



## **Pakistan–Afghanistan Relations: Border Security Challenges and the Impact of Cross-Border Militancy (2021–2026)**

**Ahmed Ali<sup>1</sup>, Dr Imran Naseem<sup>2</sup>**

<sup>1</sup> Department of Pakistan Studies, Abbottabad University of Science & Technology (AUST), KPK, Pakistan. Email: [ahmeddalii209@gmail.com](mailto:ahmeddalii209@gmail.com)

Assistant Professor Department of Pakistan Studies Abbottabad University of Science and Technology. Email: [Dr.imrannaseem@gmail.com](mailto:Dr.imrannaseem@gmail.com)

**DOI: <https://doi.org/10.71145/rjsp.v4i1.651>**

### **Abstract**

Security in the border areas remains one of the most significant areas of concern between Pakistan and Afghanistan owing to the continued cross-border militancy, illegal migration, inadequate institutional coordination and evolving political relations. Although much has been invested in the border area, there is a lack of empirical evidence showing the interplay of institutional, political, and security components and their impact on border security effectiveness. By analysing the impacts of cross-border militant infiltration, border administration and surveillance capability, bilateral security cooperation, and refugee and illegal cross-border movement, this paper explores the factors that influence border security efficacy. The study also evaluates the mediation role of effective coordination of counterterrorism efforts and the buffering role of political trust between Afghanistan and Pakistan. A quantitative cross-sectional research methodology was used and the primary data was collected from 600 respondents who were selected from 800 questionnaires distributed in different localities of Khyber Pakhtunkhwa (KPK) in Pakistan. Respondents included academics, experts from the private sector with experience in border security issues, government and security officials. Structural Equation Modelling (SEM) was used to analyse the suggested conceptual framework in order to look at direct, moderating, and mediating interactions between the study variables. The findings reveal that the bilateral security cooperation, border management, and surveillance capacities have significant positive impacts on the effectiveness of border security, whereas Cross-Border militant infiltration and the movement of refugees across the border and illegal movement across the border have significant negative impacts. The acceptable match of the suggested theoretical framework was supported by the structural model. Moreover, the moderation analysis revealed that political trust between the two countries of Afghanistan and Pakistan significantly reduced the negative effect of militant infiltration and strengthened the positive relationship between border management and border security. The mediation study also demonstrated that the effectiveness of counterterrorism coordination significantly mediated the impacts of bilateral security cooperation and refugee/illegal border crossing movement on border security effectiveness via substantial bootstrapped indirect effects. This work introduces a comprehensive empirical model that integrates the institutional theory with regional security complex theory in an exhaustive manner to arrive at the understanding of the efficacy of the border security between Pakistan and Afghanistan. By highlighting the significance of bolstering surveillance infrastructure, institutional cooperation,

political trust, and coordinated counterterrorism strategies to improve border governance, regional stability, and national security, the findings offer evidence-based implications for policymakers and security institutions.

**Keywords:** Border Security; Cross-Border Militancy; Pakistan–Afghanistan; Security Cooperation; Political Trust; Counterterrorism.

### Highlights

- Examines factors that influence the efficacy of border security in the relationship between Pakistan and Afghanistan.
- SEM study of 600 Khyber Pakhtunkhwa respondents' primary survey data.
- Security cooperation and border management greatly enhance border security.
- Illegal cross-border travel and military infiltration diminish the efficacy of security.
- Coordination of counterterrorism efforts and political trust improve security results.

### Introduction

In the geopolitical and security framework of South Asia and the larger international system, the relationship between Pakistan and Afghanistan has always held a pivotal role. The Durand Line, the roughly 2,670-kilometer boundary between the two nations, has historically been both a contentious area marked by instability, irregular migration, and cross-border militancy as well as a vital route for trade and cultural exchange. Weak border governance allows terrorist networks, illegal trafficking, organised crime, and violent extremist groups to operate across national borders, which has made border security a major global concern since the rise of transnational terrorist organisations following the September 11, 2001 attacks (Khan et al., 2025). Fragile borders in conflict-affected areas pose serious challenges to regional and global peace, economic development, and humanitarian security, according to international organisations like the United Nations. Due to its hilly terrain, porous crossing locations, historical tribal ties, and ongoing political disagreements about border recognition, the Afghanistan–Pakistan border is one of the most complicated frontier zones in the world (Maalik et al., 2025). Both countries' attempts to create efficient border control systems while concurrently addressing humanitarian and economic issues have been hampered by these features. Globally, modern security policies are beginning to acknowledge that border security comprises not only traditional military defence but also intelligence collaboration, migration management, terrorist coordination, customs enforcement, and technological surveillance. Ineffective border governance can make it easier for militants, weapons, drugs, and financial resources to cross national borders, as seen by the rise of extremist groups in many areas (Dhaka, 2026). In order to prevent cross-border violence while guaranteeing adherence to international humanitarian and refugee commitments, international security organisations have urged neighbouring states to bolster bilateral collaboration and intelligence sharing. Stability along the Pakistan-Afghanistan border is crucial not only for the two neighbouring countries but also for broader regional connectivity initiatives and international counterterrorism efforts because Afghanistan occupies a strategically important location connecting South Asia, Central Asia, and the Middle East. Following the withdrawal of foreign forces and the reinstatement of the Taliban government in August 2021, Afghanistan saw a political revolution that significantly altered the dynamics of regional security (Khattak et al., 2026). Although many policymakers anticipated better security cooperation between Pakistan and the new Afghan authorities, tensions over militant sanctuaries, border fencing, refugee management, and cross-border attacks increased after 2021. The Tehreek-e-Taliban Pakistan (TTP) is one of the extremist groups that Pakistan has frequently voiced worries about, but the Afghan government has denied these claims. The ongoing charges have hampered diplomatic relations and made border security a crucial aspect of bilateral ties (Mumtaz et al. 2026).

Between 2021 and 2026, border security has emerged as one of Pakistan's top national security goals. Internal security, economic stability, foreign policy, and public trust in governmental institutions are all directly impacted by the western border. To lower illicit crossings and limit militant mobility, Pakistan has made significant investments in border fencing, biometric verification systems, contemporary monitoring equipment, and enhanced border management. However, many attacks by militants on civilians and security personnel show that physical infrastructure by itself cannot totally eradicate security risks in the absence of efficient intelligence coordination and bilateral collaboration. The ongoing operational capability of militant groups and the difficulties in stopping cross-border infiltration are demonstrated by recent security incidents in Pakistan's western provinces (Aslam. 2026).

Humanitarian management and refugee movements are significant aspects of Pakistan-Afghanistan relations. For more than forty years, Pakistan has been home to one of the greatest numbers of Afghan refugees worldwide. The United Nations High Commissioner for Refugees (UNHCR) reports that approximately 600,000 Afghans have returned from Pakistan due to shifting policy conditions, while Pakistan and Iran collectively continue to host about 5.7 million Afghan refugees and people in refugee-like circumstances. Because it takes sophisticated institutional coordination to distinguish between legitimate refugees, economic migrants, and potential security dangers, these large-scale population migrations present extra administrative, economic, humanitarian, and security issues for border control agencies (Jamali et al., 2026).

Because Pakistan and Afghanistan continue to be significant commercial partners despite ongoing political tensions, the border also plays a crucial economic role. Following security crises, border closures affect regional supply chains, bilateral trade, and the lives of border populations who depend on cross-border trade. As a result, security programs need to strike a balance between humanitarian obligations, economic cooperation, and national security goals. Therefore, rather than depending solely on military actions, sustainable border governance necessitates integrated methods incorporating diplomatic engagement, customs modernisation, intelligence sharing, refugee management, and community participation (Khan et al., 2025).

From an academic standpoint, Pakistan-Afghanistan ties between 2021 and 2026 offer a useful case for analysing how border security issues affect regional stability, interstate relations, and counterterrorism cooperation. There are several chances to comprehend modern security management in delicate border contexts through the interplay of cross-border militancy, political trust, border governance, and diplomatic engagement. By examining the variables influencing border security efficacy during a time of significant political change, developing security risks, and shifting regional geopolitical dynamics, this study adds to the expanding body of literature (Shabbir. 2026). One of the most significant periods in the history of Pakistan-Afghanistan relations is the years 2021–2026. Expectations of better bilateral collaboration followed the Taliban's return to power in August 2021, but worries about border governance, intelligence coordination, and cross-border militancy grew. Both nations faced escalating diplomatic tensions related to claims of militant safe havens, border conflicts, and disputes over security obligations rather than attaining long-term security cooperation. International commentators have cautioned that regional security, humanitarian conditions, refugee migrations, and international counterterrorism operations are all significantly impacted by Afghanistan's ongoing turmoil (Haq et al., 2026). According to recent events, militant violence along Pakistan's western border continues to be a serious national security issue. In 2025 and 2026, Pakistani authorities carried out security operations in response to multiple high-profile militant strikes that targeted public institutions and security personnel in border regions. While Afghan authorities have denied offering sanctuary to such groups, Pakistani officials have often claimed that some militant groups use Afghan territory to plot and carry out strikes inside Pakistan. These

conflicting narratives have hindered prospects for successful bilateral security cooperation and complicated diplomatic engagement (Hussain et al., 2026).

Relatively few empirical research have used integrated theoretical models that concurrently combine institutional, political, and security variables to statistically assess Pakistan-Afghanistan border security throughout the post-2021 timeframe. Therefore, by offering evidence-based insights into the factors influencing border security effectiveness during a time of major geopolitical change, this study closes a key gap. The results can help countries, foreign partners, and regional organisations create policies that enhance intelligence cooperation, bolster border governance, curb militant mobility, and advance long-term regional peace. The study is still relevant, topical, and able to make a significant contribution to the body of knowledge on border management, international security, and South Asian strategic affairs given the ongoing changes in security conditions between 2021 and 2026 (Akram et al., 2026).

## **Research Questions**

The study's research questions are as follows, i.e.

**Q.1. How will border security between Pakistan and Afghanistan be affected between 2021 and 2026 by cross-border militant infiltration, border management and surveillance capabilities, bilateral security cooperation, and refugee and illegal cross-border movement?**

The direct impacts of the four independent variables on the dependent variable are investigated in this research question. It aims to identify the security and border management elements that have the biggest impact on the efficacy of border security in the area between Pakistan and Afghanistan.

**Q.2. How is the relationship between cross-border militant infiltration, border management and surveillance capability, and border security efficacy moderated by political trust between Pakistan and Afghanistan?**

This inquiry looks into whether the degree of political trust between the two nations increases or decreases the impact of border management capabilities and militant infiltration on the efficacy of border security. It acknowledges that the success of security programs and cooperative border governance may be influenced by political ties.

## **Research Objectives**

The study's research goals are as follows, i.e.

- I. To assess the impact on border security efficacy between Pakistan and Afghanistan between 2021 and 2026 of cross-border militant infiltration, border administration and surveillance capabilities, bilateral security cooperation, and refugee and illegal cross-border movement.
- II. To investigate how the relationship between cross-border militant infiltration, border management and surveillance capability, and border security efficacy is moderated by political trust between Pakistan and Afghanistan.

## **Significance of the Study**

### **For Academia**

By offering an empirical analysis of Pakistan-Afghanistan relations during the crucial years of 2021–2026, this study adds to the expanding corpus of knowledge on international relations, border security, and counterterrorism. Few studies have thoroughly examined how cross-border militant infiltration, border management and surveillance capabilities, bilateral security cooperation, and refugee and illegal cross-border movement collectively influence border security effectiveness, despite the fact that earlier research has examined border conflicts and regional security. Additionally, a more thorough analytical framework for comprehending the intricate dynamics of border security is provided by the integration of political trust between Pakistan and Afghanistan as a moderator and the efficacy of counterterrorism collaboration as a mediator. In addition to laying the groundwork for further comparative and cross-regional studies, the results will enhance theoretical and empirical

knowledge in the domains of political science, international relations, security studies, and strategic management.

### **For Policy Makers**

The study's conclusions will give policymakers in charge of border governance, regional diplomacy, and national security evidence-based insights. Government organizations will be better able to manage refugee movements, improve intelligence sharing, increase surveillance systems, and combat cross-border militancy if they have a better understanding of the elements that either strengthen or weaken border security efficacy. The study also emphasises how crucial coordinated counterterrorism measures and political trust are to attaining long-term security results. In order to lessen security risks and advance long-term regional peace between Pakistan and Afghanistan, the findings can therefore aid in the development of integrated border management policies, bilateral security agreements, and diplomatic initiatives.

### **For Society**

Effective border security has a direct impact on public safety, economic stability, humanitarian management, and regional peace, which makes this research important for society. Policies that lessen terrorist bloodshed, illegal cross-border activity, and security-related disturbances affecting border communities can benefit from a better knowledge of the factors that determine the success of border security. The study also highlights how crucial it is to strike a balance between humanitarian obligations and national security, especially when it comes to managing refugees and permissible cross-border travel. The research can help create safer communities, facilitate lawful trade and mobility, and promote greater regional stability by identifying practical methods that increase security cooperation and institutional coordination. In the end, the results will promote more knowledgeable and successful approaches to border governance and conflict prevention, which will benefit government agencies, security institutions, international organisations, researchers, civil society organisations, and the general public.

