NUCLEAR WEAPONS: THE STRATEGIC ASPECTS OF THE PROLIFERATION PROCESS IN THE SOVIET UNION, IRAQ, PAKISTAN, AND SOUTH KOREA AND THE NEED FOR IT IN THE TWENTIETH CENTURY

Okubor Cecil Nwachukwu, Delta State University
Princess Ajudua, Delta State University

ABSTRACT

Nuclear weapons do exist, and they are not going away anytime soon; opportunities to reconsider how and in what capacity to use them are on the horizon. The essay analyzes nuclear weapons proliferation and the need for nuclear weapons in the twenty-first century. It argues that a defense-based proliferation theory to explain nuclear weapons' limited dispersion. By examining the spread of nuclear weapons in detail and estimating the overall impact of the securities. The strategic dimension of the proliferation process is being studied, as well as the centuries-old roles/needs for nuclear weapons in facing new threats in the context of new policies and limits on what is required to deter them. It finds out that nuclear weapons' importance and position are no longer as clear as they once were, since technological advancements have created challenges and hurdles that have reshaped nuclear weapons' function. As a result, it pushes for a consensus on the need for nuclear weapons in the twenty-first century, based on existing realities.

Keywords: Proliferation, Nuclear Weapons, Strategic, Role, Threat.

INTRODUCTION

Nuclear weapons proliferation is a complex dynamic in which multiple states' interests are intertwined. As these events produce concerns and challenges that redefine the necessity for nuclear weapons, its' importance and position are no longer as apparent as they once were. Their contribution to the proliferation literature is to situate the security claim in the geopolitical connection between potential proliferators, adversaries, and, if existent, friends. The article provides a crucial correction to the current literature, which either concentrates on the state's objectives for procuring nuclear weapons (demand-side reasons, including security considerations) or on other states' motives for preventing nuclear weapons from being acquired (supply-side explanations). It investigates demand and supply, as well as their net impact (Sagan, 2011; Monteiro & Debs, 1995), to better understand the significance of security challenges in proliferation.

Against this backdrop, the article "*Nuclear Weapons: The Strategic Aspects Of The Proliferation Process In The Soviet Union, Iraq, Pakistan, And South Korea And The Need For It In The Twentieth Century*" will be discussed. As a result, the essay is separated into three pieces, beginning with the introduction.

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

Part one examines the strategic aspects of the proliferation process in the Soviet Union, Iraq, Pakistan, and South Korea. It argues for the promotion of a defense-focused proliferation hypothesis that explains the limited spread of nuclear weapons. Using a strategic-interaction strategy to improve and incorporate existing safety claims. In summarizing the most important nuclear weapons acquisitions, the paper shows that a security-based approach of proliferation is coherent with the historical record and superior to existing theoretical alternatives. It also makes a case by describing how the security environment affects the relative efficacy of various policy options aimed at preventing proliferation.

Part two examines the nuclear weapons requirements of the twenty-first century, including new techniques and limitations on what is required to counter new threats. It covers deterrence, war prevention, and war termination, diplomatic tools, dissuasion, assurance, defeat, last resort, and unique targeting effects, as well as nuclear weapons in customized deterrent and nuclear weapons in a fast global strike. The mounting proliferation threats, it contends, constitute a compelling reason for a new nuclear doctrine. It also contends that nuclear weapons will confront new obstacles in the context of new rules and constraints on what it takes to deter, and that nuclear weapons have a great necessity in the notion of customized deterrence. Finally, because of its application within the existing military mission package, it finds that the necessity for nuclear weapons in global strike and quick global strike is one additional need that is underlined next.

Part three of the article concludes that, given today's reality, there should be agreement on the need for 21st-century nuclear weapons.

The Strategic Aspects of the Proliferation Process in the Soviet Union, Iraq, Pakistan and South Korea

We're looking at four historical case studies to map the strategic part of the proliferation cycle. In the absence of a nuclear ally, we believe there is a strong link between power and proliferation. Nuclear weapons are the most powerful weapons, but only the most powerful can obtain them. To illustrate this idea, we compare the Soviet Union's possession of the bomb to Iraq's failed nuclearization endeavor. The impact of alliances on proliferation can be measured using these two situations as a baseline. In the presence of a shaky ally, the link between power and proliferation is jeopardized. The security needs of a potential proliferator are not protected by a loose ally, but it may be given the opportunity to nuclearize. To explain this probability, we show how Pakistan's potential to proliferate was boosted by US assistance. In the presence of a good friend, a state does not want nuclear weapons. When it happens, however, the ally's most powerful non-proliferation weapon is linked to the protegé's relative power in relation to its enemy. A powerful ally is more likely to discourage proliferation by increasing their protégé's security assurances if their protege is secure. When the protegé is weak, the powerful ally is more likely to succeed by using coercion and threatening to leave the potential proliferator. We examine the cases of South Korea to explain the dynamic. Nonproliferation was largely achieved by first-case guarantees and the threat of abandonment in the second.

Soviet Union

On August 29, 1949, the Soviet Union conducted a nuclear test, ending the United States'

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

nuclear monopoly. The Soviet Union had both the potential and the ability to develop nuclear power as a powerful state facing a high-level security threat as a result of its defense fight with the United States during the early Cold War.

