



### Mathematical Analysis on the Data of Security Situation in Pakistan 2009-2013

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**Supported by** Sichuan Province Region and Country Key Research Base Pakistan Study Center Fund Project (PSC13Z01).

Received 10 April 2014; accepted 17 June 2014 Published online 28 June 2014

#### **Abstract**

In 2009, Pakistan army launched two armed operations to clean up the Tehrik-e-Taliban Pakistan in Federally Administered Tribal Areas and North West Frontier Province (In 2010, Pakistan parliament approved a resolution: the North West Frontier Province officially changed its name to the Khyber-Pakhtunkhwa Province.). At the same time, the security situation in Pakistan began to worsen rapidly. Although the Pakistan army gradually achieved results by military offensive, but did not significantly improve the security situation in Pakistan. Because its strength was much weaker than Pakistan army, the Tehrik-e-Taliban Pakistan didn't wish to make head-on confrontation with Pakistan army. Thus the Tehrik-e-Taliban Pakistan and Pakistan army both observably reduced their losses. But the Tehrike-Taliban Pakistan transferred its targets of retaliation from Pakistan army to Pakistan civilian, resulting in a substantial increase in Pakistan civilian casualties. So, Pakistan counterterrorism objectives should focus on the protection of civilians, preventing Pakistan from the Tehrik-e-Taliban Pakistan hitting civilian targets. If Pakistan could maintain the social stability, it will have more possibilities to win final victory in the war on terror.

**Key words:** Pakistan; Security situation; Quantitative analysis

Jia, Z. C. (2014). Mathematical Analysis on the Data of Security Situation in Pakistan 2009-2013. *Canadian Social Science, 10*(5), 182-186. Available from: http://www.cscanada.net/index.php/css/article/view/5101 DOI: http://dx.doi.org/10.3968/5101

### INTRODUCTION

The outbreak of the September 11 incident lead Pakistan into the American led alliance against terrorism. Pakistan actively cooperated with the America war on terror, and achieved remarkable results. But at the same time, the security situation in Pakistan gradually worsened. In 2007, the Tehrik-e-Taliban Pakistan established formally. The Tehrik-e-Taliban Pakistan's threats to Pakistan national security were increasing. In 2009, the Tehrik-e-Taliban Pakistan launched a continuous offensive to the government of Pakistan, led the Pakistan army to wipe out the Tehrike-Taliban Pakistan. Pakistan army launched two armed operations in Swat and South Waziristan to clean up the Tehrik-e-Taliban Pakistan. At the same time, the security situation in Pakistan began to worsen rapidly. Although the Pakistan army gradually achieved results by military offensive, but did not significantly improve the security situation in Pakistan. Because its strength was much weaker than Pakistan army, the Tehrik-e-Taliban Pakistan didn't wish to make head-on confrontation with Pakistan army. Thus the Tehrik-e-Taliban Pakistan and Pakistan army both observably reduced their losses. But the Tehrik-e-Taliban Pakistan transferred its targets of retaliation from Pakistan army to Pakistan civilian, resulting in a substantial increase in Pakistan civilian casualties.

## 1. PAKISTAN ARMY ATTACKED THE TEHRIK-E-TALIBAN PAKISTAN

In 2009, the Pakistan government made significant gains, clearing several areas of the Tehrik-e-Taliban Pakistan's control. On February 16, the North West Frontier Province government signed a peace agreement with the Tehrik-i-Nifaz-i-Shariat-i-Mohammadi (TNSM), in the hope of restoring the writ of government in Malakand Division. While the North West Frontier Province government acceded to all the demands of the TNSM, the latter refused to lay down their weapons. On April 19, TNSM

leader Sufi Mohammad announced his disregard for the political system of Pakistan and asked governmentappointed judges to leave Malakand Division. This is the turning point, provoking a full-scale military operation across Malakand Division. Hundreds of terrorists were killed, injured, and arrested in the operation. The military operation succeeded in a pure military perspective.