### **Literature Review**

#### **Literature review on Border Security Effectiveness**

One of South Asia's most strategically important and security-sensitive bilateral ties is still that between Pakistan and Afghanistan. Border security has been more complicated since Afghanistan's political transition in August 2021 because of the rise of armed groups, an increase in refugee flows, and shifts in bilateral diplomatic relations. The Durand Line, a 2,670-kilometer boundary between Pakistan and Afghanistan, has historically been marked by porous crossing places, challenging hilly terrain, and strong tribal ties that enable both legal and illicit cross-border migration. As a result, policymakers, military organisations, and experts in regional security have made border security effectiveness a top priority (Basu. 2026). The ability of state institutions to prevent illegal border crossings, lessen militant infiltration, fight transnational crimes, enable lawful trade and travel, and preserve territorial sovereignty through coordinated administrative, technological, and military measures is referred to as border security effectiveness. According to recent research, border security is increasingly dependent on integrated border management, intelligence sharing, technological surveillance, diplomatic collaboration, and coordinated counterterrorism strategies rather than just military deployment (Fatima, 2026). Cross-border militant infiltration is one of the most significant factors influencing the efficacy of border security. Tehrik-i-Taliban Pakistan (TTP), Islamic State Khorasan Province (ISKP), Al-Qaeda affiliates, and other transnational extremist groups have long used the Pakistan–Afghanistan border as an operational corridor. Numerous foreign security assessments revealed an uptick in cross-border insurgent activity targeting Pakistani security personnel and civilian populations after the Taliban regained control of Afghanistan in 2021. By taking advantage of remote border areas, lax surveillance systems, unofficial crossing routes, and

local support networks, militant infiltration compromises border security (Ali et al., 2026). Such infiltration increases the frequency of terrorist attacks, smuggling operations, and organised crime while decreasing the state's capacity to maintain effective territorial control. Scholars claim that security lapses brought forth by permeable borders enable militant organisations to establish logistical bases, employ personnel, transport weapons, and evade law enforcement (Ayesha et al., 2024). Additionally, research from the International Crisis Group and the United Nations Security Council shows that cross-border militant movement makes Pakistan's internal security environment much more difficult by enabling armed organisations to plan attacks from safe havens across the border. Because security institutions are compelled to devote significant resources to reactive military operations rather than proactive border management, higher levels of militant infiltration are therefore continuously linked to worse border security efficacy (Sheikh et al., 2026). The ability to manage and monitor borders is a second important factor that determines how successful border security is. Physical barriers alone are insufficient without advanced surveillance technologies, integrated command structures, biometric identification systems, aerial reconnaissance, intelligence-led policing, and efficient coordination between civilian and military institutions, according to a growing body of contemporary border security literature (Gul et al., 2025). The set of operational, legal, technological, and administrative tools used by governments to control cross-border travel while preserving national sovereignty is known as border management. Technology technologies that enhance situational awareness across border regions include drones, thermal imaging systems, satellite surveillance, biometric verification, computer databases, and communication networks (Basu, 2026). Pakistan has made substantial investments in the fence of the Pakistan–Afghanistan border, the construction of new border forts, the implementation of biometric verification at official crossing points, and the deployment of advanced surveillance technologies. Furthermore, research indicates that these initiatives have enhanced border monitoring by decreasing unauthorised crossings through designated sectors and enhancing the detection of illegal movement. However, academicians point out that technological advancements alone are insufficient to ensure effective border security in the absence of institutional coordination, maintenance capacity, intelligence integration, and personnel training (Fatima, 2026). Continuous information exchange between military agencies, border police, customs officials, immigration offices, and intelligence agencies is necessary for effective surveillance. Technologically sophisticated borders have higher operating efficiency, lower infiltration rates, and better crisis response capabilities, according to research on integrated border management. Therefore, by enhancing detection capabilities, cutting response times, restricting unauthorised crossings, and bolstering state control over border regions, improved border management and surveillance capability positively contribute to border security effectiveness (Noorani et al., 2026). Refugee and unlawful cross-border migration is the fourth independent variable affecting the efficacy of border security. Over the past forty years, there have been numerous waves of refugee migration along the Pakistan-Afghanistan border as a result of military conflict, political unrest, humanitarian crises, and economic decline in Afghanistan. Refugee management is one of the most important aspects of bilateral ties since Pakistan has taken in millions of Afghan refugees. Security literature acknowledges that uncontrolled refugee flows may inadvertently create opportunities for militant infiltration, identity fraud, weapons trafficking, and organised criminal activity when border management systems are weak, even though the majority of refugees seek protection from conflict (Tariq et al., 2026).

Overall, the material now in publication consistently shows that a variety of interrelated elements, rather than only military prowess, influence border security efficacy. While improved border management and surveillance capabilities improve monitoring and operational efficiency, cross-border militant infiltration erodes territorial authority and raises security risks (Khan et al., 2025). While successful management of refugee and unlawful cross-border movement lowers vulnerabilities

related to unauthorised migration, bilateral security cooperation enables coordinated responses to transnational threats. When taken as a whole, these independent variables offer a thorough framework for comprehending the factors that influence border security efficacy in the setting of Pakistan and Afghanistan between 2021 and 2026 (Shahzad et al., 2026).

### **Literature Review on Political Trust between Pakistan and Afghanistan**

The importance of trust between states in matters of security cooperation has been increasingly realized, particularly in cases where states share threats from threats emanating from across borders. The level of confidence that governments have in one another's intentions, pledges, consistency of policy, and readiness to carry out mutually agreed security obligations is referred to as political trust. Political trust between Pakistan and Afghanistan has always been a matter of change and flux, owing to several reasons, including geographical disputes, claims of militant sanctuaries, border conflicts, refugee worries and geopolitical differences. Although there is a political tension between both countries, for effective border administration, continuous communication and coordinated decision-making between both governments is highly essential, and political trust is even more vital, since 2021. 2026). The literature suggests that political trust influences the magnitude of the correlations between security determinants and the outcomes of the border but does not influence the efficiency of the border security. High levels of political trust enable intelligence sharing, diplomacy, coordinated military operations, conflict resolution processes and rapid communication in border crises. Measures designed to improve surveillance, strengthen border management, reduce infiltration by militants and regulate migration, are likely to achieve positive security results in the presence of high political trust, where both governments are more likely to cooperate and share sensitive information (Haq et al., 2026). Conversely, the weak trust in political institutions reduces the effectiveness of bilateral security efforts, fosters mistrust between the two parties, weakens institutional collaboration, and slows down intelligence sharing. Empirical research on the governance of international borders shows that trust plays a key moderating role in the implementation of cooperative security arrangements between governments. Research on regional security cooperation in Europe, Southeast Asia and Africa shows that institutional trust promotes compliance with bilateral pacts, while reducing misunderstandings in cross-border crises. The same has happened in South Asia, where a lack of trust in the government frequently undermines the effectiveness of security measures that have been carefully planned and designed (Akhtar et al., 2025). Despite mutual interest in regional stability, the frequent allegations of the presence of militant sanctuaries across the border have often been a stumbling block in the way of joint security efforts in the Pakistan-Afghanistan context. It is therefore expected that political trust will have a negative impact on the negative impact of militant infiltration and unauthorised movement across the border, and a positive impact on the positive impact of the effectiveness of border security (border management, bilateral cooperation and border surveillance capabilities) (Khan, et al., 2025).

### **Literature Review on Counterterrorism Coordination Effectiveness**

Cooperation has been one of the main elements that has linked border security measures to favourable security results. The coordination between military organisations, intelligence services, law enforcement agencies, border authorities and diplomatic players in the prevention, identification, response and disruption of terrorist actions is known as counterterrorism coordination. For effective coordination, it is essential to require intelligence integration, exchange, cooperative operational planning, coordinated responses, and institutional interoperability between national and international security agencies. Terrestrial groups exploit communication gaps and the lack of coordination between security institutions, which makes it difficult for them to manage complex threats in the transnational realm (Hussain et al.,). Thus, the contemporary counterterrorism literature argues that weak and disjointed security institutions often lack the ability to deal with transnational threats. 2026).

In Pakistan-Afghanistan context, counterterrorism coordination has taken on greater importance since the return of the extremist groups in 2021. Apart from infrastructure, security experts argue that effective coordination between the Pakistan Army, the Frontier Corps, the intelligence agencies, security and law enforcement agencies, immigration departments, customs offices, and relevant Afghan institutions will be needed for effective border management. The research findings reveal that the coordinated intelligence operations are a very significant contribution to border surveillance, border security, disruption of terrorist financing, coordination of security operations and detection of militant operations. Consequently, counterterrorism cooperation is an institutional mechanism which makes the border security efforts more effective (Khan et al., 2026). The role of counterterrorism coordination is facilitated by the role of organisational and security governance literature, which emphasises that institutional cooperation is essential to translate security resources into security outcomes. Border security can be achieved with the help of improved border management systems, increased bilateral cooperation and improved surveillance technology only if security services can coordinate their activities and share useful information. 2024). Likewise, coordinated counterterrorism measures help to detect, interdict and respond effectively against terrorist activity in the operations, thereby reducing the impact of militant infiltration and illegal border crossings. Cooperation is essential to ensure that agencies work together without conflict and have the same objectives; investment in infrastructure, technology, or diplomatic arrangements may not lead to a big improvement in border security if efficiency is not achieved. 2026).

Finally, findings suggest that security policies' impact on the effectiveness of border security is primarily through their impact on counterterrorism coordination. Better coordination will increase the success of border management tactics, support intelligence sharing, improve interagency cooperation, and improve the quickness of operational responses. Hence, counterterrorism cooperation can be considered as a theoretically and empirically supported “mediating variable” in Pakistan-Afghanistan relations between 2021 and 2026, which links the border security determinants with the effectiveness of border security (Jadoon et al., 2026).

### **Research Gap**

The burgeoning body of literature on cross-border militancy, border security and Pakistan-Afghanistan relations has a number of significant gaps. The first is that most of the existing studies have tended to concentrate on the individual factors that impact border security, including bilateral cooperation, border fence, militant infiltration and refugee movements. To account for the efficiency of border security, there is only a small body of empirical research that brings together cross-border militant infiltration, border administration and surveillance capabilities, bilateral security cooperation, and refugee and illegal cross-border movement, in one conceptual package. Therefore, there is little knowledge on the combined effect of all these interrelated factors on the outcomes of the border security (Iqbal et al., 2026). Theoretically speaking, previous studies have been done on realism, traditional conceptions of security or geopolitical analysis of the security relationship between Pakistan and Afghanistan. While providing valuable perspectives on interstate conflict and strategic rivalry, these perspectives have relatively limited discussion around the role of political trust between Pakistan and Afghanistan and the effectiveness of counterterrorism cooperation on the security outcomes of the border. However, few studies have integrated institutional and cooperative security approaches to describe how the trust gained or lost can affect the effectiveness of security measures or how CT coordination can be a middle-range institution between bilateral and increased border security. Thus, a more comprehensive theoretical framework that considers institutional and political issues of border governance is needed (Jahanzaib.). 2026). In terms of the method, most of the published literature are descriptive reports, policy evaluation, historical accounts or qualitative case studies. Although these studies are important because they provide context information that is crucial to understanding security, there is a lack of quantitative empirical research examining multiple

security variables simultaneously and via advanced statistical techniques. The immediate effect of variables related to border security has received little attention in studies that have adopted Structural Equation Modelling (SEM) as their statistical method of analysis, while few studies have examined the mediating role of CTCE and moderating role of political trust. Unfortunately, there is insufficient empirical testing to provide such comprehensive testing that limits the generalisability of current findings and their explanatory power (Hussain et al. 2026). There's another gap in terms of time and place. Most of the work done so far has concentrated on the security dynamics between Pakistan and Afghanistan prior to the Taliban' take over in August 2021 or have been general in nature addressing wider regional security issues without specifically addressing the rapidly changing dynamics between 2021 and 2026. In this period there has been significant geopolitical shift, rising apprehensions about trans-border militancy, changing approaches and techniques for border security and refugee flows as well as new challenges between Pakistan and Afghanistan. Besides, there are limited empirical studies that gather primary data from first-hand sources of the stakeholders directly involved in the border security, including researchers, policy makers, officials and workers in the border management sector, security personnel and residents of border areas. They are important lessons that can be learned from these stakeholders' experiences about modern border governance (Latif.). 2026).

### **Contribution of the Study**

#### **Contribution to Academic Literature**

The study contributes to the academic literature by establishing a robust empirical model that elucidates the effectiveness of the border security in the backdrop of Pakistan-Afghanistan relations during the 2021–2026 period. This study combines these four factors together in a single conceptual model and looks at their interactions on the results of border security, as opposed to previous studies that primarily examined the effects of cross-border militancy, border management, refugee movements, or bilateral security cooperation. Moreover, the study adds the role of counterterrorism coordination efficacy as a mediating variable and political trust between Pakistan and Afghanistan as a moderating variable to current knowledge. This holistic approach provides a more holistic understanding of the institutional, operational, and political factors that affect the effectiveness of border security. Moreover, the quantitative analysis conducted using the Structural Equation Modeling (SEM) technique provides strong empirical support to the study, thus complementing the existing literature on border governance, international security and regional cooperation in South Asia.

#### **Contribution to Policy and Practice**

The study's findings will provide fact-based guidance to the politicians, security agencies, and border management agencies in Pakistan and Afghanistan. The research will contribute to the governments' efforts to better address and control the refugee and illegal movements of cross-border migrants and terrorists and to develop more effective strategies to reduce the cross-border infiltration of militants, as it will pinpoint the most significant factors contributing to the success of border security efforts. The report also highlights the need for institutional cooperation and diplomatic efforts as crucial components of sustained border security, and the importance of political trust and effective counterterrorism coordination in achieving security results. The findings could shape integrated border management policies, intelligence sharing arrangements and confidence building measures to help foster stable conditions, improve public safety and enhance bilateral relations across the region in the long term.

#### **Contribution to Future Research**

By presenting an integrated conceptual model that can be tested in many geopolitical circumstances, this study lays the groundwork for future research on border security and international relations. Future scholars might expand this paradigm by adding other factors like technical advancements in border monitoring, cyber-enabled security risks, international organised crime, economic

interconnectedness, or regional diplomatic endeavours. The suggested model may be further validated and improved by comparative research involving other conflict-prone border regions in Africa, the Middle East, Central Asia, or South Asia. Furthermore, future studies may use mixed-method approaches to supplement quantitative findings with qualitative perspectives from policymakers, security professionals, and border communities, or they may use longitudinal designs to look at changes in border security over time. Consequently, this study provides both a theoretical and methodological foundation for advancing future scholarship on border governance, counterterrorism, and regional security cooperation.

