A Cross-Cultural Study of Attitudes toward Iran’s Nuclear Development Program

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Abstract

Iran’s nuclear development program is a source of tension. While there is much political debate in the media regarding whether this program poses a threat to international security; there is lack of academic research about public perceptions and attitudes about the program and its controversial nature. This research attempted to fill this knowledge gap through an attitude survey. The independent variables in the study were respondents’ demographic and cultural backgrounds. Dependent variables were public perceptions about the reasons for Iran’s nuclear intentions, and their general attitudes toward these intentions. The key research question explored was whether and to what extent did these perceptions and attitudes vary according to the independent variables. The theoretical framework for the study was provided by the motivations identified in the literature (idealism, liberalism, and idealism) for nations to develop nuclear capability. Using a mixed-model approach, a quantitative survey of a convenient sample of 364 respondents was drawn from 5 population groups: Canadians, U.S. Citizens, and Iranians in Iran and North America; followed by qualitative interviews with four knowledgeable people from each subsample. Results confirmed that peoples’ perceptions and attitudes toward Iran’s nuclear-development program and the threat it might pose to international security vary by their cultural and demographic background, and the theoretical motivational categories of realism, liberalism, and idealism. These findings may help create a more realistic view of globalization of nuclear technology and thus ease international tensions emanating from this issue.

1 Introduction

Iran is historically, culturally, and politically different from other Middle Eastern countries. It has been a center of conflict in the Middle East for some time (Pendergast, Pendergast, & Zerbonia, 2006). The majority of Iranian people are ethnically Asian, while the majority of populations in the other Middle Eastern countries are Arab (Takeyh, 2006). Nearly all of Iran’s population is Shiite, while the Sunni branch of Islam dominates the rest of Middle East (Takeyh, 2006). Despite these differences, which have
made Iran an outsider in the Arab Middle Eastern conflicts, Iran’s opposition to the Jewish state of Israel and its difficult relationship with the Western powers, especially the United States, has made it an important player in the regional conflict (Jafarzadeh, 2007). The Iranian government has been trying to gain nuclear capability to become a regional power and gain hegemony in the Muslim world (Jafarzadeh, 2007). Although Iran claims that its nuclear program is solely for peaceful fuel efficiency (e.g., generating electricity), the United States, Israel, and the European countries say Iran’s pursuit of uranium enrichment suggests otherwise (Bahgat, 2006). Western countries view Iran’s nuclear capabilities as a threat to world peace and strongly oppose Iran’s nuclear-development program (Jafarzadeh, 2007).

Possession of nuclear weapons by any country, especially a nondemocratic one such as Iran, is often seen as a threat to world peace (Linzer, 2005; Lumpkin 2002). People from different cultures often carry different attitudes toward complex international issues, such as Iran’s nuclear development program. For example, a 2006 survey conducted by the Pew Global Attitudes Project showed that while the majority of U.S. citizens are worried about the nuclear threat posed by Iran, the majority of Muslim populations are not. Even in North America, Canada is generally more liberal and open to diverse political viewpoints than is the United States. Canadians seem to have more liberal attitudes toward international affairs, and are far less critical of others than most U.S. citizens (Pew Research Center, 2007a).

On the other hand, it seems that more than half of the Iranian population has become apathetic, no longer holding any particular opinion toward Iran’s political system (Ehsani, 2003). This is due to the structure of Iran’s political system, which not only prohibits people’s involvement in the political arena, but also restricts the amount and type of information that can be obtained by journalists and researchers on sensitive issues. The only study that addressed Iranian perspectives on foreign-policy issues was conducted by Hooglund in 1995. Hooglund interviewed 200 Iranians in Iran about U.S.–Iran relations and concluded that none of Iranians viewed the four factors (Iranian support for international terrorism, Iran’s efforts to destabilize regional governments, Iran’s opposition to the Arab–Israeli peace process, and Iran’s program to develop nuclear and other weapons of mass destruction) as a source of hostility between the two countries.

Although some analysts have sought to explain why the Iranian government chooses to develop nuclear capability, very little attention has been paid to people’s perspectives on this issue. Much of what is generally known and expressed about Iran’s nuclear stand is the acrimonious debate (charges and countercharges) between the governments of Iran and Western governments, spearheaded by the U.S. government. Information
in this area is limited to journalistic viewpoints portraying Iran’s nuclear intentions. Relatively little is known about how and what the ordinary citizen in Iran and the West (both Iranians and non-Iranians in Iran, Canada and the United States), think and know about this issue. An extensive literature review conducted for this investigation substantiates this claim.

The purpose of this study was to fill the knowledge gap about perceptions and attitude towards Iran’s nuclear development program among Iranians and North Americans. This study addressed three research questions: Firstly, in the opinion of people in Iran and North America, why does Iran want to develop nuclear capability? Secondly, how do these individuals view Iran’s nuclear-development intentions—negatively, positively or neutrally? And thirdly, do these perceptions vary according to the cultural and demographic background of the respondents drawn from five culturally different populations?

2. State of the Art

This study has been guided by the most prevalent international relation theories of realism, liberalism, and idealism. Using these theories, a methodology presented in the study tested these theories by quantitative and qualitative approaches. Both the quantitative and qualitative studies have been adopted in international relations studies (Braumoeller & Sartori, 2004; Mansfield, 2004). While the quantitative methods provide a rigorous means of testing a theory, qualitative methods create a better discourse with international economies (Miller, 2008).

Under the rubric of international theories, this methodology was the best methodology available to this study for two reasons. First, the methodology adopted in this study can best explain Iran’s behavior in international arena. Second, this methodology considers different factors and allow for a more comprehensive examination of Iran’s nuclear development program.

