

UNIVERSITY OF BAHRAIN
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Overlap of Mediation and Arbitration: A New Tool for ADR Methods in Construction Projects in Bahrain

A Thesis submitted in partial fulfilment of the requirements for the
master's degree in Engineering Management

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بسم الله الرحمن الرحيم

Abstract

Construction accounts for a major share of global GDP and continues to expand. They are often done in a complex and uncertain environment, with frequent disputes. Construction disputes arise when claims are not handled efficiently, economically, and expeditiously. Dispute resolution may be expensive and time-consuming. Thus, modern ADR methods must be adequately investigated to prevent long procedures, save time and money. Parties seeking a rapid, impartial, and cost-effective alternative dispute resolution procedure have several ADR options. Med-Arb, combining mediation and arbitration in a unique technique is one alternative that consists of two phases, "Med phase" and "Arb phase". If the mediator cannot resolve the matter during the "Med phase," he or she becomes an arbitrator, performs an arbitration hearing, and issues a binding award. Although the Med-Arb approach was created decades ago, there is a study gap about the potential benefits and results of Med-Arb in Bahrain disputes, especially those involving building projects. Mixed-method strategy (quantitative and qualitative) was adopted in this research. Two tools were utilized in conjunction with one another to conduct this study: Survey Monkey and Minitab. A questionnaire and exploratory interviews were implemented to collect data. The results indicated that the more one's trust in the finality, cost-effectiveness, timeliness, confidentiality, impartiality, and competency of procedural norms to govern Med-Arb practice, the more susceptible one is to include a Med-Arb provision in future contract conditions. The recommendation implies that legal practitioners shall acknowledge that Med-Arb is a hybrid technique, a unique product that combines mediation and arbitration in a novel formation, rather than the outcome of a simple sequence of conventional mediation and arbitration (Mediation-Arbitration). Also, the recommendations suggest that despite "pure" mediation, the Med-Arbiter should be able to use information from the joint sessions throughout the arbitration phase, and the parties may opt out of this default norm by directly banning the Med-Arbiter from using mediation material in the arbitration phase after being warned that studies indicate people cannot ignore what they know. Parties must have complete trust in the "Med-Arbiter's" impartiality, as with other ADR procedures. According to the findings, Med-Arb can be considered an innovative technique for resolving disputes in Bahrain construction projects if the recommended procedures are followed.

Dedication

To my parents, family, friends, and all those who work very hard to make a good difference in the world.

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Abbreviations

ADR	Alternative Dispute Resolution
AAA	American Arbitration Association
BCDR	Bahrain of Dispute Resolution
GCC	Gulf Cooperation Council
UNCITRAL	United Nations Commission on International Trade Law
DIFC	Dubai International Financial Centre
ICSID	International Centre for Settlement of International Disputes
CIETAC	China International Economic and Trade Arbitration Commission
BAC	Beijing Arbitration Commission
SHIAC	Shanghai International Arbitration Center
UN	United Nations
DAAB	Dispute Avoidance/Adjudication Board
NOD	Notice Of Dissatisfaction
DAB	Dispute Adjudication board
Med-Arb	A procedure in which the parties utilize a single Mediator/Arbitrator and only turn to the Arb phase if the Mediator/Arbitrator cannot settle their issue during Med phase. It is a hybrid procedure that is distinct from the sequential Mediation-Arbitration process.

Chapter 1: Introduction to the Study

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1.1 Introduction

Construction projects are generally conducted in a complicated and unpredictable setting, with disputes being an inevitable element. Construction disputes develop if construction claims are not addressed in an efficient, economical, and timely manner. Nonetheless, settling disputes can be costly and time-consuming. Therefore, it is vital to study in a thorough manner the up-to-date Alternative Dispute Resolution (ADR) techniques, to minimize the time and money expenditures resulting from prolonged procedures (Cheung & Pang, 2013). Mediation and arbitration have been the most used alternative dispute resolution processes. Despite their popularity, both processes have critics mediation for its slow, high cost, and formalistic nature. These perceived limitations have motivated parties to explore alternative dispute resolution options in the promise of finding a conclusive, impartial, and efficient alternative (Fullerton, 2010).

A Med-Arb procedure, which combines mediation and arbitration, is one viable alternative. Sam Kagelz is credited for combining the two methods for the first time while resolving a contentious nurses' strike in the 1970s. The hybrid Med-Arb varies from the sequential use of mediation and arbitration in that if the mediator is unable to resolve the entire dispute during the mediation phase, the mediator becomes an arbitrator, conducts an arbitration hearing, and delivers a binding award. Med-arb avoids the necessity to restart the arbitration process with a new arbitrator who is completely unfamiliar with the facts of the case (Phillips, 2009).

In this research, the term "Med-Arb" refers to the pure form of mediation and arbitration that uses the same neutral mediator/arbitrator, as opposed to the conventional method that uses distinct neutrals for mediation followed by arbitration. Preliminary findings suggest that Med-Arb is a viable procedural alternative for settling certain types of disputes.

Individuals engaged in a dispute desire a means of resolution that is fair, consistent, transparent, inexpensive, and quick. In addition to saving money and time. Med-Arb gives parties the option of seeking consensual settlement before or during binding arbitration. Under the right circumstances, Med-Arb could be the best option for disputants.

1.2 Research Problem

The world is expanding at an alarming pace, and providing necessities like education, health care, and food which are becoming more challenging. These needs can never be met without competent civil engineers and project managers.

The difficulty of successful project management is to complete all tasks on time, on budget, and to the project's specifications (Altoryman, 2014).

Construction contributed around 230 million BHD to Bahrain's GDP in the second quarter of 2021. (Trading Economics, 2021). Increasing costs, time, and danger involved with construction litigation has spurred the industry to explore more efficient means of settling disputes outside of courts. During the past decade, the construction industry has developed various alternative conflict resolution procedures that may be used at almost any stage of a building project.

Med-Arb is one of several alternative dispute resolution processes accessible to parties. The ADR community has witnessed an increase in experimentation with Med-Arb proceedings in recent years, with Med-Arb proceedings becoming a regular part of many large-scale settlement ADR programs that have been evaluated and authorized by the courts (Benzidi, 2017). And even though the Med-Arb approach was launched decades ago,

there is a research gap about the potential benefits and results of Med-Arb when applied in Bahrain disputes, especially those involving construction.

With that being said, it is vital to consistently research new or hybrid types of dispute resolution techniques that may not only reduce the length of a dispute but also reduce costs.

1.3 Research Objectives

The main objectives of this thesis are:

1. Identify the most often utilized dispute resolution methods in Bahraini construction projects, along with the approximate time required to resolve disputes using each approach.
2. Investigate the potential benefits of combining two alternative dispute resolution processes, mediation, and arbitration (the "Med-Arb" approach), in improving the efficiency of resolving disputes in Bahrain construction projects, define the advantages of combining mediation and arbitration into Med-Arb as opposed to using each method independently and examine the drawbacks of adopting the "Med-Arb" technique in the Bahraini building industry and devise strategies to overcome them.
3. Evaluation and validation of the hybrid ADR method (Med-Arb) in the Bahrain construction industry using quantitative and qualitative approaches.
4. Provide recommendations to existing and potential users of the "Med-Arb" method in Bahrain and draw the attention of future researchers to this approach.

1.4 Research Questions

- A. How does Bahrain's legal system promote the adoption of alternative dispute resolution methods? Is the process governed by any governmental laws?
- B. What are the most frequently used dispute resolution methods in construction projects?
- C. What are the possible benefits of combining mediation and arbitration (the "Med-Arb" technique) to increase the efficiency of resolving conflicts in Bahrain construction projects?
- D. What are the barriers to implementing the "Med-Arb" approach in the Bahraini construction sector and how may they be overcome?
- E. What are the concerns of having one person switching roles in a combined, mediation and arbitration?
- F. What are the different interpretations of "Med-Arb" by international legal bodies and institutions? Do they have any "Med-Arb" provisions in their legal framework?

1.5 Research Significance

Bahrain is a global actor due to its vast oil reserves. Additionally, it is a developing country in need of a variety of industrialized countries' products. The globe is becoming more economically interconnected, necessitating the establishment of an efficient legal framework for promoting international commerce and investment to foster economic development and stability.

International legal frameworks are adopting innovative or hybrid ways of resolving disputes, like Med-Arb, which implies that Bahrain's legal frameworks must play a significant role in economic development.

Even as worldwide legal frameworks continue to evolve, Bahrain is left behind due to a research shortage on hybrid dispute resolution procedures.

Thus, the significance of this research will be to reflect the Med-Arb method on the Bahraini environment while also recognizing its economic advantages. Also, the findings of the study shall establish guidelines and encourage the lawyers and disputed parties to introduce the Med-Arb clause in their contracts.

1.6 Research Limitations

The research has significant limitations. For instance, studies relied on practitioners' and participants' views rather than actual construction site occurrences. The research is primarily theoretical with no real-life data owing to the limited usage of Med-Arb in Bahrain.

1.7 The Study's Setting

Chapter 1: Introduction to the Study

This chapter begins with an overview of the alternative dispute resolution procedure for construction projects, with a particular emphasis on Med-Arb. This is followed by the description of the problem. Additionally, the research objectives, questions, significance, and terminology are defined.

Chapter 2: Theoretical Framework and Literature Review

This chapter offers an overview of the procedures for resolving disputes in construction projects. The chapter then explores various dispute settlement procedures in the context of Bahrain. Finally, it examines in detail previous studies on Med-Arb.

Chapter 3: Methods and Procedures

This chapter discusses the mathematical and statistical analysis of the results through interviews and questionnaires.

Chapter 4: Results Discussion

This chapter discusses the statistical tests that were conducted on the survey findings, including the reliability test, normality test, descriptive statistics, hypothesis test, semi-structured interviews, and ultimately the main findings which answers to the study questions.

Chapter 5: Conclusion and Recommendations

This last chapter summarize the conclusion and recommendations for future researchers on the subject.

1.8 Research Terminology

A dispute occurs when two parties disagree on a legal issue or because they have competing interests. Disputes might be resolved in or out of the courtroom.

"Alternative Dispute Resolution," or "ADR," is a term that refers to any method of resolving disputes outside of the courtroom. It is contractual in nature, both in the construction sector and in general; it is dependent on the parties' agreement.

Mediation is a non-binding ADR technique carried out with the assistance of a neutral third party, while Arbitration is a binding ADR method carried out with the assistance of an arbiter (s).

The Med-Arb is a process in which the parties use a single mediator-arbitrator and only resort to arbitration if mediation fails to resolve their dispute. It is a hybrid strategy that incorporates two well-known dispute resolution strategies. Mediation and arbitration are used in tandem, and in

the purest form of Med-Arb, the same neutral third party serves as both mediator and arbitrator.

Since the 1970s, arbitrators have advocated for the Med-Arb procedure, in which opposing parties and a neutral third party first try mediation, then arbitration if that fails. The Mediation-Arbitration procedure was developed by Sam Kagel, a San Francisco lawyer and arbitrator, perhaps because he used it to mediate a public and controversial nurses' strike in the 1970s. In 1972, he co-invented, with John Kagel, the hybrid dispute resolution technique (Med-Arb), a two-step procedure that combined mediation and binding arbitration. The Federal Service Impasses Panel then vigorously supported the Med-Arb procedure in America (USA). Over twenty incidents between 1970 and 1975 were recorded by the Panel, although it may have been used considerably more often. Wisconsin became the first state to legally approve it as a dispute resolution mechanism on January 1, 1978, and it has since grown in popularity.

Aside from the US, combining mediation and arbitration has long been a staple of Asian dispute resolution. Culture had a key influence in the resolution. Parties always had the option of combining mediation and arbitration, according to the complexities of custom, culture, and legal development. The complexities make the Chinese and Hong Kong positions on combining mediation and arbitration intriguing. They established arbitration statutes permitting a mediator to also function as an arbitrator in the same dispute since they shared similar traditions but had unique histories.

Chapter 2: Literature Review

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2.1 Theoretical Overview

This chapter discusses the qualitative component of the mixed-method research strategy which is explained in detail in chapter 3.

2.1.1 Dispute

To begin, it is critical to thoroughly grasp the term dispute. According to the Oxford Dictionary, a dispute is "Question the truth or validity of (a statement of fact), an argument, a disagreement between management and employees that leads to industrial action (Stevenson, 2010). The meaning of this term varies according to its context. Conversely, the legal meaning of dispute is disagreement. The term "dispute" refers to contentious contract concerns that cannot be handled within the construction arena and contract. Nevertheless, it is considered that disputes and conflicts are analogical but distinct as such: not every conflict is recognized as a dispute, and to comprehend the disagreement, its nature and causes must first be recognized (Murdoch & Hughes, 2002). It is worth noting that when a claim is submitted, dismissed, and reviewed in the industry, a disagreement may arise. A dispute is not a verbal argument (Stevenson, 2010). An alternative legal definition was proposed as follows: 'conflict occurs not when a claim is made but when it is not admitted' (Green, 2006).

2.1.2 The Traditional Dispute Resolution Methods in Construction Projects

Not long ago, organizations involved in the construction process had two viable concepts for dispute settlement. The first option was for a design professional to issue a non-binding determination; the second option was for binding arbitration. Apart from litigation, these were the only viable options offered to construction parties for resolving disputes throughout

the project's execution. Negotiations were utilized by all sides to bridge the gap between these tools; nonetheless, they were primarily done by means of experience, business acumen, and opportunity, without recourse to any formal mechanism that may facilitate a more expeditious and equitable resolution of the disagreement. Because litigation was seen prohibitively expensive and time-consuming, arbitration had become industry standard for resolving disputes (Pena-Mora, Sosa & McCone, 2003).

2.1.3 The Alternative Dispute Resolution (ADR) Methods

ADR refers to any method of resolving disputes that takes place outside the courts. It is contractual in nature, both in the construction sector and in general; it is contingent upon the presence of an agreement between the parties (Battelle, 1995). On the other hand, courts, and traditional litigation are open to everybody without prior agreement. As a result, ADR is particularly well-suited to the construction sector, where it is often assumed that some form of dispute will occur as a result of a project's complexity. A contract, in some way, underpins almost every transaction in the construction sector. Thus, contract interpretation standards are critical in defining the various parties' roles and obligations. The parties to a contract must define the agreement's scope and terms. The contract paperwork themselves may contain a variety of documents, depending on what the parties wish to include (Currie & Robey, 1988).

2.1.4 Steps to Dispute Resolution

The stair-step chart in Figure 1 illustrates the methods to resolve disputes that are highly favorable in the construction sector (Groton, 1992).

The researcher focuses on seven distinct types of dispute resolution systems, both binding and nonbinding. The extent to which Negotiation, Mediation, Adjudication, DAB, Arbitration, Litigation and finally the

hybrid Med-Arb is used in Bahrain Construction projects is assessed. The first five methods are briefly described here. The following sections go into detail about Med-Arb.

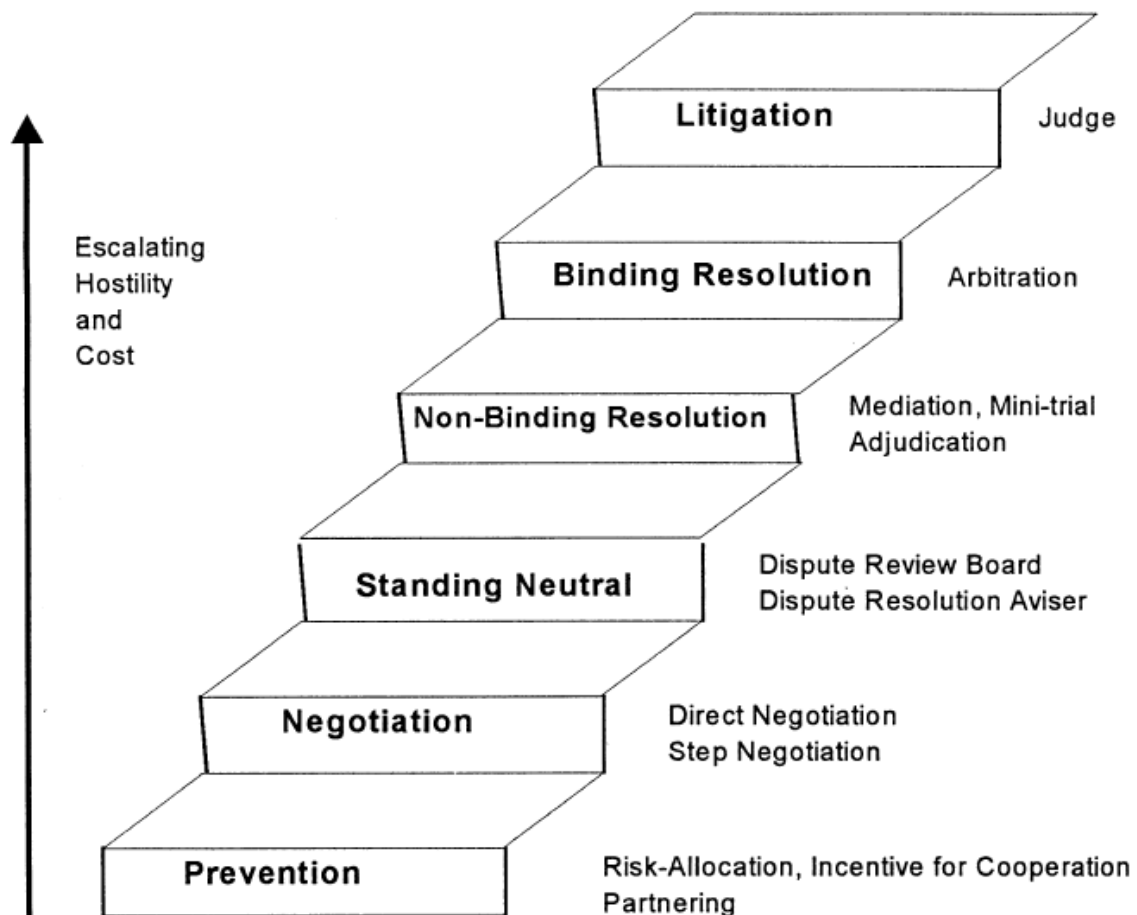


Figure 1. Construction Dispute Resolution Steps (Adapted from Groton)

Negotiation:

Negotiation is when two individuals meet to reconcile their divergent approaches to the same problem. They interact, behave in a variety of ways, attempt to alter each other's perceptions through a variety of forms of language, recover from conflicts of mutually exclusive anticipations, and agree on a common solution in which one of them obtains some of what they desire through trading with another, who obtains some of what they desire in exchange (Kennedy, 2017). Negotiation is the

process by which two or more parties interact with one another (without the assistance of a third party) to settle their conflicting interests (Nieuwmeijer, 1992). Negotiation is without a doubt an effective method of resolving conflicts. A reasonable conflict should be resolved effectively and efficiently in terms of saving time, money, and relationship preservation. If negotiations fail, alternative methods are available. However, negotiations should take precedence over alternative techniques when they are explored (Britain, 2002).

Meditation:

Mediation's fundamental and primary main features have been its core values of self-determination and parties' collaboration. The majority of ethical codes and professional standards describe mediation as a voluntary procedure based on party self-determination (Nolan-Haley, 2012). Meditation is a form of structured negotiation with a third party and is widely regarded as the most effective form of ADR (Murdoch, & Hughes, 2002). The impartial but proactive mediator observes both parties' views and then encourages and nudges both sides to focus on the issues at hand. Each party may hold private discussions to clarify points and devise a voluntary common ground solution to the problem (Ashworth & Perera, 2018).

Adjudication

Within a defined time-limit, an impartial adjudicator decides on the resolution of a contractual disagreement between the parties. The decision-making time restriction is a highly differentiating feature of this process since it establishes a predetermined time during which the adjudicator must conclude. However, if either party is dissatisfied with the decision, they may appeal it and request a more lengthy and extensive procedure (Gad,

Kalidindi, Shane, & Strong, 2011). Adjudication can be defined as a process in which a neutral third party makes a decision that is non-binding on the disputants in dispute (Khekale & Futane, 2015).

DAB

The international construction sector established the Dispute Adjudication Board (DAB). DAB members are construction industry experts who are familiar with the project's construction contract and development. DABs resolve semi-binding contract disputes and are held periodically to ensure minor conflicts do not impact the project schedule or budget. Using a DAB also saves parties time and money by avoiding lengthy legal battles over construction issues. In today's World Bank and FIDIC contracts, it is used as the main method of dispute resolution in building projects. However, a DAB's decision is usually advisory and not binding, so either party can challenge it (Gad, Kalidindi, Shane, & Strong, 2011).

Arbitration:

Arbitration is one of the ADR processes for resolving unsettled disputes by referring them to a third party, either consented upon or appointed by law, who will render a decision. Arbitration is similar to litigation in that parties jointly designate an arbitrator who is supposed to behave objectively and whose conclusions are enforceable by law. Arbitration has numerous advantages over litigation; it's less expensive and less time consuming, and all hearings are confidential and free of adverse publicity. The parties may choose the day and place of the hearing, as well as a competent expert. (Ashworth & Perera, 2018).

Litigation:

The traditional method of resolving disputes. It's founded on the law; a judicial theory. Litigation usually begins with a defendant's claim (Murdoch, & Hughes, 2002). The concerns are tried based on each party's documentation. The court may authorize the parties to hire experts. This is followed by expert depositions, witness reports, and closing arguments. The judge will then render a verdict. The guilty party should comply with the judge's judgments promptly. In some cases, the “lost” party can appeal to a higher court, but this can be time-consuming and costly (Barrett, 2009).

2.1.5 Dispute Resolution in The Context of Bahrain

2.1.5.1 The Litigation Structure in Bahrain

The Bahraini legal system is an integration of several legal systems, including Egyptian civil law, Islamic Sharia law, criminal law, commercial law, and English common law. The judicial system is divided into four courts: civil, criminal, Islamic sharia, and additional military. With the adoption of the Constitution of 2002, a Supreme Constitutional Court was set up to rule on the validity of the enacted laws. Civil courts have jurisdiction over all commercial, civil and criminal matters, including those relating to disputes over the personal status of non-Muslims, according to the provisions of the Commercial Code, the Code of Civil Procedure, the Criminal Code, and the Code of Criminal Procedure. Sharia courts have inherent jurisdiction over all matters relating to the personal status of Muslims, both Bahraini and non-Bahraini, including, but not limited to, Muslim inheritance laws, wills, gifts, and waqf (charitable donations).

2.1.5.2 Arbitration official laws

Bahrain has had a long history of arbitral proceedings since the nineteenth century. Arbitration and mediation have played a key role in the Middle East's dispute resolution culture, particularly in Bahrain. They were and continue to be wildly popular methods of resolving disputes due to their resonance with Arab culture and the influence of Islamic shariah, which emphasize the use of mediation or other forms of harmonious dispute resolution in a variety of contexts (Goel, 2014).

Domestic and international arbitration were formerly regulated by distinct legislation in Bahrain. Domestic arbitration was controlled by the 1971 Civil and Commercial Procedures Law. International arbitration in Bahrain was governed by the International Commercial Arbitration Law, which was enacted by Legislative Decree No.9 of 1994. However, under Legislative Decree No. 9 of 2015, the seventh arbitration provision of the Civil and Commercial Procedures Law which was published by law-decree (12) in 1971 and the International Commercial Arbitration Act promulgated by decree (9) in 1994 has been repealed (Article 8) (Arbitration Act, 2015).

The clause of the " UNCITRAL " Model Law on International Commercial Arbitration Act law (as per Article 1 of Legislative Decree No. 9 of 2015) shall, on the other hand, apply to all arbitrations, regardless of the nature of the legal relationship between the parties to the dispute, if the arbitration takes place in the Kingdom of Bahrain or abroad, and both parties agree to follow the UNCITRAL law (Article 1) (Arbitration Act, 2015).

Both domestic and international arbitration are now controlled by the UNCITRAL Model Law (the "Model Law") in its entirety (Official Gazette, 2015).

2.1.5.3 Arbitration Conventions

Bahrain has been a pioneer in legislation, having ratified the New York Convention as one of the first Gulf governments in 1988. Bahrain is a party to the following multilateral conventions: the GCC Convention on the Execution of Judgments, Delegations, and Judicial Notifications; the Riyadh Convention on Judicial Cooperation Among Arab League States; and the ICSID Convention (popularly known as the "Washington Convention on the Settlement of Investment Disputes between States and Nationals of Other Countries") (Goel, 2014).

2.1.5.4 Arbitral Institutions

The Bahrain Chamber for Dispute Resolution (BCDR), in conjunction with the American Arbitration Association, is the principal arbitration center in Bahrain. Other institutions, however, are widely employed by Bahraini parties, including: the London Court of Arbitration (LCIA); the International Chamber of Commerce's International Court of Arbitration (ICC); the Gulf Cooperation Council Commercial Arbitration Center (GCC-CAC); and the Dubai International Financial Center in collaboration with the LCIA (DIFC-LCIA) (Goel, 2014).

Bahrain's Chamber for Dispute Resolution (BCDR) was formed by Bahrain Legislative Decree No. 30 of 2009 (BCDR Act 2009, 2009), as revised by Bahrain Legislative Decree No. 64 of 2014 (BCDR Act 2009, 2014), and works in collaboration with the American Arbitration Association (AAA) (BCDR, 2021). BCDR is a joint endeavor of the Ministry of Justice of Bahrain and the American Arbitration Association (AAA). In December 2008, the Ministry of Justice and the AAA signed an MOU (Memorandum of Understanding) in which the AAA pledged to provide technical assistance, administrative and system expertise, and staff training to Bahraini mediators and arbitrators. BCDR workers were trained

at the AAA headquarters in the United States (the AAA also has a permanent representative in Bahrain) (Vause, & Quinlan, 2010).

BCDR is composed of two unique and different entities: a specialized court (the BCDR Court) (Chapter 02 section 01 of the Legislative Decree No. 30 for the year 2009) and an international arbitration and mediation center (BCDR-AAA) (Chapter 02 section 02 of the Legislative Decree No. 30 for the year 2009) (BCDR Act 2009, 2009).

The BCDR Court has jurisdiction over disputes that originated in Bahraini courts (i.e. The BCDR acquires automatic and mandatory jurisdiction under the law, given that, in the absence of the BCDR, the case would have come within the jurisdiction of Bahrain's courts), provided that the claim exceeds BHD 500,000 (approximately US\$ 1.3 million) and at least one of the parties is a financial institution licensed by the Bahraini Central Bank, or the dispute is of an international commercial character. Commercial disputes are those in which the subject matter, whether contractual or non-contractual, involves commercial relationships, such as transactions the supply of goods or services or their exchange, commercial representation or commercial agency, distribution agreements, managing rights in advance of others, hiring-to-purchase, factory construction, consulting services, engineering work, issuing licenses, and investment and financing transactions (Article 9) (BCDR Act 2009, 2009).

BCDR-AAA is a global arbitration and mediation center with authority over disputes in which the parties have agreed in writing to use the BCDR-AAA Arbitration or Mediation Rules or that the arbitration or mediation will be administered by BCDR-AAA under non-institutional rules or procedures.

2.1.5.5 The UNCITRAL Model Law on International Commercial Arbitration

Within the UN system, the UN Commission on International Trade Law is that the primary legal body for international trade law. UNCITRAL could be a globally recognized legal organization that has been rising company law for over fifty years. Unify and modernize worldwide business regulations. To encourage trade and investment in an increasingly mutualist globe, a far better legislative framework is essential. On Dec 17, 1966, the United Nations Commission on International Trade Law (UNCITRAL) was founded. To additional the progressive harmonization and improvement of international trade law, a spread of legislative and non-legislative mechanisms should be ready and pushed. Dispute resolution, international contract procedures, transportation, insolvency, on-line commerce, secured transactions, international payments, and products procurance and sale are all enclosed within these categories. Participants from UNCITRAL member states, non-member states, and intergovernmental and non-governmental organizations discuss these instruments on a worldwide scale. These books are well-known for delivering solutions that are applicable for countries with a spread of court systems and stages in the industrial process. UNCITRAL has been thought to be the leading UN legal agency in the field of international trade law since its founding (United Nations, 2013).

A. Arbitration Agreement

Article 4 of the Bahrain Arbitration Law defines and forms the arbitration agreement in line with the first option specified in Article 7 of the UNCITRAL Model Law (Arbitration Act, 2015). Thus, arbitration agreements in Bahrain may take the form of an arbitration clause included in a contract or a separate agreement. It must be in writing or included in a

document signed by both parties, as long as its content is documented in any form (such as email) (Official Gazette, 2015).

B. Compositions of Arbitral Tribunals

Bahrain does not have an obligatory rule for the nomination of arbitrators. The parties are, in principle, free to select their arbiter (Article 11) (United Nations, 2008).

By default, an arbitral tribunal consists of three arbitrators; however, the parties may elect to have a different number (Article 10) (United Nations, 2008). In a three-member arbitral tribunal, the claimant and defendant both nominate an arbitrator, and the arbitrators elect a third arbitrator to serve as the tribunal's chair. If no side proposes a name or the parties cannot agree on one, the Bahrain High Civil Court may intervene and appoint an arbitrator (Article 11(3)) (United Nations, 2008).

Any individual appointed as an arbitrator must inform the parties of any facts that raise reasonable doubts about their independence or impartiality (Article 12) (United Nations, 2008).

C. Determining the Rules of Arbitration Proceedings

Subject to the procedures set out in the UNCITRAL law, the two parties are allowed to reach an agreement on the procedures that will be followed by the arbitral tribunal when the arbitration is carried out. If there is no such agreement, the arbitrator, taking into consideration the requirements of this legislation, may proceed with the arbitration in the manner that he or she deems appropriate to resolve the dispute at hand (Article 19) (United Nations, 2008).

D. Initiation of Arbitral Proceedings

Except as otherwise agreed, the arbitral proceedings for a particular dispute begin on the date the respondent receives the request for arbitration (Article 21) (United Nations, 2008).

E. Claim Statement and Defense

Unless the parties have agreed otherwise regarding the required aspects of this statements, the claimant shall assert the factual data supporting his claim, the points at issue, and the remedy or solution sought, and the respondent shall state his defense in regard to these particulars within the time period specified in the agreement or determined by the arbitral tribunal. The parties may include all documents they believe are relevant to their comments or may include a reference to the papers or other proof they intend to present (Article 23) (United Nations, 2008).

Unless the parties agree otherwise, either party may alter or augment his claim or defense throughout the arbitral proceedings, unless the arbitral tribunal finds that such amendment is improper considering the delay in making it.

