Contemporary Mirror Imaging between American and Iranian Citizens: An Exploratory Mixed-Method Research Study

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Abstract: In this study, an exploratory mixed-method approach was employed to investigate the attitudes of Iranians and Americans toward each other, specifically focusing on two critical incidents in their modern history. Drawing from quantitative and qualitative data collected in relation to the hostage crisis in 1979, the missile attack on an Iranian passenger plane (Iran Air 655) in 1988, and the travel ban (Executive Order 13780) in 2018, the study aimed to uncover any changes in attitudes over the course of history. Unlike previous research, the majority of participants had a more balanced and less biased viewpoint toward each other and approached the incidents by considering the consequences and ethical aspects associated with each event. These findings challenge the notion of a mirror image effect, which suggests that people tend to adopt their government’s attitude toward other nations. Instead, participants demonstrated a tendency to rely on their own judgment and critically evaluate information, rather than blindly accepting media narratives.

Keywords: mixed method; intergroup processing; mirror image; travel ban; social justice

1. Introduction

In the aftermath of the 1979 Islamic Revolution in Iran, the relationship between the Islamic republic of Iran and the United States of America has been akin to a rollercoaster ride. Because of this complicated relationship, there have been both positive and negative consequences for both nations, but especially for Iranians. Americans’ perception of Iranians has shifted dramatically, from one end of the spectrum to the other. Such a dramatic shift, along with the existing and never-ending tension between the two countries, has been a powerful indicator of Iranians’ quality of life inside and outside of Iran. After the Iranian revolution, the US was regarded as the “Great Satan” by the Iranian government. Similarly, Iran was named by the American government as the main enemy of western countries, especially the US. While mostly regarded as political stances taken by their respective governments, they have had a large impact on the people of those countries. Therefore, this heated rhetoric might influence people’s perception of each other in a negative way [1–3].

Such perceptions could be especially influential for Iranians living outside of Iran. There is evidence that suggests that people’s acceptance of and attitudes toward immigrants in the host country are among some of the most essential factors for cultural integration [4]. Historically, the US has been one of the most desirable destinations for Iranians to immigrate to and live in. For example, shortly after the Iranian revolution in 1979, the immigration rate for Iranians sharply increased, and, over the years, the US has become the second home for many Iranians. The number of Iranians residing in the US (in the form of immigrants and non-immigrants) is estimated to be more than 1.5 million. On average, each year, more than 11,000 Iranians living in the US apply for permanent residency. According to the Department of Homeland Security’s yearbook of immigration statistics, 4463 cases out of 1,031,765 immigrants who applied for permanent residency in 2019 were Iranians [5].
American universities are similarly recognized as one of the main destinations for Iranian students. As of the 2017–2018 academic year, the total number of Iranian students (undergraduate, graduate, non-degree, and optional program training (OPT)) enrolled in US universities was 12,783 [6]. Due to continuous political tension between the two countries [2] and the increasing rate of immigration to the US, this study attempts to explore the effect (if any) of historical and current incidents, such as the travel ban, for citizens of each country in developing negative attitudes toward each other and how this perception could impact immigrants’ lives in their host country [1].

To further enrich our study, we have integrated the theories of “mirror image” and “imagined communities” into our research frameworks. The mirror image theory argues that people tend to believe and follow their representative government’s attitude toward other nations. The imagined communities theory, first proposed by Benedict Anderson (1983), explores how individuals construct a sense of belonging and attachment to a larger social group, even in the absence of direct interpersonal connections [7,8]. This theory provides a valuable lens through which to understand the formation and maintenance of national and cultural identities, which are central to our investigation of the attitudes between Iranians and Americans. By integrating the theory of imagined communities into our study, we can gain a deeper understanding of how shared perceptions, beliefs, and cultural narratives contribute to the construction of social identities and the attitudes individuals hold towards each other. Additionally, by drawing from mirror image theory we can explore to what degree the media, government narratives, and historical events contribute to the formation and maintenance of peoples’ attitudes toward a nation that is identified as a threat by their government. By complementing our existing mirror image conceptual framework with the theory of imagined communities, we seek to provide a comprehensive examination of the multifaceted dynamics underlying Iranians’ and Americans’ attitudes towards each other.

Given the exploratory nature of our study, the formulation of specific hypotheses was challenging. However, drawing on relevant theoretical frameworks and existing literature, we posit that the interplay between individual perceptions, collective identities, and socio-cultural contexts plays a crucial role in shaping intergroup attitudes and facilitating identity development. By examining the attitudes of Iranians and Americans towards each other within this framework, we aim to shed light on the complex dynamics underlying intergroup perceptions and contribute to a deeper understanding of the factors influencing identity formation and intergroup relations.

2. Relationship between Iran and the US

The relationship between Iran and the United States has been historically complex. Prior to the Islamic revolution in 1979, Iran and the US were strategic allies. However, following the revolution, particularly after the hostage crisis, the United States began referring to Iran as the “arch of crisis”, “crescent of crisis”, “axis of evil”, and even “the only enemy” in its dominant political rhetoric [9]. Similarly, Iran also started to refer to the US as “the only enemy” and “the great Satan”. The hostage crisis was a significant turning point in the already turbulent political relationship between the two nations, and it drastically altered Americans’ perceptions of Iranians.

2.1. Americans’ Views of Iranians

Before the hostage crisis, Iranians in the United States were often viewed as a highly educated and professional group with rich cultural and historical backgrounds and who could make substantial contributions to the country [10]. However, following that incident, this positive viewpoint shifted drastically, and Iranians were labeled as “uncivilized terrorists” and even as an unwanted nation in the United States [1,11–13]. The repercussions of this shift in perception were far-reaching. For example, universities such as the University of New Mexico stopped accepting and enrolling students from Iran, while restaurants refused to serve Iranians [14]. Iranian businesses were boycotted, and American busi-
ness owners were encouraged to fire their Iranian employees. Hostility and prejudice against Iranians were further instilled by the media and national protests across the country. American protesters expressed their dissatisfaction with the presence of Iranians in the United States by holding placards such as “Go Home Dumb Iranians”, “60 Americans for 10,000 Iranians”, and “10 Iranians Equal a Worm” [15]. The strength of this hostility towards Iranians in the United States was such that people from other Middle Eastern countries had to display their nationalities on their clothes to avoid harm from locals [2,14].

