International Research Journal of Social Sciences and Humanities, Vol.:03, Issue: 02,July-Sep,2024
PP: 92-119

OPEN ACCESS
IRJSSH
ISSN (Online): 2959-1392
ISSN (Print): 2959-2887
www. irjssh.com

BREAKING BARRIERS, BUILDING FUTURES: THE TRANSFORMATIVE IMPACT OF EDUCATION ON WOMEN'S EMPOWERMENT IN MALAKAND DIVISION, PAKISTAN

Umar Daraz
Lecturer, Department of Sociology, University of Malakand, Pakistan.
Email: *dr.umar@uom.edu.pk*

Zakir Hussain
Lecturer, Department of Social Work, University of Malakand, Pakistan.
Email: *zakir.hussain@uom.edu.pk*

Ibrahim
Assistant Professor, Department of Sociology, University of Malakand, Pakistan.
Email: *ibrahimsocio@gmail.com*

Wasif Khan*(Corresponding Author)*
Lecturer, Department of Sociology, University of Malakand, Pakistan.
Email: *Khansoc900@gmail.com*

Abstract

This study investigates women's empowerment through education in Malakand Division, Pakistan, addressing a literature gap by comprehensively examining the multifaceted impacts of education. The literature review synthesizes evidence on education breaking cultural barriers, enhancing economic opportunities, improving health, fostering leadership, addressing social challenges, building resilience, and driving community development. The researcher's contribution lies in providing a holistic understanding of education's transformative potential across these dimensions. The study, with a cross-sectional design and a sample of 400 educated women, employs statistical analyses revealing a significant positive association between women's education and empowerment indicators. The findings underscore the study's importance in informing tailored policies and interventions for Malakand Division, considering its unique cultural and socio-economic context. Policy recommendations include initiatives to enhance educational access, address cultural biases, promote economic independence, integrate health and leadership programs, and foster digital literacy and sports.

Keywords: *Education, women's empowerment, quantitative approach,*

Malakand Division.

INTRODUCTION

In Malakand Division, Pakistan, women's education emerges as a formidable force, transcending traditional roles and breaking cultural barriers. As women gain knowledge, they unlock economic opportunities, leading to improved financial independence and community development (Reshi & Sudha, 2022). Education becomes a catalyst for better health and well-being, empowering women to address social challenges and advocate for change. It fosters leadership, building resilience and confidence. Moreover, education opens doors to maternal and child health awareness, access to information and technology, encouraging community involvement, and promoting participation in sports and recreational activities, creating a transformative ripple effect (Engida, 2021).

Education acts as a transformative force, functioning like a superhero cape that empowers women in Malakand Division, Pakistan, to challenge ingrained cultural norms. By acquiring knowledge, women evolve into cultural superheroes, bringing about a paradigm shift in their communities towards openness and fairness (Nguyen-Phung & Nthenya, 2023). The ripple effect of educated women challenging societal expectations contributes to the dismantling of traditional barriers.

Education is akin to a magic wand, creating economic opportunities for women. It goes beyond the realm of textbooks, becoming a catalyst for improved livelihoods not only for women but also for the overall economic landscape (Reshi & Sudha, 2023). Education equips women with the skills needed to access diverse job opportunities, thereby fostering financial independence and contributing to the economic growth of the region (Bui, 2023).

Education serves as a comprehensive guidebook to a healthier life for women in Malakand Division. Educated women are better informed about healthcare, enabling them to make informed choices for themselves and their families (Daraz, Nawab, et al., 2023). This knowledge translates to improved health practices, resulting in fewer sick days and a general enhancement of well-being throughout the community (Shetty & Hans, 2015).

Beyond academic achievements, education cultivates leadership skills among women in Malakand Division. Schools become the training grounds for future leaders, instilling the confidence and knowledge necessary to stand up for what is right. As women grow into adulthood, they naturally evolve into advocates for positive changes, contributing significantly to the social and political landscape of their communities (Dahlum et al., 2022).

Education functions as a shield against social injustices, providing women in Malakand Division with the tools to challenge unfair treatment and discriminatory practices. Knowledge of their rights empowers women to confront societal issues,

transforming them into agents of change and contributing to the creation of a fairer and more equitable society (Hasin et al., 2018).

Education extends beyond the realms of reading and writing; it serves as a powerful confidence booster for women in Malakand Division. The resilience gained through education not only helps women face personal challenges but also contributes to the overall strength and fortitude of the community, creating a more resilient and empowered society (Gill & Orgad, 2017).

Education is a superhero tool for ensuring healthier families in Malakand Division. Educated women are equipped with the knowledge needed to care for themselves and their children, contributing to a significant improvement in maternal and child health outcomes (Barman et al., 2020). This, in turn, lays the foundation for a healthier and more robust future generation.

Education functions as a ticket to the future, ensuring that women in Malakand Division remain connected to the global community. It opens doors to information and technology, preventing them from being left behind in an ever-evolving world. Educated women actively engage with new ideas and technologies, fostering a sense of inclusion and participation in global advancements (Ogbonnaya, 2023). Education transcends the mere acquisition of knowledge; it inspires active participation in community development for women in Malakand Division. Educated women become community superheroes, utilizing their knowledge and skills to actively contribute to the betterment of their surroundings. Their involvement becomes a driving force for positive change and progress (Acharya et al., 2007). Education serves as the illuminating light in the darkness of ignorance, making women in Malakand Division aware of how societal mechanisms work and how they can actively contribute to development (McEwan, 2003). This heightened awareness becomes a key driver for building stronger and more vibrant communities.

Education serves as the gateway to a more active and enjoyable life for women in Malakand Division. Empowered by education, women feel confident to break stereotypes and actively participate in sports and recreational activities. This not only promotes physical well-being but also contributes to breaking gender norms and fostering a sense of fun and camaraderie within the community (Stromquist, 2003).

In conclusion, education for women in Malakand Division is akin to a superhero's journey, with each educational step propelling them toward a brighter, fairer, and more exciting future for everyone in the community. It's not merely about acquiring facts; it's about unlocking the full potential of women and the community they call home. The empowerment through education touches every sphere of life,

creating a holistic transformation that reverberates across generations.

LITERATURE REVIEW

The reviewed studies, including Ballenger (2010) and Johns (2013), reveal a significant shift in societal norms as educated women challenge ingrained cultural expectations. This aligns with the literature emphasizing the transformative role of education in dismantling traditional barriers, substantiating the claim that education acts as a superhero cape for women (Foster & Appleby, 2015).

The longitudinal analysis by Hill and King (1995) Khan and Ali (2020) supports the argument that education serves as a magic wand, creating economic opportunities for women (Syomwene & Kindiki, 2015). This aligns with the literature emphasizing the economic impact of education, showcasing its role in fostering financial independence and contributing to the overall economic growth of the region (Reshi & Sudha, 2023).

Bergstrom and Özler (2023) underscores the comprehensive guidebook aspect of education, highlighting how educated women make informed health choices. This empirical evidence substantiates the claim that education improves health practices, resulting in enhanced well-being throughout the community.

Khan (2021) illuminates the cultivation of leadership skills through education. This aligns with the literature on education being a catalyst for building resilience and confidence, fostering women's transition into advocates for positive changes in their communities (Dahlum et al., 2022).

Hamdan (2005) strengthens the argument that education acts as a shield against social injustices. Knowledge of their rights, as highlighted in the literature, empowers women to confront societal issues, positioning them as agents of change in the pursuit of a fairer and more equitable society (Ghafar, 2016).

