

Prisoner's Dilemma Theory in International Relations: A Theoretical and Practical Study on Saudi-Iranian Relations

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Abstract

This study aimed to analyze the prisoner's dilemma theory, which is one of the game theories in international relations. In addition, focus on the impact of the theory on the international political events, as well as the prediction of future events in international relations based on intellectual and theoretical foundations. The study also explained game theory in international relations and indicated its importance in the theory of international relations. The study applied the theory of the prisoner's dilemma to one of the current issues in international relations and applied it to the relations between Saudi Arabia and Iran and their competition in the Middle East. The study concluded that the prisoner's dilemma theory explains the mutual concerns between the two countries about many issues between them. Also, the study concluded that the prisoner's dilemma theory has the ability to explain the Saudi-Iranian crisis.

Key words: Games theory; Prisoner's dilemma theory; Saudi Arabia; Iran

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INTRODUCTION

Game theories are one of the important theories in the field of international relations. For its interpretation of

how states in the international system deal with each other. In addition, the theory provides an explanation of how to make decisions and deal with issues of interest to the state in cases of war and peace. Thus, how the state deals with those issues that determine its relations and interactions with other states (Bennett, 1995). These theories explain many international events, whether between the great and major powers or between the less powerful countries. It also works to predict the future of international relations and predict the international events (Brams, 2000).

The prisoner's dilemma theory is one of the important theories within game theories. It is based on mathematical rules that work to explain and clarify international interactions and important events in the world (Ehrhardt, 2008). The prisoner's dilemma theory contributes to clarifying how a country's decision-making is towards another country or another actor in international relations, and provides an explanation of the dilemma that the decision-makers face in the international politics (Correa, 2001). Additionally, international relations theories play a significant role in explaining political issues and predicting future of international relations which is what many theories succeeded in throughout the twentieth century (Bashota, 2011).

Furthermore, It is important to clarify the role of theory in the theoretical and applied fields of international relations. Various discussions in the science of international relations contributed to the development of important theories that contributed to a more comprehensive understanding of the nature of international relations (McGlinchey & others, 2017).

This study will try to analyze the prisoner's dilemma theory in international relations by clarifying and interpreting the theoretical foundations of that theory and its importance in international relations. In addition, the study will apply the theory of the prisoner's dilemma to one of the important issues in international rela-

tions in the Middle East and apply the theory on Saudi-Iranian relations.

IMPORTANCE OF THEORY IN INTERNATIONAL RELATIONS

In order to understand international political events, there is a need for a theoretical basis on which interpretations and predictions related to those events are based. The theoretical basis contributes to a deeper and more comprehensive understanding of these events regardless the unscientific and illogical explanations (Backman, 1970). The theory in international relations plays an important role in understanding international events, as it lays out a theoretical framework for understanding the various phenomena in international relations that would not be understood without a theory. It also helps researchers in understanding events deeply and the importance of predicting the future of international events (Burchill, 2005).

Many of international theories based on school of realism that consider the theory that explain and predict many of international issues. Hanz Morenthau is considered its pioneer and first founder through his book, "Politics among Nations" which was published for the first time in 1948. The realism believe in the states as the main actor in international relations and that the supreme interest of the state is survival, and therefore the state must search for strength in order to survive and continue in the international system. In addition, the state search primarily for its political, economic and military interests, and takes a rational decision based on the benefit of the state (Morgenthau, 1948). Some researchers believe that the theory of international relations must combine a number of advantages that revolve around covering all aspects of international relations and expressing them with clear and accurate assumptions.. International political events such as the First and second and the Cold War between the United States and the Soviet Union, were reflected on the theoretical side of the field of the international relations (McClellans, 1960).

United States played a significant role in the most of international events that happened in the blast century. Thus, science of international relations has developed in American universities and academic institutes. Additionally, academic studies have been influenced by the realistic American view of dealing with international relations events in the twentieth and twenty-first centuries. To conclude, International relations theories attempt to develop a theoretical and conceptual framework for international relations to enable researchers, specialists and politicians to interpret international events and predict the future of those events (Mastro, 2019).

GAME THEORY IN INTERNATIONAL RELATIONS

Game theory is the theories that explain the relations of conflict and cooperation between states. This theory uses in academic research to explain the decision-making process of a state regarding an issue in international relations. Since states try as much as possible to reach the highest benefits and the least losses in their relations, game theory helps decision makers to take the optimal rational decision on issues of concern to the state. Mathematics is considered the basis of game theory since the beginning of the twentieth century. And with the middle of the last century, game theory began to be used as a tool for analyzing war and peace between countries (Snidal, 1985). Game theory plays an important role in decision-making. it assist the decision-makers in explaining and clarifying the alternative options presented to the decision-maker in an issue (Tema, 2014).