F. Rules that apply to the subject of the dispute

An arbitral tribunal shall resolve the dispute in compliance with the applicable norms of law set by the parties. Unless otherwise specified, any reference to a Government's law or legal system shall be considered as referring directly to that Government's substantive law and not to its conflict of laws rules. In the absence of any choice by parties, an arbitral tribunal shall follow the law decided by the applicable conflict of laws rules. In all situations, an arbitral tribunal shall determine in conformity with the contract's terms and considering the applicable trade customs (Article 28) (United Nations, 2008).

G. Form and Contents of award

The arbitrator or arbitrators shall make the award in writing and sign it. In arbitral proceedings involving more than one arbitrator, the signatures of the majority of the arbitral tribunal's members must suffice, provided that the cause for any withheld signature is specified.

The award shall disclose the reasons for it, unless the parties agree otherwise, or the award is one on agreed terms pursuant to article 30. The award shall identify the date and location of the arbitration, as established pursuant.

After the award is made, each party shall obtain a version signed by the arbitrators.

H. Recognition and Enforcement of Arbitral Awards

Arbitral awards are considered enforceable and may be enforced upon formal application to the appropriate court (the Bahrain High Civil Court), regardless of their place of origin.

The party who is relying on or seeking enforcement of an award must furnish the original or a copy of the award. If the court issues an award in a language other than the national language of this country, the court may ask the party to provide a translation into that language (Article 35) (United Nations, 2008).

I. Grounds to Set Aside an Arbitral Award

An arbitral award may be rejected recognition or enforcement for the following reasons (Article 36(1)) (United Nations, 2008):

- on-demand of the party seeking recognition or enforcement, if the party submits proof to the competent court that:
 1. The agreement is invalid under the parties' contract, or under the law of the country where the award was rendered; or

2. It's possible that the award-seeking party was either not adequately notified or unable to present his case.
3. A portion of the award containing decisions on non-arbitration matters may be recognized and enforced if the award's judgment on those issues can be isolated from those not submitted to arbitration.
4. The arbitral tribunal's or procedure's structure was inconsistent with the parties' agreement or, in the absence of such agreement, with country's law; or
5. The award is still pending, or has been set aside by a court in the country where it was made, or has been delayed by legislation:
 - If the court believes that:
6. The issue is not capable of being resolved by arbitration under the country law.
7. If the award's recognition or enforcement would be contrary to state public interest.

2.1.5.6 Mediation in Bahrain

As per Decree No. (22) of 2019, a legal or business dispute may be settled by domestic or international mediation. This law applies to both domestic and international mediation.

The mediation is international if the parties' workplaces are in different countries, or if the parties' workplaces are located in countries other than those in which a substantial part of the commercial relationship obligations will be performed unless the parties agree otherwise. This law does not apply to matters where mediation is prohibited (Article 2) (Mediation Act, 2019).

A. Eligibility of a mediator

A schedule named (the mediators' schedule) shall be formed in the Ministry concerned with judicial matters, and a list of natural persons who wish to be registered mediator shall be as follows (Article 3) (Mediation Act, 2019).

- Full qualification and capability.
- He should be knowledgeable, fair, and impartial.
- He has not been convicted of a crime involving dishonesty and dishonesty.
- He has not been fired from his work due to morality or disciplinary action.

B. Mediator Duties

As per Article (4) in Decree No. (22) of 2019, the mediator must follow the subsequent guidelines (Mediation Act, 2019).

- To disclose anything that might compromise his role as a mediator or compromise his impartiality and independence.
- If he were a judge, he should avoid involving in dispute of a matter within which he previously a mediator.
- It is forbidden to act as an arbitrator or an advocate in a dispute of a matter within which he previously associated with mediation.
- Execution of the mediation mission shall be within the timeframe established within the executive regulations unless parties agree on a special period.
- He shall refuse to mediate or abandoning it if he encompasses a relationship with one amongst the parties up to the fourth degree, or if he has acted as a representative for one amongst the parties to the dispute in any previous mediation or related procedure. on its

subject, or expressing his opinion thereon, or the other reason unless the parties accepted his appointment as a mediator in writing despite one 's knowledge of that with the parties over an earlier mediation or related procedure Approval by the mediator.

- Upon completion of the mediation, he must pass to every side the notes and papers they submitted.

C. Recognition and Enforcement of Mediation

The settlement agreement must be in writing and must have the authority of an executive bond upon authentication, or it may be approved by the court if the mediation processes occur during the court's examination of the matter (Article 12) (Mediation Act, 2019).

An international mediation settlement agreement can be enforced by submitting a request to the High Court clerk's department and paying the required fee. The contract must be translated into Arabic if it was not written in Arabic. This request is filed with the court clerk, and a copy is sent to the other party responsible for enforcing the agreement. After the agreement has been evaluated and no barrier to its implementation has been identified, the President of the High Court will issue an order enforcing it (Article 13) (Mediation Act, 2019).

2.1.6 Dispute Resolution in the Context of FIDIC Red Book “Conditions of Contract for Construction”

A. DAAB¹ Disputes are resolved by a DAAB per Sub-Clause 21.4 (DAAB Decision). Both Parties should mutually appoint the DAAB member(s)

¹ “DAAB”: “Dispute Avoidance/Adjudication Board” means the single member or three members , as specified in the contract.

within 28 days of the contractor receiving the Acceptance letter (Clause 21.1) (FIDIC, 2017).

- B.** By mutual agreement, the Parties may ask the DAAB for help and/or informally explore and check out to resolve any issues or disagreements which will have occurred within the performance of contract. Any issues or disagreements is also dropped at the DAAB's attention (Clause 21.3) (FIDIC, 2017).
- C.** If a Dispute occurs between the Parties, either Party may refer it to the DAAB for resolution (whether informal negotiations pursuant to Sub-Clause 21.3 [Avoidance of Disputes] have taken place) (Clause 21.4) (FIDIC, 2017).
- D.** If either Party is unsatisfied with the DAAB's decision, the dissatisfied Party may: (a) submit a NOD to other Party, plus a duplicate to the DAAB and therefore the Engineer; (b) this NOD shall specify that it's a "Notice of Dissatisfaction with the DAAB's Decision" and shall lay out the problem under consideration and therefore the reason(s) for dissatisfaction (Clause 21.4.4) (FIDIC, 2017).
- E.** If a NOD is provided under Sub-Clause 21.4 [Getting DAAB's Decision], both parties must try and resolve the dispute amicably prior arbitration. To the extent that no attempt at amicable resolution has been made, arbitration could also be initiated on or during the twenty-eighth (28th) day from the date of this NOD (Clause 21.5) (FIDIC, 2017).
- F.** Sub-Clause 3.7.5 [Dissatisfaction with Engineer's determination], Sub-Clause 21.4.4 [Dissatisfaction with DAAB's decision], Sub-Clause 21.7 [Failure to adjust to DAAB's Decision] and Sub-Clause 21.8 [No DAAB in Place] apply. (a) The Dispute shall be eventually determined by one or three arbitrators selected in line with these Rules; (b) The arbitration shall be performed within the ruling language stated in Sub-clause 1.4 [Law and Language] (Clause 21.6) (FIDIC, 2017).

2.2 Previous Studies on Med-Arb

Med-Arb is a technique for resolving disputes that combines mediation and arbitration. The most common type of Med-Arb is 'same-neutral', in which parties use a single mediator-arbitrator and only resort to arbitration if they are unable to resolve their dispute during mediation (Pappas, 2015). It is the fusion of two well-established dispute settlement processes into a single hybrid process. Mediation and arbitration are used in tandem, and in the purest form of Med-Arb, the same neutral third party serves as both mediator and arbitrator (Baril & Dickey, 2014).

This section provides a review of the term Med-Arb in its basic state of mediation and arbitration which utilizes the same neutral, as opposed to the more common process that utilizes different neutrals for the mediation and arbitration phases.

2.2.1 The history of Med-Arb

Arbitrators advocated for the Med-Arb process since the 1940s, a means of resolving disputes in which opposing parties and a neutral third party seek to resolve their disputes through mediation and then move to arbitration if that fails (Ftika, 2015). Sam Kagel, a San Francisco lawyer, and an arbitrator is more often credited with developing the Mediation-Arbitration process, potentially because he used it to resolve a wider public and contentious nurses' strike in the 1970s (Killingsworth, 1972). Specifically, in 1972, he co-invented the hybrid dispute resolution method (Med-Arb) with John Kagel, a two-step process in which a single neutral Mediator/Arbitrator combined mediation and binding arbitration. Following that, the Federal Service Impasses Panel actively promoted the Med-Arb process in the United States of America (USA). Between 1970 and 1975, the Panel's records indicate that it was used in approximately

twenty cases, but it may have been used much more frequently (Coleman, 1992). The Med/Arb process's popularity continued to grow after Wisconsin became the first state in the United States to formally adopt it as a dispute resolution procedure on January 1, 1978 (Torosian, 1978).

Apart from the United States, the combination of mediation and arbitration has long been regarded as a core aspect of Asian dispute resolution. Culture played a significant role in the resolution process. A blended approach (combining mediation and arbitration) was always a viable option for parties, subject to the nuances of tradition, culture, and legal evolution. Such nuances made China's and Hong Kong's position regarding the combination of mediation and arbitration so interesting. The existence and sharing of common traditions while possessing distinct histories enabled them to establish arbitration laws allowing a mediator to also act as an arbitrator in the same dispute (De Vera, 2004).

Despite the Med-Arb method's continued development and increased popularity over the years, there is a knowledge gap regarding this method in Bahrain. It requires an examination of the compatibility of the combined mediation and arbitration as a distinct mode of alternative dispute resolution in Bahrain.

2.2.2 Med-Arb Clause in International Institutes

Numerous countries and institutes have endorsed the Med-Arb method. The "American Arbitration Association," the "Chicago International Dispute Resolution Association," the "New York City Bar Association," the "Washington Arbitration & Mediation Service," the "LCIA Arbitration and ADR" (UK), Beijing Arbitration Commission (BAC), among others, all include a Med-Arb clause. Appendix B contains examples of Med-Arb clauses.

2.2.3 The Med-Arb Process

The disputants may agree to attend the Med/Arb process either prior or after a dispute arises. Parties who have agreed to arbitrate may engage in pre-arbitration mediation with the arbitrator acting as mediator. Similarly, disputants who decided to mediate may request that the mediator act as arbitrator and resolve their disagreement. Generally, the parties agree on the methodology to be followed during the Med-Arb process. For instance, the mediation phase of the proceedings may be fixed in time. A full mediation can be scheduled for a half-day or for one or more days, with a separate arbitration scheduled for a later date. Typically, however, arbitration occurs immediately following the mediation phase of the process. Thus, in a one-day Med/Arb schedule, a half-day arbitration instantly follows a half-day mediation; in a two-day schedule, the first day is dedicated exclusively to mediation; the second day, if necessary, is devoted exclusively to arbitration (Flake, 1998). Apart from the time frame, several stages are established and followed, as detailed below.

2.2.3.1 The Mediator/Arbitrator's Role

Med-Arb process may serve as an arbitrator in the arbitration stage of the Med/Arb method if the first consents and the parties agree. The Med/Arb process's success in settling disputes is strongly reliant on the Med/Arb arbitrator's skill and experience. Apart from being neutral, impartial, and independent throughout the hearing, the third party should be expertise in both mediation and arbitration, to transition effectively among the requirements and responsibilities of each role. Additionally, as with any ADR method, the Mediator/Arbitrator must be able to earn and maintain the parties' trust, as well as establish and maintain the process' credibility and faith (Dendorfer & Lack, 2007).

2.2.3.2 The Med-Arb Agreement

The Med/Arb agreement demonstrates out the procedure as well as the scope of the issues to be resolved. It should address confidentiality, the form in which the phases will be conducted and concluded, and the form in which evidence will be presented and considered (Ftika, 2015).

2.2.3.3 The “Med Phase”

At the initial phase of the Med-Arb process, the Med/Arbiter will act as a mediator and will most likely begin with a joint session to evaluate each party's perspective on the issues. The Mediator/Arbitrator will then proceed with the "Med phase," as appropriate, using private hearings (caucuses). The Mediator/Arbitrator has the flexibility that mediation provides in that he or she may speak with the parties jointly or privately, as a neutral third person. The parties in the "Med phase" present their case to one another in the hope of reaching an agreement to resolve their dispute. When both parties trust they have reached an agreement on the majority of issues during the "Med phase," the third person will assist the parties in drafting and signing a Mediation Settlement Agreement covering the issues on which they have reached an agreement. If all outstanding issues are successfully resolved, the Med/Arb process will conclude. If any issues remain unresolved following the conclusion of the "med phase," they will be referred to the binding "arb phase," as specified in the Med/Arb agreement (Roth, 2009).

2.2.3.4 The “Arb Phase”

The parties will proceed to the "Arb phase" if they are unable to achieve a mutually acceptable agreement during which the Med/Arbiter will render an award. This phase, which takes the form of a formal hearing, allows the parties to submit their evidence as well as any other outstanding

issues that stopped them from reaching a final Mediation Settlement Agreement. An Arbitrator/Mediator gives a final, legally binding arbitral award following the conclusion of the hearing and briefing process. It should be emphasized that the parties are likely to have provided secret information to the Mediator/Arbitrator during the "med phase" of the process, such as their underlying settlement interests, during the "med phase." The concern is whether the Mediator/arbitrator would or should consider such "confidential" sayings later in the "Arb phase," assuming that the procedure progresses that far in the first place. Many people believe that if the procedure is correctly done, the Mediator/Arbitrator will not depend on such information. I believe this is correct (Roth, 2009).

2.2.3.5 The Med/Arb Award

As part of rendering the Med/Arb award, the Med/Arbitrator will, to the extent possible and if agreed by the parties, enforced any decisions achieved during the "Med phase" and address only the issues still in dispute through the award process. A mediated agreement shall be just as legally binding as an agreement that is obtained in the arbitral award in terms of enforceability. A mediated agreement in its pure form is generally enforceable as a contract assuming that courts give them the same "consideration" as arbitral awards (De Vera, 2004).

2.2.4 The Different Nature of Mediation and Arbitration

Arbitration and mediation are two distinct processes with distinct objectives. The key distinction is in who makes the decisions – a neutral third party (mediator/arbitrator) or the parties themselves. In traditional arbitration, a neutral third party conducts an adjudicative procedure similar in nature to a court proceeding to reach a decision based on the contract's law. Arbitration, as an adjudicative method, emphasizes each party's ability

to present factual data (evidence) and relevant standards in order for the neutral third party (the arbitrator) to obtain a sound decision based on contract, law, regulation, and common practice (Henry, 1987).

By contrast, the third-party neutral's role in mediation is to enhance communication, with the parties ultimately deciding how to settle the dispute. Mediation's unique approach places a high premium on distinct skills. A mediator assists parties in communication in order to improve communication, promote problem solving, and assist parties in reaching an agreement or resolution through a voluntary process (Menkel-Meadow, Porter-Love, Kupfer-Schneider & Moffitt, 2018). The mediator may enable the parties to examine subjective elements of the conflict, such as their beliefs and assumptions, their emotions -anger and fear-, their need to assign blame, and their focus on self-justification, which are typically overlooked in arbitration. All information exchanged during mediation is confidential, and the mediator cannot be dragged into litigation as a result of the information disclosed (Baril & Dickey, 2014).

2.2.5 Advantages of Med-Arb

The main strengths of Med-Arb are the certainty of a defined outcome, increased efficiency in terms of money and time, and increased process and timeline flexibility (Brewer& Mills, 1999).

The most appealing feature of Med-Arb is the assurance that the dispute will be resolved, one way or another, in a reasonably short period. In an idealistic situation, the parties will work out their issues pleasantly during the mediation, obviating the need for arbitration. If an agreement cannot be reached, the mediator will take on the role of an arbitrator and will finally give an award by the arbitration processes. At that time, the disagreement is resolved, allowing the parties to go on to other matters.

This procedure is an efficient way to reach an early settlement while avoiding substantive hearings and substantial legal fees, either by bringing the parties closer together or by providing an early indication of the probable outcome of the formal proceedings and thus encouraging the parties to settle (Liability & Smith, 2012). Med-arb has the promise to save both time and money as compared to the distinct sequential processes of mediation and arbitration in two essential respects. First and foremost, if a settlement cannot be reached during the mediation process, the parties and their representatives will not be required to hire another neutral who is unfamiliar with the issue and then prepare for a full-blown arbitration. Secondly, during the mediation phase, the subjects in dispute are typically narrowed, and this forward step can be carried over immediately into the arbitration phase (Blankenship, 2006). Besides that, Med-Arbs' essential strengths are innovation and flexibility. Arbitrators can serve as mediators both during and after an arbitration hearing. Where mediation fails, arbitrators will resume their original roles and hear the arbitration to a conclusion (Ali, 2016).

Consequently, Med-arb addresses several issues that arise in both mediation and arbitration by integrating the hospitable environment of mediation with the finality provided by a legally enforceable agreement.

2.2.5.1 Advantages over Mediation

Mediators do not have the authority to come to a final, legally enforceable agreement, which is the fundamental disadvantage of the practice of mediation. While the mediator may provide a suggestion for a settlement during mediation, the final agreement is the outcome of the parties' willingness to compromise. However, even though the mediator supports each party in balancing their alternatives against those of the other, the mediator does not have "muscle" in his or her role as a neutral

third-party facilitator (Henry, 1987). The most vital feature of Med-Arb is the guarantee of a final decision, which is also a primary part of the arbitration. The Med-Arbiter has full authority to reach a final and binding settlement, which the mediator does not have. Additionally, regardless of whether the end product of a Med-Arb is entirely the result of mediation or a combination of mediation and arbitration, is binding, non-ratifiable, and enforceable at law settlement. Med-arb significantly addresses one of mediation's fundamental flaws (Blankenship, 2006).

2.2.5.2 Advantages over Arbitration

It has been demonstrated that Med-Arb successfully eliminates the drawbacks of arbitration. Arbitration is frequently criticized for having a slow, high cost, and formalistic nature compared to other ADR methods. By omitting arbitration's judicial dimension, Med-Arb efficiently reduces costs and settles disputes in one to seven days, based on the number of issues to be resolved. Med-arb is significantly less formal than arbitration in terms of procedure. There are no records or transcripts collected, and any concerns deemed significant by the parties are open for debate and, if necessary, settlement. (Henry, 1987). It is intended that the time spent in mediation with the mediator be used to provide the mediator with sufficient information to enable him or her to make a decision as an arbitrator in the arbitration phase, so that time is not "wasted" at a subsequent arbitration session. The method is relatively informal, the outcome is relatively quick, and the costs are within reasonable bounds (Elliot, 1995).

2.2.6 Concerns of Med-Arb

Due to the benefits of the Mediation/Arbitration process, it is an efficient, quick, and low-cost method of settling a dispute. The parties accomplish not only a resolution of their issue, but also the continuation of

their commercial relationship and the opportunity of strengthening it and expanding its prospects. However, there are several possible drawbacks to combining mediation and arbitration, raising major concerns about the method's functioning and outcomes.

The two primary concerns with the Med-Arb procedure are the risk of "coercion" and the potential that confidential information obtained during the "med phase" may influence the Med/Arbitrator's judgment (Peter, 1997).

When the mediator is given the authority to resolve the dispute when acting as an arbitrator in the Arbitration phase of Med-Arb, he gains the ability to pressure the parties into settlement (Peter, 1997). Furthermore, as Blankenship states, "any competent, ethical neutral must be sensitive to the line between appropriate pressure to settle and inappropriate coercion" (Blankenship, 2006). Allowing each side an "opt-out" right for the same neutral third individual to continue after the "Med phase" into the "Arb phase" is the best way to avoid these problems arising (Peter, 1997).

The second key concern with the Med-Arb method is that confidential information obtained during mediation may be used or influenced inappropriately during arbitration by the neutral (Blankenship, 2006). A mediator's primary job is to facilitate discussion between the parties and to assist them in settling a dispute. An arbitrator's primary responsibility is to examine the merits of the parties' claims and to render a ruling. While acting as a mediator, the arbiter will come into contact with confidential information that they would not have access to during the arbitration process. If mediation is unsuccessful and the mediator is compelled to act as an arbitrator, there is always the chance that he or she would lack impartiality as a result of previous exposure to sensitive or

classified material. Additionally, there are concerns that the arbitrator may use material offered during the mediation process in pronouncing the award, whether purposefully or unintentionally (Gu & Zhang, 2012).

Caucusing and confidentiality issues Among the multiple problems that arise as a result of Chinese style Med-Arb, the caucusing issue is perhaps the most compelling. A caucus is an exclusive session between the mediator and one of the disputants in which the other party is not present. Caucusing may have a detrimental effect on the impartiality of the arbitrators. In other words, an arbitrator's impartiality is considered compromised if he or she develops a preference for either (a) the outcome or (b) a party. Caucusing is especially sentimental in the latter instance. The mediator may discuss a variety of issues with the parties during caucuses, including personal and emotional issues that would not be discussed during an arbitration proceeding. Without an adversary, a party may be more willing to divulge confidential information and jeopardize its position. After recognizing this information during caucusing, a mediator-turned-arbitrator may become more receptive, sympathetic, and supportive of a particular party's position (Weixia, 2013). Whether or not confidentiality is significant in a particular dispute is more dependent on its specific circumstances and challenges, as well as the parties involved. For instance, if both parties agree at the outset that they will always meet in joint sessions during mediation and that all issues will be discussed, the risk that confidential information will be used inappropriately to influence the Med-Arbiter in achieving an arbitral decision decreases (Baril & Dickey, 2014).

2.2.7 Techniques to Tackle Problematic Issues of Med-Arb

Despite the various benefits to parties of having the same neutral act as mediator and arbitrator during the same trial, Med-Arb raises substantial

logistical, ethical, and legal difficulties, as noted previously. The selection of a med-arbitrator may create a practical challenge. Although the parties may save time in the appointment process by only having to find one person to act as mediator and arbitrator instead of two -which may be true in some cases-the parties may have difficulty finding and agreeing on a neutral with the (extremely unique) skills required to perform both functions (Benzidi, 2017).

The findings of previous studies offer numerous approaches to addressing the concerns of Med-Arb; the potential solutions for the caucuses and confidentiality issues are outlined below.

The first approach would be to permit the Med-Arbiter to hold caucuses during which sensitive information may be disclosed to her by one side but to ban the Med-Arbiter from using that confidential material in his/her arbitral proceedings. This solution would guarantee caucus confidentiality while also adhering to the norm prohibiting the arbitrator from making a decision based on an ex parte (one-sided) discussion. Thus, this alternative aims to preserve the distinguishing characteristics of mediation and arbitration, reducing Med-Arb to simple conjunction of "pure" mediation and "pure" arbitration (Benzidi, 2017). The mediator-arbitrator must be permitted to dismiss mediation communications throughout the arbitration phase, and nothing disclosed in caucus may be considered during the arbitration stage until independently introduced by either party during the arbitration. Thus, the Med-Arbiter should "forget" all of the confidential information conveyed to her during private sessions (Weisman, 2012). In contrast, Brian A. Pappas states that: "If judges are unable to reliably disregard information, how can we expect arbitrators to not consider mediation communications during the arbitration phase? (...)

Being human means that we are not completely in control of our thought processes” (Pappas, 2012).

In a second alternative, a Med-Arbiter may convene caucuses in the mediation stage, but everything stated during those private sessions must be revealed to the other parties at a certain point during the mediation. In this second alternative, the parties are aware that whatever they communicate to the mediator during caucuses must be communicated to the other party later in the mediation phase. In this context, the goal of caucusing would be confined to enabling the parties' discourse. Due to the difficulty of disclosing certain information in front of all mediation participants, caucuses such as those described here would enable a party to first disclose information to the mediator and then, in a second step, disclose that information to other parties, with the mediator's assistance if necessary. This, however, is not a satisfactory alternative, as it does not ensure the impression of impartiality. A party may rightfully be afraid that not all material conveyed to the mediator during caucuses will be shared during the mediation. Additionally, this choice may work against the parties, as mediation is intended to be a safe space for debate and open communication between the parties, as well as between both parties and the mediator (Benzidi, 2017).

Thirdly, the mediator-arbitrator would be prohibited from holding caucuses. In this case, all information provided by one party would be transmitted concurrently to the mediator as well as the other parties throughout joint sessions. This third option is the only one that does not involve any legal complications. Option 3 does, in fact, deprive the Med-Arbitrator of a major instrument during the mediation phase. Numerous proponents of caucusing in mediation doubt its efficacy (Nolan-Haley, 2019). A mediator is particularly likely to hold a caucus if she considers

that the level of tension between the parties is too high to allow for fruitful discourse. As previously proven, parties may be more rational in a Med-Arb than in "pure" mediation since they are aware that the Med-Arbiter has the authority to decide the case's final settlement if they are unable to agree. Thus, we can assume that in a Med-Arb, circumstances necessitating or demanding caucuses are less likely to happen than in a pure mediation. communication between the parties, as well as communication between the mediator and the parties (Benzidi, 2017).

Finally, in order to address issues of confidentiality and bias, article 67(2) of the Beijing Arbitration Commission (BAC) Rules allows parties to demand the replacement of an arbitrator on the grounds that his or her involvement in the mediation proceedings may affect the outcome of the award. Such a demand is subject to approval by the BAC Chairman, and the parties agree to bear the additional costs associated with the replacement (Weixia, 2013).

2.2.8 Review of Med-Arb in various international Organizations

2.2.8.1 China International Economic and Trade Arbitration Commission (CIETAC)

CIETAC is the oldest and most established arbitration institution in China. It was founded in 1956 under the auspices of the China Council for the Promotion of International Trade. In China, "Med-Arb" is governed by Article 47 of the 2015 CIETAC Arbitration Rules. "Med-Arb" can be an effective method of resolving disputes, particularly simple and low-value disputes. The arbitral tribunal can settle the arbitration proceedings with the consent of both parties (Art. 47, Paragraph 2), but the arbitration

process must be discontinued at the request of one of the parties (Art. 47, Paragraph 3) (CIETAC, 2015).

Nothing communicated between the parties or the arbitral tribunal during the conciliation process, including any opinion, position, statement, or suggestion, may be quoted in any subsequent arbitration process (Article 47 (9)) (CIETAC, 2015).

If the parties agree to settle their problems under the CIETAC rules, however, they reach an agreement without initiating the arbitration. Either party may, however, request an arbitration award with the consent of CIETAC (Article 47 (10) or themselves and sign a conciliation agreement, they can withdraw their claims or apply to the arbitral tribunal for an arbitration award or a declaration of conciliation (Art. 47 Paragraphs 4 and 5). While a written declaration of conciliation has the same legal effect as a written declaration of consent under Article 51 Paragraph 2 of the Arbitration Act of the People's Republic of China, a declaration of conciliation has the advantage of being more flexible concerning the arbitration and a greater possibility of voluntary compliance. the parties often prefer an arbitration award (Ali, 2016).

2.2.8.2 Beijing Arbitration Commission (BAC)

The BAC was created in 1995 and has grown to become one of China's leading arbitration institutions. Additionally, it provides 'Med-Arb' services, which are primarily controlled by Article 42 of the BAC's Arbitration Rules (BAC, 2015).

With the parties' cooperation, the arbitrator may function as a mediator during the arbitration proceedings (Article 42 (1)). If the parties successfully achieve a settlement agreement, they may drop their claims or request an award or statement of conciliation from the arbitral tribunal

(Article 42 (2)). If the conciliation process is unsuccessful, no evidence exchanged during the conciliation process may be used in later arbitral proceedings (Article 42 (5)). Additionally, the tribunal's chairman may grant all parties' requests to replace the arbitrator because the outcome of the award may be influenced by the earlier failed conciliation process (Article 67 (2)). This effectively addresses the tribunal's prejudice concerns in the 'Med-Arb' procedure (BAC, 2015).

2.2.8.3 Shanghai International Arbitration Center (SHIAC)

SHIAC was established by the Shanghai People's Government in 1988. It has conducted arbitrations on behalf of parties from over 60 countries and regions to date. SHIAC's decisions have been recognized and implemented in more than 40 countries and territories as one of the leading arbitration institutions in China (Ali, 2016).

Articles 50 to 53 of the SHIAC Rules of Arbitration establish the "Med-Arb" procedures. The arbitral tribunal may mediate in arbitration proceedings if both parties agree (Article 51 (2)). However, the mediation process must be terminated at the request of one of the parties (Art. 51 (3)). Nothing said or written during the mediation between the parties or the court, including opinions, views, statements, or proposals, may be used as evidence in subsequent arbitration (Article 53) (SHIAC, 2015)

If the parties agree to resolve their disputes through arbitration but reach an agreement without initiating the arbitration, either party may still seek an arbitration award from SHIAC (Article 52). If the parties agree through the arbitral tribunal's mediation, they must sign a conciliation agreement (Article 51 (5)). They can then withdraw their claims or apply to the arbitral tribunal for an award or a declaration of conciliation (Article 51 (5)). In particular, any agreement reached by the parties themselves

during the arbitration process will be treated as an agreement reached through judicial mediation and therefore the parties submitting an agreement will be subject to the same requirements and options as set out in Article 51 (5) (SHIAC, 2015).

2.2.8.4 The American Arbitration Association (AAA)

The AAA was founded in 1926 in response to the Federal Arbitration Act's implementation, with the express purpose of assisting in the implementation of arbitral proceedings as a method of resolving disputes outside of court (AAA, 2015).

The AAA allows for a "step" mediation-arbitration clause which allows for mediation first and then arbitration if the dispute is not settled within a specified time (AAA, 2015).

Any controversy or claim arising out of or relating to this

contract, or breach thereof, shall be settled by mediation under the Construction Industry Mediation Procedures of the American Arbitration Association. If a party fails to respond to a written request for mediation within 30 days after service or fails to participate in any scheduled mediation conference, that party shall be deemed to have waived its right to mediate the issues in dispute. If the mediation does not result in settlement of the dispute within 30 days after the initial mediation conference or if a party has waived its right to mediate any issues in dispute, then any unresolved controversy or claim arising out of or relating to this contract or breach thereof shall be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. (AAA, 2015, p. 8).

2.2.9 Different Hybrid Forms of Med-Arb Process

While this research focuses on the "Med-Arb" process in its purest form, when discussing, investigating, and exploring the Med-arb possibilities, one cannot help but notice that other combinations of mediation and arbitration may be a better fit for some types of situations. Why not switch the neutral midway point, or bring in a mediator during the arbitration, or have the mediator offer the arbitrator the best advice on what

should happen, or prioritize the arbitration? As the ADR world expands, it appears as though the sky is the limit in terms of possible variations both within and between specific process models, as well as within and between what refer to as "Hybrid" models. Refer to Appendix c chart to assist a broadening perspective of Med-Arb forms.