2.1 Literature Review

This literature review provides an overview of the history of nuclear proliferation during the past 3 decades, along with a summary of various theories scholars have proposed to explain the motivations of nations like India, Pakistan, Israel, and Iran to develop nuclear capabilities for both military and civilian uses.
The contexts and situations matter significantly in explaining the nuclear choices of nation states. A state’s decision to develop nuclear capability is determined largely by the level and type of security threat it faces, and the nature of conflict it engages in with adversaries in its immediate geographic environment (Feldman & Shapir, 2004). The motivation of a state to develop nuclear capability could include other states’ acquisition of nuclear weapons, deterioration of politico economic relations with allies, international prestige, and benefits and costs deriving from developing, producing, or possessing nuclear weapons (Bailey, 1991; Cohen, 1991). An important factor is the level of conflict in the region. In a high-conflict environment, states are likely to acquire nuclear weapons in order to deter adversaries and to achieve hegemony in the region. These motivations are the underlying assumptions of the deterrence, realism, liberalism, and idealism perspectives on nations developing nuclear capability. In this chapter, the nuclear development programs of four states in a high-conflict region (Israel, India, Pakistan, and Iran) are specifically examined through these perspectives.

**Security, Deterrence, and Offensive Motivation**

The primary reason for states to acquire nuclear weapons is related to security. States seek to maximize their own relative power in order to guarantee their security and survival (Waltz, 1979). It is in this effort to maximize rational power that states end up in conflict with other states. This argument is the basis of realism theory. Realism argued that states attempt to resolve their security dilemmas in an international system by one or both strategies of arming themselves and forming alliances (Davis, 1993). These two strategies aim to accumulate power and deter potential threats (Schneider, 1994). As in deterrence theory, realism (particularly neorealism) assumed that states have to rely on self-help for survival (Sridharan, 2005a).

In the neorealist world, since there is no overarching authority in the system: states cannot be certain of each others’ intentions, but cooperation among states is not impossible. In such an international system, some states become stronger and others weaker (Waltz, 1979). As a result, some states become internationally isolated, and others become aggressive. An isolated state, or a state that is threatened by a larger neighbor or an adversary, seeks international prestige by acquiring nuclear weapons. There are two kinds of realism: offensive and defensive realism (Waltz, 1993). Defensive realism focuses on security and predicts that states acquire capabilities to defend themselves when threatened (Waltz, 1993). Offensive realism predicts that some states may seek offensive capabilities because they have aggressive aims unrelated to their security requirement (Waltz, 1993). These capabilities increase the risk of war by strengthening the power of the possessor and making others insecure (Waltz, 1993).
Under defensive realism, one way to achieve security is to convince the enemy that it will face unacceptable punishment or denial of its objectives if it takes any action. The preference for deterrence in a highly volatile and insecure environment forces countries to consider acquiring nuclear capabilities (Segan & Waltz, 1995). Deterrence is the process of convincing an entity (a person, state, or decision-making group) not to do something by threatening consequences for its actions (Segan & Waltz, 1995). There are two opposing views regarding nuclear deterrence. Sagan (1994) asserted that the spread of nuclear weapons is a threat to global peace and increases the risk of nuclear war. Others believed that possession of nuclear weapons results in peace between countries (Waltz, 1993). Waltz used rational-deterrence theory to explain that nuclear weapons will inevitably spread. Because nuclear weapons induce caution and restraint, the increase of these weapons results in higher international stability (Segan & Waltz, 1995). According to Waltz, once more than one state has acquired second-strike capability, war between the nuclear armed states is unlikely to occur.

One example of deterrence occurred in 1994, when the tension between the United States and Korea over their nuclear weapons program rose. The United States was prepared to use military force to attack North Korea’s nuclear-weapons facilities (Sridharan, 2005b). However, when the United States faced the estimated high cost of war, it pursued diplomatic talks with North Korea (Sridharan, 2005b). North Korea’s nuclear capabilities deterred the United States from choosing a military option, and forced it to try more diplomacy prior to initiating military action (Sridharan, 2005b).

Countries may acquire nuclear capabilities for economic purposes. Nuclear acquisition widens the range of economic capabilities in which a state can effectively compete in an international arena (Waltz, 1993). Economic capability and resource endowment are the two most important factors in determining a country’s power (Waltz, 1993). Economic competition is as important as military competition. The productive and the technologically advanced country can influence international outcomes (Waltz, 1993). Generally, the importance of economic power is the fundamental principle of Liberalism. Liberal accounts of international politics tend to focus on economic rather than security motivations. Based on liberalism, states are not alike, and some states can have competitive advantages over others by economic rather than military means (Doyle, 2000). Nuclear capabilities enable a state to concentrate on its economy rather than its military forces. A state’s economic gains from nuclear capabilities might be temporary or permanent (Schneider, 1994; Segan & Waltz, 1995). Temporary economic benefits include one-time aid, payments, or waivers of sanctions (Schneider, 1994; Segan & Waltz, 1995). Permanent economic gains include imposing or lifting of sanctions or trade barriers in a permanent manner, incorporation into trade
organizations, or strengthening of international rights (Schneider, 1994; Segan & Waltz, 1995). These factors change a country’s long-term economic position in the international system. In contrast to realism, liberalism claims that states can coexist nonviolently if certain aspects of the international system are changed. Like realism and liberalism, idealism is another motivating factor for nations in international spheres. However, idealism takes a totally different approach to the nuclear acquisition of a state (Karl, 1996; Kelly, 1970). While the realist sees the struggle between nations as the distinguishing characteristic of international relations, the idealist believes that the essence of international relations is spiritual power (Karl, 1996). This power is derived from the impact of thoughts and the individual conscience (Kelly, 1970). The idealist perspective is concerned with national, cultural, or individual attributes (Karl, 1996; Kelly, 1970). The idealist approach explains the shifts in the motivation and decision-making of specific states (Karl, 1996; Kelly, 1970).

**Historical View of Motivation of States for Their Nuclear Development Programs**

Realism, liberalism, and idealism are powerful analytic tools for understanding the dynamics of nuclear development programs in high-conflict regions. Because the association between motivations of a state to acquire nuclear capability depends highly on its geopolitical situation, one might expect that, in practice, not every state has the same motivation for acquiring nuclear capability (Segan & Waltz, 1995; Sridharan, 2005b). States acquire nuclear capabilities in an attempt to lessen the risk of war as well as to prepare for war in the event that deterrence fails (Segan & Waltz, 1995). In this section, Israel, India, Pakistan, and Iran are studied. These countries are locked into a security paradox, in which their quest for nuclear capability creates insecurity in their neighbors. The main reasons for nuclear acquisitions of these four countries are that they are situated in a high-conflict zone, have had long-lasting rivalries with other countries in the region, and have weak alliance support.