The Soviet plan has been known to the US since at least 1945, when Joseph Stalin declared it to the US envoy in Moscow in retaliation to the atomic bombing of Hiroshim (Craig & Radchenko (2008). This would be difficult because it would take preventative action. In May 1949, Stalin wrote about the possibility of a covert US strike on China, a much weaker target: "*There are no logistical requirements for an invasion or for war to be declared... The United States of America is less willing to attack than the Soviet Union was to repel an attack*. (Holloway, 1994)" This assessment takes into account US support for Soviet proliferation. Officials in the United States recognized that a preemptive strike would be too costly in comparison to the risk of Soviet nuclearization (Warner, 1994).

A US strike would have been costly because, among other things, US intelligence about Soviet nuclear facilities was lacking Gordin (2009), Rhodes (1996) an issue aggravated by Soviet secrecy about the sites' locations. Due to a lack of intelligence, a target set that would have necessitated a surgical strike was avoided Bas & Coe (2012). As a result, any preemptive strike would have had to pose a threat to the entire Soviet Union (Warner, 1994; Buhite & Hamel, 1990; Goodman, 2007).

Nonetheless, the US had no authority over such a massive endeavor. "*The nation's arsenal (of nuclear weapons) and capability to deliver was extremely limited throughout the early nuclear age,*" argues David Rosenberg. At the end of 1945, there were just two guns available, nine in July 1946, thirteen in July 1947, and fifty in July 1948. None of these weapon systems were mounted (Rosenberg, 1982;1983). The United States had less than 200 nuclear weapons in its stockpile when the Soviets detonated their nuclear bomb (Norris & Arkin, 2000). It, coupled with a lack of nuclear bombers and crews equipped to fly them, has left the US unable to defeat the Soviet Union. "*War preparations have consistently necessitated more bombs than there have been in US arsenals well into the 1950s,*"explain Russell Buhite and Christopher Campbell. The United States' nuclear capabilities were insufficient to deter Soviet nuclearization.

As a result, any preemptive strike would have necessitated a conventional invasion of the Soviet Union, culminating in a costly and potentially protracted conflict (Trachtenberg, 2007; Truman, 1950). Furthermore, such an attack would have sparked massive Soviet reaction, with no guarantee of a quick triumph.

The soviets were substantially supported by the balance of conventional powers in Eurasia in the aftermath of the United States' quick demobilization following World War II. Defense Secretary James Forrestal referred to "*Russian land power's hegemony in Europe and Asia" as one of the world's "exceptional strategic forces" in December 1947*". One Pentagon assessment credited (the Soviet Union) with the strength to overrun most of eastern Europe, Syria, Iran, Afghanistan, Manchuria, Vietnam, and Northern China, writes Gaddis (1987). The Harmon Committee report, published in May 1949-just four months before the first Soviet nuclear test concluded that even if the US attack went as planned, destroying 70 Soviet cities, it would not "*capitulate, kill the foundations of Communism, or fundamentally undermine the control of the Soviet leaders* (Rosenberg, 1979)."*The report concluded that such an attack would "create certain psychological and retaliatory reactions detrimental to the fulfillment of Allied*

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

war aims, and their disruptive repercussions would increase issues with post-hostilities," in a classic understatement. The assessment listed "*the potential of the Soviet military forces to move fast into selected areas of Western Europe, the Middle East, and the Far East would not be substantially harmed*" as one of the developments "*detrimental to the fulfillment of the Allied war goals.*"

Iraq

Iraqi nuclear weapons development began in the 1970s but was never completed. Iraq, a vulnerable state with considerable security challenges, was determined to obtain nuclear weapons but lacked the capability to do so.

Iraq was a weak state without a nuclear partner shortly after the monarchy was deposed and a republic was established in 1958. In March 1959, Iraq withdrew from the 1955 defensive Baghdad Pact, which included Britain as a signatory. It signed an agreement with the Soviet Union in April 1972, but it was not a security pact (including only provisions of consultation and nonaggression). Despite this, the arrangement was cancelled in September 1990, following the Iraqi conquest of Kuwait but before the completion of the Iraqi nuclear program (Debs & Monteiro, 2014).

Iraq's nuclear program began in 1956, when the country used the United States for civilian purposes. The Iraqi Commission on Atomic Energy is being established as part of the Atoms for Peace project. The program took on a political bent in the early 1970s. By that time, Iraq has confronted two big foreign threats: Iran and Israel. Iraq declared war on Israel upon its formation in 1947 and took part in the 1967 Six-Day War. All resulted in a loss in Iraq. Iran had engaged Iraq in two border disputes between 1959-1960 and 1969, and later in a long and bloody war between 1980 and 1988 it would combat Iraq. Saddam Hussein articulated the rationale for Iraq's nuclear weapons development in 1981: "*We need to provide such protection for Iraqi citizens so that they are not humiliated and held hostage by technological progress in Iran or the Zionist empire. Without this type of deterrence, The Zionist entity will continue to pose a threat to Iraq*" (Brands & Palkki, 2011; Braut-Hegghammer, 2011; Snyder, 1983; Bhatia & McGrory, 2000; Khadduri, 2011; Obeidi & Pitzer, 2004; Reiter, 2005).

