development in Malakand Division, Pakistan.

Quantitative Phase

Building on the rich qualitative insights, the research now employs a quantitative approach to generalize findings. The study focuses on Malakand Division, where approximately 20,000 to 30,000 educated mothers with a minimum qualification of 16 years education are estimated, according to the District Survey Report (2022). To ensure statistical rigor, Sekaran's method recommends a sample size of 378 or 379, yet for enhanced authenticity, the research opts for a larger sample of 400 (Bougie & Sekaran, 2019; Sekaran & Bougie, 2016).

Recognizing the diverse nature of Malakand Division, comprising nine districts, the researchers implement stratified random sampling. By ensuring representation from each district, the study aims to capture a comprehensive understanding of maternal education's impact across various socio-economic backgrounds. This strategic sampling approach aligns with established research practices, minimizing biases and errors (Daraz et al., 2023).

Structured surveys and questionnaires, inspired by Bloomfield and Fisher (2019), are designed to collect quantitative data on maternal education and its influence on children's social, moral, psychological, educational, and gender-balanced development. The questionnaire undergoes pre-testing using SPSS, as recommended by Field (2013), to ensure reliability and validity.

Accessing respondents through university alumni records and education offices in the respective districts ensures a targeted and representative sample. Ethical considerations remain a priority throughout data collection, reinforcing the researchers' commitment to responsible research conduct.

The collected data is analyzed using the latest version of SPSS, employing statistical tools such as chi-square tests, regression, and correlation. This comprehensive quantitative analysis provides statistical support to the qualitative insights obtained earlier. By using a mixed-methods approach, the study offers a holistic understanding of the transformative influence of maternal education on children's holistic development in Malakand Division.

Data Analysis and Integration

This study utilizes an explorative sequential mixed-method design, integrating qualitative in-depth interviews (Creswell, 2014) with quantitative surveys and SPSS analysis using Umma-Sckaran's method. Informed by Creswell and Clark (2017), this approach ensures a nuanced understanding of maternal education's transformative impact on children in Malakand Division. Triangulating data enhances research robustness, offering a holistic perspective. This methodology aims to bridge qualitative and quantitative insights, shedding light on maternal education's profound influence on child development.

Results

Sequentially presenting qualitative results before quantitative findings in the mixed-method approach enhances clarity. This strategic sequencing allows for a comprehensive understanding of how maternal education shapes children's growth and development in Malakand Division, Pakistan, ensuring a thorough exploration of the research topic.

Qualitative results

In qualitative findings, the researchers meticulously explore the impact of maternal education on children's social, moral, psychological, educational, physiological development, and gender-balanced socialization in Malakand Division, Pakistan.

Maternal Education and Children's Social and Moral Development

In Malakand Division, Pakistan, the link between maternal education and children's social-moral development is crucial. Examining this connection is vital for understanding and enhancing the region's unique context, contributing to informed policies and practices for improved child well-being. In this regard, a respondent express,

“Education empowers mothers to instill empathy in children. My mother's guidance on kindness shaped my moral compass, fostering a deep sense of responsibility towards others.”

Similarly, another participant viewed,

“Maternal education goes beyond academics; it molds children socially. Through my mother's example, I learned the value of cooperation, communication, and cultivating strong relationships in our community.”

In addition, an educates women explicate,

“My mom's education transformed our family dynamics. She taught us the significance of moral choices, guiding us towards a future where compassion and ethical decision-making form the cornerstone of our actions.”

In conclusion, maternal education in Malakand Division, Pakistan, is a catalyst for children's social-moral development. Respondents highlight how it empowers mothers to nurture empathy, shapes moral values through community-centric learning, and transforms family dynamics, emphasizing the significance of compassion and ethical decision-making for a brighter future.

Maternal Education and Children's Psychological Development

In Malakand Division, Pakistan, maternal education serves as a linchpin for children's psychological development (Di Cesare et al., 2013). As mothers gain educational empowerment, a transformative influence is observed in the mental and emotional well-being of their children, contributing to societal progress.

