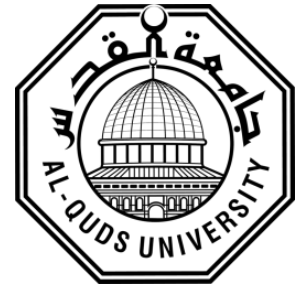


**Deanship of Graduate Studies
Al-Quds University**



**Understanding the Determinants Influencing Decision-
Makers' Adoption of Public-Private Partnership
Strategy in the Palestinian Healthcare Sector: A Mixed-
Methods Study**

Mohammad Mahmoud Mustafa Baniode

Ph.D. dissertation in Public Health

Jerusalem- Palestine

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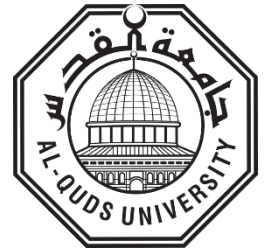
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**A Dissertation Submitted in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy in
Public Health / School of Public Health Al-Quds
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1447/2026



Dissertation Approval

**Understanding the Determinants Influencing Decision-Makers' Adoption
of Public-Private Partnership Strategy in the Palestinian Healthcare
Sector: A Mixed-Methods Study**

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Jerusalem-Palestine

1447/2026

Dedication

To my beloved parents, whose unconditional love, sacrifices, wisdom, and unwavering faith in me have been the foundation of every achievement in my life. Whatever I have become is a reflection of the values and strength you instilled in me.

To my beloved wife, Haneen Khateeb (Um Moslem), whose endless patience, steadfast support, and quiet strength carried me through the most challenging moments of this journey. Your encouragement gave me the courage to persevere when the path seemed long and difficult.

To my dear children, Mayar, Moslem, Waseem, and Kareem, whose love, laughter, and presence have been a constant source of joy, hope, and inspiration. Every accomplishment gains its true meaning because of you.

To my homeland, Palestine, the land of resilience, dignity, and hope. Your enduring spirit, despite hardship and adversity, continues to inspire generations to dream, strive, and remain steadfast in the pursuit of a better future.

This work is dedicated to all of you, with gratitude, love, and profound respect.

Mohammad Mahmoud Baniode

Declaration

I certify that this dissertation submitted for the degree of Doctor of Philosophy in Public Health, is the result of my own research, except where otherwise acknowledged, and that this Dissertation (or any part of the same material) has not been submitted for a higher degree to any other university or institution.

Signature 

Mohammad Mahmoud Baniode

Date: 24/05/2026

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Mohammad Mahmoud Baniode

Abstract

Background: Public–Private Partnership (PPP) is increasingly recognized as a policy mechanism for improving efficiency, quality, and sustainability in healthcare systems, particularly in resource-constrained settings. Although PPPs are included in Palestinian health policy discourse, their implementation remains limited. This study examined the determinants of decision-makers' intentions to adopt PPPs, as well as sectoral preferences and governance considerations influencing their implementation.

Methods: A sequential exploratory mixed-methods design was conducted between 2023 and 2025. The formative phase involved 14 participants to refine the study focus and inform instrument development. The qualitative phase comprised 17 in-depth interviews with key informants from public, private for-profit, and private not-for-profit health sectors. Findings informed the development of a questionnaire grounded in the Theory of Planned Behavior (TPB). The quantitative phase included 163 senior decision-makers from 42 hospitals in the West Bank (71% response rate). Data were analyzed using thematic analysis, descriptive statistics, non-parametric tests, and Structural Equation Modeling (SEM).

Results: The formative phase identified context-specific factors shaping PPP adoption and informed instrument development. Qualitative findings highlighted governance, financial, and operational challenges, including limited feasibility evidence, unclear stakeholder roles, weak coordination, and regulatory constraints. Sectoral differences were evident, with public-sector participants favoring regulated PPP models, private for-profit stakeholders preferring greater operational flexibility, and not-for-profit organizations emphasizing equity and access. Quantitative findings showed that Attitude toward the Behavior and Subjective Norm significantly predicted Behavioral Intention, whereas Perceived Behavioral Control and the mediating construct were not significant. The model explained 46.5% of the variance in Behavioral Intention ($R^2 = 0.465$). Policy analysis revealed broad support for management and service-operation PPP models in which government retains asset ownership while private partners manage service delivery. Full privatization was consistently rejected. Integration of findings indicated that PPP adoption is influenced by behavioral factors, governance arrangements, institutional readiness, and sector-specific preferences.

Conclusion: PPP adoption intentions in the Palestinian health sector are primarily driven by attitudinal and normative factors, while implementation feasibility is shaped by governance and institutional conditions. Effective PPP development requires strengthened regulatory frameworks, improved inter-sectoral coordination, and context-sensitive partnership models aligned with stakeholder priorities.

Keywords: Public–Private Partnership, Health Policy, Theory of Planned Behavior, Structural Equation Modeling, Mixed Methods, Healthcare Governance.

Table of Contents

Declaration.....	I
Acknowledgments	II
Abstract.....	III
Table of Contents	IV
List of Tables	VIII
List of Figures.....	X
List of Appendices	XI
List of Abbreviations	XII
Chapter One: Introduction	1
1.1 Background and Context.....	1
1.2 Problem Statement.....	5
1.3 Significance of the Study	6
1.4 Overall Objective and Specific Objectives.....	7
1.4.1 Overall Objective.....	7
1.4.2 Specific Objectives	7
1.5 Research Questions.....	7
1.6 Hypothesis	7
1. 7 Study Assumptions	8
1.8 Dissertation Outline	8
Chapter Two: Literature Review and Conceptual Framework.....	10
2.1 Introduction.....	10
2.2 Literature Review	11
2.2.1 What is Public Private Partnership (PPPs)?	11
2.2.2 PPP Modalities	13
2.2.3 Chronology and evolution of PPP.....	15
2.2.4 PPP uses and leading examples in the healthcare industry	16
2.2.5 Global Examples in Healthcare initiatives.....	17
2.2.6 Key success factors, challenges and benefits of PPP implementation in LMICs	18
2.2.7 Common Challenges	19
Summary of literature gaps on the behavioral factors influencing DMs' choices.....	20
2.3 Theoretical Framework	22
2.3.1 Theory of Planned Behavior (TPB).....	22
2.3.2 Contracting Theory	22
2.3.3 Agency Theory.....	22
2.3.4 Institutional Theory.....	23
2.3.5 Main Constructs in Theoretical Framework.....	23
2.3.6 What are the Commonalities Across Theories?.....	24
2.3.7 Critical Evaluation of the Theories.....	24
2.4 Conceptual Framework	25
2.5 Operational Definition.....	28

2.5.1 Attitude toward the Behavior	29
2.5.2 Subjective Norm	29
2.5.3 Perceived Behavioral Control	30
2.5.4 Facilitating Conditions.....	30
2.5.5 Behavior Intention	31
2.5.6 PPP Determinants	31
2.6 Individual characteristics	32
2.6.1 Gender	32
2.6.2 Age.....	32
2.6.3 Education Level.....	32
2.6.4 Experience.....	33
2.6.5 Type of Health Sector.....	33
2.7 Summary	33
Chapter Three: Methodology.....	34
3.1 Introduction	34
3.2 Study Design	35
3.2.1 Study Settings:.....	38
3.2.2 Study Tools.....	39
3.2.3 Study population and sampling	39
3.2.4 Eligibility criteria.....	39
3.2.5 Study Sampling	40
3.2.6 Sampling frame	40
3.3 Qualitative Part: Interview Guide Development	41
3.4 Quantitative Part: Questionnaire Development	42
3.4.1 Structural Equation Modeling (SEM).....	44
3.5 Data Collection and Management	45
3.6 Pilot Study, Instrument Validation, Reliability, and Trustworthiness	46
3.6.1 Reliability.....	46
3.6.2 Trustworthiness of the Qualitative Component.....	47
3.7 Data analysis	48
3.7.1 Justification for Non-Parametric Analysis	49
3.8 Ethical considerations	49
3.9 Study Limitations	50
3.10 Summary.....	50
Chapter Four: Results	52
4.1 Introduction	52
4.2 Formative Research (Exploratory Phase).....	53
4.3 Qualitative Phase.....	55
4.3.1 Main Qualitative Findings	55
4.4 Quantitative Phase	60
4.4.1 Data Screening and Analysis Methods	60
4.4.2 PLS-SEM Model evaluation	61