**Israel**

Both offensive and defensive realism philosophy can explain Israel’s nuclear development program. Israel started its nuclear development programs in the mid-1950s (Corsi, 2005). It received help from the United States and France to construct the Dimona reactor in 1963 (Paul, 2000). Israel’s main strategy for acquiring nuclear capability was to increase its security by establishing military superiority over other Middle Eastern countries. Since 1948, Israel has been in constant conflict with its Arab neighbors. Israelis view nuclear acquisition as a deterrence factor against Arab assault and public support for Israel security policy is strong (Sagan,
For Israelis, nuclear capability provides an ultimate guarantee for the state’s survival. In a survey conducted by Arian, Talmud, and Hermann (1988), a majority of Israelis showed strong support for the nuclear development program. While 89% of Israelis felt that Israel can use its nuclear capabilities for defensive purposes, 47% agreed to use nuclear weapons in an offensive sense (e.g., destroying the enemy’s military power in order to prevent future threats to Israel). Another supporting factor for Israel’s nuclear program is the acquisition of nuclear capabilities by states such as North Korea, India, Pakistan, and Iran. However, unlike these countries, Israel has not been asked by the international community to give up its nuclear capability. Israel’s nuclear capability is accepted by most of the world (Feldman & Shapir, 2004). Israel’s security policy focuses on preventing the Middle Eastern states from acquiring nuclear weapons (Feldman & Shapir, 2004). According to Israeli views, Israel would never be accepted in the Greater Middle East without having the capability to defeat its neighbors (Peleg, 1987). In order to achieve this end, Israel has even conducted preemptive strikes that are offensive in nature. For instance, an Israeli first strike in 1967 destroyed the entire Egyptian air force on the ground at the start of the war; a 1981 air strike took out Iraq’s Osirak nuclear reactors (Arian, Talmud & Hermann, 1988).

**India and Pakistan**

The philosophies of realism and liberalism explain India and Pakistan’s motivation for nuclear acquisition. Both India and Pakistan argued that the threat posed by a hostile nuclear-armed neighbor is the main incentive for their nuclear acquisition (Sridharan, 2005a). A survey conducted by Ahmed and Cortright (1998) revealed that both Indians and Pakistanis perceive the military and nuclear threat from the other as the predominant justification for developing nuclear weapons.

In the perception of many Indian citizens and leaders, the prime objective of the country’s nuclear development program was to improve its security against Pakistan (Ahmed & Cortright, 1998). Pakistan’s nuclear development not only made India vulnerable to an attack by Pakistan, but also increased the chances of Pakistan’s engagement in a low-profile war with India over disputed Kashmir (Frey, 2006). The war with Pakistan in 1971 was a turning point in India’s nuclear policy. The support and threat of U.S. intervention in the conflict provoked Indian leaders to accelerate the nuclear program. Throughout the late 1980s and early 1990s, the nuclear-option theme was adjusted to the new international condition, and finally in 1998 India declared itself a nuclear state (Basrur, 2005). Others believed that the major incentive for India’s nuclear development program was as a shield against China’s threat (Frey, 2006). China emerged as a major threat to India in the 1962 war. In 1964, China’s first
nuclear-weapons test provided the strategic demand for India to build its own nuclear arsenal. The Chinese nuclear program still poses a great threat to India’s security. The major concern for India is the existence of Chinese missile sites in Tibet, which can target major northern Indian centers with nuclear-capable intermediate-range ballistic missiles (Frey).

In addition to the assumptions of realism, both liberalism and idealism explain India’s nuclear development program. One of the incentives for India to develop a nuclear program was to gain prestige and status in the international community. For many Indians, nuclear capabilities are associated with enhanced international status and greater bargaining power in world affairs. The survey conducted by the Delhi-based Centre for the Study of Developing Societies in 1999 showed that Indian people are highly sensitive to issues that stimulate their national pride or perception of national status. Another survey conducted by Ahmed and Cortright (1998) showed that 49% of Indians believe that nuclear weapons could improve India’s bargaining position in world affairs and 38% cited that nuclear acquisition would enhance India’s international status. These ideas were put forward by a section of India’s opinion leaders, referred to as the “strategic elite.” With their communicative power, the strategic elite shaped public positive opinion about India’s nuclear development program. They exercised their communicative power by publishing extensively in India’s print media, primarily in English-language dailies.

Although nuclear capabilities have increased Pakistan’s international prestige, and have attracted foreign assistance, the public believes that nuclear capabilities are only a response to the perceived threat from India and have no relation to larger issues of global policy or Islamic solidarity (Ahmed & Cortright, 1998). The majority of Pakistanis are concerned with the conventional and nuclear military threats from India. Nuclear capability is perceived as a symbolic equalizer with India and a shield behind which Pakistanis feel secure. A survey conducted by the Kroc Institute showed that 61% of Pakistanis support Pakistan’s official policy of maintaining nuclear capability (Ahmed & Cortright). Nearly all supporters of the nuclear development program cited the threat from India as a justification for Pakistan developing a nuclear program. No supporter of the nuclear development program felt that threats of economic sanctions would justify the development of the nuclear weapons. Nearly all participants in the survey disagreed that the threat of international sanctions was the reason for the renunciation of nuclear weapons. From an idealistic perspective, Pakistanis do not perceive ideological beliefs as a justification for their nuclear development program. The concept of an Islamic Bomb, which was advocated by Bhutto, the former Pakistani prime minister, had no support among Pakistanis (Ahmed & Cortright).
Iran