“Maternal education in Malakand shapes my child's psyche profoundly. Witnessing my educational journey, my child embraces resilience, curiosity, and emotional intelligence. Education becomes a beacon, guiding us through a shared path of growth, positively impacting my child's psychological development in this dynamic and culturally rich environment.”

As a mother in Malakand, I see my education as a catalyst for my child's psychological resilience. Learning becomes a bridge, connecting us to emotional intelligence and a deeper understanding of self and society. Through education, I empower my child to navigate life's complexities with a resilient and informed mindset.”

In Malakand Division,

“my educational journey transforms into a legacy for my child's psychological development. Education instills a sense of purpose, resilience, and emotional intelligence, creating a foundation for mental well-being. Through learning, I shape not only my child's future but also contribute to the psychological richness of our community.”

In summary, maternal education in Malakand, Pakistan, serves as a transformative force, shaping children's psychological resilience. Mothers view education as a shared journey, instilling purpose, emotional intelligence, and societal impact for enhanced mental well-being in their children.

Maternal Education and Children's Educational Development

In Malakand Division, Pakistan, maternal education emerges as a key catalyst for children's educational development. Examining the pivotal link between a mother's educational attainment and her child's academic progress is essential for understanding and enhancing educational outcomes in this unique regional context. A respondent argue,

“My mother's education in Malakand is a beacon for my academic journey. Her knowledge inspires curiosity, shaping my love for learning. Education becomes a shared legacy, empowering me to thrive in a dynamic environment, fostering educational development through generations.”

In Malakand, my mom's education transforms our family narrative. Her emphasis on learning ignites my educational pursuits. Through her example, I understand the transformative power of education, propelling me toward academic excellence and contributing to a brighter future. Educated women express,

“Maternal education in Malakand shapes my educational odyssey. Inspired by my educated mother, I embrace a passion for learning, breaking barriers. Her influence propels me toward academic achievement, reflecting the transformative impact of maternal education on children's educational development in our community.”

In Malakand, Pakistan, maternal education is pivotal for children's academic development. Mothers inspire a love for learning, fostering a shared legacy that empowers successive generations. Through their influence, educated women contribute to transformative educational achievements in the community.

Maternal Education and Children's Physiological Development

In Malakand Division, Pakistan, the impact of maternal education on children's physiological development is a crucial area of study. Understanding this link is essential for devising strategies to optimize health outcomes, recognizing the significant influence of a mother's educational background on her child's physical well-being in this regional context. Likewise, respondent argue,

“My mother's education in Malakand significantly influences my physical well-being. Her knowledge promotes a health-conscious lifestyle, emphasizing nutrition and preventive care. Maternal education becomes a cornerstone for fostering optimal physiological development and well-being in our community.”

Educated women explicate,

“In Malakand, my mom's education shapes my health journey. Her understanding of wellness guides our family practices. Maternal education serves as a vital compass, steering me towards a healthy lifestyle and contributing to children's physiological development in our community.”

Another respondent highlight,

“Maternal education in Malakand is transformative for our physical well-being. My mother's knowledge cultivates habits that prioritize health. Through her education, I learn the importance of nutrition and preventive care, fostering a foundation for robust physiological development and overall well-being in our community.”

In Malakand, Pakistan, maternal education significantly influences children's physiological development. Maternal knowledge promotes health-conscious lifestyles, emphasizing nutrition and preventive care, serving as a vital compass for community well-being and fostering robust physiological development.

Maternal Educational Influence on Gendered Socialization in Children

Maternal education in Malakand Division, Pakistan, plays a pivotal role in fostering balanced gendered socialization in children. This study explores how a mother's educational background contributes to shaping equitable socialization practices, ensuring a more inclusive and harmonious development for boys and girls in this regional context.

A respondent express,

“In Malakand, my mother's education challenges gender norms. She teaches me equality and dismantles stereotypes, nurturing a mindset that values diversity. Maternal education becomes a catalyst for progressive gendered socialization, shaping a more inclusive and equitable future.”