4.4.3 Validity and Reliability Evaluation of the SEM Model	63
A. Validity Evaluation	63
A.1 Content Validity	63
A.2 Convergent Validity	63
A.2.1 Outer Loading	63
A.2.2 Average Variance Extracted	65
A.3 Discriminant validity	66
A3.1 Cross Loading	66
A3.2 Fornell-Larcker criterion	67
A3.3 Heterotrait-monotrait ratio of correlations (HTMT)	67
B. Reliability (Internal Consistency)	67
B1. Cronbach's Alpha	68
B2. Composite Reliability	68
4.5 Descriptive Statistics	68
4.5.1 Reflection on the Sampling Frame	68
4.5.2 Sample Characteristics	69
4.5.3 Attitude toward the Behavior Analysis	70
4.5.4 Subjective Norm Analysis	71
4.5.5 Perceived Behavioral Control Analysis	72
4.5.6 Facilitating Condition Analysis	73
4.5.7 Behavior Intention Analysis	74
4.5.8 Determinants of Public-Private Partnership in Health Projects	75
4.5.9 Trends and Opinions of Decision Makers Regarding PPPs	76
4.5.10 Preferred Options for PPP models in Health Projects/Services from the Perspective of Public and Private Sector DM	78
4.5.11 Governance (Transparency, Trust, Accountability, and Clarity of vision)	79
4.5.12 Structural model evaluation	80
4.5.12.1 Collinearity test	80
4.5.12.2 Coefficient of determination (R^2)	81
4.5.12.3 Predictive relevance (Q^2)	81
4.5.12.4 Effect size (f^2)	81
4.6 Structural Model Assessment Using PLS-SEM	83
4.7 Research hypotheses assessment	83
4.7.1 Result of the Hypothesis Test	84
4.7.2 Individual Hypotheses Interpretation	85
4.7.3 Hypotheses with Mediating factors	86
4.8 Mixed-Methods Findings (Results Integration)	87
4.9 Health Services Purchasing Policy Analysis	90
4.10 Summary	92
Chapter :Five Discussion	93
5.1 Introduction	93
5.2 The formative research	93

5.3 Historical foundation	94
5.4 Qualitative Findings: Perceptions and Attitudes of Decision-Makers	95
5.5 Factors Affecting Decision-Makers' Intentions	99
5.5.1 Attitude toward the Behavior	100
5.5.2 Subjective Norm.....	101
5.5.3 Perceived Behavioral Control.....	102
5.6 Contribution to Knowledge	102
5.7 Theoretical and Practical Implications	103
5.8 Limitations and Future Research	104
5.9 Conclusion.....	105
5.10 Recommendations	106
Reference	107
Annexes	119
References.....	152
ملخص.....	156

List of Tables

Table 2.1-A: Summary of Main PPP Modalities.....	14
Table 2.1-B: Summary of Main PPP Modalities.....	15
Table 2.2: Key Milestones in PPP Evolution.....	15
Table 2.3: Key Success Factors.....	19
Table 2.4: Review of Theory and Associated Constructs.....	23
Table 2.5 Evaluations of Theory Review	24
Table 2.6 Conceptual path model (relations) and hypothesis.....	26
Table 2.6.1: Operational Classification and Structural Roles of Research Framework Variables.....	27
Table 2.7: Summarizing the four constructs and their influence on PPP adoption decisions.	29
Table 2.8 attitude toward the behavior Construct and its related items.....	29
Table 2.9: Subjective Norm Construct and its related items	29
Table 2.10: Perceived Behavioral Control Construct and its related items.....	30
Table 2.11: Facilitating Condition Construct and its related items	30
Table 2.12: Behavior Intention Construct and its related items.....	31
Three items were employed to assess this construct, as depicted in Table 2.12	31
Table 2.13: Mediating Factor (PPP Determinants) Construct and its related items	32
Table 2.14: Table summarizing how demographic and sectoral factors influence PPP adoption decisions.	33
Table 3. 1: Summary of study design	36
Table 3.2: List of targeted institutions across the public and private healthcare sector in WB	40
Table 3.3: Description of questionnaire contents.....	43
Table 3.4: Study factors of SEM Model.....	45
Table 3.5: Cronbach's Alpha Reliability Coefficients for the Study Constructs in the Pilot and Final Study Samples	47
Table 4.1: Summary of formative research results (prior research implementation).....	54
Table 4.2: Profile of Key Informants	55
Table 4.3-A: Main Themes emerged from qualitative study.....	56
Table 4.2-B: Main Themes emerged from qualitative study.....	57
Table 4.3-C: Main Themes emerged from qualitative study.....	58
Table 4.3-D: Main Themes emerged from qualitative study	59
Table 4.4: Mean score interpretation	60
Table 4.5: Measurement model evaluation criteria	61
Table 4.6: Structural model evaluation criteria	62
Table 4.7: Outer loading of indicators	64
Table 4.8: Result of average variance extracted (AVE).....	65
Table 4.9: Result of cross loading.....	66

Table 4.10: Fornell-Larcker criterion for the first-order construct constructs	67
Table 4.11: Heterotrait-monotrait ratio result	67
Table 4.12: Result of Cronbach's α (CA) and the Composite Reliability (CR) coefficients	68
Table 4.13: Summary of research phases and study samples (Participants)	69
Table 4.14: Study participant characteristics	70
Table 4.15: Descriptive statistics for items on Attitude toward the Behavior	71
Table 4.16: Descriptive statistics for items on the Subjective Norm	72
Table 4.17: Descriptive statistics for items on the Perceived behavior Control	73
Table 4.18: Descriptive statistics for items on facilitating condition.....	73
Table 4.19: Descriptive statistics for items on Behavior Intention.....	74
Table 4.20-A: Descriptive statistics for on the determinants of PPP in health projects	75
Table 4.20-B: Descriptive statistics for on the determinants of PPP in health projects.....	76
Table 4.21: Descriptive statistics for items on trends and opinions on PPP.....	77
Table 4.22: Descriptive statistics for items on Preferred Options for PPP Models in Health Projects/Services from the Perspective of Public and Private Sector Decision-Makers.....	78
Table 4.23: Descriptive statistics for items on Governance (Transparency, Trust, Accountability, and Clarity)	79
Table 4.24: Collinearity Assessment	80
Table 4.25: Result of R^2	81
Table 4.26: Result of Q^2	81
Table 4.27: Result of effect size (f^2)	82
Table 4.28: Structural Model Path Coefficients and Hypothesis Testing Results.....	85
Table 4.29: Result of indirect effects.....	86
Table 4.30-A: Integrated and Triangulated Results from Quantitative, Qualitative, Formative, on PPP Adoption in the Palestinian Health Sector.....	87
Table 4.31: Policy Analysis of Health Services Purchasing under the MoH Based on Gilson and Walt (1993) Framework.....	91
Table 5.1: TPB Constructs and Their Influence on PPP Adoption	99
Table 5.2: Table comparing the effects of TPB constructs on PPP adoption intention in healthcare.....	101

List of Figures

Figure 2.1: PPP Map of literature	11
Figure 2.2 Study Conceptual Model.....	27
Figure 3.1: The sequential phases and methodological steps	36
Figure 3.2: Sequential Exploratory Mixed Methods Design.....	38
Figure 4.1 Main phases of study analysis.....	53
Figure 4.2. Code Cloud Visualization	55
Figure 4.3 PLS-SEM of the research model.	62
Figure 4.4: Measurement modal; value in the path represents outer loading of the indicator.	65
Figure 4.5: Result of path analysis; values in the inner model represent path coefficient (p- value); values in the outer model represent p-value	84
Figure 4.6 Proposed Integrated Interpretive Model for PPP Adoption	89
Figure 5.1 Policy decision tool for the most appropriate PPP Modality	104

List of Appendices

Annex 01: List of targeted DMs – In depth interview	119
Annex 02: List of targeted Entities by sector – Survey Questionnaire	120
Annex 03: Interview Guide	124
Annex 04 – Survey Questionnaire	125
Annex 05: Administrative approval	131
Annex 06: Al Quds University Review Board - Ethical Approval.....	132
Annex 07: Data collection SOP.....	133
Annex 08: Author’s Published Paper (PhD Requirements)	134

List of Abbreviations

AB	Attitude toward the Behavior
BI	Behavior Intention
DMs	Decision Makers
FC	Facilitating Condition
GDP	Gross Domestic Product
GHI	Governmental Health Insurance
LMICs	Low- and Middle-Income countries
MF	Mediating Factor
MoE	Ministry of Economy
MoF	Ministry of Finance
MoH	Ministry of Health
NHS	National Health Service
NIS	New Israeli Shekel
OECD	Organization for Economic Co-operation and Development
PBC	Perceived Behavioral Control
PHC	Primary Health Care
PPP	Public Private Partnership
SDGs	Sustainable Development Goals
SN	Subjective Norm
SPSS	Statistical Package for Social Science
TPB	Theory of Planned Behavior
UHC	Universal Health Coverage
WB	West Bank
SEM	Structural Equation Model
PLS-SEM	Partial Least Squares-Structural Equation Modeling

Chapter One

Introduction

1.1 Background and Context

Public-private partnership (PPP) is increasingly recognized as an alternative governance and financing approach for the delivery of public services, including healthcare, particularly in resource-constrained settings. In general terms, PPP refers to a long-term contractual arrangement between public and private actors through which responsibilities, resources, risks, and returns are allocated to achieve agreed public objectives. In the health sector, PPP arrangements may take several forms, including service delivery contracts, management arrangements, infrastructure development, equipment provision, and other collaborative models tailored to system needs. International experience shows that PPP can improve efficiency, expand service capacity, and mobilize technical and financial resources; however, the evidence also indicates that PPPs are not inherently successful and may generate important governance, equity, and accountability concerns when poorly designed or weakly regulated.