On August 4, leader of the Tehrik-e-Taliban Pakistan, Baitullah Mehsud was killed by U.S. drone. The top three leaders of the Tehrik-e-Taliban Pakistan, Hakimullah Mehsud, Wali-ur-Rehman Mehsud, and Qari Hussain, jockeved for power after Baitullah Mehsud's death. Hakimullah Mehsud was eventually made the consensus leader. And the Tehrik-e-Taliban Pakistan increased its attacks. This prompted the Pakistan army to intensify operations against the Tehrik-e-Taliban Pakistan, finally culminating in a full-scale ground offensive in South Waziristan in mid-October. Until December 7, the Pakistan army had cleared major towns of the terrorists. But many extremist organizations have not been dislodged. At the end of 2009, Pakistan's paramilitary Frontier Corps was engaged in fighting against Lashkar i Islam at Khyber Agency. And the Pakistan Air Force and Army Aviation had hit the Tehrik-e-Taliban Pakistan in Orakzai Agency. The Pakistan Government claimed to have made gains against the Tehrik-e-Taliban Pakistan. (United States Department of State Publication Office of the Coordinator for Counter terrorism, 2010, pp.158-159).

In 2010, the Pakistani army continued to conduct operations in Federally Administered Tribal Areas and Khyber-Pakhtunkhwa Province. Pakistani army forces undertook substantial efforts to hit terrorists. Pakistan army launched some large-scale counterinsurgency operations in Mohmand, Orakzai, and Khyber-Pakhtunkhwa province. When Pakistan army conducted operations to eliminate terrorists, it often lacked the capability to ensure war areas remained under the control of Pakistan army. Given its inability to pursue the complete elimination of the terrorist, Pakistan utilized a strategy to conduct limited operations to "contain" terrorist operatives in some areas. (United States Department of State Publication Office of the Coordinator for Counter terrorism, 2011, pp.121-122).

In 2011, Pakistan remained its efforts on counter terrorism, actively engaging against al-Qaida and the Tehrik-e Taliban Pakistan. A series of bangs, including the May 2 Abbottabad raid that killed Usama bin Ladin, indicated Pakistan's great efforts in counter terrorism. In September, the Pakistan army announced the capture of senior al-Qaida leader Younis al-Mauritani in a operation. (United States Department of State Publication Office of the Coordinator for Counter terrorism, 2012, p.141).

In 2012, Pakistan army undertook operations against terrorist groups that carried out attacks within Pakistan, such as the Tehrik-e Taliban Pakistan. But Pakistan army did not take significant action against some other violent extremist groups, such as Lashkar-e-Tayyiba, which continued to operate and raise funds openly in Pakistan through its political and charitable wing, Jamaat-ud-

Dawa. The widely publicized shooting of a 14 years old girl, Malala Yousufzai, by the Tehrik-e-Taliban Pakistan led to public calls for the Pakistan army to do more against terrorist groups. (United States Department of State Publication Office of the Coordinator for Counter terrorism, 2013, pp.166-167).

In 2013, Pakistan continued to confront terrorist groups, including al-Qaida, the Tehrik-e-Taliban Pakistan, the Punjabi Taliban, and Lashkar-I-Jhangvi, all of whom mounted attacks against police, military and security forces, or engaged in violence and criminal activities against all sectors of society. Pakistan did not confront Lashkar-e-Tayyiba, however, who continued to operate and raise fund in Pakistan with its front organizations. The May 2013 national elections brought in new civilian leadership, which was reviewing a new Counter-terrorism strategy at year's end. Pakistan government has pursued negotiations with Tehrik-e-Taliban Pakistan while also targeting the group militarily. (United States Department of State Publication Office of the Coordinator for Counter terrorism, 2014, pp.194-195).

From 2009 to 2013, despite the Pakistan army undertook so much operations against the terrorist groups, but due to the Pakistan army was much powerful than the terrorist groups, so the terrorist groups generally prefer to avoid a head-on confrontation with the Pakistan army. The Pakistan army found it was very hard to effectively eliminate the main force of militants. This resulted in the Pakistan army eliminate militants significantly reduced year by year. By Table 1 and Figure 1 we know, the Pakistan army killed 8389 militants in 2009. In 2010, the Pakistan army killed 5170 militants. This number is 38% lower than last year. In 2011, the Pakistan army killed 2800 militants. This number is 46% lower than last year. In 2012, the Pakistan army killed 2472 militants. This number is 12% lower than last year. In 2013, the Pakistan army killed 1702 militants. This number is 31% lower than last year. And the number of 2013 is 80% lower than 2009's figure.