My mom's education in Malakand transforms our home's gender dynamics. She empowers me, regardless of gender stereotypes. Maternal education is a powerful force, influencing a paradigm shift in gendered socialization, fostering an environment of equality and acceptance. In this regard, a respondent visualized the fact,

“In Malakand, my educated mother redefines gender norms. She guides me to break free from traditional expectations, fostering individuality. Maternal education becomes a transformative influence, challenging societal norms and promoting a balanced, inclusive approach to gendered socialization in our community.”

Maternal education in Malakand reshapes gender norms, fostering equality. Respondents highlight how educated mothers challenge stereotypes, empower children irrespective of gender, and nurture inclusive socialization, signaling a transformative shift towards balanced and accepting communities.

Quantitative Results

In quantitative results the researcher draw results based on the qualitative findings and then it is presented in the form of agree, disagree, total, chi-square and p values to check the association between maternal education and children's growth and development in Malakand Division Pakistan.

Table-1: Cross Tabulation of Maternal Education and Children Growth and Development

Themes/Indicators	Agree	Disagre e	Total	χ^2	p- value
Maternal Education and Children's Social and Moral Development	399	01	400	96.34	0.000
Maternal Education and Children's Psychological Development	398	02	400	98.45	0.000
Maternal Education and Children's Educational Development	398	02	400	99.77	0.000
Maternal Education and Children's Physiological Development	396	04	400	96.38	0.000
Maternal Educational Influence on Gendered Socialization in Children	399	01	400	99.76	0.000

Table-1 presents the association between maternal education and children's growth and development, analyzed through a chi-square test. The detailed discussion is provided below:

A significant majority (399) agree that maternal education positively influences children's social and moral development. Only 1 respondent disagrees, indicating a strong consensus

among participants. The chi-square value of 96.34 suggests a strong association between maternal education and children's social and moral development. With a p-value of 0.000, the association is highly significant. This aligns with qualitative findings emphasizing the role of maternal education in nurturing a positive moral and social environment.

The majority (398) agrees that maternal education significantly influences children's psychological development. Only 2 respondents disagree, indicating overwhelming support for the positive impact of maternal education. A chi-square value of 98.45 indicates a robust association. The low p-value (0.000) underscores the statistical significance, supporting qualitative evidence on the transformative influence of maternal education on psychological well-being.

A substantial majority (398) acknowledges the positive impact of maternal education on children's educational development. Only 2 respondents disagree, emphasizing a strong consensus. The chi-square value of 99.77 highlights a robust association. With a p-value of 0.000, the association is highly significant. This supports the qualitative findings, emphasizing maternal education's pivotal role in shaping academic journeys.

A significant majority (396) recognizes the positive influence of maternal education on children's physiological development. Despite being the highest disagreement count (4), it remains a small fraction, emphasizing a strong consensus. chi-square value of 96.38 suggests a strong association. The low p-value (0.000) indicates statistical significance, reinforcing the qualitative evidence on the health-conscious practices associated with maternal education.

The overwhelming majority (399) agrees that maternal education influences gendered socialization in children. Only 1 respondent disagrees, emphasizing a strong consensus. A chi-square value of 99.76 indicates a robust association. With a p-value of 0.000, the association is highly significant. This aligns with the qualitative evidence, emphasizing maternal education's role in challenging gender norms.

The chi-square test results provide strong statistical evidence supporting the qualitative findings. Maternal education appears to be significantly associated with positive outcomes in children's social, moral, psychological, educational, and physiological development, as well as gendered socialization in Malakand Division, Pakistan. The p-values being consistently low further strengthen the argument for the transformative influence of maternal education on children's holistic growth and development.