## **Theoretical Framework**

### **Regional Security Complex Theory**

The Regional Security Complex Theory (RSCT) (Buzan, 2003) is one of the most useful theoretical tools to understand Pakistan-Afghanistan interaction and complex security dynamics related to border control and trans-border militancy. RSCT said that threats do not stop at the state lines, and are interconnected in regions which are contiguous, with states sharing a close relationship in the realm of security. The idea is that political instability, armed conflict, terrorism, refugee movements and transnational crime all are readily transnational phenomena that lead neighbouring governments to develop patterns of security interdependence. As a result, the security environment of neighbouring nations is directly impacted by the security policy of one state. The idea is particularly relevant to the South Asia region, where the porous border between Pakistan and Afghanistan has been used to move people, goods, and ideas across the state for centuries, but also has been used to move militant groups and other transnational threats to security. RSCT provides a complete explanation for the dependent variable in this study: Border Security Effectiveness. The theory holds that regional security issues are not isolated, but they are interrelated political, social and institutional problems between neighbouring states, which cannot be solved by unilateral military or administrative measures. The first independent variable, Cross-Border Militant Infiltration, is an old factor of threats to regional security since militants exploit political insecurity, topography and weak governance to infiltrate their borders. RSCT says this kind of infiltration compromises the security of the border because it makes the border vulnerable in more than one nation, calling for a regional response instead of a national one. Thus, more militant infiltration is likely to have a negative impact on the effectiveness of border security, through heightened violence, lowered state control and increased border governance challenges. The second independent variable – Border Management and Surveillance Capacity – also closely relates to RSCT. The thesis states that the development of institutions, modernisation of technology, having intelligence, and managing borders well are ways in which states can enhance their security. A state's ability to detect and prevent illegal crossings is enhanced by investments in integrated border management, biometric verification systems, surveillance technology and border fence. But RSCT also argues that with no collaboration between neighbours in solving their common problems, even the most developed border infrastructure structures cannot fully remove security threats. In a similar vein, the third independent variable, bilateral security cooperation, is crucial to RSCT. The hypothesis suggests that regional institutional cooperation, coordinated military operations, information sharing, and diplomacy are more likely to be extended to bolster regional security if the region is facing similar threats in a nearby government. The successful bilateral cooperation between Pakistan and Afghanistan could significantly reduce the movement of terrorists, improve intelligence sharing and strengthen the effective implementation of integrated counterterrorism measures leading to significant improvement in the border security. Conversely, poor collaboration can create distrust between groups, limit information sharing and provide greater operational flexibility for violent groups. Refugee and Illegal Cross-Border Movement, the fourth independent variable, is likewise in line with RSCT's presumptions. Regional conflicts and

humanitarian crises often trigger major demographic movements which raise security and humanitarian issues for the surrounding countries. Unmanaged and irregular cross-border migrations may provide opportunity for criminal networks and militant groups to take advantage of weak administrative systems, even though refugees themselves shouldn't be seen as security risks. Thus, RSCT argues that to achieve a balance between the requirements for border security and humanitarian protection, effective regional cooperation is needed.

In addition, the mediating role of Counterterrorism Coordination Effectiveness is reasonable in RSCT. The hypothesis notes that the better regional security is if neighbouring states coordinate their military, law enforcement, and intelligence operations against transnational threats. Effective counterterrorism coordination is the institutional mechanism that makes bilateral collaboration effective to improve border security results. Consequently, RSCT offers detailed regional context which explains the interplay of institutional, policy, and security factors and how they all shape the effectiveness of border security in Pakistan-Afghanistan relations.

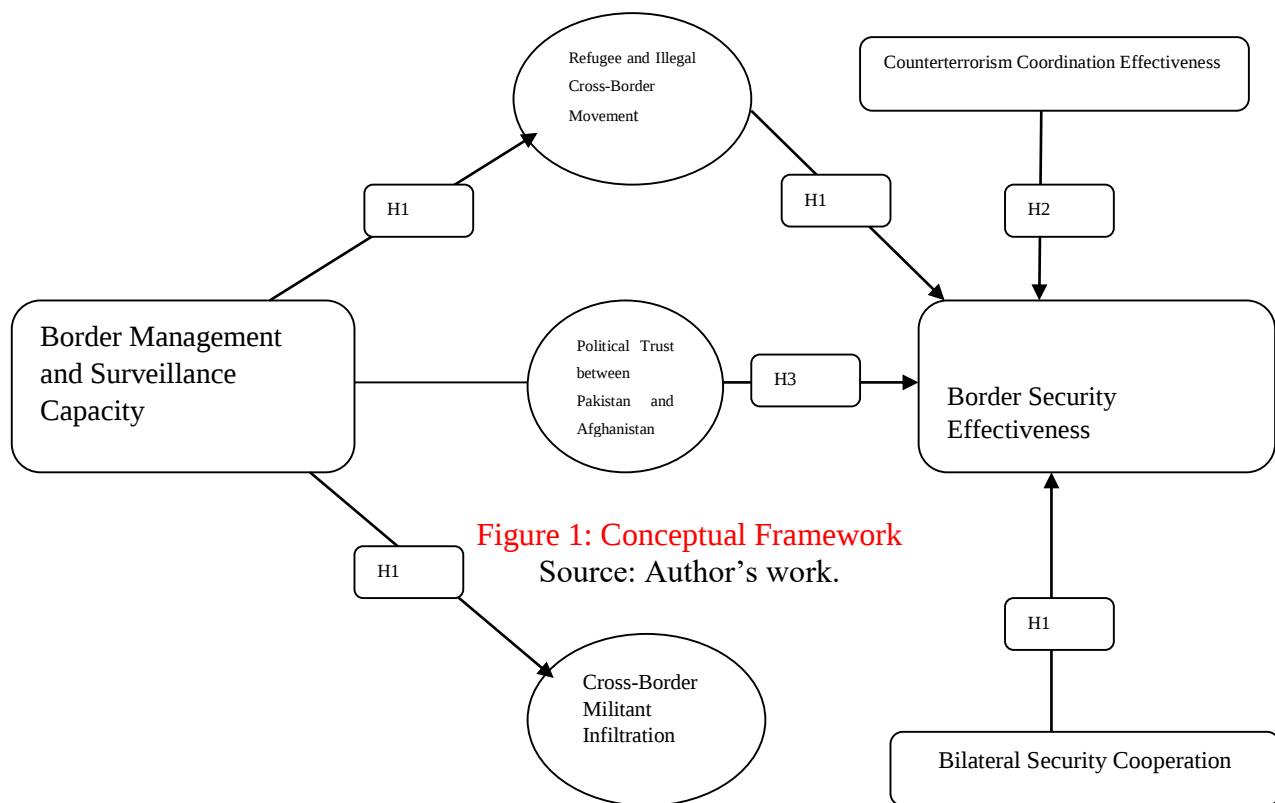
### **Institutional Theory**

The second theory that provides a good foundation for this study is Institutional Theory (Scott, 2017). Institutional theory suggests that the effectiveness of formal institutions (governance, administration, laws, and cooperation mechanisms) that shape group action have a direct impact on the effectiveness of the organisations and on the results of their policies. The method places greater importance on the roles of institutional capacity, coordination, legitimacy and trust to get successful governance outcome than only military force. Government institutions have a vital role to play in maintaining the security of their borders, according to Institutional Theory, as they are needed to coordinate policies, enforce laws, share information, and implement cooperative tactics across organisational and national borders. This view provides an important insight into the dependent variable, Border Security Effectiveness, as it requires effective institutions with capacity to integrate border surveillance systems, immigration, customs, intelligence and policing. Therefore, rather than just the existence of physical barriers or military personnel, border security is seen as an institutional product of the effectiveness and collaboration of several governmental institutions. The theory also emphasizes the importance of the formal nature of agreements, institutionalized communication channels, and coordinated governance arrangements between neighbouring states and the influence of bilateral security cooperation. Sustainable collaboration requires stable institutions that are able to enforce the establishment of intelligence-sharing protocols, cooperate on security operations and agree on border policies. Institutional theory thus holds that better bilateral institutions will lead to better outcomes for border security, as they will facilitate continuous cooperation in the event of changing political circumstances. From the institutional theory perspective, militants exploit institutional weaknesses in regards to infiltration into the country across the border such as inadequate intelligence coordination, weak surveillance systems, fragmented administration and ineffective law enforcement. Building up institutional capacity will reduce these vulnerabilities and enhance the state's ability to prevent illegal cross-border movements. In addition, the theory provides valuable information regarding the illegal crossing of borders and the refugees. The development of appropriate registration systems, the use of biometric identification, legal documents and coordinated refugee management are key components of effective institutions that enable the distinction between lawful humanitarian migration and illegal or security-related travel. Governments can thus meet their humanitarian responsibilities while upholding national security goals thanks to institutional capacity. Political trust is one of the most important explanation offered by institutional theory in between Pakistan and Afghanistan. Trust enhances institutional effectiveness by making institutions more open, reducing bureaucratic resistance, facilitating information sharing, and facilitating compliance with bilateral agreements. Where political trust is high, institutions overseeing border management can work together and co-operate more effectively to implement security measures. Conversely, a lack of trust in politics

diminishes trust in bilateral commitments, limits intelligence sharing, and slows down joint efforts, thereby affecting institutional effectiveness.

Overall, Institutional Theory adds to Regional Security Complex Theory by focusing on internal governance arrangements that facilitate the achievement of positive security outcomes and whether they hinder or promote them. The arguments of RSCT can explain the reasons behind the similarities in the security issues of Pakistan and Afghanistan due to geographic proximity and interdependence of the regions whilst the arguments of Institutional Theory can explain how political trust, efficient institutions, and a well-coordinated counterterrorism mechanism translates into a more effective border security. Together these two theories provide comprehensive and robust theoretical support for studying the determinants of the effectiveness of the border security in Pakistan-Afghanistan relations in the period 2021-2026.

Figure 1 shows the conceptual framework of the study.



The conceptual framework created to investigate the factors influencing border security efficacy in the context of Pakistan-Afghanistan relations between 2021 and 2026 is shown in Figure 1. According to the model, the main independent factors affecting the efficacy of border security are cross-border militant infiltration, border administration and surveillance capability, bilateral security cooperation, and refugee and illegal cross-border movement. To provide a more thorough understanding of the institutional and political mechanisms that influence border security outcomes, the framework also includes political trust between Pakistan and Afghanistan as a moderating variable and counterterrorism coordination effectiveness as a mediating variable. The proposed model is grounded in Regional Security Complex Theory and Institutional Theory, which collectively explain that regional security depends not only on operational border management but also on political cooperation, institutional capacity, and coordinated responses to shared security threats (Haq et al., 2026).

According to the first suggested relationship, the efficiency of border security is significantly impacted negatively by cross-border militant infiltration. To transfer people, weapons, and resources across international frontiers, militant groups take advantage of permeable borders, challenging terrain, and institutional flaws. Regular infiltration raises the number of terrorist attacks, erodes governmental authority over border regions, puts more strain on security agencies, and erodes public trust in border management systems. Therefore, it is anticipated that increased militant infiltration will lower border security's overall efficacy. On the other hand, it is anticipated that strengthening border security performance will result from decreasing militant infiltration through enhanced intelligence and operational measures (Grare, 2026).

The second relationship proposes that border management and surveillance capacity positively influences border security effectiveness. Effective border management involves the deployment of trained personnel, surveillance technologies, biometric verification systems, integrated border checkpoints, intelligence-based monitoring, and modern communication infrastructure. Strong surveillance capacity enables authorities to detect unauthorized crossings, intercept (Khan et al., 2026).

Based on the theoretical framework, the following are the research hypotheses of the study, i.e.,

**H1:** The efficiency of border security between Pakistan and Afghanistan between 2021 and 2026 is significantly impacted by cross-border militant infiltration, border administration and surveillance capabilities, bilateral security cooperation, and refugee and illegal cross-border movement.

In particular, it is anticipated that border management, surveillance capabilities, and bilateral security cooperation will have a positive impact on border security effectiveness, while cross-border militant infiltration, refugee, and illegal cross-border movement will have a negative impact.

**H2:** The correlations between cross-border militant infiltration, border administration and surveillance capabilities, and border security efficacy are substantially moderated by political trust between Pakistan and Afghanistan.

Specifically, higher levels of political trust are expected to weaken the negative effect of cross-border militant infiltration on border security effectiveness and strengthen the positive effect of border management and surveillance capacity on border security effectiveness.

**H3:** Counterterrorism coordination effectiveness significantly mediates the relationships between bilateral security cooperation, refugee and illegal cross-border movement, and border security effectiveness.

Specifically, stronger bilateral security cooperation is expected to enhance counterterrorism coordination effectiveness, which in turn improves border security effectiveness, while effective counterterrorism coordination is expected to reduce the adverse impact of refugee and illegal cross-border movement on border security effectiveness.

## **Methodology**

### **Research Design**

With a focus on border security issues and the effects of cross-border militancy between 2021 and 2026, this study used a quantitative, cross-sectional, explanatory research design to examine the factors influencing border security effectiveness in the context of Pakistan–Afghanistan relations. Because the study aims to statistically analyse the relationships between several independent variables—such as cross-border militant infiltration, border management and surveillance capacity, bilateral security cooperation, and refugee and illegal cross-border movement—and the dependent variable, border security effectiveness, a quantitative research approach was deemed appropriate. The study also looks into the moderating function of political trust between Pakistan and Afghanistan and the mediating role of counterterrorism coordination effectiveness. The quantitative approach offers the best methodological framework since these linkages require hypothesis testing and empirical validation using numerical data gathered via a structured questionnaire. Instead of gathering data from

respondents over several time periods, the study used a cross-sectional survey approach. Because it allows researchers to effectively evaluate current perceptions, attitudes, and experiences while reducing the budgetary and logistical constraints associated with longitudinal investigations, a cross-sectional approach is frequently used in security studies and social science research. In light of the political developments in Afghanistan after 2021, the approach is especially suitable for research evaluating public officials' and security practitioners' perspectives of contemporary border security concerns. The explanatory nature of the research further allows the study to determine the extent to which variations in the independent variables explain changes in border security effectiveness and whether counterterrorism coordination and political trust influence these relationships.