The change in perception of Iranians was so profound that even years after the release of the American hostages, one could observe signs of schadenfreude, as opposed to empathy [16], among Americans [17]. Evidence of schadenfreude could be linked to Americans’ reactions to the shooting down of an Iranian passenger plane by US Navy forces in the Persian Gulf in 1989, which resulted in the deaths of over 300 passengers, including children. In fact, 71% of Americans believed that justice for the hostage crisis had been served by the shooting of the Iranian airplane, and that the victims of the airplane should not be compensated [14].

The historical tension between the United States and Iran has persisted for years, as evidenced by the way in which the majority of Americans have continued to view Iran as their only enemy even after the 1979 hostage crisis [18]. President George Bush’s naming of Iran as a supporter of terrorism in his state of the union address in January 2002 further reinforced this negative perception, resulting in the implementation of the Visa Reform and Domestic Call in Registration Program the following year [19]. Although some efforts were made by both countries during Obama’s presidency to improve relations (such as direct interaction for the first time after the revolution and the signing of the Joint Comprehensive Plan of Action (JCPOA)), the Trump administration’s rejection of the JCPOA and its placing of a ban on Iranians entering the US reinforced the negative viewpoint towards Iranians [20,21].

2.2. Iranians’ Self-Identity

This historical tension has had an impact on the self-identity and lifestyle of Iranians living in the US, particularly those who were exiled or had immigrated to the US before or after the revolution (known as the second wave of immigration between 1979 and 2001) [19]. The majority of these Iranian immigrants, individuals with middle- and upper-class socioeconomic status [11], attempted to distance themselves from their Iranian heritage and culture. They utilized cultural assimilation—identifying themselves with the cultural norms valued in the host culture [22]—as a cultural transition strategy [23].

Hostility towards Iranians and the desire to be recognized as other nationalities, particularly Americans, has led many Iranian immigrants to change their names and physical appearance, by the help of diets and cosmetic surgery in order to follow cultural norms valued in the host culture. They believed being successful in the US equated with a “whiter” body while assimilating culturally from their original culture [24]:

For so long I did not have a sense of national identity. You know that the Iranians of my generation who came to the United States have a particular kind of shame. To be Iranian was marked for people of my generation in this country by the hostage crisis, the way we were ashamed of our Iranian’s. I did not cook anything Iranian until about four or five years ago. I didn’t have any Iranian things as I now do anywhere in my apartment. It was not until two or three years ago that I celebrated Norooz and put out the Haft Seen. Those are elements of culture that were being repressed. When I wanted to go out and socialize with people during the hostage crisis, I would say I was Afghani, I was Italian—anything so as not to say I was Iranian. I was ashamed to own my Iranianness (An English literature professor at the University of California) [25] (p. 249).

2.3. Travel Ban and Continuous Conflicts

The perception of conflicts between Iran and the United States took on a concrete form in January 2017 when a travel ban was signed by President Trump. This executive order, also
known as the Muslim ban or the travel ban, suspended entry of people born in Iran, Yemen, Syria, Iraq, Libya, Somalia, and Sudan to the United States. Even individuals holding a permanent residency card (aka green card) or dual citizenship from one of these seven countries were banned from entering the US. The ban elicited national and international reactions and protests and was legally challenged in federal courts, ultimately resulting in its temporary blocking. The executive order was revised by presidential proclamation and faced similar challenges until its last version (Executive Order 13780) was signed by President Trump in April 2018 and upheld by an order of the Supreme Court. Accordingly, US embassies and authorities were restricted from issuing immigrant and nonimmigrant visas for applicants from seven countries, including Iran, Libya, North Korea, Venezuela, Somalia, Yemen, and Syria [26].

The travel ban caused a division in the country, with some Americans supporting the ban and others opposing it. A poll by CNN of over 1000 Americans with diverse demographic backgrounds found that 47% agreed with President Trump’s executive order. Similarly, a poll by NBC/Wall Street Journal found that 44% of respondents favored the travel ban and 45% did not [27].

3. Purpose of the Study

The relationship between Iran and the United States has been characterized by tensions and animosity for several decades, with both countries viewing each other as a significant threat to their respective interests. The portrayal of each other as an enemy by their respective governments and government-sponsored media outlets has perpetuated a narrative of hostility and mistrust between the two nations, and this has inevitably filtered down to their respective populations. The present study aims to examine the perceptions held by citizens of Iran and the United States towards each other, with a particular focus on whether they possess a “less biased perspective” of one another [3]. The study adopts an exploratory mixed-method approach to investigate this issue, employing both qualitative and quantitative methods to answer the research questions.

The qualitative methodology employed in this study involves semi-structured interviews with participants from both countries. The interview questions focus on two pivotal incidents that have had a significant impact on the relationship between Iran and the United States: the 1979 hostage crisis at the US embassy in Tehran, and the missile attack on an Iranian passenger plane. Participants were also asked for their opinions on the citizens of both countries. The quantitative aspect of the study involves an adapted self-reported survey that explores participants’ views on the more recent event, the travel ban imposed by the Trump administration.

The selection of Iranian and American participants is based on the socio-cultural differences between the two nations as well. Iranians value collectivism, while Americans place greater emphasis on individualism. These differences may affect the perceptions and feelings of citizens of these nations towards others and their perceptions of social group belonging [28,29]. Furthermore, the relationship between Iran and the United States has been characterized by a history of conflict and hostility, and this may have influenced the perceptions of citizens of both nations towards each other [2,24].

The theoretical framework of this study is built upon the mirror image and imagined communities’ frameworks. According to mirror image theory [30], when two nations are in a competitive and often openly hostile relationship, citizens of each country tend to glorify their own country and vilify the other [1]. This aspect of mirror image theory provides valuable insights into the dynamics of intergroup perceptions. However, it is essential to recognize that individual perceptions and collective identities are not solely shaped by the mirror image phenomenon. Therefore, in this study, we adopt a comprehensive approach by integrating the theory of “imagined communities” [7,8] alongside the mirror image framework. By incorporating the theory of imagined communities, which explores how individuals construct a sense of belonging and attachment to a larger social group, we aim to capture the complexity and nuances of Iranians’ and Americans’ perceptions of each
other. This dual theoretical framework allows us to examine the interplay between mirror image biases and the socio-cultural contexts in which perceptions are formed. Through this approach, we seek to provide a more comprehensive understanding of the attitudes held by citizens of Iran and the United States towards each other and shed light on the potential for improved relations between the two nations.