Iran’s pattern of nuclearization fulfilled the expectations of neorealist philosophy, both offensively and defensively, in two respects. First, in many ways Iran is an isolated state that is threatened by the U.S., Israel, and its neighboring countries. Iran has reason to feel threatened by the United States at its borders (Cordesman & Hashim, 1997). It shares both a 1,448-kilometer border and a vital shipping channel, the Shatt al-Arab, with turbulent Iraq. It also has a border with Afghanistan, which seems to be locked in a permanent state of civil war (Cordesman & Hashim, 1997). This has created a regional security dilemma for Iran. Although the United States appears to have accepted the status quo and has made no threats to use nuclear force, the Iranian government views the United States as a major threat to its existence. Also, Pakistan, India, and especially Israel’s possession of nuclear weapons have pressured Iran to develop nuclear capabilities. Iran’s nuclear development program not only aims at deterring threats from the United States and Israel, but also from its neighboring countries (Takeyh, 2006). Iran’s defensive nuclear purpose is supported by the public in some countries. In terms of using such weapons, the majority of people in Muslim countries believe that a nuclear-armed Iran would use such weapons for defensive purposes only (Pew Research Center, 2007a). A Pew Research Center (2007a) study showed that 80% of Indonesians and smaller majorities in other Muslim countries believe that Iran is likely to use nuclear weapons only in its own defense. Iranian leaders know that as long as they appear to be able to retaliate after being attacked, other countries would not strike against them.

Second, Iran has rapidly adopted nuclearization, and there is widespread belief that a nuclear Iran would attack other countries. Pew Research Center’s (2007b) study showed that a majority of people believe that the probability of Iran attacking Israel is high: more than 6-in-10 in Jordan (65%) and Egypt (61%), half of Turks (51%) and Indonesians (49%) and as many U.S. citizens (63%) believe that if Iran develops nuclear weapons it would likely attack Israel. There is also a possibility of Iran’s attack on the United States and European countries. Roughly half of the respondents in France, Germany and Britain, as well as those in Turkey, Indonesia, and Jordan, say that an attack by Iran on the United States or Europe is likely. Many believe that Iran’s ambitions are not confined to the destruction of Israel, but to control the oil fields in the region, and to extend the power of Islam throughout Europe (Podhoretz, 2007). Podhoretz argued, “Like Hitler, Ahmadinejad is a revolutionary whose objective is to overturn the going international system and to replace it in the fullness of time with a new order dominated by Iran and ruled by the religio-political culture of Islamofascism” (p. 20).
Liberalism theory justified Iran’s acquisition of the nuclear technology. Iran has been facing many barriers in trading with other countries. The United States has steadily strengthened its efforts to block any trade between Iran and other countries and to limit all foreign investment in Iran (Dunn, 1982). Iranian leaders believed that with nuclear weapons they can widen the range of economic capability and bargaining leverage (Podhoretz, 2007). The experience of its neighbor, Pakistan, has shown that nuclear capability can be used as bargaining leverage and a competing tool in the international arena. Pakistan’s nuclear capabilities have become the key to successful execution of its political strategies at multiple levels (Tertrais, 2006).

Idealism can explain why Iranian leaders feel nuclear weapons would ensure the survival of an Islamic regime (Lavoy & Walker, 2006). The Iranian government is making a great effort to export the Islamic revolution throughout the region (Clawson, 1994). As a revolutionary Islamic power, Iran sees its message as having applicability throughout the Islamic world. Iran seeks to affirm the model of its revolution by seeing its adoption elsewhere. This model is based on policies of hostility toward Western powers. For Iranian leaders, one way to stay committed to revolutionary ideas is by achieving nuclear capabilities. The leaders of other countries such as Pakistan are also motivated by Iran’s nuclear idealism movement, and they talk about “nuclear sharing” with the Islamic states. Iranians, especially Iranian leaders, believe that nuclear acquisition would promote religious values (Lavoy & Walker).

Iran’s regime also professes a radical Islamic ideology by supporting terrorism (Cordesman & Hashim, 1997). Many believe that Iran is already the world’s leading state sponsor of terrorism (Cordesman & Hashim; Jafarzadeh, 2007). Cordesman and Hashim:

According to the State Department, Iran was involved in 45 significant terrorist incidents in 1987, 24 incidents in 1989, 10 in 1990, five in 1991, 20 in 1992, six in 1993, six in 1994, and at least six in 1995. Iran is estimated to provide over $50 million dollars worth of support to groups such as Hezbollah in southern Lebanon, which is waging a guerrilla war against Israel, and it supports the South Lebanon Army and Hamas, the violent Palestinian Islamist group in the West Bank and Gaza Strip. (p. 147)

Nuclear weapons in the hands of a state that sponsors terrorism is a threat to global peace. Large majorities in the United States and Western Europe, as well as about half of the Japanese population (52%), say that if Iran develops nuclear weapons it would be likely to provide them to terrorist groups (Pew Research Center, 2007b).
Summary
Realism, liberalism, and idealism explained that states in an anarchic international environment seek to maximize their power for their security. If adversaries possess nuclear weapons (or appear likely to in the future), a state is expected to seek nuclear capability to balance that threat. Applying these theories to Israel, India, Pakistan, and Iran leads to the conclusion that the realist position may offer the best explanation for these countries to acquire both military and civilian nuclear capabilities. This detailed review of the literature review helped us develop an analytical model to analyze Iran’s nuclear development program.

2.2 Research Data, Design, and Measures
The purpose of this research was to compare the attitudes of selected samples of Iranians (in Iran and North America) with those of North Americans (U.S. citizens and Canadians) in regard to Iran’s nuclear development program in a cross-cultural framework. The focus was on studying the attitudes from two broad angles: (a) In the opinion of people in Iran and North America, why does Iran want to go “nuclear”? (b) Respondents’ positive, negative, or neutral attitudes toward these intentions and the reasons for these attitudes. An analytical model was developed to generate hypotheses regarding how people perceive Iran’s nuclear development program. This model, shown in the Figure 1, depicts the analytical model that informed the conduct of this investigation to determine how public attitudes and perceptions of Iran’s nuclear development program may be affected by their cultural and demographic background.