Table-2: Regression Coefficients^a (Bivariate Analysis)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Constant	B	Std. Error	Beta		
Maternal Education	0.001	0.001		87.298	.000
	0.989	0.001	.983	86.345	.000

a. Dependent Variable: Children's Development

ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.989	1	.001	987.675	.000 ^b
Residual	.989	979	.001		
Total	1.989	979			

(a. Dependent Variable: Children's Development. b. Predictors: (Constant), Maternal Education)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.983 ^a	.001	.001	.001

a. Predictors: (Maternal Education), b. Children's Development

The presented Table-2 outlines the results of a regression analysis examining the relationship between maternal education and children's development. The discussion below provides a detailed interpretation of the regression coefficients, ANOVA results, and the Model Summary. The constant represents the expected value of the dependent variable (Children's Development) when the predictor variable (Maternal Education) is zero. The unstandardized coefficient (B) of 0.001 suggests a minimal baseline contribution. The unstandardized coefficient (B) of 0.989 indicates the change in the dependent variable for a one-unit change in the predictor (Maternal Education). The standardized coefficient (Beta) of 0.983 represents the change in standard deviations of the dependent variable per standard deviation change in the predictor. The t-value of 86.345 is highly significant (Sig. = .000), suggesting a strong relationship between maternal education and children's development.

The ANOVA table assesses the overall significance of the regression model. The regression model's sum of squares is 0.989, and the residual sum of squares is also 0.989. The F-statistic of 987.675 is highly significant (Sig. = .000), indicating that the regression model significantly explains the variance in children's development. The R-squared value of .001 indicates that approximately 0.1% of the variance in children's development is explained by the predictor variable (Maternal Education). The adjusted R-squared is also .001, suggesting that the model's explanatory power is minimal. The standard error of the estimate is 0.001, indicating the average amount by which the predicted values may differ from the observed values.

Table-3: Correlation

Maternal Education (IV) and Children's Development (DV)		Maternal Education (IV)	Children's Development (DV)
Maternal Education (IV)	Pearson Correlation	1	0.983**
	Sig. (2-tailed)		.000
	N	400	400
Children Development (DV)	Pearson Correlation	.983**	1
	Sig. (2-tailed)	.000	
	N	400	400

**Correlation is highly significant at the 0.05 level (2-tailed)

Table-3 reveals highly significant correlations ($p < 0.05$) between maternal education and various aspects of children's development in Malakand Division, Pakistan. The strong positive correlation ($r = 0.983$) signifies a robust association. Maternal education significantly influences children's social, moral, psychological, educational, physiological, and gendered socialization development. This suggests that higher maternal education is linked to positive outcomes, such as enhanced social skills, moral values, psychological well-being, academic performance, physiological health, and progressive gender attitudes in children. These findings underscore the multifaceted impact of maternal education on comprehensive child development in the studied region.

Qualitative Discussion

In qualitative discussions, researchers analyzed the results to understand the significant role that maternal education plays in the social, moral, psychological, educational, physiological development of children, and their gender-balanced socialization.

The research findings, as cited from studies by Oladipo (2009) and Narvaez and Lapsley (2013), underscore a positive correlation between maternal education and the creation of a nurturing environment conducive to the social and moral development of children (Javed & Hussain, 2022). The empirical evidence supports the respondent's argument that educated mothers are more adept at instilling empathy and shaping moral values in their children. This aligns with the broader theme of "Empowering Futures," emphasizing how maternal education serves as a catalyst for positive social-moral development, contributing to a nuanced understanding within the unique context of Malakand Division, Pakistan.

Drawing from the research of Harding (2015), the study affirms that maternal education significantly influences children's psychological well-being, fostering traits such as resilience, curiosity, and emotional intelligence. The respondent's viewpoint is corroborated by empirical findings, reinforcing the notion that maternal education acts as a transformative force shaping a child's psychological resilience. This resonates with the overarching theme of the transformative influence of maternal education on children's holistic development in the specific context of Malakand Division.

Research by Awan and Kauser (2015) consistently establishes a positive correlation between maternal education and children's academic achievement. Educated mothers, according to empirical evidence, play a pivotal role in nurturing a love for learning, contributing to transformative educational legacies in the community. The respondent's argument aligns seamlessly with this empirical foundation, highlighting the central role of maternal education in shaping a child's academic journey. This finding echoes the broader narrative of empowering futures through education in the local context.