2.2.10 Med-Arb & construction

Over the last decade, the industry has significant advances in establishing methodologies and approaches for mitigating the adversarial mentality inherent in the bulk of engineering and construction projects. Alternative dispute resolution techniques such as structured negotiations, mini-trials, mediation, Med-Arb, and dispute review boards have been accepted by the sector. The adoption of these tactics has been crucial in assisting parties in anticipating potential conflicts and has altered the traditionally defensive stance of the "two-step Dispute Resolution Ladder" (Pena-Mora, Sosa & McCone, 2003). Furthermore, Med-Arb is more effective in complex business disputes amongst sophisticated parties represented by expert counsel than in consumer or employment conflicts. It is beneficial in construction, particularly as the business's relationships occasionally cry out for negotiation and mediation (Phillips, 2008). It is recommended to specialize in construction dispute resolution rather than addressing them generally. Likewise, specialized construction Med-Arb is proposed to resolve the sophistication and complexity of construction disputes. As a result of its structure, Med-Arb combines elements of both mediation and arbitration; it shares the key characteristics of mediation during its mediation phase and the key characteristics of arbitration during its arbitration phase (Ng & Banaitis, 2017).

Ultimately, development in the use of Med-Arb in a wide variety of industries will be fostered by the recognition that it works and that disputes

are frequently resolved in ways that no arbitrator could award. The Med-Arb method encourages settlement, craft an atmosphere more favorable to settlement when the mediator also serves as the arbitrator, and the benefits of having the mediator and arbitrator by the same person outweigh the negatives (Phillips, 2008).

2.3 Research Hypotheses

Generally, this thesis research hypotheses suggest that given the right circumstances, "Med-Arb" provides several substantial advantages over mediation and arbitration alone and can be considered a new tool for resolving construction disputes in Bahrain. To do so, the following hypothesis were tested:

Hypothesis 1: "The higher one's faith in the finality of Med-Arb, the more favourable one's attitude toward incorporating a Med-Arb provision in future contracts."

Hypothesis 2: "The more one believes in the cost-effectiveness of Med-Arb, the more receptive to include a Med-Arb clause in future contracts."

Hypothesis 3: "The greater one trusts in Med-Arb time-effectiveness, the more amenable to incorporate a Med-Arb clause in future contractual terms."

Hypothesis 4: "The higher the faith that Med-Arb procedure preserves more confidentiality, the more acceptable it is to include a Med-Arb provision in future contractual agreements."

Hypothesis 5: "The higher one's faith in "Med/ Arbiter's" impartiality, the more willing one is to include a Med-Arb provision in future contractual arrangements."

Hypothesis 6: "The more one's faith in the capability of procedural standards to manage Med-Arb practice when they are established and monitored by legal authorities, the more amenable to incorporate a Med-Arb clause in future contractual terms."

Chapter 3: Methods and Procedures

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3.1 Methodology

The methodology employed is critical and is determined by the research objectives and available resources, such as time and funding. It is essential to adopt a technique that is compatible with the study goals to collect accurate and trustworthy data.

This section details the theoretical paradigm and research measurements.

3.1.1 Theoretical Paradigm and Mixed-Method

Research is defined as a systematic investigation or inquiry in which data are gathered, analyzed, and interpreted to explain, describe, forecast, or regulate an educational or psychological event (Mertens, 2005). What was reasonably straightforward to define thirty or forty years back has become significantly more complex in recent years, as the number of research methodologies has increased dramatically, especially in the social/applied sciences (O'leary, 2004). However, it has been suggested that the exact nature of the research definition is influenced by the researcher's theoretical framework, with theory used to develop relationships among concepts that describe or explain a phenomenon by looking beyond the local event and attempting to relate it with similar incidents (Mertens, 2005).

The theoretical framework, as opposed to a theory, is occasionally referred to as the paradigm (Mertens, 2005), and it has an impact on how knowledge is explored and perceived. The paradigm chosen establishes the research's purpose, motivation, and expectations. The term 'paradigm' can refer to "a random collection of logically related assumptions, conceptions, or propositions that serve as a guide for thinking and research" (Bogdan & Biklen, 1998).

A research paradigm is described as a collection of shared views and beliefs among scientists on the appropriate way to understand and address problems. The phrases "worldview," "theoretical lens," and "paradigm" are all used synonymously in the literature.

The researcher's worldview is significantly shaped by the positivist (quantitative) paradigm or naturalistic or constructivist (qualitative) tradition with which they identify. Traditionalists would claim that both paradigms are mutually exclusive and that a synthesis of the two is impossible (Sandelowski, 2000).

The positivist paradigm regards the researcher as independent and objective, using bigger samples to test carefully established hypotheses. The conventional opinion is that a positivist researcher can set aside values to prevent bias throughout an investigation. Constructivism, or qualitative research, developed as a counter-norm to positivism as researchers attempt to understand the context of human experience (Schwandt, 2000). In recent years, the qualitative paradigm has gained more attention, and it is sometimes referred to as naturalistic inquiry, post-positive, constructivist, or interpretive approaches. Constructivism asserts that there are numerous realities and that each research endeavor may yield various interpretations (Appleton and King, 2002). These views are molded by the unique conditions that arise throughout the research. Constructivist researchers seek to reveal others' realities through detailed accounts of their experiences (Appleton and King, 2002).

The conflicts between quantitative and qualitative methods have created the perception that the two methods are mutually incompatible (Sandelowski, 2000). Some scholars argue that battle across paradigms is unproductive and instead concentrate on strategies to merge traditional rivals. Mixed approaches are proposed as a third paradigm capable of

bridging the quantitative and qualitative views (Johnson and Onwuegbuzie, 2004).

Various techniques Philosophical assumptions influence research, allowing for the integration of qualitative and quantitative methodologies throughout the study process. The pragmatist (mixed-methods) philosophy established the idea that the outcome is more essential than the procedure, and hence that 'the goal justifies the means.' It promotes eclecticism and a needs-based or contingency-based approach to technique and idea selection' (Johnson and Onwuegbuzie, 2004), allowing researchers to identify what methods and concepts work best to address the study problems.

The pragmatic (mixed-method) approach to research is motivated by the belief that the practicalities of research preclude it from being driven solely by theory or data, and that an abduction process is recommended that enables one to switch back and forth among induction and deduction throughout the inquiry process (Morgan, 2007).

Eventually, the pragmatic perspective was undertaken in the research construction process and resulted in the adoption of a mixed-methods strategy in which the researcher concentrates on the research problem and employs all applicable methodologies to illustrate it. The research framework template by (Creswell, 2009) is shown in the figure below in bold; this study framework is presented underneath the headlines.

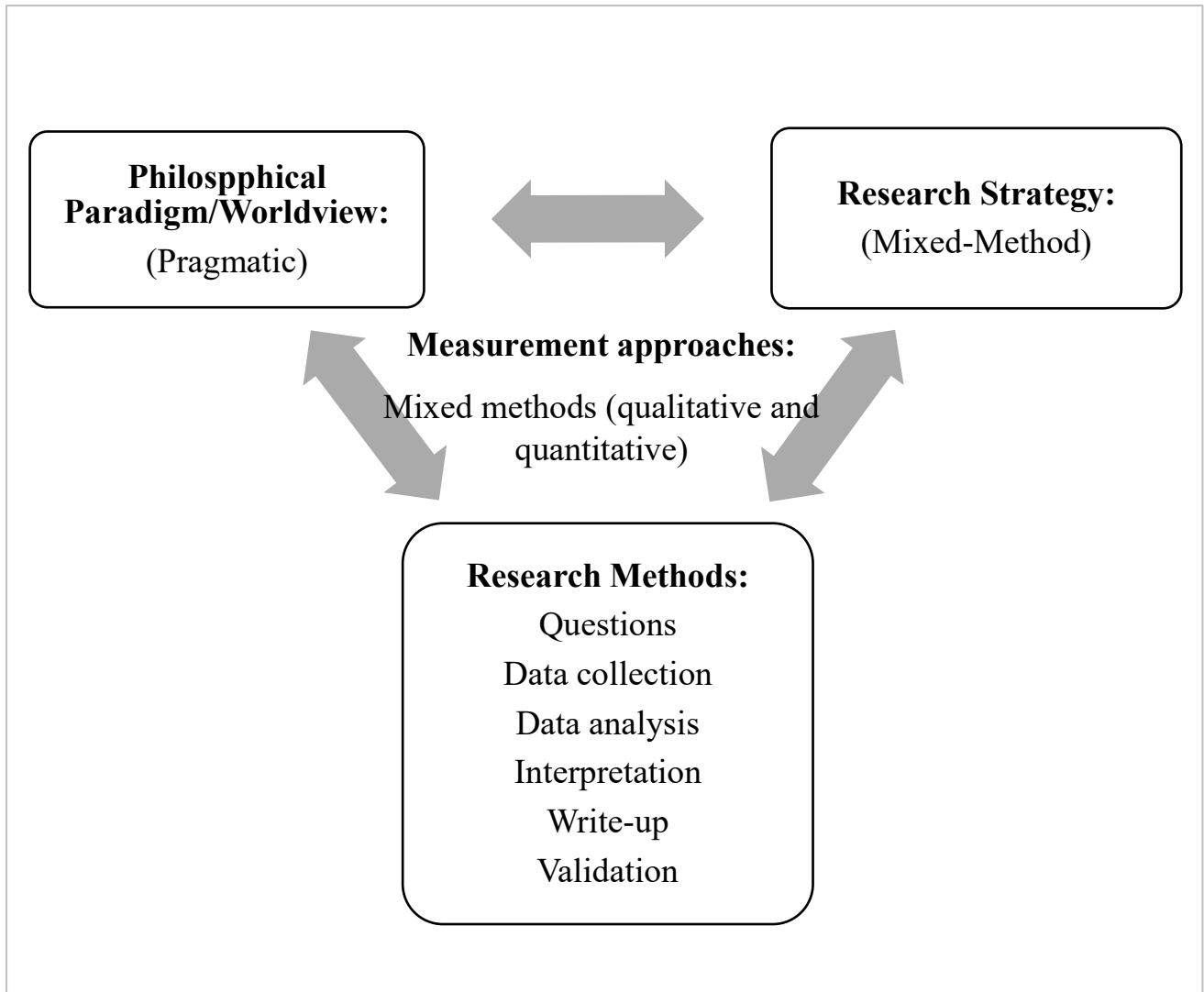


Figure 2. Research Framework (Creswell, 2009)

3.1.2 Research Measurements

The research methodology is a framework wherein the facts are placed to make sense of them. The methodology is dictated by the type of data generated to support the hypothesis being tested. Measurement is the process of establishing the value or level of a particular attribute, either qualitatively, quantitatively, or both, for a specific unit of analysis. Thus, measurement techniques can be classified into two categories: qualitative and quantitative. The quantitative approach can be broadly characterized as the social science approach: a much more formalized and specifically controlled approach with a more clearly defined area of interest that is more comparable to the natural science approach. The qualitative approach is less structured and explicit, the subject area is less defined, and a more philosophical approach is taken (Creswell, 1997).

As explained previously, particularly considering the nature of the research, it necessitated both qualitative and quantitative methods of investigation. Two stages of mixed-methods; in which quantitative and qualitative data collection were used. The objective of utilizing a mixed-method approach is to aid in the collection of diverse sorts of data to facilitate understanding and to define the type of data obtained. This reduced reliance on one methodological "school" or ideology.

3.2 Research Tools

To perform this study, two tools were used and linked together: SurveyMonkey and Minitab.

Survey Monkey is an online survey software and hosting platform. The questionnaire may be set up to accept yes/no, choose one or more options from a list, or drop-down menu responses. The survey may be used after it is set up and follows the reasoning. A URL may be delivered in an

email or embedded in a web page directed to a survey population. Survey Monkey provides a progress indicator for survey completion, which makes counting completed surveys simple. Finally, the programme may produce excel files with survey data.

Developed in 1972 by three university professors, Minitab is a statistical software package that is an essential element of statistical studies. Minitab is a widely used and well-known statistical tool. Minitab was utilized to conduct the statical analysis of the survey data acquired from Survey Monkey in this study.

3.3 Data Collection

There are several data collection techniques, and the method used is determined by the scope of the investigation, the availability, and the kind of data (Naoum, 2012). An innovative approach was required to gather the necessary information about dispute resolution methods in the context of Bahrain construction projects, and particularly to investigate the Med-Arb process. Three basic data gathering strategies were used: literature data collection, exploratory interviews, and a questionnaire.

3.3.1 Literature Data Collection

The research started with a survey of the relevant literature to gather primary data, ascertain research gaps relating to the suggested subject, and conduct a critical analysis of the study's problems. Furthermore, the literature review step assisted in identifying relevant elements and determining the most effective approaches to use to accomplish the study objective.

3.3.2 Exploratory Interviews

The interview will assist to develop a questionnaire that will assess the benefits and drawbacks of Med-Arb and determine if "Med-Arb" offers significant benefits over mediation and arbitration alone and might be considered a new tool for resolving construction disputes in Bahrain.

Interviews with industry specialists (practitioners) were conducted to develop a complete questionnaire. Practitioners are experts with more knowledge, experience, and skills than the average population (Flanagan, 1993).

Semi-structured (face-to-face) interviews with Bahraini construction legal practitioners were conducted. Interviewees were recruited ba

sed on professional connections and engineering society suggestions to help build and validate the main study questionnaire.

3.3.3 Questionnaire Survey

Based on the literature review, a thorough list of 35 questions was created, and these questions were divided into eight groups (Appendix A). At least twenty-five years of experience in the construction industry from private and public entities were asked to examine the questionnaire to find weaknesses in the phrasing, structure, and sequence of questions, instructions, and layout. To eliminate irrelevant questions, practitioners were asked to evaluate the content and the language.

There are eight sections in the approved questionnaire: general information, present dispute resolution methods in Bahrain, timeframe for resolution of disputes in Bahrain, critical success factors of using Med-Arb in Bahrain, barriers to using Med-Arb in Bahrain, benefits, concerns of

having one person act as both mediator and arbitrator; and at last, the future of Med-Arb in Bahrain. The questionnaire was bilingual in Arabic and English.

3.3.4 Representative Sample and Response Rate

Sampling is used to obtain a representative sample of a population. To generalize research findings, a representative sample of the overall population is required. The sample is generally a subset of the target population (Groves, Fowler, Couper, Lepkowski, Singer, & Tourangeau, 2010). The recommended minimum sample size is 100, however, the sample size literature varies. Many studies, however, frequently increase the sample size by 10% to account for non-participants and 30% for non-responders (Israel, 2009). This research analysis aimed for a sample size of 200.

The purpose of sampling is to provide a sample that is reflective of the population from which it was collected. In order to interpret the study findings, it is necessary to give a "representative" sample of the entire population. To calculate sample size, a variety of formula types are offered. However, for this study, estimating the sample size for a known population was done using a technique published by (Kish, 1965).

$$n = \frac{n'}{(1 + \frac{n'}{N})}$$

Where;

n = Sample size for finite population

N = Total number of the population

n' = Sample size

$$n' = \frac{S^2}{V^2}$$

$$S^2 = P(1-P)$$

Where:

P = the proportion of population elements belonging to the defined class (0.5 is the maximum possible proportion).

S = Maximum standard deviation in the population.

V = Acceptable margin of error.

The equations above were created using a 95% confidence level and a willingness to tolerate a 5% margin of error (also known as a confidence interval) in the research, which implies that the parameters used in the equation were a 95% confidence level and a 5% confidence interval (Israel, 2009).

since $P(1-P)$ reaches its greatest value when $P = 0.5$ In this study, the value of 'P' was set to 50%. The margin of error (V) is also known as the confidence interval. The sample value in a randomly chosen sample has a particular chance of falling inside a certain range on either side of the population value. The 5 percent confidence interval is used by most researchers (Brancato, 2006). The margin of error indicates how far off the estimate is likely to be and how sure we may be in our prediction.

The total number of populations was extracted from the Council for Regulating the Practice of Engineering Professions (CRPEP, 2021) and Ministry of Justice list of registered arbitrators (Ministry of Justice, 2021). The calculated population for this study (N) = 6500.

Sample size calculation:

$$S^2 = P(1-P)$$

$$S^2 = 0.5(1-0.5) = 0.25$$

$$n' = \frac{S^2}{V^2}$$

$$n' = \frac{0.25^2}{0.05^2} = 100$$

$$n = \frac{n'}{(1 + \frac{n'}{N})}$$

$$n = \frac{100}{(1 + \frac{100}{6500})} = 98$$

Since the recommended minimum sample size is 100 and the calculated sample size is 98, the minimum acceptable sample size for this study is 100.

Response rates are often used to determine the survey's quality. A response rate of 20% is regarded insufficient, while a response rate of 80% is considered sufficient by most academic journal editors (Johnson & Owens, 2003). In this study, the questionnaire was distributed through an online link to infinite population. The total number of responses is 251, 204 of them completed the survey with a completion rate is 81%.

3.4 Statical Methods

3.4.1 Anderson-Darling (AD) Normality Test

The choice of statistical approach relies on the data. Nonparametric statistical tests are used to analyse data that show non-normality. When data follows a normal distribution, normality-based statistical procedures

are used. Thus, determining the data's normality is a fundamental step in data analysis. Several statistical tests are used to assess the data's normality. The Anderson-Darling (AD) test has been frequently used to assess data normality. The AD test compares the null hypothesis that the data are normally distributed to the alternative hypothesis that the data are not (slam & Algarni, 2020).

Data is normally distributed when the value of Sig > 0.05 (Pallant, 2010). As shown in chapter 4, the results indicate that the data are not normally distributed. For this reason, non-parametric statistical procedures were deployed for this study.

3.4.2 Reliability and Validity

Reliability indicates that if another researcher used the same method or approaches to gather data at a different time and under identical circumstances, they would get the same findings. There are various methods for determining reliability, including test-retest, internal consistency (Cronbach's coefficient alpha), split-half, and parallel-form (Oppenheim & Design, 1992). Cronbach's coefficient alpha was utilized to determine the reliability of the obtained data in this study.

However, validity refers to the problem of determining whether the data collected accurately reflect the subject under study; more precisely, qualitative validity means the researcher verifies the accuracy of the findings using specific procedures, while quantitative validity refers to the ability to draw valuable and relevant inferences from the scores on a particular instrument (Creswell, 2009).

There are several strategies for ensuring validity, including triangulation between participants' perspectives, a follow-up interview to present the concluding description and conduct a final check on the

interview's results, and contacting a participant to verify the accuracy of the findings through review and questioning. The research included both methodologies (Creswell, 2009).

The researcher often assesses the validity of the content (Ghosh & Jintanapakanont, 2004). The procedures employed in developing the questionnaire aided in determining the questionnaire's content validity. For instance, the questionnaire's questions were derived from literature research and verified by various practitioners throughout the review process that was conducted before the questionnaire's finalization.

3.4.3 Descriptive Statistics

After ensuring the data correctness and validity, descriptive statistics including frequencies and central tendencies analysis were performed utilizing software (Minitab 19.1).

Average Rating Ranking questions were computed using SurveyMonkey; which calculates the average ranking for every response option, allowing to know which response option was most favoured in aggregate. The most popular response option is the one with the highest average rating.

The average ranking is as follows:

$$\frac{x_1w_1 + x_2w_2 + x_3w_3 \dots x_nw_n}{\text{Total response count}}$$

w= the weight assigned to the ranking position and,

x= the response count for the answer option.

Weights are placed in the opposite direction. In other terms, the respondent's most chosen option (which they rate first) is given the greatest

weight, while their least liked option (which they place last) is given a weight of one. The default weights cannot be changed.

For instance, if a Ranking question has five possible responses, the following weights are assigned:

The number one selection weighs five

The second option weighs four

The third option has a weight of three.

The fourth option has a weight of two.

A weight of one is assigned to the #5 option.

3.4.4 Chi-Square Test

Pearson's greatest contribution to contemporary statistics; is the Chi-square distribution and test, often recognized as the goodness-of-fit test and the test of independence. The importance of Pearson's Chi-square structure was that it enabled researchers to interpret their results using non-normal distribution-dependent statistical processes (Rana & Singhal, 2015).

The chi-square test is a non - parametric test used to assess the hypothesis of no association between two or more categories, groups, or criteria (i.e., to verify the independence of two variables) (Rana & Singhal, 2015).

The alternative and null hypotheses are as follows:

H0: The first and second variables are not associated

H1: The first and second variables are associated

To compute the Chi-square test, first, construct a two-way frequency table (as illustrated in table 1).

Table 1. Chi-Square Test- example

		Variable 1		Total
		Variable 1-A	Variable 1-B	
Variable 2	Variable 2-A	a	b	a+b
	Variable 2-B	c	d	c+d
Total		a+c	b+d	a+b+c+d=n

Second, it is important to determine how many degrees of freedom (df) are there. The $df = (\text{number of columns} - 1) \times (\text{number of rows} - 1)$, removing the rows and columns containing the total. Thus, as per the example above; $df = (2-1) \times (2-1) = 1$.

If the hypothesis is to be tested at a 5% level of significance, the alpha level of significance is specified to be 0.05. P values larger than the commonly accepted significance level of 0.05 (i.e., $P > 0.05$) will result in the null hypothesis being accepted, implying that there is no connection between variables 1 and 2 (Rana & Singhal, 2015).

Chapter 4: Results Discussion

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4.1 Introduction

This chapter analyses and discusses the questionnaire findings, which include the results of the reliability test, the normality test, descriptive statistics, hypothesis testing, and, lastly, semi-structured interviews.

4.2 Reliability Test (Cronbach's coefficient Alpha)

As noted in the methodology chapter, numerous approaches exist for determining the reliability of data; nevertheless, in this research, the coefficient of reliability (Cronbach's Alpha) was employed.

The reliability coefficient (Cronbach's Alpha) was applied to quantify the obtained data's consistency. Miles and Huberman advised in 1994 that data be deemed reliable at a level of 0.80, as noted in (Creswell, 2009).

Table 2. coefficient of reliability

Reliability statistics	Total value
Cronbach's Alpha	0.8108

The test findings in Table 2 (above) indicate that the survey questions have a coefficient of reliability of 0.8108, indicating that the data obtained is consistent and dependable.

4.3 Normality Test

The Anderson Darling Normality Test was performed to determine the distribution's normality, and the findings indicate that the data are not normally distributed. As noted in the methodology chapter, data is normally distributed with a sig. greater than or equal to 0.05. All the

Anderson Darling Normality test findings indicate a P-value of 0.005 (much lesser than 0.05).

Because the measured data is not normally distributed, non-parametric approaches were performed to examine them.

4.4 Descriptive Statistics

Descriptive statistics are utilized in the analysis, summarization, and presentation of data set results.

4.4.1 Profile of the Respondents

A. Completion Rate

The responses to study participation questions were captured once the respondent clicked "submit" to provide respondents the option to modify their responses. If respondents failed to click "submit," the survey was deemed incomplete, and unsubmitted replies were not recorded. The completion rate of Retest surveys was estimated as the total number of completed surveys divided by the total number of surveys initiated by individuals.

251 Total Responses	204 Completed Responses
Completion Rate	81%
Last Entry	10/21/2021
Created	09/16/2021

Figure 3. Survey completion rate

The questionnaire was distributed to 251 individuals who are/were involved in conflict resolution in the Bahrain construction project and received 204 replies, representing an 81 % completion rate.

B. Total Years of Experience

Questionnaire: Question 1: “Total Years of Experience”

The group of contributors with more than 20 years of experience forms the largest category, accounting for 38.07 percent of all contributors. Following that comes the second largest category, which has a proportion of 19.29 percent and has experience ranging from 1 to 5. With a ratio of 17.77 percent, people with 16 to 20 years of experience come third. 16.24% of participants had expertise ranging from 11 to 15 years, while just 8.53% of respondents had experience ranging from 6 to 10 years (Table 3).

Table 3. Total years of experience

Total years of experience	Percentage	Total number
1-5 years	19.29%	38
6-10 years	8.63%	17
11-15 years	16.24%	32
16-20 years	17.77%	35
Above 20 years	38.07%	75
	Answered	197
	Skipped	7

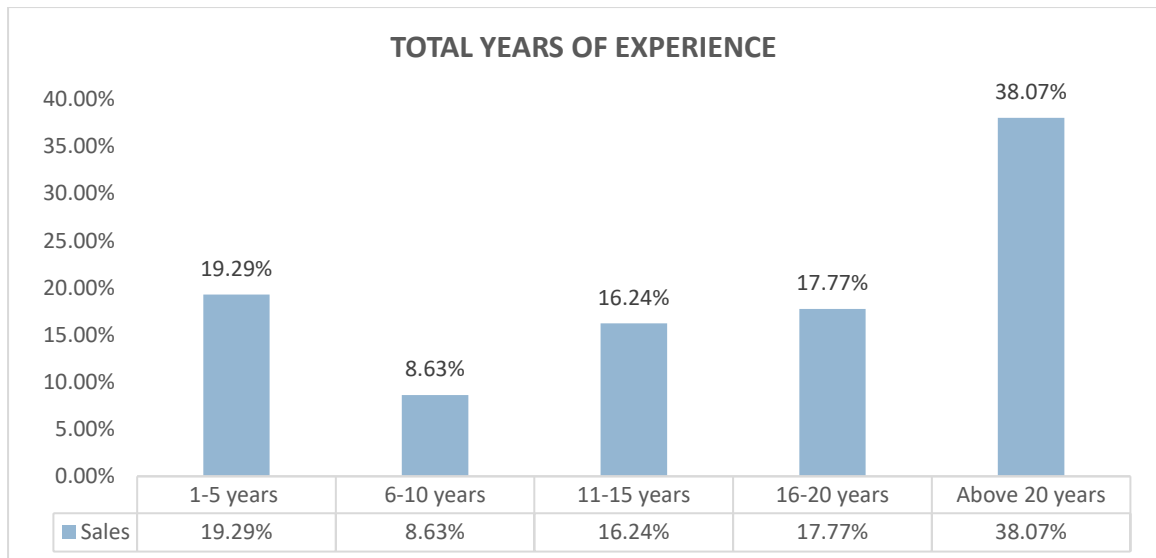


Figure 4. Total years of experience

C. Highest Educational Level

Questionnaire: Question 2: “Highest Educational Level”

Around 67.34 percent of participants own a bachelor's degree, 21.61 percent possess a master's degree, 6.03 percent have a doctoral degree, 3.52 percent hold a diploma, and 1.51 percent own a high school diploma (Table 4).

Table 4. Highest educational level

Highest educational level	Percentage	Total number
High school	1.51%	3
Diploma	3.52%	7
Bachelor’s degree	67.34%	134
Master’s degree	21.61%	43
Doctoral degree	6.03%	12
	Answered	199
	Skipped	5

The following column chart illustrates the levels of higher education attained by survey respondents.

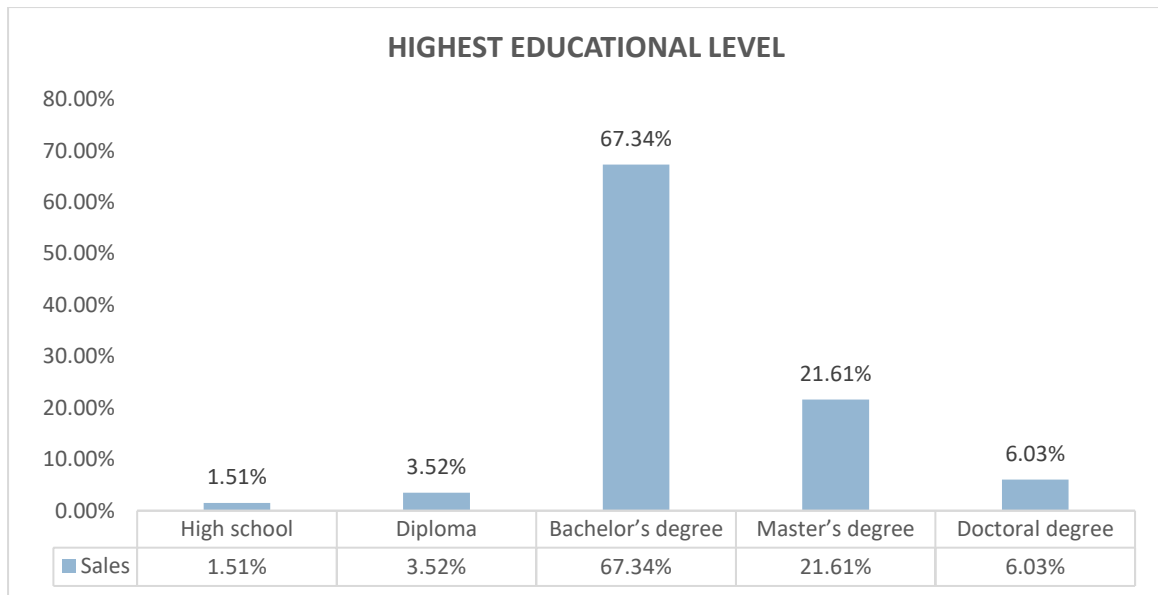


Figure 5. Highest Educational Level

D. Expertise

Questionnaire: Question 3: “Expertise”

The survey was conducted with focus on getting responses from ideal participants of Engineers, Architects, Engineering Managers, Legal practitioners, Academics, or any others who’re (were) playing roles in the contracting process in Bahrain construction projects.

In response, 59.9% of the respondents were legal practitioners and 34.01% of them were Engineers. The third largest group is the group of Managers with percentage of 15.74. Those who participated in the questionnaire and having an academic expertise are 7.11% and lastly 3.05% of the respondents stated their expertise as “other” (Table 5).