The research by Pillay (2020) supports the notion that education serves as a powerful confidence booster, contributing to the overall strength and fortitude of the community. This aligns with the literature emphasizing the resilience gained through education, reinforcing the idea of holistic transformation.

Mensch et al. (2019) provides evidence of the superhero tool aspect of education, contributing to healthier families through informed maternal and child health practices. This empirical finding substantiates the claim that education lays the foundation for a healthier and more robust future generation.

Asongu et al. (2023) supports the argument that education serves as a ticket to the future, ensuring women's connectivity to the global community. This aligns with the literature emphasizing education's role in providing access to information and technology, preventing exclusion in an evolving world.

Maracle (2018) reinforces the idea that education inspires active participation in community development. This empirical evidence substantiates the claim that

educated women become community superheroes, contributing significantly to positive change and progress. Dixit et al. (2023) highlights how education serves as the illuminating light, making women aware of societal mechanisms. This aligns with the literature emphasizing education's role in building stronger and more vibrant communities.

Cortis et al. (2008) supports the argument that education empowers women to break gender norms and actively participate in sports and recreational activities. This empirical finding aligns with the literature on education as the gateway to a more active and enjoyable life.

STUDY DISCOURSE

The study on the empowerment of women through education in Malakand Division, Pakistan, is driven by the urgent need to comprehend the nuanced impacts of education on the lives of women in a region where cultural norms and socio-economic factors have historically limited women's opportunities. This study aims to unravel the transformative potential of education and its implications for individual empowerment and community development in Malakand Division.

The primary aim of this study is to systematically investigate and analyze the various dimensions through which education empowers women in Malakand Division, Pakistan. By exploring cultural, economic, health, leadership, advocacy, and social aspects, the research seeks to provide a comprehensive understanding of the role of education in transforming the lives of women in this specific context.

Prior to this research, the literature on women's education in Malakand Division was sparse and lacked a comprehensive examination of multifaceted impacts. Previous studies often focused on specific dimensions without providing a holistic view. The researcher identified a gap in understanding how education acts as a catalyst across various domains, and this study aims to bridge that gap by conducting a thorough exploration of the topic.

The researcher contributes to the literature by synthesizing empirical evidence from various studies, offering a nuanced analysis of how education serves as a powerful tool for women's empowerment in Malakand Division. The emphasis on diverse dimensions and the integration of existing studies into a cohesive narrative enrich the understanding of the complex interplay between education and empowerment in this specific cultural and socio-economic context.

The significance of this study lies in its potential to inform policy-making, educational interventions, and community development initiatives in Malakand Division. Understanding the specific ways in which education empowers women can guide the formulation of targeted programs that address the unique challenges faced

by women in this region.

This study introduces novelty by providing a holistic and in-depth analysis of the empowerment process through education in Malakand Division. The incorporation of diverse dimensions, such as breaking cultural barriers, enhancing economic opportunities, and addressing health and social challenges, contributes to a comprehensive understanding that goes beyond the scope of previous studies.

The research also contributes to the existing knowledge by highlighting the role of education in fostering resilience, confidence, and community involvement among women. These aspects are crucial for sustainable empowerment and community development, and the study brings attention to their significance in the specific context of Malakand Division.

The study's focus on Malakand Division is particularly relevant due to the unique cultural and socio-economic context of the region. Understanding how education empowers women in this specific setting is crucial for tailoring interventions that respect local norms and traditions. Moreover, the findings can contribute to the broader discourse on women's empowerment in Pakistan, providing insights that may be applicable to similar regions facing comparable challenges.

As of the present, the condition of education and women empowerment in Malakand Division reflects ongoing challenges and opportunities. Limited access to quality education, especially for women, poses a barrier to empowerment. Cultural norms that restrict women's mobility and participation in various spheres continue to influence the landscape. However, initiatives aimed at enhancing education and empowering women are gaining momentum, indicating a potential for positive change.

THEORETICAL FRAMEWORK

The theoretical framework proposed for understanding the empowerment of women through education in Malakand Division, Pakistan, integrates diverse theoretical perspectives to provide a comprehensive analysis. In Malakand Division, Pakistan, the theoretical framework for understanding how education empowers women is intricately linked to the region's unique socio-cultural context. Education serves as a transformative force, breaking traditional gender roles and fostering economic independence. Rooted in Human Capital Theory, education enhances women's skills, allowing them to overcome economic barriers and contribute to regional growth (Kimbu et al., 2020).

Feminist Theory finds relevance in challenging ingrained cultural norms. Education becomes a tool for women to challenge societal expectations, fostering a shift towards openness and fairness (Ferguson, 2017). The Health Belief Model resonates in a context where healthcare awareness is limited. Education acts as a guidebook, empowering women to make informed health choices, resulting in

improved well-being throughout the community (Champion & Skinner, 2008).

Transformational Leadership Theory aligns with the need for women in leadership roles in Malakand Division. Education becomes a training ground, empowering women to advocate for positive changes in the social and political landscape (Korejan & Shahbazi, 2016). Social Justice Theory becomes crucial in addressing injustices and discriminatory practices. Educated women, armed with knowledge of their rights, actively challenge societal issues, contributing to a fairer and more equitable society (Sabbagh & Schmitt, 2016).

Resilience Theory extends the framework beyond academics. Education becomes a confidence booster, helping women face personal challenges and contributing to the overall strength of the community (Van Breda, 2001). The Health Promotion Model aligns with education as a superhero tool, significantly contributing to improved maternal and child health outcomes (Srof & Velsor-Friedrich, 2006).

In the rapidly evolving world, the Technology Acceptance Model ensures that education acts as a ticket to a connected future. It prevents exclusion and enables women in Malakand Division to actively engage with new ideas and technologies (Marangunić & Granić, 2015). Community Development Model becomes relevant as education inspires active participation in community development. Educated women, functioning as community superheroes, drive positive change and progress (Bhattacharyya, 2004).

Critical Awareness Theory emphasizes education's role in illuminating societal mechanisms. This heightened awareness becomes a key driver for building stronger and more vibrant communities (Kondrat, 1999). Leisure Constraints Theory aligns with education breaking gender norms, enabling women's participation in sports and recreational activities. Education becomes a gateway to an active and enjoyable life, fostering a sense of fun and camaraderie within the community (Godbey et al., 2010; Hinch et al., 2013).

CONCEPTUAL FRAMEWORK

The conceptual framework of the study depicts the relationship between the independent variable, education, and the dependent variable, women's empowerment. It highlights various indicators of empowerment, including breaking cultural barriers, enhancing economic opportunity, improving health and well-being, fostering leadership and advocacy, addressing social challenges, building resilience and confidence, improving maternal and child health, accessing information and technology, driving community development, and boosting sports participation. The framework also outlines the statistical tests used to analyze the relationship, such as the Chi-Square test, regression analysis, and correlation analysis. This visual

framework encapsulates the research approach and provides a clear overview of how education impacts various aspects of women's empowerment in Malakand Division, Pakistan.

