

Empowering Afghan Female Students in Conflict Zones through Distance Higher Education

Addressing Economic, Cultural and Logistical Barriers to Enhance Motivation,
Hope, Employability and Social Empowerment

Baheer Awrang

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Der Autor:

Baheer Awrang is a Ph.D. candidate at Helmut Schmidt University, University of the Federal Armed Forces Hamburg. His research focuses on empowering Afghan female students in conflict zones through distance higher education by addressing the economic, cultural, and logistical barriers that affect access to higher education. His work examines how reducing these barriers can enhance motivation, hope, employability, and social empowerment. His research contributes to the development of inclusive and evidence-based educational strategies for vulnerable populations in conflict-affected contexts.

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Kontakt

Rebekka Hensen
Helmut-Schmidt-Universität / Universität der Bundeswehr
Holstenhofweg 85, Gebäude H1, Raum 2133
22043 Hamburg
Tel.: 040 / 65 41 22 32
Fax: 040 / 65 41 35 22

rebekka.hensen@hsu-hh.de
www.hsu-hh.de/opal

Redaktion

Prof. Dr. Wenzel Matiaske
Prof. Dr. Katharina Liebsch

Abstract

Despite increasing interest in education in war-stricken zones, limited empirical research has examined how distance higher education supports motivation, hope and future orientation among female students living under extreme social and political restrictions. This sequential mixed-methods study explores how distance higher education fosters psychological needs and goal-directed hope among Afghan female students living under restrictive conditions and how such processes contribute to short-term learning engagement and long-term prospects for national and international labour market integration. The study draws on Self-Determination Theory and Hope Theory to explore how the distance learning environment, alongside institutional and social supports, foster autonomy, competence, relatedness, agency, and pathways. Data were collected through an online questionnaire from 304 participants across Afghanistan who are enrolled in distance higher education, followed by in-depth interviews with 16 purposively sampled learners. The quantitative data were analyzed using SPSS software for inferential statistics and qualitative data were analyzed using thematic analysis via MAXQDA (version 2026), where empirical themes were mapped onto theoretical constructs. The findings reveal that despite numerous challenges, severe socio-economic survival hurdles, local cultural barriers, and digital connectivity constraints, accessing distance higher education significantly strengthens Afghan female students' intrinsic motivation, digital and professional skills, and goal-directed pathways. It acts as a vital mechanism for psychosocial survival, social empowerment and professional identity transformation.

Considering its finding the study develops theoretical propositions on how distance education fosters and sustains motivation in conflict zones and offers policy recommendations for international universities and NGOs working on resilient education for women in unstable environments. By applying Self-Determination Theory and Hope Theory to war-affected and vulnerable educational contexts, this research contributes to emerging scholarship on inclusive, resilient and future-oriented higher education for conflict-affected learners facing structural barriers. Ultimately, this study demonstrates that despite severe

socio-political barriers, distance higher education serves as a vital tool for psychological survival and hidden resistance, offering Afghan female students a window of hope and a strategic avenue to reclaim agency and achieve social empowerment under severe challenges.

Keywords: Distance higher education, Afghan female students, Self-Determination Theory, Hope Theory, Conflict zones, Social empowerment, Digital resilience, Motivation, Labor market integration.

Dedication

I heartily dedicate this study to the soul of my late father, whose memory forever remains alive in our hearts, and to my wife and my family especially my mother, who has served Afghan women through education with dignity and determination for more than 35 years. I also dedicate this work to the Afghan female students living under restrictive conditions imposed by the Taliban's de facto government, who courageously continue to pursue higher education through distance learning. They demonstrate remarkable resilience, determination, perseverance and an eagerness to realize their dreams, shape their personalities, develop their skills and make meaningful contributions toward building a stronger, more prosperous and more inclusive Afghan society for all.

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List of Acronyms and Abbreviations

Acronym/Abbreviation	Full Form
ANVOA	Analysis of Variance
BPNT	Basic Psychological Needs Theory
COVID-19	Coronavirus Disease 2019
EFA	Education for All
HE	Higher Education
HEIs	Higher Education Institutions
HRW	Human Rights Watch
HSU	Helmut-Schmidt-Universität
ICT	Information and Communication Technology
ILO	International Labour Organization
LMS	Learning Management System
MAXQDA	Qualitative Data Analysis Software
MENA	Middle East and North Africa
NGO	Non-Governmental Organization
OECD	Organization for Economic Co-operation and Development
QDA	Qualitative Data Analysis
SD	Standard Deviation
SDGs	Sustainable Development Goals
SDT	Self-Determination Theory
SIGAR	Special Inspector General for Afghanistan Reconstruction
SPSS	Statistical Package for the Social Sciences
TVET	Technical and Vocational Education and Training
UN	United Nations
UNAMA	United Nations Assistance Mission in Afghanistan
UNDP	United Nations Development Programme
UNESCO Organization	United Nations Educational, Scientific and Cultural Organization

UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNITAR	United Nations Institute for Training and Research
UNRWA	United Nations Relief and Works Agency for Palestine

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Introduction

1.1 Background of the Study

1.1.1 Introduction to the Socio-Political Context of Afghanistan

War-stricken Afghanistan's socio-political situation is shaped by a long complex and turbulent history marked by foreign invasions, internal conflicts, and severe political instability. The land of multiethnic groups has experienced numerous internal conflicts, foreign invasions and interventions, and dramatic political fluctuations in recent decades, all these conditions have led to widespread poverty, displacement, migration and a breakdown of social institutions (UNDP, 2023).

Afghanistan's intermittent progress toward stability has been repeatedly interrupted over the past several decades, the country experienced an invasion of the Soviet Union in 1979, which caused large scale destruction and brought war to the land, destroyed its social and economic structure and later in 1990s triggered a prolonged instability. This period was followed by a civil war in the country and a large number of residents were forced to leave the land and flee. Amid this Chaos, a group of Tahrek e Taliban led by Mullah Omar emerged from Kandahar, who then rapidly captured large part of Afghanistan and enforced restrictive policies, particularly toward women (Rashid, 2000; Marsden, 1998).

Following the September 11, 2001 attacks on the World Trade Center in New York City and the Pentagon in Virginia and other parts of the United States by Al-Qaeda, the United States and its allies were pushed and intervened militarily in Afghanistan. The U.S.-led forces removed the Taliban from the power and established an international-supported democratic inclusive government. This U.S.-led allies' presence from 2001 to 2021 brought glimpses of progress: democratic governance, institutional rebuilding, and significantly, the return of Afghan females to educational and professional spaces and contributed meaningfully to national development (Albrecht; Rude; & Stitteneder, 2022).

Despite these advances in Afghanistan during this period, the country experienced ongoing internal conflict between Afghan army and the Taliban. The fragile progress was abruptly reversed following the U.S.- led forces withdrawal as result of Doha Peace Agreement with the Taliban and brought them back to power on August 15, 2021. Their return to Afghanistan's capital once again placed the country under the control of extremists (Albrecht; Rude; & Stitteneder, 2022). Despite their promises and assurance of moderation during Doha negotiations, the Taliban returned to their previous hardline policies, they imposed their strict interpretation of Islamic law which restricts Afghan females' access to rights and freedoms that had been established during republic government in previous two decades. Women again were banned from getting education, employment, travel without male guardians, and participation in politics or media activities (UNICEF 2025).

Although the International community has widely condemned these actions as clear violation of human rights, the Taliban's restrictive policies continue to systematically oppress all Afghan females. These policies are stripping them of autonomy and all the opportunities for their personal development and self-actualization (Human Rights Watch, 2023).

Currently, approximately 2.2 million females are barred from attending secondary schools and universities. Only a very limited number of professions or roles like female doctors, practitioners are allowed to work under severe restrictions (UNICEF 2025). The present socio-political environment in Afghanistan remains highly unfavorable for Afghan women, who face restrictions. This highly unfavorable situation not only marginalizes Afghan females socially, economically but also severely harms their psychological well-being, identity and intrinsic motivation. Its long term consequences extend beyond individual harm; this poses a serious threat to Afghanistan's future integration to the global community, innovation and development (Qazi Zada, 2024; United Nations Development Programme, 2023)

Since August 15, 2021, there has been a notable lack of scholarly studies investigating how alternative educational platforms, particularly distance higher education, can foster inner drive, hope and the labor-market related skills attainment for Afghan females under these severe challenges, therefore it is essential to understand and research how Afghan females may maintain hope, develop intrinsic motivation, and reclaim educational spaces despite tremendous limits. This study positions distance higher education as a transformative and liberating instrument that not only expands access to learning, but also for restoring purpose, self-esteem, and long-term social mobility of Afghan females.

1.2 Problem Statement

The Taliban who are well-known for their rigid interpretation of Islamic Sharia law entered Kabul the capital of Afghanistan on August 15, 2021. This sudden takeover halted all the previous 20 years' relative progress in democracy, social and economic advancement, and educational development. Soon after taking control over the country, they quickly reimposed repressive governance and reverted to their previous ruling system, severely restrict the fundamental rights of females, including their right to education, employment, and freedom of expression. Schools and universities are closed to females, they are banned from workplaces, silenced in media and even denied from basic cultural freedoms such as visiting parks, listening to music, participating public events. Moreover, the Afghan females are not allowed to wear their own choices clothing (UNESCO, 2025)

Almost all educational and professional achieved gains of Afghan women over the past two decades have been erased and their meaningful participation in social, economic and political life is no more possible in the current context. Afghan women who make nearly half of the Afghan population have been excluded and are systematically marginalized (United Nations Office at Geneva, 2025).

During this gap a promising network of Afghan across the globe, consists of activists, intellectuals, academics and international supporters, turned to online platforms as a best alternative means of education at the moment for Afghan female students. These online platforms are initiatives aiming to restore not

only access to learning but also a source of reviving intrinsic motivation, purpose, hope and sense of identity among Afghan female students deprived of opportunities. They further aim to support the empowerment by nurturing intrinsic motivation, autonomy and resilience particularly in a situation where external motivation is severely suppressed (Ryan & Deci, 2000).

Undoubtedly, distance higher education platforms have provided Afghan women across the country with pathways to continue their academic and professional development even under restrictive conditions. Despite of the threats and violence presence by the Taliban Afghan female students enthusiastically join these online platforms and build their skills in vital disciplines such as economics, law, political science, computer science, journalism, medicine and others (Jack & Parkin, 2024).

However, a significant gap remains in understanding what sustains Afghan female's motivation; hope throughout the educational journey and beyond graduation, particularly as they seek empowerment, personal transformation and eventual socio-economic mobility after the Taliban's takeover. While thousands of of Afghan female students continue their studies at severe personal risk, limited studies have explored how internal psychological factors such as intrinsic motivation, hope, identity, purpose and agency are fostered and sustained through these digital platforms.

These online platforms also face numerous challenges, including limited access to the technology, logistical obstacles such as poor internet connectivity, high poverty rates, and low digital literacy, financial limitations, volatility, inherent socio cultural limitations and the constant threat of extreme punishment for any act of disobedience to Taliban policies (Inter Press Service, 2025).

Therefore, this study uses Self-Determination Theory (Deci & Ryan) and Hope Theory (Snyder) as its theoretical framework. Self-Determination Theory defines autonomy, competence and relatedness as the main psychological needs that form the basis of intrinsic motivation and psychological wellbeing (Ryan & Deci, 2000), while Hope Theory emphasizes on agency and pathways as critical and crucial for

goal pursuit (Snyder, 2002). These theories together explain both the motivational conditions that sustain learning in restrictive or challenging environments and the goal-oriented activities and processes that enable longer-term empowerment along with readiness for future market integration. By applying these theories, this study investigates not only whether distance higher education restores access to learning but also how it fulfills psychological needs and builds aim-oriented hope among Afghan female students under restrictive conditions, and support sustained engagement and post graduation opportunities. Particularly, this study explores how online higher education fosters intrinsic motivation and how it is sustained and contributes to personal growth, empowerment and long-term participation in national and international labour markets.

To address these questions, a mixed-method approach will be employed including an online questionnaire for broad descriptive patterns and semi structured interviews to provide in-depth perspectives, as Mixed-methods research integrates quantitative and qualitative approaches within a single inquiry to provide a more comprehensive understanding of complex phenomena (Creswell & Plano Clark, 2018), The data will be analyzed using thematic analysis mapped to the theoretical frame work.

1.3 Research Objective

To investigate how online higher education programs reinforce the intrinsic motivation of Afghan female students living under restrictive policies in conflict zones by supporting their autonomy, competence and relatedness (Self-Determination Theory) and fostering goal-directed hope through agency and pathways of Hope Theory. This study also examines the factors influence the sustainability of these effects on Afghan females' personal growth, social empowerment, and socio-economic mobility during their studies and after graduation.

1.4 Research Question

How can online higher education programs reinforce the intrinsic motivation of Afghan female students living under restrictive policies in conflict zones by supporting their autonomy, competence and relatedness (Self-Determination Theory) and fostering goal-directed hope through agency and pathways of Hope Theory? What factors influence the sustainability of these effects on Afghan female students' personal growth, social empowerment and socio-economic mobility during their studies and after graduation?

1.5 Research Gap

Available literature on distance education in conflict zones Indicates that distance education platforms can foster intrinsic motivation, hope and skills development even under significant cultural, economic and political constraints. However, since 15 August, 2021, there has been a lack of studies investigating how such platforms can foster inner drive, hope and the labor-market related skills attainment for Afghan female students under severe challenges. This gap is critical because, without understanding how Afghan women under severe challenges can engage with and benefit from distance higher education, policy and programs responses risk being ineffective or mistargeted. Moreover, in such conflict affected contexts, there is still lack of enough understanding on how intrinsic motivation, autonomy and goal-directed hope as psychological factors are nurtured and the processes through which they translate into long-term personal growth, empowerment and socio-economic participation (UNESCO, 2024; UNICEF/UNESCO, 2024).

1.6 Significance of the Study

Afghanistan remains the only country in the world where female students are systemically prohibited from attending secondary schools and universities. Following the Taliban's return to the capital of the country on August 15, 2021. As the Taliban are ideological against women's education (Amnesty International, 2022), Approximately 1.4 million Afghan girls have been excluded from formal education, resulting in a collective loss of around three billion learning hours within the first 1,000 days of structural erasure (UNESCO, 2024; UNICEF, 2024). This massive gap in education has forced a major shift in how women study, turning their own homes into places of academic survival where online learning is now their only way to protect their future. Considering the importance of this issue, this study significantly contributes to the existing body of knowledge by exploring how distance higher education empowers Afghan female students in conflict zones. While contemporary literature extensively documents external limitations, this research moves beyond by specifically addressing the economic, cultural and logistical barriers to enhance motivation, academic hope, employability and social empowerment among these learners.

Several multi-layered dimensions underscore the academic and practical significance of this research:

- *Theoretical Advancement and Reconceptualization:* This study provides a vital extension of Self-Determination Theory (SDT) (Ryan & Deci, 2020) and Snyder's Hope Theory (Snyder, 2002) to hyper-restrictive sociopolitical regimes. While traditional motivational theories assume a baseline of open societal structures, this research demonstrates that psychological need satisfaction autonomy, competence, and relatedness can be adaptively generated and sustained virtually even when physical mobility is completely criminalized. By synthesizing these dynamics, the study introduces a novel framework the Resilient Digital Empowerment Cycle which redefines conflict-zone literature by shifting the discourse from passive models of victimization toward a dynamic paradigm of digital resistance and "subversive access."

- *Empirical Insights into the Psychological Ecosystem:* Through inferential statistical testing, this study offers robust empirical evidence confirming that internal psychological factors account for a powerful 64.2% of the variance ($R^2 = .642$) in academic hope among Afghan female distance learners. The empirical findings illuminate how advanced digital literacy serves as an indirect cognitive pathway toward future-oriented optimism, functioning as a vital psychological lifeline and a clinical counter-measure against existential despair, depression and trauma caused by forced domestic isolation.
- *Socio-Economic Reconfiguration and "Hidden Agency:* This research uncovers a critical pragmatic pivot within the target population, where female students strategically prioritize tangible digital skills and professional competencies over formal state-sanctioned certificates. By aligning their academic selections with decentralized digital labor markets, distance higher education enables these women to transition into national digital niches and transnational remote labor platforms. This economic conversion fundamentally reconfigures the private sphere, transforming the household from a site of forced confinement into an active node of economic production, which ultimately restructures gender dynamics and household power relations from the bottom up.
- *Methodological Blueprint for High-Risk Environments:* Methodologically, this study establishes a secure and scientifically rigorous precedent for conducting sequential mixed-methods research in active conflict and highly monitored settings. By successfully integrating an extensive survey dataset (N=304) with in-depth qualitative narratives (N=16) and MAXQDA (version 2026) code-density analytics, it provides a replicable framework for maximizing empirical validity while maintaining strict digital data privacy frameworks and ethical protection protocols under pervasive state surveillance.
- *Strategic and Policy-Relevant Applicability:* Finally, the practical findings of this study offer an actionable, evidence-based blueprint for international donors, non-governmental organizations (NGOs) and transnational academic institutions. It provides immediate policy relevance by shifting

institutional paradigms toward low-bandwidth, asynchronous learning architectures, alias-based secure student rosters, and coordinated global credential recognition frameworks designed to safely sustain human capital formation and ensure educational equity within structurally broken environments.

1.7 Scheme of the study

To ensure a systematic and a thorough analysis of the subject, this study is organized in seven chapters. It begins by setting the context through an introduction of socio-political context of Afghanistan, research problem, objectives, research gape and significance, followed by a theoretical framework grounded in Self-Determination Theory and Hope Theory. A comprehensive literature review then examines education in conflict zones and the structural barriers faced by females in restrictive environments across the globe. The research methodology outlines the convergent mixed-methods design used for data collection and analysis. The remaining chapters present the analysis and findings of the study, followed by a discussion of their implications and recommendations for policy and empowerment strategies. The study concludes by summarizing key findings and limitations relevant to this study and it is supported by a complete list of references used in the study to ensure academic integrity and provide a basis for future research.

Theoretical Framework

This chapter provides the theoretical foundation of the study and explains how the chosen frameworks guide data collection, analysis and interpretation. The study utilizes Self-Determination Theory and Hope Theory. These two frameworks are selected because they address complementary aspects of motivation and goal pursuit. Self-Determination Theory defines the main psychological needs that form the basis of intrinsic motivation, while Hope Theory explains the agency and pathways that foster goal-directed hope. Both theories together offer a comprehensive and practical foundation for understanding how distance higher education may empower Afghan female students under restrictive conditions during the de facto government of the Taliban in Afghanistan.

2.1 Self-Determination Theory: Conceptual Foundations and Educational Relevance

Edward Deci and Richard Ryan are recognized as the pioneers of Self-Determination Theory. The theory functions as one of the most influential contemporary frameworks for understanding human motivation (Deci & Ryan, 1985; Ryan & Deci, 2000, 2020). The foundational pillar of Self-Determination Theory is Basic Psychological Needs' Theory (BPNT), which identifies autonomy, competence and relatedness as three universal psychological needs and considers them as the essential requirements for fostering intrinsic motivation and psychological well-being (Ryan & Deci, 2000).

The theory distinguishes between different types of motivation based on whether an individual acts out of his/her own free will or it is due to external pressure. They are refereeing autonomy to the experience of acting with a sense of choice and volition and denote competence as the feeling of being capable and successful in accomplishing tasks and refer relatedness to experiencing meaningful social connections and a sense of belonging. .

These needs are not culturally contingent preferences but essential conditions for psychological growth, internalization and well-being. According to Self-Determination Theory (SDT), extrinsic motivation exists on a spectrum of intensity not just as a single category. While people often begin a task due to external pressures or incentives, they can eventually adopt these values as their own through

internalization. The theory further argues that when an environment supports their basic psychological needs, individuals stop feeling "forced" to perform and instead view external requirements as meaningful and self-chosen (Ryan & Deci, 2000).

SDT differentiates intrinsic motivation and various forms of extrinsic motivation. According to the theory, intrinsic motivation involves engaging in activities for inherent interest and enjoyment, whereas extrinsic motivation involves engaging in activities that are driven by external reward (Deci & Ryan, 1985).

Niemiec and Ryan (2009) and Reeve (2012) argue that Self- Determination Theory has been extensively utilized in educational studies. It is used to explain student's engagement, persistence, deep learning and academic performance. All teaching practices that support autonomy such as offering meaningful choices, acknowledging students' perspectives and minimizing controlling language have been shown to enhance learner's intrinsic motivation and cognitive engagement. Competence is strengthened through optimally challenging tasks, structured guidance and timely constructive feedback and their relatedness is fostered when they experience supportive interactions with instructors and peers during their learning journey.

Considering the context of distance higher education, autonomy may be supported in remote education when students have control over their learning pace and pathways. Competence is fostered by scaffolded assignments and formative feedback and is cultivated through instructor's presence and peer interactions and virtual communities, mentoring systems and peer collaboration platforms may enhance relatedness (Chen & Jang, 2010; Hartnett, 2016). Thus, SDT provides a robust analytical framework for understanding how digital educational platforms can sustain intrinsic motivation even in contexts characterized by external restriction. Thus, SDT provides a robust analytical framework for understanding how digital educational platforms can sustain intrinsic motivation even in contexts characterized by extreme external restriction. In conflict-affected settings such as Afghanistan, where institutional stability and external incentives are severely disrupted, autonomously regulated motivation becomes especially

critical. The present study therefore employs SDT as an analytical lens to examine how distance higher education satisfies psychological needs and sustains learning engagement among Afghan female students living under restrictive socio-political conditions in Afghanistan.

2.2 Hope Theory: Goal-Directed Cognition under Structural Constraint

C. R. Snyder is regarded as the pioneer of Hope Theory. This theory defines hope as a mental frame work that enables individuals to pursue their desired goals despite facing adversity in their lives (Snyder, 2002). Snyder contends that hope is not a passive emotional state, but rather is a dynamic process that is composed of two interrelated components: agency and pathways. Agency is defined as perceived capacity and aim-oriented determination that initiates and maintains progress toward desired goals. Pathways reflect an individual's perceived ability and capacity to make plans and create feasible routes and strategies to achieve these goals (Snyder et al., 1991). Hope emerges and is built when individuals possess both motivational energy (agency) and strategic planning capacity (pathways). Hope offers internal impetus and the cognitive capacity for planning and it is associated with academic achievement, persistence and resilience in the face of systematic obstacles (Snyder, 2002; Gallagher & Lopez, 2009).

Hopeful individuals do not collapse and give up when they face barriers or crises in their lives; instead, they view these problems as challenges that require alternative planning or new strategies to overcome. Hope in educational context helps learners to work harder, set clear goals for themselves and deals with challenges (Yoon et al., 2019). Particularly in conflict zones, hope functions as a mental strength that sustains and keeps learners stay focused on their future and also helps learners solve existential their problems in a better way.

In the Afghan context, where female learners face severe bans on mobility, employment and formal educational participation, agency and pathways thinking may constitute critical cognitive survival

tools for them. Distance higher education platforms do not only provide academic content but also reinforce learners' perceived capacity to construct viable future trajectories. Therefore, Hope Theory complements SDT by illuminating how satisfied basic psychological needs and motivational energy translates into long-term goal pursuit under extreme structural constraints. Together, both theories serve as primary analytical lenses for this study. These frameworks inform the design of the study's instruments, guide the thematic coding process and shape the conceptual foundation for interpreting the findings by explain how distance higher education fosters motivation and sustains hope among Afghan female students under restrictive conditions.

2.3 Theoretical claims and synthesis

Taken together, these two theories suggest that distance higher education is most empowering when it simultaneously support students' psychological need satisfaction (autonomy, competence and relatedness) and strengthens their sense of agency and capacity to develop viable paths to their goals. Guided by this combined lens, the study formulates the following refined propositions to anchor both the statistical and qualitative analysis.

Proposition 1: Distance higher education course components that enhance autonomy, competence and relatedness are associated with higher levels of intrinsic motivation and sustained student engagement.

Proposition 2: Students who demonstrate stronger agency and clearer pathways thinking are more likely to show greater goal persistence and articulate clearer plans for labor market integration.

Proposition 3: Structural barriers including severe infrastructural deficits (Internet instability, device limitations and power outages), socio-cultural restriction and institutional vulnerability (pedagogical irregularity) negatively moderate the degree to which basic psychological need satisfaction and hope translate into tangible empowerment outcomes.

Furthermore, a critical institutional vector, termed Accreditation and Future Uncertainty, introduces an acute layer of cognitive anxiety regarding degree validity. This uncertainty directly interacts

with the students' pathways thinking, altering how academic competence is converted into formal, multi-tiered labor market integration. However, this moderating constraint is counterbalanced by an emerging internal coping mechanism of Hidden Academic Resistance, enabling students to maintain functional hope and psychological survival despite absolute structural containment.

2.4. Contextual Analysis of Motivation and Hope in Restricted Environments

2.4.1 Digital Divide & Cultural Barriers

The transition to distance higher education in Afghanistan is not merely counted as a technical shift but a socio-cultural negotiation. According to the "Digital Divide" theory, access to technology is gendered in patriarchal societies (Antonio & Tuffley, 2014). In the Afghan context, logistical barriers such as unreliable electricity and high internet costs (Theme 1) are compounded by cultural norms that prioritize male access to digital infrastructure. This study observes that for female students, a mobile phone is not just a tool for learning but a contested space of autonomy. When families restrict access to devices (Theme 6), they are inadvertently suppressing the student's 'Relatedness' and 'Competence' two core pillars of Self-Determination Theory (SDT). Thus, the digital barrier is as much a socio-cultural construct as it is an infrastructure deficit. Despite these formidable digital and cultural barriers, Afghan female students have not remained passive; instead, they have navigated these constraints through a resilient form of Hidden Education.

2.4.2 Hidden Education and Identity Transformation

One of the most significant emerging patterns in this research is the phenomenon of "Hidden Learning" (Theme 6). Historically, secret education has emerged as a form of non-violent resistance in oppressive regimes. In this study, the act of studying in secret despite domestic risks intense surveillance and physical threats serves as a profound indicator of 'Intrinsic Motivation'. This extreme persistence leads direct to an Identity Transformation (Theme 10); the participant actively sheds the identity of a passive

victim of circumstances and reconstructs herself as an active Scholar in Resistance. This shift is vital for psychological survival, as it fills the vacuum of institutional exclusion with a structured pursuit of self-development, personal agency and enhanced self-confidence. Reconstructing one's identity from a marginalized victim to an active scholar fundamentally alters the psychological state of the student, moving her away from existential despair toward a functional pragmatic hope.

2.4.3 From Despair to Functional Hope

The empirical data suggests that online education functions as a "psychological miracle" (Theme 9), serving as a primary coping mechanism against clinical depression and severe psychological trauma. This aligns with the 'Functional Hope' model, where virtual education provides the 'Pathways' (Theme 11) necessary to envision a life beyond the current crisis. By focusing on skill acquisition (Theme 6) rather than formal accreditation, students demonstrate a pragmatic approach to the labor market. Their motivation is fueled by an 'Altruistic Vision' the desire to serve their community which transforms individual suffering into a collective purpose for social change.

While existing literature provides a foundational understanding of online education and psychological theories like SDT and Hope, there remains a significant empirical gap. Specifically, the existing body of research lacks a deep and contextualized exploration of how these 11 identified themes interact within the current unique socio-political restricted landscape of contemporary Afghanistan. Most generic studies focus on general digital barriers without addressing the deep intersection of secret education, gender-based containment, and existential survival. Therefore, this study employs a sequential mixed-methods design to move beyond surface-level statistics and capture a nuanced, lived-experience understanding of how Afghan female students navigate these challenges to build their future.

2.4.4 Strategic Integration of Motivation and Hope in Restricted Environments

These integrated theories (SDT and Hope) provide the foundational logic illustrating how internal psychological motivation overcomes severe external barriers. The synthesis of Self-Determination Theory (SDT) and Snyder's Hope Theory explains the extraordinary persistence of Afghan female students in Afghanistan who are currently pursuing online higher education under active bans and restrictions. While the current socio-political restrictions directly suppress basic psychological needs autonomy, competence and relatedness, the empirical emergence of "Hidden Education" (Theme 6) demonstrate a proactive, subversive reclamation of autonomy. In this adversarial context, online higher education acts as a digital sanctuary where female students exercise their agency, transforming a passive state of isolation into an active pursuit of digital and academic competence.

Furthermore, Snyder's Hope Theory is operationalized directly through Agency Thinking and Pathways Thinking. For Afghan female students, the traditional pathways to formal education are severed; hence, distance learning becomes the primary alternative pathway to the future (Theme 11). The empirical evidence indicates that this engagement serves as more than an academic endeavor; it operates as an existential psychological survival mechanism (Theme 9) and a form of silent resistance against systematic gender-based marginalization (Theme 5). This directly embodies the concept of Cognitive Resilience, where the structured pursuit of a future goal such as remote employment and community development mitigates immediate environmental trauma.

By addressing the Logistical and Structural Barriers (Themes 1 & 8), this study posits that mitigating 'Pathways' obstacles (e.g., internet access and power outages) will enhance their internal 'Agency' and foster a profound Identity Transformation. Therefore, the integration of these two theories explains why Afghan female students persist despite the 'Future Uncertainty' (Theme 4) and lack of formal accreditation. Every logged-in hour is not merely an academic step, but a victory for autonomy over isolation and marginalization. Therefore, their motivation is driven by the intrinsic value of reclaiming their future rather than external validation alone.

To ensure this strategic integration possesses absolute psychometric validity rather than remaining purely conceptual, the measurement scales used to operationalize these coupled theoretical constructs capturing the friction between structural barriers, SDT satisfaction, and hope pathways were subjected to rigorous internal consistency testing. The structural stability of this integrated framework is verified by an exceptional Cronbach's Alpha coefficient of 0.927 during the pilot phase (N = 31) and 0.924 during the main data survey (N = 304) calculated across 35 operational items. This high level of reliability confirms that the tension between external containment and internal agency is captured with extreme stability, providing a defensible foundation for theoretical inferences regarding student resilience.

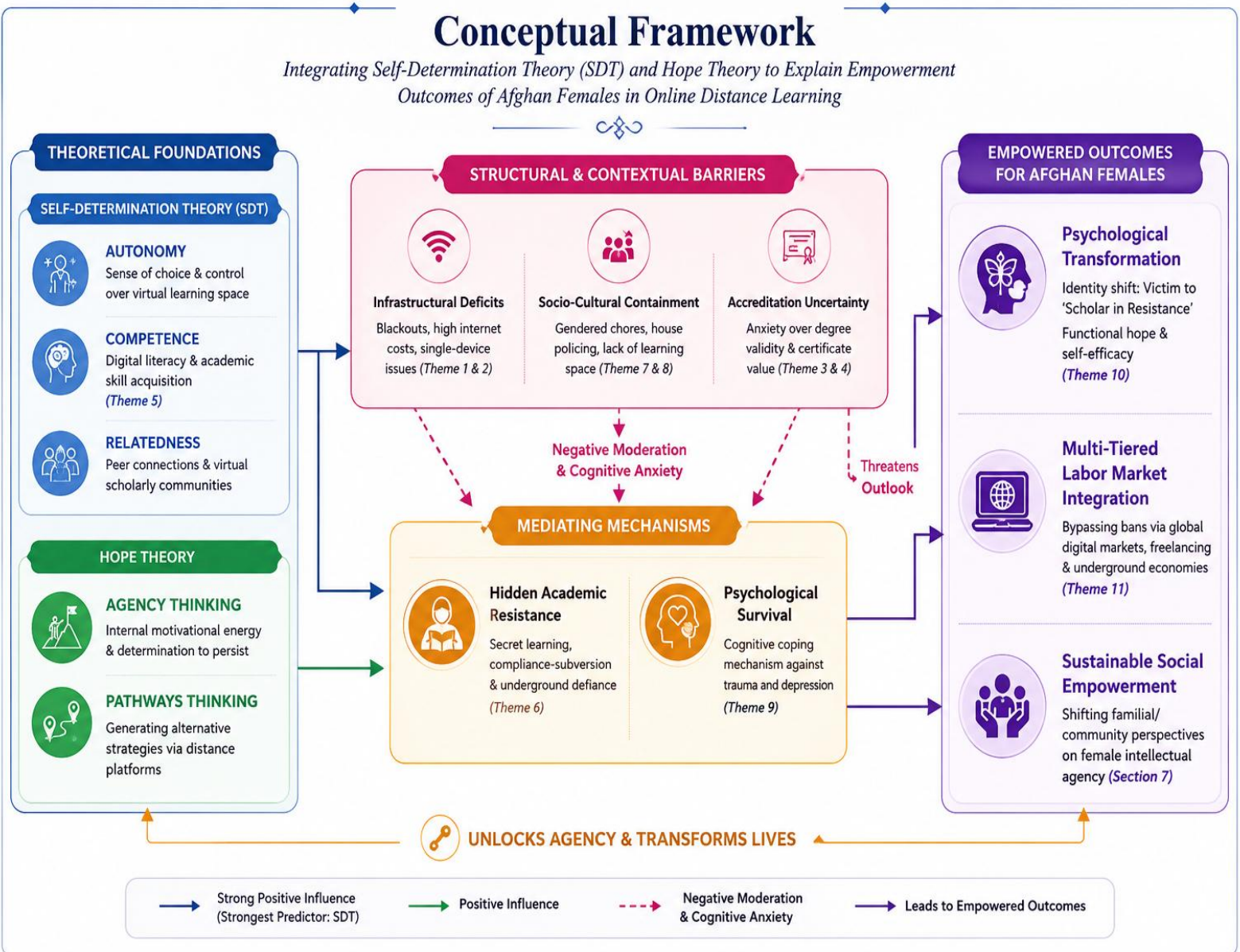
By mitigating 'Pathways' obstacles such as improving digital access and addressing power outages the framework posits that a profound Identity Transformation is unlocked. The integration of these two theories explains why Afghan female students persist despite acute Future Uncertainty (Theme 4) and a lack of formal domestic validation. Every logged-in hour is not merely an academic step, but a victory for internal autonomy over enforced isolation and structural marginalization.