Both quantitative and qualitative methods were adopted in this research because understanding peoples’ attitudes lies in the shared application of both methods. Quantitative methodology has strengths for this research in measuring descriptive aspects, but also allows comparison between different perspectives (Singleton & Strats, 2004). In this study, the quantitative assumption regarding different perspectives is that peoples’ perspectives can be reduced to a set of variables that are somehow equivalent across persons and across situations. Quantitative research is strong in measuring such variables (Tabachnick & Fidell, 2001). However, the quantitative methods measure peoples’ attitudes from the outside, without accessing the meanings that individuals give to their measurable attitude. Quantitative research does not consider some factors associated with attitude (Tabachnick & Fidell, 2001), such as specific knowledge about Iran’s nuclear development program and the effect of nuclear development on individual lives.
To fill this gap, a qualitative study accompanied the quantitative study to ascertain deeper underlying meaning and explanations of the incentives and reasons for Iran’s nuclear development program. The qualitative study focused on gaining an understanding of how the subjects view their own particular situations in relation to Iran’s nuclear development program. A qualitative research design allowed these understandings to be investigated from the researcher’s point of view. The advantage of a qualitative methodology for this study was that it allowed the sociocultural and sociodemographic components of attitudes to be explored in greater depth than quantitative methodologies allow (Singleton & Straits, 2004). The intention of this study was not only to understand peoples’ perceptions and attitudes on Iran’s nuclear development program, but to identify societal factors that would affect their opinions about the issue. This was captured by the expertise of the researcher who was familiar with both Iranian and North American culture. Also, interviewing the participants in their native languages made the researcher more confident in telling the story from the participants’ views.

For the quantitative section of this study, the relationships between dependent and independent variables were examined. Two categories of
independent variables were used for comparative purposes: (a) cross-cultural group differences (Iranians in Iran and North America, a group of U.S. citizens, and a group of Canadians); and (b) the respondents’ age, gender, level of income, religion, and level of education. Group was a categorical independent variable. The categorical variable equaled 1 if the group was composed of Iranian residents of Tehran; equaled 2 if the group was composed of Iranian residents of Greater Toronto; equaled 3 if the group was composed of Iranian residents of California; equaled 4 if the group was composed of Canadian residents of Greater Toronto, and equaled 5 if the group was composed of U.S. citizens.

Five demographic factors were analyzed by asking participants to provide information regarding age, gender, level of income, religion, and level of education. The demographic factor age was measured in years. This was a continuous variable whereby a higher number indicated older age, and a lower number depicted younger age. Similarly, the demographic factor education was measured (if possible) as the number of years of education. Religion, a categorical variable, was broken down into “Religious Traditional” and “Secular” categories. For the categorical variable “Gender,” the groups were divided into male and female. The domains of the categorical independent variable Income were “Less than $15,000”, “$15,000 to $50,000”, “$50,000 to $100,000”, and “Over $100,000.”

The dependent variables included two broad categories:

1. Respondents’ perceived reasons for Iran to develop its nuclear capabilities and their attitudes (negative or positive) toward this program. The perceptions were studied according to the three motivational categories identified above that may explain Iran’s nuclear intentions: realism, liberalism, and idealism. Realism was operationalized as (a) defensive reasons (e.g. threat to national security), and (b) offensive/military reasons (e.g. military action); liberalism as civilian purpose (e.g. development of nuclear energy), and idealism as political reasons (e.g. national prestige, regional influence).

2. Negative, positive, or neutral attitudes toward Iran’s nuclear development program.

**Instrumentation**

There were two barriers to carrying out this study: (a) there was no available instrument for measuring people’s attitudes towards Iran’s nuclear development program; and (b) attitude, a hypothetical construct, could not be directly observed. To overcome these barriers, an Attitude Scale for assessing people’s perceptions and attitudes toward Iran’s nuclear development program was developed (see Appendix A for the English version and B for the Farsi version). This rating scale included 30 items: six for each of the four perception categories and six for the attitude
quality (negative or positive) as spelled out in Table 3.1 below. These categories were expected to predict respondents’ perceptions and attitudes toward Iran’s nuclear development program. The scale items corresponded with the theoretical constructs according to which the responses were analyzed. The dependent variable attitude was measured on a scale separately from the four “reasons for Iran’s nuclear development program” domains. Table 1 demonstrates the categories of attitudes that were measured, the number of the questionnaire items for measuring each category and their percentages, and the research question each item addresses.

Table 1

<table>
<thead>
<tr>
<th>Attitude categories</th>
<th>Number of Items</th>
<th>Percent of Total Items</th>
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<tbody>
<tr>
<td>Realism—military/defensive reasons</td>
<td>6 items, questionnaire items 1-6, addressing research question one (There is no difference among the five groups in the perceived reasons for Iran to develop its nuclear capabilities).</td>
<td>20</td>
</tr>
<tr>
<td>Realism—military/offensive reasons</td>
<td>6 items, questionnaire items 7-12, addressing research question one.</td>
<td>20</td>
</tr>
<tr>
<td>Liberalism—civilian purpose</td>
<td>6 items, questionnaire items 13-18, addressing research question one.</td>
<td>20</td>
</tr>
<tr>
<td>Idealism—political/ideological reasons</td>
<td>6 items, questionnaire items 19-24, addressing research question one.</td>
<td>20</td>
</tr>
<tr>
<td>Attitude Quality</td>
<td>6 items, questionnaire items 25-30, addressing research question two (There is no difference among the five groups in the average attitude towards Iran’s nuclear development program).</td>
<td>20</td>
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<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
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The dependent variables were measured according to (a) the degree of agreement or disagreement with each of the four reasons postulated, and
(b) the degree of overall attitude toward the issue, negative or positive, as measured by the last category in Table 3.1. The questionnaire was constructed on a five-point Likert scale containing five sub-scales, each of which were considered continuous. Individual scores on each subscale could vary from 6 to 30, indicating minimum to maximum degree of agreement with the four postulated reasons for Iran to develop its nuclear capability, along with the least to most positive attitude toward it.

**Instrument Validity and Reliability**

To ensure instrument validity, a number of steps were taken. First, the pilot study was conducted to show that the instrument developed for this study was valid and reliable. Second, because Iranians in Iran and some of the Iranian participants in Toronto and California did not have enough knowledge of English, both a Farsi and an English version of the questionnaire were available. Third, to test the instrument reliability, Cronbach’s alpha was used. Cronbach’s alpha is a measure of interitem consistency (reliability) that works very well with Likert-type scales (Tabachnick & Fidell, 2001). Cronbach’s alpha tested whether the statements on the survey instrument adequately addressed the constructs provided on the Iranian survey instrument. The internal consistency/reliability between the items that comprised each of the variables (defensive, offensive, civilian, political/ideological reasons, and attitude quality) was analyzed. If the construct had a high Cronbach’s alpha, it was found to have internal consistency, meaning that the statements adequately measured the variable. The scores were averaged to provide an overall measurement for each of civilian purpose, defensive reason, offensive reasons, political/ideological reasons, and attitude quality variables.