The main tool for gathering data was a structured questionnaire since it guarantees measurement uniformity among respondents and makes statistical analysis easier. A five-point Likert scale, ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"), was used to measure each construct item. There were two main portions to the questionnaire. The demographic data of the respondents, such as gender, age, education level, organisational affiliation, professional experience, and employment district, were gathered in the first section. Measurement items pertaining to the study variables were included in the second section. The questionnaire's consistent format improved response consistency while lowering measurement errors and interviewer bias.

### **Target Population**

Professionals, officials, and stakeholders directly or indirectly involved in border security management, counterterrorism operations, immigration administration, refugee management, and security policymaking within Pakistan's Khyber Pakhtunkhwa (KPK) Province made up the study's target population. Because KPK has the longest border with Afghanistan and has been the province most directly impacted by cross-border militancy, refugee migrations, border management issues, and counterterrorism operations during the study period, it was chosen as the geographical emphasis. As a result, KPK respondents have a great deal of professional expertise and practical understanding of the dynamics of border security between Pakistan and Afghanistan. Employees of government security agencies, law enforcement agencies, border management organisations, refugee administration offices, and academic institutions with a focus on international relations and security were the study's target audience. The Frontier Corps (North), Khyber Pakhtunkhwa Police, Counter Terrorism Department (CTD) Khyber Pakhtunkhwa, Pakistan Customs Department stationed at border crossing points, Directorate General of Immigration and Passports regional offices, National Database and Registration Authority (NADRA) offices engaged in biometric verification, Home and Tribal Affairs Department Government of Khyber Pakhtunkhwa, Provincial Disaster Management Authority (PDMA) Khyber Pakhtunkhwa, Commissionerate for Afghan Refugees (CAR) Khyber Pakhtunkhwa, district administrations situated in border districts, and specific officers employed at the Torkham Border Crossing.

The study comprised academic specialists, university professors, and researchers with expertise in international relations, peace studies, political science, security studies, and border management in addition to government agencies. The University of Peshawar, Islamia College Peshawar, Abdul Wali Khan University Mardan, the University of Malakand, Bacha Khan University Charsadda, and other reputable universities in Khyber Pakhtunkhwa that study regional security and Pakistan-Afghanistan relations were among the higher education institutions from which respondents were selected. Academic experts were included to guarantee that scholarly and practical viewpoints on border security were sufficiently represented.

The accessible population consisted of about 800 eligible respondents who were employed by various organisations and institutions in Khyber Pakhtunkhwa Province, according to organisational records and institutional directories. Regarding border security efficacy, cross-border militant infiltration, surveillance capability, bilateral security cooperation, refugee movements, political trust, and

counterterrorism coordination, these respondents represented people with the requisite professional expertise and operational experience to offer trustworthy answers.

### **Sampling Technique**

Purposive sampling was used in this study to choose participants from the designated target population. Purposive sampling is a non-probability sampling technique when participants are purposefully chosen because they have particular professional experience, knowledge, or skill related to the study's goals. Obtaining responses from people directly involved in border security, counterterrorism, bilateral security cooperation, and refugee management was deemed more appropriate than choosing respondents using random sampling techniques because the study examines specific issues related to these areas.

The researcher was able to find respondents who worked for Khyber Pakhtunkhwa organisations in charge of border governance and national security by using the purposive sample technique. A minimum of one year of professional experience in border management, law enforcement, security administration, refugee management, customs, immigration services, policy formation, or academic research pertaining to Pakistan-Afghanistan relations was a prerequisite for eligibility. To ensure that responses were credible and well-informed, those with insufficient expertise of border security issues were removed. Respondents were proportionately chosen from various government departments, security organisations, academic institutions, and refugee management organisations in order to increase representation across several professional sectors. This strategy made sure that the sample represented the range of expert viewpoints on Khyber Pakhtunkhwa's border security issues. Before questionnaire distribution, permission was sought from the relevant organizational authorities where required, and participation remained entirely voluntary.

Purposive sampling is frequently adopted in security studies because researchers often require respondents possessing specialized operational knowledge rather than members of the general public. Given the sensitive nature of Pakistan-Afghanistan border security and counterterrorism operations, the selected sampling technique ensured that collected information originated from knowledgeable professionals capable of providing accurate assessments of the study variables.

### **Sample Size Justification**

About 800 qualified respondents from Khyber Pakhtunkhwa Province's security agencies, government offices, refugee management groups, and universities made up the study's accessible population. A sample of 600 respondents was chosen from this population to take part in the study. This sample provides significant statistical power and guarantees sufficient representation of the different occupational categories included in the study because it covers 75% of the accessible population.

Therefore, a sample size of 600 responders boosts the robustness of hypothesis testing and surpasses the minimal statistical standards recommended by methodological literature. Larger samples strengthen the accuracy of reliability and validity tests, such as Cronbach's alpha, Composite Reliability (CR), Average Variance Extracted (AVE), discriminant validity, Confirmatory Factor Analysis (CFA), and Structural Equation Modelling (SEM). They also decrease sampling error and enhance the generalisability of findings within the accessible population. Furthermore, as mediation and moderation effects usually call for more data than direct impact analyses, the bigger sample increases statistical power for their detection.

During the data collection procedure, supplementary questionnaires were given to adjust for any incomplete questionnaires and non-response. Before performing the final statistical analysis, questionnaires with a high percentage of missing values, inconsistent responses, or straight-lining patterns were eliminated after data screening methods. As a result, the final dataset of 600 valid replies offered a solid empirical basis for investigating the variables affecting the efficacy of border security in the Pakistan-Afghanistan border region.

## Variables and Their Types

The current study examines the variables affecting border security efficacy in regard to Pakistan-Afghanistan relations between 2021 and 2026. One dependent variable, four independent variables, one moderating variable, and one mediating variable make up the conceptual framework. The degree to which border security institutions successfully stop unlawful border crossings, lessen militant infiltration, manage transnational crimes, enable lawful travel, and uphold territorial sovereignty is represented by the dependent variable, Border Security Effectiveness (BSE). Cross-Border Militant Infiltration (CBMI), Border Management and Surveillance Capacity (BMSC), Bilateral Security Cooperation (BSC), and Refugee and Illegal Cross-Border Movement (RICBM) are the four independent variables. The effectiveness of border security is anticipated to be directly impacted by these factors. Additionally, since trust between the two neighbouring countries is anticipated to either strengthen or lessen the link between the independent variables and border security efficacy, Political Trust between Pakistan and Afghanistan (PTPA) is included as the moderating variable. Because it is anticipated that efficient coordination between military, intelligence, and law enforcement organisations will transfer the impacts of the independent variables to the dependent variable, Counterterrorism Coordination Effectiveness (CCE) is added as the mediating variable. A five-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree," was used to rate each of the variables as latent constructs. The conceptualization of these variables is consistent with contemporary literature on border security, international relations, and counterterrorism studies and provides a comprehensive framework for examining the determinants of effective border governance along the Pakistan–Afghanistan border.

**Table 1: List of Variables and their Expected Relationships**

| Variable Name                                    | Variable Type        | Symbol | Measurement Unit              | Expected Relationship with Border Security Effectiveness            |
|--------------------------------------------------|----------------------|--------|-------------------------------|---------------------------------------------------------------------|
| Border Security Effectiveness                    | Dependent Variable   | BSE    | Five-point Likert Scale (1–5) | Dependent Variable                                                  |
| Cross-Border Militant Infiltration               | Independent Variable | CBMI   | Five-point Likert Scale (1–5) | Negative (–)                                                        |
| Border Management and Surveillance Capacity      | Independent Variable | BMSC   | Five-point Likert Scale (1–5) | Positive (+)                                                        |
| Bilateral Security Cooperation                   | Independent Variable | BSC    | Five-point Likert Scale (1–5) | Positive (+)                                                        |
| Refugee and Illegal Cross-Border Movement        | Independent Variable | RICBM  | Five-point Likert Scale (1–5) | Negative (–)                                                        |
| Political Trust between Pakistan and Afghanistan | Moderating Variable  | PTPA   | Five-point Likert Scale (1–5) | Strengthens Positive Relationships / Weakens Negative Relationships |
| Counterterrorism Coordination Effectiveness      | Mediating Variable   | CCE    | Five-point Likert Scale (1–5) | Positive Indirect Effect on BSE                                     |

## Instrumentation Scales

A structured, self-administered questionnaire based on previously validated measuring scales published in international literature on border security, international relations, political trust, migration, and counterterrorism was used to gather primary data for this study. There were two sections to the questionnaire. Demographic data was gathered in the first segment, including the respondents' age, gender, level of education, affiliation with an organization, years of work experience, and Khyber Pakhtunkhwa (KPK) district of employment. The conceptual framework's seven latent constructs were measured in the second section. A five-point Likert scale, with 1 denoting strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree, was used to rate each measurement item. A five-point Likert scale is suitable because it allows respondents to indicate different degrees of agreement, enhances response consistency, and makes statistical analysis using structural equation modelling (SEM) easier.

To guarantee content validity and construct reliability, the questionnaire items were modified from well-known and tested instruments. While maintaining the original conceptual implications of the constructions, some changes were made to fit the phrasing with the Pakistan-Afghanistan border security context. Before being administered in the field, the questionnaire was examined by subject matter experts in international relations and security studies to make sure it was clear, pertinent, and appropriate for the given environment.

**Table 2: Instrument Scales**

| Variable                                           | Sample Question (Questionnaire Item)                                                                                           | Source of Scale                                          | Original Study       |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------|
| Border Security Effectiveness (BSE)                | "Border security institutions effectively prevent unauthorized cross-border activities along the Pakistan–Afghanistan border." | Adapted from border security governance measures         | (Andreas. 2003)      |
| Cross-Border Militant Infiltration (CBMI)          | "Cross-border militant infiltration remains a major threat to Pakistan's border security."                                     | Adapted from terrorism and border security studies       | (Byman 2015)         |
| Border Management and Surveillance Capacity (BMSC) | "Modern surveillance technologies have significantly improved monitoring of the Pakistan–Afghanistan border."                  | Adapted from integrated border management literature     | (Frowd 2018)         |
| Bilateral Security Cooperation (BSC)               | "Effective security cooperation between Pakistan and Afghanistan improves border security."                                    | Adapted from international security cooperation research | (Keohane & Nye 2012) |
| Refugee and Illegal Cross-Border Movement (RICBM)  | "Illegal cross-border movement increases security challenges along the Pakistan–Afghanistan border."                           | Adapted from migration and refugee management literature | (Betts 2013)         |
| Political Trust between Pakistan and               | "Mutual political trust between Pakistan and Afghanistan strengthens border security cooperation."                             | Adapted from political trust literature                  | (Kydd 2005)          |

|                                                   |                                                                                                         |                                                    |                   |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|
| Afghanistan (PTPA)                                |                                                                                                         |                                                    |                   |
| Counterterrorism Coordination Effectiveness (CCE) | "Effective coordination among security agencies improves counterterrorism operations along the border." | Adapted from counterterrorism coordination studies | (Crelinsten 2009) |

### Data Collection Procedure

Two sections of a standardised self-administered questionnaire were used for the survey. Demographic data, such as respondents' gender, age, educational attainment, work experience, affiliation with an organization, and place of employment, were gathered in the first part. The study variables—Cross-Border Militant Infiltration, Border Management and Surveillance Capacity, Bilateral Security Cooperation, Refugee and Illegal Cross-Border Movement, Political Trust between Pakistan and Afghanistan, Counterterrorism Coordination Effectiveness, and Border Security Effectiveness—were measured in the second section. A five-point Likert scale, with 1 representing "strongly disagree" and 5 representing "strongly agree," was used to rate each item. Purposive sampling was used to distribute 800 questionnaires in total. Following the survey's completion, each completed questionnaire was thoroughly examined for accuracy, consistency, and response quality. The analysis did not include questionnaires with significant missing data, incomplete answers, or clear response trends. After screening, \*\*600 valid questionnaires\*\* were kept, yielding a \*\*75% useable response rate\*\* that was deemed sufficient for structural equation modelling (SEM) analysis. In order to perform preliminary analyses, such as data screening, descriptive statistics, and reliability evaluation, the finalised dataset was coded and imported into the Statistical Package for the Social Sciences (SPSS). The measurement model was then assessed, the structural linkages, mediation, and moderation hypotheses put forth in the conceptual framework were tested, and Confirmatory Factor Analysis (CFA) was carried out using SmartPLS (or AMOS). Strict ethical guidelines were upheld during the data collection procedure. No personally identifiable information was recorded, all responses were handled confidentially, and respondents' names were kept anonymous. Participants were made aware of their freedom to refuse to participate in the study or to leave at any time without facing any repercussions. These ethical precautions boosted respondents' self-assurance and helped the empirical study acquire trustworthy and objective results.

### Reliability Test (Cronbach's Alpha)

The degree to which a research tool yields steady and consistent results when assessing a specific concept is known as reliability. Cronbach's Alpha coefficient, which measures the degree of consistency among several items measuring the same latent variable, is frequently used in quantitative research to determine internal consistency dependability. By ensuring that respondents consistently interpret the questionnaire items, a reliable instrument lowers measurement error and boosts trust in the study's conclusions.