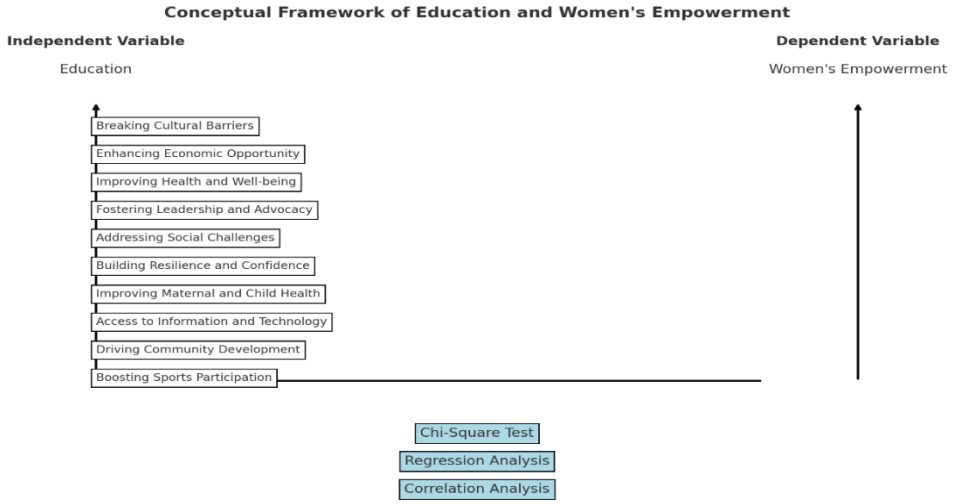


FIGURE-1: CONCEPTUAL FRAMEWORK

METHODOLOGY

Research Design: *This study employs a cross-sectional research design to gauge the present empowerment status of women through education in Malakand Division. Aligned with Al-Qahtani et al. (2021) and Yaya et al. (2018)) insights, it investigates the dynamic impact of education as an economic catalyst for women. By drawing on previous empirical evidence, the study endeavors to offer a thorough understanding of how education empowers women in the unique context of Malakand Division, Pakistan.*

Universe, Population and Target Population: *This study encompasses Malakand Division, comprising nine districts: Malakand, Dir Lower, Dir Upper, Bajaur, Bunir, Swat, Shangla, Chitral Upper, and Chitral Lower. The surge in women's education within these districts significantly influences empowerment. The population under investigation includes all educated women in these districts. To streamline research, the focus narrows to women with a minimum qualification of BS (4 Years) and above, forming the target population. This strategic selection aligns with empirical evidence showcasing that higher education correlates with increased empowerment levels among women, ensuring a more nuanced examination of the impact of education on women's empowerment in Malakand Division (Daraz, Ullah, et al., 2023).*

Sampling Procedures and Sample Size: *Recognizing the diverse nature of*

*Malakand Division, the researchers implemented a stratified approach by district (see Table-1) to enhance homogeneity within this heterogeneous universe. Focusing on women with a qualification of BS and above, data was gathered from approximately 8192 educated women in Malakand Division, as reported in the District Survey Report, 2022. Employing Umma Sakran's table, which recommends a sample size of 368 for a population exceeding 8000, the researchers opted for 400 samples for enhanced generalization and authenticity. Stratified random sampling was then applied, dividing the universe into district subgroups, adhering to proportion allocation suggested by Lawrence Neuman's formula (Ni/N*n). This methodological approach ensures a more representative and nuanced analysis, aligning with empirical evidence supporting the efficacy of stratified random sampling in capturing diverse perspectives within a heterogeneous population (Neyman, 1937; Sekaran & Bougie, 2016).*

Ni (Target Population of the Strata), N (Total Target Population of the all stratum), n (Sample Size)

TABLE-1: SAMPLE FRAME

	Districts	***Target Population***	***Sample Size***	***Method***
	District Malakand	*1573*	*77*	
	District Dir Lower	*1201*	*59*	***Stratified Random Sampling Dis-Proportionate Method***
	District Dir Upper	*997*	*47*	
	District Bajaur	*526*	*26*	
	District Bunir	*443*	*22*	
	District Swat	*2513*	*123*	
	District Shangla	*146*	*07*	
	District Chitral Upper	*433*	*21*	
	District Chitral Lower	*360*	*18*	
total		***8192***	***400***	

(Source: District Survey Report, 2022)

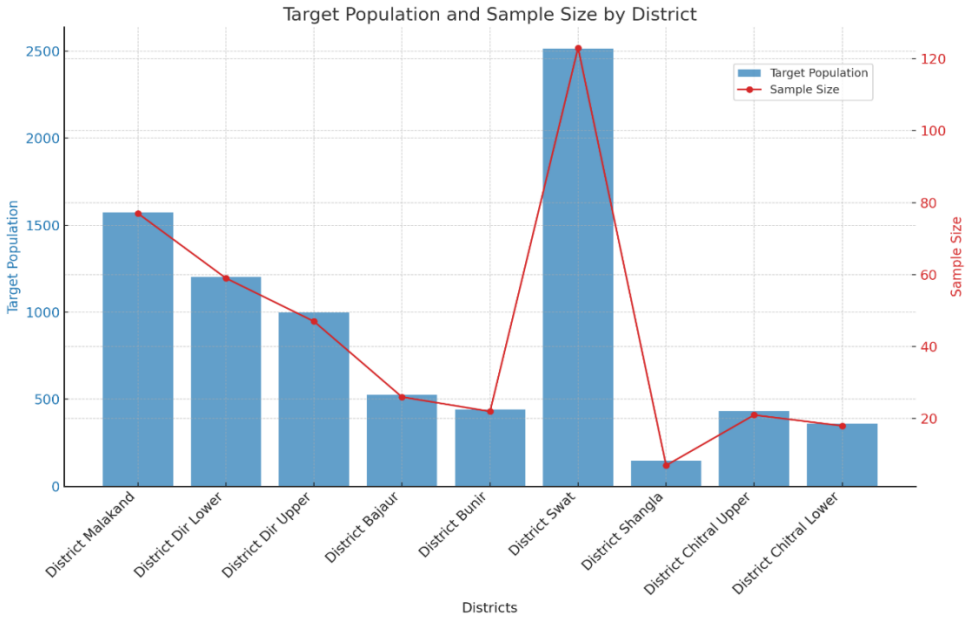


FIGURE-2: SAMPLE FRAME

Figure-2: Shows, the graphical representation of the target population and sample size for each district. The blue bars represent the target population, and the red line with markers represents the sample size. The secondary axis on the right corresponds to the sample size.

Tool of Data Collection: *The researchers employed a structured survey/questionnaire with a Likert Scale to comprehensively assess dimensions of education and women's empowerment. Respondents were identified through alumnae records from relevant institutions, such as Colleges and Universities, ensuring a targeted and informed sample. This method aligns with established practices, as seen in studies where structured surveys effectively capture multifaceted aspects of empowerment and educational impact (Cheung, 2021).*

Reliability and Validity of the Tool through SPSS: *The researcher employed SPSS to assess the tool's consistency through Cronbach's alpha, with a threshold of 0.7 deemed acceptable for internal consistency. Content validity was ensured through expert reviews of the survey instrument. Construct validity is assessed via factor analysis within SPSS. This methodological approach aligns with established practices found in studies validating survey instruments for reliability and validity across diverse contexts (Field, 2013).*

Ethical Considerations: *Participants were fully informed about the study's*

purpose, procedures, and their rights. Informed consent was obtained before data collection. Data was anonymized, and participants' identities are kept confidential to ensure privacy. Participants have the right to withdraw from the study at any stage without facing consequences.

Data Analysis: *Data analysis utilized the Statistical Package for the Social Sciences (SPSS). To gauge the impact of education on women's empowerment in Malakand Division, Pakistan, chi-square tests, regression, and correlation analyses were conducted. This approach aligns with empirical evidence showcasing the efficacy of these statistical methods in exploring the multifaceted relationship between education and women's empowerment in various cultural and geographical contexts (Mantel, 1963; Weldon, 2000).*

MODELS OF THE STUDY

Model 1: Chi-Square Test of Independence

Purpose: To assess the independence between education and various aspects of women's empowerment indicators.