2.5 Conceptual Framework: Motivation and Hope in Distance Higher Education

The Conceptual Framework of this study integrates the core components of Self-Determination Theory and Hope Theory to map out the complete empowerment pathway of Afghan female students. It posits that while severe Structural Barriers (the digital divide, institutional weaknesses, and cultural restrictions) suppress basic psychological needs, the interaction of internal Agency and alternative digital Pathways (provided by distance education) activates a powerful process of Hidden Academic Resistance and Identity Transformation. This process ultimately leads to sustained intrinsic motivation, psychological survival, and eventual labor market integration, even under highly restrictive conditions.

Figure: 2.1:

The conceptual framework map



In its operational form, the framework functions as a multi-tiered pathway. On the antecedent side, the framework positions SDT dimensions alongside digital autonomy as the primary independent drivers of psychological hope. These internal drivers do not encounter a frictionless path; instead, they are heavily moderated by the matrix of structural, socio-cultural and institutional barriers specifically the cognitive anxieties caused by Accreditation Uncertainty. Rather than resulting in behavioral or psychological

paralysis, the framework highlights Hidden Academic Resistance and Psychological Survival as core mediating mechanisms. It is through these secret learning spaces that students actively engage in compliance-subversion, turning their virtual education into a coping mechanism that actively combats depression and trauma. Ultimately, the framework maps these processes onto a dual-dependent outcome block. First, an internal Identity Transformation characterized by functional hope and goal-directed efficacy; and second, an external Multi-Tiered Labor Market Integration where female graduates utilize alternative digital pathways to successfully navigate both local underground economies and global remote digital markets.

In conclusion, these theoretical perspectives work systematically together to explain how motivation and hope interact to empower Afghan females through distance higher education and to maintain learning engagement under restrictive conditions. By successfully validating these relationships through empirical analysis, this integrated conceptual model provides a robust foundation for examining resilience in highly contained educational environments. The next chapter builds on this theoretical foundation by critically reviewing existing literature on female empowerment, distance education and education in conflict settings.

Literature Review

This chapter of the study provides a concise, systematic review of literature related to distance higher education and empowerment of female students in challenging environments. It discusses previous studies results, theoretical perspectives and identified research gaps that inform this study. To ensure systematic structure and transparency, a search protocol form adapted from Tranfield, Denyer, and Smart (2003) was employed. The review covers four major themes: access and constraints, educational and motivational support; social and psychological support and empowerment and labor-market outcomes. The results are interpreted in the light of theoretical propositions were developed in chapter 2.

3.1 Search Protocol and Selection Criteria

To identify relevant literature for this study, a comprehensive search was conducted across major academic databases, including Scopus, Web of Science, ERIC, PubMed, and Google Scholar, complemented by grey literature from international organizations, NGOs, government agencies, think tanks, and preprint repositories. The search strategy used keywords such as distance education, online learning, women in Afghanistan, motivation, women empowerment and socio-political barriers to identify relevant studies. Studies were included if they focused on online or distance education, motivation, or educational access in conflict-affected or developing contexts. Both theoretical and empirical studies were considered. Non-English publications, opinion pieces without academic basis, and irrelevant subject areas were excluded. The works mostly published between 2000 and 2025 in English and Afghan national languages Pashto and Dari were mainly focused for the review. Only empirical evaluation studies and numerous reports addressing distance education in conflict zones and challenges faced by students under restrictive conditions were included. Commentaries, opinions pieces, editorials were excluded.

This review explores the intersection of education; empowerment and motivation for female students in conflict zones, with a particular focus on the transformative the potential of distance higher

education. In contexts where female education is systematically restricted by economic, cultural, logistical and security severe obstacles. This chapter begins by examining and bringing attention to the broader global context of education in conflict zones, showcasing all the obstacles and the creative solutions applied globally and it then narrows its focus to Afghanistan's context. It highlights the challenges faced by Afghan women under restrictive conditions and creative solutions, and empowerment through online learning, with particular attention to Afghan female students after August 15, 2021 when the country fell into the hands of the Taliban. The Taliban officially banned female physical education and closed the doors of high schools and universities for them in the country. In response to these restrictive educational policies, alternative forms of learning have become increasingly important for continuing education under such conditions. Distance education has emerged as alternative mode of delivery for learners.

In war-affected countries conflicts often cause devastation of infrastructure, displacement and migration of large number of residents, destroy and ruin the lives of people and disrupt social and institutional systems. Though, education is suffered but it works a critical mechanism for resilience and recovery (UNESCO, 2022).

Conflicts for females exacerbate pre-existing inequalities. They considerably decrease their access to education they create more challenges and various threats of violence in shape of losing family members, financial and economic hardship, cultural barriers and institutional disintegration (UNESCO, 2022). Education in such contexts, not only remains as main key to unlocking opportunities and acquiring knowledge, but it also serves as a tool for societal development and psychological protection, empowerment. By establishing a sense of normalcy and routine, it effectively restores identity, a sense of purpose and a positive future orientation for vulnerable learners (Nicolai & Triplehorn, 2003).

In response to these severe challenges and issues, online and alternative educational modalities have emerged as crucial and vital approaches to triumph over these barriers across the globe to ensure continuity of learning to conflict-affected learners. Globally, in many conflict zones innovative

approaches and strategies such as radio-based education, mobile classrooms and online learning platforms have been taken and applied. In countries such as Iraq, Syria, and parts of Sub-Saharan Africa these innovative approaches have enabled learners to continue their learning. These methods are critical and useful in their environments because they provide ways to access education to those who live in the most dangerous and inaccessible areas and are allowing individuals to carry out their daily responsibilities to contribute their families in financial support, care giving and balance it with their education (UNHCR, 2020).

Afghanistan is building on these worldwide experiences in conflict- affected regions, represents a uniquely extreme case. Since August 2021, when the Taliban entered Kabul and formally prohibited Afghan females from attending secondary schools and universities. Based on UNESCO (2024) around 1.4 million girls have been excluded of education and according to UNICEF (2024), Afghan female students in their very first 1,000 days of exclusion, approximately three billion learning hours have collectively lost. During the history, Afghan females have faced systematic discrimination in accessing education, shaped by cultural norms, gender-based belief, ideological influences, security concerns and physical obstacles; these are contributing to inequality (UNESCO 2024).

Despite these severe challenges, many Afghan women have turned to distance learning opportunities which functions not only a way of acquiring knowledge but also serves as platform for psychological empowerment. It is a form of resistance, motivation resilience and based on Self-Determination theory, motivation lasts and endures the longest when it is internally driven by the fulfillment of autonomy, competence, and relatedness (Ryan & Deci, 2000).

Similarly, Hope Theory insists on the significance of cognitive and emotional pathways which enable individuals to set and allow pursue meaningful goals even in conditions of adversity and (Snyder, 2002). Despite severe challenges imposed by oppressive regimes, distance education is playing a vital role in fostering agency and future-oriented identities among marginalized females. Grounded in the

capabilities approach, these alternative learning platforms serve as a key toward long-term transformation, enabling women to develop the essential capabilities to advocate for their rights, work, and participate actively in socio-political affairs (Nussbaum, 2011).

Table 3.1:
Classification of References Used in the Study (n = 79)

S.No	Reference	Database/Source	Type	Key Focus / Findings	Credibility / Indexing
1	Adalyar (2025)	Local journal website	Peer-reviewed article	E-learning ecosystem in Afghanistan	Peer-reviewed (local journal)
2	Albrecht, Rude & Stitteneder (2022)	CESifo Forum	Review article	Women's development in Afghanistan	Policy/think tank publication
3	Al-Darei & Elhag (2022)	ERIC	Experimental study	Feedback in e-learning	Indexed education journal
4	Alemi et al. (2023)	Scopus/WoS journals	Thematic review	Afghan mental health (4 decades)	Peer-reviewed (indexed journal)
5	Ali et al. (2022)	MPRA	Working paper	E-learning in developing economies	Grey literature
6	Amnesty International (2023)	Amnesty International	Human rights report	Women's rights under Taliban	NGO report (high credibility)
7	Antonio & Tuffley (2014)	Scopus/WoS journals	Journal article	Gender digital divide	Peer-reviewed (indexed)
8	Becker, G. S. (1964)	University of Chicago Press	Book	Human Capital Theory: How education drives economic growth and individual development.	Foundational academic book
9	Chen & Jang (2010)	Scopus/WoS journals	Empirical study	SDT in online learning	Peer-reviewed (highly cited)
10	Daraz et al. (2023)	Scopus/WoS journals	Mixed-methods study	Education & social outcomes	Peer-reviewed (indexed)

11	Dawodi et al. (2023)	arXiv	Preprint	Mobile learning systems	Preprint (not peer-reviewed)
12	de Alwis (2024)	Scopus/WoS journals	Review article	Gender persecution law	Peer-reviewed (indexed)
13	Deci & Ryan (1985)	Springer/Plenum	Book	Self-Determination Theory	Foundational academic work
14	Deci, E. L., & Ryan, R. M. (1985)	Plenum Press	Book	Self-Determination Theory: Foundational concepts of intrinsic motivation and psychological needs.	Foundational academic work
15	Díaz-Noguera et al. (2022)	Scopus/WoS journals	Survey study	Online learning motivation	Peer-reviewed (indexed)
16	Gallagher & Lopez (2009)	Wiley	Encyclopedia chapter	Hope and wellbeing	Scholarly reference
17	Haqbeen et al. (2025)	Scopus/ERIC journals	Case study	Girls' digital education	Peer-reviewed (indexed)
18	Haqpal (2025)	Scopus/WoS journals	Review article	Afghan women & gender issues	Peer-reviewed
19	Hartnett (2016)	Springer	Book	Motivation in online learning	Academic book
20	Hartnett, M. (2016)	Springer	Book	Motivation in online education: Practical and theoretical framework for e-learning settings.	Academic research book
21	Hasin et al. (2025)	Scopus/WoS journals	Review article	Women's education challenges	Peer-reviewed (indexed)

22	Human Rights Watch (2023a)	HRW	Report	Afghanistan human rights	NGO (high credibility)
23	Human Rights Watch (2023b)	HRW	Report	Girls' education rights	NGO (high credibility)
24	Hussain et al. (2024)	Scopus/WoS journals	Journal article	ICT & empowerment	Peer-reviewed (indexed)
25	IIEP UNESCO (2024)	UNESCO	Policy report	Education in conflict areas	UN policy report
26	Inter Press Service (2025)	IPS	News article	Online education access	News source
27	International Labour Organization (2023)	ILO	Economic report	Employment decline	UN agency report
28	International Telecommunication Union (2021)	ITU	Institutional report	Digital empowerment	UN agency report
29	Jack & Parkin (2024)	Irish Times	News article	Afghan women online learning	News source
30	Kabeer (2012)	SOAS	Discussion paper	Women empowerment	Academic discussion paper
31	Kaplan (2022)	Scopus/WoS journals	Longitudinal study	SDT & teachers	Peer-reviewed (indexed)
32	McLean & Cooper (2025)	Scopus/WoS journals	Journal article	Internet education	Peer-reviewed (indexed)
33	Misra (2002)	Scopus/WoS journals	Journal article	Taliban & politics	Peer-reviewed

34	Mohammadi et al. (2024)	PubMed journals	Survey study	Mental health impacts	Peer-reviewed (indexed)
35	Nadir (2025)	Google Scholar journal	Case study	Women rights (2001–2021)	Peer-reviewed (unverified indexing)
36	Niemiec & Ryan (2009)	Scopus/WoS journals	Theoretical article	SDT application	Peer-reviewed
37	Nussbaum (2004)	Academic journal	Essay	Women's education	Scholarly article
38	Nussbaum, M. C. (2011)	Harvard University Press	Book	Creating capabilities: The human development approach to human well-being and education rights.	Foundational academic book
39	Qazi Zada & Qazi Zada (2024)	Scopus/WoS journals	Journal article	Human rights & Taliban	Peer-reviewed
40	Razjouyan et al. (2022)	Scopus/WoS/Pub Med journals	Cross-sectional study	Mental health war impact	Peer-reviewed
41	Reeve (2012)	Springer	Book chapter	SDT & engagement	Academic chapter
42	Reuveny & Prakash (1999)	Scopus/WoS journals	Journal article	War impacts	Peer-reviewed
43	Ryan and Deci (2000)	Scopus/WoS/Pub Med journals	Foundational article	SDT motivation	Landmark article
44	Ryan & Deci (2020)	Scopus/WoS journals	Review article	Motivation theory	Peer-reviewed
45	Sabri et al. (2017)	Academic journal	Journal article	Women agriculture education	Peer-reviewed

46	Sahu & Yadav (2018)	Regional journal	Journal article	Women & politics	Regional peer-reviewed
47	Samandar & Wardak (2025)	Scopus/WoS journals	Journal article	Women entrepreneurs	Peer-reviewed
48	Sarwari et al. (2022)	Scopus/WoS journals	Case study	COVID e-learning	Peer-reviewed
49	Selwyn (2016)	Bloomsbury Academic / Google Scholar	Book	Critical issues in education technology; digital divide and inequality in ICT-based learning	High credibility; academic publisher
50	Shaikhzada et al. (2025)	Academic journal	Review article	Digital gender issues	Peer-reviewed (emerging)
51	Shams et al. (2022)	Scopus/WoS journals	Analytical study	E-learning adoption	Peer-reviewed
52	SIGAR (2021)	US Government	Policy report	Gender equality Afghanistan	Government report
53	Snyder (2002)	Scopus/WoS journals	Theoretical article	Hope theory	Landmark article
54	Snyder et al. (1991)	Scopus/WoS journals	Scale development	Hope scale	Highly cited
55	Strand (2015)	Brookings	Policy report	Girls' education	Think tank report
56	Tai (2025)	Scopus/WoS/Pub Med journals	Journal article	Conflict & education	Peer-reviewed
57	Taqaddausi et al. (2023)	Regional journal	Survey study	Gender inequality	Regional journal

58	UN Geneva (2025)	UN	Policy report	Women exclusion	UN report
59	UN Women (2024)	UN	Gender report	Afghanistan gender index	UN official report
60	UNDP (2021)	UNDP	Policy report	Development outlook	UN report
61	UNDP (2023)	UNDP	Policy report	Gender restrictions	UN report
62	UNDP (2025)	UNDP	Policy report	Women empowerment	UN report
63	UNESCO (2020)	UNESCO	Policy report	Education crisis	UN report
64	UNESCO (2022a)	UNESCO	Framework report	Education transition	UN framework
65	UNESCO (2022b)	UNESCO	Policy report	Education crisis	UN report
66	UNESCO (2023)	UNESCO	Emergency report	Education protection	UN report
67	UNESCO (2024)	UNESCO	Gender analysis	Higher education gap	UN report
68	UNESCO (2025a)	UNESCO	Policy report	Girls education ban	UN report
69	UNESCO (2025b)	UNESCO	Advocacy report	Education rights	UN advocacy

70	UNESCO IIEP (2024)	UNESCO	Policy report	Conflict education	UN institute
71	UNICEF (2023)	UNICEF	Policy report	Girls education deprivation	UN agency
72	UNICEF (2024a)	UNICEF	Humanitarian report	Education crisis	UN agency
73	UNICEF (2024b)	UNICEF	Situation report	Afghanistan crisis	UN agency
74	University of the People (2024)	Institutional source	News article	Online education access	Institutional news
75	UNRWA (2024)	UN agency	Policy report	Conflict education	UN agency
76	WADI Online (2022)	NGO	Program report	Refugee education	NGO report
77	WB/UNESCO/UNICEF (2021)	Joint institutions	Policy report	Education crisis	International report
78	Weller (2014)	Ubiquity Press / Google Scholar	Book	Open education; access vs inequality; limits of educational democratization	High credibility; academic press
79	World Bank (2020a)	World Bank	Policy report	Development priorities	IFI report
80	World Bank (2020b)	World Bank	Global report	Poverty analysis	IFI report
81	Yoon et al. (2019)	Scopus/WoS journals	Experimental study	Hope-action theory	Peer-reviewed

The literature presented in the above table 3.1, reflects a diverse and multidisciplinary body of evidence drawn from peer-reviewed journals, theoretical books, policy reports and grey literature. This diversity ensures the integration of both empirical findings and policy perspectives relevant to education, motivation and gender issues in conflict-affected contexts. The selected studies collectively cover key thematic areas such as online and distance education, women's education in Afghanistan, economical and socio-political barriers to education, motivation, hope, human capital development and psychological frameworks. The inclusion of both high-impact indexed journals and institutional reports allows for a balanced analysis that combines academic rigor with real-world policy relevance.

3.2 The Global Context of Education in conflict Zones

Armed conflicts in the world have long been recognized as severe disruptors of formal education systems. Such conflicts have profound and multifaceted impact on education by damaging institutional structure, destroying physical infrastructure and hinder residents' access to learning. Therefore, Education always remains vulnerable in conflict zones for girls, women, children and youth (UNESCO, 2022).

In armed conflicts, one of the most immediate obstacles to physical education is the physical threat posed by violence. Educational institutions are frequently targeted through attacks, arson, bombing or shootings and in many cases they turned into military bases. In such conditions rendering schooling services is hard as the risk to life and security increases substantially. At the same time, escalating violence forces residents in large portion to flee their homes for safety. Therefore, it obliges residents to displace and dwell away from educational facilities and thousands of students due to huge destruction and mass displacement are kept disconnected from formal education for extended periods (UNESCO, 2022).

Beyond immediate disruption, education in conflict zones plays a vital role in breaking cycles of violence, poverty and social exclusion. Long-lasting military conflicts often weaken economic systems and leading to widespread poverty and sharply reduce various opportunities of people, particularly for girls and women. Undoubtedly, limited access to education in these conditions restricts skill developments and future career opportunities. These all later contribute to long-term unemployment, social instability and underdevelopment. Conversely, access to education empowers individuals and equips them with contemporary, market-demanded skills and knowledge that support economic participation, social cohesion and post-conflict recovery, thereby reducing vulnerability to poverty and renewed conflict (World Bank, 2020, 2024).

Overall, the global literature demonstrates that armed conflict all around the world consistently undermines educational systems by destroying infrastructure, displacing populations and restricting access of women and girls to due to disproportionate barriers. In conflict-affected zones, education remains one of the first sectors that undermines significantly. It simultaneously holds critical potential for breaking cycles of poverty, instability and social exclusion. These two existing realities emphasis on the urgency of exploring flexible and resilient educational approaches that can operate in insecure and vulnerable environments. Therefore, distance education has been introduced as an essential foundation and an alternative mode of education in conflict zones.

3.2.1 Challenges in Education for Females in Conflict Zones

Across the globe, armed conflicts in various regions present persistent and interrelated challenges to female access to education. In many other conflict-affected regions violence, displacement, and institutional collapse disrupt disproportionately girls' educational participation. For example, in Syria, the prolonged civil war has severely destroyed the structure of national educational system, leaving millions of children without access to schooling and large-scale

displacement has further compounded this disruption as many residents are not able to send their children to schools due to insecurity, militarization of educational facilities and destruction (UNICEF, 2021).

Similarly, long-lasting war intensified violence in Iraq. It deepened gender-based inequalities in education. Females are facing numerous severe barriers such as restrictive cultural norms, intensified security risks and reduced institutional capacities which all limit school attendance and educational continuity in Iraq (UNICEF, 2021). Ongoing conflicts in South Sudan and the Central African Republic have led to high dropout rates among girls. These outcomes are due to early marriages, gender-based exploitation and the collapse of social protection systems that would rather support girls' education in the regions (UNICEF, 2023).

Ukraine has also been experiencing server war. It has severely disrupted education. Millions of children are experiencing damaged infrastructure, daily displacement and conflict but rely on online learning modalities during the conflict (UNICEF, 2024). Persistent military operations and bombardment in Gaza destroyed infrastructure and disrupted its schooling system due to which thousands of students are not able to attend their schools (UNICEF, 2024; UNRWA, 2024).

These all cases across the globe illustrate how conflict exacerbates existing gender inequalities in education by combining together cultural barriers, physical insecurity, displacement and undermined institutions. These all undermine female education access and continuity across diverse conflict zones in the world.

3.2.2 Creative Solutions in Conflicted Zones: A Global Perspective

As armed conflicts increasingly disrupt conventional schooling, education systems in these contexts have been obliged to find unique solutions and adopt innovative and flexible delivery

models to sustain learning continuity. When physical access to schools becomes impossible and unsafe in the areas alternative education modalities that are enabled by technology and mobility have emerged as essential mechanism for persevering learning access to the students during periods of crisis. All these approaches are not merely temporary substitutes for formal education systems but function as adaptive responses that enable learners to stay connected and engaged with education under severe unfavorable conditions of insecurity and instability (UNESCO, 2023).

3.2.3 Mobile Classrooms, Online Learning Platforms, and Radio-Based Education

One widely adopted response to the challenges posed by conflict across the world is the use of Mobile classrooms, in various countries such as Afghanistan, Syria, Iraq, Jordan, Lebanon, Nepal and Uganda. These classrooms are often set up in temporary structures, tents and converted vehicles. These are designed to reach displaced population residing in camps or remote areas and are equipped with learning materials and facilitated by trained educators who provide instructions (UNESCO, 2020).

In parallel, another solution to these challenges imposed by conflict around the globe is online learning platforms; these have gained prominence as a means of delivering education in contexts where physical attendance in schools pose serious safety risks or where the educational infrastructure has been severely damaged. During the intensified conflict and displacement situations, mostly learners have continued their education through various online educational resources and digital learning platforms that enable learning (WADI, 2022).

At the same time, in areas where electricity and internet connectivity has issues, radio-based education has proven to be a highly effective and inclusive solution in conflict zones. In countries such as South Sudan where electricity and internet access is low or not available. These programs

are usually developed in collaboration with local non-governmental organizations to deliver various curriculum-aligned contents of the subjects including, literacy, numeracy and science. Radio-based learning programs allow learners of different ages to access educational content regardless of location and technological capacity. Making it especially valuable in highly resources- constrained conflict environment (UNICEF, 2020).

Collectively, these adaptive inclusive solutions across the globe demonstrate how they mitigate the educational disruptions in areas where conflict badly damages all aspects of society. As these approaches expand access, their effectiveness varies and is depending on contextual factors such as gender norms, technological infrastructure, learner autonomy and psychosocial support issues. Because they are salient for female learners in restrictive settings. These global experiences provide important insights for understanding the potential and limitations of distance higher education as a pathway for empowering Afghan females under the restrictive policies of the Taliban's de facto government in Afghanistan.

3.3 Technology as a Crucial Resources in Conflict- Affected Contexts

In many countries worldwide, armed conflicts badly damage and disrupt formal education systems. As there is displacement and marginalization amid crisis in those areas, educators and policy makers are seeking various approaches to ensure learning continuity for marginalized and displaced learners (UNHCR, 2020). In this context, modern digital technologies have emerged and have been used for playing their crucial role in sustaining access to education in conflict-affected zones worldwide.

Online and technology-mediated education has made it easier for lots of displaced and out-of- school students and to acquire knowledge and pursue their learning and education beyond

traditional school setups, through virtual classrooms, educational applications and e-learning modules. Students use smart phones to share and acquire much educational contents ranging from short video lessons to interactive learning games, in refugee camps in Syria and Iraq and other countries of the world, as these digital modalities offer flexible, scalable and relatively low-cost solutions for maintaining educational engagement amid conflict (UNHCR, 2020).

In Afghanistan, mobility restrictions have limited Afghan female students' access to physical schools and universities, and in this context, technology-based approaches in higher education have become increasingly important (Adalyar, S. H., 2025). Hussain, F., Amin, S. N. & Rezaie, R. (2024) empirical study highlights the significant potential of digital education initiatives. Based on their results, such initiatives expand educational access for all, particularly for women. However, the programs' effectiveness is constrained by and dependent on structural barriers such as unstable electricity, poor internet connections and low levels of digital literacy, and is also shaped by intersecting factors such as gender norms, educational attainment and political instability.

Further evidences from a longitudinal study between 2015 and 2022 examines Afghan women's adoption of information and communication technologies (ICT) suggests that technology use is shaped by intersecting factors such as gender norms, educational attainment and political instability. Despite these barriers, Afghan female students have continued to engage with digital technologies in their daily lives for social interaction and educational purposes during crisis and the COVID-19 pandemic (Musawi et al., 2025).

When considered collectively, the literature indicates that technology in conflict zones functions as both a contested space and a critical enabler of educational access. On the one hand, it offers pathways for circumventing physical, political and security-related barriers. On the other hand, their impact is mediated by some severe limitations such as cultural resistance, illiteracy in the

digital age, social political conditions and insufficient infrastructure. Nevertheless, within highly restrictive conditions, access to technology is increasingly becoming as mechanism of empowerment among Afghan women. It supports females to continue education, social connection and helps them to maintain engagement with learning opportunities under constrained conditions in their society.

3.4 Female Education under the Taliban Regime

After the Taliban's return to the power on August 15, 2021, Afghan females have been facing grave and systematic barriers to accessing education. Their leadership has issued a series of decrees that dismantled educational opportunities for women and girls in the country. All physical secondary schools and universities for girls across the country are closed. A decree until further notice by their Supreme leader in December 2022 has officially excluded Afghan females from secondary schools and universities (Human Rights Watch, 2023). The measures and decree were accompanied widespread national and international condemnation; many global human rights organizational characterized these measures as violation of fundamental human rights.

The Taliban authorities have offered shifting justification for their restrictions in the country. They once claimed and framed the measures as cultural concerns, and then administrative constraints later religious requirements, including claims regarding female education. These shifting justifications time to time and their ambiguous explanation lack consistency and are not only misleading, but also a prejudice that are not supported by Islam educational tradition or international legal frameworks. These restrictions are counted and have been interpreted as forms of gender persecution and systematic exclusion of Afghan women from public life (UNESCO, 2022; de Alwis, 2024).

Currently, only girls up to sixth grade are allowed to attend schools, and even this limited access remains precarious. Reports indicate discussions within the Taliban's leadership about

bringing down this threshold to 3rd grade, as they believe girls at grade sixth reach puberty and their public visibility is religiously not recommended (Human Rights Watch, 2023). The literature widely interprets such restrictive policies as mechanisms of social control rather than measures are taken for educational reform and national development in the country.

In fact, this systematic education denial is not just a violation of education right but also gender-based discrimination with profound psychological, social and economic consequences. Studies suggest such measures and prolonged educational exclusion will have a negative impact on Afghan society particularly female's mental health, reduces their intrinsic motivation, autonomy and erodes hope for their future participation in all social and economic life (UNESCO, 2022).

Beyond formal bans, they are other numerous obstacles, contributing to the challenges in accessing education such as poverty, insecurity, lack of infrastructure and cultural impediments. In some rural and marginalized communities, due to lack of awareness and education they still rely on their traditional roles and continue to restrict their females from educational participation. However, in some areas, there is a huge interest and demand for females' education, but there is a shortage of female educators, proper infrastructure and safe learning environment, these all remain severe constraints for them.

Despite these severe challenges in Afghanistan, recent reports document that thousands of Afghan females under restrictions continue their resilience, commitment and pursue their dreams have turned to continue informal learning, initiate underground educational platforms or community-based learning (UN Women, 2025).

Both international and Afghan internal civil society organization continue to advocate for and facilitate educational opportunities for afghan females, this indicates that education is an important

factor to the long-term stability, social cohesion and economic recovery of Afghanistan (UNDP, 2025).

This is widely acknowledged and the literature consistently warns, if this systematic exclusion persists, will have long term consequences for Afghanistan, including declining literacy rate, deepening poverty and widening gender inequality and with other numerous problems. Excluding half of the population from formal education is not only unjust; it is a critical impediment to national reconstruction, sustainable development and peace building.

3.5 Education as a Tool for Empowerment in Conflict Zones

Education plays a fundamental role in empowering females in conflict-affected contexts where access to various resources such as rights and opportunities is often severely constrained. In this context, Female's empowerment refers to the expansion of women's capacity to make informed decisions, exercise and have control over their lives, utilize available opportunities and participate meaningfully in all economic, social and political spheres (Nussbaum, M. C., 2000). Education is worldwide recognized as a mechanism through which human capabilities are developed and sustained. Scholarly literature emphasizes that women's access to education, enhance their capacity to overcome structural constraints imposed by cultural barriers, security related obstacles and economic deprivation (Nussbaum, 2004).

By fostering critical thinking, skill acquisition and self efficacy, education enables females to navigate restrictive environments. They gain access to livelihood opportunities and exercise agency in both in public and private domains. As in conflict- affected zones traditional support systems are frequently disrupted, therefore, education assumes an even more critical role as a pathway to autonomy, resilience, motivations, and long term empowerment.

3.5.1 Economic Empowerment

Education functions as a potential tool and critical mechanism for economic empowerment by equipping females with contemporary market-demanded skills, financial literacy and entrepreneurial capacities. Females through the acquisition of such skills secure employment or start and establish their own enterprises. Generally in conflict zones, resources are scarce and livelihoods are unstable, hence education with its potentiality provides opportunities and viable pathways through to females through which they can contribute actively to both household survival and broader economic recovery (Kabeer, N., 2012).

Economic empowerment has been widely recognized as a key factor for females' survival and resilience in conflict-affected contexts. In Afghanistan females encounter severe structural constraints to their economic participation such as restricted mobility, limited access to credit facilities and deeply entrenched cultural norms and impediments (United Nations Development Programme, 2024). These severe constraints limit females' capacity to translate their skills and education into sustainable economic outcomes in the country.

Despite such difficulties, evidence suggest that combined social and economic interventions in the form of vocational training combined with community-based support mechanism can enhance females decision-making power and improve household welfare even in risk environments (Kabeer, N., 2012).

A number of empirical findings further demonstrate some adaptive strategies and resilience have been used and shown by Afghan females under restrictive conditions. A UNDP (2024) survey indicates that many of the female entrepreneurs still maintain and operate their small businesses despite minimal access to formal financing. Although 41% of these female entrepreneurs reported

being in debt, only 5% managed to secure loans from formal banking institutions; with majority of them rely on informal or family networks for their financial support. Moreover, over 70% of the women reported that their economic activities were restricted by the requirement to be accompanied by a male guardian escort when accessing markets (UNDP, 2024; Reuters, 2024).

The study by Samandar and Wardak (2025) highlights that female entrepreneurs in rural Afghanistan face significant structural and gender-specific barriers in their daily lives. It shows that Afghan female's economic empowerment is both determined by structural restrictions and adaptive resilience. In spite of that Afghan women demonstrate their agency by rendering and sustaining their active economic and entrepreneurial activities and generating income for their households in the face of long-lasting instability and exclusion.