Table 5. Expertise

Expertise	Percentage	Total number
Engineering	34.01%	67
Management	15.74%	31
Legal	59.90%	118
Academic	7.11%	14
Other	3.05%	6
	Answered	197
	Skipped	7

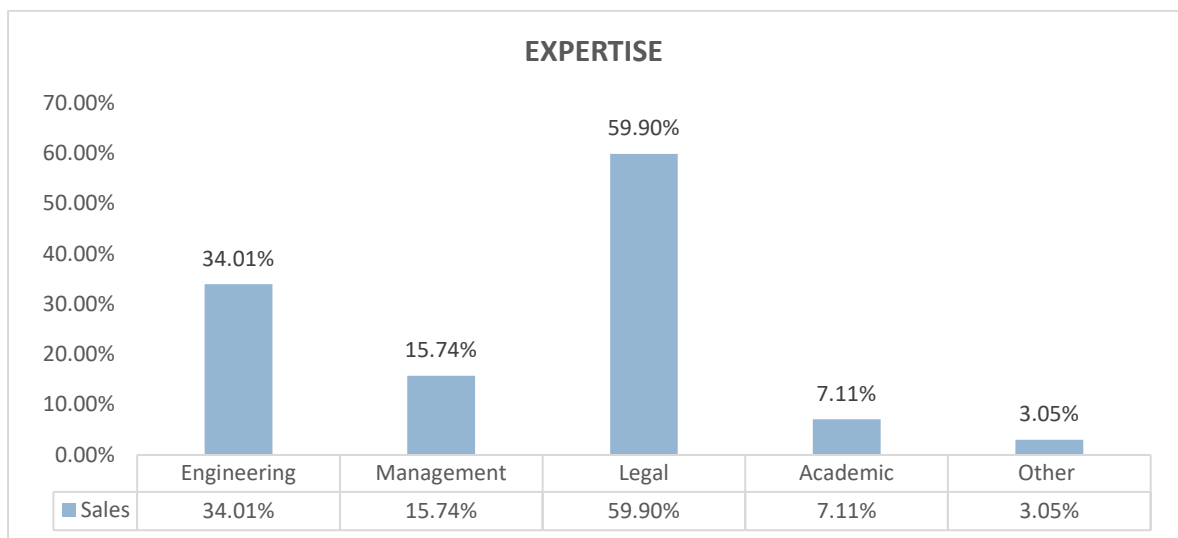


Figure 6. Expertise

E. Functional Status

Questionnaire: Question 4: “Functional status”

Consultants account for 52.31% of respondents, owners/owners’ representatives account for 22.56 percent of participants, "other" accounts for 18.46 percent, and contractors account for 6.67 percent (Table 6).

Table 6. Functional Status

Functional status	Percentage	Total number
Owner/owner representative	22.56%	44
Consultant	52.31%	102
Contractor	6.67%	13
Other	18.46%	36
	Answered	195
	Skipped	9

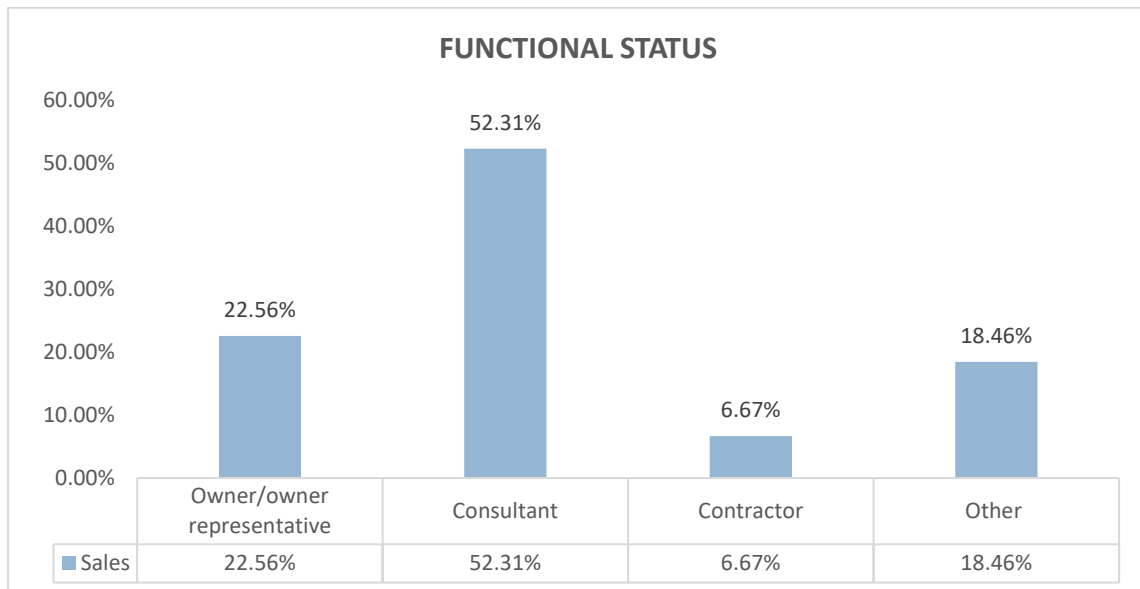


Figure 7. Pie Chart for functional status

F. The Involvement of Respondents in Construction Disputes

Questionnaire: Question 5: “The number of construction disputes which you were involved in”

This question was asked to ascertain participants' experience with construction disputes. Most respondents were involved in more than 20 construction disputes, accounting for 47.45 percent of participants; "none" accounted for 24.49 percent; 22.45 percent were involved in 1 to 10 construction disputes, and 5.61 percent were involved in 11 to 20 construction disputes (as shown in Table 7 and Figure 8) (Table 7).

Table 7. The involvement of respondents in construction disputes

The total number of construction-related disputes in which the participant was involved	Percentage	Total number
None	24.49%	48
1-10	22.45%	44
11-20	5.61%	11
Above 20	47.45%	93
	Answered	196
	Skipped	8

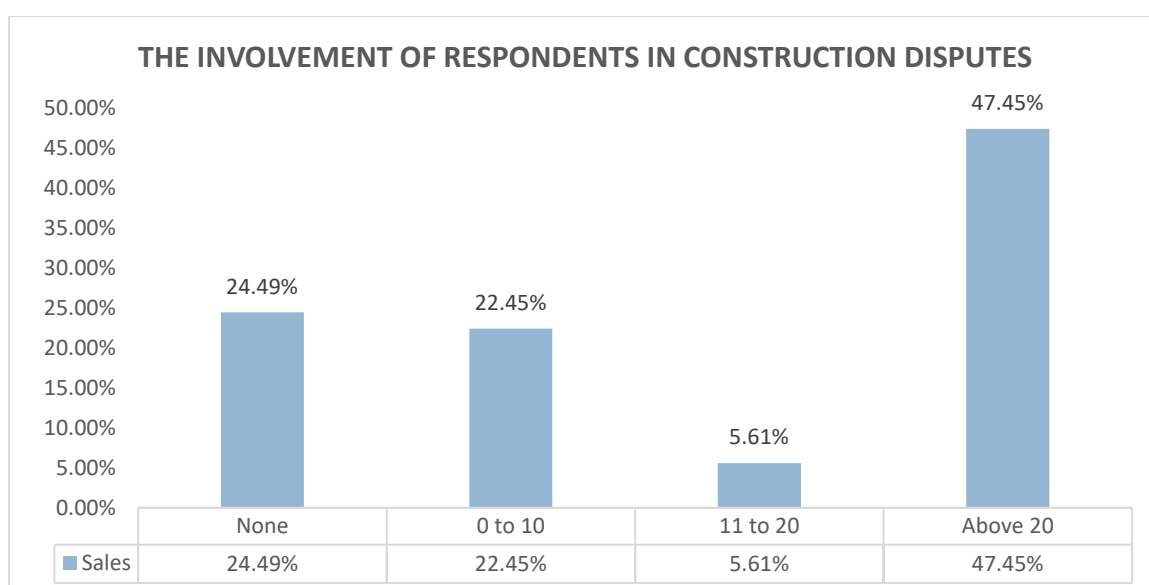


Figure 8. Pie Chart of the involvement of respondents in construction disputes

Questionnaire: Question 7: “I confronted disputes in the construction projects I was part of:”

This question was designed to evaluate participants' exposure to construction disputes. 29.29 percent of respondents stated that they sometimes encounter disputes on building projects, while 25.76 percent suggested that they almost always experience disputes. 19.70 percent of them asserted that they often encounter disagreements in construction

projects, 14.14 percent never face conflicts, and 11.11 percent experience disputes rarely in Bahrain construction projects (Table 8).

Table 8. The participants' exposure to construction disputes

I confronted disputes in the construction projects I was part of	Percentage	Total number
Never	14.14%	28
Rarely	11.11%	22
Sometimes	29.29%	58
Often	19.70%	39
Almost always	25.76%	51
	Answered	198
	Skipped	6

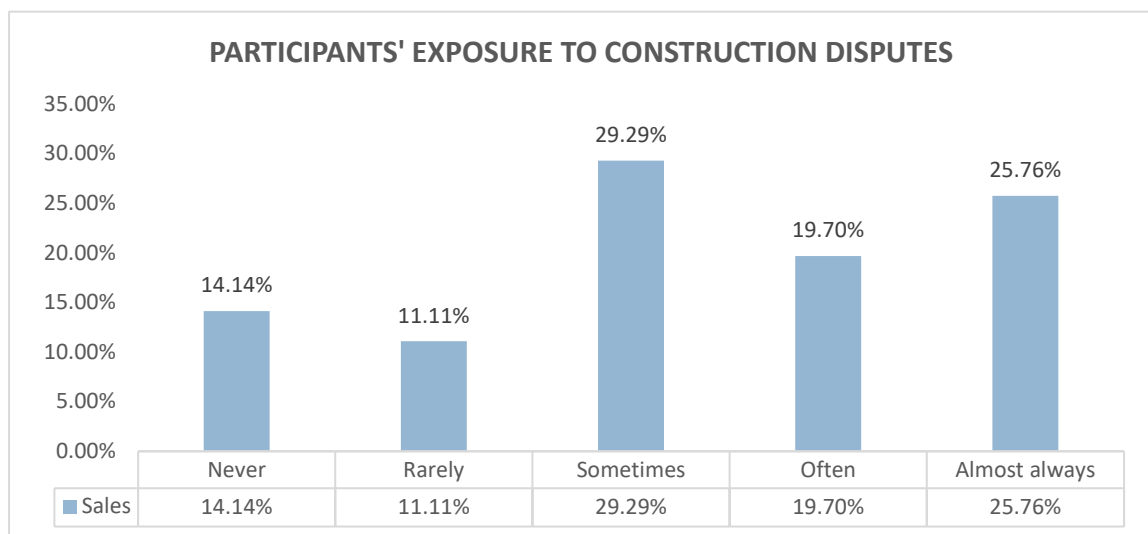


Figure 9. Participants' exposure to construction disputes

Questionnaire: Question 8: “I took a part in solving disputes in the construction projects I was part of”

The purpose of the question was to determine participants' involvement in resolving construction disputes. 41.92% of respondents stated that they were almost always involved in resolving disputes on construction projects, whereas 19.70% stated that they were sometimes involved. 16.16 percent of them reported never resolving

conflicts in Bahrain construction projects, 12.12 percent reported often resolving disputes, and 10.10 percent reported rarely resolving conflicts in Bahrain construction projects (Table 9).

Table 9. The participants' involvement in resolving construction disputes

I took a part in solving disputes in the construction projects I was part of	Percentage	Total number
Never	16.16%	32
Rarely	10.10%	20
Sometimes	19.70%	39
Often	12.12%	24
Almost always	41.92%	83
	Answered	198
	Skipped	6

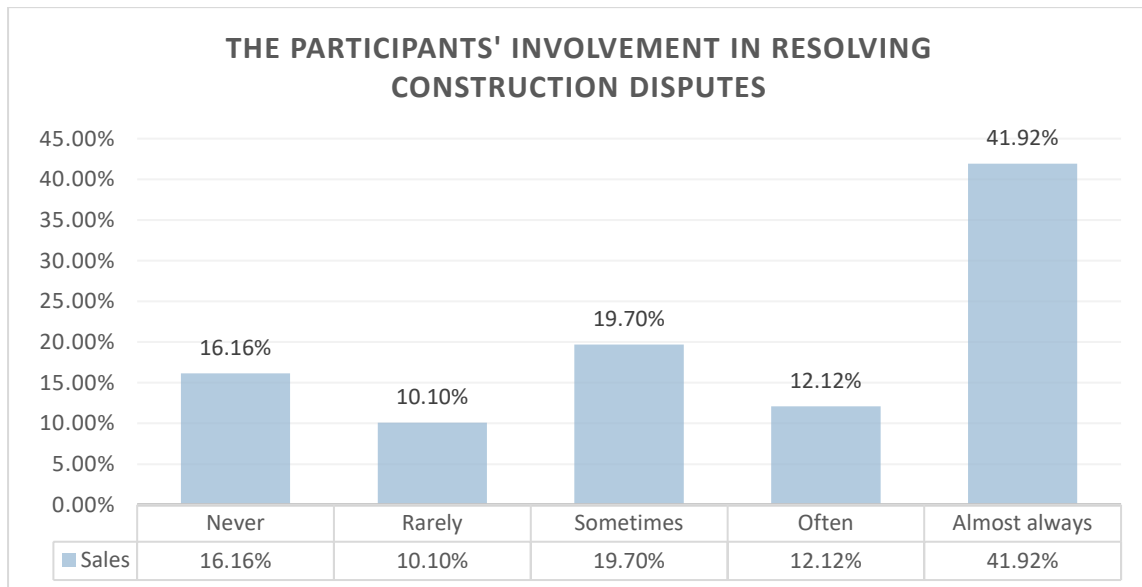


Figure 10. Participants' involvement in resolving construction disputes

G. The Awareness of the Med-Arb Method

Questionnaire: Question 6: “Are you aware of the hybrid Med-Arb process?”

The aim of this question was to verify participants' prior knowledge of the Med-Arb ADR technique. 60.2 percent of respondents indicated that they are unfamiliar with the Med-Arb Method, while 39.8 percent indicated that they are familiar with it (Table 10).

Table 10. The awareness of the "Med-Arb" method

The participant awareness of Med-Arb method	Percentage	Total number
Aware	39.80%	78
Not aware	60.20%	118
	Answered	196
	Skipped	8

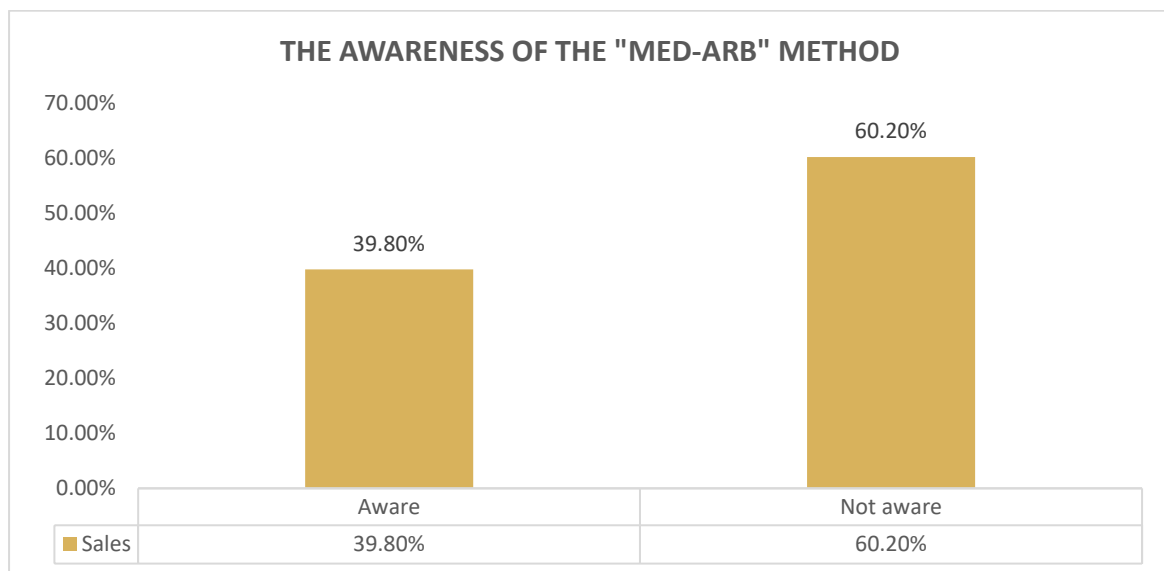


Figure 11. The awareness of the "Med-Arb" method

4.4.2 The Present Dispute Resolution Methods in Bahrain

A. The Use of Negotiation to Resolve Disputes.

Questionnaire: Question 9: “The extent you think Negotiation is used to solve disputes in Bahrain construction projects”

Negotiation is almost always used in building projects, according to 21.32 % of contributors, and it is used often, according to 39.59% of them. 30.46 percent presume it is sometimes used, while 7.11 percent believe it is rarely used to settle construction disputes. However, only 1.52% of respondents indicated that it is never used to settle construction disputes (Table 11) and (Figure 12).

Table 11. The use of negotiation to resolve disputes

The extent Negotiation is used to solve disputes in Bahrain construction projects	Percentage	Total number
Never	1.52%	3
Rarely	7.11%	14
Sometimes	30.46%	60
Often	39.59%	78
Almost always	21.32%	42
	Answered	198
	Skipped	6

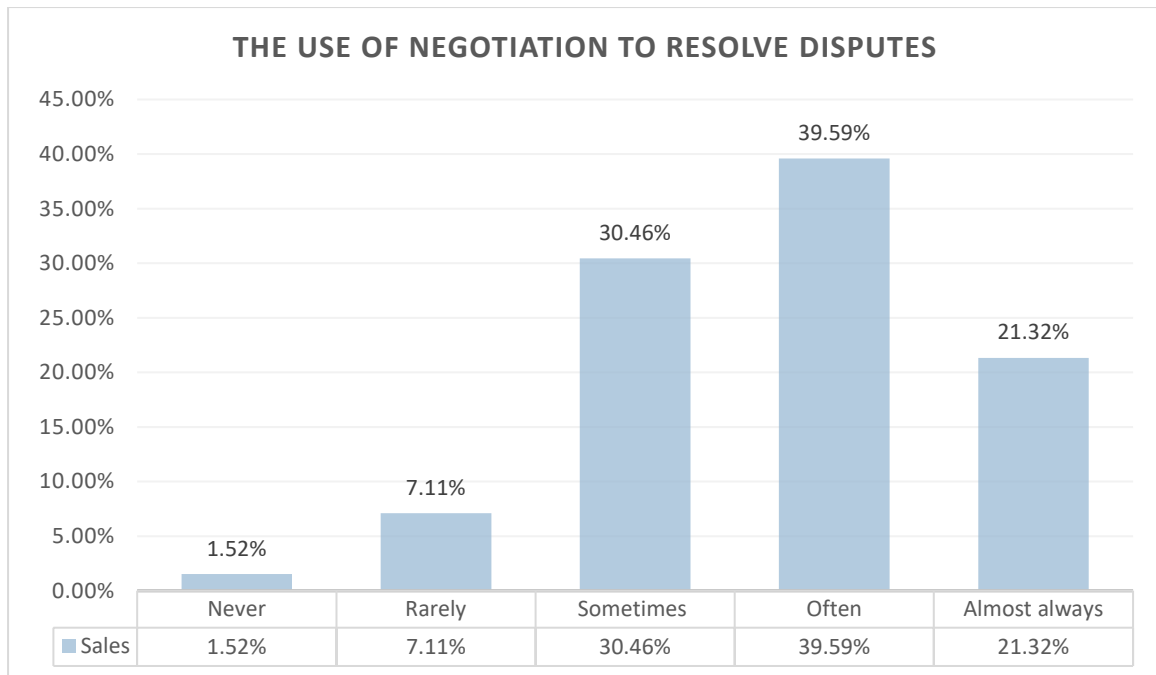


Figure 12. The use of negotiation to resolve disputes

B. The Use of Mediation to Resolve Disputes.

Questionnaire: Question 10: “The extent you think Mediation is used to solve disputes in Bahrain construction projects”

According to 9.64 percent of contributors, mediation is almost always used in construction projects and is often used, according to 45.18 percent. 28.93 percent believe it is sometimes used to resolve construction disputes, while 13.71 percent believe it is employed rarely. Meanwhile, only 2.54% of those surveyed said it was never used to resolve construction disputes (Table 12) and (Figure 13).

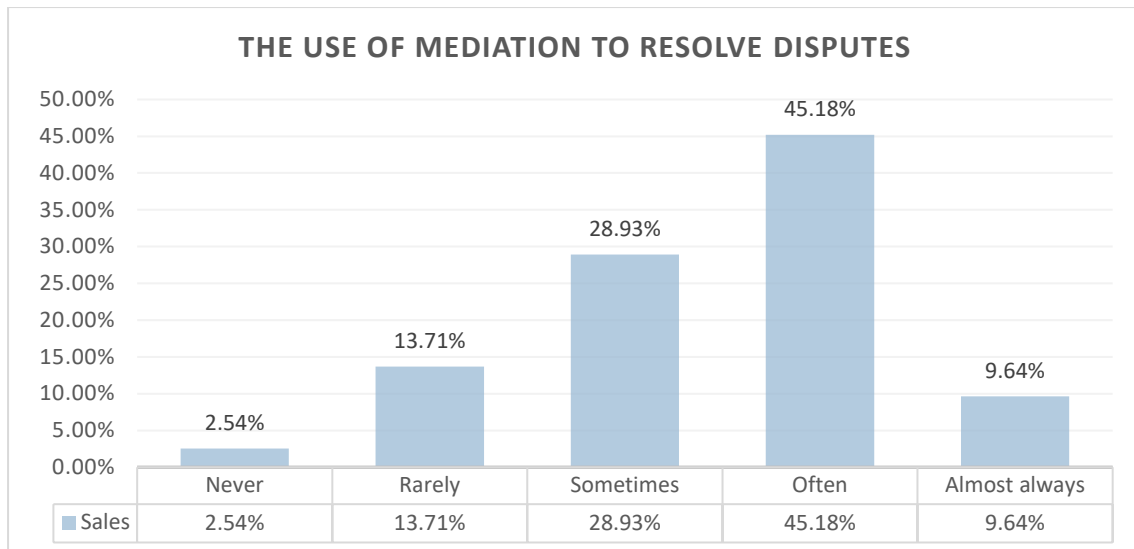


Figure 13. The use of mediation to resolve disputes

Table 12. The use of mediation to resolve disputes

The extent Mediation is used to solve disputes in Bahrain construction projects	Percentage	Total number
Never	2.54%	5
Rarely	13.71%	27
Sometimes	28.93%	57
Often	45.18%	89
Almost always	9.64%	19
	Answered	197
	Skipped	7

C. The Use of Arbitration to Resolve Disputes.

Questionnaire: Question 11: “The extent you think Arbitration is used to solve disputes in Bahrain construction projects”

Arbitration is almost always used in construction projects, according to 9.60 percent of contributors, and it is used often by 45.96 percent of them. It is sometimes used to resolve construction disputes, according to

33.33 percent, and it is rarely used, according to 9.09 percent. Only 2.02 percent of those surveyed said it is never used to resolve construction disputes (Table 13) and (Figure 14).

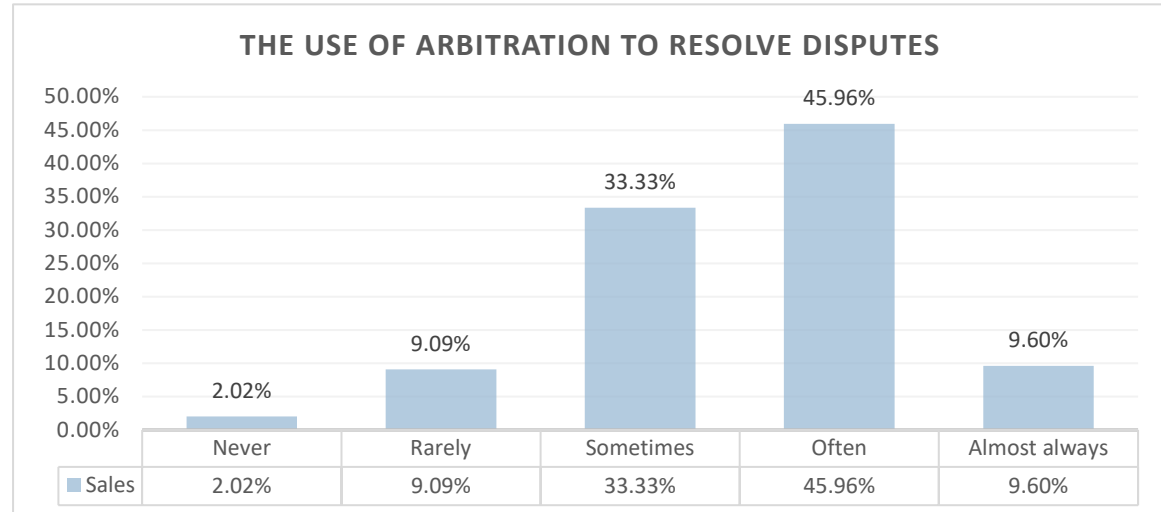


Figure 14. The use of arbitration to resolve disputes

Table 13. The use of arbitration to resolve disputes

The extent Arbitration is used to solve disputes in Bahrain construction projects	Percentage	Total number
Never	2.02%	4
Rarely	9.09%	18
Sometimes	33.33%	66
Often	45.96%	91
Almost always	9.60%	19
	Answered	198
	Skipped	6

D. The Use of Litigation to Resolve Disputes.

Questionnaire: Question 12: “The extent you think Litigation is used to solve disputes in Bahrain construction projects”

As per 10.61 percent of contributors, litigation is almost always used in building projects, and it is applied often by 21.21 percent of them. According to 56.57 percent, it is sometimes utilized to resolve construction disputes and is rarely used, according to 10.61 percent. Nevertheless, only 1.01 percent of respondents indicated that they have never used it to resolve construction disputes (Table 14) and (Figure 15).

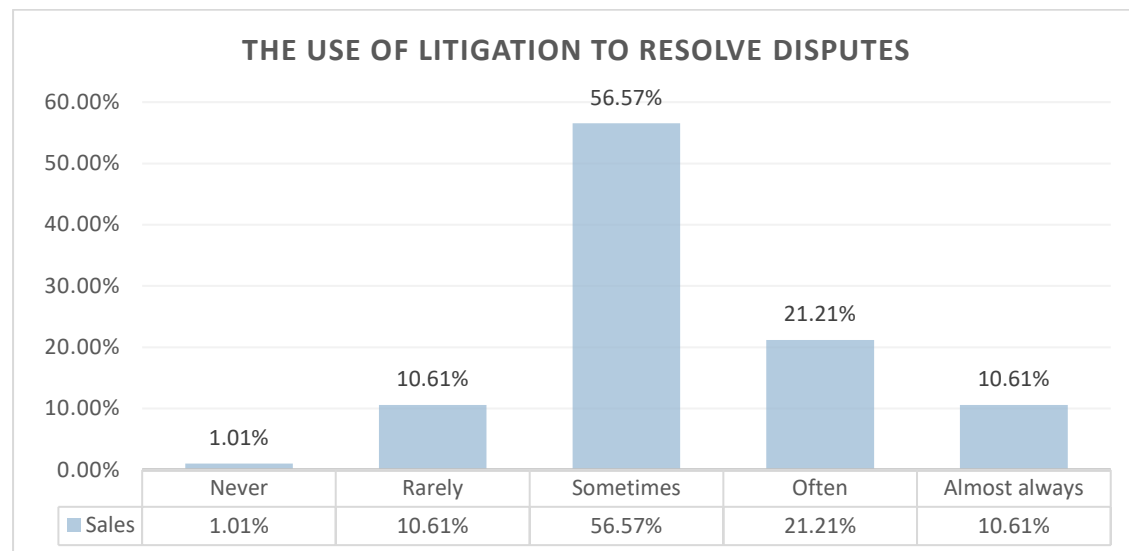


Figure 15. The use of litigation to resolve disputes

Table 14. The use of litigation to resolve disputes

The extent Litigation is used to solve disputes in Bahrain construction projects	Percentage	Total number
Never	1.01%	2
Rarely	10.61%	21
Sometimes	56.57%	112
Often	21.21%	42
Almost always	10.61%	21
	Answered	198
	Skipped	6

E. The Use of Med-Arb to Resolve Disputes.

Questionnaire: Question 13: “The extent you think Med-Arb is used to solve disputes in Bahrain construction projects”

According to 10.61 percent of participants, Med-Arb is almost always used in construction projects, and 24.75 percent of them use it often. It is sometimes employed to settle construction disputes, according to 33.84 percent, and is rarely preferred, according to 7.58 percent. Finally, a significant proportion of respondents (23.23%), indicated that they had never used it to resolve construction disputes (Table 15) and (Figure 16).

Table 15. The use of Med-Arb to resolve disputes

The extent Med-Arb is used to solve disputes in Bahrain construction projects	Percentage	Total number
Never	23.23%	46
Rarely	7.58%	15
Sometimes	33.84%	67
Often	24.75%	49

Almost always	10.61%	21
Answered		197
Skipped		7

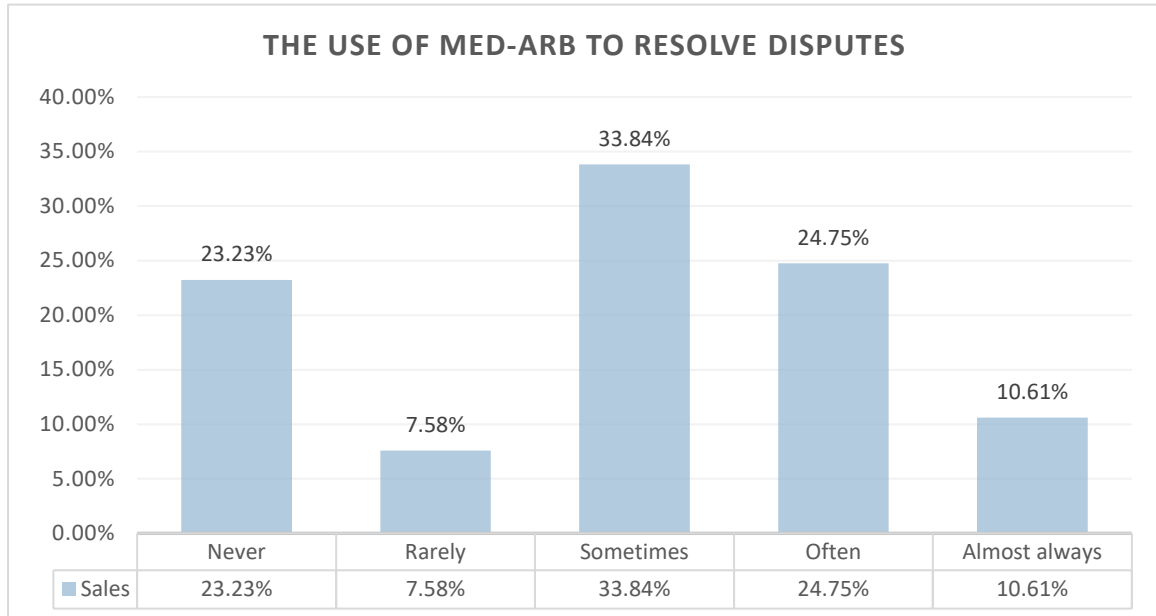


Figure 16. The use of Med-Arb to resolve disputes

F. The Best Dispute Resolution Method for Financial Disputes

Questionnaire: Question 14: “Please specify the best dispute resolution method in your opinion for financial disputes”

When participants were asked which method of dispute resolution, they believe should be used to resolve financial disputes, 23.23 percent stated negotiation. 7.58 percent of respondents indicated that Mediation would be used, while 33.84 percent indicated that Arbitration would be applied. Meanwhile, 24.75 percent of respondents believe that Litigation is the best method for resolving such disagreements, while 10.61 percent believe that Med-Arb is the best choice (Table 16) and (Figure 17).