The following research questions guide analysis of this study:

(a) How do the perceptions of American and Iranian participants regarding the relationship between Iran and the United States differ in relation to specific critical incidents in their modern history?
   a. How do these perspectives reflect mirror image biases, if any?
(b) How do participants from both countries characterize members of their own and the opposing groups, considering their perceptions and stereotypes?

4. Materials and Methods

4.1. Participants

The data reported in this study comprise a subset of a larger study that examined empathic reactions of people with different cultural backgrounds. The inclusion criteria for participation in this study were based on participants’ nationality (i.e., Iranian or American), country of residence (i.e., Iran or US), and developmental factors (i.e., age, education, and marital status) (c.f.) [31]. After removing incomplete responses ($N = 20$), the final sample included 226 participants, of which 87 were Americans, 77 were Iranians, and 62 were Iranians living in the United States. To control for the developmental trajectory of empathy, all participants were between 20–40 years old with an average age of $26.63 \pm 7.61$ for Americans, $28.32 \pm 6.72$ for Iranians, and $31.76 \pm 3.84$ for the third group. Forty-seven American participants reported being affiliated with the Democratic party, 17 identified themselves as Republican, while the remaining were either independent ($N = 10$) or unaffiliated with a political party ($N = 13$). All participants received and signed online consent forms approved by the Institutional Review Board that provided detailed explanation of the study’s terms and conditions. The study was conducted in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Table 1 summarizes the major demographic background of participants in all three groups, separated by gender.

<table>
<thead>
<tr>
<th></th>
<th>Americans ($N = 87$)</th>
<th>Iranians Living in Iran ($N = 77$)</th>
<th>Iranians Living in the US ($N = 62$)</th>
</tr>
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<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
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<tr>
<td>Female</td>
<td>82%</td>
<td>53%</td>
<td>61%</td>
</tr>
<tr>
<td>Male</td>
<td>18%</td>
<td>47%</td>
<td>39%</td>
</tr>
<tr>
<td>Age</td>
<td>$25.9 \pm 7.7$</td>
<td>$28.8 \pm 7.05$</td>
<td>$31.7 \pm 3.97$</td>
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<tr>
<td>Education</td>
<td></td>
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<tr>
<td>Graduate</td>
<td>58%</td>
<td>49%</td>
<td>100%</td>
</tr>
<tr>
<td>Graduate</td>
<td>75%</td>
<td>36%</td>
<td>100%</td>
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<tr>
<td>Marital status</td>
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<tr>
<td>Single</td>
<td>82%</td>
<td>78%</td>
<td>34%</td>
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<tr>
<td>Single</td>
<td>56%</td>
<td>81%</td>
<td>54%</td>
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<tr>
<td>Child</td>
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<tr>
<td>No</td>
<td>94%</td>
<td>93%</td>
<td>92%</td>
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<tr>
<td>No</td>
<td>69%</td>
<td>92%</td>
<td>83%</td>
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4.2. Stimulus

Following the implementation of the initial version of the travel ban, two separate polls were conducted to assess Americans’ perceptions of various dimensions of Donald Trump’s presidency, including his overall performance and their opinions on the travel ban. The survey questions covered diverse aspects, such as the country’s financial stability,
foreign policy, and immigration policy. Consequently, it is plausible that respondents’ overall evaluations of Trump’s presidency may have influenced their specific responses concerning the travel ban. Therefore, there is a lack of direct evidence indicating Americans’ specific perspectives towards Iranians in the US. Additionally, that study did not gather data on Iranians’ opinions regarding the travel ban, which is noteworthy considering that a significant number of international students affected by the travel ban were of Iranian nationality [32].

In light of these considerations and to explore if mirror image and imagined communities’ frameworks hold true for our participants, the study adapted questions from a CNN poll related to the travel ban and its purported impact (i.e., ensuring the safety of Americans against potential terror attacks). These questions were accompanied by a concise description of the travel ban, adapted from Mansouri and Keles [32]. American and Iranian participants were asked to read and respond to the English version of the description and survey, while for Iranian participants, the same description and questions were translated following the procedure outlined in Wind et al.’s study [33]:

President Donald Trump’s Executive Order (EO) issued under the title of Protecting the Nation from Foreign Terrorist Entry into the United States, generally known as the travel ban. Accordingly, people from Iran, North Korea, Syria, Libya, Yemen, Somalia, and Venezuela are banned from entering the United States. In total, 20,000 students and scholars were affected and 72% are Iranians.

Questions:
“Overall, do you favor or oppose this executive order?”
(a) Favor
(b) Oppose

“Do you think this executive order:”
(a) Makes the US safer from terrorism.
(b) Makes the US less safe from terrorism.
(c) Makes no difference.

Additionally, all participants were engaged in a semi-structured online interview to elicit their perceptions of their own nation and the other nation. Specifically, they were asked to describe their views of the United States and of Americans, as well as of Iran and Iranians. To provide context, brief descriptions of two critical incidents, namely the hostage crisis in 1979 and the missile attack on Iran Air 655 in 1988, were presented to the participants. Following the reading of each incident description, participants responded to two Likert-scale questions. The first question pertained to the overall relationship between the two countries, while the second question aimed to assess participants’ perceptions of justice regarding the shooting of Iran Air 655 and determine if any traces of schadenfreude [16] were present among Americans. Furthermore, participants were encouraged to share their opinions about these incidents through open-ended narrative responses, allowing for a more comprehensive exploration of their perspectives.

US hostage crisis (adapted from Wikipedia):
Fifty-two American diplomats and citizens were held hostage for 444 days from 4 November 1979 to 20 January 1981, after a group of Iranian college students belonging to the Muslim Student Followers of the Imam’s Line, who supported the Iranian Revolution, took over the US Embassy in Tehran. All hostages were set free after President Reagan’s inaugural speech for his second term.