Historically, partnerships between public and private sectors have served as facilitators and accelerators for developmental initiatives in various countries. The member states of the United Nations adopted the Sustainable Development Goals (SDGs), which encompass target 3.8: “achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, access to safe, effective, quality, and affordable essential medicines and vaccines for all” (United Nations, 2015). The Organization for Economic Co-operation and Development (OECD), the World Bank, and the United Nations Economic Commission for Europe (UNECE) promote essential principles that govern PPPs, including transparency, accountability, and stakeholder participation. These principles are crucial for risk mitigation and improving the efficacy of PPP agreements (Economic Commission for Europe Committee, 2022).

The private sector’s involvement in the healthcare sector is expanding globally and in the Eastern Mediterranean Region (Balkhy & Aylward, 2024). Although the Palestinian government’s resources are highly limited, it actively encourages the private sector to invest in the health sector (Ministry of Health, 2024)(MOH, n.d.). Governments around the world have increasingly used PPPs to develop, finance, and deliver public health infrastructure and services (Roehrich et al., 2014). PPPs have emerged as vital mechanisms for fostering

healthcare innovation, as seen in the UK's NHS Innovation Accelerator, which fast-tracks the adoption of new technologies (Abdul et al., 2024). Locally, existing studies in Palestine have predominantly explored PPP adoption in non-health sectors, such as transportation, power, and the water industry, infrastructure improvement (Tawafsheh et al., 2015). Another local study has focused on the level of coordination and trust between the public and private sectors (Shahwan & Soudah, 2005) and the expansion of private sector involvement in service provision (Harb, 2020). One detailed study addressed the Private Health Sector in the Palestinian healthcare system, which aimed to assess the involvement of the private sector in health care (both for-profit and not-for-profit) and its engagement in current efforts to attain UHC (WHO, 2023). Therefore, it is important to examine Palestinian decision-makers' perceptions and intentions regarding the adoption of PPP arrangements within the healthcare sector. Understanding stakeholders' readiness and intentions toward partnership is essential for informing future PPP adoption. In Palestine, there is still limited knowledge regarding how PPPs could help improve and strengthen healthcare system performance. Additionally, there is a lack of research on PPP strategy in the Arab region, which shows that more research is needed (Almalki & Al-Hanawi, 2018).

Palestine is a country in chronic conflict and economic emergency (Hamdan & Defever, 2002). The Palestinian economy is characterized as a developing economy, and it is still dependent on the Israeli economy and on the political dynamics (Palestine Economic Policy Research Institute, 2017). The World Bank review of the health sector shows serious challenges in the healthcare sector including financial fluctuation and uncertain aid flow, increasing cost of medical referrals, inefficiency and duplication of services, and excessive focus on tertiary care (World Bank, 2016). This review also points to the fragile sustainability of the Governmental Health Insurance (GHI) scheme. The increasing costs of GHI are attributed to an increasing number of GHI non-contributing enrollees (Abu-Zaineh et al., 2011). The Palestinian public sector is the major health care provider mainly for Primary Health Care- PHC and secondary care (Ministry of Health, 2024). The private non-profit sector and UNRWA actively contribute to health care provision, particularly for health care seekers, vulnerable populations, and refugees. Currently, private for-profit institutions remain among the main providers of tertiary health care services, including treatment and diagnoses (Ministry of Health, 2024). The government purchases tertiary services from domestic as well as regional providers. The Palestinian public healthcare sector is suffering from a deficiency in specialized human resources, equipment, and facilities (Falah et al., 2020).

The Palestinian health system is a mixed and pluralistic healthcare system comprising four principal providers: the Palestinian Ministry of Health (MoH), the United Nations Relief and Works Agency for Palestine Refugees (UNRWA), non-governmental organizations (NGOs), and the private sector. Healthcare services are delivered through a network of primary, secondary, and tertiary healthcare facilities across the West Bank and Gaza Strip. In 2023, Palestine had approximately 767 primary healthcare centers (PHCs), including 608 centers in the West Bank and 159 centers in the Gaza Strip. Of the PHCs operating in the West Bank, 441 centers (72.5%) were managed by the Ministry of Health, while the remainder were operated by UNRWA, NGOs, and Military Medical Services (Ministry of Health, 2024).

The hospital sector consists of governmental, NGO, military, and private hospitals providing secondary and tertiary healthcare services. According to the Ministry of Health Annual Report 2023, the West Bank had 53 hospitals with approximately 6,146 hospital beds, while the Gaza Strip had 35 hospitals with 2,614 beds prior to the October 2023 war, resulting in a total capacity of approximately 88 hospitals and 8,760 beds across Palestine (MoH, 2024). The Ministry of Health remains the largest public provider and is responsible for the majority of hospital and primary healthcare services, while specialized services are frequently delivered through referral arrangements involving NGO, private, and East Jerusalem hospitals (WHO EMRO, 2022). The governance and regulation of the Palestinian health sector are primarily guided by the Palestinian Public Health Law No. 20 of 2004, which serves as the principal legislative framework governing healthcare delivery, public health functions, and the stewardship role of the Ministry of Health. Given the prolonged suspension of the Palestinian Legislative Council, the Public Health Law and executive regulations have become the primary legal instruments guiding health sector governance and policy implementation (WHO EMRO, 2022).

The Palestinian health system serves a population of approximately 5.48 million people and has achieved notable improvements in life expectancy and health indicators over recent decades. However, the system continues to face substantial structural challenges, including fragmentation between the West Bank and Gaza Strip, dependence on donor assistance, increasing demand for specialized services, and chronic fiscal constraints. The withholding of Palestinian clearance revenues by Israel has further exacerbated the financial crisis of the Palestinian Authority, resulting in delayed salary payments, mounting debts to healthcare providers, and recurrent public-sector strikes that have negatively affected healthcare delivery and workforce motivation. These conditions have increased reliance on external referrals and purchased healthcare services, placing additional demands on limited health sector resources (Baniode & Hamdan, 2026).

Since October 2023, the war on Gaza has imposed unprecedented strain on the Palestinian healthcare system. Health facilities have been directly targeted, resulting in widespread destruction of hospitals, primary healthcare centers, ambulances, and critical infrastructure. By the end of 2023, 19 of Gaza's 35 hospitals were no longer operational and only 16 remained partially functional, while available hospital beds declined from 2,614 to approximately 1,207 beds. More than 53 primary healthcare centers became non-functional, severely restricting access to essential services (MoH, 2024). The consequences of the war have also extended to the West Bank, where movement restrictions, checkpoints, and barriers have impeded access to healthcare facilities for both patients and healthcare workers, further burdening the health system (Baniode & Hamdan, 2026). Collectively, these political, financial, and humanitarian factors continue to undermine health system resilience and sustainability, highlighting the need for strengthened governance, strategic purchasing, service localization, and innovative financing approaches to ensure equitable and accessible healthcare for all Palestinians (Mataria et al., 2009; WHO EMRO, 2022). Gross Domestic Product (GDP) per capita declined from USD 3,611 in 2021 to USD 2,854 in the first quarter of 2025 because of the war on Gaza and its broader economic consequences in the West Bank (PCBS, 2025). As of the writing of this dissertation, the latest National Health Account released in 2022 indicates that health expenditure constitutes 9.7% of GDP, totaling 1,860.2

million USD. Still, 33.6% of health finance is dependent on household out-of-pocket expenditures, which raises considerable equity issues (Palestinian Central Bureau of Statistics & Ministry of Health, 2022). This challenge may partially explain the low uptake of voluntary health insurance, which constitutes only 16% of the financing schemes (Palestinian Central Bureau of Statistics & Ministry of Health, 2024). The low uptake of voluntary health insurance may reflect limited public confidence in the quality and coverage of available health services, which could contribute to the high level of out-of-pocket expenditure and the tendency of patients to seek healthcare services outside the public system. In some cases, enrollment in insurance schemes is primarily motivated by securing eligibility for referral services rather than confidence in the healthcare system itself. In 2023, 8.9% of medical referrals were made for treatment outside Palestine. Data from 2022–2023 indicated that the Ministry of Health relied heavily on health service purchasing, with 90% of referrals (100,650 out of 110,495) delivered outside the public sector.