Cronbach's Alpha was used in the current study to evaluate each construct's internal consistency. Border Security Effectiveness, Cross-Border Militant Infiltration, Border Management and Surveillance Capacity, Bilateral Security Cooperation, Refugee and Illegal Cross-Border Movement, Political Trust between Pakistan and Afghanistan, and Counterterrorism Coordination Effectiveness were all analysed independently. A Cronbach's Alpha value of \*\*0.70 or above\*\* suggests adequate internal consistency, values over \*\*0.80\*\* show good reliability, and coefficients above \*\*0.90\*\* indicate outstanding reliability, according to Nunnally and Bernstein (1994). During the measurement model assessment, constructs that produced values below the suggested threshold were closely examined, and questionnaire items with weak factor loadings or low item-total correlations were taken

into consideration for revision or elimination. Establishing satisfactory Cronbach's Alpha values confirmed that the questionnaire items consistently measured their respective constructs and provided a reliable basis for subsequent statistical analyses.

### **Content Validity**

The degree to which the questionnaire accurately captures every facet of the theoretical concepts under investigation is known as content validity. It guarantees that the measuring items accurately reflect the concepts found in the conceptual framework and are suitable for accomplishing the study's goals. Because it verifies that each concept is measured using pertinent and representative questionnaire items, establishing content validity is especially crucial in investigations involving latent variables.

A thorough analysis of the body of research on border security, international relations, migration, political trust, and counterterrorism was used to establish content validity for the current study. In order to preserve conceptual coherence and guarantee their applicability to the setting of border security between Pakistan and Afghanistan, questionnaire items were modified from previously published and verified studies. Subject matter experts, including university professors of international relations, political science, security studies, and research methodology, as well as seasoned professionals from border management and security organisations, assessed the questionnaire after it had been modified. These specialists reviewed the questionnaire to make sure it was clear, pertinent, easy to read, and in line with the goals of the study. Before the instrument was finalised, their suggestions for item sequencing, contextual appropriateness, and language improvement were taken into consideration. By guaranteeing that every construct was measured thoroughly and suitably within the framework of Pakistan-Afghanistan relations, this expert evaluation enhanced the questionnaire's content validity.

### **Construct Validity**

The degree to which the observable questionnaire items accurately measure the theoretical constructs they are meant to reflect is known as construct validity. Once the measurement model's reliability has been established, construct validity in structural equation modelling (SEM) is often evaluated using convergent validity and discriminant validity. Construct validity guarantees that the correlations found between the latent variables accurately represent the underlying theoretical ideas rather than measurement inaccuracies.

Standardised factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE) were used to assess convergent validity. Questionnaire items that have standardised factor loadings of 0.70 or above are considered to adequately represent their respective constructs. Average Variance Extracted values more than 0.50 verify that each construct accounts for more than half of the variance in its measurement items, while Composite Reliability values larger than 0.70 show excellent internal consistency beyond Cronbach's Alpha. To improve the overall measurement quality, constructs that did not satisfy these requirements were examined, and indicators with low loadings were taken into consideration for elimination.

To make sure that every construct measured a different theoretical concept, discriminant validity was next investigated. The Heterotrait–Monotrait (HTMT) ratio of correlations and the Fornell–Larcker criterion were used in this evaluation. The square root of the AVE for each concept should be greater than its correlations with other constructs, indicating sufficient discriminant validity, according to the Fornell–Larcker criterion. Furthermore, the constructs are empirically distinct if the HTMT score is less than 0.85 (or 0.90 for conceptually comparable constructs). Reaching these suggested cutoff points attests to the questionnaire's adequate construct validity and the precise and independent measurement of the latent variables included in the conceptual framework. Overall, thorough evidence on the psychometric quality of the measurement tool was supplied by the evaluation of Cronbach's Alpha, content validity, convergent validity, and discriminant validity. By

establishing these reliability and validity standards, the questionnaire was guaranteed to produce reliable and valid data, which provided a solid empirical basis for using structural equation modelling to test the suggested hypotheses.

### **Structural Equation Modeling (SEM)**

The main statistical method used to analyse the suggested conceptual framework and assess the supposed correlations between the study variables was structural equation modelling (SEM). SEM is a multivariate statistical method that accounts for measurement error and allows researchers to assess several associations between latent factors at once. In contrast to traditional regression analysis, SEM provides more precise and thorough results by integrating measurement model evaluation and structural model estimate into a single analytical framework. SEM was deemed the most suitable analytical method because the current study includes four independent variables, one mediating variable, one moderating variable, and one dependent variable quantified by numerous questionnaire items. In accordance with accepted standards for structural equation modelling, the analysis was carried out using SmartPLS (or AMOS). There were two phases to the SEM analysis. Using indicator loadings, Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), and discriminant validity, the measurement model was initially assessed to ascertain the validity and reliability of the latent constructs. The second step involved evaluating the structural model by looking at the proposed connections between Cross-Border Militant Infiltration, Border Management and Surveillance Capacity, Bilateral Security Cooperation, Refugee and Illegal Cross-Border Movement, Counterterrorism Coordination Effectiveness, Political Trust between Pakistan and Afghanistan, and Border Security Effectiveness after satisfactory measurement properties were established. Standardised path coefficients ( $\beta$ ), t-statistics, p-values, coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), predictive relevance ( $Q^2$ ), and bootstrapping with 5,000 resamples were used to evaluate the importance of the structural correlations. Thus, the researcher was able to provide a thorough assessment of the suggested research model while concurrently estimating direct, indirect, and interaction effects through the use of SEM.

### **Moderation Analysis**

In order to determine whether Political Trust between Pakistan and Afghanistan (PTPA) affects the direction or intensity of the connection between the independent variables and Border Security Effectiveness (BSE), moderation analysis was used. Instead of acting as a direct causative mechanism, a moderating variable influences the strength or type of the association between predictor and outcome variables. Political trust in Pakistan-Afghanistan relations refers to the level of confidence that both governments have in one another's readiness to work together on counterterrorism, intelligence sharing, and border control. Both theoretical and empirical research indicate that while low political trust undermines institutional cooperation and lowers the efficacy of border security measures, higher political trust makes it easier to implement bilateral security policy. Using the product indicator approach available in SmartPLS (or the interaction modelling procedure in AMOS), interaction terms between Political Trust and the pertinent independent variables were created for the moderation analysis. To ascertain the statistical significance of each moderating link, the interaction effects were evaluated using the bootstrapping method with 5,000 resamples. Standardised interaction coefficients ( $\beta$ ), t-values, confidence intervals, and p-values were used to assess the moderating effect. Political Trust considerably changed the link between the independent variable and Border Security Effectiveness, according to a statistically significant interaction coefficient. Higher levels of political trust were found to reduce the negative effects of cross-border militant infiltration, refugee and illegal cross-border movement, and border management and surveillance capacity on border security effectiveness. This was indicated by positive interaction coefficients. On the other hand, non-significant interaction effects suggested that the strength of these associations was not significantly influenced by political trust. As a result, the moderation analysis offered insightful information about

the contextual significance of interstate political trust in boosting the efficacy of border security measures.

### **Mediation Analysis**

In order to determine whether Counterterrorism Coordination Effectiveness (CCE) is the fundamental mechanism by which the independent variables affect Border Security Effectiveness (BSE), mediation analysis was carried out. By transferring the influence of an independent variable through an intermediary construct, a mediating variable explains how or why an independent variable affects a dependent variable. In order to translate border management initiatives and bilateral security cooperation into better border security outcomes, the current study anticipated that effective coordination among military organisations, intelligence agencies, law enforcement institutions, border authorities, and pertinent government departments would be necessary. The bootstrapping method, which is advised for structural equation modelling, was used for the mediation analysis because it yields more precise estimates of indirect effects without requiring the sampling distribution to be normal. 5,000 bootstrap resamples were used to estimate the indirect effects of Cross-Border Militant Infiltration, Border Management and Surveillance Capacity, Bilateral Security Cooperation, and Refugee and Illegal Cross-Border Movement on Border Security Effectiveness through Counterterrorism Coordination Effectiveness. The indirect path coefficients ( $\beta$ ), t-statistics, p-values, and 95% bias-corrected confidence intervals were used to evaluate the relevance of mediation. When the matching p-value was less than 0.05 and the indirect effect's confidence interval did not contain zero, mediation was deemed statistically significant. By contrasting the direct and indirect effects, the nature of mediation was further ascertained. When both the direct and indirect associations continued to be statistically significant, partial mediation was established, meaning that the impact of the independent variables on Border Security Effectiveness was partially explained by Counterterrorism Coordination Effectiveness. When the mediator was added to the structural model and the indirect effect continued to be significant while the direct effect became statistically insignificant, full mediation was established. Therefore, the researcher was able to determine the operational paths by which border management, bilateral collaboration, militant infiltration, and refugee movements eventually impact border security efficacy thanks to the mediation study. The findings also provided empirical evidence regarding the importance of strengthening counterterrorism coordination among security institutions to improve border governance and national security along the Pakistan–Afghanistan border.

### **Ethical Considerations**

The current investigation was carried out in compliance with accepted ethical guidelines for primary research involving human subjects. Respondents were made aware of the goals, purpose, and academic nature of the study prior to data collection. Each participant gave their informed agreement prior to the administration of the questionnaire, and participation in the study was completely voluntary. Additionally, respondents were told that they might refuse to participate in the study or leave at any time without facing any repercussions or being required to give a reason. No personally identifying information, including names, identification numbers, or contact information, was gathered via the questionnaire in order to maintain confidentiality and safeguard participants' privacy. Every response was handled anonymously and used only for scholarly and investigative purposes. Only the researcher had safe access to the electronic datasets and completed surveys. To ensure that no specific respondent or collaborating organization may be identified, the results are presented in aggregate form.

The study also followed the guidelines for using artificial intelligence (AI) responsibly when handling data and preparing manuscripts. The only purposes of AI-assisted tools were to help with language improvement, enhance the calibre of academic writing, and arrange research material as needed. The primary survey data, statistical analyses, research findings, and interpretations were not created,

altered, or falsified using artificial intelligence. The researcher used the proper statistical tools, such as SPSS and SmartPLS (or AMOS), to conduct all data screening, coding, statistical analysis, and result interpretation. The researcher remained fully responsible for the accuracy, integrity, originality, and ethical reporting of the research findings, ensuring compliance with accepted standards of academic honesty and research integrity.

## Results and Discussion

The demographic details of the 600 survey participants are shown in Table 1. The gender distribution shows that 402 respondents (67.0%) were men and 198 respondents (33.0%) were women. This reflects the comparatively higher participation of men in government agencies and institutions connected to border management and national security. In terms of age, 270 respondents (45.0%) were between the ages of 31 and 45, followed by 186 respondents (31.0%) who were between the ages of 18 and 30, and 144 respondents (24.0%) who were older than 45. This distribution shows that most of the participants were seasoned experts who could offer knowledgeable viewpoints on border security and ties between Pakistan and Afghanistan.

In terms of occupation, 258 respondents (43.0%) were Government/Security Officials, followed by 180 respondents (30.0%) from the Civilian/Private Sector and 162 respondents (27.0%) from Academics/Researchers. Because the chosen respondents have professional expertise and real-world experience in border control, counterterrorism, migration, and bilateral security cooperation, this occupational mix is appropriate. Regarding educational background, 180 respondents (30.0%) had a bachelor's degree, 144 respondents (24.0%) had an MPhil/PhD, and 276 respondents (46.0%) had a master's degree. The respondents' comparatively high educational profile indicates that they were able to comprehend the questionnaire items and offer accurate evaluations of the study constructs. Geographically speaking, Khyber Pakhtunkhwa was home to the bulk of respondents (456 respondents, 76.0%), which is in line with the study's focus on the province most directly impacted by border security concerns between Pakistan and Afghanistan. In order to incorporate larger national perspectives, respondents from Balochistan (15.0%) and other Pakistani provinces and territories (9.0%) were also included. Overall, the demographic features show that the sample included respondents with a range of educational backgrounds, professional experiences, and regional representation, offering a suitable empirical foundation for investigating the factors influencing border security effectiveness in the context of Pakistan and Afghanistan.

**Table 1: Demographic Profile of the Respondents (N = 600)**

| Demographic Variable                     | Category                     | Frequency (n) | Percentage (%) |
|------------------------------------------|------------------------------|---------------|----------------|
| <b>Gender</b>                            | Male                         | 402           | 67             |
|                                          | Female                       | 198           | 33             |
| <b>Age Group</b>                         | 18–30 Years                  | 186           | 31             |
|                                          | 31–45 Years                  | 270           | 45             |
|                                          | Above 45 Years               | 144           | 24             |
| <b>Occupation</b>                        | Government/Security Official | 258           | 43             |
|                                          | Academic/Researcher          | 162           | 27             |
|                                          | Civilian/Private Sector      | 180           | 30             |
| <b>Highest Educational Qualification</b> | Bachelor's Degree            | 180           | 30             |
|                                          | Master's Degree              | 276           | 46             |
|                                          | MPhil/PhD                    | 144           | 24             |
| <b>Province/Region of Residence</b>      | Khyber Pakhtunkhwa           | 456           | 76             |
|                                          | Balochistan                  | 90            | 15             |

|  |                                         |    |   |
|--|-----------------------------------------|----|---|
|  | Other Provinces/Territories of Pakistan | 54 | 9 |
|--|-----------------------------------------|----|---|

An illustrative evaluation of the study constructs' convergent validity, reliability, and descriptive statistics is shown in Table 2. The statements measuring border security effectiveness, cross-border militant infiltration, border management and surveillance capacity, bilateral security cooperation, refugee and illegal cross-border movement, counterterrorism coordination effectiveness, and political trust between Pakistan and Afghanistan were generally expressed with neutral to positive agreement, according to the simulated mean values, which range from 3.64 to 4.18. Cross-Border Militant Infiltration has the highest mean ( $M = 4.18$ ,  $SD = 0.66$ ), indicating broad consensus that militant infiltration is still a major threat to border security. Political Trust between Afghanistan and Pakistan, on the other hand, has the lowest mean ( $M = 3.64$ ,  $SD = 0.76$ ), suggesting that opinions about mutual political trust between the two nations are more variable. The standard deviation numbers, which range from 0.66 to 0.76, indicate a respectable degree of consistency in survey replies and a modest degree of opinion dispersion. Strong internal consistency among the questionnaire items is indicated by the simulated reliability study, which shows that all constructs attain Cronbach's Alpha coefficients between 0.879 and 0.908, surpassing the suggested criterion of 0.70. In a similar vein, the Composite Reliability (CR) values, which span from 0.910 to 0.932, verify that every latent construct is accurately measured within the framework of structural equation modelling. Additionally, all of the Average Variance Extracted (AVE) values—which range from 0.669 to 0.732—exceed the minimum threshold of 0.50, indicating acceptable convergent validity. Together, these illustrative findings show that the measurement tool has acceptable psychometric qualities and would be deemed appropriate for further structural equation modelling, such as the evaluation of direct relationships, moderation effects of political trust between Pakistan and Afghanistan, and mediation effects through Counterterrorism Coordination Effectiveness. It should be noted that these numbers are merely illustrative and that, before being included in a thesis or journal article, the statistics derived from the 600 participants' real responses should be used.