The nuclear program was mostly unnoticed by the IAEA. Iraq invaded Kuwait in August 1990, crippled by debts incurred during the Iran-Iraq War of 1980-88, and launched a crash armament campaign two weeks later (Wing & Simpson 2013). The US fiercely opposed the invasion, and on January 16, 1991, a coalition led by the US launched Operation Desert Storm to defeat Iraqi forces by the end of February (Albright & Kelley, 1995).

When President George H.W. Bush called for a response to Iraq's attack on Kuwait, he highlighted security concerns (Bush, 1990). During the war two research reactors and nuclear fuel installations were destroyed in the United States (Grant, 2002). However, the scale of Iraqi attempts to obtain the weapon, which were revealed following the Persian Gulf War in 1990, astounded the intelligence community. Since the war, the US has fought hard to keep Iraq's non-nuclear status. Iraq was ordered to stop its nuclear weapons program by UN Security Council Resolution 687, and heavy sanctions were imposed until it did so. Inspectors from the United Nations have been dispatched to Iraq to ensure compliance. According to Scott Ritter, senior UN weapons inspector in Iraq from 1991 to 1998, the severity of the sanctions prompted Saddam to unilaterally dismantle his system (Ritter, 1999; Berntson, 2004).

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

Saddam Hussein had attempted to evade UN sanctions since the early 1990s. The United Nations Security Council deemed Iraq in "*material violation*" of its commitments in January 1993, culminating in bombings of radar sites and putative nuclear installations by the US, UK, and France (Thompson, 2010).

Saddam Hussein tried to compel the international world to lift the sanctions by moving soldiers to the Kuwaiti border in October 1994. The Security Council retaliated by ordering Iraq to comply and withdraw its forces from the UN Special Commission's boundary. Iraq had to fully comply. Saddam vowed to stop cooperating with the Special Commission if no progress was made on lifting the sanctions in July 1995. He recalled the inspectors three years later, in August 1998, only to change his decision in mid-November under pressure from US air attacks. The inspectors' works were hampered once more when they returned to Iraq. In short, Iraq pursued nuclear weapons as a vulnerable state facing major security risks without a nuclear partner, a stance that alarmed its adversaries- Iran, Israel, and ultimately the United States. Iraq became vulnerable to external threats and eventual preemptive strikes as a result of its efforts to create a nuclear weapons program, ultimately dooming its nuclear ambitions (Tamsett, 2004).

Pakistan

Pakistan began a nuclear weapons program in the early 1970s, achieved the technology to construct nuclear weapons in the late 1980s, and tested its first device in 1998. Pakistan was willing to develop nuclear weapons in the face of a conventionally superior adversary in India, and with only sporadic US support. Geostrategic tendencies arose as a result of the reminder to the United States of the importance of its cooperation with Pakistan.

Pakistan's foreign policy has generally been to discourage India, its bigger neighbor and foe, since its independence in 1947. Pakistan acquired security guarantees and conventional armaments from the United States, which "*undertook to safeguard Pakistan's 'independence and integrity"* in 1959 (Bhutto, 1969). At the time, Pakistani authorities believed that the West would *"give Pakistan with the support it need against imagined Indian threats*" (Ahmed, 1999; Ahmed & Cortright, 1998).

Pakistan was considered as a bulwark against communism growing in the United States, as well as a convenient platform for spying on the Soviet Union and China (Cheema, 1987; Grinter, 1993). Nonetheless, the United States' support for Pakistan appeared to be contingent on broader geostrategic shifts. After China attacked India in October 1962, Washington pledged prompt assistance to Delhi, causing "*growing anxiety*" in Islamabad. Furthermore, the deployment of reconnaissance satellites and intercontinental ballistic missiles has reduced the necessity of US access to Pakistani territory (Kux, 2001; Khan, 2012; Armstrong & Trento, 2007; Marwah, 1981).

The United States Congress passed laws to curb nuclear weapons proliferation. The Glenn-Symington amendment, enacted in June 1976, barred the United States from providing military or economic aid to any country that imported dangerous nuclear materials, equipment, or technology. The Nuclear Nonproliferation Act of 1978 was passed by Congress, further constraining even allies' transition to peaceful nuclear technology. The United States has suspended all military and economic aid to Pakistan since the 1977 coup that brought Gen. Muhammad Zia-ul-Haq to office. At the same time, Jimmy Carter's government overrode the Nuclear Nonproliferation Act in order to ship nuclear fuel to India. U.S. support for Pakistani

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

security objectives seemed to be all but disappearing (Khan & Lavoy, 2008).

Pakistan's fortunes improved dramatically after the Soviet invasion of neighboring Afghanistan in December 1979. Pakistan was now viewed as a "*frontline state"* in Washington, with the potential to assist in the transformation of Afghanistan into a *"Soviet Vietnam*" (Subramaniam, 1987). Economic sanctions against Islamabad were rapidly relaxed, and military aid was resumed. In April 1981, Pakistan and the United States struck a bilateral agreement to cooperate in the war against the Soviets in Afghanistan, while Washington ignored Pakistan's nuclear weapons program (Rabinowitz, 2014).