3.5.2 Social Empowerment

Education plays a vital role in social empowerment. It reshapes human attitude and challenges traditional restrictive cultural norm. Social empowerment enables females to participate more actively in their societies' civic and social life. In societies where females' engagement is restricted due to traditional cultural practices and impediments, education equips them with knowledge, confidence and critical awareness that are necessary to question and renegotiate these constraints. Females are better positioned by education in a society; they can actively participate in community decision-making processes, leadership roles and collective actions. Social empowerment also enhances females' capacity to advocate for their rights and resist or take legal actions against discriminatory practices. They can seek legal protection and oppose harmful practices such as early and forced marriage. All these processes contribute not only to individual empowerment but also to boarder social transformation by promoting inclusion, social justice and equality within communities (Hasin, Ayoubi, & Ahmad Shayan, 2025). In conflict-affected and restrictive conditions, forms of

such social empowerment are essential and important as they foster agency and collective resilience. Therefore, education not only functions as a mean of personal advancement in a society but also as a catalyst for strengthening women's social visibility, voice and active participation in shaping more inclusive social structure.

3.5.3 Political Empowerment

Education is a critical foundation for women's political empowerment in a society. It enhances women's capacity to participate in political processes and advocate for their rights and participate meaningfully in governance, civic engagement and all other decision making processes in the society. Education in females develops political awareness, critical thinking and institutional knowledge and with these abilities they can articulate their interest, claim their rights and contribute to policy formulation and public administration. Educated females can act as policy makers, advocates and informed residents of the society. Their active involvement in politics influencing social change and promoting gender-responsive policies (Sahu & Yadav, 2018).

Political empowerment by education is not only restricted to formal government roles; it also includes females' participation in grassroots activities, their involvement in community leadership and civil society initiatives in a society. In war-affected societies where formal political space is restricted or is not accessible for women, informal arena becomes especially important for them to sustain their political voice and collective action. Their leadership capacities are enhanced through education and can mobilize communities well. Through political empowerment they negotiate power relations and contribute more to an inclusive and representative form of governance (UN Women, 2015).

In addition to these benefits, education serves as a potential tool to inculcate some profound psychological attributes essentials for political engagement, such as self-confidence, motivation, resilience and future-oriented hope. These internal capacities enable females to navigate political exclusion and persist in advocating for social and political change despite adversity and restrictions (Nussbaum, 2004). In conflict zones, education not only functions as a mean of acquiring knowledge but as a transformative force that supports females' political agency, reinforces, democratic participation and contributes to long-term gender equality and social stability (UNHCR, 2020).

3.6 Online Education and Technology for Afghan Females

After enforcing severe restrictions on female education by the de facto Taliban regime, online higher and non-degree education has turned into a promising alternative for Afghan females who remain committed and determined to continue the acquisition of knowledge during severe challenges under restrictive conditions (Jack & Parkin, 2024). In the absence of access to secondary schools and universities, a substantial number of Afghan females have turned to digital learning platforms to pursue their academic dreams and professional development. This is driven by inner motivation, hope and sustained interest along with a strong sense of purpose. Considering Afghanistan's current context, distance higher education may extend beyond the mere delivery of academic content. It has the potential to support Afghan females' psychological needs, such as autonomy and relatedness, as described in Self-Determination Theory (Ryan & Deci, 2000).

By providing flexible learning structures and active participation, distance education may enable Afghan females to maintain a sense of agency and keep progressing in their education despite severe challenges in their country. Given the restriction on Afghan female' social mobility, as they are not allowed to study in-person (Human Rights Watch, 2024), distance higher and non-degree education also offers relative safety by minimizing exposure to harassment. Moreover, online

education provides a comparatively cost-effective and accessible alternative that requires fewer material resources than physical educational settings (Moore & Kearsley, 2012).

Across Afghanistan, digital learning platforms may enable Afghan females to access fields of study that are otherwise not available or explicitly prohibited such as medicine, law, political science economics, computer science, journalism, Engineering, literature, languages and others. Despite online education's limitations, these platforms can expand academic opportunities for Afghan females and promote self-determined learning. It may instill a renewed sense of identity, and strengthens confidence and self-efficacy and brings together various internationals from different cultures and experiences. Distance education may offer Afghan female students an opportunity to cultivate critical thinking, learn digital skills and develop intercultural competencies for their future career and it lays a foundation for their future academic and professional success, even under political repression (Barikzai et al., 2025).

However, online education faces substantial challenges. These challenges include unreliable and insufficient electricity, limited and unstable access to reliable internet, low levels of digital literacy, inadequate technological infrastructure, widespread poverty and some resistance from conservative people from various ethnic groups that oppose female educational participation. In some household, long standing cultural norms restrict females' autonomy that further constrains access to distance learning opportunities (Shaikhzada, et al., 2025).

In summary, in light of Afghanistan's current socio-political context, online higher and non-degree education grasps a significant and crucial promise for Afghan females; it presents a crucial pathway for Afghan females to triumph over numerous physical, social barriers and institutional barriers imposed by the Taliban de facto government in the country (Human Rights Watch, 2024). Although these platforms face significant structural challenges, they provide opportunities to sustain

learning, foster intrinsic motivation, cultivate hope, agency and maintain engagement with the global educational and professional landscape (Shaikhzada et al., 2025). It holds substantial potential to support long-term empowerment and Afghan females' future active participation in economic, social and civic life (Moore & Kearsley, 2012).

3.6.1 Security and Violence

Insecurity has been one of the most significant obstacles throughout the history to education in Afghanistan, particularly for females. Decades armed conflict, political instability and insurgency have severely damaged all aspects of the society, and especially the educational institutions that are serving females are frequently exposed to threat and violence. In many suburban and war-affected areas, insecurity remains pervasive and restricts females from safely access to education. They cannot attend schools. The insurgent groups, particularly the Taliban have previously implemented their restrictive policies that directly targeted females' education and caused the closure of schools and universities for female students and educators (Human Rights Watch, 2020). These actions have created fear that continues to influence females' educational participation even in context where educational institutions are formally allowed to operate.

Although in some parts of the country, formal educational institutions remain open and females are officially allowed to attend their schools and continue higher studies, but persistent security threat and violence undermine their actual access. Therefore, a large number of families as a protective measure withdraw their females from schools and restrict their mobility due to threat and violence. In many communities, fear of insecurity and violence further limits girls' educational participation, even where educational opportunities formally exist (UNESCO, 2023). Consequently, persistent violence and insecurity in the country for long ages functions not only as direct physical barriers to education but also create psychological fear and social constraints that discourage girls

from attending school, thereby reinforcing educational exclusion and gender inequality (UNESCO, 2023; UNESCO, 2024).

3.6.2 Cultural Limitations

Traditional culture in Afghanistan has deeply entrenched cultural norms where females are given household roles. These traditions have led females to prioritize household responsibilities over education, particularly in rural areas (Nadiry, S., 2025).

Females are restricted to homes due to societal pressures, while males are able to continue their education and pursue their professional careers. Education is perceived as male domain, and therefore, the lack of female teachers creates a hostile environment for females' educational advancement. (UNESCO, 2022; SIGAR, 2023). These cultural blocks are overwhelming challenges for females and restrict them from attending their schools or obtaining higher education (Nadiry, S., 2025).

3.6.3 The Economic Barriers

As a war-stricken country, Afghanistan has been facing economic hardship and the economic situation has been dire for years. The country is experiencing widespread poverty and its rates are gradually increasing, while resources for education remain scarce and limited. Many low-income families are struggling to meet their basic needs, thus it is making it difficult to cover both the direct and indirect cost of education such as transportation, school supplies, tuition fees and other learning materials expenses. These poor economic conditions not only affect females' academic life but also perpetuate cycle of poverty and limit their future empowerment, labour-market participation and economic independence as they are expected to assume household responsibilities instead of continuing their education (World Bank, 2021; UNDP, 2023).

3.6.4 Poor Educational Infrastructure

Afghanistan has limited and poor inadequate educational infrastructure. In remote and rural areas the shortage of schools, teaching and learning materials and qualified teachers has made it extremely difficult for females to access education (World Bank et al., 2021; Brookings, 2024). In addition, inadequate school infrastructure, limited educational facilities and the shortage of qualified female teachers discourage many families across the country from sending their daughters to school, especially in conservative communities where female teachers are preferred and want their girls to be taught by female instructors.

According to UNESCO (2022), girls in rural and remote areas continue to face significant barriers to education because of inadequate educational infrastructure, shortages of qualified teachers and persistent socioeconomic constraints. These challenges have contributed to lower enrolment and completion rates among girls compared with boys (UNESCO, 2022; UNESCO, 2023). As a result, poor educational infrastructure, together with financial and social barriers, continues to restrict girls' educational participation and limits their opportunities to pursue higher education.

3.6.5 Summary of Structural and Contextual Barriers

Taken together, the literature demonstrate that Afghan females' exclusion from education is not the result of a single constraint, but rather the cumulative effect of various interrelated structural, cultural, economic and security related barriers in Afghanistan. Prolonged war and persistent insecurity with violence against educational institutions have created an environment of fear that dishearten and discourage families in many parts of the country from allowing their girls to continue education and attend schools. Deeply entrenched cultural norms further restrict females to domestic roles and reinforce gendered perception that deprioritizes females' education. These challenges are

compounded by widespread poverty and prolonged economic instability in the country that force families to prioritize survival needs over educational investment. In addition, collapsed and inadequate educational infrastructure in remote and rural areas further restrict females and limit physical access to safe learning environment and qualified instructors in the country. Collectively, these intersecting constraints severely restrict Afghan females from educational participation and continuity, underscoring the need for alternative and adaptable modes of learning capable of operating within highly restrictive contexts.

3.6.6 Transition from Structural Barriers to Alternative Educational Pathways

The preceding discussion demonstrates that Afghan females' exclusion from education is not the result of individual choice, but rather the result of deeply entrenched structural, cultural, political and economic constraints in Afghanistan (UNESCO, 2023; World Bank et al., 2021; HRW, 2023). These constraints ranging from restrictive gender norms to security concerns and inadequate infrastructure, these all severely restrict females' access to formal in-person education in the country. Considering the persistence of these conditions under the Taliban's restrictive de facto government. It is unlikely that they will allow females to continue their education or the traditional educational systems will be restored in the near future in a manner that is accessible for all females across Afghanistan (HRW, 2023; UNESCO, 2024).

Distance education for Afghan female students as an alternative educational pathways emerge, as a necessary and pragmatic responses rather than an optional supplement to conventional schooling. Within this constrained context. Distance education offers a mode of learning that is less dependent on the factors that restrict Afghan females during accessing education such as physical mobility, institutional presence and public visibility. By bringing learning opportunities from schools to homes and online spaces, distance education allows Afghan females to continue their learning and

skills acquisition under restrictive policies and bypass many structural barriers identified above. Distance education as a potential mechanism not only provides Afghan females access education in but also fosters their intrinsic motivation, agency and future-oriented aspirations under restrictive conditions (Weber et al., 2025; UNICEF, 2025).

3.7 Distance Education as Solution

In response to these intersecting security, cultural, economic and infrastructural barriers faced by Afghan women in Afghanistan, distance education has emerged as a viable and transformative alternative for sustaining female students educational participation under the de facto government of the Taliban. As traditional cultural norms and physical barriers often hinder families from sending their daughters to schools particularly, in rural and conflict-affected areas. Distance education provides them a solution to circumvent these obstacles, as they are no longer obliged to leave their homes and travel for long distances to attend traditional schools or universities. They can pursue and continue their education safely and conveniently from their homes. It reduces the risks associated with travel, public exposure and social restrictions to them. Beyond physical access, online education also addresses critical psychological needs identified in Self-Determination Theory (Weber et al., 2025; Ahmadi, 2024).

By allowing Afghan females to exercise autonomy over the timing, pace and content of their studies, these alternative and transformative platforms foster a sense of agency and competence while opportunities for peer interaction and mentorship promote relatedness. Moreover, in line with Hope Theory, distance education supports the development of goal-directed agency and pathways thinking. It helps Afghan females to envision and plan for future educational and professional aspirations despite restrictive sociopolitical circumstances in the country (Weber et al., 2025). Global researches highlight the growing potential of e-learning both as a good way of acquiring

knowledge and a mechanism that provides access to classes and enables learners to acquire the skills regardless of their location (Shams, M. S., et al., 2022). Distance education for afghan females functions not only as a practical solution to immediate barriers but also as a mechanism for nurturing their intrinsic motivation, sustaining hope, building resilience and fostering the cognitive and emotional capacities necessary for long-term personal and professional empowerment (Weber et al., 2025; Ahmadi, 2024; UNICEF, 2025).

3.7.1 Work life Balance and Flexibility

Distance learning offers flexibility, it allows learners to balance household responsibilities with their academic pursuit. This flexibility is considered a key advantage of e-learning in enabling students to engage in education at their own pace and from their environment (Ali, H., et al., 2022). Distance education enables learners to study and continue their education from their homes. This approach reduces time and location constraints and supporting continued educational participation. As Ali et al. (2022) argue, flexibility is a defining feature that makes distance education more compatible that enhances accessibility and adaptability in diverse educational contexts.

3.7.2 Digital Literacy, Skills, and Economic Empowerment

Distance education functions as critical pathways for developing digital literacy and market-demanded and relevant skills that are increasingly essential for economic participation both in local and international contexts (UNESCO, 2023; ITU, 2021). Engaging Afghan females with online education, let them acquire skills and competences in information technology, e-business, digital communication and other contemporary professional skills. In addition, distance education offers learners to develop financial literacy, management and leadership skills that are essential and vital for starting small businesses or contributing within organizational settings (UN Women, 2024).

Beyond skills acquisition, these digital and entrepreneurial capabilities enhance female's self-efficacy, build their confidence and empower them to envision pathways toward personal and professional independence, aligning with the agency and pathways dimensions emphasized in Hope Theory (Snyder, 2002). In this way, online education functions not only as an academic tool but as a mechanism for long-term economic empowerment and social mobility under restrictive socio-political contexts.

3.7.3 Psychological and Social Support Systems

Distance education in conflict-affected zones, not only offers academic content but also facilitate social interaction and learner engagement. They through distance education navigate restrictive conditions. Opportunities such as online learning communities, mentoring networks and peer discussion forums can contribute to learners' sense of relatedness as described in Self-Determination Theory (Ryan & Deci, 2000). Such environments may enhance learner's intrinsic motivation, persistence and engagement in learning despite external barriers in their society.

In addition, mentorship and virtual guidance through distance education can strengthen learners' sense of academic support and contribute to perceived self-efficacy and hope for their future achievements in their lives. Online education is considered critical by fostering connections across local and global communities that mitigates feelings of isolation, where learners feel connected and strengthen their social capital. Research suggests that learning communities and mentoring relationships play an important role in satisfying psychological needs in educational settings (Kaplan, 2022). Furthermore, studies on hope and career development indicate that agency and pathways thinking can support individuals in pursuing academic and professional goals under challenging circumstances (Yoon et al., 2019). Overall, distance education can serve as a mechanism that supports sustained engagement in learning in highly restrictive contexts.

3.8 The Significance of Hope in Conflict Zones

Hope is considered as a critical psychological resource in conflict- affected settings. It functions as a cognitive- motivational framework that supports goal setting, agency thinking and pathways thinking in conflict-affected zones (Snyder, 2002). Hope enables individuals to set goals and identify different ways to achieve them under challenging circumstances. In this sense, hope can play a vital and supportive role in sustaining educational engagement for Afghan female students via distance learning under restrictive socio-political condition.

3.9 Motivation and Labor Market Integration

3.9.1 Future Labor Market Participation

Over the past two decades, Afghan women have experienced significant fluctuations in their access to education and labor market due to changing social and political conditions that changed over time to time consistently. During this time national and internal labor markets for Afghan women have always remained unstable. Following the US-led intervention in Afghanistan, Afghan females experienced significant changes; educational and employment opportunities were expanded. These opportunities enabled women to pursue formal education, entered employment and actively participated in political and social activities (ILO, 2023, March 7). This period indicates a gradual uneven expansion of Afghan women's social and economic participation.

However, after the fall of the country's capital into the hands of the Taliban on August 15, 2021 all these gains were significantly reversed and their return led to the systematic exclusion of Afghan females again. They are no longer allowed to work and participate actively in Afghanistan's political and social activities. Their access to labour-market and long-term economic prospects have been severely restricted (UN Women, 2024).

From a long-term perspective, capability development and motivation are important foundations for future economic participation. As Sen (1999) argues, development is closely linked to individuals' capabilities to achieve valued functionings, which can be constrained by structural barriers. In this regard, online and distance education can provide continued learning opportunities and skill development under restrictive conditions. Previous studies in Afghanistan suggest that distance learning can support continued education and skill acquisition despite significant challenges (Sarwari et al., 2022; Sabri et al., 2017).

Although Afghan females remain largely excluded from all public life and formal employment opportunities inside the country, online higher education can provide continued access to learning under restrictive condition. It can enable them to maintain educational engagement and continue their studies in the presence of external barriers. Distance education flexibility further supports continued participation by allowing women to study from their homes and at their own pace under cultural, political, economic and infrastructural constraints (Sabri et al., 2017).

Maintaining continuous engagement in education through distance platforms by Afghan females enhances their long-term labour market readiness by acquiring knowledge, contemporary skills, adaptability and competitiveness. Through the development of these contemporary and transferable skills, online education enables Afghan women to participate in both domestic and global labor markets when opportunities become accessible for them (International Finance Corporation, 2022).

3.10 Digital Skills and Economic Empowerment

One of the main advantages and significant contributions of distance education lies in its capacity to equip Afghan women with modern digital literacy skills that are essential and necessary

for navigating today's technology-driven global economy. In today's modern world digital literacy is increasingly viewed and recognized as a prerequisite for economic participation where business, commerce and communication are largely mediated by digital platforms in global markets (UNESCO, 2023; ITU, 2021).

Through online learning environments, Afghan females develop competencies in information technology, e-business and digital communication which create them pathways and open opportunities for both employment and self-employment. The acquisition of digital skills enables Afghan females to work remotely, access global markets and begin their own businesses or work as employees. This mitigates constraints related to mobility, security and local market exclusion. In contexts like Afghanistan, where females face severe challenges, that limit their mobility and employment rate, can benefit from digital literacy as it presents them a critical avenue for achieving their economic independence and sustained participation in income-generating activities (UN Women, 2024).

Distance education also contributes to skills development as it offers learning opportunities in areas such as Management, communication, entrepreneurship-related knowledge, These are important outcomes are in fragile contexts, where formal employment options are extremely limited and self-employment often becomes a primary survival strategy (UNITAR, 2021).

Afghan females' active participation across multiple sectors is essential for Afghanistan's long-term recovery and social stability as the country's economy continues to evolve under severe constraints. Distance education offers Afghan females various skills relevant to key sectors in the country such as business, healthcare, government administration, non-governmental organizational and technology (UN Women, 2025). In healthcare, online education provides basic trainings in nursing, medical administration and public health. In the technology sector, they can build their

career in software development, information technology, data analysis and digital marketing through these online platforms.

Collectively, the literature suggests that distance education can play a key role in supporting skills development and economic empowerment by offering learning opportunities and strengthening digital competencies, entrepreneurial skills and professional readiness under highly restrictive socio-economic conditions and policies of the Taliban in Afghanistan. This may contribute to broader discussions on women's economic participation (UN Women, 2025).

3.11 Synthesis of the Literature

This section synthesizes the reviewed literature by integrating empirical findings across conflict-affected context, with particular attention to Afghan females' engagement in online and distance education, rather than presenting studies in isolation. The synthesis organizes all evidences thematically to highlight recurring patterns related to access, motivation, psychological support and empowerment outcomes. All these themes are interpreted through the analytical lenses of Self-determination Theory and Hope Theory enabling a deeper understanding of how internal psychological processes interact with structural constraints.

3.12 Thematic Synthesis of Evidence

Theme 1: Structural, Cultural and Technological Barriers to Access

Based on the literature, Afghan and other women across the world who are war-affected encounter cultural, structural and technological obstacles while trying to engage in education. Their sustained engagement is restricted by their household responsibilities, poor internet connectivity, power shortages, limited access to devices (UNESCO, 2023). Their participation is further limited

by safety concerns, social conventions particularly in rural regions. All these obstacles weaken agency as conceived in Hope theory and moderate the satisfaction level of autonomy and competence needs discussed in Self-Determination theory. .

Theme 2: Pedagogical and Motivational Supports

Studies indicate that learner's motivation is significantly influenced by pedagogical design. Student's intrinsic motivation and a sense of competence are fostered by a course that offers aim-oriented tasks, provides timely feedback and allows flexibility in pacing and during learning times. Teacher's presence and ongoing feedback system boost confidence and involvement that reflects the satisfaction of both competence and relatedness needs in Self-Determination theory. Learners always show and put forth consistent effort in spite of external challenges, only when they perceive their progress is apparent and their efforts are appreciated and valued (Díaz-Noguera et al., 2022; Al-Darei & Elhag, 2022).

Theme 3: Social and Psychosocial Support Systems

Psychological support is considered as one of the most crucial element in maintaining motivation, Mentoring networks, online discussion boards and peer learning groups provide both emotional and academic reinforcement. Based on a number of studies learning communities offer safe spaces for self-expression, foster belongingness and lessen feelings of being loneliness (Kaplan, A., 2022). By rendering all these social resources that support agency and persistence these dynamics uphold and strengthen hope and satisfy the relatedness aspect of Self-Determination theory. While psychosocial support systems sustain learners' emotional well-being and persistence, their long-term significance becomes most evident when linked to hope, agency, and future-oriented goal pathways, particularly in relation to labor-market aspirations.

Theme 4: Hope, Agency, and Pathways to Labor-Market Integration

Although there are limited studies that focus at hope or future orientations, but indirect evidences prevail that learners who gets mentorship, career counseling or any other chance to recognize their skills make more direct career paths (Yoon, H.J., et al., 2019). Participants demonstrate higher confidence in their future employment prospects when educational programs include vocational components or recognized certifications. Theoretically, these traits relate to the pathways component of Hope Theory and establish a connection between intrinsic motivations and concrete goal achievement.

Theme 5: Educational Outcomes and Empowerment Effects

The literature backs the distance higher education's short-term positive effects on students' resilience, self-efficacy and sense of empowerment (Bandura, 1997). All participants' report renewed purpose, sense of social participation to society and psychological strength. Though, due to unstable political conditions long-term effects on sustained engagement and integration to genuine labor market are still poorly documented (Burde et al., 2015; Dryden-Peterson, 2016). Taken together, these thematic findings demonstrate that distance and online education in conflict-affected zones extends beyond issues of access and short-term outcomes. They reveal the central role of internal psychological resources particularly motivation, hope, agency and self-efficacy (Deci & Ryan, 2000; Snyder, 2002; Bandura, 1997). These factors help learners to keep learning and stay motivated about their future even in the presence of severe restrictions in their country. Because of this, theories are required to explain how motivation operates and how individuals plan and pursue their goals. Therefore, Self-Determination Theory (Deci & Ryan, 2000) and Hope Theory (Snyder, 2002) provide useful theoretical frameworks for understanding women's learning experiences in conflict-affected contexts.

3.13 Identified Gaps and Theoretical Connection

Although a growing body of literature describes the challenges women face in accessing online education, their participation patterns, and the empowerment benefits they gain in conflict-affected zones through online education, still these studies lack detailed analysis and deeper understanding. Most of the academic work focuses on external barriers and challenges and the outcomes of educational programs, while paying limited attention to the internal psychological factors that enable and support women to remain motivated, take initiative and pursue long-term goals. Therefore, the psychological mechanisms that support female students' ongoing engagement in education under restrictive condition in conflict-affected zones remain insufficiently understood. While previous studies have provided valuable insights into access issues and have described women's participation in online higher education, significant gaps remain in the existing body of knowledge regarding motivation, agency and long-term educational persistence.

3.14 Future Directions

Future study should examine the long- term impacts on the personal and professional growth of deprived females under the restrictive policies of the de facto government of the Taliban. Additionally, the studies should explore ways to improve international policies and partnerships to better support sustainable educational programs for Afghan women living under severe restrictive policies and conditions.

3.15 Conceptual Framework and Rationale for the Study

Drawing on the preceding synthesis, this study conceptualizes online higher education as a multidimensional intervention that operates at both structural and psychological levels. Although distance education faces some structural and technical barriers, but its deeper significance lies in its

capacity to support autonomy, competence and relatedness and simultaneously fostering hope, agency and future-oriented pathways among Afghan female student currently living under restrictive conditions in Afghanistan. However, the literature remains limited in empirically examining these internal mechanisms within highly constrained conflict-affected political environments such as Afghanistan. This gap necessitates a theoretically grounded and context-sensitive research design capable of capturing both measurable motivational constructs and lived educational experiences of Afghan female learners.

Three key gaps are identified:

1. Limited theoretical grounding

Without the systematic use of motivational theories such as Self-Determination Theory and Hope Theory, most studies remain largely descriptive in nature.

2. Scarce longitudinal evidence

Few studies track learners after they finish a program to assess how hope and intrinsic motivation translate into long-term empowerment or employment outcomes.

3. Neglect of internal psychological processes

There is limited focus on the internal motivational and cognitive mechanism that sustains perseverance, agency and goal achievement in challenging conditions, many prior studies focus on external barrier like cultural, political and technological aspects. Therefore, this study addresses these remained gaps by explicitly employing Self-Determination Theory and Hope Theory as analytical lenses. Primary data from Afghan female students under restrictive conditions will be collected through online questionnaires and interviews, and will examine how online higher

education meets their basic psychological needs autonomy, competence and relatedness and fosters agency and pathways toward personal and professional achievements.

In conclusion; the reviewed literature highlights how online learning can support females in conflict settings, and it is also revealing that motivational factors and psychological processes are still remaining insufficiently understood. Although previous studies identify potential strategies such as mentor engagement, flexible learning design, digital literacy training, they rarely links them to theoretical theories of hope or intrinsic motivation. Therefore, this study provides new insights and adds fresh perspectives to the body of knowledge by examining the role of motivation and hope in sustaining Afghan women's empowerment and engagement through online higher education under restrictive circumstances in Afghanistan.

The study employs a mixed-methods approach, enabling that a complete investigation of both quantitative motivational elements and lived experiences of Afghan female students by combing theoretical frameworks with empirical evidences. Self-Determination Theory (SDT) and Hope Theory are not only the conceptual bases of the study, but also guide the entire analytical process. The questionnaire measures the indicators of autonomy, competence, relatedness, agency and pathways, digital skills, structural and logistical barriers and employability while the interviews investigate the manifestation of these aspects in the regular experiences and firsthand accounts of Afghan female students living under restrictive conditions. Thus, these theories guide the entire research process from design to data collection, analysis and interpretation ensuring theoretical coherence throughout the study.

3.16 Chapter Summary

This chapter has reviewed and synthesized existing literature on female education in conflict-affected contexts. It mainly focuses on Afghanistan's restrictive context following August 15, 2021 when the Taliban returned to power. The review highlighted structural, deeply entrenched cultural, economic and technological constraints affecting female education. It also examined distance education as a critical alternative and transformative mechanism for sustaining learning and promoting empowerment, drawing on Self-Determination Theory and Hope Theory. The chapter identified key motivational and psychological dimensions such as autonomy, competence, relatedness, agency and pathways that remain underexplored in the existing research. By identifying theoretical, empirical and methodological gaps, this chapter established a clear rationale for the present study. The next chapter outlines the methodological approach adopted for collecting and analyzing primary data to empirically investigate these constructs among Afghan female learners engaged in online higher education, informed by these theoretical perspectives.

4. Methodology

4.1 Research Philosophy: The Pragmatic Paradigm

As this study is grounded in the philosophical worldview of Pragmatism, it sidesteps the contentious debates between positivism (which focuses on objective numerical data) and constructivism (which focuses on subjective human experiences). Instead, it prioritizes the 'research problem' above all else (Tashakkori & Teddlie, 2010). Considering the context of the study, which investigates Afghan female students' social empowerment in a conflict zone via distance higher education, a single lens is insufficient. The complexity of how distance higher education influences and affects Afghan females' motivation, hope, and social barriers requires a pragmatic approach that combines multiple perspectives.

By adopting a pragmatic worldview, this study justifies the use of a Mixed-Methods Research Design. Pragmatism's flexibility ensures that the findings are not only scientifically rigorous but also contextually rich and practically relevant to the unique context and socio-political challenges in Afghanistan under the de facto government of the Taliban. At the same time, elements of interpretivist epistemology are incorporated in the qualitative strand. This vividly acknowledges that the data produced is not merely a collection of facts, but a rich construction of social reality built from the participants' own lived experiences and the personal meanings they assign to their struggle for empowerment.

4.2 Research Design and Rationale

This study utilizes a mixed-method design that combines a structured questionnaire with semi-structured interviews to capture both statistically measurable patterns of motivation and the qualitative lived experiences of the Afghan females who live under restrictive policies. Creswell and

Plano Clark (2018) argue that Mixed-methods design integrates both quantitative and qualitative approaches within a single inquiry to provide a more comprehensive understanding of complex phenomena. They further argue that when neither numerical data nor narrative accounts are alone sufficient to explain the research problem completely, mixed-methods designs are appropriate to be adopted. The quantitative component examines the general trends of motivation, while the qualitative part of the study investigates the lived experiences of Afghan females who live in Afghanistan under severe restriction but actively participate in distance higher education programs. Both parts provide in-depth insight into how autonomy, competence, relatedness, and future planning are interpreted within restrictive socio-political environments.

This study's design is theoretically informed by Self-Determination Theory (SDT) and Hope Theory. Both these theories as frameworks of the study guide the formulation of research questions as well as the development of research instruments. SDT describes and clarifies how autonomy, competence and relatedness contribute to human intrinsic motivation, while Hope Theory focuses on agency and pathways as central mechanisms for goal pursuit. The integration of these theories in the study ensures that empowerment is examined through the interrelated dimensions of internal motivation, goal-directed thinking and contextual constraints in Afghan society.

4.3 Research Design: Explanatory Sequential Mixed Methods

For this study Explanatory Sequential Mixed-Methods Design was utilized and executed in two distinct phases. In the first phase, a Quantitative approach was used to collect and analyze numerical data from a survey of 309 initially collected responses (resulting in 304 valid responses for final analysis) Afghan female students from various disciplines across Afghanistan. This phase aimed to identify general trends, correlations between digital skills and motivation and the overall

levels of hope and psychological need satisfaction among Afghan female students studying online and are facing severe challenges under the de facto government of the Taliban.

In the second phase, a Qualitative follow-up was conducted through semi-structured interviews. These interviews consisted of 13 questions developed based on the themes emerging from the open-ended responses in the survey. The interview protocol was structured into five key dimensions:

1. Autonomy and Hidden Resistance
2. Mental Health and Hope
3. Identity, Confidence, Skills and Change
4. Environment and Educational System
5. Future and Goals

16 participants from the entire number of 304 valid responses who had earlier participated in the survey and had shown their prior consent for the interview in the survey were selected purposively to represent a diverse range of fields such as Applied Sciences and Social Sciences and residential backgrounds (Rural and Urban) across the five geographical zones of Afghanistan (Central, East, West, South and North.)

The rationale for this sequential approach is that the quantitative results of the study provide a broad picture of the research problem, while the qualitative data helps to explain and refine those results by exploring the participants' lived experiences in depth. Therefore, by connecting these two phases of the study, it explicitly provides a more nuanced understanding of how distance education for Afghan female students in Afghanistan serves as a tool of social empowerment, window of hope and a source of motivation for them despite facing severe socio-political barriers under the rule of the Taliban.

4.4 Population and Sampling Strategy

The study's target population comprises Afghan female students who are currently residing in Afghanistan and are studying online higher education programs, as well as all those females who had recently graduated from these online higher education programs. Considering Afghanistan's highly sensitive and restrictive socio-political environment and security concerns a Non-Probability Sampling approach was adopted, combining Purposive and Snowball Sampling techniques.

In the first stage, to identify students who are active in online programs and meet the criteria, purposive sampling was used. The researcher has asked several distance learning institutions such as Women University, Rayan University and Afghanistan International Online Academy for their consent about collecting data from their students, after receiving their consent; these institutions facilitated access by disseminating the survey link through their official student communication channels, including institutional WhatsApp groups, Telegram channels and email lists.

In the second stage, a snowball sampling technique was employed to reach a broader and more diverse group of students across the country. Initial participants were encouraged to share the survey link within their private networks of female peers who are also engaged in distance education. This peer-to-peer recruitment was essential to reach students in remote areas and those who maintain a low digital profile for safety reasons.