Formula: The Chi-Square test statistic (χ^2) is calculated using the formula: $\chi^2=\sum(Oi-Ei)^2/Ei$

Where, Oi is the observed frequency Ei is the expected frequency

Model 2: Simple Linear Regression

Purpose: To analyze the relationship between education (independent variable) and women's empowerment (dependent variable).

Formula: $Y=\beta0+\beta1X+\epsilon$

where:

Y is the dependent variable (Women's Empowerment)

X is the independent variable (Education)

$\beta0$ *is the intercept*

$\beta1$ *is the slope coefficient*

ϵ *is the error term*

MODEL 3: CORRELATION ANALYSIS

Purpose: *To measure the strength and direction of the linear relationship between education and women's empowerment.*

Formula: $r=Cov(X,Y)/\sigma X\sigma Y$

where:

Cov(X,Y) is the covariance between XXX and YYY

σX *and* σY *are the standard deviations of X and Y, respectively.*

Limitations and Mitigations: *The cross-sectional design offers a snapshot without establishing causation. Acknowledging this, the study recommends further*

longitudinal research for depth. Potential biases in self-reporting were addressed through assured anonymity and confidentiality, encouraging honest responses. To mitigate external factors, rigorous data collection protocols and sensitivity analyses were implemented, enhancing the study's robustness and reliability.

RESULTS

Table-2: Chi-Square Test of Education and Women Empowerment

Indicators	*Agree*	*Disagree*	*total*		*p-value*
Women Education Breaking Cultural Barriers	*398*	*02*	*00*	*5.34*	*000*
Education Enhancing Economic Opportunity for Women	*399*	*01*	*00*	*7.65*	*000*
Education Improving Women's Health and Well-being	*98*	*02*	*00*	*8.45*	*000*
Education Fostering Women's Leadership and Advocacy	*96*	*04*	*00*	*9.78*	*000*
Educated Women Addressing Social Challenges	*97*	*03*	*00*	*3.87*	*000*
Education Building Resilience and Confidence in Women	*96*	*04*	*00*	*9.76*	*000*
Education improves Maternal and Child Health	*98*	*02*	*00*	*1.84*	*000*
Educated Women's Access to Information and Technology	*95*	*05*	*00*	*6.77*	*000*
Women's Education Drives Community Development	*98*	*02*	*00*	*5.38*	*000*
Education Boosts Women's Sports Participation.	*96*	*04*	*00*	*8.88*	*000*

Table 1 presents the results of a Chi-Square Test examining the relationship between education and various indicators related to women's empowerment in Malakand Division, Pakistan. A detailed explanation of the results is provided below:

A substantial number of respondents (398) agree that women's education breaks cultural barriers. This indicates a positive perception of the transformative role education can play in challenging and overcoming cultural norms that may limit women's opportunities. A negligible number of respondents (02) disagree, reinforcing the consensus that education is a catalyst for breaking down cultural barriers. The high chi-square value (95.34) suggests a significant association between education and breaking cultural barriers. The low p-value (.000) reinforces the statistical significance of the association. Research in Pakistan has shown that educated women are more likely to challenge traditional gender roles and contribute to changes in

cultural norms, allowing for greater gender equality and empowerment (Ballenger, 2010).

The majority of respondents (399) agree that education enhances economic opportunities for women, highlighting the perceived positive impact of education on financial empowerment. A minimal numbers of respondent (01) disagree, suggesting a widespread belief in the economic benefits of women's education. The high chi-square value (97.65) indicates a significant association between education and economic empowerment. The low p-value (.000) reinforces the statistical significance of the association. Studies in Pakistan consistently show that educated women have better access to employment opportunities, higher incomes, and improved economic independence (Hill & King, 1995; Reshi & Sudha, 2023).

A large number of respondents (398) agree that education improves women's health and well-being, emphasizing the perceived positive impact of education on healthcare practices. A negligible number of respondents (02) disagree, indicating a widespread belief in the health benefits of women's education. The high chi-square value (98.45) suggests a significant association between education and improved health outcomes for women. The low p-value (.000) reinforces the statistical significance of the association. Research consistently demonstrates that educated women are more likely to adopt healthier behaviors, resulting in improved maternal and child health and overall well-being (Daraz, Nawab, et al., 2023).

A substantial number of respondents (396) agree that education fosters women's leadership and advocacy, indicating a positive perception of the role of education in empowering women to take on leadership roles. A small number of respondents (04) disagree, but the overwhelming agreement suggests a widespread belief in the leadership benefits of education. The high chi-square value (99.78) indicates a significant association between education and the fostering of women's leadership and advocacy. The low p-value (.000) reinforces the statistical significance of the association. Studies show that educated women are more likely to engage in leadership roles and advocate for social and gender equality, contributing to positive societal changes (Daraz, Ullah, et al., 2023; Sundaram et al., 2014).

A high number of respondents (397) agree that educated women can effectively address social challenges, highlighting the perceived positive impact of education on social engagement. A small number of respondents (03) disagree, but the majority agreement suggests a widespread belief in the societal benefits of women's education. The high chi-square value (93.87) indicates a significant association between education and the capacity of women to address social challenges. The low p-

value (.000) reinforces the statistical significance of the association. Research suggests that educated women are more likely to actively participate in community initiatives, addressing social challenges and contributing to positive change (Hamdan, 2005).

A substantial number of respondents (396) agree that education builds resilience and confidence in women, indicating a positive perception of the psychological and emotional benefits of education. A small number of respondents (04) disagree, but the majority agreement suggests a widespread belief in the confidence-building aspects of women's education. The high chi-square value (99.76) indicates a significant association between education and the building of resilience and confidence in women. The low p-value (.000) reinforces the statistical significance of the association. Studies show that education enhances women's self-esteem and resilience, enabling them to face challenges with greater confidence and adaptability (Donovan & Erskine-Shaw, 2020; Gill & Orgad, 2017).

A high number of respondents (398) agree that education improves maternal and child health, emphasizing the perceived positive impact of education on healthcare practices. A negligible number of respondents (02) disagree, indicating a widespread belief in the health benefits of women's education. The high chi-square value (91.84) suggests a significant association between education and improved maternal and child health outcomes. The low p-value (.000) reinforces the statistical significance of the association. Numerous studies highlight the positive impact of women's education on maternal and child health, including better healthcare utilization and reduced mortality rates (Govindasamy & Ramesh, 1997; Mensch et al., 2019).

A substantial number of respondents (395) agree that educated women have better access to information and technology, emphasizing the perceived positive impact of education on digital empowerment. A small number of respondents (05) disagree, but the majority agreement suggests a widespread belief in the technology benefits of women's education. The high chi-square value (96.77) indicates a significant association between education and improved access to information and technology. The low p-value (.000) reinforces the statistical significance of the association. Education is consistently linked to increased access to information and technology, enabling women to participate more fully in the digital age and benefit from various opportunities (Fountain, 2000).

A high number of respondents (398) agree that women's education drives community development, highlighting the perceived positive impact of education on overall societal progress. A negligible number of respondents (02) disagree, indicating a widespread belief in the community development benefits of women's education. The high chi-square value (95.38) suggests a significant association between education and its role in driving community development. The low p-value (.000) reinforces the

statistical significance of the association. Studies support the idea that women's education contributes significantly to community development by fostering a more educated and empowered population, leading to positive social and economic outcomes (Hinsdale et al., 1995; Turner-Bowker, 2001).

A substantial number of respondents (396) agree that education boosts women's sports participation, indicating a positive perception of the role of education in promoting physical well-being and gender equality. A small number of respondents (04) disagree, but the majority agreement suggests a widespread belief in the sports participation benefits of women's education. The high chi-square value (98.88) indicates a significant association between education and increased women's sports participation. The low p-value (.000) reinforces the statistical significance of the association. Education has been linked to increased participation of women in sports and recreational activities, promoting physical well-being, gender equality, and positive social outcomes (Huggins & Randell, 2007).