The volume of purchased services increased significantly, from 61,635 in 2022 to 110,495 in 2023 (Ministry of Health, 2024). This surge in external referrals highlights the financial strain on the health sector, with Ministry of Health- MoH expenditures on service procurement reaching 1.13 billion New Israeli Shekel (NIS) (approximately 319 million USD) in 2023, representing 40.2% of total health expenditures (Ministry of Health, 2024). The Palestinian health financing system is characterized by fragmentation, high out-of-pocket expenditure, and increasing reliance on purchasing healthcare services from non-governmental providers. Despite the expansion of GHI coverage, out-of-pocket payments remained a major source of health financing, reflecting weak risk-pooling mechanisms and shallow financial protection. The MoH continues to play a dominant stewardship and financing role; however, constrained fiscal capacity, increasing referral costs, and growing demand for specialized services have intensified the purchasing of healthcare services from private and non-governmental providers. The current purchasing arrangements are largely passive and fragmented, with limited strategic contracting, regulation, and coordination mechanisms. In this context, strengthening structured purchasing arrangements and developing governance-based PPP frameworks have increasingly emerged as important policy considerations for improving efficiency, service integration, and health system sustainability within the Palestinian healthcare sector. These challenges underscore the urgent need for innovative strategies, such as PPPs, to address inefficiencies, reduce reliance on external providers, and enhance service delivery within the local healthcare system. Public entities often emphasize transparency and accountability while private partners focus on financial viability and risk management (Busco et al., 2024). In a study of waste-to-energy projects in Nepal, financial and market risks were perceived differently, with public stakeholders ranking them lower than private stakeholders (Busco et al., 2024). The perception of risk such as corruption varies between sectors thus impacting project performance and stakeholder satisfaction (Samoilov et al., 2024) (Maqbool & Sridhar, 2024). Conflicting interests can arise, particularly in megaprojects where public stakeholders prioritize social outcomes over profitability (Busco et al., 2024). This study aims to provide an in-depth understanding of the willingness, intentions, and perceptions of Palestinian decision-makers to adopt PPP in the healthcare sector. In addition to examining awareness and knowledge of Decision Makers -DMs (individuals who are responsible for influencing,

shaping, and making decisions related to the adoption of PPP strategies within both the public and private sectors (for-profit and not-for-profit entities))regarding Palestinian health system capacity, feasibility of implementation, advantages, and disadvantages in the local context, the study will also examine factors that might affect its adoption. The generated knowledge will help to enlighten policy making and provide strategy advice for decision-makers in both public and private.

1.2 Problem Statement

The Palestinian health sector operates under conditions of chronic political instability, fiscal fragility, and structural dependence, all of which constrain long-term planning and service expansion. Health expenditure has risen substantially over time, while the public system continues to face persistent challenges related to financing volatility, rising referral costs, fragmented purchasing arrangements, inefficiencies in service provision, and limited capacity in specialized care. Although the Ministry of Health remains the main steward and provider of primary and secondary care, a significant proportion of specialized and tertiary services is purchased from non-governmental, private, and external providers. This pattern reflects both the system's adaptive capacity and its structural weaknesses, including shortages in specialized human resources, equipment, and infrastructure. In such a context, PPP has emerged as a potentially relevant policy option for strengthening governance, improving strategic purchasing, and enhancing service delivery sustainability.

In Palestine, up to this date, the available evidence and knowledge on the readiness, acceptance, pattern and the factors affecting the decision makers decision of adoption is still very limited. Despite the global recognition of PPP as a strategic approach to strengthen healthcare systems, in Palestine there remains a significant gap in empirical evidence concerning the readiness, acceptance, and underlying factors that influence decision-makers' adoption of such strategies. This knowledge deficit constrains both scholarly understanding and policy formulation, thereby limiting the development of context-specific frameworks that could guide effective PPP implementation in the Palestinian healthcare sector. The Palestinian health sector operates in a context of rising demand for health services, constrained public resources, and increasing reliance on external purchasing of services to sustain service delivery. While the public sector remains the main steward of the health system, its capacity to fully meet population needs is limited, leading to an expanding role of the private sector in service provision. However, this expansion has occurred in an ad hoc and fragmented manner, primarily through procurement and referral arrangements rather than through a structured and regulated public-private partnership (PPP) framework.

Despite the expanding interaction between public and private providers, PPPs in the Palestinian healthcare sector remain weakly institutionalized and insufficiently understood as a formal policy option. Existing arrangements are driven largely by immediate service needs and purchasing pressures rather than by a coherent governance framework that defines roles, allocates risk, regulates accountability, and aligns collaboration with national health priorities. At the same time, the empirical evidence on what shapes decision-makers' intentions to adopt PPP strategies in Palestine remains limited. This creates both a policy gap and a scholarly gap: policymakers lack context-specific evidence to guide structured PPP development, while academic literature offers insufficient insight into how behavioral, institutional, and governance-related factors interact in shaping pre-adoption decision-making. Accordingly, the central problem addressed in this study is the limited understanding of the determinants influencing decision-makers' intention to adopt PPP

strategies within a fragile, weakly institutionalized, and rapidly evolving healthcare environment.

Finally, this study does not assess the performance or effectiveness of PPP projects. Instead, it focuses on PPP adoption as a pre-adoption decision-making process within the Palestinian healthcare sector, with particular emphasis on decision-makers' intention formation. While the Theory of Planned Behavior-TPB is primarily used to explain individual-level intention formation among decision-makers, its application in this study is complemented by institutional, political, and economic determinants to reflect the multi-level nature of PPP adoption in the healthcare sector. This framing ensures conceptual clarity by distinguishing between intention formation and implementation outcomes and positions the study as an analysis of governance and policy adoption processes rather than PPP performance evaluation.

1.3 Significance of the Study

This study makes three interrelated contributions. First, it offers a conceptual contribution by extending the application of the Theory of Planned Behavior to the study of PPP adoption within a health policy context and by situating behavioral intention within a broader institutional and governance environment. Second, it makes an empirical contribution by generating context-specific evidence on the determinants influencing decision-makers' intention to adopt PPP strategies in the Palestinian healthcare sector using a mixed-methods design. Third, it provides a policy contribution by producing evidence that can inform the design of more coherent governance, regulatory, and strategic purchasing frameworks for public-private collaboration in healthcare.

As a mixed methods study, it will capture decision-makers' preferences (from both the public sector and the private for-profit and not-for-profit sectors) regarding PPP models in health projects and services, while also highlighting critical governance dimensions such as trust, accountability, and clarity. Furthermore, the study will emphasize the importance of feasibility assessments, economic evaluations, and a clear delineation of healthcare providers' roles, thereby informing the strategic and operational directions necessary for effective PPP implementation. Therefore, the findings will serve as a foundation for future PPP initiatives in the Palestinian healthcare sector and contribute to both policy development and scholarly discourse.

From an academic perspective, the study contributes to the literature on PPP adoption by operationalizing key behavioral constructs within a mixed-methods design and examining their relevance in a fragile and politically constrained health system. Although the Theory of Planned Behavior serves as the primary explanatory framework, the study also recognizes the importance of institutional and governance conditions in shaping intention formation. In this sense, the dissertation may provide a useful analytical basis for future research examining whether decision-makers' intention is explained primarily by core TPB constructs or by the interaction between behavioral intention and broader contextual determinants.

1.4 Overall Objective and Specific Objectives

1.4.1 Overall Objective

This study examines the determinants influencing decision-makers' intentions toward the adoption of PPP strategy in the Palestinian healthcare system.

1.4.2 Specific Objectives

- To explore the perceptions of decision-makers toward introducing the PPP strategy in the Palestinian health care system.
- To examine the factors influencing the decision makers-DM's intentions to adopt PPP; i.e., Attitude toward the Behavior-AB, Subjective Norm-SN, and perceived behavioral control – PBC on the intention of key stakeholders to adopt PPP strategies in the Palestinian healthcare sector.
- To assess the effect of determinants in shaping stakeholders' intention and willingness to engage in PPP initiatives within the Palestinian healthcare system.

1.5 Research Questions

Three main research questions were developed to examine the determinants influencing decision-makers' intentions to adopt PPP strategies in the Palestinian healthcare sector:

1. What are decision-makers' perceptions of adopting PPP strategies in the Palestinian healthcare sector, and which PPP models are viewed as most appropriate within this context?
2. How do attitude toward the behavior, subjective norm, and perceived behavioral control influence decision-makers' intention to adopt PPP strategies in the Palestinian healthcare sector?
3. How do institutional and governance-related determinants shape decision-makers' perceptions and intention to engage in PPP initiatives within the Palestinian healthcare sector?

1.6 Hypothesis

Based on the Theory of Planned Behavior the adoption of PPP strategies in the healthcare sector is influenced by three key constructs: Attitude toward the Behavior, subjective norms, and perceived behavioral control. The following hypotheses are proposed aligned with research questions and TPB constructs:

H1: A positive attitude toward PPP strategies significantly increases the intention to adopt PPP in the Palestinian health sector.