4.5 Data Collection Procedures

In order to ensure a logical flow from broad numerical data to deep personal experiences or insights, the study's data collection process was carried out in two sequential phases. Quantitative Phase: A semi structured online questionnaire with keeping linguistic and cultural clarity, the scales

adapted from Self-Determination Theory (SDT) and Hope Theory were translated into three languages (English, Pashto and Farsi) with 8 sections is mentioned below:

1. Introduction, Consent, and Safety Information
2. Demographic and Background Information
3. Psychosocial and Educational Empowerment Measures
4. Barriers and Challenges to Online Learning
5. Employability and Economic Empowerment
6. Attention Check Section
7. Open-Ended Qualitative Questions
8. Follow-Up Interview Consent and Safe Contact Information

The questionnaire was administered through a secure digital platform (Google forms) and it was designed considering the study's theoretical and analytical framework, the socio-cultural and political context of Afghanistan, the realities of women's access to online higher education in conflict-affected settings, and the linguistic, technological, economic and security-related challenges faced by Afghan female students living under the restrictive policies of the de facto government of the Taliban. In the process of making the questionnaire, not only the researcher's supervisors reviewed and gave their feedbacks about it, it was also reviewed by other three PhD scholars and had their comments of on its structure, clarity, contextual relevance and overall design. After having the final feedback of its readiness for the data collection, a Pilot Study was conducted with 31 participants. As this step was essential and crucial for refining the questions or wording of them in the questionnaire and the link's technical accessibility. During the process a couple of questions were found to be confusing for students. Following the pilot, the instrument's reliability was checked and confirmed through using SPSS software and its Cronbach's Alpha was 0.927. After the pilot

study the main data collection process was executed and a total of 309 responses were collected for the final analysis within 10 days.

4.5.1 Qualitative Phase:

Following the initial analysis of the survey results, semi-structured interviews were conducted with 16 selected participants from the entire group of 304 valid responses out of 309 total students who had given their consent for the interviews in the survey, they were selected by considering all zones of Afghanistan (Central, East, West, North and south), their field of studies (Applied Science and Social Science) and their residence (Urban and Rural) to gain deeper insights into their lived experiences. Due to the ongoing travel restrictions and the high-risk security environment in Afghanistan, these interviews were held via secure digital communication tools (such as WhatsApp and Telegram) and were recorded. Each interview lasted between 15-40 minutes. All the interviews were conducted in the participants' preferred Afghan National language (Dari (Farsi) and Pashto) to allow them to express their lived experiences and emotions freely and accurately without any communication hurdles.

4.5.2 Interview Protocol:

The interviews followed a pre-designed protocol consisting of 13 open-ended questions based on the answers of participants to open-ended questions the survey. These questions focused on five core dimensions: autonomy and hidden resistance, mental health, identity, confidence, skill and change, learning environment and educational system, and future and goals. With the participants' prior consent, the interviews were recorded (where safe) or documented through detailed note-taking to ensure data integrity for the subsequent transcription and analysis phase.

4.6 Instrument Reliability and Validity

To ensure the rigor of the quantitative data, and the internal consistency of all 35 likert-scale questions covering Digital skills, Self-Determination Theory (SDT), Hope Theory, Economics and safety underwent comprehensive reliability and validity testing. The instrument was assessed using Cronbach's Alpha via SPSS (version 26) software. For pilot study (n = 31) an overall Cronbach's Alpha coefficient of $\alpha = 0.927$ for the 35-items. Based on academic standards (Hair et al., 2019), any value above 0.70 is considered reliable, and a value exceeding 0.90 indicates excellent internal consistency among questions in the questionnaire. And later in the main survey (n=309) Cronbach's Alpha coefficient of α was 0.925. Beyond the overall reliability of the entire instrument, separate reliability analyses were conducted for each sub-scale (Digital Skills, SDT, Hope, Economic constraints, and Safety concerns) to ensure the internal consistency and reliability of each specific construct measured in the study. This high reliability score confirms that the survey items were stable and consistently understood by the Afghan female participants. Furthermore, Content Validity was established through a rigorous review process by the researcher's supervisors and three other independent PhD scholars. Their feedback ensured that the 35 items accurately represented the constructs of Digital skills, SDT, Hope Theory, and the specific socio-economic challenges in Afghanistan.

4.7 Data Analysis Procedure

To integrate numerical data and lived experiences of participants, this research followed a systematic process, aligned with the explanatory sequential mixed-methods design.

4.7.1 Quantitative Analysis

Although a total of 309 responses were initially collected, 5 of these responses were excluded during the data-cleaning process because they failed the attention-check question. Consequently; a final sample of 304 valid responses was used for the quantitative analysis to ensure data integrity and respondent attentiveness. And the valid qualitative data were analyzed using SPSS (version 26). The analysis was conducted in three progressive stages:

Descriptive Statistics: Frequencies and percentages were calculated to summarize the demographic profiles and identify the most prevalent barriers to online education. Specifically, a ranking analysis was performed to determine the "most significant," "second most significant," and "third most significant" barriers faced by the students.

4.7.2 Inferential Statistics: Correlation and Multiple Regression Analysis

For exploring the relationship and predictive power among the available primary continuous variables of the study, inferential statistical tests (Pearson Correlation Coefficient and Multiple Linear Regression analysis) were performed. The Pearson Correlation Coefficients were calculated to determine the strength and direction of the linear relationships between the core constructs, including Digital Skills, Self-Determination Theory (SDT) dimensions, Hope levels, Economic constraints and Safety concerns. Building upon this, a Multiple Linear Regression analysis was conducted to evaluate the predictive impact of these independent variables (Digital Skills, SDT dimensions, Economic constraints, and Safety concerns) as predictors on the levels of Hope (dependent variable) among Afghan female students living under severe restrictive policies of the Taliban.

Reliability Testing: To ensure the internal consistency of the scales, Cronbach's Alpha was calculated for each thematic section of the questionnaire.

4.7.3 Qualitative Analysis and Coding Framework

The study's qualitative data from the semi-structured interviews were analyzed considering thematic analysis; the process strictly followed the rigorous six-phase frame established by Braun and Clarke (2006). As the interviews were conducted in Dari and Pashto, all 16 of them were manually transcribed by the researcher and subsequently translated into English; and after that for systematic data management, analysis, visual analysis and visual reports MAXQDA (version 2026) software was employed.

4.7.4 The Sequential Qualitative Design and Coding Process

The study's qualitative data analysis followed a dual-approach of inductive coding (data-driven) and deductive mapping (theory-driven):

Phase 1: Inductive Exploration: Initially, after conducting the study's survey, an inductive thematic analysis was performed on its open-ended responses to capture immediate raw patterns. This step was really crucial, as it directly informed and helped design the semi-structured interview protocol. This ensured that the next qualitative phase went deeper into the specific nuances raised. 11 primary themes that emerged from this initial inductive coding of survey open-ended responses were as follows.

Theme 1: Digital and Structural Barriers

Theme 2: Socio-Economic Survival vs. Education

Theme 3: Institutional and Educational System Weaknesses

Theme 4: Accreditation and Future Uncertainty

Theme 5: Gender and Cultural Restrictions

Theme 6: Hidden Education and Domestic Resistance

Theme 7: Time Burden and Gendered Responsibilities

Theme 8: Learning Environment Constraints

Theme 9: Education as Psychological Survival and Hope

Theme 10: Motivation, Identity and Self-Development

Theme 11: Aspirations for Employment and Social Change

Phase 2: Deductive Mapping and Theoretical Alignment

After (16) interviews' transcription, deductive mapping approach was systematically employed within MAXQDA (version 2026). This phase involved systematically aligning and consolidating the (11) inductively generated themes from the survey's open-ended questions with the pre-defined theoretical constructs of the study.

Through this integrated and overarching analytical process, the initial eleven open-ended codes were conceptually mapped onto the core pillars of the research framework. Specifically, the data were aligned with the essential dimensions of Self-Determination Theory (SDT) which focuses on fostering intrinsic motivation through autonomy, competence and relatedness, concurrently, the findings were mapped onto Snyder's Hope Theory which examines the cognitive traid of goal

attainment, agency and pathways thinking under severe contextual constraints, and furthermore the data were analyzed through the analytical lenses of Identity Transformation and Socio-Cultural Adaptation. Identity transformation captures how Afghan female students reconstructing their self-perception and professional identity through distance higher education after being excluded from physical university studies.

Socio-cultural adaptation investigates how these Afghan female students remake and shape their social and cultural roles, as online studies does not only mean to them a tool of connecting to smart phone or laptop's screens. Rather it plays a vital role as window of hope and a strategic avenue for them to reclaim agency and achieve social empowerment in the presence of severe challenges by the de facto government of the Taliban. As this study is examining how distance higher education in conflict zones fosters resilience, future employment aspirations and social empowerment. These both inductive and deductive approaches ensure that the final qualitative findings remain deeply rooted in the participants' authentic, lived narratives of Afghan female students; they are transforming their personal struggles into a powerful, structural validation of the study's theoretical framework.

4.7.5 Data Integration

After the separate analyses of both quantitative and qualitative data, the findings from both strands were integrated to achieve a comprehensive understanding of the research problem. Firstly, in the connecting phase, after cleaning the survey data from the entire 309 responses, 5 were excluded and 304 valid responses were analyzed. The result helped the researcher to identify (11) themes and based on these the researcher constructed 13-question interview protocol.

Secondly, in the merging phase, it merges "what" of the study (such as the empirical links between digital skills, SDT, Hope Theory and economics) with the rich narrative insights the "how"

and "why" of the phenomena (the participants' lived experiences of hidden resistance and resilience). This integration provides a holistic validation of the theoretical framework and a nuanced analysis of social empowerment through distance higher education for Afghan female students living under severe social-political challenges.

4.8 Ethical Considerations and Formal Authorization

The researcher considered the ethical integrity while conducting this study and it remained the cornerstone of this research. Given the highly sensitive socio-political context of Afghanistan every step of this study was undertaken with great caution and care ensuring the strict adherence to the ethical guidelines of Helmut Schmidt University.

4.8.1 Formal Authorization:

Before collecting data for the pilot and the main phases, formal permission was obtained from the administrations of the participating distance learning institutions such as Women University, Rayan University and Afghanistan International Online Academy. These authorization letters (see Appendix A) served as the basis for accessing student networks and institutional communication channels.

4.8.2 Informed Consent and Voluntary Participation:

digital informed consent forms were presented to all participants along with questionnaire before they could access the pilot or survey or participate in interviews in the later phase of the study. The forms were translated into Afghan national languages and they clearly outlined the research Topic, objectives, and the voluntary nature of participation. The participants were instructed

and were given the right to withdraw at any stage without any penalty or loss of institutional benefits.

4.8.3 Anonymity and Confidentiality:

Considering the highly sensitive context of Afghanistan particularly to mitigate the risk from the Taliban's side and other security risks for the Afghan female students, the researcher implemented strict anonymity protocols. The participants were not asked for their personal identifiable information, such as their full names, specific home addresses, locations or their identification numbers. Only in the questionnaire a self-generated code was given and In the qualitative phase, pseudonyms were assigned to all interviewees to ensure that their identities remain protected in the final manuscript.

4.8.4 Data Security:

All raw data related to this study has been stored on encrypted, password-protected cloud storage accessible only to the primary researcher. WhatsApp and Telegram were the digital platforms used for in-depth interviews and their recorded audio files have been stored in a secure password protected device to prevent unauthorized access to it. Upon completion of the study, all temporary files containing sensitive metadata will be permanently deleted.

In summary, this chapter detailed the pragmatic, explanatory sequential mixed-methods design used to investigate the social empowerment of Afghan female students. By combining a robust quantitative survey of valid 304 responses out of (309 participants) with in-depth qualitative interviews of 16 students, across Afghanistan considering their fields of study and residence (Urban and Rural). the study ensures both statistical breadth and interpretive depth. The rigorous data collection and analysis procedures, grounded in Self-Determination Theory and Hope Theory,

provide a solid foundation for the subsequent presentation of findings. The next chapter will present the results of this inquiry in details, beginning with the quantitative trends and followed by the qualitative narratives that elaborate on the lived experiences of empowerment and resistance of Afghan female students in Afghanistan.

Empirical results and findings

5.1 Introduction

This chapter presents the empirical results and thematic findings derived from the sequential mixed-methods investigation into empowering Afghan female students in conflict zones through distance higher education. This chapter systematically addresses the core research questions by exploring the multifaceted socio-economic, cultural, structural and logistical barriers faced by these students in Afghanistan, under the Taliban's restrictive policies, while simultaneously evaluating how distance higher education fosters their motivation and psychological resilience, hope, digital and other skills' acquisition.

This chapter critically explores that how these acquired competencies via online education facilitate the long-term integration of Afghan female students into both domestic and international labor markets, thereby driving hidden structural agency and sustainable social empowerment. Considering the nature of the study and to provide both statistical breadth and contextual depth a sequential mixed-methods design was utilized. This research's empirical analysis is structurally integrated into two primary analytical strands:

- *The Quantitative Strand:* Comprising descriptive and inferential statistical analyses generated from N=304 valid responses filtered out of initial N=309 responses across various provinces in Afghanistan.
- *The Qualitative Strand:* Comprising an in-depth thematic analysis of N=16 semi-structured institutional and regional interviews in both Afghan national languages (Pashto and Dari (Persian) were conducted and processed via MAXQDA (version 26). these interviews are representing diverse macro-zones (North, East, South, West, and Central), academic disciplines (Applied and Social Sciences) and their residence (Urban and Rural).

5.1.1 Methodological Integration and Instrument Reliability

In accordance with international standards for high-level academic research, the study's quantitative survey instrument underwent rigorous internal consistency testing both for (Pilot and main Survey) before thematic deployment. The reliability analysis computed by using SPSS yielded an exceptional Cronbach's Alpha coefficient.

Alpha Pilot = 0.927 (calculated across 35 operational items; N = 31)

Alpha Main Survey = 0.924 (calculated across 35 operational items; N = 304)

This high reliability vector significantly exceeds the universally accepted psychometric threshold of Alpha is greater or equal 0.70. It is confirming that the measurement scales used to capture the multi-dimensional tracking of Afghan female students' lived experiences and firsthand accounts, particularly quantifying psychological hope, their intrinsic motivation, digital skills development, infrastructural and logistical hurdles, future local and international labour market integration and their educational documents academic validity possess structural stability and robust internal consistency. Consequently, the empirical findings presented herein provide a highly stable and methodologically sound and legally defensible foundation for theoretical inference, secondary analysis and high-level policy recommendations.

5.1.2 Triangulation Framework: Preliminary Themes from Open-Ended Questionnaire Responses

The survey instrument incorporated strategic open-ended questions in order to bridge the quantitative measures with deeper contextual insights, these questions were as follow:

- Do you experience any other challenge or problems?

- Can you describe one specific way that distance education has changed your life?
- What three skills or qualifications do you think would help you most to find paid work after graduation?
- What are your top three suggestions for improving distance higher education for Afghan female students?
- How has your participation in this program changed your family's views, and how do they view your future now?

After conducting an inductive thematic analysis of these open-ended responses in the main survey, 11 baseline study themes were yielded. These preliminary themes provided the inductive foundation for conceptualizing and refining the subsequent semi-structured institutional and regional interview guides. This integration allowed for a systematic exploration and triangulation of emerging empirical patterns.

The comprehensive matrix of these preliminary themes yielded from the main survey, along with their academic interpretations and direct localized evidence, is structured in Table 5.1 below:

Table 5.1: Methodological Matrix of Preliminary Open-Ended Questionnaire Themes

No.	Major Research Theme	Thematic Interpretation	Empirical Evidence
1	Structural Barriers & Digital	This theme reflects baseline systemic infrastructure deficits including unreliable internet, electricity shortages in Afghanistan and lack of digital devices for female students that limit their access to online higher education.	“High cost of internet packages and occasionally government shutdowns it. (قیمت بالای بسته‌های اینترنت و قطع اینترنت بعضاً از طرف دولت).” “Lack of continuous power and its outages and accessing education with only one mobile phone. (نبود برق و تنها با یک گوشی به آموزش دست می‌یابیم).”
2	Socio-Economic Survival vs. Education	This theme captures macro- economic pressures in the country that force Afghan female students to balance education with essential income-generating activities.	“I work to afford my education; if I don't work, I cannot study and won't be able to continue. (کار میکنم؛ اگر کار نکنم آموزش هم دیده نمیتوانم).” “We cannot afford internet costs. (توان مالی برای اینترنت نداریم).”
3	Institutional & Educational System Weaknesses	This theme identifies internal pedagogy-delivery operational issues, spanning inconsistent faculty schedules, resource deficits and a perceived lack of structural student support in some online platforms for Afghan female students.	“Teachers are not regular. (اساتید منظم نیستند).” “We lack proper learning materials. (عدم دسترسی به منابع آموزشی).”
4	Accreditation & Future Uncertainty	The theme highlights underlying cognitive anxiety of the female students regarding their degrees official recognition and value of	“We are not sure if our certificate is valid. (سند معتبر نیست).” “Will our education and degrees be recognized?”

		educational qualifications. It raises concerns about their future academic and employment opportunities as well.	(آیا این دانشگاه و سند مان پذیرفته میشود؟)“
5	Gender & Cultural Restrictions	This theme documents micro-level domestic constraints, including rigid traditional gender norms in Afghan families and familial policing and structural patriarchal resistance within the private sphere in different ethnic groups in Afghanistan.	"Women are only made for housework. (زن فقط برای خانه ساخته شده).“ “We are deprived of education because we are women. (محدودیت بخاطر زن بودن).“
6	Hidden Education & Domestic Resistance	This theme is about participants’ engaging in education secretly due to family opposition and it is indicating the presence of domestic resistance to female education.	“I study secretly. (از فامیل پنهان درس میخوانم).“ “My phone is taken away during classes. (موبایل را از من میگیرند).“
7	Time Burden & Gendered Responsibilities	The theme describes the Participants’ competing responsibilities, particularly domestic duties, which limit their ability to fully engage in learning activities and negatively affect their concentration.	“Housework affects my concentration during my studies. کارهای خانه باعث میشود در دروان درس تمرکز (نداشته باشم) “I don’t have enough time to study. (وقت کافی ندارم).“
8	Learning Environment Constraints	The themes highlights the challenges faced by Afghan females during their studying from home, including lack of separate, quiet	“The home environment is not suitable. (محیط خانه مناسب نیست).“ "There are many distractions.

		space and frequent distractions.	“(محیط نارام).”
9	Education as Psychological Survival & Hope	The theme discusses and emphasized on the emotional and psychological benefits of Online higher education for Afghan female students. It is describing it, as a source of hope and a coping mechanism against distress.	“It saved me from depression. (از افسردگی نجاتم داد).” “It gave me hope for the future.” (امید پیدا کردم).”
10	Motivation, Identity & Self-Development	The theme indicates that female students’ engagement in online higher studies contributes in increasing their motivation, self-confidence and a clearer sense of personal identity.	“Now I have goals. (اهداف دارم).” “My confidence has increased. (اعتماد به نفس بالا رفته).”
11	Aspirations for Employment & Social Change	The theme expresses the Afghan female students’ aspirations to use education as a pathway to their employment and as a means to contribute positively to their communities in future.	“I want to find a job. (میخواهم کار پیدا کنم).” “I want to help my community. (میخواهم به مردم کمک کنم).”

Note: All of the above-mentioned themes are preliminary in nature and were developed from open-end questionnaire responses obtained from the main dataset. These themes served as a foundation for designing and developing the subsequent semi-structured interview guide to further explore and validate the emerging patterns.

5.1.3 Thematic Roadmap of the Chapter

In order to maintain a logical, robust and empirically grounded narrative arc, the study's rich mixed-methods data is synthesized and structured across seven comprehensive thematic domains. This matrix systematically tracks the journey of Afghan female students living under restrictive policies of the Taliban; it is capturing their baseline demographic diversity across various ages, provinces, their academic faculties, facilities and traces their progression from institutional exclusion and infrastructural hurdles to psychological motivation, autonomous resistance, hope and academic specialization. Critically, this synthesis clearly demonstrates that their development extends far beyond technical proficiency; rather, the acquisition of specialized discipline-specific knowledge serves as the core catalyst for their comprehensive social empowerment that is shifting their societal positioning. Within this paradigm, digital literacy functions not only as an operational vehicle that ultimately links Afghan female students to transnational digital economies and online freelance markets, but it is also inherently the fundamental prerequisite that is enabling these students to effectively navigate, utilize and maximize the online learning process itself. Ultimately, this entire structural and cognitive progression serves as the definitive psychological anchor that systematically constructs, preserves, and elevates forward-looking academic hope, transforming education from a mere survival strategy into a powerful vision for a self-determined future.

Section 5.2: Socio demographic and Contextual Profile

This section establishes the baseline descriptive parameters including age distribution, academic status, urbanization index and macro-regional clustering of both the quantitative survey respondents (N = 304) and the qualitative regional informants (N = 16). This structural profile provides the empirical foundation necessary to contextualize the heterogeneous lived experiences of Afghan female students who took part in the study.

Section 5.3: Structural, Economic and Socio-Cultural Barriers

This section provides a critical evaluation of the multi-layered impediments restricting distance education for Afghan female students under restrictive policies in Afghanistan. This subsection compressively assesses physical/logistical bottlenecks (severe internet instability, electricity deficits, and device limitations), macro-economic survival pressures and deep-seated socio-cultural restrictions or domestic challenges within the private sphere.

Section 5.4: Institutional Delivery and Accreditation Uncertainty

This section investigates perceived systemic and pedagogical weaknesses within virtual higher education environments such as irregular instructional delivery and resource deficits while analyzing the deep psychological and professional anxieties regarding degree validity, external accreditation and certification recognition.

Section 5.5: Socio-Cultural Restrictions, Psychological Well-being and Structural Agency

This section documents the profound psychological transition of female students. It evaluates how continuous engagement with virtual learning spaces operates as a critical cognitive coping mechanism and it is systematically transitioning Afghan female students from institutional trauma, anxiety, hopelessness and depression toward reconstructed academic motivation, self-development and psychological hope.

Section 5.6: Inferential Statistical Analysis and Hypotheses Testing

This section presents the rigorous inferential statistical modeling executed via SPSS. This analytical section evaluates the quantitative hypotheses of the study, examining correlations and causal vectors between online education accessibility, motivational shifts and skills acquisition to provide statistically defensible validation for the study's core theoretical arguments.

Section 5.7: Labour Market Integration, Freelancing and Sustainable Social Empowerment

This section concludes the empirical narrative by exploring the participants' long-term career aspirations, remote digital employment alignments, and proactive socio-economic strategies. Crucially, it theorizes how these competencies from online higher education function as a dual-market asset: equipping female students not only to access and impact global digital markets and remote transnational networks, but also to strategically navigate, create, and secure viable employment opportunities within their immediate local and underground economies. By fostering both domestic financial self-sufficiency and international market integration, these digital vocational pathways drive tangible economic empowerment, thereby transforming historically marginalized agents into resilient, independent actors *capable of overcoming systemic financial exclusion*.

Section 5.8: Qualitative Thematic Auditing and Contextual Triangulation

Concludes the chapter by providing an advanced qualitative thematic audit based on the semi-structured interviews (N=16) processed via MAXQDA (version 2026). This section cross-examines and triangulates the deep contextual insights and lived experiences of the participants with the quantitative findings, establishing a comprehensive, multidimensional understanding of the phenomena.

Table 5.2:

Cronbach's Alpha of Pilot Study:

		N	%
Cases	Valid	31	100,0
	Excluded ^a	0	,0
	Total	31	100,0

Reliability Statistics	
Cronbach's Alpha	N of Items
,927	35

In the pilot study, a total of 31 responses were collected. The reliability of all 35 Likert-scale items was assessed using Cronbach's alpha via SPSS Software and it yielded a coefficient of 0.927. This value indicates excellent internal consistency and demonstrates that the questionnaire is highly reliable.

Table 5.3:

Cronbach's Alpha of Main Data

		N	%
Cases	Valid	304	100,0
	Excluded ^a	0	,0
	Total	304	100,0

Reliability Statistics

Cronbach's Alpha	N of Items
,924	35

In the main survey, from a total of 304 valid responses valid collected. The reliability of all 35 Likert-scale items was assessed using Cronbach's alpha via SPSS Software, which yielded a coefficient of 0.924. This value indicates excellent internal consistency and demonstrates that the questionnaire is highly reliable.

5.2 Socio-demographic and Contextual Profile of Participants

This section of the chapter solely focuses on descriptive and contextual parameters of the study's participants, in order to contextualize the empirical validity, reliability and generalizability of the findings. In alignment with the sequential mixed-methods design, the demographic topographies of both the quantitative survey respondents (N = 304) and the qualitative regional informants (N = 16) are structurally examined to establish a transparent, multi-layered foundation for subsequent inferential analyses.

5.2.1 Quantitative Sample Demographics

The statistical distribution of the quantitative survey sample (N = 304) was generated via using SPSS software descriptive frequencies. To preserve methodological authenticity all redundant procedural strings were excluded and removed. These primary descriptive tables capturing age intervals, academic status, and occupational status, field of studies, internet type, urbanization index and provincial distribution are presented below in their original output configurations.

Table 5.4:

Frequency Distribution of Participants' Age Cohorts

		Frequency	Percent	Valid Percent	Cumulative Percent
	18-23	183	60,2	60,2	60,2
	24-29	91	29,9	29,9	90,1
	30 and Above	30	9,9	9,9	100,0
	Total	304	100,0	100,0	

Table 5.4 explicitly presents the age distribution of the 304 Afghan female students across Afghanistan who participated in the survey. The majority of these Afghan female students who participated in the survey were between 18 and 23 years old and are comprising 60.2% (n = 183) of the sample. Students aged 24–29 years comprised 29.9% (n = 91) of the entire number. Only 9.9% (n = 30) were those participants whose age was 30 years or above. Thus the results suggest that the study population was largely concentrated in the younger age categories with 90.1% of the participants being below 30 years of age.

Table 5.5:

Frequency Distribution of Participants' Academic Year

		Frequency	Percent	Valid Percent	Cumulative Percent
	First Year	138	45,4	45,4	45,4
	Second Year	60	19,7	19,7	65,1
	Third Year	41	13,5	13,5	78,6
	Fourth Year	20	6,6	6,6	85,2
	Fifth Year	18	5,9	5,9	91,1
	Graduated	27	8,9	8,9	100,0
	Total	304	100,0	100,0	

Table 5.5 shows the academic year distribution of the 304 Afghan female students who participated in the main data collection. Students from first year made up the majority of these participants and are accounting 45.4 % (n=138) of the sample. Second-year students are comprising 19.7% (n = 60) while third-year students are accounting 13.5% (n = 41) of the sample. Fourth-year and fifth-year students are representing 6.6% (n = 20) and 5.9% (n = 18)

respectively. In addition, 27 participants were graduated students who had completed their online studies recently and are comprising 8.9% of the sample. These findings explicitly indicate that the study's sample was predominantly composed of students in the early years of their online academic programs and are constituting nearly two-thirds (65.1%) of these participants in the survey.

Table 5.6:

Frequency Distribution of Participants' current occupation Status

		Frequency	Percent	Valid Percent	Cumulative Percent
	Student	243	79,9	79,9	79,9
	Student & Employed	23	7,6	7,6	87,5
	Student & Self-employed	11	3,6	3,6	91,1
	Graduated Jobless	3	1,0	1,0	92,1
	Graduated & Employed	22	7,2	7,2	99,3
	Graduated & Self-employed	2	,7	,7	100,0
	Total	304	100,0	100,0	

Table 5.6 shows the current occupational status of the 304 respondents of the study. Students made up the majority of these participants. They are comprising 79.9% (n = 243) of the sample. Additionally, 7.6% (n = 23) of the respondents were students who were employed. A further 3.6% (n = 11) of these participants were students who were self-employed and 7.2% (n = 22) were those graduated participants who were employed. Only 1.0% (n = 3) are graduated jobless participants and 0.7% (n = 2) are self-employed graduates. These findings clearly indicate that the study's population was predominantly composed of students who are primarily engaged in online learning. This means that 91.1% of Afghan female students are either studying full-time or combining their studies with employment or self-employment at the time of data collection.

Table 5.7:*Frequency Distribution of Participants' by field of study (Social science and arts)*

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	79	26,0	26,0	26,0
	Yes	225	74,0	74,0	100,0
	Total	304	100,0	100,0	

Table 5.7 shows that majority of the respondents were students from the field of Social Sciences and Arts, these are accounting for 74% (n = 225) of the sample. These disciplines included areas such as Economics, Political Science, Law, Psychology, Sociology, History, Literature, and other related fields. This means many Afghan female students are currently showing their tendency towards choosing and gaining knowledge about the fields of Economics, Business, Law, Political Science, and Psychology because these disciplines are highly relevant to their current circumstances and needs. By studying Economics and Business, Afghan women can develop their skills that enable them to find both remote and on-site employment opportunities or start small home-based businesses which are allowing them to contribute actively to their households and provide financial support to their families. Studying Law and Political Science helps them gain a better understanding of their rights and international legal frameworks, these subjects are empowering them to advocate for themselves and raise their voices in defense of their rights both now and in the future in Afghanistan or anywhere in the world. Similarly, Psychology and related disciplines are equipping them with the knowledge and skills needed to cope with challenges and stress, build resilience and navigate difficult situations more effectively. This means are areas of study that Afghan women need them today more than ever, as they provide practical tools for personal empowerment, economic participation and social awareness. In contrast, 26.0% (n = 79) of the participants were enrolled in other academic

disciplines. This result shows that the study's sample was largely drawn from Social Sciences and Arts program students.

Table 5.8:

Frequency Distribution of Participants' by Medical field of study

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	260	85,5	85,5	85,5
	2	44	14,5	14,5	100,0
	Total	304	100,0	100,0	

Table 5.8 provides the distribution of respondents who were engaged in medical-related fields of study. The findings show that 14.5% (n = 44) of the participants who took part in the survey were studying in medical discipline. Medical-related disciplines included programs such as Medicine, Nursing, Midwifery, Pharmacy, Dentistry and other health sciences. Although Afghanistan is currently suffering from a critical shortage of healthcare professionals, particularly female physicians. Since medicine is inherently a practice-based discipline requiring extensive clinical exposure and the access to practical medical training for Afghan women has been severely constrained by the Taliban's restrictive policies and unfortunately online education cannot fully provide such practical opportunities as well which may significantly hinder effective learning. However, the continued engagement of Afghan female medical students in online academic programs remains a promising development, reflecting resilience and sustaining hope for the future of the country's healthcare system.

Table 5.9:*Frequency Distribution of Participants' in the Field Engineering*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	289	95,1	95,1	95,1
	3	15	4,9	4,9	100,0
	Total	304	100,0	100,0	

Table 5.9 presents the distribution of respondents' who were engaged in engineering-related fields of study. The findings indicate that only 4.9% (n = 15) of the participants from the entire survey were studying in engineering disciplines. Engineering-related disciplines included programs such as Civil Engineering, Computer Engineering and other technical fields. Considering all the challenges are affecting women's access to work and education, including restrictions in Afghanistan and issues such as electricity shortages and other basic infrastructure problems, the number of girls pursuing studies in the field of construction has declined. However, their presence in computer science remains relatively strong. Despite the fact that online education offers fewer opportunities for hands-on practice compared to in-person learning, Afghan female students continue to pursue their studies and remain committed to their education in this field.

Table 5.10:*Frequency Distribution of Participants' in the field of Natural science*

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	298	98,0	98,0	98,0
	4	6	2,0	2,0	100,0
	Total	304	100,0	100,0	

Table 5.10 presents the findings that only 2.0% (n = 6) of the participants who took part in the survey were studying in natural science disciplines. It clearly shows that majority of the

participants, accounting for 98.0 % of the sample were engaged in other fields. Natural science disciplines included subjects such as Physics, Chemistry, Biology, Environmental Science, Mathematics and related fields. As schools above grade six for girls remain closed and these subjects currently do not directly lead to employment opportunities and cannot provide specific financial support like economics and other applied fields currently in the country, this may be one of the reasons why Afghan female students show less interest in these disciplines. It suggests that these disciplines may provide less practical benefits for Afghan women in the present context.

Table 5.11:

Frequency Distribution of Participants' in the field of Education and others

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	300	98,7	98,7	98,7
	5	4	1,3	1,3	100,0
	Total	304	100,0	100,0	

Table 5.11 presents the distribution of respondents according to whether they belonged to the field of Education and other miscellaneous academic disciplines. The findings indicate that only 1.3% (n = 4) of the participants were enrolled in Education and other less represented fields of study, while the vast majority, 98.7% (n = 300), were from the major academic fields identified in this study. Education and other fields included disciplines that did not fall within the categories of Social Sciences and Arts, Medical Sciences, Engineering, or Natural Sciences. As schools above grade six for girls remain closed and these subjects currently offer limited practical benefits for the Afghan women in the present context, therefore, very limited students may be willing to study this field. The results suggest that respondents from Education and other miscellaneous academic backgrounds constituted only a very small proportion of the study sample.