**Populations, Samples, and Data Collection**

The survey population was specified as Iranians in Iran (only Tehran since that is the most accessible population), Iranian residents of the Greater Toronto Area (GTA), Iranian residents of California, Canadian residents of the GTA, and U.S. citizens across the United States. Although the original sample size was set at 500 (100 from each population group), only 364 surveys were returned. Difficulties encountered in data collection were that some questionnaires were returned incomplete or incoherent about demographic background. Also, because of the sensitivity of the topic, some of those approached did not cooperate in the study. The sample size and rationale for each population group is described below:

1. Iranian residents of Tehran, Iran (73 people): The inclusion criterion for the Iranian residence of Tehran was that respondents should be residing in Tehran with knowledge of Iran’s nuclear development program. Since names of all
residents were not listed in the phone book in Tehran, convenience sampling was used to select samples from the population based on easy availability and/or accessibility. Only the Iranians in the capital city, Tehran, which is the most populated city in the country, were studied. The candidates from different educational and religious backgrounds were chosen to ensure those who were selected were viewed as the most representative sample of the society. The questionnaires were available in Farsi, and interviews were conducted in Farsi.

2. Iranian residents of Toronto, Canada (73 people): Systematic sampling was used for this population group. Since the Iranian population in the GTA was scattered, the sample was drawn from a population who conducted businesses with the Iranian community. It was assumed that this sample was more tied to its cultural and ethnic roots and could better provide feedback on Iran’s nuclear program. First, a list of 50 Iranian businesses in the GTA from the Iranian yellow pages in Toronto was chosen. After scrambling the list, every fifth business to a maximum of ten businesses was selected. The data was obtained via 250 questionnaires distributed to businesses operating in the GTA to ensure the return of a number to match the sample from Tehran, 73. The number of questionnaires delivered to each business was determined by the size of its workforce and its customers/clients. The questionnaires were available in two languages (English & Farsi).

3. Iranian residents of California (73 people): Convenience sampling was adopted to study the Iranian residents of San Jose, Los Angeles, Sacramento, and San Francisco. This population group was reached via e-mail, which was a cost effective and easily managed method of gathering data. The inclusion of an Iranian-American sample was used in order to compare their responses with the Iranian Canadian sample to check if the country of residence made any difference between immigrants of the same ethnic background.

4. Canadian residents of the GTA (73 people): Convenience sampling was used to recruit participants from various colleges, universities, businesses, and subway stations. Also, a larger population was reached by e-mailing the questionnaire to friends and acquaintances.

5. Residents of the United States (72 people): An ideal method of gathering data on this population group was convenience sampling. The questionnaire was e-mailed to friends and acquaintances in different states.
For the qualitative part of the study, face-to-face interviews with the following four population groups were conducted for a deeper understanding of both Iranian and Westerners’ perceptions of Iran’s nuclear development program. The interview schedules were informed by the perceptions and attitude items in the quantitative survey.

1. 3 Iranian respondents (residing in Toronto), who were considered informed about the Iran’s nuclear development program.
2. 2 Iranians (residing in Tehran), who were considered informed about the Iran’s nuclear development program.
3. 3 Canadians (residing in Toronto), who were considered informed about the Iran’s nuclear development program.
4. 2 U.S. citizens, who were considered informed about the Iran’s nuclear development program.

Data Analysis

The categorical independent variables in this study were cross-cultural group, gender, religion, and level of income. To analyze the interactions of these independent variables with the dependent variables of perceptions and attitudes, three statistical methods were used: Multivariate Analysis of Variance (MANOVA), Analysis of Variance (ANOVA), and Chi-square Analysis. MANOVA is a method of comparing group differences for one categorical independent variable on more than one continuous dependent variable. MANOVA is simply an ANOVA with several dependent variables. Using this method, the differences among the five groups (Iranians in Tehran, Toronto, and California, Canadians in Toronto, and U.S. citizens) in their perceptions and attitudes towards Iran’s nuclear development program, as measured by the Likert-type subscales in the questionnaire, were analyzed. MANOVA determined whether mean differences in the responses of these groups on a combination of dependent variables were likely to occur by chance.

Other analytical methods were considered but not used in this study. For example, the analysis of the distribution within a group is interesting and useful both for information and validity check. However, this study was interested in comparative analysis of differences among the averages of many specific groups. Also, multiple mean comparisons using t-test was rejected because the possibility of committing a type-1 error in the analysis increases significantly with multiple group comparison.

Using Excel and SPSS software, data were analyzed to test three hypotheses, each related to the three research questions. All tests were performed at the 0.05 significance level. To analyze the association between the independent and dependent categorical variables, the Chi-square test was used. The Chi-square method is used when stringent assumptions about the population of interest are not warranted, and when
both the dependent and independent variables are categorical. This
distribution-free method tested whether there was a significant difference
between perceptions and attitudes and cross-cultural, ethnic background. A
Chi-square test was also used to analyze the relationship between
perceptions and attitudes.
Three hypotheses were analyzed in this study:

**H1.** There is no difference among the five groups in the perceived
reasons for Iran’s nuclear development program.

**H2.** There is no difference among the five groups in the average
attitude toward Iran’s nuclear development program.

**H3.** There is no difference in respondents’ perceptions and
attitudes toward Iran’s nuclear development program by demographic
background.

These hypotheses are illustrated in Figure 2. Hypotheses H1 and H2
examined the effect of cultural background on respondents’ perceptions
and attitudes toward Iran’s nuclear development program. Hypothesis H3
determined how these attitudes and perceptions may be affected by their
demographic background.