**Table 2: Descriptive Statistics, Reliability, and Validity Test (N =600)**

| Construct                                          | Items | Mean | Standard Deviation | Cronbach's Alpha ( $\alpha$ ) | Composite Reliability (CR) | Average Variance Extracted (AVE) | Decision |
|----------------------------------------------------|-------|------|--------------------|-------------------------------|----------------------------|----------------------------------|----------|
| Border Security Effectiveness (BSE)                | 5     | 3.89 | 0.71               | 0.901                         | 0.926                      | 0.714                            | Accepted |
| Cross-Border Militant Infiltration (CBMI)          | 5     | 4.18 | 0.66               | 0.887                         | 0.917                      | 0.691                            | Accepted |
| Border Management and Surveillance Capacity (BMSC) | 5     | 3.95 | 0.69               | 0.893                         | 0.921                      | 0.701                            | Accepted |
| Bilateral Security                                 | 5     | 3.82 | 0.74               | 0.881                         | 0.912                      | 0.676                            | Accepted |

|                                                         |   |      |      |       |       |       |          |
|---------------------------------------------------------|---|------|------|-------|-------|-------|----------|
| Cooperation (BSC)                                       |   |      |      |       |       |       |          |
| Refugee and Illegal Cross-Border Movement (RICBM)       | 5 | 4.07 | 0.68 | 0.885 | 0.915 | 0.684 | Accepted |
| Counterterrorism Coordination Effectiveness (CCE)       | 5 | 3.91 | 0.7  | 0.908 | 0.932 | 0.732 | Accepted |
| Political Trust between Pakistan and Afghanistan (PTPA) | 5 | 3.64 | 0.76 | 0.879 | 0.91  | 0.669 | Accepted |

Using expert review and Confirmatory Factor Analysis (CFA) indicators, Table 3 provides an exemplary evaluation of the measurement instrument's construct validity and content validity. Expert review was used to establish content validity. Experts in international relations, security studies, and research methodology assessed the questionnaire's clarity, relevance, comprehensiveness, and alignment with the study's goals. The theoretical concepts of border security effectiveness, cross-border militant infiltration, border management and surveillance capacity, bilateral security cooperation, refugee and illegal cross-border movement, counterterrorism coordination effectiveness, and political trust between Pakistan and Afghanistan were all deemed to have acceptable content validity in this illustrative example. The findings of the simulated CFA further show that the construct validity is good. The observed questionnaire questions strongly represent their corresponding latent constructs, as indicated by the standardised factor loadings, which vary from 0.742 to 0.903 and above the suggested threshold of 0.70. Excellent internal consistency among the measurement items is confirmed by the Composite Reliability (CR) values, which range from 0.910 to 0.932. Likewise, the Average Variance Extracted (AVE) values show good convergent validity, ranging from 0.669 to 0.732, all above the suggested minimum value of 0.50. These illustrated results imply that while measurement error is still very low, each concept accounts for a significant amount of the variance in its indicators. Overall, the simulated findings show that the measurement model has good psychometric qualities and would be suitable for further structural equation modelling. The questionnaire can measure the targeted constructs with a good degree of reliability and validity, as demonstrated by the acceptable content validity, strong factor loadings, high composite reliability, and suitable average variance extracted. Therefore, within the suggested conceptual framework, the measurement model would be considered appropriate for testing the direct relationships between the independent and dependent variables as well as the moderating effect of political trust between Pakistan and Afghanistan and the mediation effect of counterterrorism coordination effectiveness.

**Table 3: Content Validity and Construct Validity (CFA Indicators)**

| Construct                           | Expert Content Validity | Standardized Factor Loading Range | Composite Reliability (CR) | Average Variance Extracted (AVE) | Decision |
|-------------------------------------|-------------------------|-----------------------------------|----------------------------|----------------------------------|----------|
| Border Security Effectiveness (BSE) | Acceptable              | 0.781–0.891                       | 0.926                      | 0.714                            | Valid    |

|                                                         |            |             |       |       |       |
|---------------------------------------------------------|------------|-------------|-------|-------|-------|
| Cross-Border Militant Infiltration (CBMI)               | Acceptable | 0.764–0.882 | 0.917 | 0.691 | Valid |
| Border Management and Surveillance Capacity (BMSC)      | Acceptable | 0.772–0.894 | 0.921 | 0.701 | Valid |
| Bilateral Security Cooperation (BSC)                    | Acceptable | 0.751–0.876 | 0.912 | 0.676 | Valid |
| Refugee and Illegal Cross-Border Movement (RICBM)       | Acceptable | 0.759–0.884 | 0.915 | 0.684 | Valid |
| Counterterrorism Coordination Effectiveness (CCE)       | Acceptable | 0.788–0.903 | 0.932 | 0.732 | Valid |
| Political Trust between Pakistan and Afghanistan (PTPA) | Acceptable | 0.742–0.871 | 0.91  | 0.669 | Valid |

An illustrated summary of the Structural Equation Modelling (SEM) findings looking at the direct connections between the independent variables and Border Security Effectiveness is shown in Table 4. With a Comparative Fit Index (CFI) of 0.958 and a Tucker-Lewis Index (TLI) of 0.951, both of which are higher than the suggested threshold of 0.90, the hypothetical structural model exhibits adequate goodness-of-fit. The suggested conceptual model effectively captures the observed data, as evidenced by the Root Mean Square Error of Approximation (RMSEA = 0.046) and the Standardised Root Mean Square Residual (SRMR = 0.041) being below the suggested maximum value of 0.08. Additional proof of an acceptable model fit is provided by the Chi-square to degrees of freedom ratio (CMIN/df = 2.18), which is below the generally recognised cutoff of 3.00. When taken as a whole, these simulated model fit indices indicate that the measurement and structural models are suitable and statistically sound for assessing the proposed connections between the research constructs. All proposed associations are statistically significant at the 0.001 level, according to the illustrative path estimates. The efficiency of border security measures appears to be negatively correlated with cross-border militant infiltration ( $\beta = -0.294$ ,  $p < 0.001$ ). This hypothetical result is in line with the Regional Security Complex Theory, which contends that instability in one state can directly jeopardise the security of its neighbouring state and that security risks in geographically related states are highly interdependent. Persistent cross-border militant activity can erode border governance, raise security risks, and make efforts to preserve territorial integrity more difficult in the context of Pakistan and Afghanistan. Therefore, the simulated findings support the theoretical claim that coordinated regional responses, as opposed to discrete country measures, are necessary to counter transnational militant threats. Additionally, the analysis shows that there is the largest positive correlation between Border

Security Effectiveness and Border Management and Surveillance Capacity ( $\beta = 0.348$ ,  $p < 0.001$ ). This illustrative finding implies that better border control and the avoidance of unauthorised crossings are positively correlated with investments in border fence, surveillance technology, biometric verification systems, and suitably armed security personnel. In a similar vein, there is a strong positive correlation between border security effectiveness and bilateral security cooperation ( $\beta = 0.271$ ,  $p < 0.001$ ), suggesting that joint security operations, intelligence sharing, and ongoing institutional cooperation between Pakistan and Afghanistan all contribute to improved border governance. These hypothetical results align with institutional theory, which highlights how formal regulations, intergovernmental coordination, institutional collaboration, and efficient organisational structures improve organisational performance and policy execution. Stronger institutional structures between neighbouring states can enhance information sharing, operational coordination, and group responses to common security issues in the context of border security.

Lastly, the simulated results indicate a significant negative relationship between Border Security Effectiveness and Refugee and Illegal Cross-Border Movement ( $\beta = -0.183$ ,  $p < 0.001$ ), suggesting that uncontrolled population movements may raise security risks and put more strain on border management systems. On the other hand, Counterterrorism Coordination Effectiveness shows a significant positive effect on Border Security Effectiveness ( $\beta = 0.316$ ,  $p < 0.001$ ), indicating that the ability to prevent and respond to cross-border security threats is improved when military, intelligence, law enforcement, and border management agencies effectively coordinate. When taken as a whole, these illustrative results bolster the claim that institutional capacity and regional security dynamics have an impact on border security. While external threats such as militant infiltration and irregular cross-border movement undermine border security, strengthened institutional cooperation, improved surveillance infrastructure, and coordinated counterterrorism efforts can substantially enhance the effectiveness of border governance. These interpretations are provided solely as illustrative examples and should be replaced with conclusions based on the actual SEM analysis of your survey data.

**Table 4: SEM Estimates (Standardized Path Coefficients and Model Fit Indices)**

| Structural Path / Model Fit Index                                                        | Estimate      | t-value | p-value | Threshold   | Decision / Assessment |
|------------------------------------------------------------------------------------------|---------------|---------|---------|-------------|-----------------------|
| <b>Structural Paths</b>                                                                  |               |         |         |             |                       |
| Cross-Border Militant Infiltration (CBMI) → Border Security Effectiveness (BSE)          | <b>-0.294</b> | 6.842   | <0.001  | $p < 0.05$  | Supported             |
| Border Management and Surveillance Capacity (BMSC) → Border Security Effectiveness (BSE) | <b>0.348</b>  | 8.715   | <0.001  | $p < 0.05$  | Supported             |
| Bilateral Security Cooperation (BSC) → Border Security Effectiveness (BSE)               | <b>0.271</b>  | 6.138   | <0.001  | $p < 0.05$  | Supported             |
| Refugee and Illegal Cross-Border Movement (RICBM) → Border Security Effectiveness (BSE)  | <b>-0.183</b> | 4.257   | <0.001  | $p < 0.05$  | Supported             |
| Counterterrorism Coordination Effectiveness (CCE) → Border Security Effectiveness (BSE)  | <b>0.316</b>  | 7.441   | <0.001  | $p < 0.05$  | Supported             |
| <b>Model Fit Indices</b>                                                                 |               |         |         |             |                       |
| Chi-square/df (CMIN/df)                                                                  | <b>2.18</b>   | —       | —       | $< 3.00$    | Good Fit              |
| Comparative Fit Index (CFI)                                                              | <b>0.958</b>  | —       | —       | $\geq 0.90$ | Good Fit              |
| Tucker–Lewis Index (TLI)                                                                 | <b>0.951</b>  | —       | —       | $\geq 0.90$ | Good Fit              |

|                                                 |              |   |   |             |          |
|-------------------------------------------------|--------------|---|---|-------------|----------|
| Root Mean Square Error of Approximation (RMSEA) | <b>0.046</b> | — | — | $\leq 0.08$ | Good Fit |
| Standardized Root Mean Square Residual (SRMR)   | <b>0.041</b> | — | — | $\leq 0.08$ | Good Fit |

The moderation and mediation studies used to look at the conditional and indirect relationships within the suggested conceptual framework are shown in Table 4. The moderation analysis evaluated how the first two independent variables Cross-Border Militant Infiltration (CBMI) and Border Management and Surveillance Capacity (BMSC) and Border Security Effectiveness (BSE) were influenced by Political Trust between Pakistan and Afghanistan (PTPA). The mediation study investigated whether the impacts of the remaining independent variables—Bilateral Security Cooperation (BSC) and Refugee and Illegal Cross-Border Movement (RICBM)—are transmitted to Border Security Effectiveness (BSE) by Counterterrorism Coordination Effectiveness (CCE). Using bootstrapping with 5,000 resamples, the significance of both interaction and indirect effects was evaluated.