Table 5.12:*Frequency Distribution of Participants' field not Specified*

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	294	96,7	96,7	96,7
	6	10	3,3	3,3	100,0
	Total	304	100,0	100,0	

Table 5.12 presents the distribution of respondents who did not specify their academic fields during the main data collection. The findings clearly indicate that only 3.3% (n = 10) of the Afghan female students in the survey did not specify their academic fields, as the question related to their academic fields was presented them as an optional in the questionnaire. These results suggest that the vast majority of participants in the survey have provided information about their academic fields, while only a small proportion of the sample did not specify their academic backgrounds.

Table 5.13:*Frequency Distribution of Participants' Residence*

		Frequency	Percent	Valid Percent	Cumulative Percent
	Urban	266	87,5	87,5	87,5
	Rural	38	12,5	12,5	100,0
	Total	304	100,0	100,0	

Table 5.13 presents the distribution of Afghan female students who took part in the main data collection according to their place of residence. The findings indicate that the majority of these female students 87.5% (n = 266) are residing in urban areas particularly in the capitals of the provinces or in the main parts of the districts that are close to districts' cities and Afghan students count them urban areas, whereas only 12.5% (n = 38) of these students are living rural areas. These results suggest that the study sample was predominantly composed of urban

residents, indicating a greater representation of individuals from urban communities compared to those from rural communities.

Table 5.14:

Frequency Distribution of Participants' Internet Type

		Frequency	Percent	Valid Percent	Cumulative Percent
	Home	101	33,2	33,2	33,2
	Mobile Data	111	36,5	36,5	69,7
	Both	92	30,3	30,3	100,0
	Total	304	100,0	100,0	

Table 5.14 provides a clear picture of the distribution of respondents according to the type of internet connection they primarily used for their online studies. The findings indicate that 36.5% (n = 111) of the participants relied on mobile data that is making it the most commonly used internet source. In addition, 33.2% (n=101) of the respondents accessed the internet through home internet connections, while 30.3% (n = 92) reported using both home internet and mobile data. These results suggest that Afghan female students are utilizing a variety of connection methods to study online, although mobile data was the most frequently used option.

All these descriptive frequencies and percentage distributions presented in this section are extracted directly from the primary statistical outputs documented in Findings Analysis with SPSS Tables and Tests.

5.3 Structural, Institutional and Socio-Cultural Barriers

5.3.1 Infrastructure and Logistical Barriers

To gain deeper insights and develop a hierarchical understanding of the infrastructural and logistical challenges faced by Afghan female students under the Taliban's restrictive policies, participants were asked to identify the barriers they face on a daily basis and rank their primary challenges according to three levels of importance: the most significant, second most significant and third most significant barriers affecting both their daily lives and their participation in distance higher education.

Table 5.15:

Frequency Distribution of the Most Significant Barrier Faced

		Frequency	Percent	Valid Percent	Cumulative Percent
	Poor internet connection	85	28,0	28,0	28,0
	High cost of data	98	32,2	32,2	60,2
	Lack of electricity	22	7,2	7,2	67,4
	Lack of personal device	18	5,9	5,9	73,4
	Low digital skills	3	1,0	1,0	74,3
	Family/cultural restrictions	10	3,3	3,3	77,6
	Safety/security concerns	8	2,6	2,6	80,3
	Language barriers	2	,7	,7	80,9
	Financial constraints	58	19,1	19,1	100,0
	Total	304	100,0	100,0	

Table 5.15 presents the statistical distribution of the most significant barriers faced by the 304 female students participated in the study. The data reveals that the primary obstacle to distance higher education is the high cost of data, which accounts for 32.2% (n = 98) of the total sample. This is closely followed by poor internet connection which is comprising 28.0% (n=85) of the respondents as their single most critical hurdle. These two infrastructure-related barriers together constitute 60% of primary challenges faced by Afghan female students who participated

in the main data collection. 19.1% (n=58) of these surveyed students have reported general financial constraints as the third largest category. Other structural and environmental friction points include the lack of electricity at 7.2% (n = 22), lack of a personal device at 5.9% (n = 18) and family/cultural restrictions at 3.3% (n = 10). The minor categories such as safety/security concerns (2.6%, n = 8), low digital skills (1.0%, n = 3) and language barriers (0.7%, n = 2) made up the remainder of the responses. These findings clearly indicate that the immediate threats to distance educational continuity for Afghan female students are predominantly economic and technical rather than socio cultural or skill-based, as the combination of data costs, poor connectivity, and overall financial pressures directly account for nearly 80% of the major barriers reported by Afghan female students in survey. This distribution shows the central role of economic and technological constraints in shaping students' access to and participation in distance higher education in Afghanistan. Based on the results improving affordable internet access and reducing financial burdens may have a greater impact on sustaining distance higher education than interventions focused solely on digital skills or socio-cultural factors.

Table 5.16:

Frequency Distribution of the Second Most Significant Barrier

		Frequency	Percent	Valid Percent	Cumulative Percent
	Poor internet connection	62	20,4	20,4	20,4
	High cost of data	84	27,6	27,6	48,0
	Lack of electricity	64	21,1	21,1	69,1
	Lack of personal device	22	7,2	7,2	76,3
	Low digital skills	9	3,0	3,0	79,3
	Family/Cultural restrictions	6	2,0	2,0	81,3
	Safety/Security concerns	8	2,6	2,6	83,9
	Language barriers	11	3,6	3,6	87,5
	Financial constraints	38	12,5	12,5	100,0
	Total	304	100,0	100,0	

Table 5.16 outlines the empirical data regarding the secondary layer of impediments experienced by the Afghan female students during their online studies. The descriptive breakdown reveals that even when looking past the absolute primary hurdles, economic and technical infrastructure constraints remain heavily dominant. The high cost of data continues to feature prominently, cited by 27.6% (n = 84) of the respondents as their second most critical barrier. This is closely followed by a notable surge in the lack of electricity, which rises to 21.1% (n = 64) and a poor internet connection at 20.4% (n = 62). In this secondary matrix, direct financial constraints account for 12.5% (n = 38) of the barriers. Other compounding issues reported by the students in the survey include the lack of a personal device at 7.2% (n = 22), language barriers at 3.6% (n = 11), and low digital skills at 3.0% (n = 9). Minor challenges such as safety/security concerns (2.6%, n = 8) and family/cultural restrictions (2.0%, n = 6) comprise the remaining portion of the descriptive responses.

The distribution within this secondary layer indicates that economic and infrastructure-related barriers play a significant role in shaping Afghan females' online learning experiences. As students encounter primary access barriers, issues such as high data costs, electricity shortages and poor internet connectivity remain prominent secondary challenges. The increase in the proportion of respondents reporting a lack of electricity (21.1%) suggests that power supply limitations constitute an important additional barrier to participation in distance education. These findings further highlight the interconnected nature of financial and technological constraints affecting Afghan female students' access to online higher education.

Table 5.17:

Frequency Distribution of the third Most Significant Barrier

		Frequency	Percent	Valid Percent	Cumulative Percent
	Poor internet connection	44	14,5	14,5	14,5
	High cost of data	31	10,2	10,2	24,7

	Lack of electricity	64	21,1	21,1	45,7
	Lack of personal device	35	11,5	11,5	57,2
	Low digital skills	21	6,9	6,9	64,1
	Family/Cultural restrictions	22	7,2	7,2	71,4
	Safety/Security concerns	14	4,6	4,6	76,0
	Language barriers	15	4,9	4,9	80,9
	Financial constraints	58	19,1	19,1	100,0
	Total	304	100,0	100,0	

Table 5.17 presents the empirical configuration of the tertiary layer of barriers experienced by the Afghan female students during their online higher education. Within this third analytical matrix, the lack of electricity remains a highly critical friction point, persisting at the top with 21.1% (n = 64) of the total sample. Concurrently, generalized financial constraints resurge significantly as a major tertiary factor, accounting for 19.1% (n = 58) of the entire number.

Infrastructure and technical bottlenecks continue to exert lingering pressure, with poor internet connection cited by 14.5% (n = 44) and the lack of a personal device accounting for 11.5% (n = 35) of the student profile. Additionally, the high cost of data represents 10.2% (n = 31) of the cohort. Socio cultural and environmental barriers show a minor percentage increase in this layer, where family/cultural restrictions account for 7.2% (n = 22), low digital skills comprise 6.9% (n = 21), language barriers make up 4.9% (n = 15), and safety/security concerns round out the remaining 4.6% (n = 14).

The distribution in this tertiary layer indicates that electricity shortages and financial barriers continue to represent prominent obstacles to online higher education among Afghan female students. In addition, poor internet connectivity, lack of personal devices and high data costs remain important challenges reported by the respondents in the survey. Although socio-cultural factors, digital skills, language barriers and safety concerns appear with lower frequencies in the results, they nevertheless contribute to the overall pattern of obstacles

experienced by Afghan female students. Collectively, these findings suggest that economic and infrastructure-related constraints in Afghanistan remain the most persistent barriers across multiple levels of prioritization.

Table 5.18:

Total Affirmation of Poor Internet Connection as a Barrier to Online Higher Education

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	84	27,6	27,6	27,6
	Yes	220	72,4	72,4	100,0
	Total	304	100,0	100,0	

Table 5.18 presents the direct "Yes" or "No" feedback from the female students took part in the survey regarding their poor internet connection as a barrier to their online higher education in Afghanistan. The statistical results show that an overwhelming majority of 72.4% (n = 220) of the Afghan female students answered "Yes". This is confirming that weak or unstable internet is a major problem for them. On the other hand, 27.6% (n = 84) of the respondents reported that they do not face this issue and answered ("No").

This high percentage clearly validates the ranking tables discussed earlier. It is confirming that internet instability is a widespread, structural challenge rather than an isolated problem in Afghanistan for these female students. As a digital learning setup depends entirely on continuous online access, such a massive confirmation rate implies that nearly three-quarters of these students face this barrier. It means the poor internet connectivity may affect and hampers their ability to participate in their daily classes, access learning materials, attend live lectures and submit their assignments in a timely manner.

Table 5.19:*Total Affirmation of High Cost of Data as a Barrier to Online Higher Education*

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	126	41,4	41,4	41,4
	Yes	178	58,6	58,6	100,0
	Total	304	100,0	100,0	

Table 5.19 provides the direct "Yes" or "No" breakdown regarding the high cost of data a barrier to online higher education among female students in Afghanistan. The statistical findings reveal that a majority of 58.6% (n = 178) of the surveyed Afghan female students answered "Yes,". It means that it is confirming that the expensive price of internet packages constitutes a significant challenge to their on line studies. On the other hand, 41.4% (n = 126) of the Afghan females who took part in the survey and did not consider the data cost a primary challenge for them and answered ("No").

This high percentage of affirmative responses demonstrates that online higher education brings a heavy, ongoing financial burden for most families under the current economic crisis in Afghanistan. As virtual learning requires substantial digital engagement such as attending virtual classes, streaming streaming video lectures, downloading large academic files and submitting assignments, students are required and must regularly purchase internet packages to access their online platforms and participate in their courses. These results indicate that the high cost of the data remains a significant challenge for a considerable proportion of Afghan female students to their online higher education.

Table 5.20:

Total Affirmation of Lack of Electricity as a Barrier to online higher education

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	172	56,6	56,6	56,6
	Yes	132	43,4	43,4	100,0
	Total	304	100,0	100,0	

Table 5.20 presents the “Yes” or “No” responses of the Afghan female students who took part in the study. The descriptive results indicate that 43.4% (n = 132) of the surveyed Afghan female students answered “Yes,” and it is suggesting that electricity shortages adversely affect participation in distance learning. On the other side, 56.6% (n = 172) of the respondents reported that a lack of electricity was not their primary obstacle to their online higher studies and answered (“No”).

Although more than half of the students did not identify electricity shortages as a major challenge, the fact that over two-fifths (43.4%) of the respondents explicitly highlighted this issue as a major infrastructure deficit in Afghanistan and its importance as a barrier to their online higher education. As online higher education depends on the availability of consistent power to keep digital devices charged and to maintain internet routers, interruptions in power supply may affect students’ ability to attend online classes and access learning resources and complete their academic tasks effectively in a timely manner. These findings indicate that electricity shortages remain a significant infrastructural challenge for a considerable proportion of Afghan female students.

Table 5.21:*Total Affirmation of Lack of Personal Device as a Barrier to Online Higher Education*

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	222	73,0	73,0	73,0
	Yes	82	27,0	27,0	100,0
	Total	304	100,0	100,0	

Table 5.21 presents the "Yes" or "No" distribution of the respondents regarding the lack of a personal device as a barrier to their distance higher education. The descriptive results show that a substantial majority of 73.0% (n = 222) of the surveyed Afghan female students reported that they do not face a lack of a personal device ("No"). On the other hand, 27.0% (n = 82) of the study's participants answered "Yes," indicating that not owning a dedicated personal device for students is a major obstacle to their online higher education. The results indicate that nearly three-quarters of the student sample have access to a device, the fact that more than a quarter (27.0%) of these women lack a personal computer or smartphone represents a significant institutional challenge. As distance higher education fundamentally requires regular and long-term access to a digital screen to attend virtual classes and complete homework. For this segment of the cohort, having to share devices with family members or lacking hardware altogether acts as a significant practical challenge that limits their educational autonomy and their learning opportunities.

Table 5.22:*Total Affirmation of Financial Constraints as a Barrier to Online Higher Education*

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	156	51,3	51,3	51,3
	Yes	148	48,7	48,7	100,0
	Total	304	100,0	100,0	

Table 5.22 presents the "Yes" or "No" distribution of the respondents concerning general financial constraints as a barrier to their online higher education. The descriptive statistics reveal a relatively balanced distribution among the sample: 156 students from the survey that comprising 51.3% of the total respondents reported that general financial constraints were not their primary obstacle ("No"). Conversely, a substantial near-half of the cohort, accounting for 48.7% (n = 148), answered "Yes," confirming that broader economic hardship directly disrupts their ability to pursue distance higher education.

These findings reflect the current macroeconomic conditions in Afghanistan, where widespread unemployment, restrictions on women's employment and limitations in banking systems have affected household incomes. On the other hand, slightly more than half of the Afghan female students did not identify this issue as a barrier to their distance higher education. However, nearly 49% of the students explicitly identified financial distress as a major barrier to their online higher education. In a context where distance learning involves additional expenses such as internet data packages and access to electronic devices, household financial conditions remain an important factor influencing students' participation in online higher education. For this massive segment of the student population, the continuous struggle to balance basic household survival expenses against educational costs may present continuing challenges that affect their academic participation and persistence.

5.3.2 Language, Familial, Safety and Digital Literacy Constraints

Table 5.23:

Total Affirmation of Low Digital Skills as a Barrier to Online Higher Education

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	252	82,9	82,9	82,9
	Yes	52	17,1	17,1	100,0
	Total	304	100,0	100,0	

Table 5.23 presents the "Yes" or "No" responses of the Afghan female who students participated in the study regarding low digital skills as a barrier to their distance learning. The statistical data reveal that a large majority of these Afghan female students that comprise 82.9% (n=252) of the total respondents, answered "No," indicating that they do not consider poor digital skills to be a major obstacle for them while pursuing distance higher education. On the other hand, a considerable number of these female students that comprise 17.1% (n = 52) of the total respondents answered "Yes," confirming that they struggle with the technical skills needed for online higher education.

Based on these findings, the primary challenges for Afghan female students are not a lack of technical knowledge or digital illiteracy. Instead, the findings highlight that despite being forced into sudden online learning due to university closures by the Taliban, the vast majority of these students have successfully adapted and developed the necessary digital literacy to navigate online academic platforms. As discussed earlier, the main challenges confronting Afghan female students in pursuing distance higher education are external and structural in nature, including high internet costs and frequent power shortages, rather than limitations in their digital skills or technological capabilities.

Table 5.24:

Total Affirmation of Family/Cultural Restrictions as a Barrier to Online Higher Education

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	263	86,5	86,5	86,5
	Yes	41	13,5	13,5	100,0
	Total	304	100,0	100,0	

Table 5.24 presents the "Yes" or "No" distribution of the respondents regarding family and cultural restrictions as an academic barrier. The descriptive data explicitly indicate that a considerable number of 86.5% (n = 263) Afghan female students who participated in the study

answered "No," confirming that they do not face family or cultural opposition to their online higher education. Conversely, 13.5% (n = 41) of these participants answered "Yes," confirming that socio-cultural and familial limitations act as an obstacle to their online higher education.

This statistical distribution provides a highly valuable insight into the social dynamics of female education in present-day Afghanistan. While global narratives often emphasize cultural resistance as the main reason blocking women's learning, these findings prove that the vast majority of Afghan families actively support and permit their daughters to pursue university degrees through distance learning platforms.

"As my family is open-minded, when schools and universities were closed, like many other girls in society, I also faced depression. I was sad and my family decided to pursue my education via online I am happy now and we should take advantage of this opportunity and continue our studies." Participant, (Central Zone, Social Science)

The core problem is not a lack of familial willingness, but rather external infrastructural challenges. However, for the 13.5% who selected "Yes," local traditional norms and strictly enforced domestic expectations still remain a painful reality that limits their academic freedom.

Table 5.25:

Total Affirmation of Safety/Security Concerns as a Barrier to Online Higher Education

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	261	85,9	85,9	85,9
	Yes	43	14,1	14,1	100,0
	Total	304	100,0	100,0	

Table 5.25 presents the "Yes" or "No" responses of Afghan female students who participated in the study regarding safety and security concerns as a barrier to their online higher education. The results indicate that a large majority of Afghan female students who constitute

85.9% (n = 261) of these participants answered "No," meaning that they do not feel that direct physical safety or security risks as significant challenge to their online higher education at the moment. On the other hand, a considerable number that comprises 14.1% (n = 43) of these female students, answered "Yes," confirming that security worries still negatively impact their educational environment in Afghanistan.

This relatively low percentage of "Yes" makes perfect sense within the context of online education. As the platform allows female students to study online from the safety of their homes and protects them from the physical threats, street harassment and checkpoints they would normally face if they were traveling to a traditional university campus. However, 14.1% of these female students still experience security concerns. These results highlight that digital safety worries such as fear of surveillance, online privacy risks, or broader community instability still cast a shadow over their domestic study spaces.

Table 5.26:

Total Affirmation of Language Barriers as a Barrier to Online Higher Education

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	262	86,2	86,2	86,2
	Yes	42	13,8	13,8	100,0
	Total	304	100,0	100,0	

Table 5.26 presents the "Yes" or "No" responses regarding language barriers as an academic obstacle among Afghan female students who took part in the study. These findings show that large majority 86.2% (n = 262) of these female students answered "No", meaning that they do not face language barriers in their online higher education. However, only 13.8% (n = 42) of these female students answered "Yes," confirming that language differences still remain a barrier for them during their online higher education.

Based on these findings, the high percentage of negative responses suggests that the large majority of these female students possess adequate proficiency in all languages used as primary mediums of instruction on their online platforms. As online universities offer instructions in Afghan national languages (Dari and Pashto) as well as English, therefore, language differences do not appear to be a major issue for them. However, for the 13.8% of students who still face language issues; this remains a notable challenge for them particularly when navigating international online curriculum resources, specialized technical terminology or digital learning management systems that lack local translation.

5.4 Institutional Delivery and Accreditation Uncertainty

This section critically investigates the operational weaknesses within the distance learning delivery framework and analyzes the pervasive anxieties surrounding the legal recognition and future value of online higher education certificates among Afghan female students. Because these issues fundamentally transcend rigid quantitative scoring, this sub-chapter draws directly from the open-ended questionnaire surveys and the thematic analysis of the N = 16 semi-structured institutional and regional interviews. By synthesizing these local voices, this section of this chapter maps the academic friction points occurring within virtual environments and details how external political realities distort the students' professional aspirations.

5.4.1 Pedagogy Delivery Vulnerabilities and Resource Deficits

The findings from the primary qualitative data indicate that the distance higher education experience is affected by certain internal instructional and administrative challenges. During the qualitative interviews and main survey, some participants, particularly students from various faculties, reported that the delivery of academic and learning materials was not always conducted

in a consistent and well-organized manner. According to these participants, course materials were occasionally shared late, scheduling arrangements were sometimes unclear, and adequate coordination among teaching activities was not always evident. Some respondents further noted that these challenges may be partly associated with the fact that many instructors serving in online universities are Afghan academics who contribute on a voluntary basis while managing other professional and personal responsibilities.

While these perspectives do not represent the experiences of all Afghan female students who participated in the study and are actively pursuing their higher education via online learning, they highlight challenges encountered by a segment of the participants in this study. The experiences shared by these female students suggest that such issues may negatively affect the quality of their learning experience and academic engagement. Therefore, these findings point to the need for improving the organization of course delivery, administrative coordination and instructional management within some online learning programs for Afghan female students. The primary friction points identified by the participants revolve around two systemic weaknesses:

5.4.1.1 Irregular Faculty Commitments

Students routinely note that online lecturers struggle to maintain stable, predictable teaching schedules due to competing socio-political pressures, personal displacement or localized technical blackouts. This structural irregularity breaks the continuity of learning, leaving students isolated in their private domestic spheres.

The empirical data from the survey's open-ended feedback and qualitative interviews demonstrates that operational instability is a core friction point. Some female Afghan students frequently emphasized that pedagogical efficacy is inherently linked to faculty presence and

systematic curriculum adherence. The lack of synchronized management leaves students disoriented. This vulnerability is vividly captured in the qualitative texts, where participants articulated a desperate need for structural discipline and professional accountability from their instructors:

For distance learning to be high quality, professors must prioritize consistency over quantity. We need our lecturers to be strictly disciplined and be very serious about students' attendance. They must adhere strictly to a well-structured curriculum and timetable. We don't want them to cancel our classes unexpectedly. (Survey Respondent, Open-ended Feedback)

"A major issue we face currently is the lack of structural organization. We desperately need a synchronized timetable and a predictable regular schedule from our instructors." (Survey Respondent, Open-ended Feedback)

To further corroborate this operational gap, Afghan female students in the qualitative assessments explicitly highlighted that having a pre-defined lesson plan is a prerequisite for online higher education to succeed in a conflict zone. One student noted:

"در زمان معین حاضر بودن اساتید و پلان درسی درست داشتن" (Instructor's presence at the designated time and possessing a proper structured lesson plan is really essential). (Survey Respondent, Open-ended Feedback)

Furthermore, the data shows that structural continuity is disrupted when instructors do not strictly monitor the academic environment. Students expressed that since online education lacks physical presence, the students' engagement is entirely dependent on faculty's strictness.

"استادان باید پیگیر باشند در قسمت حضری شاگردان و در قسمت تدریس باید خیلی جدی و قاطع باشند."

(Instructors must actively follow up on student attendance daily and they must be highly disciplined, rigorous in their teaching delivery). (*Survey Respondent, Open-ended Feedback*)

5.4.1.2 Severe Curricular Resource Deficits

Virtual learning platforms frequently lack contextualized, downloadable and translated study assets. Students are often forced to navigate difficult online curricula without the aid of interactive libraries. The qualitative findings suggest that some students face difficulties at the time of accessing adequate learning resources within their online education programs. Several participants reported that they often have to engage with complex course materials without sufficient support from interactive libraries, localized digital textbooks or direct academic guidance. As a result, some students rely heavily on self-directed learning to understand course content and complete their academic requirements. The data further indicate that issues related to languages and limited access to appropriate educational resources contributes to a sense of academic isolation among some Afghan female students. Considering the results, a large number from these students are able to overcome some technical barriers in their online higher education, but some of them may still encounter difficulties when learning materials are not available in their own national languages or are not adapted to their educational context. Participants from different disciplines emphasized that the quality of learning content, the availability of their course contents translations in Dari and Pashto and the effective organization of educational resources are important factors in supporting their academic progress. These all are helping them successfully complete the academic year.

We are struggling deeply with the quality of the content itself. The learning materials must be localized and simplified into our own languages (Dari and Pashto). Presentations and slides should be provided well-organized and compressed and lightweight video files

that we can actually download with our limited internet. (Survey Respondent , Open-ended Feedback)

Having an internet connection is completely useless if we do not possess the digital devices or the localized academic textbooks required to comprehend the lectures. Most of the time, the study assignments are really difficult and we do not have a direct guidance or any interactive library. We must do it by self-study. (Survey Respondent, Open-ended Feedback)

This thematic vulnerability is deeply rooted in the qualitative segments under the Language & Quality Content node. Students explicitly requested a shift from abstract, high-bandwidth resources to pragmatic, low-volume, and linguistically accessible formats. This is substantiated by the following raw empirical evidence:

"محتوا باید ساده، قابل فهم و بومی باشد. ویدیوهای کم حجم و سلايدهای منظم. چون مهم است و اینترنت مان ضعیف است."

(The learning content must be simple, understandable and localized. Low-volume videos and organized presentation slides are highly critical because our internet connection is very weak). (Survey Respondent, Open-ended Feedback)

Additionally, the deficit is not merely pedagogical but material. The qualitative texts reveal that a vast majority of these female students are forced to access virtual classrooms through inadequate or shared mobile screens. Many of these female students share their learning devices with their other family members while pursuing online higher education which may severely restricts their ability to process complex academic datasets and complete long-form assignments:

"بسیاری دختران گوشی مناسب ندارند. حتی اگر اینترنت باشد، بدون وسایل دیجیتال خواندن درس بی فایده است."

(Many girls do not even have a proper smartphone. Even if an internet connection is available for them, attempting to study without appropriate digital devices is completely futile). (Survey Respondent, Open-ended Feedback)

5.4.2 The Cognitive Burden of Accreditation and Certificate Validity

Beyond daily operational difficulties, the single most exhausting psychological barrier identified within this domain is the deep-seated structural anxiety regarding degree recognition. Under the Taliban's restrictive governance and the total suspension of official university access for women, distance higher education operates in a legal grey area. The inductive evidence points toward a profound cognitive dilemma affecting the student cohort. While these women invest heavy financial resources (such as internet data costs) and brave significant personal risks to continue their studies, they remain plagued by a paralyzing uncertainty regarding whether their final degrees will be recognized by future domestic employers, state institutions or international bodies.

“یا این دانشگاه پذیرفته میشود” (will this university (our degrees) be recognized.) (Survey Respondent, Open-ended Feedback)

This structural challenge raises painful questions about the practical utility of their qualifications. For instance, students face immense societal skepticism and continuous discouragement from their surrounding environments due to this lack of recognition. As one student shared:

“I believe certificates are very important because in many places people think online education is not valid, which discourages students. If valid and recognized certificates are provided, students will continue their studies with motivation and confidence.”(Participant, Applied Science, Central Zone)

However, there are some female students who actively prioritize skill acquisition from these online platforms. Without official state validation or alternative international accreditation frameworks, students experience a form of academic containment, where their hard-won digital competencies are threatened by institutional invalidity, leaving their future academic advancement and labor-market entry highly uncertain. To cope with this containment, many female students shift their primary focus entirely away from traditional credentials, viewing absolute practical capability as their true asset. This prioritization of capability over paper validation is clearly echoed in their testimonies:

“Personally, skills are more important to me. Whether or not someone has a certificate, skills speak for themselves... Still, for me, skills are the priority.” (Participant, Applied Science, Eastern Zone)

“I already have many certificates, and they do not hold much value for me. Certificates are just papers. Skills are what truly matter and help us progress... For me, skills and experience are the most important.” (Participant, Social Science, Western Zone)

“Certificates can be obtained anywhere, it is even bought but skills are what truly matter. Learning is what we really need.” (Participant, Social Science, Central Zone).

Ultimately, while the lack of validation creates an environment of profound institutional instability, the strategic pivot toward digital expertise and real-world skills serves as a vital tool of resilience for Afghan women navigating this academic containment.

5.5 Socio-Cultural Restrictions, Psychological Well-being and Structural Agency

While infrastructural and operational challenges present significant operational challenges for Afghan female students in Afghanistan. The country’s broader socio-political

landscape imposes deep-seated socio-cultural restrictions and psychological stressors. This section integrates the quantitative scale metrics for Socio-Cultural/Safety Restrictions, Psychological Hope, and Self-Determination with the lived experiences and firsthand accounts of the participants to illuminate how distance higher education serves as a psychological anchor and a mechanism of quiet agency.

Table 5.27:

Descriptive Statistics of Key Study Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Digital_Skills	304	2,25	5,00	4,1505	,56303
SDT_Total	304	2,85	5,00	4,2105	,48487
Hope_Total	304	2,44	5,00	4,2588	,51916
Economics_Total	304	2,40	5,00	3,9059	,58108
Safety_Total	304	1,67	5,00	4,1721	,63220
Valid N	304				

5.5.1 Perceived Safety and Psychological Well-Being in Online Education

The quantitative metrics demonstrate the critical role of psychological and environmental safety in shaping participants' educational persistence. Table 5.27 presents a descriptive overview of the primary constructs affecting Afghan female students' engagement in distance higher education. Among these dimensions, the Safety_Total construct which evaluates students' feelings of security, expression without fear, and sense of a valued voice in online learning spaces recorded a notably high mean score (M=4.1721,SD=0.63220, N=304).

The relatively low standard deviation (SD=0.63) indicates a strong consensus across respondents. On a 5-point Likert scale, a mean score of 4.17 signifies that participants strongly perceive their online learning environments as safe, supportive, and empowering. Rather than reflecting pervasive fear or academic hesitation, this high average demonstrates that students feel secure discussing their learning, experience mutual respect for their opinions, and actively

participate in academic activities without fear of negative repercussions within their digital learning communities.

Consequently, safety in this context functions as a crucial psychological sanctuary: while broader socio-cultural constraints may restrict physical mobility and expression in daily life, distance learning spaces effectively provide a protected, enabling environment for self-expression, collaboration and educational continuity.

5.5.2 The Mental Health Toll and the Compensatory Role of Academic Hope

The institutionalized closure of physical educational spaces for Afghan female students has created profound psychological challenges. These bans are disrupting future aspiration and generating widespread uncertainty. However, the empirical results explicitly indicate that distance education in the current context of Afghanistan serves as an important source of hope, continuity and psychological resilience for Afghan female students.

Table 5.27 presents the descriptive statistics for the Hope Scale (Hope_Total). The results indicate a notably high mean score ($M = 4.26$, $SD = 0.52$) among surveyed students. Considering the challenging socio-political environment in which these female students pursue their online higher education, this finding is particularly significant. It suggests that participants have maintained a strong sense of future orientation, motivation and belief in their ability to pursue educational and professional goals despite the considerable obstacles they face today in Afghanistan under the Taliban's restrictive policies.

In addition, the relatively low standard deviation ($SD = 0.52$) shows a strong level of consistency among respondents. In other words it hints that hope is not just stuck in a small set of super optimistic female students, but it shows up as a fairly shared mental resource among the female students taking part in distance higher education. The qualitative narratives add some

extra context for understanding these results. Several participants described how the suspension of physical education opportunities damaged and negatively affected their emotional balance and their sense of direction. At the same time, they kept insisting that online learning access helped them regain momentum, restored a sense of purpose and renewed their confidence in the future.

One participant from Parwan province explained:

Because my family is very open-minded, when schools and universities were closed, like many other girls in society, I also faced severe depression and hopelessness. Therefore, my family decided to let me pursue online education, we should take advantage of this opportunity and continue our studies. It completely changed my mental state; it gave me back my future. (Participant 39, Social Sciences, Parwan)

This testimony closely aligns with the quantitative findings. While participants acknowledged the psychological difficulties associated with educational restrictions, they also described distance education as a meaningful pathway through which they could maintain personal aspirations, continue academic development and preserve hope for future opportunities. Therefore, taking these both evidences together, they suggest that distance higher education plays a role that extends beyond the delivery of academic content for Afghan female students.

Online distance education functions as a source of psychological support, future orientation and personal empowerment. In a context marked by uncertainty and restricted educational opportunities, online learning appears to provide an important mechanism through which Afghan female students under the Taliban's restrictive policies sustain hope, maintain a sense of purpose and continue investing in their long-term goals.

5.5.3 Autonomy and Subservient Agency through Self-Determination Theory (SDT)

To understand the internal driving forces enabling these Afghan female students to persist despite severe socio-cultural and technical constraints, the study examined their experiences the lens of Self-Determination Theory (SDT), focusing on the dimensions of autonomy, competence, and relatedness.