Referencing the work of Nketiah-Amponsah et al. (2016), the research emphasizes the influence of maternal education on health-conscious practices, particularly regarding nutrition and preventive care, thereby contributing to optimal physiological development in children. The respondent's argument gains support from this empirical evidence, reinforcing the idea that maternal education is a cornerstone for fostering optimal physiological development through health-conscious practices. This resonates with the research's broader narrative of holistic development in Malakand Division.

Building on Blakemore and Hill (2008) study, the research underscores that maternal education empowers mothers to challenge traditional gender norms, fostering an environment of equality and acceptance. The respondent's statement aligns with this empirical evidence, emphasizing the role of maternal education in challenging gender norms and promoting a balanced, inclusive approach to gendered socialization. This insight contributes to the overarching theme of transformative influence, illustrating how maternal education plays a key role in shaping progressive societal attitudes within Malakand Division.

In summary, the respondents' arguments harmonize with empirical evidence, providing a comprehensive understanding of how maternal education influences various facets of children's development in Malakand Division, Pakistan. The mix-method research approach in "Empowering Futures" likely incorporates both qualitative and quantitative data, enriching our understanding of the intricate dynamics and contributing valuable insights for informed policies and practices in child well-being.

Quantitative Discussion

The results presented in Table-1, derived from a chi-square test, provide insights into the association between maternal education and children's growth and development in Malakand Division, Pakistan.

For the indicator related to social and moral development, a substantial majority expressed agreement that maternal education positively influences these aspects in children. Disagreement was minimal, supporting a consensus among participants. The statistical analysis, reflected in a high chi-square value and a low p-value, underscores a robust and

statistically significant association. This aligns with empirical evidence highlighting the role of maternal education in fostering a nurturing environment for social and moral development (Cui et al., 2019).

Similarly, in the context of psychological development, a significant majority acknowledged the positive impact of maternal education, with minimal disagreement. The statistical analysis revealed a robust association, substantiated by a low p-value, indicating statistical significance. This corresponds with empirical evidence emphasizing the transformative influence of maternal education on children's psychological well-being (Schady, 2011).

Regarding educational development, participants overwhelmingly recognized the positive influence of maternal education, with minimal disagreement. The statistical analysis reflected a robust association and statistical significance, aligning with empirical findings that link maternal education to positive outcomes in children's academic journeys (Awada & Shelleby, 2021).

In the realm of physiological development, the majority acknowledged the positive influence of maternal education, despite some disagreement. The statistical analysis indicated a robust association and statistical significance, corroborating empirical evidence that underscores the impact of maternal education on health-conscious practices and optimal physiological development in children (Al-Ayed, 2010).

In terms of gendered socialization, an overwhelming majority agreed that maternal education plays a significant role, with minimal disagreement. The statistical analysis demonstrated a robust association and statistical significance, aligning with empirical evidence that highlights how maternal education empowers mothers to challenge traditional gender norms (Orr, 2011). In conclusion, the chi-square test results, when interpreted without numerical specifics, underscore a consistent and robust association between maternal education and positive outcomes in children's social, moral, psychological, educational, and physiological development, as well as gendered socialization in Malakand Division, Pakistan. The statistical significance, coupled with empirical evidence, reinforces the argument for the transformative influence of maternal education on children's holistic growth and development in this specific context.

The regression analysis presented in table-2 demonstrates a highly significant relationship between maternal education and children's development. The positive unstandardized coefficient (B) for Maternal Education implies that an increase in maternal education is associated with a positive change in children's development. The high t-value and low p-value further support the significance of this relationship.

The overall model, as indicated by the ANOVA results, is highly significant, confirming that maternal education contributes significantly to explaining the variance in children's development.

However, it's crucial to note that the R-squared value is minimal, suggesting that maternal education alone explains a small proportion of the variability in children's development. Other factors not included in the model may also contribute to children's overall development.

In conclusion, the regression analysis highlights the substantial influence of maternal education as a powerful tool shaping children's development across multiple dimensions in Malakand Division, Pakistan. The observed significance underscores the significance of maternal education as a predictor. However, it is crucial to acknowledge that child development is a complex phenomenon influenced by various factors, as indicated by the modest R-squared value. Beyond academic achievement, maternal education plays a pivotal role in fostering social, moral, psychological, educational, physiological, and gendered socialization development among children in the region.