Table 16. The best dispute resolution method for financial disputes

The best dispute resolution method for financial disputes	Percentage	Total number
Negotiation	23.23%	46
Mediation	7.58%	15
Arbitration	33.84%	67
Litigation	24.75%	49
Med-Arb	10.61%	21
	Answered	198
	Skipped	6

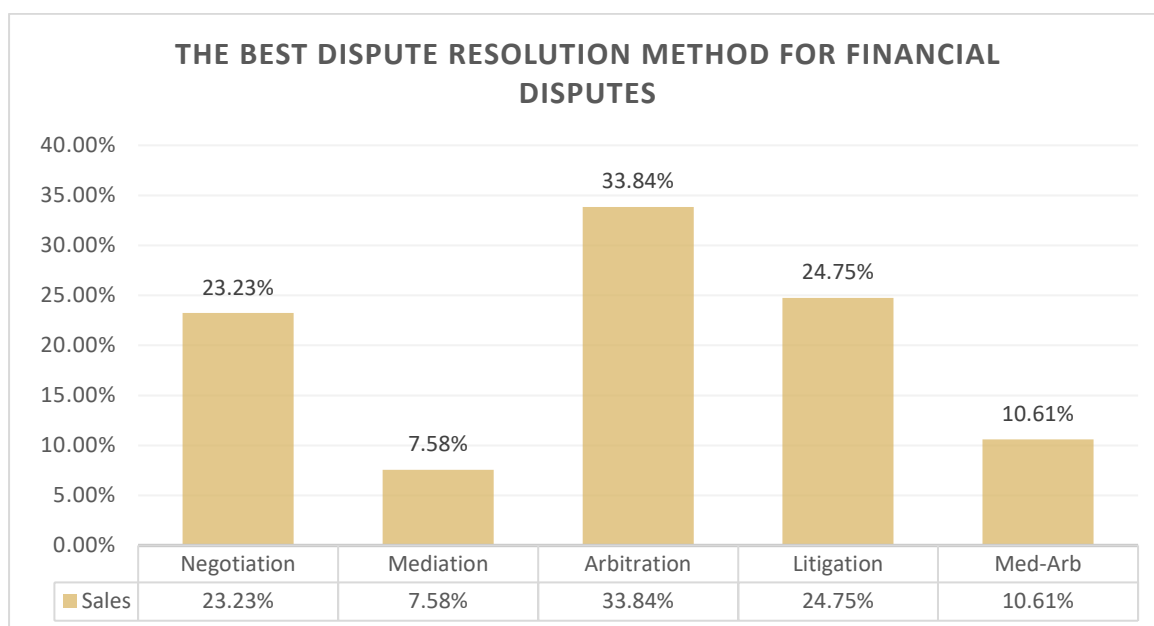


Figure 17. The best dispute resolution method for financial disputes

G. The Best Dispute Resolution Method for Breach in Contract Disputes

Questionnaire: Question 15: “Please specify the best dispute resolution method in your opinion for breach in contract disputes”

When asked which technique of dispute resolution they believed should be employed to settle contract breach disputes, 11.86 percent chose negotiation. 9.79 percent of those polled said they would select mediation,

while 43.30 percent stated they would use arbitration. Whilst 17.01 percent of respondents think that litigation is the best way to resolve such disputes, while 18.04 percent presumed that Med-Arb is the best option (Figure 18).

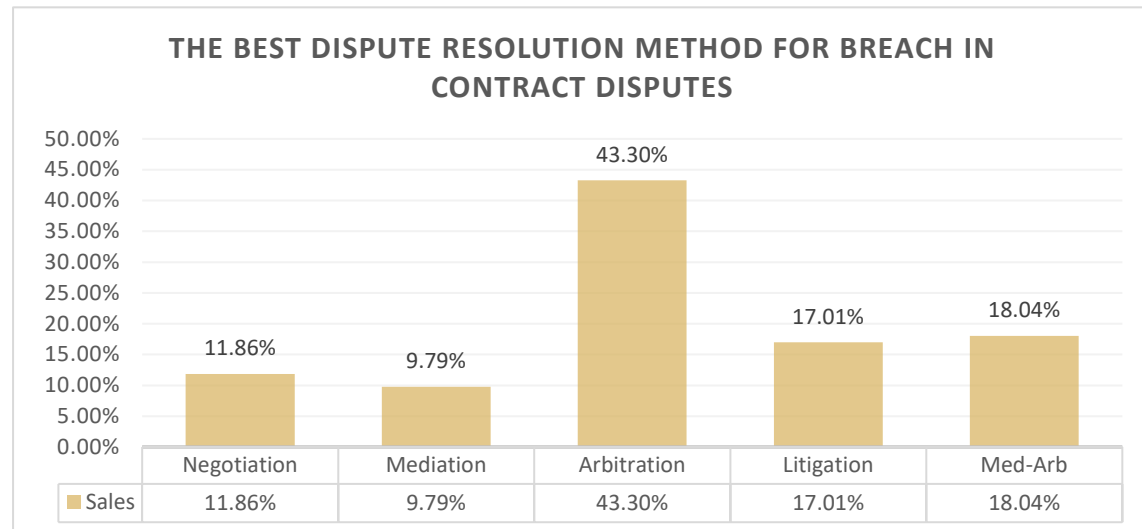


Figure 18. The best dispute resolution method for breach in contract disputes

H. The Best Dispute Resolution Method for People's Behavior Related Disputes

Questionnaire: Question 16: “Please specify the best dispute method in your opinion for people's behavior related disputes”

When participants were inquired which approach of settling people's behavior-related disputes they accepted ought to be utilized, 10.61 percent chose negotiation. 63.64% of respondents replied that they would use mediation, whereas 7.58% demonstrated that they would utilize arbitration. In the interim, 9.60% of respondents say that Litigation is the most noteworthy strategy for settling such issues, whereas 8.59% accept that Med-Arb is the finest alternative (Table 17) and (Figure 19).

Table 17. The best dispute resolution method for people's behavior related disputes

The best dispute resolution method for people's behavior related disputes	Percentage	Total number
Negotiation	10.61%	21
Mediation	63.64%	126
Arbitration	7.58%	15
Litigation	9.60%	19
Med-Arb	8.59%	17
	Answered	198
	Skipped	6

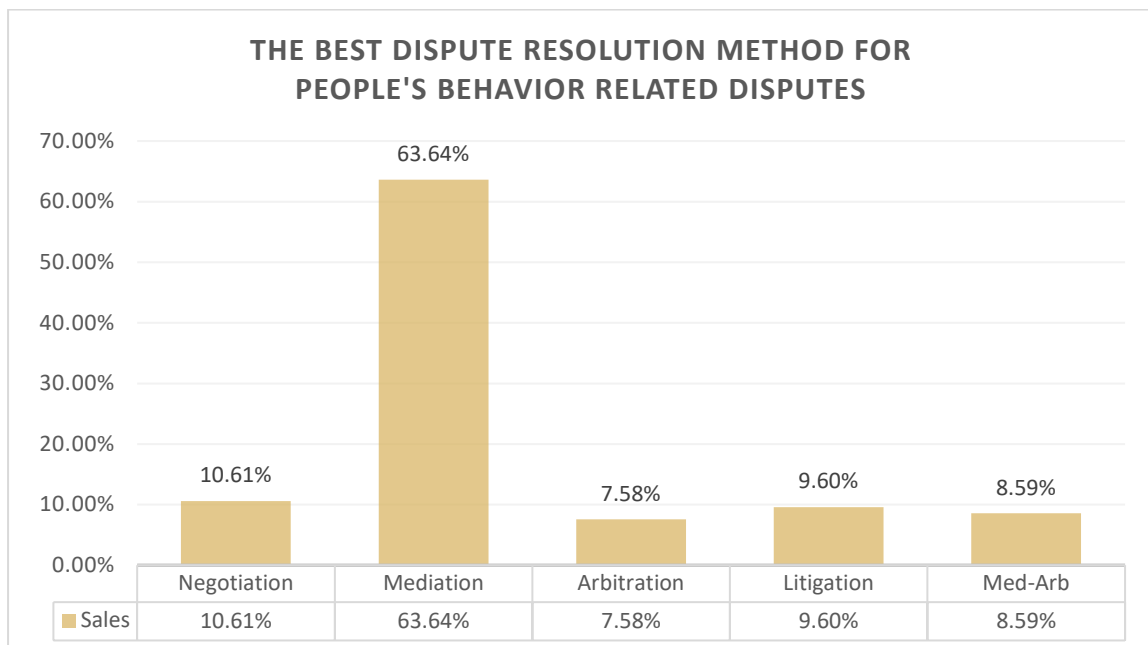


Figure 19. The best dispute resolution method for people's behavior related disputes

I. The Best Dispute Resolution Method for Technical Disputes

Questionnaire: *Question 17: “Please specify the best dispute resolution method in your opinion for technical disputes”*

When asked which method of resolving technical issues they believe should be used, 52.53 percent said negotiation. 12.12 percent of respondents stated that they would use mediation, while 16.16 percent indicated that they would use arbitration. Meanwhile, 6.57 percent of respondents believe that Litigation is the best technique for resolving such disagreements, while 12.63 percent believe that Med-Arb is the best option (Table 18) and (Figure 20).

Table 18. The best dispute resolution method for technical disputes

The best dispute resolution method for technical disputes	Percentage	Total number
Negotiation	52.53%	104
Mediation	12.12%	24
Arbitration	16.16%	32
Litigation	6.57%	13
Med-Arb	12.63%	25
	Answered	198
	Skipped	6

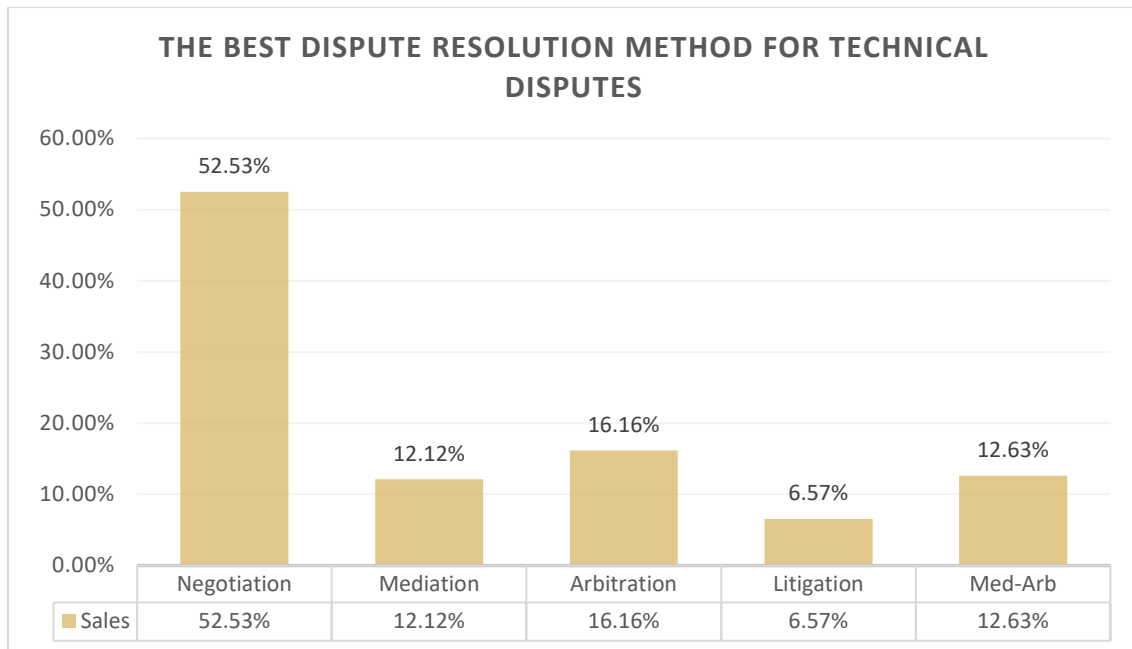


Figure 20. The best dispute resolution method for technical disputes

J. The Best Dispute Resolution Method for Disputes Due to Owners' Issues

Questionnaire: Question 18: “Please specify the best dispute resolution method in your opinion for disputes due to owners’ issues”

Of those surveyed, 13.13 percent said negotiation should be the preferred approach of resolving disagreements arising from owners' issues. 50.51 percent of those polled said they would utilize Mediation, while 6.57 percent said they would use Arbitration. Around 19% of respondents think that Litigation is the greatest way to settle such disputes, while 10% think that Mediation is the best option (Table 19) and (Figure 21).

Table 19. The best dispute resolution method for disputes due to owners’ issues

The best dispute resolution method for disputes due to owners' issues	Percentage	Total number
Negotiation	13.13%	26
Mediation	50.51%	100
Arbitration	6.57%	13
Litigation	19.70%	39

Med-Arb	10.10%	20
	Answered	198
	Skipped	6

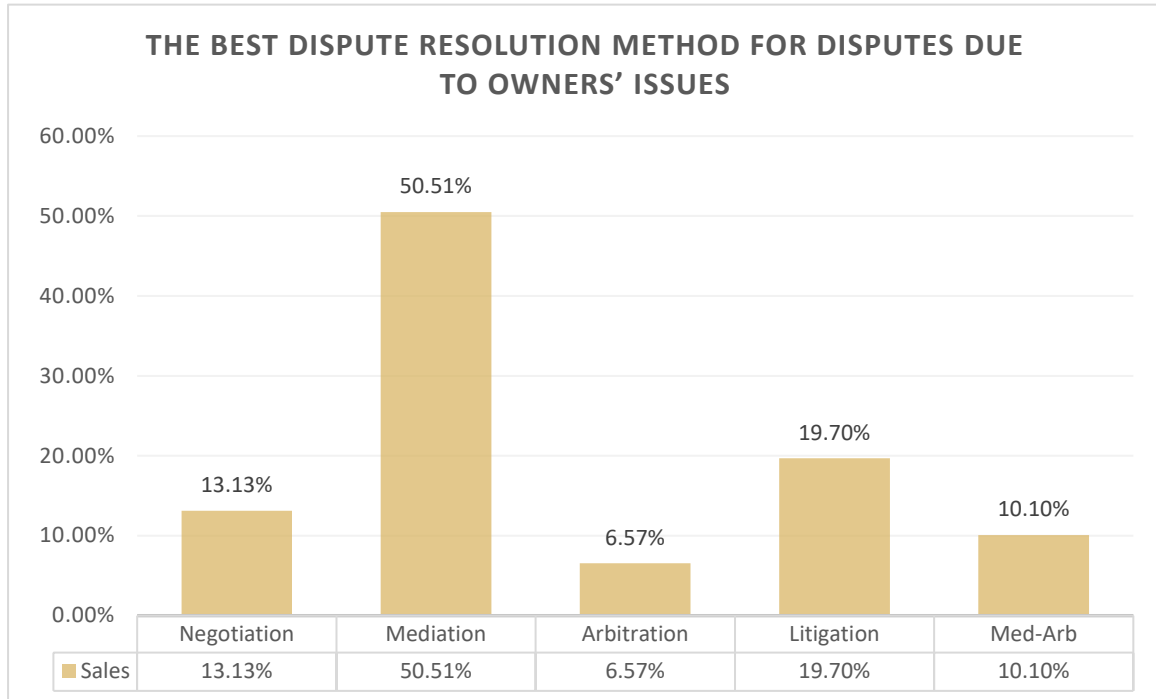


Figure 21. The best dispute resolution method for disputes due to owners' issues

K. The Best Dispute Resolution Method for Disputes Due to Consultants' Issues

Questionnaire: Question 19: "Please specify the best dispute resolution method for in your opinion disputes due to consultants' issues"

13.71% of participants chose negotiation as the method of conflict resolution that should be implemented to handle disputes caused by consultants' difficulties. 51.78 percent of those polled said they planned to employ mediation, while 11.68 percent said they planned to use arbitration as well. When it comes to settling consultants' disputes, 12.69 percent of respondents say litigation is the greatest option, while 10.15 percent say Med-Arb is the best option (Table 20) and (Figure 22).

Table 20. The best dispute resolution method for disputes due to consultants' issues

The best dispute resolution method for disputes due to consultants' issues	Percentage	Total number
Negotiation	13.71%	27
Mediation	51.78%	102
Arbitration	11.68%	23
Litigation	12.69%	25
Med-Arb	10.15%	20
	Answered	197
	Skipped	7

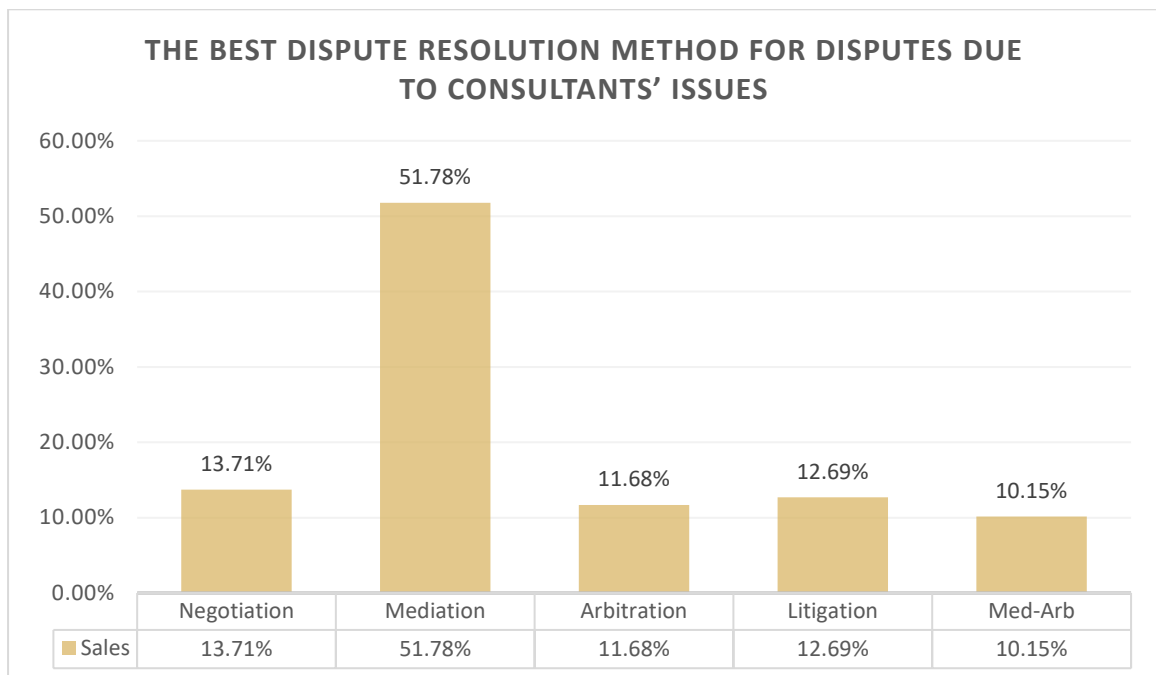


Figure 22. The best dispute resolution method for disputes due to consultants' issues

L. The Best Dispute Resolution Method for Disputes Due to Contractors' Issues

Questionnaire: Question 20: “Please specify the best dispute resolution method in your opinion to resolve disputes due to contractors’ issues”

When asked which technique of conflict resolution they thought should be utilized to handle disagreements caused by contractor difficulties, 10.61 percent said negotiation. 11.11 percent of respondents said they would choose Mediation, while 48.99 percent said they would utilize Arbitration. Meanwhile, 14.14 percent of respondents say that Litigation is the greatest way to resolve such issues, while 15.15 percent believe that Med-Arb is the ideal option (Table 21) and (Figure 23).

Table 21. The best dispute resolution method for disputes due to contractors’ issues

The best dispute resolution method for disputes due to contractors’ issues	Percentage	Total number
Negotiation	10.61%	21
Mediation	11.11%	22
Arbitration	48.99%	97
Litigation	14.14%	28
Med-Arb	15.15%	30
	Answered	198
	Skipped	6

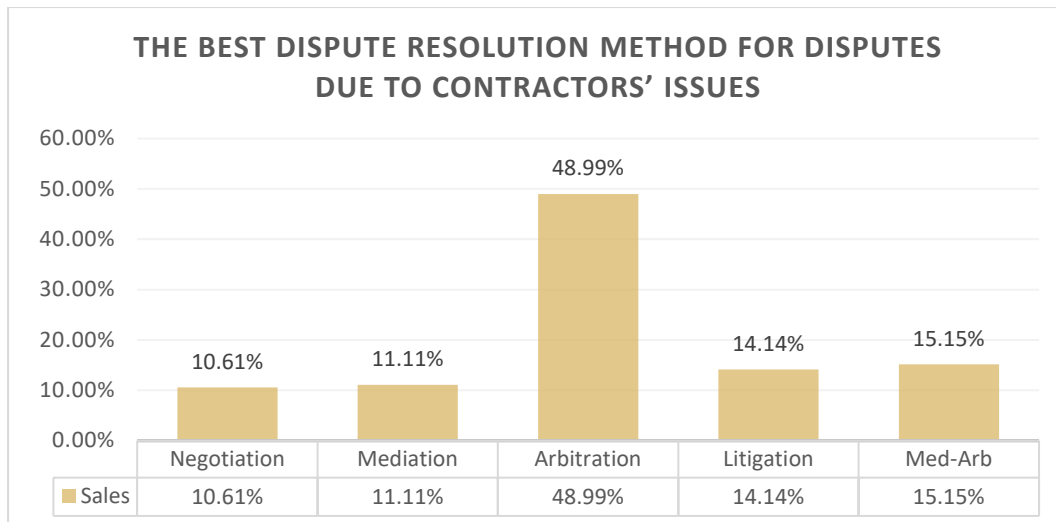


Figure 23. The best dispute resolution method for disputes due to contractors' issues

M. The Best Dispute Resolution Method for Disputes Over Contract Terms and Specifications

Questionnaire: Question 21: “Please specify the best dispute resolution method in your opinion for disputes over contract terms and specifications”

When asked which technique of dispute resolution they feel should be utilized to handle contract terms and specifications disputes, 16.67 percent said negotiation. 6.06 percent of respondents said they would utilize mediation, while 44.95 percent said they would choose arbitration. Whereas 13.13 percent of respondents think that litigation is the best way to resolve such disputes, while 19.19 percent say that Medi-Arb is the greatest option (Table 22) and (Figure 24).

Table 22. The best dispute resolution method for disputes over contract terms and specifications

The best dispute resolution method for disputes over contract terms and specifications	Percentage	Total number
Negotiation	16.67%	33
Mediation	6.06%	12
Arbitration	44.95%	89
Litigation	13.13%	26
Med-Arb	19.19%	38
	Answered	198
	Skipped	6

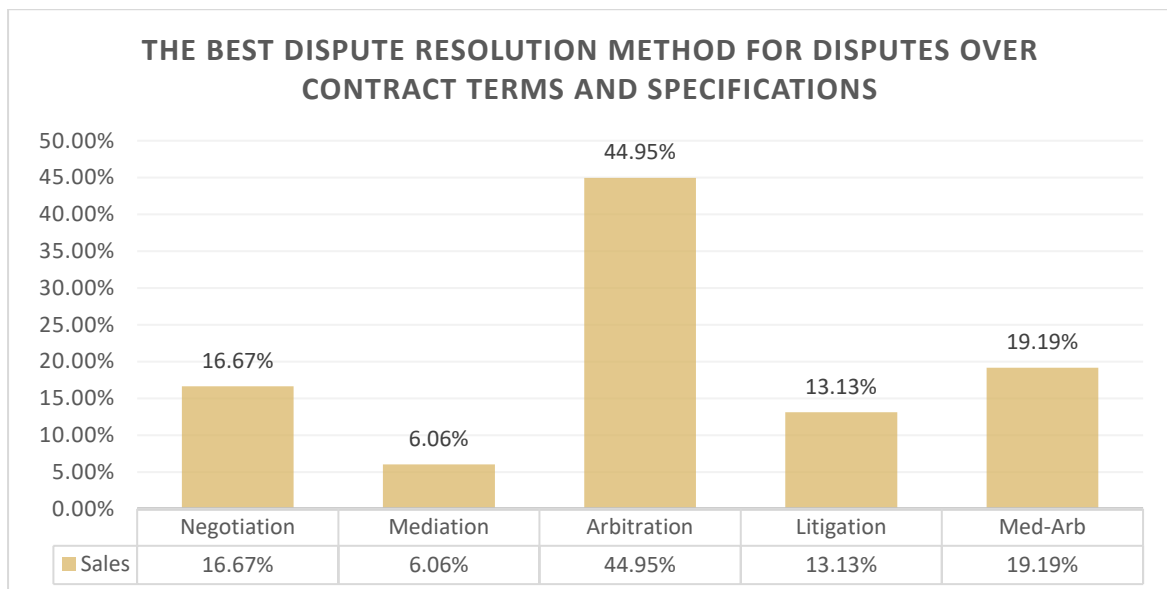


Figure 24. The best dispute resolution method for disputes over contract terms and specifications

Table 23. Comparison between question 22 and 21

Dispute Resolution Method	The best dispute resolution method for disputes due to contractors' issues	The best dispute resolution method for disputes over contract terms and specifications
Negotiation	10.61%	16.67%
Arbitration	11.11%	6.06%
Mediation	48.99%	44.95%

Litigation	14.14%	13.13%
Med-Arb	15.15%	19.19%

As shown in table 23, the best dispute resolution method for “contractors’ issues” and “disputes on contract terms and specifications” is Mediation. Even though the results of questions 9 to 13 ranks Negotiation as the overall best dispute resolution method in construction projects, Mediation came first for these two particular causes of disputes in construction project as per the responds of the survey participants.

4.4.3 The Timeframe to Resolve Disputes in Bahrain

A. The Approximate/Expected Duration to Resolve Disputes Using Negotiation

Questionnaire: Question 22: “Please identify the approximate/expected duration to resolve disputes using Negotiation”

When surveyors inquired about the time required for dispute determination utilizing negotiation, 77.78 percent said it takes from 1 to 3 months. 11.62% of respondents said they would require 3 to 5 months, whereas 7.07 percent said 6 to 12 months is approximately required. 1.01% claimed it requires from 1 to three years, while small percentage of 2.02% and 0.51% of respondents think that it would take 3 to 5 or more than five years respectively (Table 24) and (Figure 25).

Table 24. The approximate/expected duration to resolve disputes using negotiation

The approximate/expected duration to resolve disputes using negotiation	Surveyors' answers	
	Percentage	Total number
1-3 months	77.78%	154
3-6 months	11.62%	23
6-12 months	7.07%	14
1-3 years	1.01%	2
3-5 years	2.02%	4
More than 5 years	0.51%	1
	Answered	198
	Skipped	6

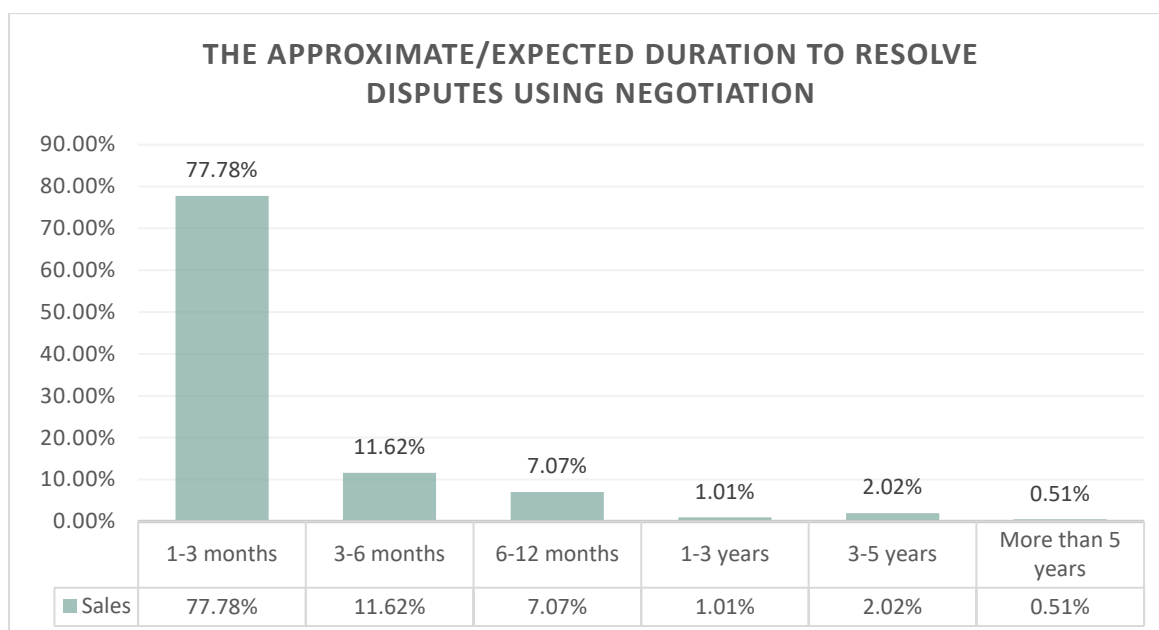


Figure 25. The approximate/expected duration to resolve disputes using negotiation

B. The Approximate/Expected Duration to Resolve Disputes Using Mediation

Questionnaire: Question 23: “Please identify the approximate/expected duration to resolve disputes using Mediation”

When surveyors enquired about the time necessary to resolve a dispute through mediation, 68.69 percent said that it takes between one to three months. 22.73 percent of respondents said they would need between three to five months, while 5.56 percent indicated they would require between six to twelve months. 2.02% of them indicated it would take from one to three years, while a minority of 1.2 percent of respondents believe it would take more than three years (Table 25) and (Figure 26).