Table 5.27 presents the descriptive statistics for Self-Determination (SDT_Total) which indicate a high mean score ($M = 4.21$, $SD = 0.48$, $N = 304$). Looking at the available results, the relatively low standard deviation suggests limited variability across female students took part in the study. This indicates a broadly consistent level of perceived self-determination within these female students. This pattern reflects a sustained psychological orientation toward motivation and self-regulation, even within structurally constrained environments.

Qualitative findings further contextualize these results under the theme of “Autonomy as Hidden Resistance.” In contexts such as Afghanistan where overt resistance is associated with considerable risks, the female students’ participation in distance higher education emerges as a subtle yet meaningful form of agency. In addition, their familial support within this process plays a pivotal enabling role by providing them financial support and access to essential resources such as internet connectivity and mobile devices, as well as offering emotional encouragement to them during online higher education. In doing so, it strengthens both relatedness and perceived competence among these deprived students.

This dynamic is illustrated by a female student from the Central Zone, who emphasized the role of family support in enabling uninterrupted access to education despite widespread structural barriers: “I personally have not faced such problems, but there are many Afghan girls

who do not have access to mobile phones, internet or family support” (Participant 38, Social Sciences, Central Zone).

The interviewee’s this testimony reinforces the qualitative theme of familial shielding as a key enabler of sustained engagement of these females students in higher education. Such support structure within the SDT framework function as critical conditions that facilitate relatedness and indirectly support autonomy. This means that it is allowing female students to maintain educational engagement despite facing numerous constraints. Overall, the integration of quantitative and qualitative findings suggests that online higher education operates as a space where constrained but meaningful forms of agency are exercised within restrictive socio-cultural environments.

5.5.4 Digital Skills as an Enabler of Educational Continuity

Table 5.27 presents the descriptive statistics for Digital Skills (Digital_Skills) of Afghan female students who took part in the study. The result indicates a high competency profile among the cohort, yielding a mean score of 4.15 (SD = 0.56, N = 304). The finding shows a mean score above 4.00. That means, despite the abrupt transition from physical to virtual learning environments in Afghanistan where the context is digitally constrained the active student cohort has developed a strong level of digital literacy. The relatively low standard deviation (SD = 0.56) that suggests limited variability across respondents. This means that the technological proficiency is widely shared among Afghan female students and it functions as a foundational capability within them. The qualitative framework under the central theme of (Identity, Skill and Change) further contextualizes this statistical pattern. A considerable number of Participants emphasized that the acquisition of digital skills was not merely an academic requirement for them, but a transformative process that reshaped their self-perception, shifting their identities from isolated and forgotten learners to digitally connect and globally engaged students.

A student from the Central Zone (Kabul), pursuing Applied Sciences, highlighted how developing digital competencies enabled her to overcome structural barriers and reframe her educational experience during online higher education:

There has been a big change. We are required to learn computer and mobile applications. Before, we did not understand things like creating slides, but now we use different programs that we download on computers. I try to learn new things and improve my skills. Our digital skills have definitely increased. (*Participant 36, Applied Sciences, Central Zone*)

Synthesizing these findings indicates that digital proficiency functions as a critical enabling structure in contexts where restrictions for educations exist. The high mean (4.15) aligns directly with student's lived experiences described by an interviewee from Central Zone. By transforming digital platforms into primary channels for educational continuity, these female students effectively reconfigured structural barriers, shifting the locus of learning and agency into virtual space.

5.5.4 Economic Empowerment, Skill Application and Market Readiness

The Socio-Economic Empowerment construct was measured through the Economics_Total variable, which evaluates students' acquisition of job-search and professional competencies, their readiness to generate income, and their perceived connectedness to international employment opportunities through online learning. Among the evaluated constructs in the descriptive statistics matrix, this variable recorded a mean score of $M = 3.91$ ($SD = 0.58$, $N = 304$).

Although Economics_Total yielded the lowest mean score relative to the other dimensions namely Hope ($M = 4.26$), Self-Determination ($M = 4.21$), Safety ($M = 4.17$), and

Digital Skills (M = 4.15) a mean of 3.91 on a five-point Likert scale remains notably high. This indicates a strong positive consensus among participants regarding the economic utility and market relevance of digital education. Rather than reflecting passive economic hardship, this score demonstrates students' proactive orientation toward financial self-reliance, remote employment, entrepreneurial capability, and the practical application of digital learning despite the broader socio-economic challenges of post-conflict Afghanistan.

The items constituting this construct reflect a critical trajectory from skill acquisition to practical economic application:

- **Practical Skill Acquisition and Application:** Students demonstrate confidence in acquiring professional and job-search skills through digital platforms and applying these competencies to freelance work, remote employment, or local entrepreneurial initiatives.
- **Work-Life Integration:** Participants express confidence in balancing future professional responsibilities with familial and cultural expectations.
- **Global Connectivity:** Online learning is perceived as an important pathway for accessing international employment opportunities and overcoming local structural barriers to economic participation.

The qualitative findings strongly support this quantitative pattern. Although participants acknowledged existing financial constraints, their narratives primarily emphasized transforming digital learning into tangible economic opportunities. As one participant explained:

"Personally, I believe that if I become a computer programmer and can work on software projects from home, then what I learn will definitely have practical use." (Participant: Applied Science, Urban Central Zone, Bamyan)

This quotation illustrates students' conviction that online learning equips them with practical, marketable skills that can be translated into remote employment and sustainable income generation. When considered alongside the high mean scores for Hope (M = 4.26) and Digital Skills (M = 4.15), these findings demonstrate that socio-economic empowerment is perceived as an actionable outcome of digital resilience. Despite macroeconomic instability, participants do not view education merely as an academic pursuit; rather, they regard online learning as a strategic mechanism for achieving financial autonomy, accessing global labour markets, and contributing to household sustainability.

5.6 Inferential Statistical Analysis and Hypotheses Testing

While the descriptive statistics provide an overview of the demographic characteristics and key study variables, inferential statistical techniques were employed to test the relationships among the core constructs of the study. Specifically, a Pearson Correlation Analysis was conducted to assess the associations between Digital Skills, Self-Determination (SDT), Hope, Economic Challenges, and Safety Perceptions. Subsequently, Multiple Linear Regression Analysis was performed to evaluate the extent to which Digital Skills, Self-Determination, Economic Conditions and Safety Factors predict levels of Hope among participants. All analyses were conducted using data from 304 respondents (N = 304).

5.6.1 Bi-Variate Correlation Matrix and Interactivity

Table 5.29:

Pearson Correlation Matrix for Primary Study Variables

		Digital_Skills	SDT_Total	Hope_Total	Economics_Total
Digital_Skills	Pearson Correlation	1	,488**	,340**	,253**
	Sig. (2-tailed)		<,001	<,001	<,001

	N	304	304	304	304
SDT_Total	Pearson Correlation	,488**	1	,771**	,436**
	Sig. (2-tailed)	<,001		<,001	<,001
	N	304	304	304	304
Hope_Total	Pearson Correlation	,340**	,771**	1	,501**
	Sig. (2-tailed)	<,001	<,001		<,001
	N	304	304	304	304
Economics_Total	Pearson Correlation	,253**	,436**	,501**	1
	Sig. (2-tailed)	<,001	<,001	<,001	
	N	304	304	304	304
Safety_Total	Pearson Correlation	,305**	,617**	,579**	,367**
	Sig. (2-tailed)	<,001	<,001	<,001	<,001
	N	304	304	304	304

Correlations

		Safety_Total
Digital_Skills	Pearson Correlation	,305**
	Sig. (2-tailed)	<,001
	N	304
SDT_Total	Pearson Correlation	,617**
	Sig. (2-tailed)	<,001
	N	304
Hope_Total	Pearson Correlation	,579**
	Sig. (2-tailed)	<,001
	N	304
Economics_Total	Pearson Correlation	,367**
	Sig. (2-tailed)	<,001
	N	304
Safety_Total	Pearson Correlation	1
	Sig. (2-tailed)	
	N	304

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

N = 304 for all variables.

Table 5.29 outlines the empirical bi-variate correlation matrix, which serves as the statistical foundation for verifying the study's core hypotheses.

The correlation matrix reveals statistically significant positive associations among all study variables ($p < .001$), indicating meaningful interrelationships between digital skills, self-determination, hope, economic factors, and safety perceptions among Afghan female students took part in the study and are engaged in online higher education under restrictive policies of the current regime.

5.6.1.1 Self-Determination and Hope

The finding shows the strongest relationship between Self-Determination (SDT_Total) and Psychological Hope (Hope_Total) ($r = .771$, $p < .001$). This strong positive correlation suggests that Afghan female students are reporting higher levels of autonomy, competence and relatedness also tend to report higher levels of hope regarding their online higher educational and future prospects. The finding provides substantial support for the study's theoretical framework and hypothesized association between psychological empowerment and hope.

5.6.1.2 Safety and Psychological Well-Being

Safety perceptions were strongly and positively correlated with both SDT_Total ($r = .617$, $p < .001$) and Hope_Total ($r = .579$, $p < .001$). These findings suggest that Afghan female students who perceive greater levels of personal and environmental safety also tend to report stronger self-determination and higher levels of hope.

5.6.1.3 Economic Empowerment and Educational Resilience

Economics_Total, which reflects participants' acquisition of job-search and business and professional competencies, income generation potential, and readiness to apply their learning

across diverse professional domains and physical/digital labor markets demonstrated statistically significant, moderate-to-strong positive correlations with SDT_Total ($r = .436$, $p < .001$) and Hope_Total ($r = .501$, $p < .001$).

These empirical results indicate a meaningful alignment between students' psychological internal assets and their perceived capacity for socio-economic advancement. Online learning serves as a broader medium through which students acquire versatile vocational skills, arts, and professional competencies enabling them to seek opportunities in both digital/remote formats and local, physical workforce environments:

- Link with Hope ($r = .501$): Indicates that higher optimism and educational aspirations co-occur with a greater confidence in translating acquired skills into practical economic self-reliance, local enterprise, or freelance employment.
- Link with Self-Determination ($r = .436$): Demonstrates that self-directed learners who feel autonomous in their educational journey are more proactive in building marketable competencies and balancing work with family/cultural responsibilities.

Overall, these findings signify that psychological resilience and the practical, economic utility of education across various disciplines mutually reinforce one another. However, as correlation analysis identifies relationship strength rather than direct cause-and-effect dynamics, the exact direction of influence cannot be determined from these statistical values alone.

5.6.1.4 Digital Skills as a Foundational Resource

Digital Skills were positively associated with all major study variables, including SDT_Total ($r = .488$, $p < .001$), Hope_Total ($r = .340$, $p < .001$), Economics_Total ($r = .253$, $p < .001$), and Safety_Total ($r = .305$, $p < .001$). These findings suggest that higher levels of digital

competence are associated with stronger psychological resources and more positive educational experiences among these Afghan female students participated in the study.

Taken together, the correlation analysis provides empirical support for the proposed conceptual model. All variables were positively and significantly related, with the strongest association emerging between self-determination and hope. The results justify the subsequent use of multiple regression analysis to examine the relative contribution of each predictor variable.

5.6.2 Multiple Linear Regression Analysis

To move beyond the examination of bi-variate relationships and assess the simultaneous influence of multiple factors on students' levels of hope, a Multiple Linear Regression Analysis was conducted. In this model, Hope_Total was specified as the dependent variable, while Digital_Skills, SDT_Total, Economics_Total and Safety_Total were entered as independent variables. The analysis aimed to determine the relative contribution of psychological, technological, economic and environmental factors in explaining variations in hope among Afghan female students engaged in online higher education.

Table 5.30:

Multiple Linear Regression Model Results (Dependent Variable: Hope_Total)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,501	,180		2,785	,006
	Digital Skills	-,053	,037	-,058	-1,460	,145
	SDT_Total	,677	,053	,632	12,758	<,001
	Economics_Total	,169	,035	,190	4,873	<,001
	Safety_Total	,113	,036	,137	3,085	,002

a. Dependent Variable: Hope_Total

Table 5.31:

Model Summary of Multiple Linear Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,801 ^a	,642	,637	,31291
a. Predictors: (Constant), Safety_Total, Digital_Skills, Economics_Total, SDT_Total				

Table 5.32:

Analysis of Variance (ANOVA) for Multiple Linear Regression Model

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	52,392	4	13,098	133,773	<,001 ^b
	Residual	29,276	299	,098		
	Total	81,668	303			
a. Dependent Variable: Hope_Total						

b. Predictors: (Constant), Safety_Total, Digital_Skills, Economics_Total, SDT_Total

5.6.2.1 Model Fit and Overall Significance

The multiple linear regression model was statistically significant, $F(4, 299) = 133.773$, $p < .001$, indicating that the combined predictors significantly explain variations in female students' levels of hope. The model demonstrated strong explanatory power, with a Multiple Correlation Coefficient (R) of .801, reflecting a strong relationship between the observed and predicted values of Hope_Total.

The Coefficient of Determination (R^2) was .642. It is suggesting that 64.2% of the variance in hope among Afghan female distance education students is explained collectively by Digital Skills, Self-Determination Capacity (SDT_Total), Economic Empowerment, and Safety Perceptions. The Adjusted R^2 of .637 confirms the stability and robustness of the model after accounting for the number of predictors included. Collectively, these findings indicate that the proposed model provides substantial explanatory power for understanding hope among Afghan female distance education students.

5.6.2.2 Individual Predictor Effects

- *Self-Determination Capacity (SDT_Total)*

Self-Determination Capacity emerged as the strongest predictor of Hope_Total ($\beta = .632$, $B = .677$, $t = 12.758$, $p < .001$). This finding indicates that Afghan female students who reported higher levels of autonomy, competence and relatedness also tended to report significantly higher levels of hope. Among all variables included in the model, SDT_Total demonstrated the greatest predictive influence and highlighting the central role of psychological empowerment in shaping future-oriented aspirations.

- ***Socio-Economic empowerment (Economics_Total)***

Economic Factors were also found to be a statistically significant positive predictor of Hope_Total ($\beta = .190$, $B = .169$, $t = 4.873$, $p < .001$) in the model.

This significant positive contribution demonstrates that higher perceived economic capability directly enhances students' psychological hope. These empirical findings indicate that when female students acquire practical, marketable digital/vocational skills and professional competencies enabling them to explore freelance opportunities, local income generation, or global workforce entry their optimism for the future and educational persistence are substantially strengthened.

Therefore, socio-economic empowerment serves not merely as a passive outcome, but as an active driver of psychological hope and resilience among distance learners navigating challenging socio-political environments.

- ***Safety Perceptions (Safety_Total)***

Safety Perceptions significantly predicted Hope_Total ($\beta = .137$, $B = .113$, $t = 3.085$, $p = .002$). Participants who reported greater feelings of safety, security and freedom to engage in online learning also tended to report higher levels of hope. This finding highlights the importance of a supportive and secure learning environment in sustaining students' optimism and future aspirations.

- ***Digital Skills (Digital_Skills)***

Digital Skills did not emerge as a statistically significant independent predictor of Hope_Total ($\beta = -.058$, $B = -.053$, $t = -1.460$, $p = .145$). Although the earlier Pearson correlation analysis showed a significant positive association between Digital Skills and Hope (r

= .340, $p < .001$). The regression results are indicating that Digital Skills do not explain additional unique variance in hope when SDT_Total, Economics_Total, and Safety_Total are included in the model. It means that digital competencies may influence hope indirectly through psychological empowerment and educational engagement rather than having a direct independent effect.

Overall, the multiple regression analysis explained 64.2% of the variance in Hope_Total, demonstrating strong explanatory power. Among all independent variables, Self-Determination Capacity emerged as the most influential factor and it is followed by Economic Factors and Safety Perceptions, while Digital Skills did not show a significant independent effect. These findings suggest that psychological empowerment; perceptions of safety and persistence despite economic challenges play a more direct role in shaping hope among Afghan female students in distance higher education programmes in Afghanistan under Taliban's restrictive policies.

5.7 Labour Market Integration, Freelancing and Sustainable Social Empowerment

The final empirical domain of this study evaluates how the intersection of digital skills, internal self-determination and academic hope facilitates the structural transition of Afghan female students into the economic sphere. Under the current socio-political regime, traditional employment avenues for women have been heavily restricted. Consequently, distance higher education operates not merely as an intellectual sanctuary, but as a critical gateway to navigating highly restricted domestic employment sectors such as precarious roles in healthcare institutions or localized community projects while simultaneously opening windows to cross-border digital labor markets, remote work paradigms and alternative institutional agency. To ground this socio-economic dynamics empirically, Table 5.33 outlines the comprehensive quantitative baseline regarding the cohort's active occupational configuration (N = 304).

5.7.1: Labour Market Restrictions and Alternative Livelihood Pathways

Table 5.33:

Quantitative Distribution of Participants' Current Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
	Student	243	79,9	79,9	79,9
	Student & Employed	23	7,6	7,6	87,5
	Student & Self-employed	11	3,6	3,6	91,1
	Graduated Jobless	3	1,0	1,0	92,1
	Graduated & Employed	22	7,2	7,2	99,3
	Graduated & Self-employed	2	,7	,7	100,0
	Total	304	100,0	100,0	

The finding illustrates the severe economic containment defining the lives of Afghan female students, while simultaneously highlighting emergent pathways of financial resilience. As demonstrated by the data, the vast majority of the cohort (79.9%, $f = 243$) operate strictly as full-time students without active employment, reflecting the macro-level systemic bans imposed on women's labor market participation in the country.

However, despite severe localized restrictions by the Taliban in the country, electricity deficits and other institutional barriers, a distinct segment of the female students has successfully bypassed absolute physical restrictions through alternative structural frameworks. Specifically, 7.6% ($f = 23$) of the participants manage the dual roles of being a student and an employee, while 3.6% ($f = 11$) are engaged in digital self-employment or remote freelancing.

Additionally, 7.2 % ($f = 22$) of Afghan female students who have completed their online coursework, maintain active employment frequently located within permissible yet highly monitored domestic sectors such as public health facilities, medical clinics and primary schools and 0.7% ($f = 2$) are self-employed. When synthesized, these segments reveal that approximately

19.1% (f = 58) of the total surveyed students are actively utilizing their collective competencies to generate alternative livelihoods under extreme systemic adversity.

The qualitative findings expand significantly on the strategic negotiation required to maintain these non-traditional or highly secure livelihoods. When traditional office spaces were structurally closed to women, as an interview from Herat province, west zone highlighted the situation: “Because of the existing problems and restrictions, I had to stop working and stay at home. Working outside became difficult for me due to government family pressure.” (Participant, Social Science, Herat)

Both the digital landscape and restricted specialized local services became the primary sites for economic survival. Students utilize technological competencies and academic agency developed through distance learning to secure contracts and livelihoods completely out of sight of regional enforcement agencies. An interviewee from the Central Zone highlighted this hidden professional transformation:

"I like business. I even started a small online business before, buying and selling clothes. My goal was to grow my work and also help other girls benefit from it. I plan to continue business in the future." (Participant, Social Science, Kabul.)

This data triangulation proves that while the baseline of formal traditional employment remains compressed, specialized business, digital and other soft and hard skills via online platforms acquisition act as an active economic shield, shifting individuals from passive containment to active agents in both the global gig economy and crucial domestic micro-sectors.

5.7.2 Micro-Level Generational Shifts: Transforming Familial Perspectives

The findings of this study indicate that the participation of Afghan female students in distance higher education programs extends beyond improving educational access and economic opportunities; it has also contributed to positive changes in their families' views, attitudes and perceptions. Based on the responses of the 304 female students who took part in the study, a vast number of their families now have a greater appreciation of the importance and value of girls' education than they did previously. As families observed their daughters actively pursuing their studies, acquiring new knowledge and skills and strengthening their capacities for future success, their perceptions of female education became increasingly positive and changed significantly. In Afghan traditional households, female tracking into higher education was initially viewed with hesitation due to safety risks or rigid cultural norms. However, when families witness their daughters mastering complex digital interfaces, acquiring various skills, interacting with international virtual classrooms and contributing intellectually or financially to the household during an intense economic crisis, internal patriarchal structures begin to soften. A participant from the south zone described this domestic transformation:

My family's view changed significantly. As I mentioned earlier, my family initially did not believe online education could have much impact. However, since I began this online higher education, they have noticed changes in my knowledge and communication skills. During family discussions, they now realize how much my understanding has improved and how confidently I can express my ideas. (Participant, South Zone, Social Science)

This integration proves that distance higher education triggers a bottom-up restructuring of gender roles. The empowerment does not wait for macro-political change; it actively alters the daily power dynamics of the household, turning the family unit into a defensive barrier that shields the student's operational autonomy.

5.7.3 Sustainable Social Empowerment and Strategic Agency

When the results of the quantitative regression analysis, which show the internal self-determination and access to education explain 64.2% of the variance in hope ($R^2 = .642$) is integrated with findings on employment and perception changes, a more comprehensive model of sustainable social empowerment emerges. The students' practical agency can be understood as unfolding through three key stages.

5.7.3.1 Competence Acquisition: In addition to developing digital literacy, Afghan female students acquire a wide range of discipline-specific and transferable skills through online education. These include subject-related professional competencies, as well as essential soft skills such as communication, language proficiency, problem-solving, critical thinking and collaboration. Together, these skills strengthen afghan female student' internal sense of capability and transform passive restriction into active academic engagement.

5.7.3.2 Domestic Space Negotiation: This newly acquired academic standing is strategically deployed to alter familial perspectives, transforming the domestic home from a site of confinement into a protective environment.

5.7.3.3 Alternative Market Navigation: Although the overall formal employment landscape remains structurally limited for Afghan women (with a combined employment rate of 19.1%), the subgroup engaging in, remote work, online freelancing and other income-generating activities. These opportunities are an important foundation for their economic independence. These opportunities are accessed both within the country, under constrained and restrictive conditions and beyond national borders through online and transnational digital markets. In this way, such engagement enables Afghan female students to develop new income pathways outside local structural limitations and to operate with a relatively greater degree of economic autonomy.

5.8 Qualitative Thematic Auditing and Contextual Triangulation

To validate the thematic depth and structural distribution of the qualitative strand analyzed alongside the quantitative metrics, a systematic coding frequency and density audit was extracted from the computer-assisted qualitative data analysis software MAXQDA (version 2026). The qualitative landscape derived from the 16 extensive semi-structured interviews tracks across all coded segments, distributed systematically across key operational and psychological dimensions.

Figure 5.1 illustrates the visual thematic mapping and relative code frequency density across the participant spectrum as generated by the software backend.

Figure 5.1: MAXQDA Code Matrix Browser Output for Participant-Thematic Mapping (N=16)

Code System	North Zone	East Zone	South Zone	West Zone	Central Zone	SUM
Autocode - ALL: Participant	55	34	42	37	134	302
Autocode - ALL: Interviewer	57	35	36	37	134	299
Demographics	3	4	2	3	9	21
Environment & Educational System	14	7	13	6	26	66
Future & Goals	6	4	4	5	20	39
Identity, Skill and Change	19	7	10	9	45	90
Mental Health and Hope	6	4	6	7	19	42
Autonomy and Hidden Resistance	7	8	7	7	16	45
SUM	167	103	120	111	403	904

To ground the visual density shown in Figure 5.1 into descriptive metrics, Table 5.34 outlines the exact code-frequency matrix and segment density mapping across the multi-zonal participant distribution.

Table 5.34:
Qualitative Code System Matrix and Segment Density

Primary Thematic Domain (Code	Coded Segments (f)	Percentage of Qualitative Data (%)	Operational Definition & Empirical Focus
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System)			
Identity, Skill and Change	90	29.7%	Transformation of self-concept, confidence, acquisition of all skills, perceived competence, valuation of skills versus certificates, economic adaptation strategies, and changes in family perceptions following participation in learning activities.
Environment & Educational System	66	21.8%	Home-learning conditions, domestic workload, infrastructure constraints, internet access, electricity shortages, instructional quality, institutional restrictions and participant recommendations for educational improvement.
Autonomy & Hidden Resistance	45	14.9%	Expressions of agency under restrictive conditions, female students' persistence despite family opposition, phone confiscation, threats or violence, negotiation of domestic constraints and strategies for sustaining educational engagement.
Mental Health & Hope	42	13.9%	Emotional and psychological effects of learning, coping with stress and uncertainty, reduction of hopelessness, development of resilience and perceptions of education as a source of future possibility.
Future & Goals	39	12.9%	Female student's educational aspirations, employment expectations, professional advancement, cross-border opportunities, social contribution, community transformation and long-term personal

			development goals.
Demographics	21	6.9%	Geographical location, educational background and institutional affiliation.
Total Qualitative Matrix	303	100.0%	Comprehensive thematic representation of the qualitative dataset across N = 16 interviewees from across Afghanistan.

Source: Consolidated Visual Coding Reports (MAXQDA Structural Synthesis)

This MAXQDA code-frequency matrix explicitly shows , *Identity, Skill and Change* emerged as the dominant thematic domain with 90 coded segments (29.7%), indicating that participants most frequently discussed transformations in self-confidence, competence, economic challenge, personal identity resulting from educational participation and their concerns regarding degrees recognition.

Environment and Educational System represented the second most prevalent theme, with 66 coded segments (21.8%), reflecting persistent structural barriers, including electricity shortages, limited internet access, inadequate home-based learning environments, the absence of separate study rooms, household noise and interruptions, domestic responsibilities, and institutional restrictions that affect Afghan female students ‘ online higher educational experiences. Theme of Autonomy and Hidden Resistance (14.9%) reflects an environment with family restrictions and female student’s personal experiences that how they navigated these restrictions to continue their studies. the theme highlights Afghan female students' personal experiences of managing, negotiating, and resisting various pressures and limitations in their daily lives. Mental Health and Hope (13.9%) explored the impact of online higher education on their emotions and mental state and further explores their perceptions regarding their future hopes and the value of their current online studies. Theme of Future and Goals with (12.9%), further demonstrated the role of online higher education in shaping Afghan female student’s future and explores how they imagine their future in Afghanistan. This means how Afghan

female students envision their futures and negotiate the existing constraints while sustaining aspirations for personal growth, educational achievement and social advancement. Demographic coding accounted for 6.9% of the qualitative dataset and served primarily as contextual information for participant profiling.

5.8.1 Analysis of Autonomy and Hidden Resistance

The theme of Autonomy and Hidden Resistance generated 45 coded segments (14.9% of the qualitative dataset) and represents one of the clearest manifestations of self-determined educational persistence within the study. Responses to Questions 1 and 2 revealed that Afghan female students who took part in this study have frequently encountered family restrictions, limited access to digital devices, opposition to female education and broader socio-political constraints that complicated their ability to continue online higher education. As one student from the North Zone explained:

In the environment where we live, especially in Kunduz province, young girls do not have access to mobile phones because families do not allow it. We are deprived of many rights and opportunities. From my experience, I got a mobile phone. My family initially opposed it. But I later explained the situation to them, because schools and universities are all closed to us and we are deprived of our rights. The Women's Online University opened a door for us so we could continue our education. I faced many problems, but I convinced my family. (Applied Science student, Rural Kunduz, North Zone)

Despite these barriers, participants consistently described education as something worth protecting and pursuing. Rather than withdrawing from their studies. Thousands of Afghan female students have adopted practical strategies to maintain participation, including negotiating access to technology, adjusting study schedules, seeking support from trusted family members

and creating opportunities for learning within restrictive domestic environments. A participant from rural Paktia described her experience:

Of course, in our society, most girls almost 80% face such problems. Even before, when education was in-person, many girls were not allowed to study. I also had this problem; my family did not allow me to go to university and study. When education became online, I initially started secretly. I did not share it with anyone in my family and no one knew it till some time. I even started teaching drawing secretly. Gradually, I progressed until I learned about the Online Women's University. Later, it was no longer possible to continue secretly, thus it caused me a lot of mental stress. I was obliged to share it with so I decided to share it with my family. As I expected, they completely rejected it and did not allow me to continue. I did not eat for several days and I was constantly searching for a way to convince my family and have their permission. Finally, with great difficulty, I managed to gain their approval. I convinced them what I did was not easy at all. Even now, there are still obstacles in my path. I still do not have my own mobile phone. In Paktia where I live people are very strict. In this environment people assume that if a young girl has a phone, she must be doing something inappropriate with it. This has made things very difficult for me and I still do not have a personal phone for my studies. (Applied Science student, Rural Paktia, East Zone)

The narratives from the qualitative data demonstrate that educational participation by Afghan female students was not a passive activity but an active process of their negotiation, adaptation and persistence. These female students under restrictions imposed by community norms, their families and the broader educational context exercised agency by identifying ways to continue their learning and acquiring skills. They continued and struggled. Their actions speak louder and reflected subtle yet meaningful forms of resistance, often expressed through

perseverance, negotiation and the strategic use of available opportunities rather than through direct confrontation.

From the perspective of Self-Determination Theory (SDT), female students' behaviors represent efforts to preserve autonomy in circumstances where opportunities for self-directed action were severely constrained. Although participants operated within restrictive environments, they sought to maintain a degree of personal choice and control over their educational trajectories. Being engaged in online studies and continuing studies enabled them to sustain a sense of purpose, competence and future orientation despite ongoing barriers.

In Afghanistan, online higher education for female students functioned not only as a pathway for their learning but also as a mechanism through which these students maintained agency and resisted educational exclusion. These findings suggest that persistence in online higher education constituted an important form of everyday resistance and it is enabling Afghan female students to pursue their personal development and future aspirations despite significant structural limitations in the country for them.

5.8.2 Mental Health and the Reconstruction of Hope

Mental Health and Hope comprised of 42 coded segments and accounts of 13.9% of the qualitative dataset. The theme highlights the psychological significance of educational participation of Afghan female students under restrictive conditions of the current government. Responses to Questions 3 and 4 demonstrated that engagement in learning contributed substantially to participants' emotional well-being, resilience and ability to maintain a positive outlook toward the future.

Participants frequently reported that their educational participation in online higher education programs have reduced feelings of isolation, hopelessness and emotional distress. A participant from rural Kunduz described her experience:

Yes, the Women's Online University had a very positive impact on us. When schools and universities were closed, we had no hope for the future. Now that the online university has opened a door for us, we have hope again. Our morale has improved, our thinking has changed, and we are now thinking about the future. We have recognized ourselves as human beings. (Applied Science student, Rural Kunduz, North Zone)

Learning activities have provided Afghan female students with a structure to their daily lives. They have created a sense of achievement and offered them a meaningful engagement during a period shaped by uncertainty and limited opportunities. Many female students who participated in the study described education as one of the few remaining avenues through which they could continue investing in themselves and sustaining aspirations for their future. Another female student from the interview reflected on the transformative effect of gaining access to online higher education after the closure of physical education institutions:

Yes, it has had a tremendous impact on my mental well-being. After the bans on physical education and before being admitted to the online university, I felt my life had stopped and that I was living without any purpose and hope. I thought I might never find a way back into higher education. but when I received my online education's acceptance via email, I became so happy that I cannot fully describe those feelings at the moment. Now, my self-confidence has increased significantly and I feel that my life has meaning and direction. I now live and strive toward a clear goal. (Social Science student, Urban Area, South Zone)

These narratives of Afghan female students illustrate that the benefits of online higher education extended beyond academic learning. Participants described a process through which hope was reconstructed after a period of educational disruption and uncertainty. Access to learning opportunities restored a sense of purpose, strengthened their self-confidence and encouraged their future-oriented thinking. Online higher education in Afghanistan under the Taliban's restrictive policies therefore functioned as both an academic resource and a psychological support mechanism. It has been helping Afghan female students to maintain their motivation and emotional resilience despite ongoing restrictions for them in the country. These qualitative findings complement the quantitative results of the study, the quantitative results indicated that internal psychological factors explained a substantial proportion of the variance in hope ($R^2 = .642$). It means that hope is not solely derived from the acquisition of knowledge or technical skills, participants associated hope with the broader experience of remaining connected to educational opportunities and future possibilities. From a Self-Determination Theory perspective, continued participation in online higher education supported psychological needs related to competence and personal growth, thereby reinforcing optimism and motivation. Through this process, education contributed to the reconstruction of future-oriented thinking and strengthened participants' belief that meaningful personal and professional goals remained attainable despite current challenges.

5.8.3 Identity, Skills and Personal Transformation

The theme of Identity, Skills, and Personal Transformation was the largest thematic domain, generating 90 coded segments (29.7% of the qualitative dataset). Responses to Questions 5–8 revealed substantial changes in participants' self-confidence, self-perception, skills development, and social identity following their engagement in online higher education.