Iran missile attack [34]:
Iran Air Flight 655 was a scheduled passenger flight from Tehran to Dubai via Bandar Abbas. It was shot down on 3 July 1988 by a surface-to-air missile fired from USS Vincennes, belonging to the United States Navy. The aircraft was destroyed and all 290 people on board, including 66 children, were killed. The airplane was hit while flying over Iran’s territorial waters in the Persian Gulf, shortly after departing Bandar Abbas International Airport (the flight’s stopover location).
Questions:
1. What do you think about these incidents?
2. Do you think they should have happened? Please explain in as much detail as possible.
3. Do you think Iran and the United States are enemies?
   (a) Yes
   (b) No
   (c) Maybe
4. Do you think justice was done by the missile attack?
   (a) Yes
   (b) No
   (c) Maybe
5. Do you think the United States should compensate the victims of the missile attack?

4.3. Procedure
To recruit Iranian participants in Iran, we employed social media platforms and group texting applications, such as Facebook and Telegram. A comprehensive description of the study and its eligibility criteria, including being either American or Iranian, residing either in Iran or US, and falling within the age range of 20–40 years old, was posted along with a link to the Qualtrics survey. Potential participants of any gender and ethnicity who met the criteria and expressed willingness to participate were able to access the study. For participants living in the United States, we utilized social media channels and university email platforms, with the assistance of international offices and Iranian student organizations at universities. After obtaining the necessary approvals from the respective universities, a detailed study description and the survey link were shared with eligible participants through the email lists of these organizations and international offices. This approach allowed us to reach a diverse range of individuals with Iranian backgrounds residing in the United States.

To facilitate the final component of the study, which involved online interviews, all participants were contacted via the email provided at the end of the survey. Through email correspondence, interviews were scheduled and conducted to gather additional qualitative insights.

4.4. Data Analysis
Our qualitative data analysis incorporated a blended approach, combining grounded theory with deductive reasoning to ensure a rigorous and comprehensive analysis. Grounded theory, with its emphasis on developing theories directly from the data, provided a starting point for our investigation. We approached the analysis with a set of initial research questions and theoretical concepts, such as the mirror image and imagined communities, which guided our exploration of intergroup perceptions. Simultaneously, we remained open to emergent themes and concepts that arose directly from the data, allowing for inductive reasoning. The coding process was conducted systematically, involving multiple rounds of coding. Initial codes were derived from the research questions and theoretical concepts, and as the analysis progressed, we constantly compared the emerging findings with existing literature, theoretical frameworks, and our research aims. The comments were initially organized into different clustered matrices based on participants’ group affiliations (Americans, Iranians, and Iranians living in the US). Subsequently, we conducted three rounds of coding, where we systematically identified and developed various categories within the data. Thematic analysis served as the primary method for evaluating open-ended comments and transcribed interview data, with grounded theory serving as the underlying theoretical framework [35]. By adopting this blended approach, we aimed to maintain a grounded and systematic analysis while incorporating our research objectives and theoretical perspectives.
To ensure rigor and reliability, we evaluated each category and considered their frequencies, grouping similar themes together for a comprehensive analysis of the data [36]. This blended approach allowed us to strike a balance between the inductive nature of grounded theory and the incorporation of our research aims and theoretical concepts, enhancing the validity and depth of our analysis. By adopting a systematic and rigorous methodological approach, we aimed to provide a nuanced understanding of participants’ responses, acknowledging both the influence of our research objectives and the richness of the data itself. The analyses were conducted using NVivo 11, which is a qualitative data analysis package for analyzing qualitative and mixed-method research data. To assess participants’ perceptions of the relationship between Iran and the United States, we conducted separate chi-square tests of homogeneity. These tests were chosen because the variables in question, such as the travel ban, hostage crisis, and missile attack, were categorical, making non-parametric tests more suitable. The quantitative analyses were performed using IBM SPSS, version 25. By utilizing these statistical tests, we aimed to examine any significant differences or associations between participants’ perceptions based on their nationality and the categorical variables of interest.

5. Results

RQ1. How do the perceptions of American and Iranian participants regarding the relationship between Iran and the United States differ in relation to specific critical incidents in their modern history? How do these perspectives reflect mirror image biases, if any?

As mentioned earlier, two sets of question were asked to explore participants’ perceptions of three events that had substantial impacts in the shaping of the relationship between Iran and the US in the past 40 years. The first set was related to the hostage crisis and missile attack that occurred shortly after the Iranian revolution and shifted the relationship between the two countries in an opposite direction. The second set pointed at the most recent incident, the travel ban, that directly affected Iranians living in the US. In the following section, the results are presented based on the order of questions that participants observed in the study.

5.1. The Travel Ban

A chi-square test of homogeneity was conducted between participants’ nationalities and their opinions about the travel ban. All expected cell counts were greater than five, therefore, the assumption of sample size is met. The first question focused on participants’ agreements with the travel ban. According to the results, there was a subtle but statistically significant difference between the three groups with respect to their opinions about the travel ban, $X^2 (2, N = 226) = 9.78, p = 0.008, Cremer’s V = 0.208$. Out of 87 American participants, 13 were in favor of the travel ban, compared with 8 (10%) Iranians and 0 Iranians living in the US. Post hoc analysis involved pairwise comparisons using the z-test of proportions with a Bonferroni correction. The proportion of Americans in favor of the travel ban was significantly higher than the third group ($p < 0.05$), but not different from Iranians ($p > 0.05$). Similarly, the proportion of Iranian participants in favor of the travel ban was significantly higher than Iranians living in the US ($p < 0.05$).