Furthermore, Game theory in international relations contributes to assisting scholars and researchers in clarifying the international interactions between actors in the international system. It also provides an explanation and interpretation for understanding international facts (Turocy,2001). In addition, the decision maker must take into account the reaction of the other country when making a particular decision. In game theory, the zero-sum equation requires that what one side gains, the other side loses (1:0) and in a non-zero equation, both parties do not necessarily lose, it is possible for both sides to win (Lake,2013). It is very important for both players (the two countries) that they interact within certain strategies that take into account the importance of acquiring new benefits against the other party (Tema, 2014).

PRISONER'S DILEMMA THEORY

Prisoner's Dilemma Theory is one of the most important examples of game theories. The prisoner's dilemma theory is used to describe the decision-making process followed by the decision-maker in states' external relations with another power in a particular case. It plays an important role in explaining how to make decisions in international conflicts and crises (Snidal, 1985).

The prisoner's dilemma theory is widely used in various fields, revolving around its ability to clarify the choices that the political decision maker has in relations with other countries within the international system. The importance of this theory lies from an important issue, which is that the rational behavior that the state adopts towards a specific issue or towards another competing state does not necessarily lead to the acquisition of the benefits that the state wants since it does not fully know the intentions of the states or the other state towards it. As this principle is one of the basic principles in the nature of international relations especially within the school of

realism which basically proceeds from the fact that the intentions of states towards each other are latent. Thus, the decision-makers in the states cannot predict what the other states intends to do with it (McCarthy, 2014).

The Following Example Clearly Illustrates This Theory

Example: Two people were arrested for stealing a car, and each of them was placed in solitary confinement, so there is no communication between them. The authorities put the next option in front of prisoner No. (1) which is that he will be released if he confesses to his friend and if the other does not confess either. If both partners confess to each other, the penalty will be five years in prison for each of them, and if they do not confess to the theft, they will be jailed 3 years in prison, and if one of them confesses, he will be released and the other will be jailed 10 years in prison. At the same time; The authorities summoned the other prisoner (prisoner No. 2) and gave him the same previous options without any communication between the two parties (Kumar, 2021).

In this case, these two people (or actors or states) face a big dilemma, which is the lack of communication between them or their inability to predict the intentions of the other, and therefore both countries are faced with a dilemma in making the appropriate decision that guarantees certain benefits.

The paradox in this case (and of course in the various issues in international relations) is that both parties do not know about the other's intentions, and therefore the ability of each country to move is limited because it depends on the strategies that the other country will follow to deal with the same issue. Thus, this puts the decision makers in a big dilemma that requires to carry out others' strategies to obtain the highest benefits against the other country (Ehrhardt, 2008).

The prisoner's dilemma theory explains the dilemma that the state faces in its interaction with other states. The basic principle in international relations is that states are looking primarily for their own interests and therefore try - as much as possible - to maximize their benefits towards other countries. In addition, the intentions of states towards each other are latent, and it is not possible, even in the case of an alliance between two states, to know the intentions of other countries toward your country, and this increases the difficulty of being able to make right decision. This theory attempts to clarify and apply that to the international relations (Asher, 2009).

The inability of both countries to guess the appropriate and accurate of the opposite reaction, and in the absence of any possibility of cooperation between the two parties, both countries may increase their military capabilities. For example, in anticipation of the other reaction, and this is what we find during the Cold War, Neither of USA & USSR were able to guess the reaction of the other side to the contested issues at the time. Consequently,

this led to arms race between the two superpowers (Bashota, 2011). There are many current examples of conflicts or competition between two powers that the prisoner's dilemma theory can explain and clarify, such as the relations between Iran and Saudi Arabia. The current competition between them on many issues, as they are two powers in the Middle East. This study will apply the prisoner's dilemma theory to the Saudi-Iranian competition in the region and the importance of this in the decision-making process in both countries.

THE PRISONER'S DILEMMA THEORY AND SAUDI-IRANIAN RELATIONS

In this part of the study, we will apply the prisoner's dilemma theory to Saudi-Iranian relations by highlighting the rivalry between the two countries on issues that concern them.

First: Mutual Concerns Between Both Countries

Both Saudi Arabia and Iran are important powers in the Middle East, and during periods of time the Saudi-Iranian competition over the region reflects many dimensions. The balance of power for both countries came at the forefront of these dimensions, and other factors such as oil and the relationship with the United States as a superpower play to push that competition in a certain direction could lead to war at the end (Fraihat,2020).

During the past few years, regional issues in the Middle East contributed to the strengthening and prominence of the Saudi-Iranian conflict, and in many cases it took the character of a proxy war through the support of both countries to certain parties in their competing conflict areas such as Yemen, Lebanon.