Terrorists Killed by Pakistan Army in Pakistan 2009-2013

Year	Terrorists/insurgents
2009	8389
2010	5170
2011	2800
2012	2472
2013	1702



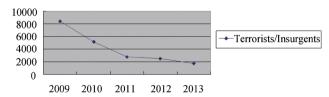


Figure 1
Terrorists Killed by Pakistan Army in Pakistan 2009-2013
Data source: http://www.satp.org/satporgtp/countries/pakistan/database/casualties.htm

# 2. THE TEHRIK-E-TALIBAN PAKISTAN LAUNCHED TERROR ASSAULT

In retaliation for the military operation of Pakistan army, terrorist organizations in Pakistan launched large-scale terrorist attacks. Terrorist attacks expanded from north to south, spread quite rapidly. The targets of terrorist attack include military base, political building to and the religious places. Everything is contained therein. All these terrorist attack caused huge casualties and adverse effects. Terrorist attacks spread from the northwest area to the southern provinces, such as Balochistan province, Punjab province and Sindh province. Especially in Southern Punjab Province, the situation is particularly bad. Because terrorist attacks on the political and military objectives is the most direct way to retaliate the Pakistan government and the Pakistan army, and it also has great convulsion power, thus it become the best choice of the terrorist organizations.

The terrorist organization launched terrorist attacks against important anti extremist politicians. Federal Minister for Minorities Affairs Shahbaz Bhatti was assassinated on March 2, 2011 in Sector 1-8 of the Federal Capital by assassinator who opened fire on him and fled the scene on a car. (Pakistan Minister Shahbaz Bhatti assassinated in Capital City, 2011) The Awami National Party's district president Muzaffar Ali Khan and two of his associates were gunned down in Swat's Matta region's Shakardarra area on May 28, 2011. In the past also, Khan had had to leave his house on account of the threats from militants. (ANP leader, two others killed in Swat, 2011) On 2011 September 14, Militants had planted a remote controlled explosive device in Maidan area of Lower Dir, which detonated after the Awami National Party district president Sher Muhammad Khan reached there. Sher Muhammad Khan was killed in the blast while four others sustained injuries. (Bomb kills local ANP leader in Lower Dir, 2011) Militants fired two missiles at a rally led by the governor of Khyber-Pakhtunkhwa province on Oct 11, 2011, killing one person and wounding four, but the governor was not hurt. (Pakistan's governor escapes missile attack, 2011) A policeman and a little girl were killed when a suicide bomber attacked the motorcade of former interior minister Aftab Ahmad Sherpao near Kangra village on March 3, 2012 soon after he left the venue of a public meeting in nearby Battgram village of Shabqadar tehsil. (Faiz Muhammad. Sherpao survives suicide attack; policeman, girl die, 2012)

For the purpose of eliminating the Counter-terrorism elites in the Pakistan army and police, the terrorist organization launched terrorist attacks on the Counter-terrorism elites in the Pakistan army and police. A carborne Taliban suicide bomber flattened the house of senior counter-terrorism police officer Aslam Khan in Karachi on September 19, 2011, killing eight people including six policemen. Senior Superintendent Aslam Khan was unhurt in the attack but whose home was destroyed. He

had been threatened by the Tehrik-e-Taliban Pakistan and knew that he was the target. The militant group claimed responsibility for the attack and said Khan had been targeted for arresting, torturing and killing Taliban members. Khan heads the counter-terrorism unit of the Police Crime Investigation Department in Karachi, investigating Islamist militant cells in this port city. (Taliban suicide blast in Karachi leaves eight dead, 2011)

The twin suicide bombs on September 7, 2011 targeted Pakistan's paramilitary force, the Frontier Corps which was responsible for the capture of the Al Qaeda operatives. One attacker detonated his bomb-laden car outside the residence of the deputy chief of the Frontier Corps in Quetta city, before a second attacker blew himself up inside the house. The attack on the home of deputy chief Farrukh Shahzad wounded him, killed his wife and injured at least one of his children. The Tehrik-e-Taliban Pakistan has claimed responsibility for twin suicide bombs in Quetta that killed at least 24 people, saying they were to avenge the arrests of Al Qaeda operatives. (Quetta blasts to avenge Qaeda arrests: Taliban, 2011)