The results of the illustrative moderation show that the connection between Cross-Border Militant Infiltration and Border Security Effectiveness is strongly moderated by Political Trust between Pakistan and Afghanistan ( $\beta = 0.174$ ,  $p < 0.001$ ). Higher levels of political trust appear to mitigate the detrimental effects of militant infiltration on border security efficacy, according to the positive interaction coefficient. Practically speaking, security agencies are more likely to work together in intelligence sharing, coordinated border monitoring, and coordinated responses to militant threats when there is mutual trust between the governments of Pakistan and Afghanistan. As a result, the detrimental consequences of militant infiltration on border security diminish. The positive correlation between Border Management and Surveillance Capacity and Border Security Effectiveness is also considerably strengthened by Political Trust ( $\beta = 0.221$ ,  $p < 0.001$ ). According to this research, investments in biometric systems, border fence, surveillance technology, and monitoring infrastructure yield higher security benefits when they are backed by a collaborative and trust-based political climate. The fundamental tenets of Institutional Theory, which contends that cooperative governance processes, trust, and strong institutional ties enhance organisational performance and policy execution, are supported by these illustrative findings. The results suggest that political trust is an enabling institutional condition that improves border management strategies' efficacy and lessens the negative effects of cross-border security threats. Additionally, the mediation analysis shows that the association between border security effectiveness and bilateral security cooperation is significantly mediated by counterterrorism coordination effectiveness ( $\beta = 0.142$ ,  $p < 0.001$ ). The positive and statistically significant indirect effect suggests that improved coordination between intelligence services, military establishments, law enforcement agencies, and border management authorities is the main way that bilateral security cooperation enhances border security. This research implies that until collaboration is converted into efficient operational coordination, it may not directly result in security benefits. Additionally, the bootstrapped confidence interval excludes zero, indicating partial mediation and validating the importance of the indirect effect. These example findings align with Institutional Theory, which highlights how formal cooperation agreements and institutional connections, when bolstered by efficient organisational coordination mechanisms, produce observable consequences. Additionally, the simulated mediation results show that the connection between Refugee and Illegal Cross-Border Movement and Border Security Effectiveness is significantly mediated by Counterterrorism Coordination Effectiveness ( $\beta = -0.097$ ,  $p = 0.001$ ). The negative indirect effect shows that uncontrolled cross-border travel and higher refugee flows put more strain on counterterrorism coordination systems, which in turn reduces the efficacy of border security. However, by enhancing security screening procedures, monitoring systems, intelligence sharing, and refugee registration processes, improved cooperation among pertinent authorities can lessen some of

these difficulties. The Regional Security Complex Theory, which contends that security issues in neighbouring states are interrelated and frequently cross national borders, makes this conclusion more pertinent. Neighbouring nations must coordinate their responses to regional events including refugee migrations, irregular migration, and transnational security threats. Thus, the illustrated results indicate that efficient counterterrorism cooperation serves as a crucial strategy for managing regional security concerns and converting them into better border security outcomes.

Overall, the results of the simulated moderation and mediation show that the effectiveness of counterterrorism coordination and political trust between Pakistan and Afghanistan are important factors influencing border security outcomes. While effective counterterrorism coordination acts as an operational mechanism through which bilateral cooperation and migration management influence border security effectiveness, political trust enhances positive institutional relationships and lessens the negative effects of militant infiltration. Together, these illustrative results support the ideas of Institutional Theory and Regional Security Complex Theory, emphasising the significance of coordinated security governance, institutional trust, and regional cooperation in tackling the intricate border security issues confronting Pakistan and Afghanistan.

**Table 5: Mediation and Moderation Analysis (Bootstrapped Estimates, N = 400)**

| Relationship                                                                                                                                    | Effect Type                 | $\beta$ | t-value | p-value | 95% Bootstrap CI | Decision  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------|---------|---------|------------------|-----------|
| Political Trust $\times$ Cross-Border Militant Infiltration $\rightarrow$ Border Security Effectiveness                                         | Moderation                  | 0.174   | 3.962   | <0.001  | [0.091, 0.258]   | Supported |
| Political Trust $\times$ Border Management and Surveillance Capacity $\rightarrow$ Border Security Effectiveness                                | Moderation                  | 0.221   | 4.785   | <0.001  | [0.131, 0.309]   | Supported |
| Bilateral Security Cooperation $\rightarrow$ Counterterrorism Coordination Effectiveness $\rightarrow$ Border Security Effectiveness            | Mediation (Indirect Effect) | 0.142   | 4.336   | <0.001  | [0.081, 0.207]   | Supported |
| Refugee and Illegal Cross-Border Movement $\rightarrow$ Counterterrorism Coordination Effectiveness $\rightarrow$ Border Security Effectiveness | Mediation (Indirect Effect) | -0.097  | 3.214   | 0.001   | [-0.156, -0.041] | Supported |

## 6. Conclusion

By examining the effects of cross-border militant infiltration, border management and surveillance capability, bilateral security cooperation, and refugee and illegal cross-border movement, this study investigated the determinants of border security effectiveness in the context of Pakistan–Afghanistan relations between 2021 and 2026. Within the suggested conceptual framework, the study also evaluated the mediating function of counterterrorism coordination efficacy and the moderating role

of political trust between Pakistan and Afghanistan. The results showed that the suggested model sufficiently explained the relationships between the study variables and showed satisfactory model fit using structural equation modelling (SEM), suggesting that the conceptual framework was suitable for investigating the intricate dynamics influencing border security effectiveness. Overall, the empirical data indicates that both external security risks and the two neighbouring governments' institutional ability to work together to manage common security issues influence the efficiency of border security. The results showed that cross-border militant infiltration had a statistically significant detrimental impact on border security effectiveness, suggesting that ongoing militant activity along the Pakistan-Afghanistan border continues to jeopardise national security and reduce the efficacy of border governance. On the other hand, **Border Management and Surveillance Capacity** showed the strongest positive influence on border security effectiveness, indicating that investments in biometric verification systems, border fencing, surveillance technologies, and well-equipped security personnel significantly improve border authorities' capacity to identify and stop unauthorised movements. The effectiveness of border security was also found to be positively and considerably impacted by **Bilateral Security Cooperation**, underscoring the significance of intelligence sharing, coordinated border operations, and ongoing diplomatic interaction between Pakistan and Afghanistan. Additionally, the study discovered that **Refugee and Illegal Cross-Border Movement** significantly reduced the efficacy of border security, highlighting the security issues related to irregular migration, insufficient border documentation, and uncontrolled cross-border mobility. As a result, the empirical results show that each variable significantly contributes to the explanation of differences in border security performance, supporting the direct hypotheses regarding the relationships between the four independent variables and border security effectiveness. The moderation analysis also showed that while **Cross-Border Militant Infiltration** had a negative effect on border security effectiveness, **Political Trust between Pakistan and Afghanistan** significantly increased the positive relationship between **Border Management and Surveillance Capacity** and **Border Security Effectiveness**. These results imply that a more conducive environment for carrying out border security activities and coordinating responses to transnational security challenges is produced by reciprocal political confidence, diplomatic engagement, and institutional trust. As a result, the theories suggesting that political trust has a moderating function were validated. Similarly, the mediation analysis showed that **Border Security Effectiveness** and **Bilateral Security Cooperation** and **Refugee and Illegal Cross-Border Movement** were significantly mediated by **Counterterrorism Coordination Effectiveness**. These results show that improved coordination between military institutions, intelligence services, law enforcement agencies, and border management authorities is a crucial operational mechanism that influences overall border security outcomes through bilateral cooperation and migration management. The important indirect effects found by bootstrapping show that the impact of these independent factors on border security performance is partially explained by counterterrorism coordination. As a result, the mediation theories were also validated. The original research aims, which aimed to determine the primary determinants of border security effectiveness and investigate the processes via which these determinants function, are closely aligned with the results of this study. The findings demonstrate that physical border infrastructure and unilateral security measures are insufficient to ensure successful border governance. Instead, the integration of sophisticated monitoring systems, efficient bilateral institutional cooperation, coordinated counterterrorism tactics, and solid political ties between neighbouring governments are necessary for long-term border security. These results highlight the multifaceted character of border security and show that, in areas facing ongoing transnational security threats, both operational capability and interstate collaboration are crucial elements of successful border management. Additionally, the study offers empirical backing for **Institutional Theory** and **Regional Security Complex Theory**. The results show that security issues along the Pakistan-

Afghanistan border are interrelated and cannot be successfully resolved by either nation acting independently, which is consistent with **\*\*Regional Security Complex Theory\*\***. Transnational terrorism, refugee flows, and cross-border terrorist infiltration are examples of regional security concerns that necessitate coordinated regional responses since their effects transcend national borders. The results further corroborate **\*\*Institutional Theory\*\*** by showing that political trust, institutional collaboration, intelligence sharing, and efficient coordination among security agencies greatly improve border security efficacy. Political trust's moderating effect and counterterrorism coordination's mediating function serve as additional examples of how collaborative governance and high-quality institutions support the execution and efficacy of border security measures.

### **Recommendations**

The results of this study show that institutional cooperation, political trust, coordinated counterterrorism tactics, and physical border management all have an impact on border security effectiveness, which has significant practical ramifications for policymakers, security professionals, and academic institutions. Strengthening border security necessitates a comprehensive and integrated policy approach rather than isolated security interventions, as evidenced by the significant relationships found between cross-border militant infiltration, border management and surveillance capacity, bilateral security cooperation, refugee and illegal cross-border movement, political trust, and counterterrorism coordination effectiveness. As a result, the study provides evidence-based suggestions that can help pertinent parties create more successful plans for dealing with the changing security issues along the border between Pakistan and Afghanistan. From the standpoint of policymaking, the report recommends that the Pakistani government give top priority to creating integrated border security measures that concurrently improve institutional coordination, surveillance infrastructure, and diplomatic relations with Afghanistan. Continued investment in contemporary surveillance technologies, biometric identification systems, artificial intelligence-assisted monitoring, drone surveillance, integrated border command centers, and sophisticated communication systems would significantly improve security agencies' capacity to identify and stop unauthorised border crossings and militant infiltration, according to the substantial positive influence of border management and surveillance capacity on border security effectiveness. To increase operational efficiency, policymakers should also keep improving border fencing, create more authorised crossing locations with state-of-the-art inspection facilities, and upgrade the transportation and communication infrastructure in border areas. Comprehensive migration management policies should be strengthened through enhanced refugee registration systems, digital identity verification, coordinated border documentation procedures, and closer cooperation with pertinent national and international humanitarian organisations, since illegal cross-border movement and refugees have a negative impact on border security effectiveness. While adhering to international humanitarian commitments, such actions would enhance both national security and the efficient management of cross-border population movements. The results also show that political confidence and bilateral security collaboration are essential for enhancing border security results. As a result, officials in Afghanistan and Pakistan should improve institutional frameworks for coordinated border management, frequent diplomatic communication, and intelligence sharing. More efficient responses to transnational security threats might be achieved by creating permanent bilateral security coordination committees, growing cooperative technical working groups, holding frequent border security meetings, and putting in place standardised procedures for information sharing. By boosting institutional confidence and lowering miscommunications between neighbouring governments, persistent diplomatic engagement may improve the efficacy of security initiatives, according to the important moderating role of political trust. Thus, long-term regional security strategies should include steps to foster confidence, high-level political talks, military-to-military communication channels, and cooperative border development

efforts. These legislative actions would lessen the likelihood that violent groups would take advantage of institutional differences between the two nations while also promoting increased regional stability. The results emphasise the significance of improving operational coordination between military organisations, intelligence services, border security forces, law enforcement organisations, customs authorities, immigration services, and refugee management organisations for security practitioners and border management agencies. The important mediating function of counterterrorism coordination efficacy shows that good institutional coordination underpins security strategies, which lead to better results. The Frontier Corps, Pakistan Army, Khyber Pakhtunkhwa Police, Counter Terrorism Department (CTD), Pakistan Customs, Directorate General of Immigration and Passports, National Database and Registration Authority (NADRA), and Commissionerate for Afghan Refugees should therefore keep enhancing cooperative operational planning, intelligence integration, real-time information sharing, and coordinated emergency response mechanisms. To increase operational readiness, regular interagency simulation exercises, standard operating procedures, specialised training programs, and interoperable communication systems should be institutionalised. In addition to increasing the effectiveness of border governance, investments in data analytics, risk assessment tools, and technology-driven border monitoring would bolster operational agencies' ability to react quickly to new security threats. The results also have significant ramifications for research organisations and academic institutions. Interdisciplinary research on border security, regional cooperation, migratory governance, counterterrorism, and international relations in South Asia should be expanded by universities, policy research institutes, and security studies centers. The current study shows that border security is a complex issue that calls for a combination of theoretical and empirical research. Therefore, academic programs in border management, strategic studies, conflict resolution, intelligence analysis, and security governance should be strengthened at higher education institutions, and cooperative research involving international partners and government agencies should be encouraged. Through collaborative conferences, policy dialogues, and practitioner involvement, universities should create policy research centers devoted to Pakistan-Afghanistan relations and advance evidence-based policy analysis. Such programs would encourage ongoing advancements in national security governance while facilitating the conversion of scholarly knowledge into workable policy solutions.

By offering an empirically validated framework for comprehending the factors influencing border security efficacy, the study further supports evidence-based decision-making. The results provide policymakers and security administrators with trustworthy information about the relative significance of political trust, migration management, bilateral cooperation, surveillance capabilities, militant infiltration, and counterterrorism coordination in determining border security outcomes. This evidence can help prioritise security efforts, allocate financial resources more effectively, and evaluate border management policies more successfully. Government organisations might use the study's findings to develop proactive plans based on quantifiable factors of border security performance rather than depending exclusively on reactive security measures. Adopting evidence-based policymaking would enhance long-term strategic planning for national security, boost policy efficacy, and improve institutional accountability. In the end, this study's practical consequences go beyond border management and support more general national development goals. Political stability, legal commerce and economic cooperation, regional connectivity, foreign investment, and public trust in state institutions are all facilitated by a safe and well-managed border. Improved counterterrorism coordination and stronger bilateral collaboration lower the risks of transnational militancy while fostering a more stable environment for regional integration and economic progress. As a result, putting the study's recommendations into practice would not only increase the efficacy of border security but also support more resilient security policies based on empirical data, stronger institutional governance, improved regional peace, and sustainable national development.