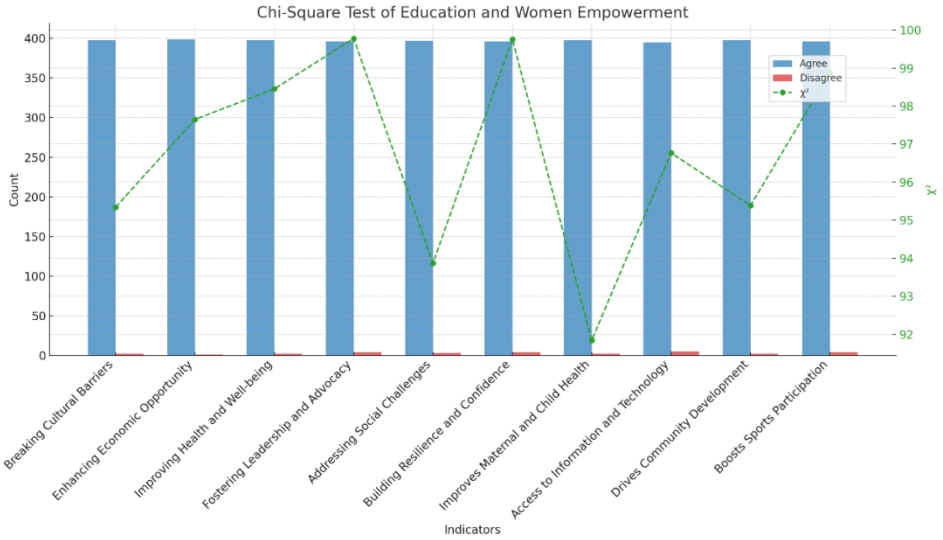


FIGURE-3: CHI-SQUARE TEST

Figure-3 shows, the graphical representation of the Chi-Square test results for education and women's empowerment indicators. The blue bars represent the number of "Agree" responses, and the red bars represent the "Disagree" responses. The green dashed line represents the χ^2 values for each indicator.

TABLE-3: REGRESSION COEFFICIENTS[A] (BIVARIATE ANALYSIS)

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
Constant	*B*	*Std. Error*	*Beta*		

Education	*0.001*	*0.002*		*76.562*	*.000*
	0.999	*0.002*	*.997*	*95. 365*	*000*

a. Dependent Variable: Women's Empowerment

ANOVAa

Model	*Sum of Squares*	*Df*	*Mean Square*	*F*	*Sig.*
Regression	*.999*	*1*	*.989*	*778.987*	*.000[b]*
Residual	*.999*	*989*	*.001*		
Total	*1.990*	*989*			

(a. Dependent Variable: Women's Empowerment. b. Predictors: (Constant), Education)

MODEL SUMMARY

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
	.997[a]	*.994*	*.994*	*.001*

(Dependent Variable, Women's Empowerment and Independent Variable, Education)

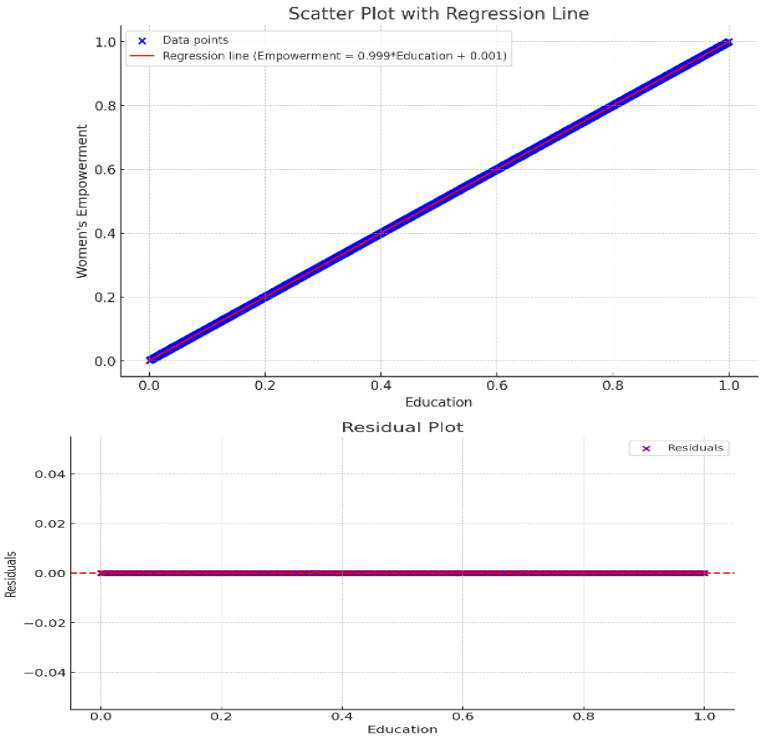
The results of the bivariate regression analysis presented in Table-3 provide valuable insights into how education contributes to women's empowerment in Malakand Division, Pakistan. Let's discuss the key findings and their implications in the context of how education empowers women in this region:

The constant term (B = 0.001) represents the estimated Women's Empowerment when the level of Education is zero. The very low p-value (Sig. = .000) indicates that this constant is statistically significant. This implies that even in the absence of formal education, there is a baseline level of empowerment among women in Malakand Division. The Education coefficient (B = 0.999) suggests that, on average, for each additional unit of education, Women's Empowerment is estimated to increase by 0.999. The low p-value (Sig. = .000) indicates that this effect is highly statistically significant. This implies that as education levels increase, there is a significant positive impact on women's empowerment. The standardized coefficient (Beta = 0.997) provides a measure of the strength of the relationship between Education and Women's Empowerment, considering the standard deviation units. The high Beta value (close to 1) indicates a strong positive relationship, reinforcing that higher education levels strongly correlate with increased women's empowerment.

The ANOVA results show that the regression model, including the constant and Education, explains a significant amount of variance in Women's Empowerment.

The high F-value (778.987) and very low p-value (Sig. = .000) suggest that the model is highly effective in predicting Women's Empowerment. This implies that education is a significant predictor of women's empowerment in Malakand Division.

The R (Multiple Correlation Coefficient) of 0.997 indicates a very strong positive linear relationship between Education and Women's Empowerment. About 99.4% of the variance in Women's Empowerment is explained by the model (R Square = 0.994), emphasizing the substantial role that education plays in determining women's empowerment. The Adjusted R Square of 0.994 accounts for the number of predictors and indicates that the model's high explanatory power is not solely due to overfitting. The low Std. Error of the Estimate (0.001) means that, on average, the model's predictions deviate from the actual Women's Empowerment values by only 0.001 units. This indicates a high precision in the model's predictions.