H2: Subjective Norm positively influences the intention to adopt PPP strategies.

H3: Higher perceived behavioral control positively influences the intention to adopt PPP.

H4: Institutional and contextual determinants mediate the relationship between Perceived Behavioral Control and Behavioral Intention toward PPP adoption.

1. 7 Study Assumptions

1. The study population is sufficiently knowledgeable and experienced in the Palestinian healthcare sector to use PPP strategies.
2. The results of this study are specific to the Palestinian healthcare system and might not apply to other areas without adjustments.
3. The validity and reliability of the data were guaranteed by the respondents' candid and objective responses to the questionnaire and in-depth interviews.

1.8 Dissertation Outline

This section provides a brief overview of the five main chapters of this dissertation and the steps undertaken to fulfil the research aim and objectives.

Chapter 1 provides a mind map of the thesis structure. It first introduces the reader to the background on the Palestinian local context of macro-economic, health financing and purchasing of health service as a foundation to PPP concept, research problem along with the justification behind conducting this research. Then it highlights the research aims and objectives. Finally, dissertation assumptions and hypotheses which are derived from TPB.

Chapter 2 provides a comprehensive literature review about the Partnership definition, types, and, modalities. This chapter first demonstrates the chronology of PPP and the Historical evolution of public-private partnerships. The chapter includes theoretical basis, and conceptual framework aims to discuss the development of the proposed conceptual model to study the PPP adoption decision and DM Participation. Moreover, it includes the most influential theories and models that help to understand the determinants and factors affecting the adoption of PPP, including Theory of Planned Behavior, Contract Theory, Agency Theory, and discuss external factors derived from literature which are directly or indirectly useful in developing the conceptual framework for this dissertation. Among the other theories mentioned, TPB was selected as a theoretical basis due to its direct relevance in predicting and studying the intention. Finally, this chapter will provide critical reflections on the summarized literature and its related theoretical basic and conceptual framework that is important for understanding the dimensions and factors that facilitate the adoption of PPP and DM participation. The chapter also provides an explanation for the variables and assumed relations include personal, social, and organizational factors as key determinants, in addition, to the integration of individual characteristics (age, sector type, educational level, experience) determinants as mediating factors within the model to study PPP adoption and acceptance in the Palestinian context. Moreover, research hypotheses will be formulated and operational definitions for each construct will be presented. The results of this chapter along with the detailed literature review will help to achieve the following objective of this research, which is “To develop a conceptual framework that captures the latent factors influencing the DM adoption of PPP strategy.

Chapter 3 describes research design and methodology. This chapter also explains the rationale behind the chosen approach and techniques that are essential to empirically test the proposed conceptual model and thus to achieve the main research objectives and answer the research questions. This chapter will also discuss the sampling technique and the design of the qualitative interview guide and questionnaire, and data collection process, instrument scale measurement, explaining the data analysis and statistical techniques and finally the ethical considerations of the research study are provided.

Chapter 4 presents the results of the mixed methods study. A MAXQDA was employed to conduct thematic analysis of the qualitative data generated from 17 in-depth interviews. The analysis was applied based on an open coding approach and generated four themes from the study which were considered as a foundation for the next step of quantitative research. The Statistical Package for Social Science (SPSS) version 20.0 was employed for preliminary data analysis like data screening, frequencies and percentages and other descriptive analysis. The results from the data analysis in this chapter will focus on the Structural Equation Model- SEM that's applied to analyze the TPB constructs, and mediating factors affecting the intention of DM to adopt PPP. This chapter presents an in-depth analysis of the relationships among the constructs within the proposed research model. A two-step approach will be used during the data analysis process. The first step will assess the construction's validity and test the model fit while the next step will test the direct relationships among the independent and dependent variables for both models as well as the moderating impact of determinants and other demographic characteristics.

Chapter 5 discusses and reflects upon the main findings presented in Chapter 4 through an in-depth interpretation of the demonstrated results and findings. This chapter will help in understanding the important role that behavioral intention, Subjective Norm, Perceived Behavioral control factors play in affecting the DM's beliefs towards adoption and acceptance of PPP strategy in the Palestinian health care sector and will also discuss the similarities and dissimilarities between Palestinian and other Low- and Middle-Income countries - LMICs with focus on the Palestinian uniqueness case. Conclusion and Further Research is devoted to highlighting and discussing the major methodological, theoretical and practical implications drawn from the research study. This section also delineates and discusses the potential limitations and finally proposes directions for future research.

Chapter Two

Literature Review and Conceptual Framework

2.1 Introduction

This chapter reviews the diverse theories and models relevant to understanding decision-makers' intentions to adopt PPP strategy. This chapter reviews the literature related to PPP types and modalities, as well as the chronology of the historical evolution of PPP. Specifically, the chapter begins with a brief discussion of the importance of PPPs, their uses as alternative strategy, leading examples in health care industry, benefits and barriers of implementation globally and regionally with more focus on LMICs. The second section reviews different behavioral theories with an emphasis on TPB which will lead directly in developing the conceptual framework. Moreover, the research hypotheses are developed, and operational definitions are presented. The proposed Conceptual framework forms the basis for the empirical data collection and analysis.

The chapter is organized into six sections. Section 2.2 presents the literature review and identifies existing research gaps. Section 2.3 outlines the theoretical framework, highlighting the main theories relevant to PPP adoption. Section 2.4 develops the conceptual framework by discussing and justifying the inclusion of key determinants in this study, namely Behavioral Intention (BI), Subjective Norm (SN), Perceived Behavioral Control (PBC), Facilitating Conditions (FC), and Attitude Toward the Behavior (AB). Section 2.5 provides the operational definitions of the study variables, while Section 2.6 discusses individual characteristics. Finally, Section 2.7 offers the concluding remarks of the chapter.

2.2 Literature Review

Establishing the theoretical basis of the proposed framework is essential for the development of the conceptual framework. Figure 2.1 presents a map of the literature reviewed in this study.