Cause the hatred enhanced by warfare, the terrorist organization launched terrorist attacks on military bases. intelligence office and the police stations. The Tehrik-e-Taliban Pakistan claimed responsibility for a deadly attack on March 8, 2011 in Faisalabad. At least 24 people were killed and 105 others were wounded when a bomb went off at a compressed natural gas station. Ihsanullah Ihsan, spokesman for the Tehrik-e-Taliban Pakistan, said the target was the regional office of Pakistan's top spy agency, the ISI. Ihsan said the ISI had killed many Taliban fighters over the years and had handed over some to the United States in return for money. He warned that his group will continue to target the ISI in revenge. (Samson Desta, Taliban claims responsibility for deadly attack, 2011) On 2011May 22, at least a dozen Taliban attacked the Mehran base, a key naval aviation facility in Karachi. 11 navy officers and two paramilitary rangers were killed and 14 others injured in the attack. And two maritime patrol aircraft P-3 Orion were destroyed and at least nine people were also wounded in the assault. (Taliban claims responsibility for attack on naval facility in Karachi that has left at least 13 dead, 2011) The Tehrik-e-Taliban Pakistan on May 13, 2011 claimed their first major strike in revenge for Osama bin Laden's death as more than 80 people were killed and at least 115 were wounded in a suicide and bomb attack on the Frontier Constabulary personnel. The explosions detonated in the Shabqadar Tehsil of Charsadda. (Twin blasts kill more than 80 in Charsadda, 2011)

Although the Tehrik-e-Taliban Pakistan achieved some success in terrorist attacks on the Pakistan army, police and other targets, but the number of Pakistan army killed by the Tehrik-e-Taliban was in decline gradually. This is because the Tehrik-e-Taliban Pakistan avoids having head-on confrontation with the Pakistan army, prefers to

resort small scale harassment and attacks, so can not kill a large amount of Pakistan army.

By Table 2 and Figure 2 we know, the Tehrik-e-Taliban Pakistan killed 991 Pakistan soldiers in 2009. In 2010, the Tehrik-e-Taliban Pakistan killed 469 Pakistan soldiers. This number is 53% lower than the previous year. In 2011, the Tehrik-e-Taliban Pakistan killed 765 Pakistan soldiers. This number is 63% higher than the previous year. In 2012, the Tehrik-e-Taliban Pakistan killed 732 Pakistan soldiers. This number is 4% lower than the previous year. In 2013, the Tehrik-e-Taliban Pakistan killed 676 Pakistan soldiers. This number is 8% lower than the previous year. And this number is 32% lower than in 2009.

Table 2 Security Force Personnel Killed by Terrorists in Pakistan 2009-2013

Year	Security Force Personnel	
2009	991	
2010	469	
2011	765	
2012	732	
2013	676	

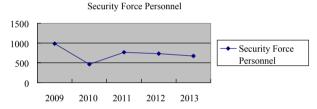


Figure 2 Security Force Personnel Killed by Terrorists in Pakistan 2009-2013

Data source: http://www.satp.org/satporgtp/countries/pakistan/database/casualties.htm

## 3. CIVILIAN CASUALTY INCREASED RAPIDLY

Due to the high difficulty of attacking Pakistan military and government goal, and attacks on Pakistan civilians can achieve political, social and religious goals, so the Tehrik-e-Taliban Pakistan choose the Pakistan civilians as the main attack target. This leads to ceaselessly increased civilian deaths. The Tehrik-e-Taliban Pakistan ceaselessly launched attacks on civilians over the Pakistan.

The Tehrik-e-Taliban Pakistan launched a large-scale indiscriminate attacks on Pakistan civilians, caused huge casualties. A roadside bomb killed 14 passengers in a van and wounded 12 others in northwest Pakistan near the Afghan border on September 16, 2012. (Roadside bomb kills 14 in Lower Dir, 2012) A car bomb killed 17 people including women and children and wounded dozens more when it exploded near a bus queue at a market in northwest Pakistan's Khyber agency on December 17, 2012. (Car bomb kills 17 in Khyber agency, 2012) Nineteen people were killed and 25 others were injured after three passenger buses were struck by

an explosion in Mastung's Dringarh area early on December 30, 2012. (Blast in Mastung kills 19, 2012)