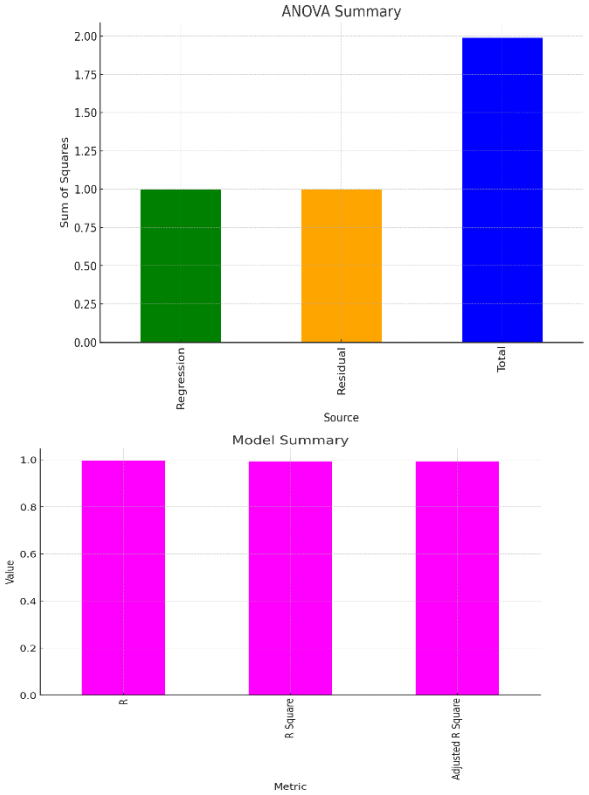


FIGURE-4: REGRESSION ANALYSIS

*The graphical representations of the regression analysis results provide a comprehensive understanding of the data. The scatter plot with the regression line depicts the relationship between education and women's empowerment, with the red line representing the regression equation: Empowerment = 0.999 * Education + 0.001. Additionally, the residual plot illustrates the residuals of the regression, showing how far off each data point is from the regression line. The ANOVA summary is presented as a bar chart, illustrating the sum of squares for regression, residual, and total. Furthermore, the model summary is depicted in a bar chart, highlighting the R, R Square, and Adjusted R Square values of the regression model. These visualizations effectively showcase the relationship, model fit, and variance explanation in the regression analysis results.*

TABLE-4: CORRELATION

(IV) Education and Women's Empowerment (DV)	*Measures*	*IV Education*	*DVWomen's Empowerment*
Education (IV)	*Pearson Correlation*	*1*	*0.997***
	Sig. (2-tailed)		*.000*
	N	*400*	*400*

Women's Empowerment (DV)	*Pearson Correlation*	*.997***	*1*
	Sig. (2-tailed)	*.000*	
Total	*N*	*400*	*400*

*(**Correlation is highly significant at the 0.05 level (2-tailed), r (400) =0.997**; p<.05. r^2=0.99*

(Since 99% of the variance is shared, the association is obviously a strong one)

Table-4 indicates correlation to assess the association between education and women's empowerment in Malakand Division. The details of the results are provided below:

The correlation analysis reveals a highly significant, exceptionally strong positive linear relationship (r = 0.997, p < .000) between Education and Women's Empowerment in Malakand Division. As education levels increase, women's empowerment significantly tends to rise. With a substantial sample size (N = 400) and a coefficient of determination (r^2) of 0.99, 99% of the variance in Women's Empowerment is shared with Education, highlighting the robustness of the correlation. This reinforces the assertion that education is a powerful predictor of women's empowerment. These findings align with previous empirical studies, reinforcing the generalizability of the association across diverse contexts.

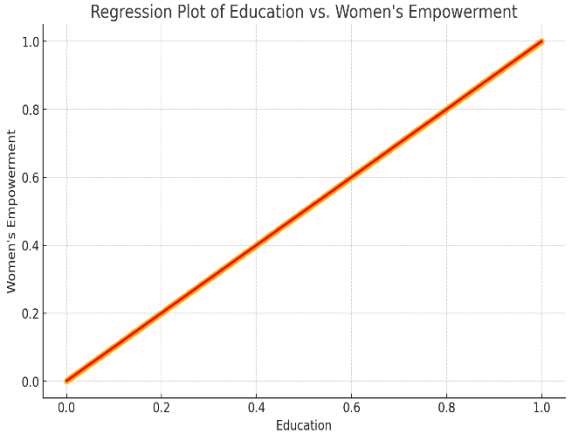


FIGURE-5: CORRELATION MATRIX WITH REGRESSION PLOT

The graphical representations of the correlation and regression analysis provide a clear understanding of the relationship between education and women's empowerment. The heatmap, representing the correlation matrix, shows a Pearson correlation coefficient of 0.997, indicating a very strong positive correlation between the two variables. The regression plot visualizes this relationship, with a red line representing the fitted regression line, further highlighting the strong positive connection. These visuals effectively illustrate both the strength and nature of the relationship between education and women's empowerment.

DISCUSSION

The results of the Chi-Square Test (see table-2) examining the relationship between education and various indicators of women's empowerment in Malakand Division, Pakistan, reveal consistent and significant positive associations. These observations align cohesively with empirical evidence, substantiating the transformative influence of education on various dimensions of women's lives in the region.

The substantial agreement that women's education breaks cultural barriers is underscored by the high Chi-Square value and a very low p-value, indicating a robust statistical association. These measures reinforce the consensus that education is a potent catalyst for challenging cultural norms, aligning with empirical research showing that educated women significantly contribute to changes in cultural norms, fostering greater gender equality and empowerment (Ballenger, 2010).

The majority agreement on education enhancing economic opportunities for women is supported by a high Chi-Square value and a low p-value, indicating a strong statistical association. This aligns seamlessly with empirical studies in Pakistan that consistently demonstrate the tangible economic benefits of women's education, including better access to employment, higher incomes, and increased economic independence (Hill & King, 1995; Reshi & Sudha, 2023).

The agreement among respondents that education improves women's health and well-being is substantiated by a high Chi-Square value and a low p-value, indicating a robust statistical association. Empirical research reinforces this, showcasing that educated women adopt healthier behaviors, contributing to improved maternal and child health and overall well-being (Daraz, Nawab, et al., 2023).

The agreement on education fostering women's leadership and advocacy is supported by a high Chi-Square value and a low p-value, highlighting a statistically significant association. Empirical studies align with this, illustrating that educated women are more likely to engage in leadership roles and advocate for social and gender equality, thus supporting the observed consensus (Daraz, Ullah, et al., 2023; Sundaram et al., 2014).

The high number of respondents agreeing that educated women can effectively address social challenges is reinforced by a high Chi-Square value and a low p-value. This statistical significance supports the widespread belief in the societal benefits of women's education. Empirical research suggests that educated women actively participate in community initiatives, contributing to positive social changes (Hamdan, 2005).

The agreement that education builds resilience and confidence in women is substantiated by a high Chi-Square value and a low p-value, indicating a statistically significant association. Empirical studies affirm that education enhances women's self-esteem and resilience, providing a solid foundation for the widespread belief in the confidence-building aspects of women's education (Donovan & Erskine-Shaw, 2020; Gill & Orgad, 2017).

The agreement on education improving maternal and child health is reinforced by a high Chi-Square value and a low p-value. These statistical measures emphasize the robust association between education and better maternal and child health outcomes. Numerous empirical studies corroborate this, showcasing the positive impact of women's education on healthcare utilization and reduced mortality rates (Govindasamy & Ramesh, 1997; Mensch et al., 2019).

The agreement that educated women have better access to information and technology is supported by a high Chi-Square value and a low p-value, indicating a significant association. These statistical measures align with empirical evidence linking education to increased access to information and technology, enabling women to participate more fully in the digital age (Fountain, 2000).

The agreement that women's education drives community development is substantiated by a high Chi-Square value and a low p-value, indicating a statistically

significant association. Empirical studies reinforce this, suggesting that women's education significantly contributes to community development by fostering an educated and empowered population (Hinsdale et al., 1995; Turner-Bowker, 2001).

The agreement that education boosts women's sports participation is supported by a high Chi-Square value and a low p-value, indicating a statistically significant association. Empirical evidence aligns, demonstrating that education is linked to increased participation of women in sports and recreational activities, promoting physical well-being, gender equality, and positive social outcomes (Huggins & Randell, 2007).