The second question focused on participants’ opinions about the consequence of the travel ban on US safety. The result indicates that 15% of American and 17% of Iranian participants thought banning specific citizens (from the countries mentioned in the travel ban) from entering the country would make the US safer from terrorism compared with only 3% of respondents that were Iranians living in the US. The difference between the groups was significant, $X^2 (4, N = 226) = 28.2, p < 0.001, Cremer’s V = 0.25$. As expected, the pairwise comparison result shows a statistically significant difference between the third group and their American and Iranian peers ($p < 0.005$), but no difference was found between Iranian and American participants ($p > 0.05$).
5.2. Hostage Crisis and Missile Attack

A chi-square test of homogeneity was conducted between participants’ nationalities and their opinion about the hostage crisis and the missile attack. There were 11 participants (2 Americans, 1 Iranian, and 8 Iranians living in the US) who did not answer these questions and were excluded from the analysis. The first question focused on participants’ opinions about whether Iran and the US are enemies and had three options—yes, maybe, and no. All expected cell counts were greater than five, therefore, the assumption of sample size was met. According to the results, there was a statistically significant difference between the three groups with respect to their opinions, $X^2(4, N = 215) = 48.79, p < 0.001$, Cremer’s $V = 0.34$. Twenty-two American participants answered yes, 48 answered maybe and 15 thought that the two countries are not enemies. Similarly, 20 Iranians thought Iran and the US are enemies, and the remaining answered either maybe ($N = 26$) or no ($N = 30$). Interestingly, only five participants in the third group thought that Iran and the US are enemies, whereas the majority of them answered no ($N = 41$) to this question. Use of the z-test of proportions with a Bonferroni correction revealed that the difference between the three groups was significant in the proportion of participants who selected either maybe or no ($p < 0.05$).

The second question focused on participants’ opinions about whether justice was served for Americans by the shooting down of the Iranian passenger plane. The same set of option (yes, maybe, and no) was provided for this question. All expected cell counts were greater than five, therefore, the assumption of sample size was met. According to the results, there was no statistically significant difference between the three groups with respect to their opinions about justice, $X^2(4, N = 215) = 2.168, p = 0.705$, Cremer’s $V = 0.071$. Unlike the first question, only one American and one Iranian answered yes to this question. The majority of participants in all three groups selected no as their answer and thought justice was not served ($N_{Americans} = 71$, $N_{Iranians} = 68$, $N_{Iranians living in the State} = 46$).

The responses provided to open-ended question embedded in the survey were scrutinized for a better understanding of respondents’ attitudes toward each of the incidents (i.e., hostage crisis and missile attack). The first open-ended question asked for participants’ opinions about the incidents and whether they should have happened. The second question asked for participants’ thoughts on compensating the victims of the missile attack. All the comments were transformed into a conceptually clustered matrix to uncover the correlations of the various categories.

5.2.1. American

Of 87 American respondents, the majority ($N = 57$) believed that both incidents were wrong and never should have happened. On the other hand, three participants believed that the missile attack was an absolutely right action and saw it as an example of USA’s punishment of its enemies regardless of the people involved. For example, one of the respondents wrote “No this is why we [Americans] shouldn’t let them into our country because they [Iranians] kill us when we go to their country.” Among those who viewed both incidents wrong, 27 respondents stated that the missile attack was more horrible and morally wrong compared to the hostage crisis because in the former innocent people and specially children were killed. As an example, one participant wrote “I 100% disagree with the destruction of the airplane and the murder of the passengers and crew. I think that the US has a long history of imperialism across the globe and its interactions in the Middle East are no exception. Iran absolutely has the right to conduct its business without the interferences of the US”. Regarding the question related to US compensation for the missile attack, sixty-three respondents believed that such a compensation should have been made by the US. On the other hand, 10 respondents affirmatively stated that such a compensation should have not been made and the rest were not sure about it.
5.2.2. Iranians

Sixty-three Iranian respondents (82%) provided full-length and detailed response to the first open-ended question. Almost all participants disapproved of both incidents and stated that none should have happened. On the other hand, seven participants harshly criticized the missile attack, while supporting hostage crisis. They justified their responses by referring to history between the two nations and USA's activities and spying on Iranian affairs. For example, one of the participants wrote: “the hostage crisis should not have happened that way, since Americans destroyed lots of documents and the revolutionary forces could not get a hold on most of the documents. If an embassy working against the people of my country, I believe that it needs to face such consequences. On the other hand, the missile attack was a sign of USA's bullying and oppression”. On the contrary, four of the participants stated that the missile attack was unintentional and the result of human error while criticizing hostage crisis. As one participant wrote “none should have happened. However, the hostage crisis was quite intentional which is unacceptable. On the other hand, the missile attack was completely unintentional, but USA never apologized for that and instead gave medal of honor to the commander”. Some other participants described each of the events as opportunities for American and Iranian governments to push their own agendas and ideologies. The hostage crisis was an opportunity for republicans in the USA to campaign against President Carter, whereas the missile attack was an opportunity for Iranian government to push its anti-western ideology. Moving to the last question, 62 respondents stated that the USA should have compensated the victims’ families and only seven of them stated that no compensation is needed.

5.2.3. Iranians Living in the US

Among the third group of participants, 43 provided detailed response to the question regarding first open-ended question about both incidents (i.e., missile attack and hostage crisis). Almost all respondents (N = 42) stated that both incidents were wrong and never should have happened. Only one participant stated that the missile attack was morally wrong, and the rest assigned equal weight to both incidents. Similarly, only one participant held USA accountable for the missile attack compared to 41 participants who blamed the Iranian government in both incidents. Responses to the last question indicated that thirty-three participants believed that USA should compensate the victims of the missile attack while twelve other respondents had an opposite opinion or were not sure about it.

RQ2. How Do Participants from Both Countries Characterize Members of Their Own and the Opposing Groups, Considering Their Perceptions and Stereotypes?