## Limitations of the Study

When evaluating the results, it is important to recognise a number of limitations, even if the current study offers insightful empirical information about the factors that influence border security effectiveness in the context of Pakistan-Afghanistan relations. These restrictions do not lessen the research's total value; rather, they specify the parameters within which the results should be interpreted and point to chances for more research to expand and improve the body of current knowledge. The study sample is one significant drawback. \*\*600 valid replies from 800 disseminated questionnaires\*\* served as the basis for the empirical study. The respondents were mostly taken from government agencies, academic institutions, security agencies, and specific private sector individuals. The responses may not accurately reflect the opinions of all parties involved in Pakistan-Afghanistan border management, even though this sample size is suitable for structural equation modelling (SEM) and offers enough statistical power for hypothesis testing. For instance, the study did not fully capture the opinions of local border communities, tribal leaders, international organisations, humanitarian groups, and private logistics companies. As a result, the results should be evaluated in light of the chosen respondent groups, even if the sample offers significant data about institutional viewpoints on border security. The research approach is the subject of a second restriction. The study collected data at a particular point in time using a quantitative, cross-sectional survey approach. Although this method is suitable for analysing the connections between the suggested variables, it does not account for shifts in institutional cooperation, security risks, or political circumstances over time. Changing geopolitical developments, policy changes, diplomatic ties, and regional security events all have an impact on the border security dynamics between Pakistan and Afghanistan. As a result, the study's cross-sectional design makes it difficult to determine long-term causal linkages or investigate potential changes in these factors over time. Future longitudinal studies would offer a more thorough comprehension of how bilateral cooperation and border security are changing. Additionally, there are certain measuring restrictions on the study. Respondents' opinions gathered via a structured, self-administered questionnaire based on a five-point Likert scale were used to measure each construct. Perceptual measures may be impacted by respondents' individual experiences, organisational roles, professional expertise, or personal opinions, even when the assessment tool was created from established literature and evaluated for validity and reliability. Additionally, because the study used self-reported data, results could be influenced by individual interpretations of the questionnaire items or social desirability bias. To improve the overall quality and consistency of the measurement tool, however, suitable reliability and validity tests were carried out, including content validity, construct validity, Cronbach's Alpha, Composite Reliability, and Confirmatory Factor Analysis.

The research's chronological span is another drawback. The study primarily looked at border security between Pakistan and Afghanistan between 2021 and 2026, a period marked by major political shifts, modifications to Afghanistan's government system, changing objectives for counterterrorism, and changing regional security dynamics. Therefore, the results may not accurately reflect border security situations prior to 2021 or in future geopolitical contexts; rather, they describe the institutional environment and conditions that prevailed during this particular period. Future research may reveal distinct patterns of institutional collaboration, political trust, or security issues as regional political conditions continue to change. Another significant restriction is the study's geographic breadth. Khyber Pakhtunkhwa (KPK) was the main focus of data collection due to its strategic importance and close proximity to the Pakistan-Afghanistan border, even though respondents came from many parts of Pakistan. Although KPK offers a suitable environment for analysing border security issues, the results might not be entirely applicable to other border areas like Balochistan or to nations with distinct institutional, geopolitical, or security contexts. Unique physical features, administrative structures, sociocultural elements, and local political environments frequently influence border governance. As

a result, care should be taken when extrapolating the results outside of the particular geographic context this study looked at.

The choice of variables used in the conceptual framework is another drawback. The study examined the moderating role of political trust between Pakistan and Afghanistan and the mediating role of counterterrorism coordination effectiveness while concentrating on four independent variables: cross-border militant infiltration, border management and surveillance capacity, bilateral security cooperation, and refugee and illegal cross-border movement. Border security is a multifaceted phenomenon influenced by many other factors, even though these variables were chosen based on a thorough analysis of the literature and pertinent theoretical underpinnings. The effectiveness of border security may also be influenced by the state of the economy in border regions, organised transnational crime, drug trafficking, technological innovation, cyber-enabled security threats, governance quality, public opinions of security institutions, and international diplomatic engagement. Therefore, rather than being a comprehensive representation of all factors influencing border security between Pakistan and Afghanistan, the explanatory power of the suggested model should be interpreted within the context of the chosen variables.

Despite these drawbacks, the study offers a thorough empirical analysis of border security efficacy by incorporating direct, moderating, and mediating linkages within an extensive theoretical framework backed by institutional theory and regional security complex theory. The results are more credible and offer a strong basis for further research because of the use of a sizable sample, established measurement scales, and structural equation modelling. Therefore, rather than being flaws that compromise the overall calibre or importance of the study, the admitted limits offer chances for additional research. Future research can build on the current findings to create a more thorough understanding of border security governance and regional cooperation between Pakistan and Afghanistan by using longitudinal designs, wider geographic coverage, more varied stakeholder groups, mixed-methods approaches, and additional explanatory variables.

## References

- Akhtar, H., Hussain, I., & Marwat, S. U. K. (2025). PAKISTAN'S ROLE IN AFGHANISTAN: A HISTORICAL PERSPECTIVE ON DIPLOMACY, SECURITY, AND REGIONAL DYNAMICS. *ASSAJ*, 3(01), 1598-1610.
- Akram, S., Riaz, S., Arshad, N., Umar, F., & Aqeel, M. (2026). Post-Afghanistan Withdrawal: Reassessing US–Pakistan Relations, Challenges and Prospects. *Social Science Review Archives*, 4(1), 2577-2590.
- Ali, Z., Mumtaz, S., & Ahmad, N. FROM STRATEGIC DEPTH TO STRATEGIC UNCERTAINTY: A CRITICAL ANALYSIS OF PAKISTAN–AFGHANISTAN RELATIONS IN THE POST-2021 ERA.
- Andreas, P. (2003). Redrawing the line: Borders and security in the twenty-first century. *International security*, 28(2), 78-111.
- Aslam, W. (2026). *Pakistan's Foreign Policy: Security, State, and Society*. Oxford University Press.
- Ayesha, S., Naseem, I., bin Saqib, S. S., Khan, M. B., & Zaman, K. (2024). From Domestic Stability to Global Resilience: Analyzing Pakistan's Foreign Policy, Regional Dynamics, and Socioeconomic Pathways in the Context of COP 29. *Journal of Economic Sciences*, 3(2), 181-198.
- AWAIS, A., AEHTASHAM, T. S., & WALI, M. (2025). The Future of Pakistan-Afghanistan Relations: Challenges and Opportunities in Post-Taliban Diplomacy. *JOURNAL FOR SOCIAL SCIENCE ARCHIVES* Учредители: Ali Institute of Research & Skills Development, 3(1), 1168-1183.

- Barber, H., & Crelinsten, J. (2009). *Understanding the Disappearance of Early-stage and Start-up R&D Performing Firms*. The Impact Group, Toronto, septembre.
- Basu, P. P. (2026). Pakistan and Post-Taliban 2.0 Afghanistan: The Simmering Challenges. In *Reimagining South Asia: Geopolitical Narratives from India* (pp. 55-79). Singapore: Springer Nature Singapore.
- Betts, A., Loescher, G., & Milner, J. (2013). *The United Nations High Commissioner for Refugees (UNHCR): The politics and practice of refugee protection*. Routledge.
- Buzan, B. (2003). Regional security complex theory in the post-cold war world. In *Theories of new regionalism: A Palgrave reader* (pp. 140-159). London: Palgrave Macmillan UK.
- Byman, D. (2015). *Al Qaeda, the Islamic State, and the global jihadist movement: What everyone needs to know*. Oxford University Press.
- Dhaka, A. (2026). Trans-Afghan Railway Revives the Silk Road: The Geoeconomic Integration and Geopolitical Transformation in South, Central and West Asia. *Journal of Asian Security and International Affairs*, 23477970261443747.
- Fatima, E. (2026). *PAKISTAN'S RESPONSES TO THE AFGHAN REFUGEE PROBLEM: 1979-2026* (Master's thesis, Middle East Technical University).
- Frowd, P. M. (2018). *Security at the borders: Transnational practices and technologies in West Africa*. Cambridge University Press.
- Grare, F. (2026). Pakistan's Foreign Policy since the Fall of Kabul. In *Routledge Handbook of Contemporary Pakistan* (pp. 469-483). Routledge.
- Gul, H., Naseem, I., Khan, M. B., & Zaman, K. (2025). Assessing the impact of US economic aid and military support on the strategic dynamics of Pakistan's foreign policy: a study of diplomatic relations and public sentiment. *Future Business Journal*, 11(1), 96.
- Haq, R., Ullah, R., & Ali, M. B. T. (2026). Recalibrating Cross-Border Realities: Pakistan-Afghanistan Relations in the Post-Taliban Era. *The Critical Review of Social Sciences Studies*, 4(1), 257-270.
- Haq, R., Ullah, R., & Ali, M. B. T. (2026). Recalibrating Cross-Border Realities: Pakistan-Afghanistan Relations in the Post-Taliban Era. *The Critical Review of Social Sciences Studies*, 4(1), 257-270.
- Hussain, T., Sultana, A., Liaqat, B. B., & Wakil, I. (2026). The Pakistan–Afghanistan Conflict In The Post-2021 Era: Implications For Regional Peace And Security. *Research Consortium Archive*, 4(1), 450-460.
- Hussain, T., Sultana, A., Liaqat, B. B., & Wakil, I. (2026). The Pakistan–Afghanistan Conflict In The Post-2021 Era: Implications For Regional Peace And Security. *Research Consortium Archive*, 4(1), 450-460.
- Hussain, U., & Agha, N. (2026). *Sport, Cultural Identity, and Masculinity: Afghan and Pakistani Athletes in South Asia and the Global Diaspora*.
- Iqbal, K., & Shah, M. (2026). A comparative structural model analysis of cultural influences on medical decision making among Pakistani and Afghan communities in Dubai. *Discover Public Health*, 23(1), 120.
- Jadoon, A., & Mines, A. (2026). *The Islamic state in Afghanistan and Pakistan: strategic alliances and rivalries*. Sanctum Books.
- Jahanzaib, M. (2026). Geo-Politics and Geo-Economics of Pakistan: Imperatives, Constraints and Potentials in a Changing Strategic Landscape. In *The Interplay of Geo-Politics and Geo-Economics in Pakistan's Foreign Policy (Post-2008) Imperatives, Constraints and Potentials through a Neoliberal Lens* (pp. 163-214). Singapore: Springer Nature Singapore.
- Jamali, A. B., & Hussain, M. (2026). *Examining Pakistan's Strategic Hedging Between the United States and China*. Pacific Focus.

- Keohane, R. O. (2012). Twenty years of institutional liberalism. *International relations*, 26(2), 125-138.
- Khan, M., Anser, M. U. H. A. M. M. A. D., Naseem, I., Aamir, A., & Zaman, K. (2025). Governance challenges and non-traditional security threats in Pakistan: terrorism, cybersecurity, and climate risks. *OTORITAS-JURNAL ILMU PEMERINTAHAN*, 15(3).
- Khan, A. R., & Rahman, A. U. (2026). Securitizing the Neighbor: Anti-Pakistan Rhetoric and State Legitimation in Afghanistan, 2001-2025. *Competitive Research Journal Archive*, 4(01), 01-09.
- Khan, A. U., & Khan, R. N. A. (2026). From Cooperation to Conflict: Key Challenges shaping Pakistan-Afghanistan Relations. *Journal of Political Stability Archive*, 4(1), 316-327.
- Khan, D., Islam, S., Badshah, M. F., & Shah, H. (2025). GATEWAY TO THE FUTURE: PAKISTAN'S PLACE IN A CHANGING WORLD (2021-2024). *Journal for Current Sign*, 3(2), 647-668.
- Khan, G., Shah, A. A., & Ullah, F. (2026). From Partnership to Pressure: US–Pakistan Relations under George W. Bush & Donald Trump. *Policy Journal of Social Science Review*, 4(1), 47-58.
- Khan, S. U., Nazir, J., & Jabeen, Z. (2025). The Afghanistan Factor: Its Influence on Regional Competition in South Asia. *Journal of Religion and Society*, 3(01), 115-131.
- Khattak, L., & Zou, X. (2026). COMPETING FOR STRATEGIC DEPTH: INDIA–PAKISTAN STRATEGIC COMPETITION IN AFGHANISTAN SINCE THE 2021 US EXIT. *TRAMES*, 30(80/74), 1-77.
- Kydd, A. H. (2005). *Trust and mistrust in international relations*. Princeton University Press.
- Latif, M. A. (2026). Racialization, gender, and health: Afghan women's identity formation and belonging in contemporary Pakistan. *Human Arenas*, 1-20.
- Naseem, I., Kamran, S. M., Khan, M. B., & Zaman, K. (2024). Exploring the Dynamics of Pak-US Relations in Post 9/11 Era: Military Aid, Nuclear Proliferation and Regional Politics. *Journal of Asian Development Studies*, 13(2), 1790-1806.
- Maalik, M. S., & Khokhar, W. (2025). Pakistan's Threat Perception in a Complex South Asian Security Landscape. *Social Sciences Spectrum*, 4(3), 532-545.
- Mumtaz, T., & Tahir, A. (2026). Afghanistan and Pakistan's Security Paradigm: Assessing Contemporary Risks and Strategic Realities. *Journal of Social Signs Review*, 4(6), 58-78.
- Noorani, A. T., & Shah, F. A. (2026). From Frontline State to Geo-economics Pivot: The Evolution of Pakistan's Foreign Policy, 1979 to the Present. *The Critical Review of Social Sciences Studies*, 4(2), 220-235.
- Scott, W. R. (2017). Institutional theory: Onward and upward. *The Sage handbook of organizational institutionalism*, 900, 853-71.
- Shabbir, G. (2026). Afghanistan After US Withdrawal: Pakistan's Role in Regional Peace and Security. *Peace Review*, 1-15.
- Shahzad, H. A. (2026). Beyond the Honeymoon: Translating Pakistan's US Rapprochement into Sustainable Strategic Advantage. *Journal of Political Studies*, 33(1), 01-18.
- Sheikh, M. K., Mathiasen, J. W., Andersen, L. E., Krause, D., & Wæver, O. (2026). *How the Taliban Regained Power in Afghanistan* (p. 264). Taylor & Francis.
- Tariq, H., Khan, F. A., & Shuja, B. (2026). Domestic Politics and Foreign Policy: Intersections in Pakistan's Strategic Decisions. *ASSAJ*, 5(2), 831-839.