To disturb the pace of the reconstruction of the Pakistan government in tribal areas, the Tehrik-e-Taliban Pakistan launched attacks on the tribal elders and the tribal lashkar leaders who pro-government in the tribal areas. Suspected Taliban fighters have shot and killed a pro-government tribal elder who was trying lure back tribesmen who had fled northwest Pakistan because of fighting between militants and the army. The gunmen on a motorcycle shot Malik Arsala Khan on July 31, 2011 in the main bazaar in Tank district. (Suspected militants kill pro-government tribal elder, 2011) Two men were killed and a woman injured when 15 terrorists armed with automatic weapons attacked the house of a progovernment tribal elder, Malik Rehan, in Turbat area of Central Kurram on May 6, 2012. (Tribal elder's house attacked; two killed, 2012) A militant shot dead the head of a local pro-government militia in the Kalaya area of the northwestern Orakzai tribal region on March 9, 2012. (A militant killed the head of local militia in Orakzai, 2012) Remote-controlled bombs on June 11, 2012 killed two people, including a commander of Aman Lashkar (pro-government militia), in the Mastak area of Khyber Agency. (Peace militia chief among two killed in Khyber bombing, 2012) A pro-government lashkar leader Abdul Rasheed Khan was killed and his brother Adam Khan was injured in an improvised explosive deviceblast on July 14, 2012. (Bomb kills lashkar leader in Landikotal, 2012)

A majority of the Tehrik-e-Taliban Pakistan belong to Sunnite. To attack the believers of other religions and other factions of Islam, could not only meet the religious prejudice of the Tehrik-e-Taliban Pakistan, but also provoke the religious conflicts in Pakistan. And the Tehrik-e-Taliban Pakistan could make profit of these attacks. So, the Tehrike-Taliban Pakistan launched large-scale attacks toward religious goal in Pakistan. Two Taliban suicide bombers caused carnage on Apr 3 2011 at a Sufi shrine in eastern Pakistan, killing at least 41 people and wounding scores in the latest bloody attack on minority religious groups. (Asim Tanveer, Suicide blast in Pakistan kills dozens, 2011) Obaidullah Ustad, imam of the Shaidu village mosque was shot dead by militants in Nowshera District on November 19, 2011. He had earlier stopped militants from preaching "terrorist values" at the mosque. The militants wanted to have access to the mosque and use it as a base to find new recruits. The militants belonged to the Tehrik-e-Taliban Pakistan. (Iftikhar Firdous, Militants kill mosque cleric for resisting 'terrorist value' preaching, 2011) Gunmen forced 20 Shiites off buses in northern Pakistan and killed them. This incident happened on Aug. 16, 2012 in the Naran Valley. (Gunmen kill 20 Shiite Muslims forced off buses in northern Pakistan, 2012)

By Table 3 and Figure 3 we know, the Tehrik-e-Taliban Pakistan killed 2324 Pakistan civilians in 2009. In 2010, the Tehrik-e-Taliban Pakistan killed 1796 Pakistan civilians. This number is 23% lower than the previous year. In 2011,

the Tehrik-e-Taliban Pakistan killed 2738 Pakistan civilians. This number is 52% higher than the previous year. In 2012, the Tehrik-e-Taliban Pakistan killed 3007 Pakistan civilians. This number is 10% higher than the previous year. In 2013, the Tehrik-e-Taliban Pakistan killed 3001 Pakistan civilians. This number is 0.2% lower than the previous year. And this number is 29% higher than in 2009.

Table 3 Civilians Killed by Terrorists in Pakistan 2009-2013

č		
Year	Civilians	
2009	2324	
2010	1796	
2011	2738	
2012	3007	
2013	3001	

Civilians

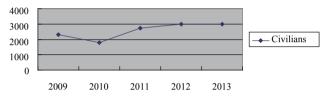


Figure 3
Civilians Killed by Terrorists in Pakistan 2009-2013
Data source: http://www.satp.org/satporgtp/countries/pakistan/database/casualties.htm

#### CONCLUSION

After 2009, the Pakistan army launched operations against the Tehrik-e-Taliban Pakistan. Although the Pakistan army gradually achieved results by military offensive, but did not significantly improve the security situation in Pakistan. The security situation in Pakistan began to worsen rapidly. Because its strength was much weaker than Pakistan army, the Tehrik-e-Taliban Pakistan didn't wish to make head-on confrontation with Pakistan army. Thus the Tehrik-e-Taliban Pakistan and Pakistan army both observably reduced their losses. But the Tehrike-Taliban Pakistan transferred its focus of retaliation from Pakistan army to Pakistan civilian, resulting in a substantial increase in Pakistan civilian casualties. So, Pakistani Counter-terrorism objectives should focus on the protection of civilians, preventing Pakistan from the Tehrik-e-Taliban Pakistan hit civilian targets. If Pakistan could maintain the social stability, it will have more possibilities to win final victory in the war on terror.