Table 25. The approximate/expected duration to resolve disputes using mediation

The approximate/expected duration to resolve disputes using mediation	Surveyors’ answers	
	Percentage	Total number
1-3 months	68.69%	136
3-6 months	22.73%	45
6-12 months	5.56%	11
1-3 years	2.02%	4
3-5 years	0.51%	1
More than 5 years	0.51%	1
	Answered	198
	Skipped	6

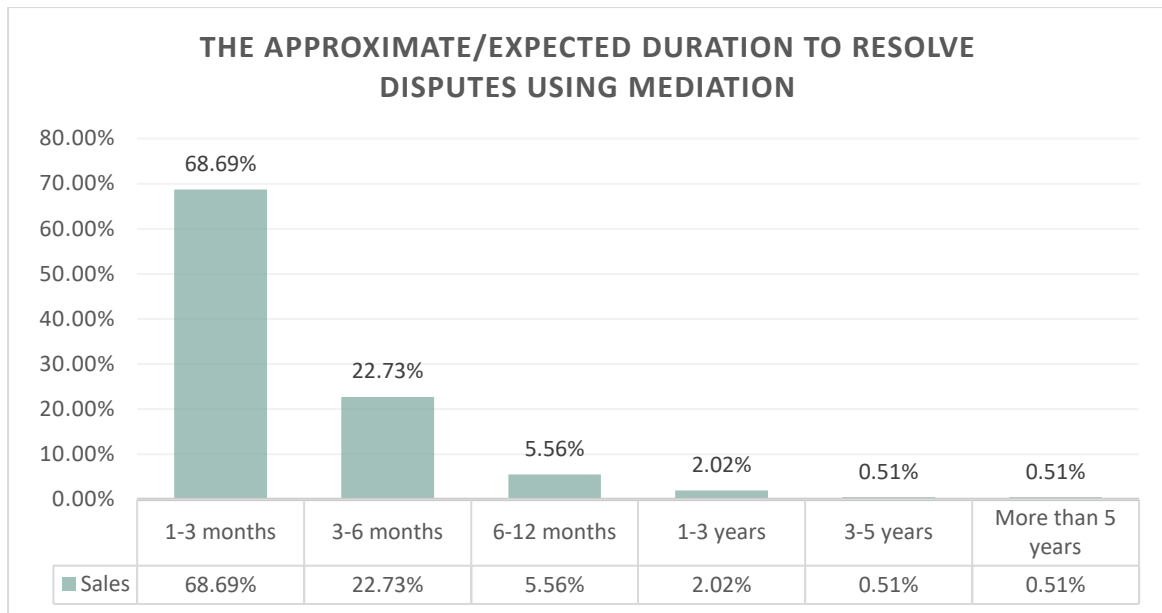


Figure 26. The approximate/expected duration to resolve disputes using mediation

C. The Approximate/Expected Duration to Resolve Disputes Using Arbitration

Questionnaire: Question 24: “Please identify the approximate/expected duration to resolve disputes using Arbitration”

Arbitration takes between one and three months, according to 15.74 percent of those polled. 50.76 percent of respondents answered that they would need between 3 to 5 months, while 20.30 percent indicated that between six to twelve months would be required. 9.64 percent answered that it would take between one to three years, although a minority of 3.55 percent felt it would take more than three years (Table 26) and (Figure 27).

Table 26. The approximate/expected duration to resolve disputes using arbitration

The approximate/expected duration to resolve disputes using arbitration	Surveyors' answers	
	Percentage	Total number
1-3 months	15.74%	31
3-6 months	50.76%	100

6-12 months	20.30%	40
1-3 years	9.64%	19
3-5 years	3.55%	7
More than 5 years	0.00%	0
Answered		197
Skipped		7

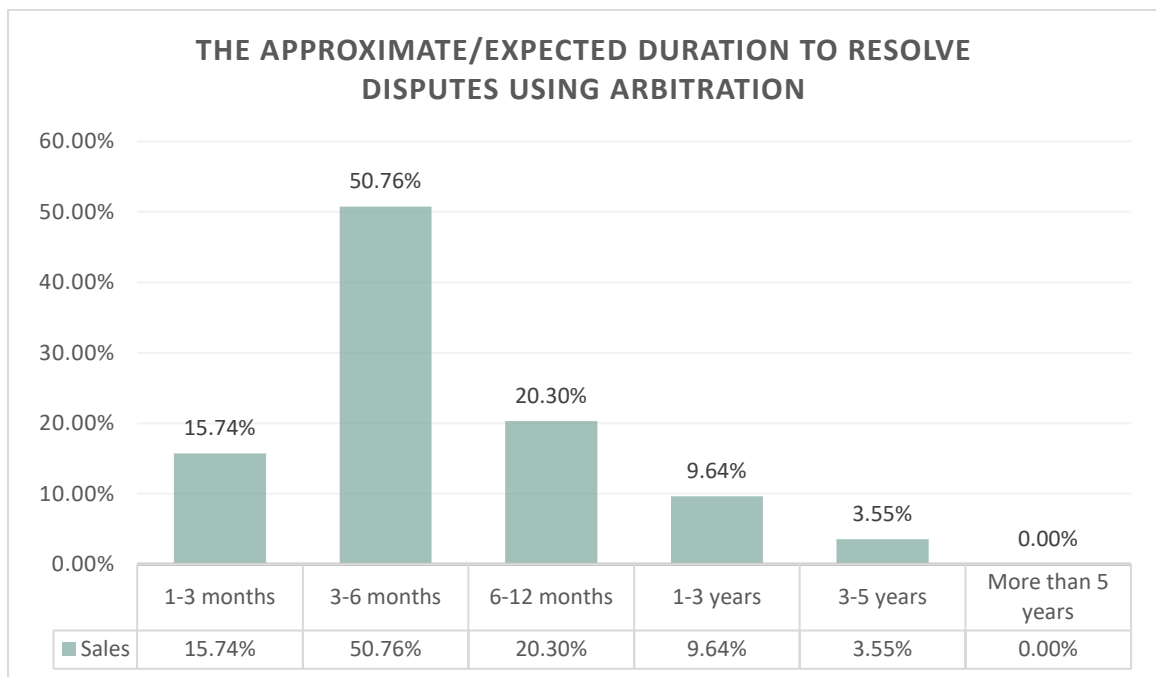


Figure 27. The approximate/expected duration to resolve disputes using arbitration

D. The Approximate/Expected Duration to Resolve Disputes Using Litigation

Questionnaire: Question 25: “Please identify the approximate/expected duration to resolve disputes using Litigation”

When asked how long it takes to resolve an issue using litigation, 5.05 percent replied 1 to 3 months. 3.03 percent answered 3 to 5 months, another 16.67 percent stated 6 to 12 months. A majority of 55.05% of respondents believe it will take between one and three years, while 14.14%

and 6.06% of respondents believe it would take three to five or more than five years, respectively (Table 27) and (Figure 28).

Table 27. The approximate/expected duration to resolve disputes using litigation

The approximate/expected duration to resolve disputes using litigation	Surveyors' answers	
	Percentage	Total number
1-3 months	5.05%	10
3-6 months	3.03%	6
6-12 months	16.67%	33
1-3 years	55.05%	109
3-5 years	14.14%	28
More than 5 years	6.06%	12
	Answered	198
	Skipped	6

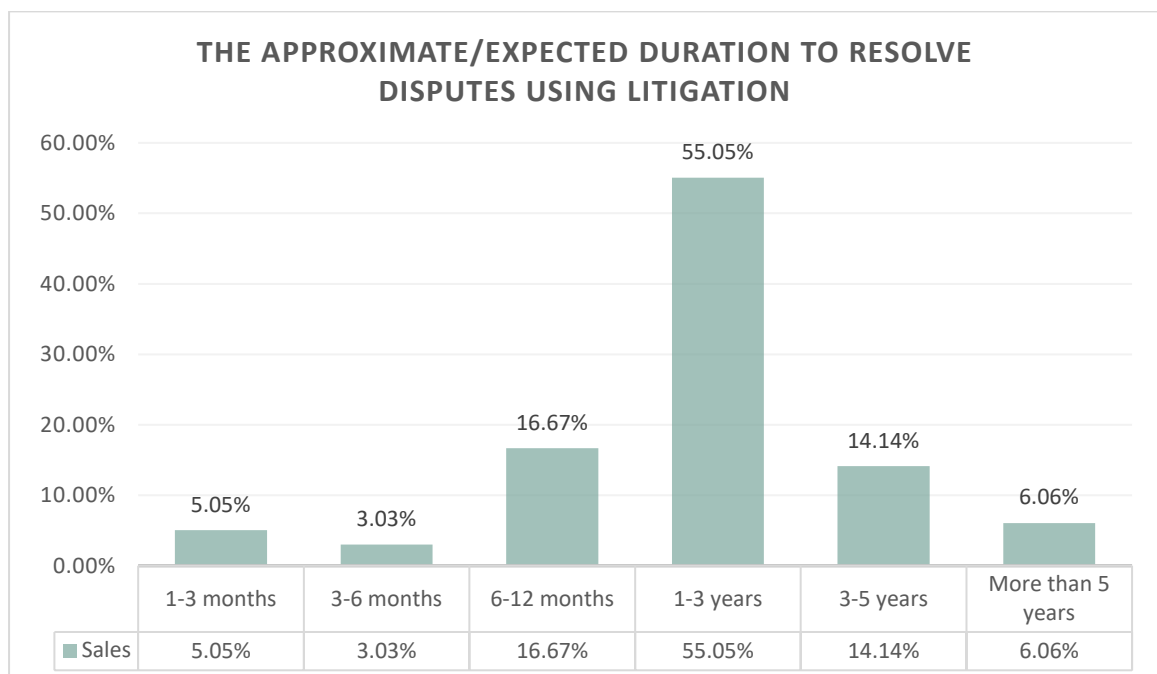


Figure 28. The approximate/expected duration to resolve disputes using litigation

E. The Approximate/Expected Duration to Resolve Disputes Using Med-Arb

Questionnaire: Question 26: “Please identify the approximate/expected duration to resolve disputes using Med-Arb”

According to 22.84 percent of individuals surveyed, Med-Arb takes between one and three months. 42.13 percent of respondents responded that they would need between three and five months, while 24.37 percent indicated that they would require between six and twelve months. 6.60 percent said it would take between one and three years, while 4.06 percent estimated it would take between one and three years, while 4.06 percent estimated it would take more than three years (Table 28) and (Figure 29).

Table 28. The approximate/expected duration to resolve disputes using Med-Arb

The approximate/expected duration to resolve disputes using Med-Arb	Surveyors' answers	
	Percentage	Total number
1-3 months	22.84%	45
3-6 months	42.13%	83
6-12 months	24.37%	48
1-3 years	6.60%	13
3-5 years	4.06%	8
More than 5 years	0.00%	0
	Answered	197
	Skipped	7

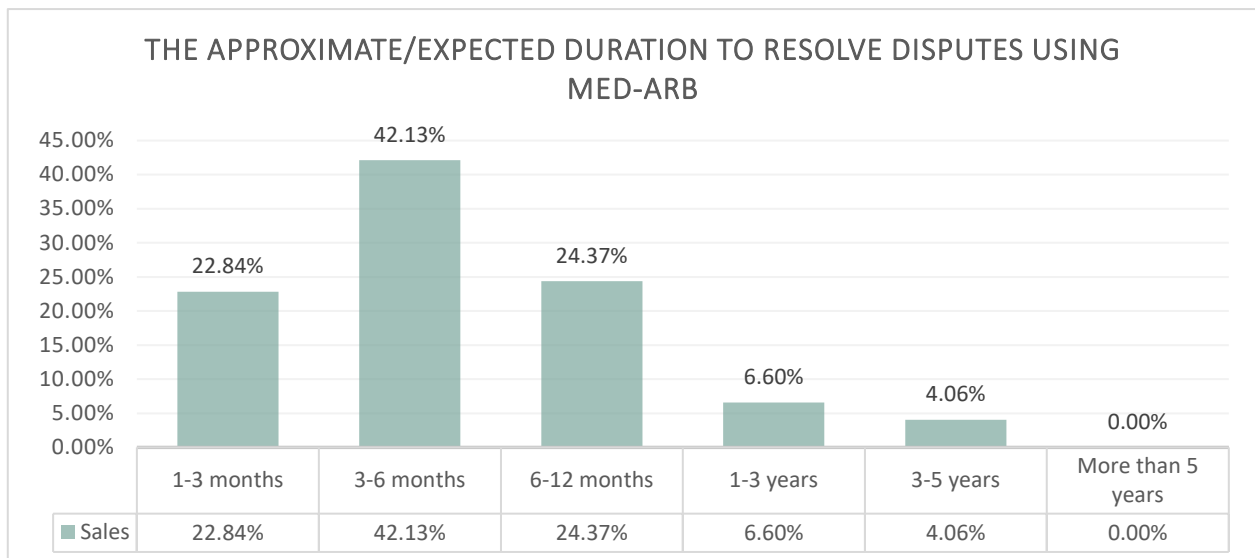


Figure 29. The approximate/expected duration to resolve disputes using Med-Arb

Table 29. Comparison of duration to resolve disputes

The approximate/expected duration to resolve disputes (%)	Dispute resolution method				
	Negotiation	Mediation	Arbitration	Litigation	Med-Arb
1-3 months	77.78%	68.69%	15.74%	5.05%	22.84%
3-6 months	11.62%	22.73%	50.76%	3.03%	42.13%
6-12 months	7.07%	5.56%	20.30%	16.67%	24.37%
1-3 years	1.01%	2.02%	9.64%	55.05%	6.60%
3-5 years	2.02%	0.51%	3.55%	14.14%	4.06%
More than 5 years	0.51%	0.51%	0.00%	6.06%	0.00%

According to the results of the summary above (table29), 68.69 percent of respondents believe that settling disputes through mediation takes 1-3 months, while 50.76 percent believe that resolving disputes through arbitration takes 3-6 months. While most respondents (42.13 percent) believe that conflicts may be settled through Med-Arb in 3-6 months, this clearly demonstrates the possibility for saving time when

compared to the traditional sequence of mediation followed by arbitration, which can take up to 9 months.

4.4.4 The Critical Success Factors of Using Med-Arb in Bahrain

A. The Advantages of Med-Arb ADR Method

***Questionnaire: Question 27:** “Please rank from 1 to 7 in terms of importance: (1= the most important, 10= the least important): The most critical success factor for choosing the hybrid ADR method (Med-Arb) in Bahrain construction projects”*

When survey respondents were asked to rate the benefits of utilizing Med-Arb to settle conflicts, their responses differed as shown in table 30.

Table 30. The advantages of Med-Arb method

The most critical success factor for using Med-Arb	Rated as 1		Rated as 2		Rated as 3		Rated as 4		Rated as 5		Rated as 6		Rated as 7	
	(%)	Total count	(%)	Total count	(%)	Total count	(%)	Total count	(%)	Total count	(%)	Total count	(%)	Total count
Cost	56.85	112	10.66	21	10.66	21	6.09	12	4.06	8	4.57	9	7.11	14
Speed	15.98	31	60.82	118	8.76	17	6.70	13	3.61	7	3.61	7	0.52	1
Confidentiality	9.28	18	5.15	10	52.06	101	8.76	17	8.25	16	8.76	17	7.73	15
Procedure flexibility	5.15	10	10.82	21	10.31	20	57.22	111	9.79	19	4.12	8	2.58	5
Impartiality	6.84	13	5.26	10	9.47	18	9.47	18	57.37	109	8.42	16	3.16	6
Direct enforceability	3.05	6	3.05	6	5.58	11	5.08	10	10.15	20	60.41	119	12.69	25
Finality	2.53	5	4.04	8	3.54	7	7.58	15	8.59	17	8.59	17	65.15	129

Using SurveyMonkey, an online survey and analytic tool, the weighted average rate for each item was obtained. Each answer option includes an average rating, allowing the user to rapidly choose the best alternative. Cost is the most important success element for adopting Med-Arb, according to the weighted average values. Second, speed is selected as a benefit, followed by confidentiality. The procedural flexibility is fourth, followed by impartiality, direct enforceability, and lastly finality (table 31).

Table 31. The advantages of Med-Arb method (ranked)

The most critical success factor for using Med-Arb	Weighted average of the rank
Cost	5.68
Speed	5.66
Confidentiality	4.41
Procedure flexibility	4.22
Impartiality	3.57
Direct enforceability	2.52
Finality	1.98

B. The Motivation for Using Med-Arb

Questionnaire: Question 28: *“Do you think that during Med-Arb, having a binding arbitration stage can motivate disputants to reach an agreement at mediation stage, so that arbitration stage is not proceeded with?”*

When asked if a binding arbitration stage in Med-Arb may drive disputants to settle their disputes at the mediation stage, 92.46 percent said "yes," while only 7.54 percent responded "no" (Table 32) and (Figure 30).

Table 32. The motivation for using Med-Arb

Do you think that during Med-Arb, having a binding arbitration stage can motivate disputants to reach an agreement at mediation stage, so that arbitration stage is not proceeded with?	Surveyors' answers	
	Percentage	Total number
Yes	92.46%	184
No	7.54%	15
	Answered	199
	Skipped	5

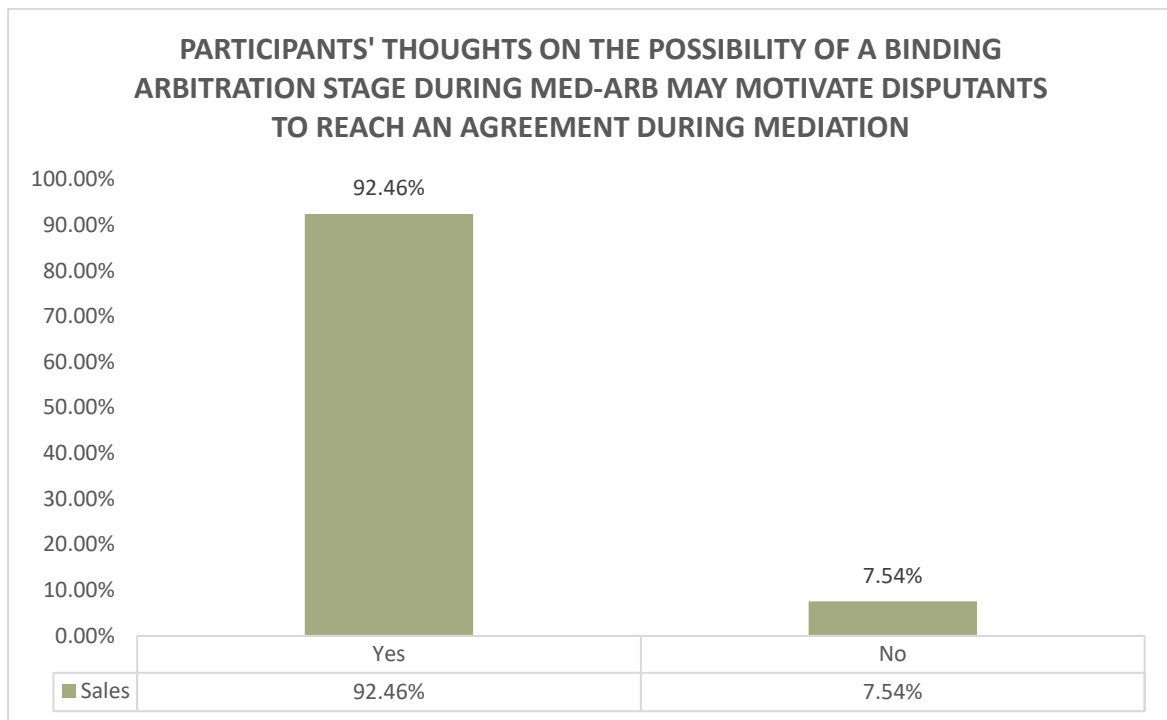


Figure 30. The motivation for using Med-Arb

4.4.5 The Barriers of Using Med-Arb in Bahrain

Questionnaire: Question 29: “Please rank the following from 1 to 6 in terms of importance: (1= the most important, 6= the least important: The most significant barriers which can prevent the use of Med-Arb in Bahrain construction projects”

When asked to rank the drawbacks of using Med-Arb to resolve disputes, survey respondents' replies varied, as indicated in table 33.

Table 33 . The disadvantages of Med-Arb method

The most critical barriers for using Med-Arb	Rated as 1		Rated as 2		Rated as 3		Rated as 4		Rated as 5		Rated as 6	
	(%)	Total count	(%)	Total count	(%)	Total count	(%)	Total count	(%)	Total count	(%)	Total count
1*	64.25	124	11.40	22	10.36	20	7.77	15	1.55	3	4.66	9
2**	21.13	41	51.55	100	12.89	25	8.76	17	2.58	5	3.09	6
3***	4.08	8	12.24	24	57.65	113	12.76	25	8.16	16	5.10	10
4****	4.66	9	13.47	26	9.33	18	57.51	111	9.84	19	5.18	10
5*****	2.08	4	5.21	10	5.21	10	10.94	21	62.50	120	14.06	27
6*****	4.55	9	7.58	15	5.56	11	3.54	7	14.14	28	64.65	128

Notes:

* The survey statement: Lack of clauses about Med-Arb by the government institutes in Bahrain.

** The survey statement: Lack of adequate experience in Med-Arb among arbitrators and legal experts

*** The survey statement: Parties might hold back information during mediation

**** The survey statement: Ethical concerns regarding the dual role of arbitrator and mediator

***** The survey statement: Lack of Impartiality

***** The survey statement: Lack of knowledge about the cost-efficiency of using Med-Arb

To find the most significant barriers to adopting Med-Arb, the weighted average rank value for each item was determined. Table 34 has the values.

Table 34. The disadvantages of Med-Arb method (ranked)

The most critical barriers for using Med-Arb	Weighted average of the rank
Lack of clauses about Med-Arb by the government institutes in Bahrain.	5.15
Lack of adequate experience in Med-Arb among arbitrators and legal experts	4.71
Parties might hold back information during mediation	3.76
Ethical concerns regarding the dual role of arbitrator and mediator	3.3
Lack of Impartiality	2.31
Lack of knowledge about the cost-efficiency of using Med-Arb	1.91

4.4.6 The Benefits for Having One Person Switching Roles in Med-Arb

Questionnaire: Question 30: *“Do you think it’s cost-effective to hire one person which serves as both a mediator and an arbitrator?”*

When enquired whether they believe it is cost-effective to integrate mediation and arbitration into one person's work, 85.79 percent replied "yes," whereas only 14.21 percent said "no"(Table 35) and (Figure 31).

Table 35. The cost-effectiveness of Med-Arb

Do you think it's cost-effective to hire one person which serves as both a mediator and an arbitrator?	Surveyors' answers	
	Percentage	Total number
Yes	85.79%	169
No	14.21%	28
	Answered	197
	Skipped	7

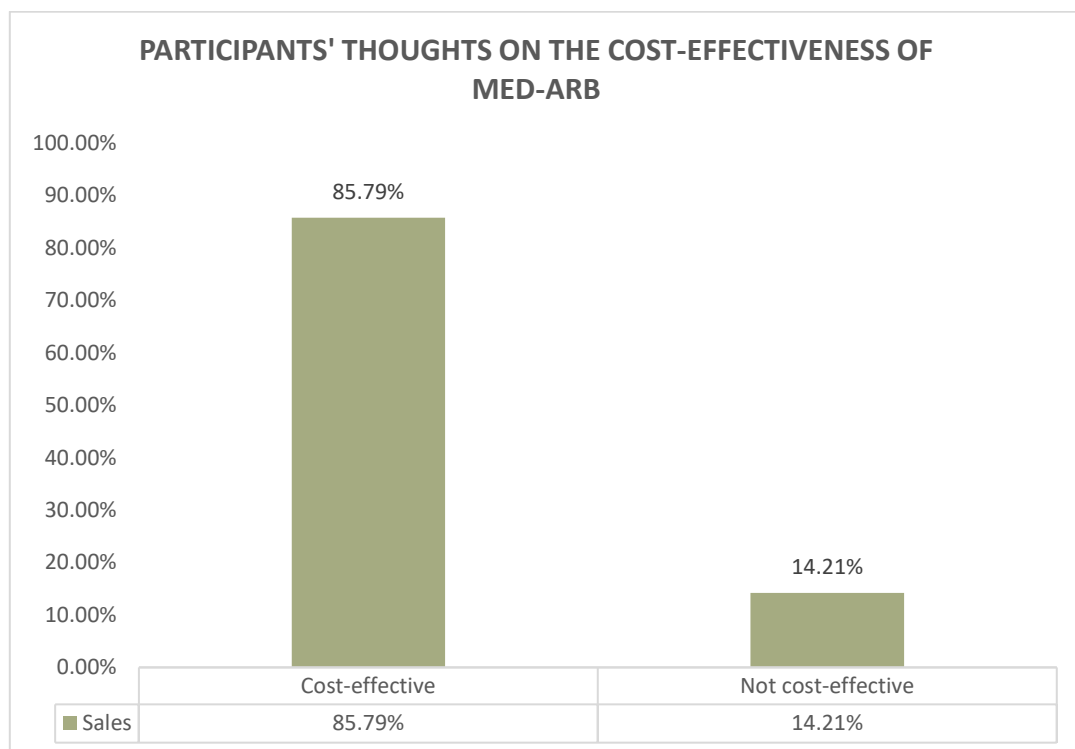


Figure 31. The cost-effectiveness of Med-Arb

Questionnaire: Question 31: “Do you think that the combined process controlled by one person in Med-Arb can reduce the time required to settle disputes?”

Contributors questioned whether they think combining mediation and arbitration saves time, 90.45% responded "yes," while just 9.554% said "no" (Table 36) and (Figure 32).

Table 36. The time-effectiveness of Med-Arb

Do you think that the combined process controlled by one person in Med-Arb can reduce the time required to settle disputes?	Surveyors' answers	
	Percentage	Total number
Yes	90.45%	180
No	9.55%	19
	Answered	199
	Skipped	5

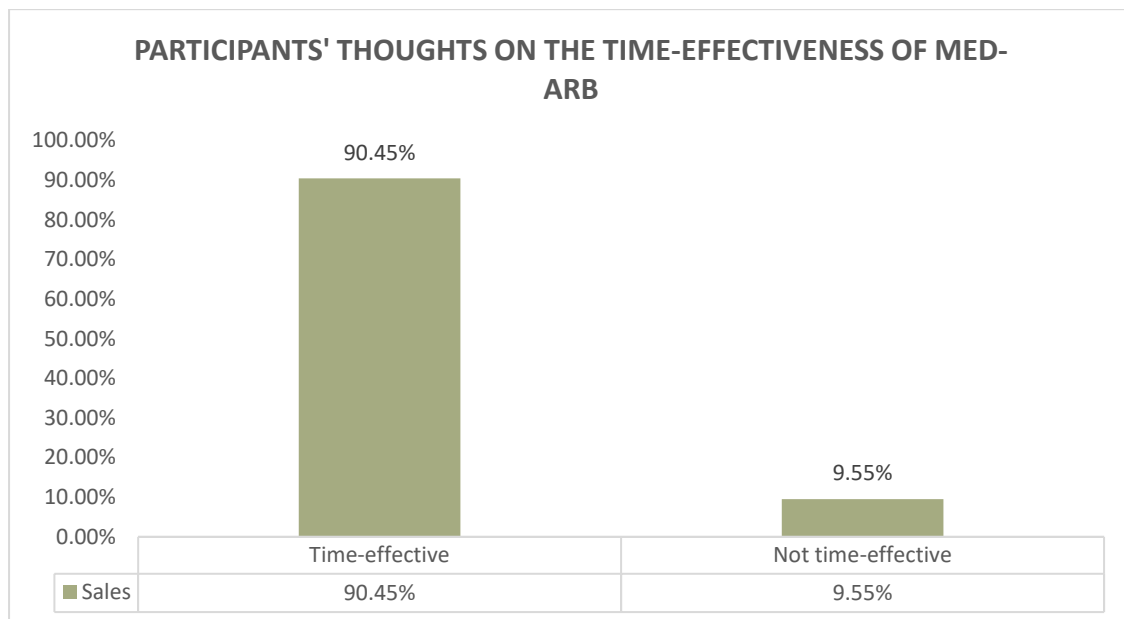


Figure 32. The time-effectiveness of Med-Arb

Questionnaire: Question 32: “Do you think that having one person acting as both mediator and arbitrator can preserve confidential information, that will be shared with one person only?”

When respondents were asked if they believe that merging mediation and arbitration may help protect sensitive information, 88.38 percent replied "yes," while just 11.62 percent said "no." (Table 37) and (Figure 33).

Table 37. Med-Arb as a mean to increase confidentiality

Do you think that having one person acting as both mediator and arbitrator can preserve confidential information, that will be shared with one person only?	Surveyors' answers	
	Percentage	Total number
Yes	88.38%	175
No	11.62%	23
	Answered	198
	Skipped	6

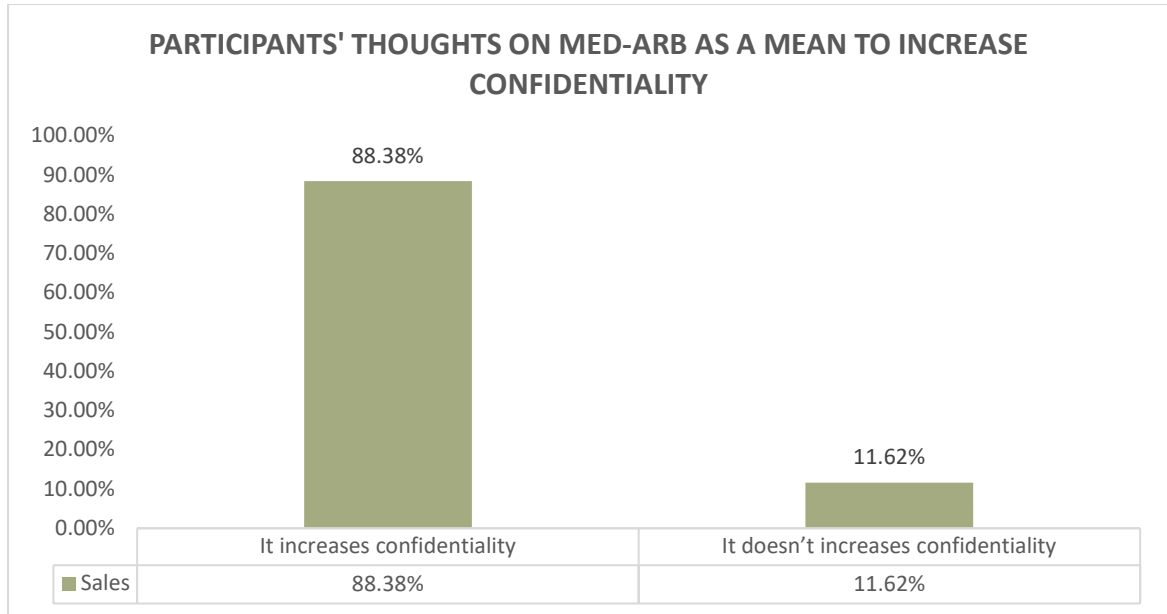


Figure 33. Med-Arb as a mean to increase confidentiality

4.4.7 The Concerns of Having One person Switching Roles in Med-Arb

Questionnaire: Question 33: “Do you think that having one person acting as both mediator and arbitrator can raise ethical concerns regarding the fairness of the Mediator/Arbitrator?”