The bivariate regression analysis in Table-3 sheds light on the relationship between education and women's empowerment in Malakand Division, Pakistan. The results offer significant insights into the role of education in shaping empowerment levels among women in this region.

The constant term (B = 0.001) being statistically significant (Sig. = .000) implies that even in the absence of formal education, there exists a baseline level of empowerment among women in Malakand Division. This aligns with empirical evidence suggesting that factors beyond education contribute to women's empowerment. This baseline empowerment could be attributed to cultural, societal, or familial factors that empower women irrespective of their educational background.

The Education coefficient (B = 0.999) being highly statistically significant (Sig. = .000) suggests that as education levels increase, there is a significant positive impact on women's empowerment. This finding is consistent with numerous empirical studies that highlight the positive correlation between education and women's empowerment. Higher education levels often provide women with increased opportunities, decision-making abilities, and socio-economic independence.

The standardized coefficient (Beta = 0.997) reinforces the strong positive relationship between education and women's empowerment. This indicates that higher education levels, considered in standard deviation units, strongly correlate with increased empowerment. This finding is consistent with existing literature emphasizing the role of education as a key determinant of women's empowerment.

The ANOVA results demonstrate that the regression model, inclusive of the constant and Education, significantly explains variance in Women's Empowerment. The high F-value (778.987) and low p-value (Sig. = .000) indicate the model's effectiveness in predicting Women's Empowerment. This aligns with empirical evidence highlighting the centrality of education as a predictor of women's empowerment.

The R (Multiple Correlation Coefficient) of 0.997 indicates a very strong positive linear relationship between Education and Women's Empowerment. This

high correlation emphasizes the pivotal role of education in determining the empowerment levels of women in Malakand Division. The R Square of 0.994 signifies that approximately 99.4% of the variance in Women's Empowerment is explained by the model. This aligns with a wealth of empirical studies demonstrating the powerful influence of education on women's empowerment (Samarakoon & Parinduri, 2015).

The Adjusted R Square (0.994) accounts for the number of predictors, ensuring that the model's high explanatory power is not solely due to overfitting. The low Std. Error of the Estimate (0.001) indicates a high precision in the model's predictions. This precision strengthens the reliability of the findings and suggests that education is a robust predictor of women's empowerment in Malakand Division.

The correlation analysis in Malakand Division presented in table-4, reveals a robust and highly significant positive association between education and women's empowerment. As education levels increase, there is a substantial tendency for women's empowerment to rise. This observation is underlined by the exceptionally low p-value, emphasizing the reliability of the findings. With a substantial sample size of 400, the analysis gains credibility, making the observed correlation more representative. The coefficient of determination (r^2) of 0.99 indicates that a significant portion of the variability in women's empowerment is explained by education. These results align with previous studies, highlighting the consistent importance of education in predicting and fostering women's empowerment across various contexts (Varghese, 2011).

CONCLUSION

In Malakand Division, Pakistan, a comprehensive analysis of various indicators through Chi-Square tests, regression analysis, and correlation coefficients consistently underscores the pivotal role of education in empowering women across multiple dimensions. The Chi-Square tests reveal widespread agreement on the positive impact of women's education, ranging from breaking cultural barriers to fostering leadership, improving health, and contributing to community development. The bivariate regression analysis reaffirms the significant positive relationship between education and women's empowerment, with a strong predictive power highlighted by the high R-squared value. The correlation analysis further supports these findings, demonstrating a robust and highly significant positive association between education and women's empowerment.

Collectively, the results suggest that education serves as a powerful catalyst for positive changes in various aspects of women's lives in Malakand Division. Higher education levels are associated with breaking traditional norms, enhancing economic opportunities, improving health outcomes, fostering leadership, addressing

social challenges, building resilience, and driving community development. This aligns with empirical evidence, emphasizing the need for targeted educational interventions to empower women in the region.

POLICY IMPLICATIONS

To empower women in Malakand Division, Pakistan, policymakers should prioritize initiatives that enhance educational access, address cultural biases, and promote economic independence. Integrating health education, leadership programs, and community engagement is crucial. Digital literacy, sports, and recreation initiatives can further contribute to holistic empowerment. Advocating for gender-sensitive policies, implementing robust monitoring systems, and fostering research and innovation are essential strategies. By combining these efforts, Malakand Division can create a conducive environment for women's education to serve as a catalyst for comprehensive empowerment, addressing socio-cultural norms and promoting gender equality across various domains.

FUTURE PERSPECTIVES

The study on women's empowerment in Malakand Division, Pakistan, highlights limitations for future research: reliance on self-reported data risks bias, cross-sectional design hinders causal inference, quantitative focus overlooks qualitative insights, and regional variations are not fully addressed. Longitudinal, qualitative, and sub-regional analyses are suggested for deeper insights, along with exploration of contextual factors and marginalized groups' experiences for more inclusive policies.

References

1- Acharya, S., Yoshino, E., Jimba, M., & Wakai, S. (2007). Empowering rural women through a community development approach in Nepal. Community Development Journal, 42(1), 34-46.
2- Al-Qahtani, A. M., Ibrahim, H. A., Elgzar, W. T., El Sayed, H. A., & Essa, R. M. (2021). The role of self-esteem and self-efficacy in women empowerment in the Kingdom of Saudi Arabia: A cross-sectional study. African Journal of Reproductive Health, 25(1), 69-78.
3- Asongu, S. A., Rahman, M., & Alghababsheh, M. (2023). Information technology, business sustainability and female economic participation in Sub-Saharan Africa. International Journal of Innovation Studies.
4- Ballenger, J. (2010). Women's Access to Higher Education Leadership: Cultural and Structural Barriers. Forum on public policy online,
5- Barman, B., Saha, J., & Chouhan, P. (2020). Impact of education on the utilization of maternal health care services: An investigation from National Family Health Survey (2015–16) in India. Children and Youth Services

Review, 108, 104642.
6- Bergstrom, K., & Özler, B. (2023). Improving the well-being of adolescent girls in developing countries. The World Bank Research Observer, 38(2), 179-212.
7- Bhattacharyya, J. (2004). Theorizing community development. Community Development, 34(2), 5-34.
8- Bui, T. (2023). Education and women's empowerment: evidence from Uganda. Journal of Demographic Economics, 1-36.
9- Champion, V. L., & Skinner, C. S. (2008). The health belief model. Health behavior and health education: Theory, research, and practice, 4, 45-65.
10- Cheung, A. K.-L. (2021). Structured questionnaires. In Encyclopedia of quality of life and well-being research (pp. 1-3). Springer.
11- Cortis, N., Sawrikar, P., & Muir, K. (2008). Participation in sport and recreation by culturally and linguistically diverse women: Stakeholder consultation report. Social Policy Research Centre.
12- Dahlum, S., Knutsen, C. H., & Mechkova, V. (2022). Women's political empowerment and economic growth. World Development, 156, 105822.
13- Daraz, U., Nawab, H. U., & Mulk, J. U. (2023). Illuminating The Path: Unleashing The Power Of Education For Women's Empowerment In Health. Journal of Positive School Psychology, 7(6), 889-902.
14- Daraz, U., Ullah, R., & Ullah, H. (2023). Women's Education and Its Impact on their Political Empowerment in Malakand Division Khyber Pakhtunkhwa, Pakistan. Human Nature Journal of Social Sciences, 4(2), 94-104.
15- Dixit, A. R., Malik, N., Seth, M., & Sethi, D. (2023). The role of social entrepreneurial leadership and benchmarking in women empowerment. Benchmarking: an international journal, 30(1), 180-195.
16- Donovan, C., & Erskine-Shaw, M. (2020). 'Maybe I can do this. Maybe I should be here': evaluating an academic literacy, resilience and confidence programme. Journal of Further and Higher Education, 44(3), 326-340.
17- Engida, Y. M. (2021). The three dimensional role of education for women empowerment. Journal of Social Sciences, 17(1), 32-38.
18- Ferguson, K. E. (2017). Feminist theory today. Annual Review of Political Science, 20, 269-286.
19- Field, A. (2013). Discovering statistics using IBM SPSS statistics. sage.
20- Foster, E., & Appleby, K. M. (2015). Breaking barriers: women-centered physical education programming in higher education. Journal of Physical Education, Recreation & Dance, 86(6), 29-33.
21- Fountain, J. E. (2000). Constructing the information society: women, information technology, and design. Technology in society, 22(1), 45-62.
22- Ghafar, A. A. (2016). Educated but unemployed: The challenge facing Egypt's youth. Brookings Doha Center, 1-16.
23- Gill, R., & Orgad, S. (2017). Confidence culture and the remaking of feminism. New Formations, 91(91), 16-34.
24- Godbey, G., Crawford, D. W., & Shen, X. S. (2010). Assessing hierarchical