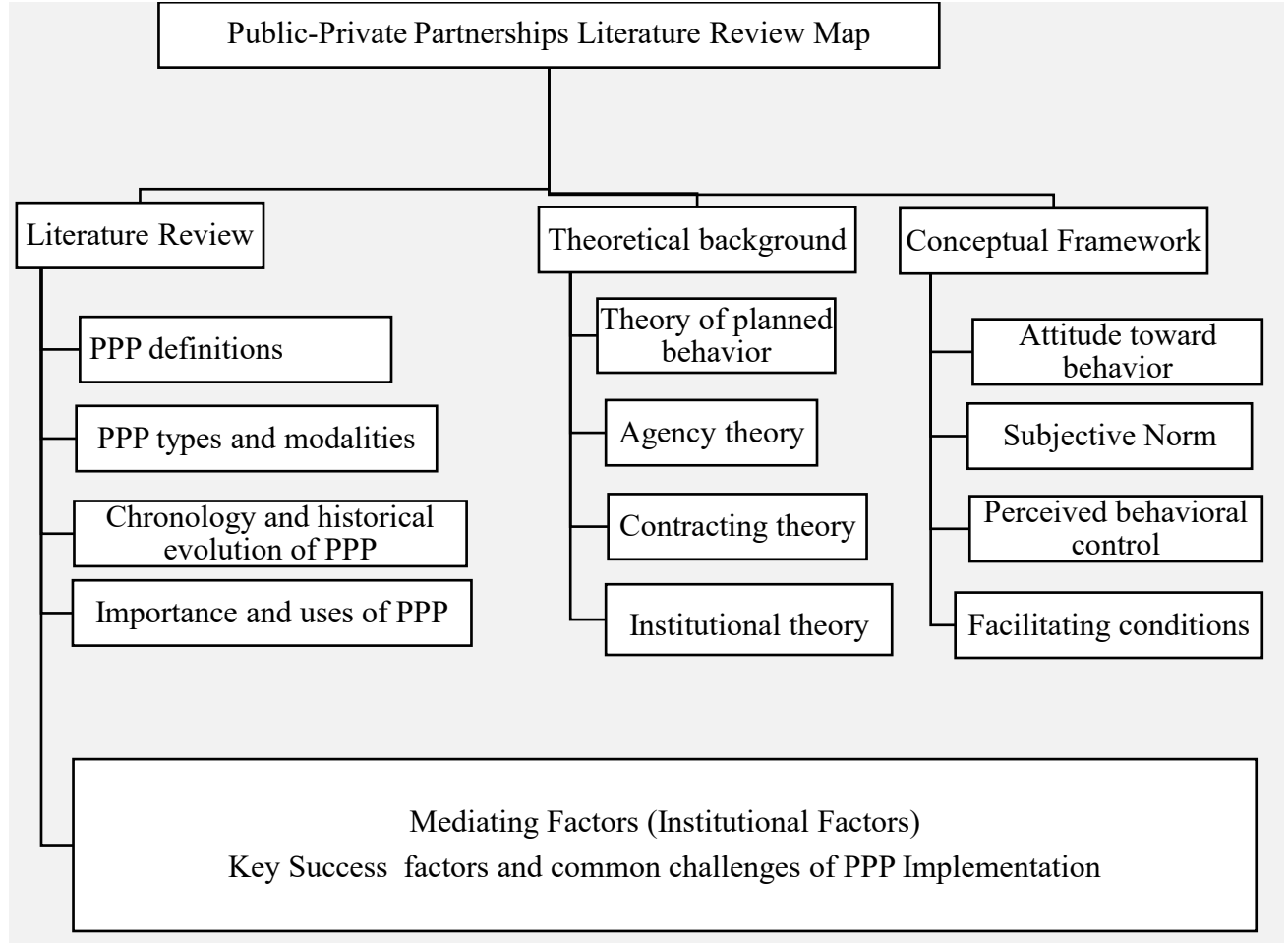


Figure 2.1: PPP Map of literature

2.2.1 What is Public Private Partnership (PPPs)?

Although no universally accepted definition exists, there is a consensus that PPP entails collaborative governance, risk sharing, and mutual benefits via a contractual arrangement. The World Bank defines PPPs as long-term contractual arrangements between a private party and a government agency that strive to provide a public asset or service in which the private party bears some risk and some management responsibility. (International Bank for Reconstruction and Development / The World Bank, 2017). This definition is similar to that of the OECD and highlights the transfer of risk and responsibility to the private sector as central features (Negrych, 2024). Partnerships, as a form of collaborative strategy, have existed from ancient civilizations to modern societies. In our culture, Islamic commercial law further developed partnership models like *Mudaraba* (مضاربة) and *Musharaka* (مشاركة) which influenced later Western business practices. In Arabic, Musharakah literally means “partnership” and it is one type of partnership which defines as all partners contribute

capital and may participate in management. Profits are shared according to a pre-agreed ratio, while losses are distributed strictly in proportion to each partner's capital contribution. This is a true partnership model, aligning closely with the general legal definition of partnership in both Islamic and conventional contexts (Aladdin et al., 2020; Alamad, 2019; Julian & Atif, 2020; Lewis & Kaleem, 2019; Schoon, 2016). Another partnership model is Mudaraba (Profit-Sharing Partnership) where one party provides all capital, while the other provides expertise and management (Mudarib). Profits are shared as per agreement, but losses are borne solely by the capital provider, unless caused by the manager's negligence. The manager's compensation is contingent on the venture's success, making this a unique form of partnership where only one party manages the business (Aladdin et al., 2020; Alamad, 2019; Fadel & Gharar, 2021; Julian & Atif, 2020; Schoon, 2016).

In the modern era, partnerships evolved into formal legal arrangements, including PPP, particularly in the 20th century. In literature, partnership has been a recurring theme symbolizing cooperation, loyalty, and mutual benefit. Furthermore, the partnership concept has declared as one of the SDGs in Goal 17 "Partnership for Goals". Accordingly, 19 targets were established to achieve this goal, all of which emphasize collaboration, governance, and coordination to achieve effective and successful SDGs.

The PPP concept is often used interchangeably with several related terms and is sometimes narrowly defined, like to outsource, contracting-out, procurement, build-operate-transfer, and privatization. These terms do not necessarily constitute PPP arrangements, nor do all of them constitute PPP; it is merely one manifestation of it. The literature review revealed numerous definitions for PPP. Instead of listing many definitions, we will concentrate on the fundamental commonalities among them and examine a singular definition. Therefore, examining the fundamental components of PPP provides a clearer understanding of the concept. However, the common elements across definitions can be summarized as follows: long-term contract (Dabizha & Samkov, 2023; Ke et al., 2023; Negrych, 2024; Valaguzza & Parisi, 2020), shared roles and responsibilities (Yatsechko, 2019) risk allocation and sharing (Krivykh, 2023; Yashchenko, 2018), resource and expertise injection (Dabizha & Samkov, 2023; Ke et al., 2023; Pashina et al., 2019; Yatsechko, 2019), cooperation and teamwork (Bovaird, 2004), focus on public interest (Krivykh, 2023; Valaguzza & Parisi, 2020). It is essential to note that PPP differ from privatization and public procurement by incorporating shared management, risk, and long-term collaboration, rather than just outsourcing or asset transfer.

In conclusion, from an operational perspective, PPP may be defined as structured, long-term collaborative arrangements in which the public and private sectors jointly deliver public services or infrastructure, sharing risks, resources, and responsibilities through formal agreements. While definitions of PPP vary across literature, this conceptualization captures their core operational features.

The PPP concept emerged partly as a response to the limitations of traditional privatization policies. Unlike full privatization models often associated with market-driven or capitalist approaches, PPPs are perceived by stakeholders as a more balanced framework that preserves public sector stewardship while leveraging private sector efficiency and investment. This distinction is important, as concerns have been raised that pure privatization may negatively affect equity and citizens' rights in access to essential services.

2.2.2 PPP Modalities

This section presents PPP modalities implemented across various countries. Various types and modalities of PPP exist, each characterized by unique frameworks for the distribution of responsibilities, risks, and rewards. Table 2.1 summarizes the PPP modalities, outlining key features and typical use cases across various sectors, including healthcare.

PPPs are implemented through multiple contractual and institutional modalities that differ according to the allocation of ownership, financing responsibilities, operational authority, risk transfer, and duration of engagement between public and private actors. Although the literature often presents PPP modalities as discrete categories, in practice many modalities overlap substantially, particularly in the healthcare sector where service delivery arrangements are frequently hybrid and adaptive rather than rigidly standardized. Consequently, PPP modalities should be understood as existing along a continuum of public–private engagement rather than as entirely separate contractual forms.

The most common PPP modalities include Build–Operate–Transfer (BOT), Build–Own–Operate–Transfer (BOOT), Build–Lease–Transfer (BLT), Design–Build–Operate (DBO), and Build–Own–Lease–Transfer (BOLT). These models primarily differ in three dimensions: ownership during the concession period, responsibility for financing, and the degree of operational control transferred to the private sector. For example, BOT and BOOT arrangements involve substantial private sector participation in financing, construction, and operation; however, BOOT grants temporary ownership rights to the private partner, whereas BOT does not. Similarly, BLT and BOLT rely on leasing arrangements but differ in ownership structures and financing responsibilities. DBO models, in contrast, maintain public ownership while transferring selected technical and operational functions to private entities.

Despite these distinctions, considerable conceptual overlap exists among PPP modalities. Many modalities share similar contractual mechanisms, risk-sharing arrangements, and operational structures, with differences often reflecting legal terminology or country-specific regulatory adaptations rather than fundamentally distinct partnership models. This overlap is particularly evident in healthcare PPPs, where governments frequently combine elements from several modalities within a single arrangement. For instance, a hospital PPP may simultaneously involve private financing, facility management, equipment procurement, and service delivery components under blended contractual structures. Therefore, the absence of sharply defined boundaries between modalities does not necessarily indicate conceptual weakness; rather, it reflects the flexible and evolving nature of PPP implementation in response to contextual policy, financial, and institutional conditions.

From a healthcare policy perspective, PPP modalities are not equally suitable for all contexts. Highly capital-intensive models such as BOOT and BOT may be effective for hospital infrastructure development where governments seek external financing and technical expertise. However, these models may expose weak public sectors to long-term fiscal commitments, contractual dependency, and governance risks if institutional oversight capacity is limited. In contrast, more flexible arrangements such as DBO, service contracts,

leasing models, or management contracts may be more appropriate in fragile or underfunded healthcare systems because they allow gradual private sector participation while preserving greater public ownership and regulatory control. Accordingly, the suitability of PPP modalities should not be evaluated solely based on theoretical efficiency claims, but rather according to governance capacity, financial sustainability, accountability mechanisms, and the broader political and institutional environment in which they are implemented.

Table 2.1 Summarizes the most PPP predominant PPP modalities (Akhtar et al., 2023; Almuhsen et al., 2021; Alqahtani et al., 2024; Dey & Ogunlana, 2004; Eventia, 2017; Le et al., 2020; McCarthy & Tiong, 1991; Thamrin, 2017; Xenidis & Angelides, 2005; Zaw, 2022).