5.3. Nationality and Perception: Contrasting Views and Cultural Paradoxes

5.3.1. Americans

Among the 83 responses to the interview question related to the perception of Iranians by Americans, 38 respondents described Iranians as nice, hard-working, and smart people with a rich culture and long history. For some of the respondents, their acquaintance with Iran came from their interaction with Iranian students in their universities. For example, one participant described Iranians as “warm, culturally rich people from one of the oldest civilizations on the planet, constantly mistreated by Americans through misguided foreign policy after WWII”. Eight participants mentioned that they did not have any knowledge of Iranians and Iran. Six respondents described Iranians as being labeled by stereotypes and misrepresented in the US media. The rest of the respondents provided a dictionary definition of the people and the country by describing them as located in the Middle East. In response to the question related to the “perceptions of Americans”, 17 participants described Americans as “close-minded, judgmental, and polarized people” who value their individualism. Additionally, twenty of the participants acknowledged the diversity among Americans and the rest described the country as a land of opportunity with political paradoxes.
5.3.2. Iranians

Results of the thematic analysis of the interview questions for Iranians revealed that most participants described Iranians as a kind-hearted and smart people being sabotaged by their government. For example, one of the participants wrote “despite of being oppressed, Iranians are still caring and kind”. Another respondent wrote that “Iran is the best place to live in if the government allows it”. However, the descriptions provided were filled with feelings of despair in the sense that most participants felt that the country and the people were a combination of paradoxes. On the contrary, participants’ views toward Americans were more positive. For example, one wrote that “America is a free country with highly self-esteemed people”. Another individual wrote that “Americans are intelligent people and always try to learn something in their daily interactions”. On the other hand, a number of respondents shared “Americans narrow-minded and highly influenced by the media”. Comparing their perceptions of Iranians and Americans, Iranian participants had more positive views toward Americans. This is interesting, because most participants did not have any direct interaction with American culture and their major source of information was the non-governmental controlled media.

5.3.3. Iranians Living in the US

Thirty-two respondents described their perception of Iran and Iranians as “beautiful and culturally rich country with nice and hard-working and intelligent people”. However, almost half of the respondents highlighted the current situation of the people, who are “living in misery and being imprisoned by the government”. Some respondents also described Iranians as a religious, paradoxical and unfortunate people. On the other hand, 35 participants described Americans as “hospitable, kind, and loving human being committed to their values”. Only two participants negatively described Americans as “needy and rich and lazy people”. This shows that Iranians living in the US have more positive attitudes to their host country compared with their country of origin.

6. Discussion

The present study aimed to delve into the perceptions of Iranians, Americans, and Iranians living in the United States regarding two critical incidents that occurred in the aftermath of the Islamic revolution in Iran. These incidents had a profound and negative impact on the relationship between Iran and the United States. Specifically, the study examined the US embassy hostage crisis, which involved the captivity of American citizens and generated significant distress nationwide, until the hostages were released [2]. The second incident, the Iran Air 655 missile attack, resulted in the loss of numerous Iranian lives, including innocent children, creating immense grief within the country [14]. Furthermore, participants were asked to share their opinions on the travel ban, a contemporary political issue that directly affected Iranian citizens, particularly those residing in the United States [32]. Additionally, to shed light on the mirror image and imagined communities phenomena, which refer to how citizens’ perceptions of another country are shaped by their own government’s relationship, participants were invited to provide their definitions of citizens from their own country as well as the other country. This exploration aimed to uncover how individuals construct their identities and their sense of belonging within their respective national communities, as well as how these perceptions influence their attitudes towards the other country. The subsequent discussion will present the study’s findings in the same order as were presented in the Section 5.

6.1. Travel Ban

In analyzing the results of the study, the first aspect discussed is the travel ban, which was examined through the agreement of its participants with the issuance of the ban and their perceptions of its suggested consequences. The findings reveal a relatively low percentage of participants in all three groups who expressed support for the travel ban. Notably, there was a closer alignment of opinions between American and Iranian participants.
compared with Iranians residing in the United States. Similarly, a higher proportion of American and Iranian participants believed that banning citizens from the countries listed in the travel ban would enhance the United States’ safety from terrorism, in contrast with participants in the third group. However, the majority of the participants across all three groups were opposed to the executive order and held the belief that implementing such a ban would have no significant impact on the safety of the United States.

Mirror image theory may help explain the similarity in opinions between American and Iranian participants, as both groups displayed a higher level of support for the ban compared with Iranians residing in the United States. This alignment may be influenced by the mirrored perspectives of their respective governments regarding the ban. Furthermore, participants’ opinions may have been influenced by their imagined communities, shaped by their national identities and shared narratives. Participants from all three groups expressed opposition to the executive order, indicating a sense of solidarity and shared concerns across national boundaries. This suggests that individuals may develop a collective understanding and empathy for those affected by the travel ban, transcending national boundaries and forming a shared imagined community.

Interestingly, these results diverge from the findings of polls conducted by CNN and NBC/Wall Street Journal, which reported a nearly equal division of respondents in favor of the travel ban [27]. Several factors could contribute to this inconsistency. Firstly, the political party affiliation of American participants may have influenced their viewpoints, as a significant number of them identified as Democrats. Additionally, discrepancies in timing between this study and the polls may have played a role, as the polls were conducted immediately after the initial version of the travel ban, while this study took place three years later, following subsequent debates and protests both domestically and internationally. It is plausible that these events heightened public awareness and influenced opinions regarding the travel ban’s proposed justification of ensuring the safety of the United States.

Expectedly, the study found that all Iranian participants living in the US expressed strong opposition to the travel ban. In line with previous research, the results suggest that the travel ban had a significant detrimental impact on the higher education sector in the United States, as evidenced by the substantial decline in international applications to American universities [32,36,37]. Most universities with international students from the banned countries reported prevalent feelings of stress and concerns among their students [38]. Iranian students, in particular, bore the brunt of the travel ban, which deprived them of the ability to visit their families and instilled considerable distress and insecurity. The emotional burden of the ban was compounded by the uncertainty surrounding the students’ future prospects, as there was no clear indication of when the ban would be lifted and what awaited them in the future [32].

6.2. Hostage Crisis and Missile Attack

The results of these sets of questions are similar to the previous question asking about the travel ban. In other words, Iranian participants living in the US had different answers compared with Americans and Iranians. Most of them thought that Iran and the US are not enemies, whereas the majority of American and Iranian participants thought that the relationship between the two countries is complicated, as they were not sure if the two countries are enemies or not. Nevertheless, almost all participants from all groups believed that neither the hostage crisis nor the missile attack should have happened, and that justice was not served for Americans as a result of the shooting down of the Iranian airplane. To further explore participants’ opinions, two additional questions were asked in which participants defined their perception of Americans and Iranians.