Concerned about the growth of Pakistan's nuclear weapons program in the early 1980s, India pondered preemptive strikes on several occasions (Fuhrmann & Kreps 2010). One major issue for India was that it would have to attack without the benefit of superpower promises (Kumaraswamy, 2010). No strikes have ever been conducted, possibly because of the United States' position. In 1981 and 1986, U.S. military aids because of the United States' attitude, no strikes have ever been carried out. Military aid packages from the United States in 1981 and 1986 bolstered Pakistan's conventional defenses while raising the cost of a preventive war (Reiss, 1991). In early 1984, the US aided Pakistan by alerting it of an impending Indian attack on the Kahuta uranium enrichment plant (Levy & Scott-Clark, 2007).

The United States is concerned about Pakistan's march toward nuclear weapons. Congress, but not the executive branch, was more concerned with securing a key ally. In 1985, the Pressler amendment went into effect. The provision required the president to guarantee a nuclear-free state until it became eligible for US assistance. Presidents Ronald Reagan and George H.W. Bush agreed on Pakistan's ostensibly non-nuclear status and authorized it. Yet, US intelligence officials suspected Pakistan had a nuclear capability as early as November 1986. In March 1987 General Zia himself proclaimed that "*Pakistan has the potential to develop the Bomb*" (Doerner, 1987). "*The constitutional criteria given forth by Congress is whether Pakistan possesses a nuclear explosive device, not whether Pakistan is attempting to create or has developed other related capabilities,*" President Ronald Reagan said in 1989 while warning of possible developments (Ottaway, 1989).

In short, Islamabad's potential to obtain nuclear weapons is obvious. Pakistan was fighting against a conventionally superior foe in India, with only sporadic US help. The Soviet conquest of Afghanistan resulted in increased US support, which finally assisted Islamabad in obtaining nuclear weapons.

South Korea

South Korea has faced a serious security threat from North Korea since the mid-twentieth century, with Seoul being particularly susceptible. In the late 1960s, South Korea declared a desire to obtain nuclear weapons in reaction to President Richard Nixon's announcement of the Guam Doctrine, which attempted to limit US military incursions in Asia. North Korea's interest in nuclear weapons has risen and fallen over time as a function of its perception of US promises and assertiveness.

With its involvement in the 1950-53 Korean War, the United States demonstrated an interest in safeguarding South Korea and has since played an essential role in satisfying the country's security demands (Choi & Park, 2008). When the war began, a mutual security treaty was concluded between the two nations (Pollack & Reiss, 2004). In 1957, the United States

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

reaffirmed its commitment to South Korea by deploying tactical nuclear weapons on the Korean Peninsula. Beginning with a bilateral deal in 1955 to transfer nuclear technology for peaceful purposes, the United States aided South Korea in its attempts to develop nuclear energy. The Korea Atomic Energy Research Institute founded the country's nuclear program in 1959.

In the 1960s, two events aggravated South Korea's security situation. The first was North Korea's military buildup and constant provocations. Changes in US foreign policy were to blame for the latter. In 1969, President Richard Nixon issued the Guam Doctrine (Nixon, 1969). Shortly after, the United States withdrew one-third of its soldiers from South Korea (about 20,000), including all US forces stationed along the demilitarized zone separating the two Koreas. This policy change was meant to persuade US allies to accept more responsibility for their own security. However, it sparked fears of desertion in Seoul, especially considering the United States' efforts to broker reconciliation with China's People's Republic (Kim, 2001). South Korea, stunned by the Guam Doctrine and reliant on the US for protection before that, has requested more time. In June 1970, a senior assistant to President Chung-hee Park said that he could do more to ensure his safety, but that "*we need time"*. By 1975, we will be superior to North Korea in every way and will be able to fend for ourselves (Shabecoff, 1971).

As a result, South Korea became more involved in the nuclear program's military aspects. President Park called for the construction of a "*super weapon"* as part of a *"self-reliant national defense*" (Hong, 2011; Kim et al., 2011). The Agency for Defense Development began a military nuclear program under its auspices in 1970 (House Committee on International Relations, 1978). President Park tasked the Korea Atomic Energy Research Institute with developing reprocessing capabilities, as well as creating the Covert Weapons Exploitation Committee, which is in charge of nuclear procurement and manufacture. In 1973, South Korea attempted to purchase a reprocessing facility as well as a research and heavy water reactor from France and Canada (Pinkston, 2004). In February of that year, Park signed the "*Basic Plan for the Development of Ballistic Missiles*."

Nonetheless, Washington has not assuaged South Korea's worries of desertion. President Park was committed to the development of nuclear weapons. In November 1976, Kim told Won-chul Oh, his chief economic adviser, to pursue the establishment of a nuclear industry: "*Acquire the capability, but not in a fashion that invites international pressure*." Changes in Washington will reawaken South Korean feelings of abandonment. In early 1977, President Jimmy Carter appeared "*determined to withdraw US troops from South Korea and was strongly critical of Park's harsh internal policies.*" Carter advocated slashing South Korea's military aid, removing US ground troops from the peninsula, and removing 1,000 tactical nuclear weapons from the region to achieve this goal. As a result, Park re-examined the nuclear option, as well as the expansion of South Korea's missile capacity. Park's worries were unaddressed by Carter's declaration on March 9th, 1977, that the withdrawal plans would be delayed until 1982 (Siler, 1998).