Table 2.1-A: Summary of Main PPP Modalities

#	PPP Modalities	Definition	Key Features	Typical Use Cases
1	Build-Operate-Transfer (BOT)	The private sector finances, designs, builds, operates, and maintains an asset for a fixed period, after which it is transferred to the public sector.	Private sector designs, builds, operates, then transfers assets to government	Infrastructure (roads, housing)
2	Build-Own-Operate-Transfer (BOOT)	Similar to BOT, but the private entity owns the asset during the concession period before transferring it to the public sector.	Private sector owns and operates asset before transfer	Large infrastructure projects.
3	Build-Lease-Transfer (BLT)	The private sector builds the asset, leases it to the public sector for a set period, and then transfers ownership to the public sector.	Private sector builds, leases to government, then transfers	Public buildings and facilities.
4	Design-Build-Operate (DBO)	The private sector designs, builds, and operates the facility, but legal ownership remains with the public sector throughout.	Private sector designs, builds, and operates, but does not own asset	Utilities, water treatment
5	Build-Own-Lease-Transfer (BOLT)	The private sector builds, owns, and leases the asset to the public sector, then transfers ownership at the end of the lease.	Private sector builds, owns, leases, then transfers	Housing, specialized facilities

Table 2.1-B: Summary of Main PPP Modalities

#	PPP Modalities	Definition	Key Features	Typical Use Cases
6	Managed Equipment Services (MES)	The private sector provides, maintains, and manages equipment for a facility, often including replacement and upgrades.	Private sector provides and maintains equipment	Healthcare
7	Operation & Maintenance (O&M)	The private sector is contracted to operate and maintain a public asset, without involvement in construction or ownership.	Private sector operates and maintains public assets	Healthcare, transport, utilities
8	Integrated PPP	A broad term for PPPs that combine multiple elements (design, build, finance, operate, maintain) in a single contract.	Private sector involved in multiple stages (design, build, operate, finance)	Complex infrastructure

2.2.3 Chronology and evolution of PPP

The terms "private sector" and "public sector" have evolved over time, reflecting changes in economic systems, governance, and the relationship between government and business. Their emergence and development are closely tied to shifts in public administration, economic reforms, and institutional changes. Therefore, historical evolution of terms like "Public Sector" which traditionally refers to government-owned and operated organizations, responsible for providing public goods and services. The concept solidified with the rise of modern states and public administration paradigms, especially during the 20th century as governments expanded their roles in welfare, infrastructure, and regulation (Teymurov, 2024). The key milestones in PPP evolution are depicted in Table 2.2. Whereas the "Private Sector" refers to businesses and organizations owned by individuals or groups operating for profit. The term PPP gained prominence with the growth of market economies and entrepreneurship, especially as countries transitioned from centrally planned to market-oriented systems (Tran & Santarelli, 2020); (Atherton & Newman, 2016). The distinction and interaction between the public and private sectors have evolved through historical, institutional, and policy changes. The terms themselves reflect broader shifts in governance, economic systems, and the roles of government and business in society.

Table 2.2: Key Milestones in PPP Evolution

Period/Paradigm	Key Developments	Citations
Classical Public Administration (pre-1980s)	A clear separation between public (government) and private (business) roles.	(Teymurov, 2024)
New Public Management (1980s onward)	Adoption of private sector principles (efficiency, accountability) in the public sector.	
Public-Private Partnerships (1990s onward)	Collaboration between sectors for service delivery and infrastructure.	
Market Reforms (late 20th century)	Emergence and legitimization of private sector in formerly state-dominated economies (e.g., China, Vietnam).	(Atherton & Newman, 2016; Tran & Santarelli, 2020)

2.2.4 PPP uses and leading examples in the healthcare industry

PPPs in healthcare are increasingly being used worldwide to address gaps in infrastructure, service delivery, and access, especially in primary healthcare and underserved areas. These arrangements combine public oversight with private-sector efficiency, aiming to improve health outcomes, affordability, and system sustainability. There are several ways that the healthcare industry has used PPP, as seen in the literature like (1) access and service delivery, where PPPs have expanded access to prevention and treatment services, including tuberculosis, malaria, HIV/AIDS, and chronic disease management, particularly for targeted or remote populations (Joudyian et al., 2021; Mirzaii et al., 2020; Tabrizi et al., 2020) (2) digital health initiatives include large-scale digital health PPPs, such as telemedicine projects in India, have successfully delivered millions of consultations and laboratory tests at reduced costs, demonstrating the potential to bridge healthcare divides (3) hospital and clinical services, in countries like Portugal, PPP hospitals have matched or exceeded public hospitals in quality and access, challenging assumptions about lower social performance in private-involved facilities (Ferreira & Marques, 2020).

These examples collectively suggest that PPPs may provide governments with alternative mechanisms to expand service coverage, mobilize technical expertise, and accelerate innovation in areas where public systems face financial or operational limitations. The diversity of applications across disease-control programs, digital health, and hospital services also indicate that PPPs are not limited to infrastructure financing alone, but increasingly function as broader governance and service-delivery arrangements within modern health systems. In this context, PPPs appear particularly attractive in low- and middle-income countries-LMICs seeking to improve healthcare access while managing fiscal pressures and rising service demands.

However, the international evidence also demonstrates that the outcomes of healthcare PPPs remain highly context-dependent and should not be interpreted as uniformly successful. Although several studies report gains in efficiency, accessibility, and service responsiveness, other experiences have raised concerns regarding cost-effectiveness, transparency, accountability, and equity in service provision. For example, some PPP arrangements may improve efficiency while simultaneously creating disparities in access between profitable and non-profitable populations or services. Similarly, digital health PPPs may expand service reach, yet they may also increase dependency on private technological actors and generate governance challenges related to data ownership, regulation, and sustainability.

Moreover, the positive performance observed in some hospital PPP models, such as those reported in Portugal, should be interpreted cautiously rather than generalized universally. The success of these arrangements often depends on strong institutional capacity, effective regulatory oversight, clearly defined contractual obligations, and the ability of governments to monitor performance and manage risks. Therefore, the literature increasingly emphasizes that PPP effectiveness is shaped less by the partnership model itself and more by the governance environment within which it operates. This highlights the importance of adopting a balanced and critical perspective when examining PPPs in healthcare, particularly in fragile or resource-constrained settings where weak governance structures may limit the anticipated benefits of such partnerships.

2.2.5 Global Examples in Healthcare initiatives

- **United Kingdom:** The NHS Innovation Accelerator partners with industry to rapidly introduce new health technologies into the National Health Service, improving patient care and efficiency (Ebulue et al., 2024) (Ballantyne & Stewart, 2019).
- **Sub-Saharan Africa:** The Medicines for Malaria Venture (MMV) collaborates with governments, pharmaceutical companies, and research institutions to develop affordable antimalarial drugs (Ebulue et al., 2024).
- **Global Vaccine Development:** The Coalition for Epidemic Preparedness Innovations (CEPI) unites governments, philanthropies, and private firms to accelerate vaccine development for emerging diseases, as seen during COVID-19 (Ebulue et al., 2024)
- **India:** A large-scale digital health PPP in Andhra Pradesh provided telemedicine and remote healthcare to over 2.6 million people, significantly reducing costs and improving access to specialist care. (Ganapathy et al., 2021)
- **Hong Kong:** PPP programs have targeted chronic disease management, cataract surgeries, and vaccinations, though challenges in coordination and resource allocation have limited success (Lau & Fong, 2021).
- **Malaysia:** Several health PPP projects were implemented like (1) Medical equipment enhancement tenure (MEET). The program launched by the MoH in 2014, MEET outsources the acquisition and maintenance of biomedical equipment in primary healthcare centers to a private concessionaire. The program improved equipment maintenance met key performance indicators (KPIs) for response and repair times, and saved approximately Malaysian ringgit-RM 150 million (30%) between 2015 and 2016, enabling the purchase of 4,000 additional equipment units (Zamaludin et al., 2025) (2) Dialysis funding program: The PPP project aimed at financing and enhancing access to dialysis therapy for patients with renal failure has resulted in greater availability and affordability of dialysis treatments in primary healthcare settings (Hamzi et al., 2020). (3) Methadone maintenance therapy.

A Collaboration between the public and private sectors to provide methadone therapy for opioid dependence aimed at enhancing access to treatment and contributed to harm reduction strategies (Hamzi et al., 2020). (4) Mammogram test subsidy program. A PPP provides subsidized mammogram screening for early breast cancer detection. The program improved access to preventive screening for women, especially in underserved areas (Hamzi et al., 2020). (5) Centre for image guidance and minimally invasive therapy (CIGMIT): A clinician-led mini-PPP at the University of Malaya, providing advanced neurosurgical and radiotherapy services to both public and private patients. The center served over 37,000 patients (2015–2019), improved access to high-end care, and demonstrated financial sustainability (Waran et al., 2021). As for LMICs PPPs are increasingly used including those in Arab countries, to strengthen healthcare delivery and health systems. These collaborations aim to leverage the strengths of both sectors to improve access, quality, and efficiency in health services, especially where public resources are limited.