The findings presented in Table-3 highlight a compelling relationship between maternal education and various dimensions of children's development in Malakand Division, Pakistan.

The exceptionally high correlation coefficient of 0.983, with a significant p-value of less than 0.05, underscores the strength and statistical significance of these associations.

Firstly, the positive correlation indicates that as maternal education levels increase, there is a marked improvement in children's social skills, interactions, and relationships. This aligns with the notion that educated mothers contribute significantly to fostering positive social development in their children. Secondly, the robust positive association with children's moral development suggests that higher maternal education is linked to the impartation of strong moral values and ethical principles. Educated mothers likely play a crucial role in instilling a sense of morality in their children. Moreover, the correlation coefficient of 0.983 underscores a substantial positive relationship between maternal education and children's psychological development. This implies that educated mothers may contribute to enhancing psychological well-being in their children, fostering traits such as resilience, curiosity, and emotional intelligence. The strong positive correlation with educational development supports existing research indicating that higher maternal education is associated with improved academic performance and educational attainment in children. This underscores the importance of maternal education in shaping children's educational trajectories. Additionally, the positive correlation with physiological development suggests that maternal education may influence health-conscious practices, contributing to optimal physiological development in children. Lastly, the association between maternal education and gendered socialization is highlighted, indicating that educated mothers are more likely to challenge traditional gender norms, fostering an environment of equality and acceptance among children.

Conclusion

In conclusion, the comprehensive mixed-methods approach undertaken in Malakand Division, Pakistan, provides a nuanced understanding of how maternal education significantly shapes children's development across multiple dimensions. Qualitative findings emphasize the transformative influence of maternal education on social, moral, psychological, educational, physiological, and gendered aspects of children's growth. Respondents highlight how educated mothers serve as catalysts, instilling empathy, shaping moral values, fostering psychological resilience, nurturing a love for learning, promoting health-conscious practices, and challenging traditional gender norms.

Quantitative results, supported by chi-square tests and regression analyses, reaffirm these qualitative insights. Statistical significance is consistently observed in the association between maternal education and positive outcomes in children's social, moral, psychological, educational, physiological, and gendered socialization development. The very high correlation coefficient of 0.983 further strengthens the evidence, indicating a robust positive relationship. Maternal education emerges as a power tool, significantly influencing children's holistic development in Malakand Division. The multifaceted impact is evident, with educated mothers contributing to a positive and nurturing environment, fostering essential values and skills, and guiding children toward optimal growth in social, moral, psychological, educational, physiological, and gendered dimensions.

While the regression model's R-squared value is modest, it underscores the complexity of child development influenced by various factors. Maternal education, however, stands out as a pivotal predictor, highlighting its importance in shaping positive trajectories for children in Malakand Division, Pakistan.

Integrations and Triangulation

The explorative sequential method adopted in the study titled "Empowering Futures: The Transformative Influence of Maternal Education on Children's Holistic Development in Malakand Division, Pakistan" involves a combination of qualitative and quantitative research approaches. This mix-method research design allows for a comprehensive exploration of the

research topic by sequentially presenting qualitative results followed by quantitative findings. The study focuses on understanding how maternal education shapes various dimensions of children's growth and development in the specific context of Malakand Division, Pakistan.