When queried if they have ethical reservations regarding the combined role of mediator/arbitrator, 44.13 percent said "yes," while 55.87 percent responded "no" (Table 38) and (Figure 34).

Table 38. Ethical concerns using Med-Arb

Do you think that having one person acting as both mediator and arbitrator can raise ethical concerns regarding the fairness of the Mediator/Arbitrator?	Surveyors' answers	
	Percentage	Total number
Yes	44.13%	79
No	55.87%	100
	Answered	179
	Skipped	25

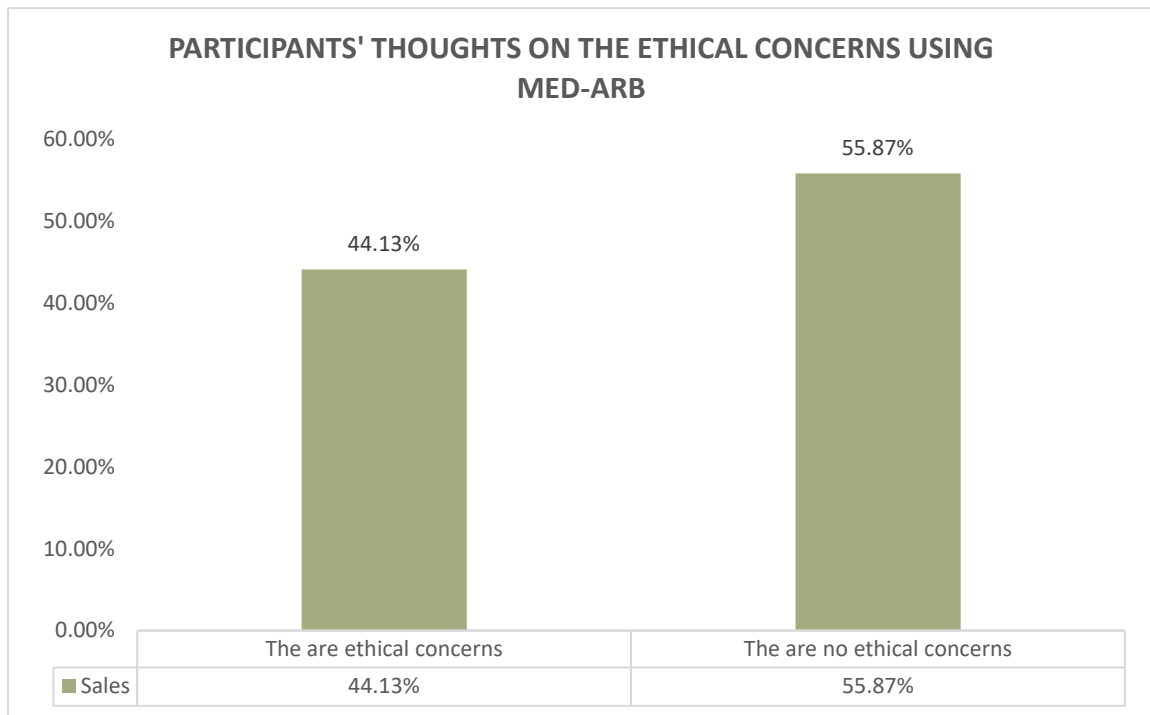


Figure 34. Ethical concerns using Med-Arb

4.4.8 The Future of Med-Arb in Bahrain:

Questionnaire: Question 34: “Do you think that Med-Arb process can be controlled if strict procedural standards are employed and monitored by legal authorities?”

Eighty-seven percent of respondents indicated they believed strict procedural standards may help regulate the Med-Arb process, while 12.24 percent disagreed (Table 39) and (Figure 35).

Table 39. Med-Arb procedural standards

Do you think that Med-Arb process can be controlled if strict procedural standards are employed and monitored by legal authorities?"	Surveyors' answers	
	Percentage	Total number
Yes	87.76%	172
No	12.24%	24
	Answered	196
	Skipped	8

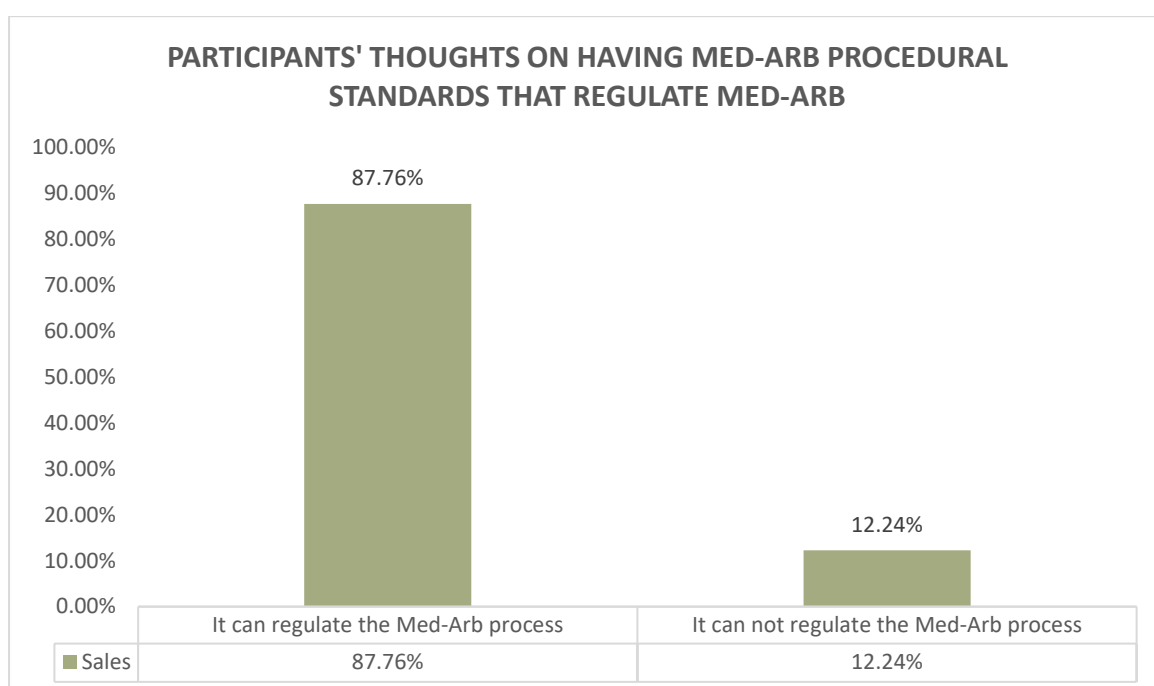


Figure 35. Med-Arb procedural standards

Questionnaire: Question 35: “Would you consider including a Med-Arb clause in your future agreements?”

When asked if they would consider including a "Med-Arb" clause in future contracts, 76.26 percent said "yes," while 23.74 percent stated "no." (Table 40) and (Figure 36).

Table 40. The future of Med-Arb

Would you consider including a Med-Arb clause in your future agreements?	Surveyors' answers	
	Percentage	Total number
Yes	76.26%	151
No	23.74%	47
	Answered	198
	Skipped	6

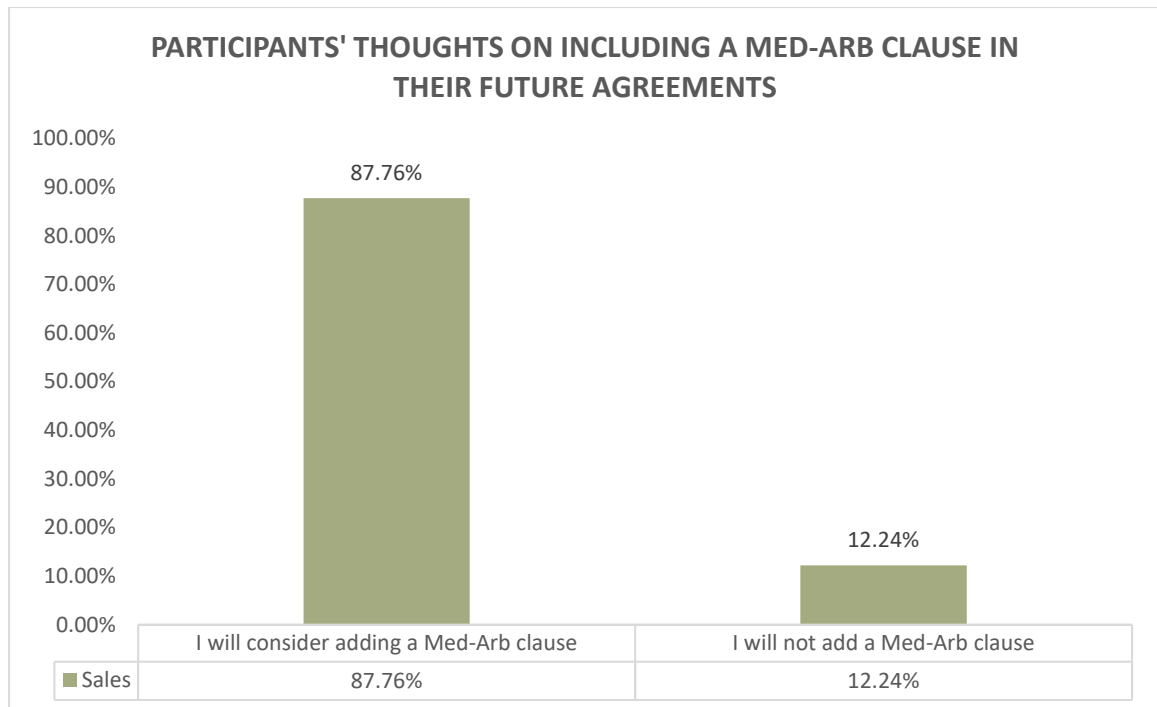


Figure 36. The future of Med-Arb

4.5 Chi-Square Hypothesis Test

The chi-square test was performed to determine if there is a correlation between experienced participants' perceptions of Med-Arb and their attitude towards including a Med-Arb clause in future agreements.

As detailed in the following sections, the six research hypotheses were examined.

4.5.1 Testing the First Hypothesis

Hypothesis 1: "The higher one's faith in the finality of Med-Arb, the more favourable one's attitude toward incorporating a Med-Arb provision in future contracts."

The goal of this test is to determine if there is an association between one's belief in the finality of Med-Arb and one's attitude toward future contracts with a Med-Arb clause. The null (H0) hypothesis and the alternative (H1) hypothesis are as follows:

H0: There is no association between one's belief in the finality of Med-Arb and one's attitude toward future contracts with a Med-Arb clause.

H1: There is an association between one's belief in the finality of Med-Arb and one's attitude toward future contracts with a Med-Arb clause.

Table 41 represents the fundamental participant count as determined by the questionnaire analysis.

Table 41. Testing hypothesis (1)

	Participants who are willing to use Med-Arb (Total count)	Participants who are non-willing to use Med-Arb (Total count)
Participants who believe in finality of Med-Arb	138	35
Participants who do not believe in finality of Med-Arb	5	8

The P-value calculated is 0.001, which is significantly less than the accepted significance level of 0.05. Thus, the null hypothesis (H0) is incorrect; one's confidence in the finality of Med-Arb and one's attitude toward future contracts including a Med-Arb provision are strongly associated (Table 42).

Table 42. Hypothesis (1) results

Hypothesis	Person P-value	Result
H0: “There is no association between one's belief in the finality of Med-Arb and one's attitude toward future contracts with a Med-Arb clause.” H1: There is an association between one's belief in the finality of Med-Arb and one's attitude toward future contracts with a Med-Arb clause.	0.001	0.001 < 0.05 (significant level) Reject the null hypothesis

4.5.2 Testing the Second Hypothesis

Hypothesis 2: "The more one believes in the cost-effectiveness of Med-Arb, the more receptive to include a Med-Arb clause in future contracts."

The purpose of this test is to assess if there is a relationship between one's confidence in Med-Arb cost-effectiveness and one's attitude toward future contracts with a Med-Arb provision. The following are the null (H0) and alternative (H1) hypotheses:

H0: There is no association between one's belief in the cost-effectiveness of Med-Arb and one's attitude toward future contracts with a Med-Arb clause.

H1: There is an association between one's belief in the cost-effectiveness of Med-Arb and one's attitude toward future contracts with a Med-Arb clause.

The basic participant count, as obtained by questionnaire analysis, is shown in table 43.

Table 43. Testing hypothesis (2)

	Participants who are willing to use Med-Arb (Total count)	Participants who are non- willing to use Med-Arb (Total count)
Participants who believe in the cost-effectiveness of Med-Arb	125	35
Participants who do not believe in the cost- effectiveness of Med-Arb	9	17

The computed P-value is 0.000, which is much less than the commonly accepted level of significance of 0.05. Thus, the null hypothesis (H0) is false; confidence in the cost-effectiveness of Med-Arbs and attitude toward future contracts with a Med-Arb clause are substantially associated (Table 44).

Table 44. Hypothesis (2) results

Hypothesis	Person P-value	Result
H0: There is no association between one's belief in the cost-effectiveness of Med-Arb and one's attitude toward future contracts with a Med-Arb clause. H1: There is an association between one's belief in the cost-effectiveness of Med-Arb and one's attitude toward future contracts with a Med-Arb clause.	0.000	$0.000 < 0.05$ (significant level) Reject the null hypothesis

4.5.3 Testing the Third Hypothesis

Hypothesis 3: "The greater one trusts in Med-Arb time-effectiveness, the more amenable to incorporate a Med-Arb clause in future contractual terms."

The aim of this testing is to assess if there is a correlation between one's trust in the time-effectiveness of Med-Arb and one's perspective toward future contracts that have a Med-Arb clause. The null (H0) and alternative (H1) hypotheses are as follows:

H0: There is no correlation between one's confidence in Med-Arb time-effectiveness and one's perspective about future contracts with a Med-Arb provision.

H1: There is correlation between one's confidence in Med-Arb time-effectiveness and one's perspective about future contracts with a Med-Arb provision.

Table 45 summarizes the basic participant count as determined through questionnaire analysis.

Table 45. Testing hypothesis (3)

	Participants who are willing to use Med-Arb (Total count)	Participants who are non-willing to use Med-Arb (Total count)
Participants who believe in the cost-effectiveness of Med-Arb	132	40
Participants who do not believe in the cost-effectiveness of Med-Arb	5	9

The measured P-value is 0.001, which is significantly less than the commonly accepted value of 0.05. Thus, the null hypothesis (H0) is untrue; confidence in the time-effectiveness of Med-Arbs and having a good attitude toward future contracts with a Med-Arb provision are significantly associated (Table 46).

Table 46. Hypothesis (3) results

Hypothesis	Person P-value	Result
H0: There is no correlation between one's confidence in Med-Arb time-effectiveness and one's perspective about future contracts with a Med-Arb provision. H1: There is correlation between one's confidence in Med-Arb time-effectiveness and one's perspective about future contracts with a Med-Arb provision.	0.001	$0.001 < 0.05$ (significant level) Reject the null hypothesis

4.5.4 Testing the Fourth Hypothesis

Hypothesis 4: "The higher the faith that Med-Arb procedure preserves more confidentiality, the more acceptable it is to include a Med-Arb provision in future contractual agreements."

The purpose of this testing is to determine whether there is a relationship between one's belief that the Med-Arb technique preserves

greater confidentiality and one's willingness to accept the inclusion of a Med-Arb clause in future contracts. The null (H0) and alternative (H1) hypotheses are as follows:

H0: There is no association between one's view that the Med-Arb approach maintains more confidentiality and one's readiness to accept future contracts with a Med-Arb provision.

H1: There is association between one's view that the Med-Arb approach maintains more confidentiality and one's readiness to accept future contracts with a Med-Arb provision.

Table 45 summarizes the basic participant count as determined through questionnaire analysis.

Table 47. Testing hypothesis (4)

	Participants who are willing to use Med-Arb (Total count)	Participants who are non- willing to use Med-Arb (Total count)
Participants who believe in the confidentiality enhancement of Med-Arb	132	34
Participants who do not believe in the confidentiality enhancement of Med-Arb	10	10

P-value 0.001 is far lesser than the commonly accepted level of 0.05. Therefore, the null hypothesis (H0) is untrue; one's belief that the Med-Arb method provides more confidentiality and one's willingness to accept future contracts that include a Med-Arb clause are strongly linked (Table 48).

Table 48. Hypothesis (4) results

Hypothesis	Person P-value	Result
H0: There is no association between one's view that the Med-Arb approach maintains more confidentiality and one's readiness to accept future contracts with a Med-Arb provision. H1: There is association between one's view that the Med-Arb approach maintains more confidentiality and one's readiness to accept future contracts with a Med-Arb provision.	0.003	$0.003 < 0.05$ (significant level) Reject the null hypothesis

4.5.5 Testing the Fifth Hypothesis

***Hypothesis 5:** "The higher one's faith in "Med/ Arbiter's" impartiality, the more willing one is to include a Med-Arb provision in future contractual arrangements."*

The purpose of testing is to ascertain if there is a correlation between one's trust in the impartiality of a "Med/Arbiter" and one's willingness to incorporate a Med-Arb clause in future contractual contracts. The following are the null (H0) and alternative (H1) hypotheses:

H0: There is no correlation between one's trust in the impartiality of the "Med/Arbiter" and one's willingness to include a Med-Arb clause into future contractual agreements.

H1: There is correlation between one's trust in the impartiality of the "Med/Arbiter" and one's willingness to include a Med-Arb clause into future contractual agreements.

The overall respondent count, as established by questionnaire analysis, is described in table 49.

Table 49. Testing hypothesis (5)

	Participants who are willing to use Med-Arb (Total count)	Participants who are non-willing to use Med-Arb (Total count)
Participants who believe in the impartiality of a Med/Arbiter	86	18
Participants who do not believe in the impartiality of a Med/Arbiter	54	28

The P-value of 0.008 is much lower than the accepted level of 0.05. As a result, the null hypothesis (H0) is false; one's faith in the "Med/Arbiter's" impartiality and readiness to include a Med-Arb provision in future legal arrangements are strongly associated (Table 50).

Table 50. Hypothesis (5) results

Hypothesis	Person P-value	Result
H0: There is no correlation between one's trust in the impartiality of the "Med/Arbiter" and one's willingness to include a Med-Arb clause into future contractual agreements. H1: There is correlation between one's trust in the impartiality of the "Med/Arbiter" and one's willingness to include a Med-Arb clause into future contractual agreements	0.008	0.008 < 0.05 (significant level) Reject the null hypothesis

4.5.6 Testing the Sixth Hypothesis

***Hypothesis 6:** "The more one's faith in the capability of procedural standards to manage Med-Arb practice when they are established and*

monitored by legal authorities, the more amenable to incorporate a Med-Arb clause in future contractual terms.”

The purpose of this study is to determine whether there is a correlation between one's faith in the ability of procedural standards to manage Med-Arb practice and one's willingness to incorporate a Med-Arb clause into future contractual terms when they are established and monitored by legal authorities. The following are the null (H0) and alternative (H1) hypotheses:

H0: There is no association between one's trust in the competence of procedural norms to govern Med-Arb practice and one's willingness to insert a Med-Arb provision into future contractual conditions when they are formed and overseen by legal authorities.

H1: There is association between one's trust in the competence of procedural norms to govern Med-Arb practice and one's willingness to insert a Med-Arb provision into future contractual conditions when they are formed and overseen by legal authorities.

The overall respondent count, as established by questionnaire analysis, is described in table 51.

Table 51. Testing hypothesis (6)

	Participants who are willing to use Med-Arb (Total count)	Participants who are non- willing to use Med-Arb (Total count)
Participants who believe in the ability of procedural standards to manage Med- Arb practice	133	31
Participants who do not believe in the ability of procedural standards to manage Med-Arb practice	9	13

The P-value of 0.000 is significantly less than the frequently used limit of 0.05. Consequently, the null hypothesis (H0) is false; belief in the competence of procedural standards to manage Med-Arb practice and readiness to include a Med-Arb provision into future contractual conditions when they are developed and supervised by legal authorities are substantially correlated (Table 52).

Table 52. Hypothesis (6) results

Hypothesis	Person P-value	Result
H0: There is no association between one's trust in the competence of procedural norms to govern Med-Arb practice and one's willingness to insert a Med-Arb provision into future contractual conditions when they are formed and overseen by legal authorities. H1: There is association between one's trust in the competence of procedural norms to govern Med-Arb practice and one's willingness to insert a Med-Arb provision into future contractual conditions when they are formed and overseen by legal authorities.	0.000	$0.000 < 0.05$ (significant level) Reject the null hypothesis

4.6 Semi-Structured Interviews

Several listed mediators and arbitrators in the Ministry of Justice were contacted for their feedback on Med-Arb. Among them is Mr. Ahmed Hussain, Chief Operating Officer and Acting General Registrar of the Bahrain Chamber for Dispute Resolution (BCDR-AAA), as well as several others who opted not to be named but all have over 20 years of expertise. Interviewees were asked the following questions.

- 1. Do you think that an arbitrator can agree to serve as both mediator and arbitrator with the written approval of the parties, who are represented by competent lawyers or themselves? What are your overall thoughts on the use of Med-Arb with the parties' written agreement and after the parties have been properly advised and signed the clause stating?**

Mr. Ahmed Hussain answered: "While Med-Arb is a theoretically possible method of resolving construction disputes, it is very difficult to settle ongoing issues through mediation. When parties get involved in a conflict, they often reach a point where they are unwilling to compromise or talk further to achieve a middle ground with the other party. This may be because our society does not view mediation as a technical means of resolving disputes. In general, mediation is not highly regarded in the middle east or the region as a service requiring legal professional advice to be compensated; the parties' culture and mindset have not yet grasped the efficiency of mediation."

Another arbitrator stated that: "I see no reason why this procedure cannot be successful if all parties agree to utilize it."

Other arbitrator commented saying: "Mediation and arbitration can go hand-in-hand, we usually call it multi-tiered dispute resolution clause; it means that you cannot go to the next step unless you satisfy the first step; but usually with two different individuals. One is mediator and the other is arbitrator."

Other mentioned that: "While arbitration is widely utilized in Bahrain, western nations have a leg up on us when it comes to mediation. The culture in this country continues to lack trust in mediation; consequently, med-arb."

Another arbitrator commented that: "The nature of arbitration is completely different than mediation and they should not be handled by the same neutral."

2. What has been your experience in Med-Arb if you have been involved in this process?

Mr. Ahmed Hussain answered: "I have not been engaged in a procedure where the mediator and arbitrator is the same person, but I see no reason why not provided both parties agree."

Another arbitrator stated that: "It is uncommon and discouraged to have the same individual serve as mediator and arbitrator."

Other arbitrator commented saying: "In my experience, I have never seen the mediator and arbiter switching positions."

3. Do you agree that having the mediator and arbitrator in the same person offers advantages that outweigh the disadvantages in certain circumstances?

Mr. Ahmed Hussain answered: "We need to view it as a new product rather than just attempting to combine the benefits of mediation and

arbitration and eliminate their flaws. It is a novel product that, like other ADR approaches, has both benefits and challenges; nonetheless, when used properly, it has the potential to be quite beneficial."

Another arbitrator stated that: "Technically, the method may save time and money, which can be beneficial."

4. Would you recommend a procedure where the mediator is also the arbitrator?

Mr. Ahmed Hussain answered: "The best solution, in my opinion, to avoid the drawbacks of Med-Arb is for the parties to agree that the arbitrator would make a judgement during the arbitration phase based on "rules of fairness and justice." The concern of impartiality arises because arbitration is often governed by an arbitration procedure in which the arbitrator is prohibited from using information obtained during mediation until it is disclosed as evidence during arbitration. When an arbitrator is allowed to make decisions based on principles of fairness and justice, if they do not clash with the broader legal system, bias may be avoided. In other words, bias occurs because of the legal requirements agreed upon by the parties and the arbitrator; if the parties place their faith in the arbitrator's justice, where no rules must be followed if the justice is followed, no bias or fear of partiality occurs. The parties appoint the arbitrator with the authority to utilize any information gathered throughout the Med-Arb procedure because they have trust in his/her impartiality."

Another arbitrator stated that: "When parties to a dispute contact me in my office, I attempt to mediate first to help them achieve a resolution and avoid the extra time required to settle a dispute. If that is unsuccessful, we would go to arbitration."

Do you believe that this process encourages the settlement of the dispute in mediation?

Mr. Ahmed Hussain answered: “In all circumstances, the mediator's role is to persuade parties to achieve an agreement, either through pure mediation or the Mediation phase of the Med-Arb process.”

Another arbitrator stated that: “Yes definitely, mediation is more like negotiation in its nature; one in mediation can gain much more than in arbitration due to the flexibility of the process.”

5. Are you concerned that the arbitrator might be unfairly influenced by evidence that could be challenged at the arbitrator hearing because it was communicated only to the mediator in a private caucus but not to the other side?

Mr. Ahmed Hussain answered: “A skilled legal practitioner can maintain his or her objectivity and fairness. Any individual in the position of judge/arbitrator cannot make decisions based on his or her own expertise; rather, they must make decisions based on clear evidence. A skilled arbiter will have his or her own method of disclosing information throughout the arbitration process. I don't believe it matters whether the arbitrator is affected by the caucus, as long as his/her judgement is founded on the facts presented during the arbitration process and results in justice.”

Another arbitrator stated that: “Regardless of how hard the arbitrator tries not to be swayed by the sensitive material obtained during mediation, the arbitrator will undoubtedly be affected by it.”

6. Can the mediator maintain objectivity and impartiality throughout the mediation phase if he/she is aware that she will ultimately decide on unresolved issues during arbitration phase?

Mr. Ahmed Hussain answered: "While a qualified mediator can retain objectivity, the success of the mediation process is mainly dependent on the parties' faith in the mediator/arbitrator."

Another arbitrator stated that: "In all cases, when parties choose a mediator/arbitrator, they are putting their confidence in the third party to conduct an unbiased procedure."

7. Holding the ability to proceed to arbitration may encourage the parties to make decisions that reflect the mediator's views rather than their own. How does this influence the mediation process's promise of self-determination?

Mr. Ahmed Hussain answered: "The mediation process itself is more like to brainstorming with each party and thinking openly throughout the caucus. A mediator's role includes disclosing to the parties the legal circumstances of his or her actions. Even though the mediator lacks the authority to enforce decision, he or she may give impartial legal opinions. In the purest form of mediation, a competent mediator is one who can persuade parties to agree; if parties are not influenced, they will not decide. Bottom line, whether in pure mediation or Med-Arb, the mediator will have influence on the parties without imposing on their right to self-determination."

Another arbitrator stated that: "During the mediation phase and caucus, parties will have an understanding of the med/arbitrator's decision, and it is probable that they may adopt his/her advice."

Other arbitrator commented that: "It is necessary for a mediator to have proper training, including not just understanding of legal processes, but also training on how to mediate. Apart from that, he should have exceptional social and communication abilities so that she/he does not

enforce any opinions but facilitates communication. The same thing applies to Med-Arb."

8. Parties may be more willing to compromise with a powerful mediator. Would you, as a mediator with final decision-making authority, alter your approach of mediating, and if so, how?

Mr. Ahmed Hussain answered: "A powerful mediator would incentivize parties to achieve an agreement without jeopardizing their self-determination."

Another arbitrator stated that: "Even in pure mediation, the mediator's role is limited to foster discussion between the parties and to allow them to make their own decisions. The same shall apply to Med-Arb"

9. Arbitrators who have served as mediators may bring inappropriate information to the table. The argument then poses the question of how the arbitrator can possibly forget this information and behave impartially. How is it possible for an arbitrator to disregard the information obtained during the mediation?

Mr. Ahmed Hussain answered: "I believe that caucus sessions have a greater impact on the mediator/arbitrator than on the parties. In other words, anything is discussed in the caucus cannot be disclosed by the arbitrator during the arbitration phase unless the party agrees to disclose it during the arbitration procedure. This puts the arbitrator in a situation where he or she is aware of information that might result in more justice but is unable to utilize it."

Another arbitrator stated that: "Even if he wanted to, he cannot forget the information obtained at mediation."

10. Worrying that specific info may influence an arbitrator, parties may simply be less forthcoming during a mediation knowing that arbitration is to follow. Does this make the job of the mediator harder? What would you do as a mediator to encourage parties to have more trust in the mediation phase?

Mr. Ahmed Hussain answered: "Parties must have trust in the mediator/arbitrator, who is critical to the success of Med-Arb. Unless and until the med/arbitrator earns their confidence, the procedure will be difficult to facilitate."

Another arbitrator stated that: "The success of the Med-Arb is dependent upon the faith in the Med-Arbiter."

4.7 Main Findings

4.7.1 First Research Question

Research Question (1): *"How does Bahrain's legal system promote the adoption of alternative dispute resolution methods? Is the process governed by any governmental laws?"*

Bahrain has a rich history of arbitration dating all the way back to the nineteenth century. Bahrain has pioneered legislation, becoming one of the first Gulf states to ratify the New York Convention in 1988. The 1971 Civil and Commercial Procedures Law governed domestic arbitration. International arbitration in Bahrain was controlled by Legislative Decree No.9 of 1994, which created the International Commercial Arbitration Law.

However, the seventh arbitration clause of the Civil and Commercial Procedures Law was abolished by Legislative Decree No. 9 of 2015. Domestic and international arbitration are now governed in their totality by the UNCITRAL Model Law (the "Model Law").

Bahrain's Chamber for Dispute Resolution (BCDR) was established in 2009 according to Bahrain Legislative Decree No. 30. Bahrain's major arbitration center is the Bahrain Chamber for Dispute Resolution (BCDR), which operates in collaboration with the American Arbitration Association. It not only operates an arbitration center, but also encourages mediation. BCDR is a collaborative venture between Bahrain's Ministry of Justice and the American Arbitration Association (AAA). In December 2008, the Ministry of Justice and the AAA signed an MOU (Memorandum of Understanding) in which the AAA committed to assisting Bahraini mediators and arbitrators with technical help, administrative and system expertise, and staff training. BCDR employees received training at the AAA's corporate headquarters in the United States (the AAA also has a permanent representative in Bahrain).

Domestic or international mediation could be used to resolve a legal or commercial issue under Decree No. (22) of 2019. Domestic and international mediation are also covered under this law.