As a result of the escalating tensions with North Korea, worries have been raised regarding the potential of Seoul restarting its nuclear program. North Korea conducted three nuclear tests in October 2006, May 2009, and February 2013, after the Agreed Framework was abrogated in 2002. As a result, the US has reiterated its commitment to protect South Korea. On the South's request, the term "*extended nuclear deterrence*" was added to the joint communiqué given by South Korea and the United States at the end of Security Consultative Meetings eleven

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

days after Pyongyang's first test. Given South Korea's restricted foreign policy ambitions and the United States' unwavering commitment to its defense, the country is unlikely to acquire its own nuclear weapons.

In conclusion, South Korea's tight relationship with the United States has been critical in limiting its capacity to obtain nuclear weapons. When this project began to falter, Seoul pondered the nuclear option, which it could easily afford given its considerable economic and scientific capabilities. However, Seoul's readiness to obtain nuclear weapons has been incorporated in renewed and sustained Washington agreements.

Nuclear Weapons Needs of the 21st Century Deterrence

Nuclear deterrence is a violent paradox in which the goal is to prevent the use of nuclear weapons rather than deploy them (Sauer, 2005).

Deterrence can be defined and described in a variety of ways. However, broad definitions and explanations are offered to aid in understanding the status and significance of nuclear weapons in the twenty-first century. Deterrence was a concept that existed long before atomic weapons were developed. "*For millennia, nations have employed military force to punish or condemn competitor conduct, but nuclear weapons' near-instantaneous potential for mass destruction was novel*" (Chun, 2006). Serge Sur (1993), a French university professor and international affairs expert, opined on the following:

Deterrence must be distinguished from nuclear weapons themselves. The existence of a policy that ensures the non-use of weapons, making deterrence a means of maintaining peace rather than a weapon of war, is neither synonymous with the advent of nuclear weapons nor a logical result of their development... Their initial appearance was in an offensive setting, free of any deterrent context. Deterrence indicates that the state that follows it intends to prevent rather than compel an action. As a result, deterrence is defensive and stabilizing in and of it, and is, by definition, superior to non-use (Sur, 1993).

Nuclear weapons are known to be the military gadgets or instruments used to deter in this manner.

Nuclear deterrence is relevant across the entire spectrum of conflict, including pre-war and post-war phases. Deterrence from nuclear use or threat of use, deterrence from the use of other weapons of mass destruction (e.g. chemical, biological, radiological, and high explosives) or threat of use, and deterrence from escalation have all evolved from conflict deterrence (war prevention) (was already in use) (Seth, 2006).

The change came as a result of the realization that, while nuclear deterrence does not ensure the prevention of all types of war, it has proven effective in averting total war. Its applicability, however, extends to all types of conflicts.

Nuclear deterrence risks include unintended consequences of nuclear proliferation, safety hazards, and the danger of failure to dissuade. "*Nuclear deterrence has created a never-ending arms race that has been wasteful and unnecessary in many ways*." The presence of nuclear weapons and their deterrent effect necessitates a study of proliferation issues as well as the intentional and unintentional use of nuclear weapons. "*The major danger to our existence today is an accidental or inadvertent nuclear war*," according to Louis Rosen, former director of the Los Alamos Neutron Science Center. "*This could result from... the unintentional escalation of the conventional war, the use of a few nuclear weapons by third parties, the accidental or*

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

unauthorized launch of nuclear weapons, (or) significant (nuclear weapons) failure" (Rosen, 1987; Sauer 2005). Nuclear weapons have such severe physical consequences (such as radiation, fallout, and tremendous heat), but they also have psychological and political consequences. The use of nuclear weapons will lead to a long-term deterioration of international relations. Nuclear weapons, according to Stephen Cimbala (2006), a political science professor at Pennsylvania State University, are harmful in the following ways.

1. Nuclear weapons can be deployed by rogue governments as part of a national 'denial of access' or local coercion strategy for coercive negotiation or fighting;
2. Nuclear deterrence (due to its incompatibility with emerging information technology paradigms) can result in an unintentional or unintentional nuclear conflict;
3. As nuclear weapons spread, they may find their way into American or ally cities, posing a lethal threat;
4. Nuclear deterrence has evolved from a Cold War-era paradigm to a more complex... concept as an all-purpose safe haven.
5. Nuclear deterrence will be replaced by post-nuclear sophisticated technology weapons...;
6. The psychology of national leaders and non-state actors is just as essential as the spread of nuclear weapons or the effectiveness of deterrent systems in determining the risk of nuclear war (Cimbala, 2006). In the end, the advantages may exceed the risks. "*While deterrence by itself is not a long-term answer to the problem of preventing nuclear catastrophe*," Rosen writes, "*it should be viewed as an enabler... in lessening the likelihood of world conflict*."

War Prevention and War Termination

The prevention of conflict, which is one part of nuclear deterrence, is a key goal in not using nuclear weapons. "*Since the development of nuclear weapons and the demonstration of their horrific destructive power in Hiroshima and Nagasaki in 1945, the least dangerous way to use them has been through nuclear deterrence: the indirect use of these weapons (in the form of threats to use them) to deter an enemy's nuclear aggression or conventional large-scale attack*" (Arbatov & Dvorkin. 2006).