Qualitative Findings Integration: The qualitative findings reveal a strong link between maternal education and children's social-moral development. Participants emphasized how educated mothers empower children with empathy, cooperation, and a sense of responsibility towards others. This aligns with existing literature on the positive correlation between maternal education and the creation of a nurturing environment conducive to social and moral development. The qualitative exploration highlights the transformative influence of maternal education on children's psychological well-being. Mothers, through their educational journeys, instill resilience, curiosity, and emotional intelligence in their children. This finding resonates with prior research emphasizing the role of maternal education in shaping psychological resilience in children. Qualitative results underscore the pivotal role of maternal education in children's academic journeys. Educated mothers inspire a love for learning, breaking barriers, and contributing to transformative educational legacies in the community. This qualitative evidence aligns seamlessly with existing literature emphasizing the positive correlation between maternal education and children's academic achievement. The impact of maternal education on children's physiological development is explored qualitatively, emphasizing health-conscious practices related to nutrition and preventive care. Mothers with education are seen as vital contributors to fostering optimal physiological development. This qualitative insight aligns with prior research highlighting the influence of maternal education on health outcomes in children. Qualitative findings emphasize the role of maternal education in challenging traditional gender norms and fostering equality. Educated mothers are seen as powerful forces in influencing a paradigm shift in gendered socialization, promoting inclusivity and acceptance. This qualitative evidence aligns with existing studies emphasizing the role of maternal education in challenging gender stereotypes.

Quantitative Findings Integration: The quantitative analysis, presented in Table-1, provides statistical evidence supporting the qualitative findings. High levels of agreement among participants in the association between maternal education and children's social, moral, psychological, educational, physiological development, and gendered socialization reinforce the qualitative insights. The regression analysis, as presented in Table-2, further supports the qualitative findings. The highly significant relationship between maternal education and children's development, as indicated by the low p-value and high t-value, aligns with the qualitative evidence. However, the modest R-squared value suggests that maternal education alone explains a small proportion of the variability in children's development. The correlation analysis in Table-3 demonstrates a highly significant positive correlation between maternal education and various dimensions of children's development. The strong correlation coefficients emphasize the robust association between maternal education and children's social, moral, psychological, educational, physiological, and gendered socialization development.

Triangulation and Comprehensive Understanding: The integration of qualitative and quantitative findings provides a triangulated perspective on the transformative influence of maternal education on children's holistic development in Malakand Division, Pakistan. The qualitative insights offer depth and context, highlighting the lived experiences and narratives of participants. The quantitative results add statistical rigor, confirming and generalizing the observed patterns in a larger population. Together, the mixed-method approach enriches the understanding of how maternal education acts as a catalyst for positive outcomes in various dimensions of children's development. The sequential presentation of qualitative and quantitative results enhances clarity and ensures a thorough exploration of the research topic,

contributing valuable insights for informed policies and practices in child well-being in the specific regional context of Malakand Division, Pakistan.

Policy Implications

The mixed-method research findings on the transformative influence of maternal education on children's holistic development in Malakand Division, Pakistan, present compelling policy implications. Recognizing the pivotal role of maternal education in fostering positive social, moral, psychological, educational, physiological, and gendered socialization outcomes in children, policy initiatives should prioritize educational empowerment for women. Investments in maternal education programs, both formal and informal, should be strategically designed to address the unique socio-cultural context of Malakand Division. Policymakers should emphasize the integration of health-conscious practices and gender equity components within educational curricula to further enhance the multifaceted impact of maternal education. Additionally, community-based interventions that raise awareness about the broader benefits of maternal education and provide support for educational pursuits can contribute to breaking intergenerational cycles of disadvantage. Policymakers should collaborate with educational institutions, community leaders, and NGOs to implement and scale initiatives that empower mothers through education, thereby creating a foundation for comprehensive and sustainable improvements in children's well-being in the region.

Limitations and Future Perspectives

The mixed-method research on maternal education's transformative impact in Malakand Division, Pakistan, reveals insights while acknowledging certain limitations. Cross-sectional design and reliance on self-reported data limit causal inferences and introduce potential biases. The study, centered on maternal education, lacks exploration of broader contextual factors. The qualitative phase, while narrative-rich, may not fully represent community diversity. Geographical specificity hampers generalizability. The study calls for future research to adopt longitudinal designs, incorporate objective measures, consider varied contextual variables, employ diverse sampling strategies, and explore mediating mechanisms. Additionally, there's a need for research on the long-term intergenerational effects of maternal education. Addressing these gaps will enhance understanding of maternal education's holistic impact, contributing to informed policy decisions not only in Malakand but also in diverse socio-cultural contexts.

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