5.8.3.1 Identity and Self-Confidence

In the interviews, participants frequently described increased self-confidence, greater self-awareness and more positive perceptions of their own abilities after joining online higher education. Many reported that online educational participation transformed the way they viewed themselves. These learning opportunities are enabling female students to move beyond feelings of limitation and uncertainty toward a stronger sense of competence and personal agency. Participants often associated learning with intellectual growth, broader perspectives and a clearer sense of identity and purpose.

One participant from east zone explained:

Yes, online higher education had a very strong impact on my self-confidence and it really increased my confidence and strengthened my sense of resilience. About my identity, when I started studying online, I tried to let everyone know around me that I started online higher education. now after some time they see me differently as an educated and progressive girl. This positive perception affected both my identity and confidence. (Applied Science student, Rural Paktia, East Zone)

Similarly, another participant reflected on how online learning restored her sense of value and social purpose:

Online education had a very positive impact on my confidence and identity. When universities were closed, many girls felt they had lost everything no future, no identity, and no opportunity. But after starting online education, this feeling changed. I felt again that I could still be useful, still I can learn, and still can play a vital role in my society. Online learning gave me a sense of value, identity and renewed hope. (Applied Science student, Urban Kabul, Central Zone)

These narratives from Afghan female students suggest that online higher educational engagement contributed not only to knowledge acquisition but also to meaningful processes of identity reconstruction, self-worth and personal empowerment.

5.8.3.2 Skills versus Formal Credentials

Responses to Question 6 explored participants' perceptions of formal qualifications and practical skills. Although certificates and diplomas were generally regarded as important indicators of educational achievement. However, many participants in the interviews consistently emphasized the value of practical and transferable skills during the online higher education. They believe valuable skills for a successful future are Digital literacy, communication skills, critical thinking, technical competencies and entrepreneurial knowledge.

A participant from Herat explained:

I already have many certificates, and they do not hold much value for me. Certificates are just papers. Skills are what truly matter and help us progress a lot. For example, I have a carpet-weaving workshop at my home and I want to start a small business. Through studying economics, I want to expand this business. For me skills and experience are the most important. (Social Science student, Urban Herat, West Zone)

Another participant similarly emphasized the practical value of skills:

In today's world, both academic qualifications and practical skills are very important for success. However, if I had to choose one, I would say that skills are more important. A person may possess degrees, but without practical skills, it can still be difficult to achieve success, so I prefer skills. (Social Science student, Urban Area, South Zone)

These findings from the qualitative data indicate that female students viewed education not merely as a pathway to credentials but as a means of acquiring competencies for them that could support employment, entrepreneurship, self-reliance and their long-term personal development.

5.8.3.3 Economic Challenges and Educational Persistence

In the interviews, the seventh question focused on the influence of economic challenges on Afghan female students' online higher educational participation. They reported that internet costs, limited financial resources and other study-related expenses created significant obstacles to their learning. Despite these difficulties, many described making considerable sacrifices to remain enrolled and continue their studies.

One participant highlighted the financial burden associated with connectivity: "There are many economic problems in Afghanistan, and internet costs are very high. Internet packages are very expensive. My financial supporter in this area is my brother, and he helps me to to continue my study." (Applied Science student, Urban Kabul, Central Zone)

Another participant described her determination to continue studying despite limited support: "Yes, there are definitely economic problems. Sometimes we cannot attend classes due to lack of internet or other issues. However, I try to manage it. Personally, if my family cannot support me, I work myself and spend my money on education and internet instead of unnecessary expenses." (Applied Science student, Urban Bamyan, Central Zone)

These findings from qualitative data highlight both the economic barriers associated with online learning and the determination of participants to prioritize education despite financial hardship.

5.8.3.4 Changing Family Perceptions

Responses to Question 8 examined whether educational participation influenced family perceptions. Many participants reported positive changes in family attitudes after they began studying. As relatives observed improvements in knowledge, confidence, communication skills, and commitment to learning, support for educational participation often increased. One participant explained:

“Since I began these studies, they have noticed changes in my knowledge and communication skills. During family discussions, they now realize how much my understanding has improved and how confidently I can express my ideas.” (Social Science student, Urban Area, South Zone)

Another participant described growing optimism within her family: “Yes, it changed a lot. They are now optimistic about my future. They always encourage me and tell me that I will achieve my all dreams if I continue like this.” (Social Science student, Rural Parwan, Central Zone)

These narratives of female students suggest that educational engagement contributed not only to their individual transformation but also to gradual shifts in their families’ perceptions regarding the value of women’s education and capabilities.

Overall, these qualitative findings indicate that online higher education played a significant role in shaping Afghan female students’ identities. They also suggest that online higher education plays a vital role in strengthening their skills and fostering positive personal and social change. Through their continued engagement in learning, female students developed greater confidence in their abilities and acquired competencies they considered valuable for their future. In the presence of many severe challenges their families are recognizing their valuable efforts and supporting them. The findings suggest that educational participation served as a catalyst for both

personal empowerment and broader social change within Afghan female students' immediate environments.

5.8.4 Environmental and Educational System Challenges

The theme of Environment and Educational System generated 66 coded segments (21.8% of the qualitative dataset), making it the second most frequently represented thematic domain. Responses to Questions 9–11 highlighted a combination of household, infrastructural and institutional factors that shaped participants' online learning experiences.

5.8.4.1 Household Learning Environment

At the household level, some participants in the interviews frequently reported that their learning was affected by noise, their domestic responsibilities, care giving duties and the absence of private study spaces. These conditions often reduced their concentration and limited the availability of uninterrupted study time. It means that learning was strongly shaped by everyday domestic realities rather than individual motivation alone. As one participant explained: “Yes, sometimes the home environment is challenging. Noise and household work can reduce concentration. However, I try to choose a quiet place and stay focused on my goals.” (Applied Science student, Urban Faryab, North Zone)

Another participant added: “In Afghanistan many families have three to four or more members living together, and this affects learning. But we are obliged to adapt ourselves.” (Applied Science student, Rural Kunduz, North Zone)

In some cases, female students developed adaptive strategies to maintain their concentration despite environmental constraints, such as seeking quiet spaces or minimizing distractions. One participant described: “Lack of electricity and noise reduce concentration.

Sometimes, for better focus, I even sit inside a car to study. I usually close doors and windows to minimize distractions.” (Applied Science student, Rural Paktia, East Zone)

These accounts illustrate how domestic environments directly influenced educational participation and required continuous adaptation from learners.

5.8.4.2 Challenges within the Online Learning System

Some participants also identified several challenges within the online education system itself. These included unstable internet connectivity, electricity shortages, limited interaction with instructors and variations in teaching quality. While many participants appreciated the opportunity for education, and praised the quality of the platforms, they also noted that system-level limitations affected learning effectiveness.

One participant observed both strengths and weaknesses: “Overall, it is very good and admirable, especially since people are teaching without pay to help Afghan girls. However, sometimes teachers lack proper classroom management. When teachers simply read line by line, it becomes difficult for me.” (Applied Science student, Rural Paktia, East Zone)

Another participant emphasized structural limitations: “Online education is valuable, but it can never fully replace in-person education. There are challenges such as weak internet connections and electricity shortages. It is also difficult to maintain full concentration during online classes.” (Social Science student, Urban South Zone)

Another Participant explained:

Online education is valuable, but it can never fully replace in-person education. There are many challenges, such as weak internet connections and electricity shortages. In addition, there are significant time-zone differences between us and foreign instructors.

Most online teaching methods rely heavily on lectures and offer fewer practical activities compared to traditional classroom learning. It is also difficult for students to maintain full concentration during online classes. However, considering our current circumstances, where we are not allowed access to in-person education, online learning remains the best available option, and we are deeply grateful for it.” (Participant, Social Science, Urban Area, South Zone)

Despite these challenges, some participants also acknowledged the pedagogical benefits of online learning for them: “We use digital tools, multiple sources, and multimedia. When we face problems, we discuss them with classmates or teachers and find better solutions.” (Applied Science student, Urban Area, Bamyan, Central Zone).

Another Participant explained:

My view about online education is completely positive because we learn skills that we cannot acquire in physical education. Although it is different from in-person learning and we cannot engage in practical work, our teachers work hard and provide video lessons and learning materials so that we can study effectively. (North Zone, Applied Science, Urban Area, Faryab, North Zone)

These findings from qualitative data indicate that the effectiveness of online education depended not only on content delivery but also on technological stability and instructional quality.

5.8.4.3 Proposed Improvements

When students during the interviews were asked to suggest improvements for the online learning systems, many of the participants emphasized the need for more flexible, accessible and

context-sensitive learning systems. Key recommendations included improving internet affordability, increasing access to devices, providing downloadable learning materials and adopting more flexible schedules and assessment methods.

One participant stated: “Yes. I would ensure that students receive support for electricity, internet access and essential equipment such as personal laptops. I also believe that maintaining language balance is very important and should be carefully considered in online programs.”

(Social Science student, South Zone)

Another Participant commented:

Good question. If I were responsible for an online education program, I would improve the quality of education. I would ensure that learning materials come from reliable global sources so students do not waste time on useless content. I would also make the platform more interactive and technically strong so teachers can properly monitor students.

(Applied Science, Urban Area, Bayman, Central Zone)

Another participant shared her following suggestions for improvement:

First, access should be made easier, especially internet and technical facilities. Second, education should be more skill-based and practical, not only theoretical. Third, women’s home conditions should be considered, and the system should be designed according to their realities. This would make education more effective and higher quality. (Applied Science, Urban Area, Kabul, Central Zone)

Overall, these qualitative findings suggest that female students sought a more inclusive and adaptable educational system that accounts for their socioeconomic and infrastructural constraints. These narratives of female students clearly demonstrate that educational persistence

in online learning is shaped by a complex interaction between household environments, technological infrastructure and institutional design. While participants demonstrated resilience and adaptability in managing domestic and environmental constraints, the effectiveness of their learning was strongly influenced by system-level challenges. Nevertheless, female students consistently expressed a desire to continue their education and proposed practical improvements to enhance accessibility, flexibility and learning quality within the online education system, as online higher education has become a window of opportunity and hope for their future.

5.8.5 Future and Goals

The final thematic domain, Future and Goals, accounted for 39 coded segments (12.9% of the qualitative dataset). This thematic domain explored Afghan female student's long-term aspirations and perceptions of the value of their current online higher education. Based on their responses to question 12 and 13, Interviewees viewed online higher education as a central pathway for future personal, professional and social development.

5.8.5.1 Education and Future Orientation

Participants emphasized and strongly linked their current online higher educational engagement with future employment opportunities, economic independence and their professional advancement. Despite facing severe challenges, female students are continuing their participation in online higher education, viewing education is as a strategic investment that would enhance their lives chances and strengthen their resilience in an uncertain context.

One participant explained: "Online education is a good opportunity for me and plays an important role in my future. It helps me gain skills and become independent so I can achieve my goals." (Applied Science student, Urban Faryab, North Zone)

Another participant emphasized the direct connection between current learning and future professional practice:

It has a very important role. What I am learning today is directly connected to my future. In medicine, this education will help me serve women, mothers, and patients in the future. Even today, it has changed my thinking and understanding of health and society. (Applied Science student, Urban Area, Kabul, Central Zone)

These narratives demonstrate that participants viewed education not only as immediate skill development but also as a long-term investment in future roles and responsibilities.

5.8.5.2 Education as Personal and Social Responsibility

Responses to Question 13 revealed that participants rarely viewed education as solely a means of personal success. Instead, they consistently expressed a dual orientation toward both individual achievement and social contribution. Many participants articulated aspirations to serve their communities, support national development and act as role models for other women in the future in their communities.

One participant reflected: “Both. I strive not only for my own personal success and progress but I also want to create a positive impact on society and serve as a role model and be as a future policymaker, I aspire to contribute to the betterment of society.” (Social Science student, Rural North Zone)

Similarly, another participant highlighted the link between education, professional identity, and social contribution:

Both. Education should have results and benefit others. When I become a doctor, I want to use what I have learned to serve society. If our certificates are recognized and we are

allowed to work, I want to contribute to hospitals and help people. (Applied Science student, Rural Eastern Zone)

From an entrepreneurial perspective, one participant connected her educational goals with broader economic and societal development:

My personal goal is to contribute to Afghanistan's economy. I want to create a better future for my children and for the nation. As I already have a carpet-weaving workshop, through studying economics I want to grow this business and contribute more to society. (Social Science student, Urban Herat, West Zone)

These narratives from Afghan female students' interviews clearly suggest that they framed education as a means of personal empowerment and collective advancement, rather than merely a pathway to individual success.

Overall, the qualitative findings from the interviews of Afghan female students demonstrate that they viewed online higher education as a key driver of their future aspiration formation and goal orientation. They view education as a pathway to their economic independence, professional identity and their meaningful social contribution. Importantly, female students' aspirations extended beyond personal achievement to include broader goals such as supporting families, mentoring other women, contributing to national development and improving community well-being. These qualitative findings suggest that distance higher education played a critical role in shaping future-oriented thinking, strengthening a sense of purpose and reinforcing female students' belief in their ability to contribute positively to their society despite structural constraints. From the perspectives of Self-Determination Theory and Hope Theory, educational engagement supported autonomy, competence and goal-directed

thinking, enabling students to maintain agency and construct meaningful future pathways under conditions of limited opportunity and severe challenges.

5.9 Conclusion

This chapter presented a comprehensive analysis of the quantitative and qualitative findings regarding the role of distance higher education in empowering Afghan female students and the barriers they face under the Taliban's restrictions. The statistical data from the survey (N=304) and the thematic analysis of the semi-structured interviews (N=16) collectively demonstrated that, despite severe cultural, structural, financial and technical constraints, online education has played a pivotal role in fostering psychological hope, personal agency and digital skills among Afghan female students. Furthermore, the findings revealed that these educational initiatives have cultivated a form of hidden structural agency, enabling female students to envision future integration into domestic and global labor markets, while simultaneously strengthening their prospects for socio-economic advancement.

While this chapter provided an empirical mapping of the current realities, achievements and challenges of Afghan female students living under the restrictive policies of the Taliban, the broader theoretical, conceptual and practical implications of these findings warrant deeper exploration. Consequently, the subsequent chapter (Discussion) will critically contextualize these empirical results within the study's foundational theoretical frameworks, specifically Self-Determination Theory (SDT) and Hope Theory.

Discussion

6.1 Introduction

This chapter provides a critical synthesis and contextualized discussion of the empirical findings presented in Chapter 5. By triangulating the quantitative survey results (N=304) with the qualitative thematic insights (N=16) and the MAXQDA (version 2026) code-density analytics, this discussion explicates how distance higher education operates as a mechanism of empowerment for Afghan female students experiencing systemic containment under the de facto government of the Taliban.

The analytical matrix of this chapter is structured around the core research question and theoretical framework anchoring this study. First, it evaluates the structural and infrastructural warfare navigated by these students, linking technological precarity to broader institutional failure. Second, it contextualizes the psychological ecosystem of the cohort, interpreting the profound intersection between Self-Determination Theory (SDT) and the preservation of academic hope. Finally, it outlines the emerging pathways toward national and transnational labor markets and home-based subversion, culminating in a refined conceptual framework for sustainable empowerment within conflict-affected, hyper-restrictive sociopolitical regimes.

6.2 The Structural and Infrastructural Crucible: Beyond Technical Bottlenecks

The empirical findings from this study reveal that the operational reality of distance higher education in Afghanistan is defined by severe infrastructural and institutional challenges. The quantitative tracking established that infrastructural precarity manifested through constant power outages, prohibitive internet costs, and weak local connectivity imposes a continuous structural friction on female learners in the country.

6.2.1 Infrastructural Warfare and Technical Agency

Traditional educational technology literature has often treated reliable internet connectivity and electricity as implicit infrastructural prerequisites rather than variables requiring critical attention (Selwyn, 2016). However, in the context of contemporary Afghanistan, these technical barriers function as active socio-political filters. The qualitative narratives illustrated that navigating high socio-economic precarity requires students to negotiate constantly for digital resources. The struggle for bandwidth and the reliance on unstable solar energy configurations are not merely logistical inconveniences; they represent a form of infrastructural warfare designed to restrict educational mobility from the outside.

Despite these hurdles in Afghanistan, the cohort exhibits a remarkably high digital literacy base ($M = 4.1505$). This indicates a crucial theoretical shift: in hyper-restrictive environments, digital literacy ceases to be a passive skill set and becomes a form of tactical agency. Students do not simply navigate Learning Management Systems (LMS); they actively optimize limited data packages, bypass state-level digital monitoring and modify local domestic spaces to maintain connection. The sheer precarity of this digital access in the country is exemplified by the lived experiences of Afghan female students in the northern region, such as Kunduz, where young women lack basic personal devices and are forced to navigate complex. They are obliged to borrow mobile phones or secure internet data just to download course modules. These infrastructural battles turn the simple act of logging into a classroom into an ongoing logistical operation, highlighting that technological access under the current regime is a highly contested terrain of struggle.

6.2.2 The Accreditation Crisis and Legal Grey Areas

A deeper institutional challenge identified in Section 5.4.2 concerns the profound cognitive anxiety surrounding degree validation and accreditation. In a context where women's physical access to universities has been entirely suspended at the state level, distance learning operates within a highly precarious legal grey zone.

This structural instability imposes a distinct psychological burden on learners, which this study conceptualizes as academic containment. In this condition, students are compelled to invest substantial financial resources in alternative learning platforms while simultaneously facing deep uncertainty about whether their qualifications will ever receive formal recognition from national or international institutions.

This finding engages critically with the discourse on “Open Education” as discussed by Weller (2014), which is often associated with expectations that increased access to online learning resources may contribute to broader educational democratization. However, as the Afghan case illustrates, such outcomes are not automatic. Without supportive legal frameworks and internationally coordinated accreditation agreements, digital education may become a constrained and circular pathway, limiting the conversion of learning achievements into formally recognized academic or professional mobility and, in some cases, effectively confining educational progress within virtual boundaries.

Confronted with this profound institutional vacuum and the structural non-recognition of their degrees, female students are undergoing a paradigm shift, actively prioritizing 'tangible skills over formal certificates.' Qualitative accounts, particularly from the Herat and Western zones, indicate that students are consciously decoupling the value of education from state-sanctioned accreditation. By focusing heavily on acquiring specialized digital fluencies, language

proficiencies, and practical competencies, they are preparing for a borderless, decentralized digital economy. This strategic shift effectively neutralizes the regime's power to invalidate their education, ensuring that their intellectual capital remains globally functional and personally empowering, regardless of official domestic validation.

However, this tactical pivot toward 'skills over certificates' introduces a profound institutional paradox between short-term economic survival and long-term academic mobility. While prioritizing global digital fluencies and freelance competencies successfully bypasses immediate domestic bans and generates home-based income, it does not resolve the looming crisis of non-recognition. The systemic absence of formal, internationally validated accreditation creates an invisible ceiling; without legally recognized credentials, these women remain locked out of global higher education ecosystems, preventing them from formally pursuing postgraduate or doctoral fellowships. Consequently, while digital and other skills acquisition serves as a vital emergency life-support mechanism, it simultaneously risk institutionalizing a form of permanent peripheral standing, where academic progress is sustained in isolation but structurally severed from the broader global academy.

These complex institutional dynamics critically engage with and extend the current global discourse on Education in Emergencies (EiE) and protracted crises. Traditional EiE frameworks, such as those established by the Inter-agency Network for Education in Emergencies (INEE), predominantly conceptualize educational continuity through localized physical interventions, temporary learning spaces, or basic literacy provisions during active conflicts or natural disasters. However, the contemporary reality of Afghan female students forces a radical paradigm shift within this body of literature. The Afghan context illustrates a form of socio-political crisis defined not by infrastructural destruction alone, but by systematic, state-enforced educational erasure.

By utilizing distance learning to navigate these restrictions, this cohort shifts the academic focus toward the often-overlooked domain of Higher Education in Emergencies (HEiE). Within traditional frameworks, higher education in crisis zones is frequently marginalized as a secondary priority or a luxury; yet, the empirical realities of this study prove that HEiE serves as a primary psychological and economic survival mechanism. Afghan women's strategic pivot toward virtual higher education demonstrates that under regimes of absolute containment, digital spaces evolve into international educational sanctuaries. This refines current academic paradigms by proving that human capital and intellectual resilience can be effectively preserved and deployed globally, even when structurally severed from the local physical academy.

6.2.3 Institutional Pedagogical Frictions and Systemic Bottlenecks

Beyond external infrastructural and accreditation barriers, the empirical evidence from Section 5.4.1 underscores that the digital higher education framework itself suffers from acute internal institutional and pedagogical weaknesses. A primary friction identified by the students is the high irregularity and lack of structural commitment among volunteer educators. Because many instructors across the globe operate on a voluntary and non-compensated basis. Therefore their pedagogical engagement is frequently disrupted by their own personal and professional commitments, leading to unannounced class cancellations, delayed feedback and unstructured lesson plans.

Furthermore, this pedagogical vulnerability is compounded by severe cross-border temporal disparities. The reliance on transnational professors introduces significant time-zone differences, forcing Afghan female students who already navigate restrictive domestic environments and strict domestic curfews to attend synchronous lectures at highly inconvenient or late-night hours. Pedagogically, the lack of localized, contextualized and translated learning

materials further alienates the learners. When course modules are delivered in complex foreign languages or dense formats without considering local linguistic fluencies and internet limitations, it exacerbates the cognitive load on students. Lastly, the virtual medium severely curtails the integration of practical laboratory work and hands-on clinical applications, which remains an unresolved academic hurdle for students clustered in medical, natural sciences and engineering disciplines. These combined institutional failures reveal that the digital higher education ecosystem in Afghanistan is not only strained by political exclusion but also by internal operational precarity.

6.3 The Psychological Ecosystem: Interrogating SDT and Academic Hope

The multiple regression analysis provides important insights into the factors associated with Academic hope among Afghan female distance education students. The model demonstrated strong explanatory power ($R^2 = .642$), indicating that Digital Skills, Self-Determination Capacity, Economic Empowerment and Safety Perceptions collectively explained 64.2% of the variance in hope. Among these four predictors, Self-Determination Capacity emerged as the strongest factor. It means that students who reported greater autonomy, competence and relatedness were significantly more likely to maintain higher levels of hope. This quantitative finding highlights the central role of psychological empowerment in sustaining positive future expectations under severe challenging educational and social conditions such as Afghanistan.

Besides these to psychological factors, other contextual variables also played a significant role. Socio-Economic empowerment and Safety Perceptions were both significant positive predictors of hope, this demonstrates that female students' acquisition of marketable business and vocational skills, along with their sense of security and freedom of expression within the

online learning environment, are directly linked to their ability to sustain optimism and remain hopeful about their future.

Although Digital Skills showed a significant positive correlation with hope in the bivariate analysis, they did not retain a significant independent effect in the regression model. This result suggests that digital competencies may contribute to hope indirectly, potentially through their influence on self-determination, educational engagement and access to learning opportunities. Overall, these findings explicitly indicate that hope among Afghan female distance education students is primarily driven by psychological empowerment, while safety and economic circumstances provide important additional support. In the context of Afghanistan's restrictive educational environment, these results underscore the importance of strengthening students' autonomy, competence and sense of connectedness, while simultaneously addressing environmental barriers that may affect their educational aspirations and future outlook.

6.3.1 Reconceptualizing Self-Determination in Confinement

According to classical Self-Determination Theory (Deci & Ryan, 2000), the psychological needs for autonomy, competence and relatedness require supportive and open social structures in order to thrive. In contrast, the current Afghan socio-political landscape represents an extreme, institutionalized denial of these basic psychological needs. Yet, the quantified mean for SDT_Total among the students remains relatively high ($M = 4.2105$). This empirical finding suggests that need satisfaction may persist even under conditions of severe structural constraint, and therefore invites a contextual refinement of how Self-Determination Theory is applied in conflict-affected settings.

Within this framework, two interpretive models can be distinguished:

[Traditional SDT Model] → requires open, facilitative environments where psychological needs are directly supported through social, institutional and relational structures.

[Conflict-Zone SDT Model] → Psychological need satisfaction is maintained through adaptive and compensatory mechanisms, rather than direct environmental support.

Within such constrained environments such as Afghanistan, autonomy is no longer primarily expressed through outward civic participation; instead, it becomes internalized as an intellectual and self-regulatory form of agency. Competence is demonstrated through mastery of complex academic and digital tasks, which allow individuals to maintain a sense of effectiveness despite external limitations. Relatedness, in turn, is reconstructed through mediated and often concealed virtual networks, where social connection is sustained beyond immediate physical or institutional restrictions.

Thus, when physical and institutional spaces are significantly restricted in their capacity to support psychological needs, digital environments emerge as alternative arenas for psychological functioning. These spaces do not contradict the core assumptions of Self-Determination Theory; rather, they extend its applicability by illustrating how autonomy, competence, and relatedness may be reorganized and partially satisfied under conditions of systemic constraint.

Crucially, in the absence of physical campuses in a society, these mediated virtual networks transcend their status as mere technical utilities and evolve into vital 'virtual counter-spaces.' Peer interactions hosted via instant messaging applications, encrypted forums and asynchronous learning management tools provide a foundational social sanctuary that effectively breaks the crushing psychological weight of domestic confinement. This digital camaraderie acts as an emotional buffer; by engaging daily with fellow institutional outcasts, these Afghan female

students co-construct a shared, resilient reality. Therefore, the satisfaction of the need for relatedness is not merely simulated online; it is dynamically re-anchored within a collective digital underground that mitigates systemic isolation and sustains institutional belonging.

6.3.2 The Digital Screen as an Anchor for Future Orientation

The regression model's confirmation that internal psychological factors predict 64.2% of the variance in Hope_Total underlines the protective nature of online higher education. Furthermore, a subtle yet critical mechanism uncovered in the qualitative material is the unquantified, indirect pathway between high digital literacy ($M = 4.1505$) and the preservation of academic hope ($M = 4.2588$). In standard educational models, technical self-efficacy is treated merely as a facilitator of task completion.

Within this highly restrictive environment of Afghanistan, advanced digital literacy functions as a crucial pathway to future-oriented optimism and personal empowerment for female students. When female students with numerous issues successfully navigate complex digital systems and circumvent online restrictions along with properly managing digital information independently during their online higher education, they develop a stronger sense of competence and self-efficacy. By Possessing such technical capabilities directly challenge dominant narratives that portray women as dependent or powerless. Thus, these digital competencies transform technology from an instrument of limitation into a gateway to opportunity, autonomy and self-determination. As these Afghan female students gain confidence in their ability to navigate and master the digital landscape, they are better able to envision meaningful educational and professional futures. Considering the realities of the contemporary world, digital literacy opens numerous opportunities for students in an increasingly digitalized society. In this way, digital competence extends beyond the acquisition of technical skills; it becomes a powerful source of psychological agency and academic hope.

The qualitative findings strongly support the statistical results of this study. Thematic analysis identified 42 coded segments related to “Mental Health and Hope,” representing 13.9% of the total qualitative dataset. This substantial thematic presence highlights the extent to which online higher education serves purposes that extend far beyond academic instruction for Afghan female students. For many participants, access to online education functioned as a vital psychological lifeline, providing emotional resilience, sustaining hope and helping to alleviate the profound distress and sense of despair generated by systemic social and educational constraints in Afghanistan.

This finding confirms that distance education does not merely fill an instructional void; it serves as a critical clinical counter-measure against trauma and depression. Academic hope ($M = 4.2588$) functions as a cognitive buffer. By providing daily, future-oriented milestones (such as assignments, lectures and exams), the online curriculum breaks the paralyzing weight of immediate isolation, allowing these Afghan female students to build a viable identity beyond their forced domestic confinement.

6.3.3 The Empowering Role of Socio-Economic Competencies

The statistically significant, positive predictive path from Socio-Economic Empowerment (Economics_Total) to Academic Hope ($\beta = .190$, $t = 4.873$, $p < .001$). Underscores the direct psychological benefits of marketable skill acquisition. In this regression model, higher scores on the Economics_Total scale represent greater confidence in job-search skills, Professional competencies, income-generating capabilities, and readiness to engage with broader employment markets both digital and physical.

The positive regression coefficient demonstrates that as female distance learners acquire practical, marketable digital and professional competencies and skills, their optimistic outlook

and long-term educational aspirations are significantly reinforced. This finding aligns directly with human capital and psychological empowerment frameworks: when education offers actionable pathways to financial self-reliance and career self-efficacy, it directly strengthens students' agency and determination to persist.

For Afghan female students facing structural constraints on traditional employment, distance higher education functions as a vital mechanism for socio-economic empowerment. By equipping learners with versatile competencies spanning digital freelancing, local enterprise, and global employment opportunities the acquisition of economic self-efficacy serves as a primary driver of academic hope, reinforcing their commitment to personal advancement and educational continuity.

6.4 Labor Market Integration and the Rise of "Subversive Agency"

The final thematic domain explored the transitional capacity of distance education into the economic sphere. The integration of the descriptive baseline reveals a structural pivot: approximately 19.1% ($n = 58$) of the cohort are actively earning an income via digital and physical avenues. However, this economic pivot is not exclusively outward-looking; it encompasses a dual-layered engagement with both highly constrained domestic (national) limited physical and digital avenues and transnational remote labor market.

Crucially, the manifestation of subversive agency among female students is deeply intertwined with their strategic choice of academic disciplines, moving beyond generalized digital survival toward intentional professionalization. The empirical findings reveal a highly polarized distribution of study fields, with a striking 74 % of participants clustering within Social Sciences, Business, Economics, political science, law and Psychology, followed by 14.5 % in medical fields, 4.9% in Engineering, 2% in Natural Sciences such as Chemistry, Physics

Biology, 1.3% in Education, while other fields were not specified by the surveyed students. Far from being arbitrary, this concentration reflects a calculated alignment with the surviving pragmatics of the local economy. This radical curricular migration represents a tactical restructuring of female human capital in response to direct institutional erasure. Historically, the education sector and local school systems served as the primary, culturally sanctioned career pipeline for literate Afghan women. However, the systematic closure of secondary schools and the sweeping bans on female employment within public frameworks have rendered traditional teaching degrees functionally obsolete. By purposefully abandoning the field of Education and pivoting toward Medicine, Computer Science, Law, Psychology, Economics and Business Administration, female students are executing an agentic, defensive realignment. They are actively positioning themselves to enter decentralized, private or remote professional spheres through a dual-layered framework of online and physical engagement. Physically, they exploit surviving domestic niches such as working within female-led private medical clinics, localized underground legal networks and private corporate entities. Simultaneously, they leverage online platforms for transnational remote work, thereby converting their academic selection into a calculated tool for long-term economic self-reliance and public-sphere relevance.

6.4.1 Transnational Digital Labor as an Economic Shield

The traditional model of human capital development posits that local higher education feeds directly into local labor markets (Becker, 1964). Under conditions in which women are systematically excluded from formal public and professional life, this conventional pipeline becomes significantly disrupted. The findings of this study suggest that distance higher education partially bypasses these structural constraints by enabling the conversion of female human capital into digitally mediated and transnational forms of labor participation.

In practice, this shift is reflected in engagement with online freelancing, remote translation services, data analytics and graphic design contracts, through which women increasingly participate in global gig economy platforms. Rather than being absorbed into local labor structures, their skills are redirected toward decentralized and borderless digital markets.

This structural adaptation gradually reconfigures the domestic sphere itself. The household, traditionally understood as a site of social and political confinement, is increasingly transformed into a functional node within a global professional and economic network. As a result, the home becomes not only a private space but also an operational base for digitally mediated labor production.

This phenomenon introduces the concept of borderless economic resilience, whereby digital literacy and remote connectivity allow marginalized groups to decouple economic productivity from restrictive local political and institutional environments. In this sense, economic agency is not contingent upon physical mobility or formal labor market inclusion, but is instead reorganized through participation in distributed digital infrastructures that transcend geographic and socio-political boundaries.

In this hyper-restrictive economic landscape, female students leverage digital skills to navigate a highly bifurcated market. On the national level, where physical employment is systematically blocked by the regime, women exploit domestic digital niches, such as local online businesses, distance tutoring, and remote administrative support for private national enterprises. While these local opportunities provide an immediate financial buffer, they are severely suppressed by low wages, institutional instability, and a collapsing domestic economy. Consequently, national digital avenues serve as a vital baseline for immediate survival, while transnational remote work functions as the ultimate shield for long-term economic autonomy,

allowing students to completely decouple their financial productivity from local systemic failures.