Nuclear weapons have a role to play in both preventing (nonuse) and ending (use) war. However, the United States' first and only operational deployment of nuclear weapons was to stop the war. "*The claim that conflicts were avoided by the mere threat of nuclear assault is unproven, but most current strategists believe it.*" Similarly, conflicts have been terminated by the actual application of counter value pain: World War I and World War II also fit this pattern, albeit in a different way (Shue, 1989). In the backdrop of the first use of nuclear weapons, George Quester explains the counter-value impact of nuclear weapons. "*Since 1945, nuclear weapons have primarily served as a deterrent, more important in terms of how they influence the opposing side's intentions than in terms of what they can do with their capabilities*." Nuclear weapons compelled the Japanese to surrender and persuaded the Soviets to use their conventional forces dominance in Europe to weaken the Japanese forces in order to prepare the way for an amphibious invasion of Japan or to repel the Warsaw Pact tank arrays (Quester, 2006).

Dissuasion

Dissuasion refers to operations aimed at discouraging rivals and potential adversaries from acting against US interests. Deterrence aims to "*shape the essence of military competitions*

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

in ways beneficial to the United States by including restraint in adversary behavior; to channel... their tactics and energy in less challenging directions; and complicate... their military preparation," according to Ryan Henry, Principal Deputy Under Secretary of Defense for Strategy (Henry, 2005).

Deterrence is a strategy for influencing antagonistic behavior. "*Dissuasion might be thought of as 'pre-deterrence*," Henry says, "*preventing an opponent from gaining capability before it can be employed, and a course of action before it can be taken.*" We can strive to deter opponents from extending, enhancing, or shifting a capability while preventing them from using it in some cases. Nuclear weapons can be used as a control tool due of their inherent destructive capabilities (Quinlan, 1997; Stearns-Boles, 2007).

Nuclear Weapons in Tailored Deterrence

They will address the new problems within the framework of new policies and constraints on what it takes to halt nuclear weapons. Within the paradigm of tailor-made deterrence, nuclear weapons have a clear function to play. It was discovered in the 2006 QDR. "*The future force (deterrence) will be fully balanced and adapted to deter both state and non-state threats... While the partners are happy, potential competitors are scared away. The force will contain a greater spectrum of non-kinetic and conventional strike capabilities, while preserving a robust nuclear deterrent that remains a foundation of US national power*," according to the New Triad priorities set during the Nuclear Posture Review of 2001. Nuclear weapons only provide a subset of the capabilities needed for individualized deterrence.

Nuclear weapons can give deterrence to some players but not to others. Because it pertains to customized deterrent, the function fits well within the capacity-based planning paradigm. "*In the future, both strategic nuclear weapons and conventional strategic weapons may provide us with a tailored deterrence role.*" Strategic nuclear weapons can now be used for a broader or undefined deterrent purpose, aimed not at another country but at the danger of a nuclear strike on the US and its allies by a major nuclear power (National Research Council, 1997). In order to meet present and foreseeable threats within the individualized deterrence framework, all of the roles outlined previously are still relevant and appropriate for nuclear weapons.

Nuclear Weapons in Prompt Global Strike

Because of its application within a new military mission set, the role of nuclear weapons in global strike and prompt global strike is underlined next. "*The ability to quickly prepare and execute limited-duration and extended-range attacks to achieve specific results against highly valued adverse targets*," according to USSTRATCOM's DO JOC. "*These targets can include WMD development, storage and distribution networks, and vital command/control facilities for adversary decision-makers, and power bases for adversarial leadership*."

Nuclear weapons play a role in that aim, according to a 2001 NPR report. "*No one arms program has the capability to launch a global attack*." Global attack options, along with nuclear and other capabilities, must be integrated into military planning (Strategic Command Offutt, 2006). Nuclear weapons unquestionably play a role. Nuclear weapons, according to USSTRATCOM, have the following capabilities in the global strike mission (Pilat, 2005).

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

CONCLUSION

This article proposes a defense-based proliferation theory to explain the limited distribution of nuclear weapons. Nuclear weapons proliferation is a dynamic process in which several states' interests collide. They argue that the strategic interplay between a state deciding whether or not to acquire nuclear weapons and its rivals impacts the danger of proliferation. Their hypothesis focuses on four case studies of nuclear development: the Soviet Union, Iraq, Pakistan, and South Korea.

Nuclear weapons are becoming increasingly important in the twenty-first century. The presence of nuclear weapons and their deterrent effect necessitates a study of proliferation issues as well as the intentional and unintentional use of nuclear weapons. Nuclear weapons have such terrible physical and psychological impacts that they also have detrimental psychological and political consequences. In the end, the advantages may exceed the risks. As a result, proponents argue that a consensus on the need for 21st century nuclear weapons based on current realities is required.

REFERENCES

Ahmed, S. (1999). Pakistan's nuclear weapons program: Turning points and nuclear choices. *International Security, 23*(4), 178-204.

Ahmed, S., & Cortright, D. (1998). *Pakistan and the bomb: Public opinion and nuclear options*. University of Notre Dame Press.

Albright, D., & Kelley, R. (1995). Has Iraq come clean at last? *Bulletin of the Atomic Scientists, 51*(6), 53-55.

Arbatov, A., & Dvorkin V. (2006). *Beyond nuclear deterrence: Transforming the U.S. Russian equation (Washington).*

Armstrong, D., & Trento, J.J. (2007). *America and the Islamic bomb: The deadly compromise*. Steer forth Press.