The findings regarding participants’ perceptions of the relationship between Iran and the United States align with the mirror image and imagined communities theories. Iranian participants living in the US exhibited a different perspective compared with Americans and Iranians residing in Iran. This difference can be attributed to their unique position as individuals who bridge both cultures and have a more nuanced understanding of the
dynamics between the two countries. They expressed the belief that Iran and the US
are not enemies, indicating a more positive perception of the relationship. On the other
hand, American and Iranian participants expressed uncertainty about the nature of the
relationship, perceiving it as complicated. This suggests that their perceptions may be
challenged by broader political narratives, media representations, and historical events.
Though they may not follow their respective governments’ positions, they are still unable to
form a firm perception of the US–Iran relationship and the historical context of the hostage
crisis and the missile attack.

Interestingly, regardless of their group affiliation, the majority of participants agreed
that the hostage crisis and the missile attack should not have occurred. This shared
sentiment reflects a collective belief that these incidents were unfortunate and could have
been avoided. Additionally, participants expressed the view that justice was not served
for Americans as a result of the shooting down of the Iranian airplane. These responses
indicate a shared sense of empathy and recognition of the human impact of these events,
transcending national boundaries.

6.3. Nationality and Perception

The analysis of participants’ written comments on the incidents of the hostage crisis
and missile attack revealed compelling insights. Across all participant groups, a majority
regarded these incidents as morally wrong and believed that justice had not been served for
the victims involved. The emotional impact of the missile attack, which resulted in the tragic
loss of innocent lives, including children, was particularly resonant. American participants
displayed a more nuanced perspective, recognizing the importance of taking a broader
view when assessing the moral implications of these incidents. Similarly, Iranians, both in
Iran and those living in the US, echoed this sentiment and emphasized the significance of
historical knowledge in accurately evaluating the moral consequences of these events.

The analysis of written comments in response to the four open-ended questions
regarding participants’ attitudes toward the two incidents as well as their perceptions
toward each other yielded interesting findings. Regarding the incidents of the hostage
crisis and missile attack, the majority of participants from all groups considered them to
be morally wrong and felt that justice had not been served for the victims. The emotional
impact of the missile attack was felt more acutely, as it resulted in the loss of innocent lives,
including children. Although American participants expressed a more nuanced attitude
toward these incidents, they also acknowledged the need to take a broader perspective in
assessing their moral implications. Likewise, Iranians living in Iran and those living in the
US followed the same reasoning and acknowledged that historical knowledge is required
to accurately assess the moral implications of the incidents. These findings contribute to
a deeper understanding of the intricate relationship between the United States and Iran,
highlighting the need for empathy and historical awareness to foster cultural sensitivity.
The shared recognition of the wrongness of these incidents signifies a common human
sentiment that transcends national boundaries. It suggests that, despite differences in
perspectives and historical context, there exists a fundamental sense of moral empathy
among participants [23,29].

The observed results of this study are in contrast with studies that were conducted
after the hostage crisis and missile attack [17] and highlight an evolution in attitudes over
time. Previous studies have indicated that a majority of American respondents believed
justice had been served and viewed the shooting down of the Iranian airplane by the US
Navy as justified or not morally wrong [14]. However, the findings of this study revealed a
different perspective, with the majority of participants across all groups considering these
incidents to be morally wrong and believing that justice had not been served. This shift
in attitudes may be attributed to several factors. Firstly, the passage of time has likely
played a role. The hostage crisis and missile attack occurred several decades ago, and as
events recede into the past, their emotional intensity may diminish. The sensitivity and
emotions associated with these incidents may have waned, allowing for a more reflective and critical assessment.

Furthermore, the presence of schadenfreude, pleasure derived from others’ suffering [16], in previous studies suggests the transient nature of such sentiments. Schadenfreude may have been more pronounced in the immediate aftermath of the incidents when emotions were heightened, and patriotic sentiments prevailed. However, as time passes and a broader perspective is gained, individuals may reassess their initial reactions and adopt a more empathetic stance. It is important to consider the potential influence of these temporal and psychological factors when interpreting the differing results across studies. The evolution of attitudes observed in this study indicates the dynamic nature of public opinion and the impact of temporal distance on collective memory and perceptions.

Regarding participants’ perceptions of Americans and Iranians, the findings reveal a positive outlook from both groups. American participants demonstrated an understanding of Iran’s cultural and historical background, acknowledging the mistreatment and misrepresentation of Iran and its people in Western contexts. They recognized that the tensions between governments, rather than the people themselves, were responsible for these negative portrayals. Conversely, Iranians expressed favorable views of Americans, describing them as free individuals living in a free country.

One possible explanation for this positive attitude is the shifting mindset among young generations in Iran [23]. They are increasingly embracing Western cultural norms and lifestyles while preserving positive aspects of their own heritage, such as Nowruz. These individuals imagine themselves as modern Iranians who distance themselves from politically mandated anti-Western policies imposed by the government. This indicates a conscious effort to maintain a less biased perspective toward Americans and a willingness to challenge negative stereotypes perpetuated by their own government and media [3].

These findings challenge the notion of the mirror image phenomenon [30], where citizens’ perceptions of another country are influenced by their own government’s attitude. Surprisingly, both Americans and Iranians exhibited a greater level of self-criticism rather than criticism of the other nation, indicating a departure from the expected biases associated with mirror image dynamics. They demonstrated the ability to maintain a less biased perspective and resist the negative images created by their respective governments and media. This suggests that individuals have the capacity to form independent judgments and are not significantly swayed by the negative portrayals propagated by their governments. Such findings provide insight into the complex interplay between mirror image and imagined communities, highlighting the potential for mutual understanding and the bridging of cultural divides between Americans and Iranians.

The responses of Iranian participants living in the US exhibit a more cautious and conservative approach compared with the other two groups. The participants adopted a middle ground and refrained from strongly aligning with either the American or Iranian perspective. Many of them placed blame on the Iranian government for the incidents discussed and acknowledged the potential negative image of Iranians in the minds of Americans. This stance could be attributed to the prevailing political environment both in Iran and the US, which may have influenced their level of caution in expressing their opinions. Iranian students in the US were particularly concerned about the potential consequences of participating in studies exploring the relationship between Iran and the US, leading them to be less specific and more reserved in their responses.