**Figure 2.** Framework for hypothesis testing.
In order to test/verify the first hypothesis, a MANOVA was used to compare the results of the constructed variables with that of the group of participants. The dependent variable, perception, includes defensive reason and offensive reasons (realism), civilian purpose (liberalism), and political/ideological reasons (idealism); while the independent variable was the country of residence of the study participants.

For addressing the second hypothesis, an ANOVA was used. The dependent variable for this hypothesis was the attitude quality (negative or positive), while the independent variable was the participants’ country of the residence. Again, in order to determine how the participants’ attitudes differed according to their country of residence, the least significant differences (LSD) test was conducted to compare the mean results for this dependent variable.

The third hypothesis was composed of, first, the analysis of the relationship between the demographic factors and perceptions. The demographic factors were used as independent variables in the model, while the perceptions (military offensive perceptions, military defensive perceptions, civilian purpose perceptions, and political/ideological perceptions) were used as dependent variables. Because there were multiple dependent variables for this part of the study a MANOVA was conducted.

Second, the third hypothesis included an analysis of the relationship between attitudes and demographic factors. ANOVA was used to address this hypothesis. The dependent variable for this analysis was the constructed attitude variable, while the independent variables were the demographic characteristics of the participant. Third was the analysis of the relationship between perceptions and attitudes and the cross-cultural, ethnical background. Chi-square tests were used to conduct this analysis.

Fourth, the third hypothesis included an analysis of the relationship between perceptions and attitudes. A two-way Chi-square was used to carry out this analysis.

The interview-based qualitative analysis helped create a deeper understanding of the issues being examined in this research. Implied meanings and explanation of the interview data were generated through the aid of content analysis using data reduction, coding, and thematic derivations to correspond with the theoretical constructs. The entire data analysis and interpretation of this survey may be deemed as explanatory research. Contrary to a descriptive study, which collects and summarizes information about the matter being studied, explanatory research focuses on verifying theories, testing hypotheses, and explaining the relationships between independent and dependent variables (Bryman, 1988; Punch, 2000; Singleton & Straits, 2004).
Pilot Study

The pilot study on 100 people from the five population group was conducted to improve the quality and accuracy of the main study. The reason for conducting the pilot study was to address the problems that might have arisen in the data-collection process. Cronbach’s alpha reliability analysis was carried out for the pilot study. If the construct was found to have an internal consistency statistic, as measured by a Cronbach’s alpha of 0.70 or greater, it was concluded that the statements adequately measured the variable so that the scores were averaged to provide an overall measurement for each of the civilian-purpose, defensive-reason, offensive-reasons, political/ideological-reasons, and attitude-quality variables. In this context, a higher mean score indicated that civilian purpose, defensive reason, offensive reasons, political/ideological reasons, and attitude quality of the participants for that participant were higher whereas a lower score indicated that they had a low perception of civilian-purpose, defensive-reason, offensive-reasons, political/ideological-reasons and attitude-quality variables.

The Cronbach’s alpha for the subscale items on Civilian Purposes was nearly 0.77. Because of high internal consistency among all items in the civilian purposes subscale, all items were kept. The Cronbach’s alpha for the Military Reasons—Defensive items was also high (0.83), and was very high for the Military Reasons—Offensive (0.90). The results suggest that adequate internal consistency exists between the items. All of the 12 items determining the Military Reasons—Defensive and Military Reasons—Offensive were kept.

The Cronbach’s alpha for the subscale on political/ideological reasons items was fairly low (less than 0.60). Because of this, each individual item was examined to determine its contribution to the overall reliability of the scale. It was found that the reliability of the overall scale would increase to about 0.62 if one item was removed from the scale (“If Iran had nuclear capability, the military superiority would result in the spread of Islamism”). The revised Cronbach’s alpha analysis with that item removed increased only to 0.61 but it was decided to keep the item because of its assumed value to the overall survey. The Cronbach’s alpha for items measuring general perceptions and attitudes towards Iran’s nuclear development program was 0.87, and so all items were kept.

Demographic Data

The analysis of frequency counts and percentages for the demographic variables showed that overall, for the country code it was observed that there were an equal number of participants from each one of the areas (20.1%) except for those from the United States (19.8%). A total of 40.4% of the participants resided in Canada while 39.6% resided in the United States. The remaining 20.1% of the sample consisted of individuals from
Iran. More than half of the participants were considered to have traditional religious beliefs (56.9%) while the remaining 43.1% had secular religious beliefs. Of these participants, 33.2% had an income of $15,000 to $50,000 followed by individuals that had an income from $50,000 to $100,000 (26.6%). Over half of the participants were female (51.1%) with the remaining 48.9% being male. The majority of the participants had between 14 and 18 years of education (54.4%) while 17% of the participants had less than 12 years of education and more than 18. There was a diverse age range between the participants in the study with 32.1% being 25 to 35 years of age and 24.7% being between 35 to 45 years of age.

**Reliability/Internal Consistency Analysis**

To be able to conduct the ANOVA and the MANOVA, the dependent variables need to be operationalized as continuous variables. Therefore, complement to the pilot study, a reliability/internal consistency analysis on 364 people determined whether the statements on the survey instrument adequately addressed the constructs provided on the Iranian survey instrument. Based on the results, it was gleaned that there was a high internal consistency/reliability between the items that comprised each of the variables on the survey instrument. The internal-consistency measures ranged from a low of .503 for the political/ideological reasons variable to a high of .992 for the offensive reasons variable. In fact, only the political/ideological-reasons variable was found to have a reliability of less than .70. Even though this was the case, each of the items that comprised each of the constructs was averaged to provide an overall measurement for that variable.

The result showed that the variable with the highest average value was the offensive-reasons variable ($M = 3.03, SD = 1.13$) meaning that on average offensive reasons was observed to be most important in terms of the Iranian nuclear development program in a cross-cultural framework. The lowest average value was observed for the civilian-purpose variable in the study. To determine whether there were significant differences between the groups in this study the ANOVA and MANOVA results are presented in the following section.