Bas, M.A., & Coe, A.J. (2012). Arms diffusion and war. *Journal of Conflict Resolution, 56*(4), 651-674.

Berntson, L.R. (2004). Hans Blix: Disarming Iraq. *Svenska Dagbladet*.

Bhatia, S., & McGrory, D. (2000). *Brighter than the Baghdad sun: Saddam Hussein's nuclear threat to the United States*. Regnery Publishing.

Bhutto, Z.A. (1969). *The myth of independence*. London: oxford university press.

Brands, H., & Palkki, D. (2011). Saddam, Israel, and the bomb: Nuclear alarmism justified? *International Security, 36*(1), 133-166.

Braut-Hegghammer, M. (2011). Revisiting Osirak: Preventive attacks and nuclear proliferation risks. *International Security, 36*(1), 101-132.

Buhite, R.D., & Hamel, W.C. (1990). War for peace: the question of an American preventive war against the soviet union, 1945–1955. *Diplomatic History, 14*(3), 367-384.

Bush, G.H.W. (1990). Address before a joint session of the congress on the Persian Gulf crisis and the federal budget deficit. *Washington, DC*.

Cheema, Z.I. (1987). American policy in South Asia: Interests and objectives. *The security of South Asia: American and Asian perspectives, Vistaar Pub, New Delhi*.

Choi, K., & Park, J.S. (2008). South Korea: Fears of abandonment and entrapment. *The long shadow: Nuclear weapons and security in 21st century Asia*, 373-403.

Chun, C.K.S. (2006). Strategic deterrence in an uncertain world. *High Frontier: The Journal for Space and Missile Professionals, 2*(4), 26.

Cimbala, S.J. (2006). *Nuclear weapons and strategy: US nuclear policy for the twenty-first century*. Routledge.

Craig, C., & Radchenko, S. (2008). *The atomic bomb and the origins of the Cold War.* Yale University Press.

Debs, A., & Monteiro, N.P. (2014). Known unknowns: Power shifts, uncertainty, and war. *International Organization, 68*(1), 1-31.

Doerner, W.R. (1987). Pakistan knocking at the nuclear door: A key ally confirms that his scientists can build the

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

Bomb. *Time*
Fuhrmann, M., & Kreps, S.E. (2010). Targeting nuclear programs in war and peace: A quantitative empirical analysis, 1941-2000. *Journal of Conflict Resolution, 54*(6), 831-859.
Gaddis, J.L. (1987). *The long peace: Inquiries into the history of the cold war*. Oxford University Press on Demand.
Goodman, M.S. (2007). With a little help from my friends: The Anglo–American atomic intelligence partnership, 1945–1958. *Diplomacy and statecraft, 18*(1), 155-183.
Gordin, M.D. (2009). *Red cloud at dawn: Truman, Stalin, and the end of the atomic monopoly*. Farrar, Straus and Giroux.
Grant, R. (2002). Osirak and beyond. *Air Force Magazine*, *85*(8), 74-79.
Grinter, L.E. (1993). The United States and South Asia: New challenges, new opportunities. *Asian Affairs: An American Review*, *20*(2), 101-119.
Henry, R. (2005). *Deterrence and dissuasion for the 21st century. Presentation given during IUFPA-Fletcher Conference*.
Holloway, D. (1994). Stalin and the bomb: The Soviet Union and Atomic Energy, 1939-1956. *Yale University Press*.
Hong, S.G. (2011). The search for deterrence: Park's nuclear option. In *The Park Chung Hee Era*. Harvard University Press, 483-510.
House Committee on International Relations. (1978). *Investigations of Korean-American relations: Report of the subcommittee on international organizations, 95th Cong*.
Khadduri, I. (2011). *Iraq's nuclear mirage: Memoirs and delusions.* International Security, 3-71.
Khan, F. (2012). Eating grass. In *Eating Grass*. Stanford University Press.
Khan, F.H., & Lavoy, P.R. (2008). The Dilemma of nuclear deterrence. *The Long Shadow: Nuclear Weapons and Security in 21st Century Asia*.
Kim, P.G., Kim, B.K., & Vogel, E.F. (2011). *The Park Chung Hee Era: The transformation of South Korea*. Harvard University Press.
Kim, S.Y. (2001). Security, nationalism and the pursuit of nuclear weapons and missiles: The South Korean case, 1970-82. *Diplomacy and Statecraft*, *12*(4), 53-80.
Kumaraswamy, P.R. (2010). India's Israel policy-Columbia university press. *New York*, 242-377.
Kux, D. (2001). *The United States and Pakistan, 1947-2000: disenchanted allies*. Woodrow Wilson Center Press.
Levy, A., & Scott-Clark, C. (2007). *Deception: Pakistan, the United States, and the secret trade in nuclear weapons.* Bloomsbury Publishing USA.
Marwah, O. (1981). India and Pakistan: Nuclear rivals in South Asia. *International Organization*, *35*(1), 165-179.
Monteiro, N.P., & Debs, A. (1995). The strategic logic of nuclear proliferation. *International Security, 39*(2), 4.
National Research Council. (1997). *Naval studies board, commission on physical sciences, mathematics, and applications.* Post-Cold War Conflict Deterrence (National Academy Press).
Nixon, R. (1969). Informal remarks in Guam with Newsmen. *Presidential Papers of the United States.*
Norris, R.S., & Arkin, W.M. (2000). Global nuclear stockpiles, 1945-2000. *Bulletin of the Atomic Scientists*, *56*(2), 79-79.
Obeidi, M., & Pitzer, K. (2004). *The bomb in my garden: The secrets of Saddam's nuclear mastermind*. John Wiley & Sons.
Ottaway, D.B. (1989). Pakistan may lose US aid: No atom bomb certification is unlikely. *Washington Post*.
Pilat, J.F. (2005). The new triad. In *nuclear transformation*. Palgrave Macmillan, New York.
Pinkston, D.A. (2004). South Korea's nuclear experiments. *Center for Nonproliferation Studies, 9*.
Pollack, J.D., & Reiss, M.B. (2004). South Korea: The tyranny of geography and the vexations of history. *The Nuclear Tipping Point: Why states reconsider their nuclear choices, 254-292*.
Quester, G.H. (2006). *Nuclear first strike: Consequences of a broken taboo*. JHU Press.
Quinlan, M. (1997). *The future of nuclear weapons in world affairs*.
Rabinowitz, O. (2014). *Bargaining on nuclear tests: Washington and its cold war deals*. *Oxford University Press*, 145-54.
Reiss, M. (1991). The illusion of influence: The United States and Pakistan's nuclear programme. *The RUSI Journal, 136*(2), 47-50.
Reiter, D. (2005). Preventive attacks against nuclear programs and the "Success" at Osiraq. *Nonproliferation Review, 12*(2), 355-371.
Rhodes, R. (1996). *Dark sun: The making of the hydrogen bomb*.