The fears between the two sides mutual on the fact that the Iranian Islamic State has escalated its danger after the Islamic revolution in Iran in 1979, so Iran aimed to exporting the revolution abroad especially in the neighboring Gulf states. In recent years, the Iranian expansion in Iraq, Lebanon, and finally in Syria has contributed to the growing Saudi fears of Iran as an occupying country of Arab lands (Juneau,2020). It is natural that there will be a threat to Saudi interests in the region. In addition, Iran has worked to support the Bahraini opposition, which sometimes took a military character. The great support that the Houthi Group receives in Yemen, especially after the fall of the Ali Abdullah Saleh regime, contributed greatly to Saudi Arabia's leadership of an Arab military coalition to confront that danger and to confront the Iranian threat and prevent it from expanding (Darwich,2018).

Second: The Balance of Power Between the Two Parties

Both countries are an important force in the region, due to the military and economic strength they possess in

facing the threats facing them. Because of the Iranian nuclear program, Western countries have escalated their threats against the Iranian program, especially through the United States. In addition, the Israeli factor has become an important role in determining the relationship and competition between Saudi Arabia and Iran especially in the recent period (Mabon, 2017).

Each of the two countries has many cards that they can use to confront each other. Saudi Arabia is the main source of oil production, and this may lead to serious thinking by Saudi Arabia to harm the Iranian economy by increasing production to reduce prices, and this will necessarily lead to great damage to the Iranian economy which suffers from the imposition of economic sanctions by the West, especially in the past years. In addition to the Saudi-American alliance on the issue of Iranian expansion may push the direction of military action against Iran (Van derHeiden & Krijger, 2018.).

Third: The Theory of the Prisoner's Dilemma in Saudi-Iranian Relations

In order to understand the nature of Saudi-Iranian attraction and its reflection on many issues in the region; We must apply the theory of the prisoner's dilemma in international relations to Saudi-Iranian attractions and competition in the region. This can be understood through the following:

a. There are currently no diplomatic relations between the Saudi and Iranian and there is no official communication between the two countries, and therefore this deepens the crisis and increases the danger of the competition. As the lack of communication between them leads to increasing tension and hostility as well as the inability of either country to anticipate the reaction of the other party leads to the absence of any ability to know the intentions of the other. This basically expresses the prisoner's dilemma theory.

b. Due to the inability of one country to understand and anticipate the reaction of the other, this leads to a major dilemma for decision makers in both countries, and leads to extreme caution in dealing each other. However, the absence of the ability to understand the reaction of the other country keeps these options limited and keeps them confined to official and unofficial statements and minor skirmishes between the two countries that do not reach to war between them. This is expressed by the prisoner's dilemma theory, as the dilemma lies in the lack of communication between the two countries and the lack of knowledge of one's intention towards the other. Thus, the inability to correctly anticipate and understand the reaction of the other state which leads to the perpetuation and deepening of the crisis without resorting to a military war between the two countries. For example, if Iran implemented its threats to the West and Saudi Arabia as well by closing the Strait of Hormuz, Iran does not fully realize the reaction that Saudi Arabia and other countries

will take, such as lowering oil prices or launching a limited or expanded military operation.

c. Failure of one country to take an initiative to resolve the crisis between them leads to its perpetuation for a longer time because the matter will be interpreted by the other side as a reaction that expresses a state of weakness or despair for the inability to keep pace with it politically, economically or militarily. Thus, the other party will gain more than the party initiating the solution to the crisis because it will be in a weak state or the matter will be understood. This is found in the prisoner's dilemma theory whereby the inability of one country to anticipate the reaction of the other will exacerbate the crisis and lead both countries to the dilemma of not being able to make the right decision and resorting to other solutions to solve the dilemma.

CONCLUSION

This study discussed the nature of the prisoner's dilemma theory in international relations by studying the most important foundations in the theory. The study showed the importance of a theory in international relations and the theory's ability to predict the future of many events in the world. Also, the study applied the theory of the prisoner's dilemma to Saudi-Iranian relations and demonstrated the dilemma faced by the decision-makers in both countries through inability to anticipate the reaction of the opposite country.

The importance of the study stemmed from the need to clarify many theories of international relations and the theoretical foundations on which they are based including the prisoner's dilemma theory.

The study concluded that the decision-makers in both countries face a big dilemma on the inability of each of them to anticipate the reaction that the opposite country will present and therefore ability to maneuver is limited. Therefore the decision-makers resort to other tactics and strategies to help them reach those goals that each party seeks about.

The study concluded that the prisoner's dilemma theory explains the Saudi-Iranian relationship and the nature of the tactics and strategies that each country must follow because each country does not know the nature of the response of the corresponding country, and this is what the prisoner's dilemma theory shows in international relations.

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