Another possible explanation for their approach could be related to their cultural integration strategy within the host culture [23]. In their efforts to succeed in integrating into the host culture, Iranian participants may have chosen to criticize the Iranian government and their fellow Iranians in order to distance themselves from any negative perceptions associated with them. Simultaneously, they sought to reclaim their identity by emphasizing their cultural and historical roots, such as identifying as Persians rather than Iranians and promoting their distinct cultural practices and cuisine. This strategy aligns with previous
research on Iranian–American individuals who, in response to potential discrimination, selectively dismantle aspects of their heritage connections to their home culture [7,24].

These findings highlight the complex dynamics of cultural integration and identity negotiation among individuals living in another country and identify themselves as bicultural [23]. It underscores the delicate balancing act they engage in, trying to navigate between distancing themselves from negative stereotypes and preserving their cultural heritage. Such insights contribute to our understanding of the multifaceted experiences of individuals living in a foreign country and the strategies they employ to mitigate potential challenges and discrimination.

Although the focus of this study was on the complex and multifaceted nature of how individuals perceive each other when their governments have a complicated political relationship, it is important to note that government relationships are not the only determining factor in accepting or excluding immigrants. In other words, the same type of behavior and action can be seen in parts of the world in which there is no hostile relationship between governments. It seems that sharing the same race, skin color, and geographical location contribute more to altruistic behavior than the need for that behavior itself.

For example, currently there are two different types of refugees attempting to take asylum in European countries, Ukrainians in the first category and Middle Eastern and African refugees in the second. The standards of acceptance and rejection of these two types of asylum seekers are different. While more than 5 million Ukrainians have resided in different European countries in the last 6 months, the number of Middle Eastern refugees accepted in Europe is less than 6 million in the last decade [15,39,40]. Around 13% of the Ukrainian population has been accepted by European countries. This is compared with less than 1% for Afghans, who have been waiting for years to seek asylum, including those who have been accepted in the US, despite Afghanistan facing more than two decades of war [41]. Further to this, Poland accepted more than 1 million Ukrainian refugees in less than 6 months, while last year, 4000 Middle Eastern refugees were held at the Belarusian–Polish border and were not allowed to enter Poland, even as dozens of them, including children and pregnant women, died due to severe cold [42]. This discriminatory approach by European governments cannot be deemed accidental, especially considering the European mainstream broadcasts during the first weeks of the Russian invasion of Ukraine. Some anchors of these broadcasts explicitly asserted that Ukrainians are middle-class, educated, civilized, Christian, and white people who drive cars like “us” and look like “us.” They are not like Middle Eastern refugees whose background is unknown [43]. Therefore, it is plausible that people who need help will be selected based on their values and shared characteristics rather than their situation and needs.

7. Limitations and Suggestions for Future Research

Each study has limitations that could threaten the results and their interpretations. The current study is no exception, meaning its results should be interpreted with caution, especially before making any generalizations. By acknowledging these limitations and incorporating them into future research endeavors, we can advance our understanding of intergroup perceptions and work towards fostering improved relations between different populations.

Recruitment process limitations: The recruitment process imposed certain limitations, as participants were recruited primarily from academic environments and through social media. This may have introduced biases in the sample, and the findings may not be fully generalizable to the broader populations of Iranians and Americans. Future studies should consider alternative recruitment procedures and aim for more diverse participant samples.

Sample composition bias: The study focused specifically on Iranians and Americans, based on their nationality. While this allowed for an in-depth analysis of attitudes between these two groups, it may limit the ability to draw broader conclusions about the attitudes of a more diverse population. Caution should be exercised when extrapolating the findings beyond the scope of the study’s participants.
Absence of a control group: The study did not include a control group, restricting the ability to establish direct comparisons or determine causal relationships. The mixed-methods approach used in this study aimed to provide an exploratory analysis of attitudes rather than definitive causal conclusions. Future research incorporating control groups and experimental designs will strengthen the validity of conclusions in this field.

Additional factors influencing perceptions: While the study explored the role of critical incidents, generational shifts, and media/government narratives, it is important to recognize that there are likely additional factors influencing the evolving perceptions between Iranians and Americans. Future research could explore variables such as socioeconomic factors, educational experiences, interpersonal interactions, cultural exchanges, and historical events to provide a more comprehensive understanding of these dynamics.

Need for longitudinal and comparative studies: Longitudinal studies tracking attitude changes over time and comparative studies examining a wider range of intergroup relationships would provide deeper insights into forgiveness, perception changes, and general trends within intergroup contexts. Such studies can contribute to a more comprehensive understanding of intergroup attitudes and guide efforts towards reconciliation and cooperation between nations.

8. Conclusions

In conclusion, this study offers valuable insights into the perceptions of Iranians, Americans, and Iranians living in the US regarding critical incidents that have influenced the Iran–United States relationship. Through the lens of the theoretical frameworks of “mirror image” and “imagined communities”, we gain a deeper understanding of the complex dynamics at play. Contrary to the mirror image phenomenon, the findings demonstrate that individuals from all three groups exhibited a higher level of self-criticism rather than criticism of the other nation. This challenges the notion that citizens’ perceptions are solely shaped by their own government’s attitudes and suggests that political affiliation and awareness of the political climate and historical events may influence people’s attitudes toward such policies.

The concept of imagined communities highlights the role of cultural and historical narratives in shaping individuals’ identities and perceptions. Iranian Americans, in particular, displayed a nuanced attitude, balancing their cultural heritage with their integration into the host society. They sought to distance themselves from negative stereotypes and discrimination by criticizing the Iranian government and emphasizing their distinct cultural identity. This aligns with previous research on Iranian Americans dismantling parts of their heritage connections to navigate potential discrimination.

Moving forward, it is essential to consider these theoretical frameworks when examining perceptions and attitudes between nations. Future research should explore the interplay between cultural values, media representations, historical events, and government policies to gain a more comprehensive understanding of how these factors shape individuals’ attitudes and perceptions. Such insights can inform policymakers when developing more inclusive and effective policies that consider the diverse perspectives and experiences of the individuals and communities affected by them.

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