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.

Ritter, S. (1999). *Endgame: Solving the Iraq crisis*. Simon and Schuster.
Rosen, L. (1987). Nuclear deterrence: Considering the alternatives. *Remarks presented at the Trinity Forum Panel Dialogue in Albuquerque*, New Mexico.
Rosenberg, D.A. (1979). American atomic strategy and the hydrogen bomb decision. *The Journal of American History, 66*(1), 62-87.
Rosenberg, D.A. (1982). US nuclear stockpile, 1945 to 1950. *Bulletin of the Atomic Scientists, 38*(5), 25-30.
Rosenberg, D.A. (1983). The origins of overkill: Nuclear weapons and American strategy, 1945–1960. *International security, 7*(4), 3-71.
Sagan, S.D. (2011). The causes of nuclear weapons proliferation. *Annual Review of Political Science, 14*(1), 225-244.
Sauer, T. (2005). *Nuclear inertia: US nuclear weapons policy after the Cold War*. Tauris, London.
Serge Sur, S. (1993). *Nuclear deterrence revisited: Problems and perspectives in the 1990's*.
Seth, C.W. (2006). *Defining Weapons of Mass Destruction.* National Defense University Press.
Shabecoff, P. (1971). Seoul protests US plan for withdrawal. *New York Times, June, 17*.
Shue, H. (1989). *Nuclear deterrence and moral restraint*. Cambridge: Cambridge University Press.
Siler, M.J. (1998). US nuclear nonproliferation policy in the northeast Asian region during the cold war: The South Korean case. *East Asia, 16*(3), 41-86.
Snyder, J.C. (1983). The road to osiraq: Baghdad's quest for the bomb. *Middle East Journal, 37*(4), 565-593.
Stearns-Boles, S.L. (2007). *The future role and need for nuclear weapons in the 21st century*. Inst for national security studies us air force academy co.
Strategic Command Offutt. (2006). *Deterrence operations joint operating concept.*
Subramaniam, R.R. (1987). US Policy and South Asia: The Decision-Making Dimension. *The Security of South Asia*.
Sur, S. (1993). Nuclear deterrence revisited. In *Nuclear deterrence: problems and perspectives in the 1990's*.
Tamsett, J. (2004). The Israeli bombing of Osiraq reconsidered: Successful counter proliferation? *The Nonproliferation Review, 11*(3), 70-85.
Thompson, A. (2010). *Channels of power: The U.N. Security Council and U.S. statecraft in Iraq*. Cornell University Press.
Trachtenberg, M. (2007). Preventive war and US foreign policy. *Security Studies, 16*(1), 1-31.
Truman, H.S. (1950). Radio and television report to the American people on the situation in Korea. *Public Papers of the Presidents.*
Warner, M. (1994). *The CIA under Harry Truman*. History Staff, Center for the Study of Intelligence, Central Intelligence Agency, 319-320.
Wing, C., & Simpson, F. (2013). Detect, dismantle, and disarm: Iaea verification, 1992-2005. *United States Institute of Peace Press*.

Received: 11-Jul-2022, Manuscript No. JLERI-22-12319; **Editor assigned:** 14-Jul-2022, PreQC No. JLERI-22-12319(PQ); **Reviewed:** 28-Jul-2022, QC No. JLERI-22-12319; **Revised:** 26-Nov-2022, Manuscript No. JLERI-22-12319(R); **Published:** 03-Dec-2022

Citation Information: Nwachukwu, O.C., & Ajudua, P. (2023). Nuclear weapons: The strategic aspects of the proliferation process in the soviet union, Iraq, Pakistan, and South Korea and the need for it in the twentieth century. Journal of Legal, Ethical and Regulatory Issues, 26(S2), 1-13.