Mr. Saad Al Doseri, a listed mediator and arbitrator at the Ministry of Justice and the founding partner of Al Doseri Law firm stated: "While arbitration is widely utilized in Bahrain, western nations have a leg up on us when it comes to mediation. The culture in this country continues to lack trust in mediation; consequently, Med-Arb"

Mr. Ahmed Hussain, the Chief Operating Officer and Acting General Registrar at the BCDR commented that: "In general, mediation is not highly regarded in the middle east or the region as a service requiring legal professional advice to be compensated; the parties' culture and mindset have not yet grasped the efficiency of mediation." Also, he added: "It is not only a matter of having rules; although laws do regulate dispute resolution procedures, other factors play a significant influence in the

adoption of ADR methods. The acceptance, understanding, and awareness of the benefits of each ADR approach, as well as the need of using such methods; ADR methods were developed to address existing issues such as cost, time, and flexibility. The society must first identify its requirements, and then have trust in and understanding of ADR procedures."

To conclude, Bahrain is making a significant effort to establish ADR regulations, and although it lags behind western nations, it is regarded a regional pioneer. Though arbitration has been in use since the 1990s, mediation was just introduced in 2019, and thus awareness of the usefulness of ADR techniques among legal practitioners and also possible parties to a dispute shall be increased.

4.7.2 Second Research Question

Research Question (2): “What are the most frequently used dispute resolution methods in construction projects?”

The findings of the survey questionnaire are presented in the table below.

Table 53. Summary of the extent dispute resolution methods are used

Dispute Resolution Method	The extent of use to solve disputes in Bahrain construction projects					Rank
	Never	Rarely	Sometimes	Often	Almost always	
Negotiation	1.52%	7.11%	30.46%	39.59%	21.32%	3.7208
Arbitration	2.02%	9.09%	33.33%	45.96%	9.60%	3.5203
Mediation	2.54%	13.71%	28.93%	45.18%	9.64%	3.4567
Litigation	1.01%	10.61%	56.57%	21.21%	10.61%	3.2983
Med-Arb	23.23%	7.58%	33.84%	24.75%	10.61%	2.9196

Negotiation is the most often utilized technique of resolving disputes in construction, followed by arbitration, mediation, litigation, and lastly Med-Arb.

4.7.3 Third Research Question

Research Question (3): *“What are the possible benefits of combining mediation and arbitration (the "Med-Arb" technique) to increase the efficiency of resolving conflicts in Bahrain construction projects?”*

The table below summarizes the potential advantages of using Med-Arb in Bahrain building projects based on survey responses.

Table 54. Summary of the benefits of Med-Arb

The benefits of using Med-Arb	Weighted average of the rank
Cost	5.68
Speed	5.66
Confidentiality	4.41
Procedure flexibility	4.22
Impartiality	3.57
Direct enforceability	2.52
Finality	1.98

A 20-year experienced Engineering Manager stated that: “The fewer legal practitioners participating in a dispute, the more secure the information.”

A lawyer with more than two decades of experience commented: “I would want to utilize Med-Arb to increase dispute resolution flexibility and provide my clients the option of resolving their problems more harmoniously through mediation, but with the assurance that the case would be resolved firmly by arbitration.”

A 20-year experienced Engineer stated: "It will undoubtedly save time, since the arbitrator will be aware with the facts from the mediation phase."

A Ministry of Justice-registered arbitrator with over two decades of expertise stated: "In order to accurately assess the potential of Med-Arb, it must be utilized, and assessments must be founded on numbers. We may infer that it saves time and money, but without real-world examples, we cannot be certain."

In general, there is a conviction in the theoretical potential of Med-Arb. Survey practitioners believe that the primary advantage of Med-Arb is the reduction of time and expense associated with resolving disputes. Others emphasize the process's flexibility, finality, and enforceability as a significant benefit above other dispute settlement techniques.

4.7.4 Fourth and Fifth Research Question

Research Question (4): *"What are the barriers to implementing the "Med-Arb" approach in the Bahraini construction sector and how may they be overcome?"*

Research Question (5): *"What are the concerns of having one person switching roles in a combined, mediation and arbitration?"*

When surveyors were asked to rate the barriers to Med-Arb implementation in Bahrain building projects, the following responses were received.

Table 55.summary of the barriers to implementing Med-Arb

The barriers to implementing Med-Arb	Weighted average of the rank
Lack of clauses about Med-Arb by the government institutes in Bahrain.	5.15
Lack of adequate experience in Med-Arb among arbitrators and legal experts	4.71
Parties might hold back information during mediation	3.76
Ethical concerns regarding the dual role of arbitrator and mediator	3.3
Lack of Impartiality	2.31
Lack of knowledge about the cost-efficiency of using Med-Arb	1.91

While the literature review recognised all of the above barriers, previous research on the Med-Arb technique has emphasized two critical issues: the potential of "coercion" and the chance that private information obtained during the "med phase" might alter the Med/Arbitrator's decision.

When the mediator is empowered to arbitrate the disagreement in the Arbitration phase of Med-Arb, he gets the capacity to coerce the parties into settlement (Peter, 1997).

The second major worry with the med-arb system is that the neutral may improperly utilize or influence private material received during mediation during arbitration (Blankenship, 2006). The fundamental function of a mediator is to foster communication between the parties and to help them in resolving a conflict. The fundamental function of an arbitrator is to determine the merits of the parties' claims and to make a decision. While serving as a mediator, the arbiter will have access to

sensitive information that they would not have throughout the arbitration process (Gu & Zhang, 2012).

Mr. Ahmed Hussain, the Chief Operating Officer and Acting General Registrar at the BCDR commented that: “In all circumstances, the mediator's role is to persuade parties to achieve an agreement, either through pure mediation or the Mediation phase of the Med-Arb process.” Then he added: “A skilled legal practitioner can maintain his or her objectivity and fairness. Any individual in the position of judge/arbitrator cannot make decisions based on his or her own expertise; rather, they must make decisions based on clear evidence. A skilled arbiter will have his or her own method of disclosing information throughout the arbitration process. I don't believe it matters whether the arbitrator is affected by the caucus, if his/her judgement is founded on the facts presented during the arbitration process and results in justice. “Lastly he stated: “The mediation process itself is more like to brainstorming with each party and thinking openly throughout the caucus. A mediator's role includes disclosing to the parties the legal circumstances of his or her actions. Even though the mediator lacks the authority to enforce decision, he or she may give impartial legal opinions. In the purest form of mediation, a competent mediator is one who can persuade parties to agree; if parties are not influenced, they will not decide. Bottom line, whether in pure mediation or Med-Arb, the mediator will have influence on the parties without imposing on their right to self-determination.”

While issues with Med-Arb exist, its risk may be decreased if administered properly.

4.7.5 Sixth Research Question

Research Question (6): *“What are the different interpretations of "Med-Arb" by international legal bodies and institutions? Do they have any "Med-Arb" provisions in their legal framework?”*

Despite the fact that Med-Arb is not codified in any country's law, it is advocated by a number of reputable arbitration bodies. The following is a summary of some organizations. Appendix B has more information.

To begin, there is CIETAC, which is China's oldest and most established arbitration organization. It was established in 1956 under the supervision of the China Council for International Trade Promotion. Article 47 of the 2015 CIETAC Arbitration Rules governs "Med-Arb" in China.

Second, the BAC was founded in 1995 and has developed to become one of the premier arbitration organizations in China. Additionally, it offers 'Med-Arb' services, which are governed principally by Article 42 of the BAC's Arbitration Rules.

Thirdly, SHIAC was founded in 1988 by the Shanghai People's Government. To date, it has arbitrated cases on behalf of parties from over 60 nations and regions. The "Med-Arb" processes were created under SHIAC Rules of Arbitration Articles 50 to 53.

Finally, the AAA was created in 1926 in reaction to the enactment of the Federal Arbitration Act, with the specific objective of helping in the implementation of arbitral procedures as a way of settling disputes outside of court. The AAA permits a "step" mediation-arbitration clause, which provides for mediation first and then arbitration if a dispute cannot be resolved within a given time.

Chapter 5: Conclusion and Recommendations

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5.1 Conclusion and Recommendations

It is now time to make a final decision about the "single-neutral Med-Arb." The survey findings indicate that the greater one's faith in the finality, cost-effectiveness, timeliness, confidentiality, impartiality, and capability of procedural standards to manage Med-Arb practice when established and monitored by legal authorities, the more amenable one is to include a Med-Arb clause in future contract terms. In other words, under the correct conditions, "Med-Arb" offers numerous significant benefits over mediation and arbitration alone and could be seen as a novel method of resolving construction disputes in Bahrain.

The results of the survey show that, according to respondents' assumptions about the most important success factors for using Med-Arb in Bahrain construction projects, cost is the most important factor, followed by speed, confidentiality, procedure flexibility, impartiality, direct enforceability, and finality. On the other hand, literature review shows that all the above factors except for impartiality and confidentiality are advantages to using Med-Arb.

When participants to the questionnaire were asked to rank the main barriers to using Mediation in Bahrain construction projects, "lack of Med-Arb clauses by Bahraini government institutes" came first, followed by "lack of adequate experience in Med-Arb among arbitrators and legal experts," "parties might withhold information during mediation," "ethical concerns regarding the dual role of arbitrator and mediator," "lack of impartiality," and at last "lack of knowledge about the cost-efficiency of using Med-Arb."

While respondents ranked confidentiality and impartiality third and fifth in a list of seven success factors for implementing Med-Arb in

Bahrain, they ranked "parties may withhold information during mediation," "ethical concerns regarding the dual role of arbitrator and mediator," and "lack of impartiality" as the third, fourth, and fifth main barriers to using Med-Arb in Bahrain, respectively. In contrast, a study of the literature highlights confidentiality and impartiality (potential of "coercion" and the chance that private information obtained during the "med phase" might alter the Med/Arbitrator's decision) as the two key concerns with employing Med-Arb that must be addressed properly.

Also, according to the findings of interviews with professionals in the field in Bahrain, Med-Arb should be viewed as a distinct dispute resolution method, rather than as a standard sequence of Mediation and Arbitration, to avoid the concerns that have been raised. By contrast, if legal practitioners accept that Med-Arb is a valid dispute resolution mechanism in its own right, that it is an authentic hybrid method, a genuine product that combines mediation and arbitration in a unique formation, rather than the result of simple addition of mediation and arbitration, in other words, if it is considered as "Med-Arb" and not "Mediation-Arbitration", then there is no reason to deny ourselves access to this novel form.

In the researcher's opinion, Med-Arb ought to be regulated as a form of dispute resolution. The present systems governing mediation and arbitration, respectively, do not fit the Med-Arb paradigm. They have shown an inability to satisfy the requirements of Med-Arb, which the researcher believe explains why some are hesitant to utilize it. This conclusion is based on an analysis of the opinions expressed by respondents when questioned about the main barriers to using Med-Arb. "Lack of Med-Arb clauses by Bahraini government institutes" and "lack of

adequate competence in Med-Arb among arbitrators and legal experts," respectively, are the two most significant barriers.

The following recommendations are made for future Med-Arb users:

- As per the results of questionnaire, it is advised that the Bahraini government enact regulations that include Med-Arb clauses to encourage parties to disputes and legal practitioners to employ Med-Arb in future contracts and to give guidance for using it. It is also recommended that Arbitrators/Mediators receive training on how to apply Med-Arb.
- Based on the findings of the questionnaire, literature analysis, and interviews with professionals, it appears that addressing the ethical concerns raised in the conclusion is critical to the success of Med-Arb. The findings of the interviews and the literature provide some procedural guidelines for legal entities in Bahrain to avoid ethical concerns:
 - Med-Arb shall be considered as an alternate dispute resolution method comprised of two different phases, mediation, and arbitration in which the mediator and arbitrator designated by the parties are the same individuals. Thus, the term "Med-Arb" would refer to the "same-neutral Med-Arb." By contrast, the term "Mediation-Arbitration" refers to a mediation followed by an arbitration hearing in which two distinct neutrals act as mediator and arbiter. The rules should state that they apply solely to Med-Arb as described before (same-neutral Med-Arb), not to Mediation-Arbitration.

- In contrast to "pure" mediation², the default norm should be that the Med-Arbiter may utilize information gathered during the mediation's joint sessions during the arbitration phase. The parties might forego this default rule by specifically prohibiting the Med-Arbiter from utilizing mediation material in the arbitration phase after being advised that studies show that individuals cannot ignore what they know.
- Parties should be permitted to nominate neutrals only if they can show competence and expertise in both mediation and arbitration.
- As is the case with other ADR techniques, parties must have total confidence and faith in the "Med- Arbiter's" impartiality. This way, parties will not feel compelled to decide during the "Med phase," knowing that the Med-Arbiter will ultimately reach a fair conclusion if no agreement is reached during the "Med phase."
- Parties cannot choose a Med-Arb process unless they understand what mediation and arbitration are, what a caucus is, or what the powerful benefits of caucusing are. This increased requirement to inform the parties may seem to be a significant burden, but it gives a chance to enlighten the parties about the several alternatives to settle a conflict, which can only improve the field of ADR.

Finally, when asked if they would be willing to use Med-Arb in their future contracts, 75.88 percent of respondents said "Yes." Thus, taking all of the above recommendations into account, Med-Arb can be regarded as a novel tool for resolving disputes in Bahraini construction projects.

² Pure Mediation: The original form of Mediation process in which parties address their disagreements with the aid of a skilled, neutral third person(s) who supports them in achieving a resolution.

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Appendix A

Research Questionnaire



University Of Bahrain
College of Engineering
Department of Mechanical Engineering
IEN598- Master Thesis

This questionnaire is conducted as part of a master's in engineering management thesis at University of Bahrain.

Ideal participants in this questionnaire:

Engineers, Architects, Engineering Managers, Legal practitioners, Academics, or any others who're (were) playing roles in the contracting process in Bahrain construction projects.

The aim of this research:

To study the "Overlap of Mediation* and arbitration**": A new tool for ADR*** Methods in Construction Projects in Bahrain".

The focus of this research: This study spots the light on the hybrid "**Med-Arb**" ***** method, one of the increasingly used mixed-mode **ADR*** processes which combines Mediation* and Arbitration**.

***Mediation:** One of the non-binding ADR methods carried out with the assistance of a neutral third-party.

****Arbitration:** One of the binding ADR methods carried out with by Arbitrator(s).

*****ADR:** Or "Alternative Dispute Resolution" refers to any measure of settling disputes which occur outside of the courtroom (e.g.: Mediation, Arbitration, etc.)

******Med-Arb:** Or "Mediation-Arbitration" is a hybrid alternative dispute resolution (ADR) process consisting of two stages. It involves the parties agreeing to permit a mediating power to convert automatically to being an arbitrator, and to convey a legally binding arbitral award, if the mediation stage fails to end in a settlement of the dispute. The arbitration stage of the method will be legally binding, and the arbitrator's award will be enforceable.

Justification of the study:

There's a gap in the research on hybrid ADR methods (particularly "Med-Arb") in Bahrain and the middle east.

Answering this questionnaire will not take more than **10 minutes**. Your participation in this study is highly appreciated.

Part 1: General information

1. **Total years of experience:** ☐ 1-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ Above 20 years
2. **Highest educational level:** ☐ High school ☐ Diploma ☐ Bachelor's degree ☐ Master's degree ☐ Doctoral degree
3. **Expertise:** ☐ Engineering ☐ Management ☐ Legal ☐ Academic ☐ Others
4. **Functional status:** ☐ Owner/owner representative ☐ Consultant ☐ Contractor ☐ Others
5. **The number of construction disputes which you were involved in:** ☐ None ☐ 1-10 ☐ 11-20 ☐ Above 20
6. **Are you aware of the hybrid Med-Arb process?** ☐ Yes ☐ No

Part 2: The present dispute resolution methods in Bahrain

Part 2(a): Please answer the listed questions where each number carries the meaning of the evaluation of the following:

1= Never, 2= Rarely, 3= Sometimes, 4= Often 5= Almost always

7. I confronted disputes in the construction projects I was part of:

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

8. I took a part in solving disputes in the construction projects I was part of:

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

9. The extent you think negotiation is used to solve disputes in Bahrain construction projects:

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

10. The extent you think mediation is used to solve disputes in Bahrain construction projects:

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

11. The extent you think arbitration is used to solve disputes in Bahrain construction projects: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	12. The extent you think litigation is used to solve disputes in Bahrain construction projects: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
13. The extent you think Med-Arb is used to solve disputes in Bahrain construction projects: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	
Part 2(b): Please specify the best dispute resolution method in your opinion for the following dispute causes in Bahrain construction projects:	
14. Financial disputes: ☐ Negotiation ☐ Arbitration ☐ Mediation ☐ Litigation ☐ Med-Arb	15. Breach in contract: ☐ Negotiation ☐ Arbitration ☐ Mediation ☐ Litigation ☐ Med-Arb
16. People's behavior related disputes: ☐ Negotiation ☐ Arbitration ☐ Mediation ☐ Litigation ☐ Med-Arb	17. Technical disputes: ☐ Negotiation ☐ Arbitration ☐ Mediation ☐ Litigation ☐ Med-Arb
18. Disputes due to owner issues: ☐ Negotiation ☐ Arbitration ☐ Mediation ☐ Litigation ☐ Med-Arb	19. Disputes due to consultant issues: ☐ Negotiation ☐ Arbitration ☐ Mediation ☐ Litigation ☐ Med-Arb
20. Disputes due to contractor issues: ☐ Negotiation ☐ Arbitration ☐ Mediation ☐ Litigation ☐ Med-Arb	21. Disputes over contract terms and specifications: ☐ Negotiation ☐ Arbitration ☐ Mediation ☐ Litigation ☐ Med-Arb
Part 3: The timeframe to resolve disputes in Bahrain Please identify the approximate/expected duration to resolve disputes using the following dispute resolution methods:	

22. Negotiation ☐ 1-3 months ☐ 6-12 months ☐ 3-5 years ☐ 3-6 months ☐ 1-3 years ☐ More than 5 years	23. Arbitration ☐ 1-3 months ☐ 6-12 months ☐ 3-5 years ☐ 3-6 months ☐ 1-3 years ☐ More than 5 years
24. Mediation ☐ 1-3 months ☐ 6-12 months ☐ 3-5 years ☐ 3-6 months ☐ 1-3 years ☐ More than 5 years	25. Litigation ☐ 1-3 months ☐ 6-12 months ☐ 3-5 years ☐ 3-6 months ☐ 1-3 years ☐ More than 5 years
26. Med-Arb ☐ 1-3 months ☐ 6-12 months ☐ 3-5 years ☐ 3-6 months ☐ 1-3 years ☐ More than 5 years	
Part 4: The critical success factors of using Med-Arb in Bahrain	
Part 4(a): Please rank the following from 1 to 7 in terms of importance: (1= the most important, 10= the least important) 27. The most critical success factor(s) for choosing the hybrid ADR methods (e.g.: “Med-Arb”) in Bahrain construction projects: ☐ Cost ☐ Speed ☐ Confidentiality ☐ Procedure flexibility ☐ Impartiality (i.e. equal treatment of all rivals or disputants) ☐ Direct enforceability ☐ Finality Others. Please specify (.....)	
Part 4(b): Kindly answer the questions below with “yes” or “No”. 28. Do you think that during Med-Arb, having a binding arbitration stage can motivate disputants to reach an agreement at mediation stage, so that arbitration stage is not proceeded with?	

☐ Yes

☐ No

Explain:

Part 5: The barriers of using Med-Arb in Bahrain

Please rank the following from 1 to 6 in terms of importance: (1= the most important, 7= the least important)

29. The most significant barriers which can prevent the use of Med-Arb in Bahrain construction projects:

() Lack of clause about Med-Arb by the governmental institutes in Bahrain.

() Ethical concerns regarding the dual role of arbitrator(s) and mediator(s).

() Lack of adequate experience in Med-Arb among arbitrators and engineers in Bahrain.

() Lack of Impartiality (i.e. equal treatment of all rivals or disputants)

() Parties might hold back information during mediation knowing that the Mediator can automatically convert to Arbitrator.

() Lack of knowledge about the cost-efficiency of using Med-Arb.

Part 6: The benefits for having one person switching roles (one person acting as both mediator and arbitrator) in a combined, mediation and arbitration

Kindly answer the questions below with “yes” or “No”.

30. Do you think it's cost-effective to hire one person which serves as both a mediator and an arbitrator?

☐ Yes

☐ No

31. Do you think that the combined process controlled by one person in Med-Arb can reduce the time required to settle disputes

☐ Yes

☐ No

32. Do you think that having one person acting as both mediator and arbitrator can preserve confidential information, that will be shared with one person only?

☐ Yes

☐ No

Part 7: The concerns of having one person switching roles in a combined, mediation and arbitration

Kindly answer the questions below with “yes” or “No”.

33. Do you think that having one person acting as both mediator and arbitrator can raise ethical concerns regarding the fairness of the Mediator/Arbitrator?

☐ Yes

☐ No

Explain:

Part 8: The future of Med-Arb in Bahrain:

Kindly answer the questions below with “yes” or “No”.

34. Do you think that Med-Arb process can be controlled if strict procedural standards are employed and monitored by legal authorities?

☐ Yes

☐ No

Explain:

35. Would you consider including a Med-Arb clause in your future agreements?

☐ Yes

☐ No

Explain:

Appendix B

“MED-ARB” CLAUSES:

1. Med-Arb Clause- American Arbitration Association³

“Any controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by mediation under the Construction Industry Mediation Procedures of the American Arbitration Association. If a party fails to respond to a written request for mediation within 30 days after service or fails to participate in any scheduled mediation conference, that party shall be deemed to have waived its right to mediate the issues in dispute. If the mediation does not result in settlement of the dispute within 30 days after the initial mediation conference or if a party has waived its right to mediate any issues in dispute, then any unresolved controversy or claim arising out of or relating to this contract or breach thereof shall be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.¹”

2. Med-Arb Clause- Chicago International Dispute Resolution Association⁴

“The parties agree that they will endeavor to settle any dispute, controversy, or claim arising out of or relating to this contract, which they are unable to settle through direct negotiations, by mediation administered by the Chicago International Dispute Resolution Association ("CIDRA"), One South Wacker Drive, Suite 2800, Chicago, Illinois 60654, USA, under its Mediation Rules before resorting to arbitration, litigation, or other dispute resolution procedure. If mediation is unsuccessful, the parties agree that they will submit such dispute, controversy, or claim to arbitration administered by CIDRA under its

Arbitration Rules and that a judgment on the award may be filed and enforced in accordance with those Rules and the rules and laws of the

³ [Construction Guide to Drafting ADR Clauses.pdf](#)

⁴ [Sample Mediation Followed by Arbitration \(cidra.org\)](#)

applicable jurisdiction. Any contractual requirement of filing a notice of claim with respect to the dispute submitted to mediation including a contractual requirement to file a notice of arbitration claim with CIDRA shall be suspended by mutual agreement until the conclusion of the CIDRA mediation proceedings.”

3. Med-Arb Clause- New York City Bar Association⁵

“If a dispute arises from or relates to this contract or the alleged breach thereof, and if the dispute cannot be settled through negotiations within 30 days, the parties agree to endeavour first to settle the dispute by mediation administered by the (name administrative provider) under its Commercial Mediation Procedures before resorting to arbitration.

Any dispute arising from or relating to this contract or alleged breach thereof shall be resolved by arbitration administered by the (name administrative provider) in accordance with its Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. If all parties to the dispute agree, a mediator involved in the parties’ mediation may be asked to serve as the arbitrator.”

4. Med-Arb Clause- Washington Arbitration & Mediation Service⁶

“In the event the dispute is not resolved through mediation, the parties agree to immediately proceed to arbitration, either on the same day or within [] days of the mediation date, by agreement of the parties. The parties agree to share equally in the costs of the arbitration and cooperate fully in the effort to schedule the arbitration hearing. The arbitrator shall have the authority to award all mediation and arbitration costs to the prevailing party, at the discretion of the arbitrator. The award of the arbitrator shall be considered final and binding on the parties.”

5. Med-Arb Clause- LCIA Arbitration and ADR⁷

“Mediation and Arbitration”:

⁵ [20073042-CompilationofSampleMediationClausesALTDIS442016.pdf \(nycbar.org\)](#)

⁶ [Mediation Clauses | Washington \(usamwa.com\)](#)

⁷ [Recommended Clauses \(lcia.org\)](#)

"In the event of a dispute arising out of or relating to this contract, including any question regarding its existence, validity or termination, the parties shall first seek settlement of that dispute by mediation in accordance with the LCIA Mediation Rules, which Rules are deemed to be incorporated by reference into this clause.

If the dispute is not settled by mediation within [.....] days of the commencement of the mediation, or such further period as the parties shall agree in writing, the dispute shall be referred to and finally resolved by arbitration under the LCIA Rules, which Rules are deemed to be incorporated by reference into this clause. The language to be used in the mediation and in the arbitration shall be [.....].

The governing law of the contract shall be the substantive law of [.....].

In any arbitration commenced pursuant to this clause,
(i) the number of arbitrators shall be [one/three]; and
(ii) the seat, or legal place, of arbitration shall be [City and/or Country]."

Appendix C

Med-Arb Practice Variations

Table 56. *Med-Arb Practice Variations. Adapted from: “Med-arb and its variants: Ethical Issues for Parties and Neutrals” by R. Fullerton, 2010, Dispute resolution journal, 65(2/3), 52.*

Method	Procedure	Benefits	Ethical Concerns	Procedural Concerns
Med-Arb Hybrid (Pure)	- First mediation, Second arbitration - One neutral - Ex parte* - Communication allowed in mediation phase.	Efficient	- No voluntary withdrawal - Risk of arbitrator bias from access to ex parte* communication	-
Overlapping Neutrals	- First mediation, Second arbitration - Two neutrals - Ex parte* - Communication allowed in mediation phase - Arbitrator hears only shared info in mediation	- Efficient - No risk of arbitrator bias	No voluntary withdrawal	- Arbitrator’s sitting in on mediation can alter interpersonal dynamics - More expensive
Plenary Med-Arb	- First mediation, Second arbitration - Single neutral - No ex parte* communication allowed in either phase	- Efficient - No risk of arbitrator bias	No voluntary withdrawal	Mediation weakened without confidential info
Braided Med-Arb	- First mediation, Second arbitration - One neutral - Ex parte* - Communication allowed in mediation phase. - Mediation allowed during breaks in arbitration phase	- Efficient - More opportunity for voluntary agreement	- No voluntary withdrawal - Risk of arbitrator bias - Parties may feel pressure to settle	-
Med-Arb with Optional Withdrawal	- First mediation, Second arbitration - One neutral - Ex parte* communication allowed in mediation phase. - Parties can forgo arbitration by withdrawing after mediation.	- Efficient - Withdrawal option allows greater self-determination	Risk of arbitrator bias	- No guarantee of finality - Possible manipulation by parties

Arb-Med	• First arbitration, Second mediation • One neutral • Ex parte* communication allowed in mediation phase. • Award disclosed after mediation if no settlement	• efficient • no risk of arbitrator bias	• No voluntary withdrawal • Parties may feel pressure to settle in mediation	• Arbitrator cannot alter award based on mediation
Note: *Ex parte: One-sided				

الملخص

يمثل البناء حصة كبيرة من الناتج المحلي الإجمالي العالمي ويستمر في التوسع. غالبًا ما تتم إجراءات البناء في بيئة معقدة وذات نتائج غير مؤكدة، مع وجود نزاعات متكررة. تنشأ نزاعات البناء عندما لا يتم التعامل مع المطالبات بكفاءة، اقتصادية وسرعة. قد يكون حل النزاعات مكلفًا ويستغرق وقتًا طويلاً. وبالتالي، يجب البحث الدائم ودراسة وسائل بديلة ومستحدثة تساهم في توفير الوقت والمال اللازمين لحل النزاعات. أطراف النزاع اللذين يسعون إلى إجراء سريع بشكل حيادي وفعال من حيث التكلفة لتسوية المنازعات لديها عدة خيارات لتسوية المنازعات ومنها الـ "Med-Arb" و التي تجمع بين الوساطة والتحكيم و تتكون من مرحلتين، "مرحلة الوساطة" و "مرحلة التحكيم". إذا لم يتمكن الوسيط من حل المسألة خلال "مرحلة الوساطة"، فإنه يصبح محكمًا، ويقوم بإجراء جلسة تحكيم، ويصدر حكمًا ملزمًا. على الرغم من أن نهج الـ "Med-Arb" قد تم إنشاؤه منذ عقود، إلا أن هناك فجوة دراسية حول الفوائد المحتملة لحل النزاعات عن طريق الـ "Med-Arb" في مملكة البحرين، وخاصةً النزاعات المتعلقة بمشاريع البناء. تشير نتائج هذه الدراسة إلى أنه كلما زاد ثقة الفرد في نهائية الـ "Med-Arb" وقدرتها على خفض التكلفة والوقت اللازم لتسوية النزاعات، وسرية إجراءاتها، وحياد الوسيط/المحكم، وكفاءة القواعد الإجرائية الوضعية لضبط ممارسة الـ "Med-Arb"، كان الفرد أكثر تقبلًا لتضمين بند الـ Med-Arb في عقود البناء. تشير التوصية إلى أن الممارسين القانونيين يجب أن يقرروا بأن الـ Med-Arb هي تقنية هجينة، منتج فريد يجمع بين الوساطة والتحكيم في تشكيل جديد، بدلاً من نتيجة تسلسل بسيط للوساطة ثم التحكيم. تشير التوصيات أيضًا إلى أنه يجب أن يكون المحكم قادرًا على استخدام المعلومات التي حصل عليها خلال مرحلة الوساطة في عملية التحكيم، ولكن للأطراف حق اختيار حظر المحكم من استخدام مواد الوساطة في مرحلة التحكيم بعد تحذيرهم من أن الدراسات تشير إلى أنه لا يمكن للمحكم تجاهل ما يعرفه من معلومات. كما تشير التوصيات إلى أنه يجب على الأطراف تعيين طرف ثالث من ذوي الخبرة في الوساطة والتحكيم ويجب أن يكون لديهم ثقة تامة في حيادية "المحكم/الوسيط". وفقًا لنتائج هذه الدراسة، يمكن اعتبار الـ Med-Arb تقنية مبتكرة لحل النزاعات في مشاريع البناء في البحرين إذا تم اتباع الإجراءات الموصي بها في هذا البحث.

جامعة البحرين
كلية الهندسة
قسم الهندسة الميكانيكية



تداخل الوساطة والتحكيم: وسيلة جديدة من الطرق البديلة لتسوية المنازعات في مشاريع البناء في البحرين (Med-Arb)

أطروحة مقدمة كجزء من متطلبات الحصول على
درجة الماجستير في الإدارة الهندسية

إعداد

فاطمة فاضل يوسف

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ديسمبر، 2021