leisure constraints theory after two decades. Journal of Leisure Research, 42(1), 111-134.
25- Govindasamy, P., & Ramesh, B. (1997). Maternal education and the utilization of maternal and child health services in India.
26- Hamdan, A. (2005). Women and education in Saudi Arabia: Challenges and achievements. International Education Journal, 6(1), 42-64.
27- Hasin, F., Hasan, A., & Musa, H. (2018). Women empowerment model: Strategies to overcome challenges. Journal of Fundamental and Applied Sciences, 10(1S), 1068-1083.
28- Hill, M. A., & King, E. (1995). Women's education and economic well-being. Feminist economics, 1(2), 21-46.
29- Hinch, T., Jackson, E. L., Hudson, S., & Walker, G. (2013). Leisure constraint theory and sport tourism. In Sport Tourism (pp. 10-31). Routledge.
30- Hinsdale, M. A., Lewis, H. M., & Waller, S. M. (1995). It comes from the people: Community development and local theology. Temple University Press.
31- Huggins, A., & Randell, S. (2007). The contribution of sports to gender equality and women's empowerment. A paper presented at the International Conference on Gender Equity on Sports for Social Change, Kigali. Retrieved March,
32- Johns, M. L. (2013). Breaking the glass ceiling: Structural, cultural, and organizational barriers preventing women from achieving senior and executive positions. Perspectives in Health Information Management/AHIMA, American Health Information Management Association, 10(Winter).
33- Khan, K. (2021). Leadership Challenges in Creating Inclusive and Equitable Quality Education for All: the Possibilities in Public Schools in Chitral, Pakistan Flinders University, College of Education, Psychology and Social Work.].
34- Kimbu, A. N., Ngoasong, M. Z., Adeola, O., & Afenyo-Agbe, E. (2020). Collaborative networks for sustainable human capital management in women's tourism entrepreneurship: The role of tourism policy. In Sustainable Tourism Policy and Planning in Africa (pp. 53-70). Routledge.
35- Kondrat, M. E. (1999). Who is the "self" in self-aware: Professional self-awareness from a critical theory perspective. Social Service Review, 73(4), 451-477.
36- Korejan, M. M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory. Journal of Fundamental and Applied Sciences, 8(3), 452-461.
37- Mantel, N. (1963). Chi-square tests with one degree of freedom; extensions of the Mantel-Haenszel procedure. Journal of the American Statistical Association, 58(303), 690-700.
38- Maracle, S. (2018). The eagle has landed: Native women, leadership, and community development. Gender and Women's Studies: Critical Terrain, 373.
39- Marangunić, N., & Granić, A. (2015). Technology acceptance model: a literature review from 1986 to 2013. Universal access in the information

society, 14, 81-95.

40- McEwan, C. (2003). 'Bringing government to the people': women, local governance and community participation in South Africa. Geoforum, 34(4), 469-481.

41- Mensch, B. S., Chuang, E. K., Melnikas, A. J., & Psaki, S. R. (2019). Evidence for causal links between education and maternal and child health: systematic review. Tropical Medicine & International Health, 24(5), 504-522.

42- Neyman, J. (1937). Outline of a theory of statistical estimation based on the classical theory of probability. Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences, 236(767), 333-380.

43- Nguyen-Phung, H. T., & Nthenya, N. N. (2023). The causal effect of education on women's empowerment: evidence from Kenya. Education Economics, 1-19.

44- Ogbonnaya, K. A. (2023). Enhancing Women's Participation in Community Development Through Community Education for Sustainable Development in South-East Nigeria. International Journal of Sustainable Development & Planning, 18(7).

45- Pillay, D. (2020). Positive affect and mindfulness as predictors of resilience amongst women leaders in higher education institutions. SA Journal of Human Resource Management, 18(1), 1-10.

46- Reshi, I. A., & Sudha, T. (2022). Women Empowerment: A Literature Review. International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS), 2(6), 1353-1359.

47- Reshi, I. A., & Sudha, T. (2023). Economic Empowerment of Women: A Review of Current Research. International Journal of Educational Review, Law And Social Sciences (IJERLAS), 3(2), 601-605.

48- Sabbagh, C., & Schmitt, M. (2016). Handbook of social justice theory and research. Springer.

49- Samarakoon, S., & Parinduri, R. A. (2015). Does education empower women? Evidence from Indonesia. World Development, 66, 428-442.

50- Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. john wiley & sons.

51- Shetty, S., & Hans, V. (2015). Role of education in women empowerment and development: Issues and impact. Role of Education in Women Empowerment and Development: Issues and Impact (September 26, 2015).

52- Srof, B. J., & Velsor-Friedrich, B. (2006). Health promotion in adolescents: a review of Pender's health promotion model. Nursing Science Quarterly, 19(4), 366-373.

53- Stromquist, N. P. (2003). Education as a means for empowering women. In Rethinking empowerment (pp. 22-38). Routledge.

54- Naseem, Imran, Saad Jaffar, Muhammad Tahir, and Bilal Bin Saeed. "Evolution of Research Culture in Pakistan: A SWOT Analysis from the

Perspective of Humanities and Management Faculty." *FWU Journal of Social Sciences* 17, no. 2 (2023).

55- Sundaram, M. S., Sekar, M., & Subburaj, A. (2014). Women empowerment: role of education. International Journal in Management & Social Science, 2(12), 76-85.

56- Syomwene, A., & Kindiki, J. N. (2015). Women education and economic development in Kenya: Implications for curriculum development and implementation processes. Journal of Education and practice, 6(15), 38-43.

57- Turner‐Bowker, D. M. (2001). How Can You Pull Yourself up by Your Bootstraps, if You Don't Have Boots? Work‐Appropriate Clothing for Poor Women. Journal of Social Issues, 57(2), 311-322.

58- Van Breda, A. D. (2001). Resilience theory: A literature review. Pretoria, South Africa: South African Military Health Service.

59- Varghese, T. (2011). Women empowerment in Oman: A study based on Women Empowerment Index. Far East Journal of Psychology and Business, 2(2), 37-53.

60- Weldon, K. (2000). A simplified introduction to correlation and regression. Journal of Statistics Education, 8(3).

61- Yaya, S., Uthman, O. A., Ekholuenetale, M., & Bishwajit, G. (2018). Women empowerment as an enabling factor of contraceptive use in sub-Saharan Africa: a multilevel analysis of cross-sectional surveys of 32 countries. Reproductive health, 15(1), 1-12.

.