**3. Conclusion and Discussion**

The cross-cultural study showed that while North Americans perceive offensive reasons as the main motivation for Iran’s nuclear development program, Iranians perceive defensive, civilian, and political reasons as the
main motivations for Iran’s nuclear development program. Among the five population group, Americans had the strongest support for realism–offensive reasons as the motivation for Iran’s nuclear development program. Residents of the United States and Canada had a more negative attitude toward Iran’s nuclear development program than the residents of Iran. Overall, individuals living in Iran, traditional religious people, and individuals between 35 and 45 years of age had the most negative attitudes.

Countries frequently try to preserve their sovereignty by accumulating military, economic, political, and ideological power. Reviewing the literature, three theoretical concepts were identified: realism, liberalism, and idealism that seem to explain why a nation may want to develop its defensive and/or offensive military capabilities, including nuclear capabilities. These motivational categories were used to test public’s perceptions about Iran’s nuclear intentions. This study aimed to shed empirical light on the assumptions of these three theoretical criteria through a questionnaire survey and interviews. The results of the study corroborated that this theoretical framework is indeed valuable in understanding Iran’s nuclear intentions as perceived by the people in Iran and North America. Three key research questions guided this investigation:

1. In the opinion of people in Iran and North America, Why does Iran want to develop nuclear capability?

Among the five population groups, realism–offensive reasons were observed as the most important reason for Iran for Iran to develop its nuclear capabilities. This was followed by realism–defensive reasons, and political reasons. While realism–defensive reasons, liberalism, and idealism were mostly perceived by the Canadian residents of the GTA as motivations for Iran’s nuclear development program, realism–offensive reasons was mostly perceived by the U.S. group as the motivation for Iran’s nuclear development program. Liberalism, which calls for democracy, development and interdependence, had the strongest support among the Iranian residents of California. However among the five population group, Canadian residents of the GTA expressed the strongest support for liberalism as the motivation of Iran for nuclear development program. The majority of Iranian residents of Tehran perceived idealism as the motivation for Iran’s nuclear development program.

The majority of Iranian residents of the GTA, Canadian residents of the GTA, and U.S. citizens perceived realism–offensive reasons as the motivation for Iran’s nuclear development program. In a cross-cultural group, the U.S. citizens had the strongest support for realism–offensive reasons as the motivation for Iran’s nuclear development program. Based on their perception, Iran’s concern for its nuclear development program is
to pursue power to attack other countries. This was also confirmed by the qualitative study in which the majority of the respondents perceived military–offensive reasons as the motivation for Iran’s nuclear development program. Among the five population groups, Canadian residents of the GTA had the strongest perception of realism–defensive reasons as the motivation for Iran’s nuclear development program. That means Iran’s nuclear development program is due to concerns with international prestige and gaining security in the international arena. Between Iranians and North Americans, Iranians showed higher support for the idealism–defensive reasons, civilian reasons, and idealism as the reasons for Iran’s nuclear development program than North Americans.

2. How do these individuals view Iran’s nuclear development intentions—negatively, positively or neutrally?

In a cross-cultural group, while Iranian residents of Tehran had the most positive attitude toward Iran’s nuclear development program, U.S. citizens had the most negative attitude toward this issue. Residents of the United States and Canada had a more negative attitude toward Iran’s nuclear development program the residents of Iran. Iranian residents of the GTA had more negative attitude toward Iran’s nuclear development program than the Iranian residents of Tehran and California, and the Canadian residents of the GTA. Canadian residents of the GTA had a more negative attitude than the Iranian residents of Tehran and California, but they were more positive than the Iranian residents of the GTA and the U.S. citizens. Attitude quality of the participants depended on their perceptions of liberalism, realism–defensive reasons, and realism–offensive reasons as the motivation for Iran’s nuclear development program. While, the majority of people who perceived liberalism and realism–offensive reasons for Iran’s nuclear development program had negative attitudes, people who favored realism–defensive reasons as motivation for the nuclear development program had positive attitudes toward this issue.

3. Do these perceptions vary according to the cultural and demographic background of the respondents drawn from five culturally different populations?

The cross-cultural study showed that Iranians perceive defensive, civilian, and political reasons as the main motivations for Iran’s nuclear development program. North Americans perceive offensive reasons as the main motivation for Iran’s nuclear development program. Traditional religious people and individuals between 35 and 45 years of age had the most negative attitude toward Iran’s nuclear development program. Individuals over 55 years of age had the most positive attitude toward this issue. Among the demographic predictors, age, place of residence, and religion showed a moderate relationship with respondents’ perceptions toward nuclear development program. People who were over 55 years of age, the U.S. citizens, and those who were secular had strong perceptions
of realism–offensive reasons as the motivation of Iran’s nuclear development program.

Further, the study examined the relationship between perceptions and attitudes. The respondents’ perception of Iran’s nuclear development program was correlated with their attitude toward this issue. The results showed that the attitude quality of the respondents correlated positively with perceptions of civilian purposes, defensive reasons, and offensive reasons, but not with their perceptions of political reasons.

The three major hypotheses investigated in this study yielded the following main conclusions: The first hypothesis stated that there was no difference among the five groups in the perceived reasons for Iran to develop its nuclear capabilities. This hypothesis was rejected. The second hypotheses stated that there was no difference among the five groups in the average attitude toward Iran’s nuclear development program. This hypothesis too was rejected. The result showed that there was a significant difference between the five group’s average attitudes toward Iran’s nuclear development program. The third hypothesis suggested that there was no difference in respondents’ perceptions and attitudes toward Iran’s nuclear development program according to their demographic background. This hypothesis was rejected with respect to age and religion.

It is not clear to what extent nuclear capability would reduce economic sanctions and security threats to Iran. But the international community can use the findings of this study to communicate with the Iranian leadership about how the world community views its nuclear development policy. Since the study results suggest the main motivation for this policy to be a perceived security threat, some type of security guarantees for Iran may be used by the international community to convince Iran that it would be in its best interest to negotiate altering this policy in exchange for lifting of trade and military sanctions. Furthermore, this being the first ever study of cross-cultural public perceptions and attitudes towards Iran’s nuclear development program, its finding could also help generate a better and more realistic journalistic, governmental, and international agency (e.g. the United Nations, International Atomic Energy Agency) appreciations on this issue, and thereby lessen international tensions emanating from it.

References