6.4.2 Bottom-Up Generational Shifts and Household Power Dynamics

The complexity of these micro-level negotiations is starkly illustrated by qualitative narratives from conservative regions, such as the case of a female student from Paktia province, eastern Afghanistan. She faced with rigid familial and societal restrictions during her studies; she resorted to hunger strikes for several days to secure her family's permission to study online and continue her education, while simultaneously engaging in clandestine artistic resistance. This underscores that familial alignment is rarely a passive concession; rather, it is a hard-won outcome achieved through high-stakes personal sacrifice and domestic diplomacy, proving that autonomy is systematically carved out from within the most restrictive private spaces.

Perhaps the most socially significant finding is the distinct positive shift experienced within families regarding how they perceive their daughters' capabilities and professional autonomy. Within this framework, two household configurations can be distinguished:

[Traditional Household Model] —→ Females are primarily perceived through a framework of socio-cultural vulnerability, dependency and restricted autonomy.

[Transformed Household Model] —→ Mediated by digital income generation and technical competence, females are increasingly recognized as strategic contributors to household stability and as emerging decision-making actors.

This transformation occurs when families directly observe their daughters engaging with complex technical systems and contributing economically during periods of national economic

stress. Such experiences gradually reshape internal household perceptions, shifting the valuation of female capability from symbolic dependency to functional indispensability.

Importantly, this negotiation process enables the formation of internal alliance structures between female students and male household authorities (particularly fathers and brothers). These alliances facilitate adaptive modifications of domestic norms, often aimed at protecting the student from external community surveillance and preserving her educational and digital engagement within culturally acceptable boundaries. Thus, rather than waiting for macro-level institutional or political reform in the country that seem quite difficult now, digital empowerment of these Afghan females students itself operates as an active micro-social force that gradually restructures gender relations and household power dynamics at the foundational level of Afghan society.

6.5 Conceptual Framework: The Resilient Digital Empowerment Cycle

By synthesizing the quantitative matrices, the qualitative code frequencies, and the theoretical expansions discussed above, this study presents a new conceptual framework for understanding female education under systemic oppression: The Resilient Digital Empowerment Cycle.

This cycle functions across three interconnected structural phases:

- ***The Technical and Professional Foundation (Phase I):*** High digital literacy ($M = 4.1505$) functions not merely as an isolated technical attribute, but as a foundational conduit through which students acquire advanced, market-driven professional competencies across critical disciplines including Medicine, Economics, Computer Science, Law, Psychology, Business Administration and others. This technological efficacy serves as a defensive mechanism that enables the mastery of high-value career

skills, directly satisfying and unlocking their internal psychological needs for autonomy and competence (SDT $M = 4.2105$).

- ***The Psychological Buffer and Virtual Sanctuary (Phase II):*** Internalized self-determination systematically generates high future-oriented hope (Hope $M = 4.2588$). Despite severe external constraints and socio-political restrictions, the online educational environment functions as a vital interactive sanctuary for Afghan female students at the moment where they find the confidence and structural safety (Safety $M = 4.1721$) to freely express their opinions, share their perspectives with peers and actively participate in academic discourse without fear. This collective digital academic belonging successfully buffers the student's mental health against systemic isolation and external vulnerabilities.
- ***The Micro-Structural Shift (Phase III):*** The students deploy their specialized professional and technical skills to navigate a dual-layered market, leveraging online avenues for transnational remote work and exploiting surviving local physical and digital niches. This strategic economic and their intellectual contribution triggers a profound qualitative shift in their familial value systems, reshaping internal perceptions and transforming the household into a secure, defensive space that actively protects and sustains their autonomy.

Ultimately, this cycle demonstrates that distance higher education is not a temporary fallback option. It is a highly sophisticated, sustainable mechanism of quiet resistance that preserves, builds, and deploys human capital from within the cracks of an oppressive regime.

In conclusion, the Resilient Digital Empowerment Cycle conceptualized in this chapter demonstrates that online higher education under systemic containment is not merely an alternative mode of instruction, but also a site of profound political, psychological and socio-

economic negotiation. The findings reveal how digital learning environments are currently enabling Afghan female students to exercise agency, sustain hope and pursue their educational aspirations despite facing significant structural constraints in their society. However, translating these theoretical insights and empirical findings into actionable, scalable and policy-relevant frameworks requires a structured synthesis. Accordingly, the subsequent chapter (Chapter 7) presents a comprehensive summary of the study's key conclusions, outlines its theoretical and methodological contributions and offers strategic recommendations for national, transnational and institutional stakeholders seeking to sustain and expand higher education opportunities for Afghan women.

Conclusion and Recommendations

7.1 Introduction

This final chapter provides a systematic and comprehensive synthesis of the entire study, which investigated the role of distance higher education in empowering Afghan female students navigating systemic containment under the Taliban regime. Drawing directly upon the empirical results analyzed in Chapter 5 (N=304) quantitative responses and N=16 qualitative interviews and the theoretical triangulation detailed in Chapter 6, this chapter articulates the overarching conclusions of the research.

Furthermore, it explicitly details the study's original theoretical and methodological contributions to the fields of international education, conflict-zone pedagogy and gender studies. Finally, based on the grounded realities of technological precarity and psychological resilience identified in the Resilient Digital Empowerment Cycle, this chapter offers actionable, strategic recommendations for national, transnational and institutional stakeholders, concluding with critical avenues for future academic inquiry.

7.2 Summary of Key Empirical Findings and Conclusions

The synthesis of the mixed-methods data leads to three profound, interconnected conclusions aligned with the study's core research question:

7.2.1 The Paradox of Technological Precarity and "Subversive Access"

The study concludes that structural and infrastructural barriers ranging from frequent electricity blackouts and exorbitant internet costs to severe institutional blockages do not merely represent technical bottlenecks; they constitute an ongoing structural warfare aimed at female exclusion.

- **Conclusion:** Despite these immense hurdles in Afghanistan for Afghan female students; distance higher education acts as a vital conduit for "subversive access." Afghan female students successfully re-engineer the domestic sphere from a site of forced isolation into a secure, defensive space of digital resistance.

7.2.2. Psychological Ecosystem: Self-Determination and Academic Hope

By triangulating Self-Determination Theory (SDT) with Hope Theory, the empirical data confirms that the cognitive and emotional architecture of Afghan female students remains unbroken.

- **Conclusion:** Online higher education directly satisfies the core psychological needs of autonomy, competence and relatedness. Academic engagement acts as a critical psychological buffer, transforming existential despair into structured, goal-oriented pathways ("pathway thinking" and "agency thinking") that sustain long-term aspirations.

7.2.3 The Transition to Digital Agency and Transnational Labor Markets

The qualitative and quantitative findings converge on the fact that education under containment is not a passive placeholder.

- **Conclusion:** Acquired digital literacy, linguistic competencies and professional skills allow these female students to bypass local physical and all other restrictions. Distance higher education serves as a gateway to home-based economic agency, facilitating alternative pathways toward national and transnational remote labor markets, thereby cultivating a form of "hidden structural agency."

7.3 Theoretical and Methodological Contributions

7.3.1 Theoretical Contributions

- **Conceptualization of the Resilient Digital Empowerment Cycle:**

This study advances existing literature by moving beyond passive models of victimization in conflict zones. It offers a new framework showing how digital learning environments facilitate a continuous loop of psychological fortification, skill acquisition and systemic subversion.

- **Extension of Self-Determination Theory (SDT) to Hyper-Restrictive Regimes:**

While traditional SDT assumes a basic level of societal freedom, this research proves that autonomy and competence can be actively generated and sustained virtually, even when physical mobility is completely criminalized.

7.3.2 Methodological Contributions

- **Sequential Mixed-Methods Triangulation in High-Risk Contexts:**

This study provides a robust methodological blueprint for conducting safe, ethically sound and scientifically rigorous research in active conflict and repressive settings such as Afghanistan where there is always a possibility of challenges and problems arising at any moment. By successfully integrating extensive survey data (N=304) with in-depth qualitative narratives (N=16) and MAXQDA (version 2026) code-density analytics, it establishes a high standard of empirical validity in contexts where data collection is severely constrained and there is always a possibility of problems and challenges arising at any moment.

7.4 Strategic and Policy-Relevant Recommendations

To translate these empirical and theoretical insights into scalable realities, the following target-specific recommendations are proposed:

7.4.1 for Transnational Educational Providers and Universities

- **Asynchronous Learning Architecture:** Considering Afghanistan's technological and infrastructural precarity, online higher education programs should be deliberately designed using low-bandwidth, downloadable and asynchronous learning models to accommodate frequent electricity outages and unreliable internet connectivity. This approach ensures continuity of learning in a context characterized by infrastructural fragility and unstable digital connectivity.
- **Anonymization and Data Privacy Frameworks:** Considering Afghanistan's current political context and existing de facto governments' restrictive policies toward women education, female student's participation in online higher education may expose them to significant security, legal and social risks. In some cases, female students may fear surveillance, detention, intimidation, financial penalties for engaging in educational activities and pressure on their families; therefore, implementing any online higher education program, robust anonymization and data privacy frameworks should be established. This includes implementing strong cryptographic protocols, alias-based student rosters and secure Learning Management Systems (LMS) to protect Afghan female students' identities and their personal information. Strengthening digital security infrastructures is essential to safeguard participation, preserve confidentiality and minimize exposure to potential socio-political risks.

- **Credential Recognition and Assurance Mechanisms:** International educational providers and universities should develop robust and formal mechanisms to ensure the global recognition and credibility of academic qualifications earned by Afghan female students through online and distance learning pathways. Such measures would not only enhance the transferability of acquired skills and credentials but also address students' persistent concerns regarding the future acceptance and validity of their academic qualifications. In this regard, strengthening collaboration between international universities and accrediting bodies, establishing mutual recognition frameworks, and implementing secure digital credentialing systems could significantly enhance educational continuity and Afghan female students' participation. Given the current approach of the Taliban toward women's education, these interventions are particularly critical, as political and regulatory uncertainty may limit the formal recognition of academic documentation in the long term.

- **Teaching Continuity, Academic Coordination and Instructor Support Systems:** While Afghan female and male academic staff and instructors demonstrate strong voluntary commitment and a deep sense of national and educational responsibility in sustaining online teaching processes, empirical insights indicate that their personal livelihood constraints and structural pressures occasionally affect the consistency, punctuality and formal scheduling of instructional delivery. Although this challenge is not universal across all programs, it has been reported in some cases by survey participants as a factor influencing learning continuity. In response, transnational educational providers should strengthen institutional support mechanisms for instructors, including workload stabilization, structured scheduling systems and sustainable compensation or incentive frameworks. Such measures would enhance online teaching reliability, improve academic coordination and ensure greater consistency in the delivery of online education programs, thereby reinforcing overall student learning outcomes.

In addition, greater attention to instructional quality, responsiveness to students' needs and continuous engagement in teaching processes by Afghan volunteer instructors across the globe can further improve the effectiveness of online learning environments.

7.4.2 for International Donors and Non-Governmental Organizations (NGOs)

- **Digital Infrastructure Subsidies:**

Direct funding should prioritize solar energy kits, essential digital hardware (laptops and tablets) and encrypted, subsidized high-speed internet vouchers specifically targeted at female learners inside Afghanistan. Considering the country's technological, infrastructural and economical context, these interventions are vital for reducing infrastructural barriers and ensuring uninterrupted educational access for Afghan female students.

- **Micro-Scholarships for Global Micro-Work:**

Targeted funding mechanisms should be established to bridge the transition between the completion of online degrees and access to international freelance or remote employment opportunities. This would enhance employability, economic inclusion, and integration into global digital labor markets.

- **Postgraduate Continuation Scholarships:**

Dedicated scholarship programs should be created to enable Afghan female students to pursue postgraduate education at master's and doctoral levels. This is essential for long-term human capital development, academic advancement and strengthening global knowledge participation.

- **Practical Training and Clinical Exposure Support:**

Given Afghanistan's political context and the Taliban's approach toward women's education all International agencies, including United Nations bodies, should facilitate in-country and hybrid mechanisms for practical and clinical training, particularly in fields such as medicine and healthcare. These initiatives should ensure that female students' acquire essential hands-on experience alongside theoretical learning, aligning academic preparation with international professional standards.

7.4.3 for Global Tech Corporations and Remote Employers

- **Inclusive Remote Hiring Pathways:**

Global technology corporations and remote employers should establish structured virtual mentorship, internship and remote employment pathways for qualified Afghan female graduates. These programs should include professional on boarding, skills validation and career development support within global remote work ecosystems. Furthermore, the use of decentralized and compliant financial systems such as regulated fintech platforms and international digital wallets should be encouraged to enable secure cross-border payments and overcome limitations imposed by restricted domestic banking infrastructures. These measures would promote equitable access to global labor markets and support sustainable professional integration.

7.5 Limitations and Avenues for Future Research

While this study offers groundbreaking insights, certain limitations present fertile ground for future academic research:

- ***Geographic and Class Dimensions:*** The sample predominantly represents urban centers with relatively better access to technology. Future studies should focus on co-designing alternative offline-online hybrid learning mechanisms for highly marginalized rural Afghan women.
- ***Long-Term Longitudinal Tracking:*** Future research should track this cohort longitudinally over the next 5 to 10 years to empirically evaluate the long-term economic conversion rate of distance degrees into sustainable transnational employment.
- ***Mental Health and Long-Term Trauma:*** A deeper psychiatric and pedagogical investigation is needed to analyze the cumulative psychological toll of prolonged digital isolation and continuous structural anxiety.

7.6 Final Concluding Reflection

Beyond its educational and policy dimensions, and considering Afghanistan's context, supporting Afghan women's access to higher education during the Taliban's presence and rule as the governing authority of the country represents a substantive investment in human development and intergenerational progress. Extensive scholarship in human capital theory (Becker, 1964) and the capability approach (Sen, 1999; Nussbaum, 2011) demonstrate that women's education contributes not only to individual empowerment in society but also to broader socio-economic development. Women's Education contributes to improvements in household welfare, community resilience and long-term societal wellbeing. Empirical evidence from global development research further confirms that female education generates strong intergenerational externalities, particularly in relation to health outcomes, educational attainment and upward socio-economic mobility (UNESCO, 2023; World Bank, 2018). In this sense, ensuring sustained access to education for Afghan female students constitutes not only a national

or regional concern but also part of a broader global commitment to educational equity and sustainable human development.

Building on these human development and intergenerational foundations, the findings of this study further indicate that online higher education under conditions of systemic constraint carries significant political, psychological and epistemic implications. Rather than functioning solely as an alternative mode of instruction, online higher education emerges as a complex site of negotiation between structure and agency, constraint and resilience, and exclusion and participation. The lived experiences and firsthand accounts of Afghan female students suggest that while formal institutions of higher education may be restricted or suspended, the pursuit of knowledge and intellectual agency persists in transformed digital spaces. In this context, distance higher education operates as a resilient mechanism for sustaining human capital formation, educational continuity and epistemic agency within structurally constrained environments.

References

- Adalyar, S. H. (2025). E-learning ecosystem for higher education in Afghanistan. *Journal of Natural Sciences – Kabul University*, 3(3), 11–19. <https://doi.org/10.62810/jns.v3i3.177>
- Albrecht, C., Rude, B., & Stitteneder, T. (2022). Women in Afghanistan: Developments over the last 20 years. *CESifo Forum*, 23(4), 3–8. <https://www.cesifo.org/en/publications/2022/article-journal/women-afghanistan-developments-over-last-20-years>
- Al-Darei, I. S., & Elhag, A. (2022). The effect of feedback type in the e-learning environment on students' achievement and motivation. *Journal of Educational Technology and Online Learning*, 5(3), 694–705. <https://doi.org/10.31681/jetol.1111527>
- Alemi, Q., Panter-Brick, C., Oriya, S., Ahmady, M., Alimi, A. Q., Faiz, H., . . . Ventevogel, P. (2023). Afghan mental health and psychosocial well-being: Thematic review of four decades of research and interventions. *BJPsych Open*, 9(4), Article e125. <https://doi.org/10.1192/bjo.2023.502>
- Ali, H., Azhar, M., Zain, M., Shekhani, H., & Iqbal, F. (2022). *How e-learning is reshaping the education industry of a developing economy? An evidence from PLS-SEM approach* (MPRA Paper No. 112308). Munich Personal RePEc Archive. <https://mpra.ub.uni-muenchen.de/112308/>
- Amnesty International. (2023, May). *Afghanistan: Taliban's treatment of women and girls should be investigated as the crime against humanity of gender persecution*. <https://www.amnesty.org/en/latest/news/2023/05/afghanistan-talibans-treatment-of-women-and-girls-should-be-investigated-as-the-crime-against-humanity-of-gender-persecution/>
- Antonio, A., & Tuffley, D. (2014). The gender digital divide in developing countries. *Future Internet*, 6(4), 673–687. <https://doi.org/10.3390/fi6040673>

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.

Chen, K. C., & Jang, S. J. (2010). Motivation in online learning: Testing a model of self-determination theory. *Computers & Education*, 55(2), 741–752.
<https://doi.org/10.1016/j.compedu.2010.03.004>

Daraz, U., Khan, Y., Alnajdawi, A. M., & Alsawalqa, R. O. (2023). Empowering hearts and shaping destinies: Unveiling the profound influence of education on women’s mate selection in Pakistan – A comprehensive mixed methods study. *Frontiers in Sociology*, 8, Article 1273297.
<https://doi.org/10.3389/fsoc.2023.1273297>

Dawodi, M., Baktash, J. A., & Dawodi, S. M. R. (2023). *Leveraging mobile learning platforms for flexible education delivery: Bridging educational gaps in Afghanistan*. arXiv.
<https://arxiv.org/abs/2311.01850>

de Alwis, R. (2024). Holding the Taliban accountable for gender persecution: The search for new accountability paradigms under international human rights law, international criminal law and women, peace, and security. *German Law Journal*, 25(2), 289–334.
<https://doi.org/10.1017/glj.2023.113>

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press. <https://doi.org/10.1007/978-1-4899-2271-7>

Díaz-Noguera, M. D., Hervás-Gómez, C., De la Calle-Cabrera, A. M., & López-Meneses, E. (2022). Autonomy, motivation, and digital pedagogy are key factors in the perceptions of Spanish higher-education students toward online learning during the COVID-19 pandemic. *International*

<https://doi.org/10.3390/ijerph19020654>

Gallagher, M. W., & Lopez, S. J. (2009). Positive expectancies and mental health. In S. J. Lopez (Ed.), *The encyclopedia of positive psychology* (pp. 710–714). Wiley-Blackwell.

Haqbeen, J., Sahab, S., & Ito, T. (2025). A digital initiative to address girls' education challenges in collaboration with NPO in post-2021 Afghanistan. *IIAI Letters on Informatics and Interdisciplinary Research*. <https://doi.org/10.52731/liir.v004.176>

Haqpal, N. (2025). The Afghan women's movement and gender apartheid: Shifting the trajectory of international human rights law. *Central Asian Survey*. <https://doi.org/10.1080/02634937.2025.2514553>

Hartnett, M. (2016). *Motivation in online education*. Springer. <https://doi.org/10.1007/978-981-10-0700-2>

Hasin, B. A., Ayoubi, M. M., & Ahmad Shayan, N. (2025). Challenges and prospects: Women's education in contemporary Afghanistan. *Frontiers in Global Women's Health*, 6, Article 1477145. <https://doi.org/10.3389/fgwh.2025.1477145>

Human Rights Watch. (2023a). *World report 2023: Afghanistan*. <https://www.hrw.org/world-report/2023/country-chapters/afghanistan>

Human Rights Watch. (2023b, March 24). *One year on, the Taliban still attacking girls' right to education*. <https://www.hrw.org/news/2023/03/24/one-year-taliban-still-attacking-girls-right-education>

- Hussain, F., Amin, S. N., & Rezaie, R. (2024). ICTs for Afghan women's empowerment in the pre- and new-Taliban era: Roles of gender, education, and crises. *Electronic Journal of Information Systems in Developing Countries*, 90(5), Article e12326. <https://doi.org/10.1002/isd2.12326>
- Inter Press Service. (2025, February 7). *Online education: A lifeline for Afghan girls amid Taliban restrictions*. IPS News. <https://www.ipsnews.net/2025/02/online-education-lifeline-afghan-girls-amid-taliban-restrictions/>
- International Institute for Educational Planning. (2024). *The challenges of providing quality education in conflict areas*. UNESCO IIEP. <https://www.iiep.unesco.org/en/articles/challenges-providing-quality-education-conflict-areas>
- International Labour Organization. (2023, March 7). *Women's employment drops by 25% in Afghanistan since mid-2021*. Investing.com. <https://www.investing.com/news/economic-indicators/womens-employment-drops-by-25-in-afghanistan-since-mid2021--ilo-3023573>
- International Telecommunication Union. (2021, August 5). *Technology and training to support the digital empowerment of women in Afghanistan*. <https://www.itu.int/hub/2021/08/technology-and-training-to-support-the-digital-empowerment-of-women-in-afghanistan/>
- Jack, A., & Parkin, B. (2024, January 2). Afghan women and girls use online resources to evade government ban on female education. *The Irish Times*. <https://www.irishtimes.com/world/asia-pacific/2024/01/02/afghan-women-and-girls-use-online-resources-to-evade-government-ban-on-female-education/>
- Kabeer, N. (2012). *Women's economic empowerment and inclusive growth: Labour markets and enterprise development* (CDPR Discussion Paper No. 29/12). School of Oriental and African

Studies, University of London. <https://soas-repository.worktribe.com/output/384662/womens-economic-empowerment-and-inclusive-growth-labour-markets-and-enterprise-development>

Kaplan, H. (2022). The unique effects of supporting beginning teachers' psychological needs through learning communities and a teacher-mentor's support: A longitudinal study based on Self-Determination Theory. *Frontiers in Psychology*, 13, Article 859364. <https://doi.org/10.3389/fpsyg.2022.859364>

McLean, J., & Cooper, M. (2025). Internet education of girls and women in Afghanistan. *Discourse and Communication for Sustainable Education*, 16(1), 50–56. <https://doi.org/10.2478/dcse-2025-0005>

Misra, A. (2002). The Taliban, Radical Islam and Afghanistan. *Third World Quarterly*, 23(3), 577–589. <https://doi.org/10.1080/0306837042000194884>

Mohammadi, A. Q., Neyazi, A., Habibi, D., Mehmood, Q., Neyazi, M., & Griffiths, M. D. (2024). Female education ban by the Taliban: A descriptive survey study on suicidal ideation, mental health, and health-related quality of life among girls in Afghanistan. *Journal of Public Health*, 46(3), e439–e447. <https://doi.org/10.1093/pubmed/fdae111>

Moore, M. G., & Kearsley, G. (2012). *Distance education: A systems view of online learning* (3rd ed.). Wadsworth, Cengage Learning.

Nadir, S. (2025). Women's rights under the US presence from 2001–2021: A case study of the rural Afghan women. *Cognizance Journal of Multidisciplinary Studies*, 5(4), 675–694. <https://doi.org/10.47760/cognizance.2025.v05i04.011>

Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom:

Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133–144. <https://doi.org/10.1177/1477878509104318>

Nussbaum, M. C. (2004). Women's education: A global challenge. *Signs*, 29(2), 325–355.

<https://doi.org/10.1086/378571>

Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. Harvard University Press.

Qazi Zada, S., & Qazi Zada, M. Z. (2024). The Taliban and women's human rights in Afghanistan: The way forward. *The International Journal of Human Rights*, 28(10), 1687–1722.

<https://doi.org/10.1080/13642987.2024.2369584>

Razjouyan, K., Farokhi, H., Qaderi, F., Qaderi, P., Masoumi, S. J., Shah, A., . . . Qaderi, S. (2022). War experience, daily stressors and mental health among the inter-Taliban generation young adults in northern Afghanistan: A cross-sectional school-based study. *Frontiers in Psychiatry*, 13Trace, Article 877934. <https://doi.org/10.3389/fpsy.2022.877934>

Reeve, J. (2012). A self-determination theory perspective on student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149–172). Springer. https://doi.org/10.1007/978-1-4614-2018-7_7

Reuveny, R., & Prakash, A. (1999). The Afghanistan war and the breakdown of the Soviet Union.

Review of International Studies, 25(4), 693–708.

<https://www.cambridge.org/core/journals/review-of-international-studies/article/afghanistan-war-and-the-breakdown-of-the-soviet-union/E77727BD1593966CC45872EE507697CD>

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
<https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, Article 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sabri, A., Abdulrahimzai, S., Witteveen, L. M., Lie, R., & Meulen, S. (2017). Enhancing women's participation in agricultural education in Afghanistan through distance education. *International Women Online Journal of Distance Education*, 6(2), 67–78.
https://www.wojde.org/FileUpload/bs295854/File/06_62
- Sahu, T. K., & Yadav, K. (2018). Women's education and political participation. *International Journal of Advanced Education and Research*, 3(6), 65–71.
<https://doi.org/10.22271/educatin.2018.v3.i6.15>
- Samandar, R., & Wardak, M. H. (2025). Gender-specific challenges faced by women entrepreneurs in rural Afghanistan. *Future Business Journal*, 11(1), Article 149. <https://doi.org/10.1186/s43093-025-00576>
- Sarwari, K., Kakar, A. F., Golzar, J., & Miri, M. A. (2022). Distance learning during COVID-19 in Afghanistan: Challenges and opportunities. *E-Learning and Digital Media*, 19(2), 144–162.
<https://doi.org/10.1177/20427530211044757>
- Selwyn, N. (2016). *Education and technology: Key issues and debates* (2nd ed.). Bloomsbury Academic.
- Sen, A. (1999). *Development as freedom*. Oxford University Press.

Shaikhzada, N., Rahmani, L., Asghari, T., Hosseini, M., & Quraishi, T. (2025). Challenges and opportunities for Afghan women in the digital world in Afghanistan. *International Journal of Applied Research and Sustainable Sciences* ✕, 3(3), 261–272.

<https://doi.org/10.59890/ijarss.v3i3.5>

Shams, M. S., Niazi, M. M., Gul, H., Mei, T. S., & Khan, K. U. (2022). E-learning adoption in higher education institutions during the COVID-19 pandemic: A multigroup analysis. *Frontiers in Education*, 6, Article 783087. <https://doi.org/10.3389/educ.2021.783087>

Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13(4), 249–275.

https://doi.org/10.1207/S15327965PLI1304_01

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual differences measure of hope. *Journal of Personality and Social Psychology*, 60(4), 570–585. <https://doi.org/10.1037/0022-3514.60.4.570>

Special Inspector General for Afghanistan Reconstruction. (2021, February). *Support for gender equality: Lessons from the U.S. experience in Afghanistan* (SIGAR 21-18-LL).

<https://www.sigar.mil/pdf/testimony/SIGAR2125TY.pdf>

Strand, A. (2015, August 19). *Expanding and improving the quality of girls' education in Afghanistan*.

Brookings Institution. <https://www.brookings.edu/articles/expanding-and-improving-the-quality-of-girls-education-in-afghanistan/>

Tai, X. H. (2025). Nearby armed conflict affects girls' education in Africa. *PLoS One*, 20(1), Article e0314106. <https://doi.org/10.1371/journal.pone.0314106>

- Taqaddausi, M. T., Akbary, M. F., & Behzad, S. H. (2023). Attitudes of university students in Afghanistan toward cultural factors of gender inequality. *Journal of Contemporary Philosophical and Anthropological Studies*, 1(2), Article 93.
<https://doi.org/10.59652/jcpas.v1i2.93>
- UN Women. (2024). *Afghanistan gender index 2024*.
<https://knowledge.unwomen.org/sites/default/files/2025-06/gender-index-2024-afghanistan-en.pdf>
- UNDP. (2021, December 1). *Afghanistan: Socio-economic outlook 2021–2022*. United Nations Development Programme. <https://www.undp.org/afghanistan/publications/afghanistan-socio-economic-outlook-2021-2022>
- UNDP. (2023). *Afghanistan socio-economic outlook 2023: The crisis deepens amid gender restrictions and economic collapse*. United Nations Development Programme.
<https://www.undp.org/afghanistan/press-releases/undp-warns-restrictions-on-womens-rights-will-worsen-economic-catastrophe-afghanistan>
- UNESCO. (2020). *Providing education opportunities in crisis and displacement settings*.
<https://www.unesco.org/en/articles/providing-education-opportunities-syrias-youngest-refugees>
- UNESCO. (2022a). *Afghanistan Education Sector Transitional Framework 2021–2023*.
https://planipolis.iiep.unesco.org/sites/default/files/ressources/afghanistan_education_sector_transitional_framework_3_mar_2022.pdf
- UNESCO. (2022b). *Education in Afghanistan*. <https://www.unesco.org/en/articles/new-report-warns-afghanistans-education-crisis-threatens-future-entire-generation>

UNESCO. (2023). *Protecting the right to education for all Afghans — Afghanistan emergency education page*. <https://www.unesco.org/en/emergencies/education/afghanistan>

UNESCO. (2024, October 9). *Afghanistan higher education gender analysis*.

<https://www.unesco.org/en/articles/afghanistan-higher-education-gender-analysis>

UNESCO. (2025a, August 15). *Afghanistan: Four years on, 2.2 million girls still banned from school*.

<https://www.unesco.org/en/articles/afghanistan-four-years-22-million-girls-still-banned-school>

UNESCO. (2025b, March 12). *UNESCO gives voice to Afghan girls and women and calls for their*

rights to be restored. <https://www.unesco.org/en/articles/unesco-gives-voice-afghan-girls-and-women-and-calls-their-rights-be-restored>

UNICEF. (2023, March 22). *As new school year starts in Afghanistan, almost 400,000 more girls deprived of their right to education, bringing total to 2.2 million*.

<https://www.unicef.org/afghanistan/press-releases/new-school-year-starts-almost-400000-more-girls-deprived-their-right>

UNICEF. (2024a, September 9). *45,000 first graders unable to start the new school year in the Gaza*

Strip. <https://www.unicef.org/press-releases/45000-first-graders-unable-start-new-school-year-gaza-strip-unicef>

UNICEF. (2024b, September). *Afghanistan humanitarian situation report, 1–31 August 2024*.

<https://www.unicef.org/afghanistan/documents/unicef-afghanistan-humanitarian-situation-report-1-31-august-2024>

United Nations Development Programme. (2025, June 10). *Women's economic empowerment as a*

cornerstone of peace and humanitarian response. <https://www.undp.org/gender-crisis/press-releases/womens-economic-empowerment-cornerstone-peace-and-humanitarian-response>

United Nations Office at Geneva. (2025, June 17). *Afghan women face near total social, economic and political exclusion*. UN Geneva. <https://www.ungeneva.org/en/news-media/news/2025/06/107457/afghan-women-face-near-total-social-economic-and-political-exclusion>

United Nations Relief and Works Agency for Palestine Refugees in the Near East. (2024, September 10). *Gaza war continues to shut hundreds of thousands out of school*. United Nations Palestine. <https://palestine.un.org/en/278268-gaza-war-continues-shut-hundreds-thousands-out-class>

University of the People. (2024, January 4). *Afghan women and girls use online resources to evade government ban on female education*. <https://www.uopeople.edu/about/worldwide-recognition/media/afghan-women-and-girls-use-online-resources-to-evade-government-ban-on-female-education>

WADI. (2022, May 1). *Online education for Syrian refugees and IDPs*. <https://wadi-online.org/2022/05/01/3304/>

Weller, M. (2014). *The Battle for Open: How openness won and why it doesn't feel like victory*

World Bank, UNESCO, & UNICEF. (2021). *The state of the global education crisis: A path to recovery*. <https://documents1.worldbank.org/curated/en/416991638768297704/pdf/The-State-of-the-Global-Education-Crisis-A-Path-to-Recovery.pdf>

World Bank. (2020a). *Policy notes: Priorities for inclusive development in Afghanistan*. <https://thedocs.worldbank.org/en/doc/8033eefca38ca8af7b653869a3469087-0310012021/original/Policy-Notes-report-Jan-12-2021-Final-version-2.pdf>

World Bank. (2020b). *Poverty and shared prosperity 2020: Reversals of fortune*. <https://www.worldbank.org/en/publication/poverty-and-shared-prosperity-2020>

Yoon, H. J., Bailey, N., Amundson, N. E., & Niles, S. G. (2019). The effect of a career development programme based on the Hope-Action Theory: Hope to Work for refugees in British Columbia. *British Journal of Guidance & Counselling*, 47(1), 6–19.
<https://doi.org/10.1080/03069885.2018.1544827>

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