#### REFERENCES

A militant killed the head of local militia in Orakzai. *Dawn*. March 9, 2012.

ANP leader, two others killed in Swat. *Dawn*. May 28, 2011. Blast in Mastung kills 19. *Dawn*. December 30, 2012.

Bomb kills lashkar leader in Landikotal. *Daily Times*. July 15, 2012. Bomb kills local ANP leader in Lower Dir. *Daily Times*. September 14, 2011.

Car bomb kills 17 in Khyber agency. (2012, December 17).

Dawn.

Desta, S. (2011, March 8). Taliban claims responsibility for deadly attack. Retrieved from http://edition.cnn.com/2011/WORLD/asiapcf/03/08/pakistan.blast/

Firdous, I. (2011, November 19). Militants kill mosque cleric for resisting "terrorist value" preaching. Retrieved from http://tribune.com.pk/story/294482/militants-kill-mosque-cleric-for-resisting-terrorist-value-preaching/

Girls' school blown up in DI Khan. Daily Times. February 4, 2012.

Gunmen kill 20 Shiite Muslims forced off buses in northern Pakistan. (2012, August 16). Retrieved from http://www.ctvnews.ca/world/gunmen-kill-20-shiite-muslims-forced-off-buses-in-northern-pakistan-1.916493.

Muhammad, F. (2012 March 4). Sherpao survives suicide attack; policeman, girl die. *Dawn*.

Pakistan Minister Shahbaz Bhatti assassinated in Capital City. *Pakistan Times*. March 3, 2011.

Pakistan's governor escapes missile attack. Oct 11, 2011. Retrieved from http://www.reuters.com/article/2011/10/11/us-pakistan-violence-idUSTRE79A2ST20111011.

Peace militia chief among two killed in Khyber bombing. (2012, June 12). *Daily Times*.

Quetta blasts to avenge Qaeda arrests: Taliban. Dawn. September 7, 2011.

Roadside bomb kills 14 in Lower Dir. (2012, September 16). *Dawn*. Suspected militants kill pro-government tribal elder. (2011, July 31). *Dawn*.

Taliban claims responsibility for attack on naval facility in Karachi that has left at least 13 dead. (2011, May 23). Retrieved from http://english.aljazeera.net/news/asia/2011/05/201152218582675282.html

Taliban suicide blast in Karachi leaves eight dead. (2011, September 19). *Dawn*.

Tanveer, A. (2011, April 3). Suicide blast in Pakistan kills dozens. Retrieved from http://www.reuters.com/article/2011/04/03/us-pakistan-blast-idUSTRE73217N20110403.

Tribal elder's house attacked; two killed (2012, May 7). *Daily Times*. Twin blasts kill more than 80 in Charsadda. (2011, May 13). *Dawn*.

United States Department of State Publication Office of the Coordinator for Counter-Terrorism (2010). *Country Reports on Terrorism 2009*. Retrieved from http://www.state.gov/documents/organization/141114.pdf.

United States Department of State Publication Office of the Coordinator for Counter-Terrorism (2011). *Country Reports on Terrorism 2010*. Retrieved from http://www.state.gov/documents/organization/170479.pdf.

United States Department of State Publication Office of the Coordinator for Counter-Terrorism (2012). *Country Reports on Terrorism 2011*. Retrieved from http://www.state.gov/documents/organization/195768.pdf.

United States Department of State Publication Office of the Coordinator for Counter-Terrorism (2013). *Country Reports on Terrorism 2012*. Retrieved from http://www.state.gov/documents/organization/210204.pdf.

United States Department of State Publication Office of the Coordinator for Counter-Terrorism (2014). *Country Reports on Terrorism 2013*. Retrieved from http://www.state.gov/documents/organization/225050.pdf.