Saudi Arabia has actively explored PPPs to modernize its healthcare system. The government is seeking to reduce the economic burden on the state-funded MoH by involving

private partners in funding, management, and service delivery. This approach aims to improve standards and the quality of care, though the exact structure and balance between public and private roles are still being developed (Almalki & Al-Hanawi, 2018b). PPP in LMICs often involve sharing resources, co-producing health goods and services, and developing governance networks to manage partnerships effectively (Fanelli et al., 2020). Furthermore, PPPs are widely used in PHC, with models ranging from contracting private providers to delivering essential services, to integrating private facilities into government-led systems. PPPs have also been applied to areas like pediatric cancer care and advanced medical technology, showing improvements in service access and outcomes (Howard et al., 2018).

These global and LMIC examples illustrate that public–private collaboration in healthcare is implemented through diverse institutional arrangements ranging from innovation platforms and research consortia to service delivery and financing mechanisms. Across high-income settings (e.g., the United Kingdom and Hong Kong), initiatives tend to focus on accelerating innovation, improving efficiency, and addressing specific service delivery gaps, though coordination challenges remain. In contrast, LMIC cases (e.g., India, Malaysia, Saudi Arabia, and broader Arab contexts) demonstrate a stronger emphasis on expanding access, reducing system costs, and strengthening service availability through resource-sharing and contracting models. Collectively, the evidence suggests that while contexts differ, the underlying logic of collaboration is consistent: leveraging complementary public and private sector strengths to enhance health system performance. However, outcomes are highly dependent on governance quality, regulatory clarity, and implementation capacity. However, some of the examples presented reflect broader forms of collaboration initiatives that were included due to their conceptual proximity to public–private collaboration mechanisms, even though they do not constitute PPPs in the strict definitional sense.

In summary, PPP in LMICs and Arab countries have shown promise in improving healthcare access, quality, and system performance. Success depends on strong governance, clear agreements, local leadership, and effective regulation. However, challenges like sustainability, equity, and system fragmentation must be addressed to maximize the benefits of PPPs in healthcare .

2.2.6 Key success factors, challenges and benefits of PPP implementation in LMICs

PPPs are widely used in LMICs to address infrastructure and service delivery gaps. Successful PPP implementation in LMICs depends on strong leadership, stakeholder engagement, robust governance, and effective risk management, while common challenges include weak regulatory frameworks, lack of transparency, and political interference. The table below 2.3 summarizes the key success factors of PPP implementation.

Table 2.3: Key Success Factors

Success Factor	Description	Citations
Leadership & Government Commitment	Strong public sector leadership and alignment with national priorities	(Iroz et al., 2024; Ismail, 2013; Mannan et al., 2024; Osei-Kyei & Chan, 2017)
Stakeholder Engagement & Community Support	Involving local communities and frontline teams to ensure buy-in and local ownership	(Busco et al., 2024; Chileshe et al., 2020; Iroz et al., 2024; Osei-Kyei & Chan, 2017)
Robust Legal & Regulatory Framework	Clear laws, regulations, and guidelines to legitimize and guide PPPs	(Al-Tameemi et al., 2024; Chileshe & Kavishe, 2021; Ismail, 2013)
Transparent Procurement & Competition	Fair, open, and competitive procurement processes	(Busco et al., 2024; Gognaje et al., 2023; Hai et al., 2021; Xhala et al., 2017)
Financial Viability & Market Availability	Sound financial packages, access to finance, and attractive investment environments	(Chileshe & Kavishe, 2021) (Ahmed et al., 2024; Chileshe et al., 2020; Gognaje et al., 2023)
Effective Risk Allocation	Proper distribution of risks between public and private partners	(Busco et al., 2024; Escudero & Kleinman, 2022; Iroz et al., 2024; Osei-Kyei & Chan, 2017)
Data-Driven Monitoring & Evaluation	Use of robust data systems to track progress and outcomes	
Trust & Communication	Open, constant communication and trust among all stakeholders	

2.2.7 Common Challenges

Across the implementation of PPP several lack of clear regulations and reluctance among lawmakers can stall PPPs (Al-Tameemi et al., 2024; Chileshe et al., 2020; Ismail, 2013). A study showed also the corruption and political meddling undermine transparency and project outcomes (Gognaje et al., 2023). Among other challenges the insufficient training, vague project descriptions, and lack of local ownership hinder sustainability were raised as main challenges of PPP implementation (Busco et al., 2024; Chileshe & Kavishe, 2021; Iroz et al., 2024). Furthermore, poor risk management, like inadequate risk allocation and assessment, can lead to project failure (Ahmed et al., 2024; Gognaje et al., 2023; Mannan et al., 2024) and stakeholder conflicts, including misaligned interests between public and private sectors, and neglect of community needs, can cause social and operational (Busco et al., 2024; Iroz et al., 2024; Osei-Kyei & Chan, 2017)

In conclusion, effective PPP implementation in LMICs requires strong leadership, a clear legal framework, stakeholder engagement, and transparent processes. Addressing challenges like corruption, weak regulation, and limited local capacity is essential for sustainable success. It is worth mentioning also the lessons learned from the challenges, like (1) Considering the governance and coordination in PPP implementation where effective PPPs require clear objectives, transparent communication, and strong stakeholder engagement (Ebulue et al., 2024; Joudyian et al., 2021; Lau & Fong, 2021). (2) Regulatory and financial

barriers as complex regulations, funding uncertainties, and misaligned incentives can hinder success (Abass et al., 2024). (3) Ethical and Data Concerns: Digital health PPPs must address data privacy, public trust, and equitable benefit sharing (Bak et al., 2025; Ballantyne & Stewart, 2019).

Summary of literature gaps on the behavioral factors influencing DMs' choices

Although, there is growing research on PPP adoption, but significant gaps remain regarding the behavioral factors influencing decision-makers' choices, especially in developing and Arab countries.

- Limited focus on behavioral drivers of DMs where most studies emphasize economic, financial, and institutional factors (e.g., fiscal pressure, risk transfer, regulatory environment) rather than the psychological, attitudinal, or behavioral aspects of decision-makers (Wang et al., 2018) (Fleta-Asín et al., 2019; Mota & Moreira, 2015).
- The motives, attitudes, and perceptions of public officials and private sector leaders—such as risk aversion, trust, and personal incentives—are underexplored, especially outside of a few contexts like China (Zhang et al., 2018).
- Underrepresentation of political and ideological influences where political cycles and ideology are recognized as potential influences, but empirical research on how these shaped PPP adoption decisions is scarce. For example, studies in Brazil note that political timing and electoral strategy can drive PPP adoption, but similar research is lacking in other regions (Bertulucci & Pereira, 2024).
- The role of political reluctance or support among lawmakers, as seen in Iraq, is rarely examined in depth (Al-Tameemi et al., 2024). Furthermore, scarcity of context-specific and comparative studies where there is a lack of contextualized research on how decision-makers' behaviors differ across countries, sectors, or cultures, particularly in Arab and LMICs (Wang et al., 2018) (Al-Tameemi et al., 2024).
- A comparative study that analyzes public vs. private sector behavioral intentions are rare, with most research focusing on one side only (Chileshe & Kavishe, 2021; Y. Wang & Zhang, 2019).
- Insufficient theoretical and empirical integration where few studies apply behavioral theories (e.g., Theory of Planned Behavior) to PPP adoption, and those that do are mostly limited to the private sector (Zhang et al., 2018) Still, here is a need for empirical research linking behavioral intentions, attitudes, and actual PPP adoption outcomes (Wang & Zhang, 2019)

Finally, the literature on PPP adoption is rich in institutional and economic analysis but lacks depth in examining the behavioral dynamics of decision-makers. Future research should focus on psychological, political, institutional and contextual factors shaping adoption, especially in developing and Arab countries, to better inform policy and practice.

based on reviewing the literature and link it with Palestinian context I added here a tool to select the best ppp model.

Critical Analysis and Synthesis of Literature

The reviewed literature demonstrates that PPP is conceptualized differently across countries, sectors, and institutional contexts. Although PPP is commonly presented as a mechanism for improving efficiency, mobilizing resources, and expanding healthcare services, the literature

also indicates that PPP arrangements are not inherently successful and may generate governance, accountability, and equity concerns when implemented under weak regulatory and institutional conditions. Existing studies frequently emphasize financing, infrastructure development, and service delivery outcomes, while comparatively limited attention is given to the determinants influencing decision-makers' intention to adopt PPP strategies, particularly during the pre-adoption phase.

Further literature shows that PPP modalities substantially overlap in practice, especially within healthcare systems where arrangements are often hybrid and adaptive rather than rigidly standardized. This overlap reflects the evolving nature of PPP implementation in response to contextual political, financial, and institutional conditions. Consequently, the effectiveness of PPP cannot be understood independently from governance structures, institutional capacity, transparency, accountability, and stakeholder alignment.

A major observation emerging from the literature review is that most existing studies focus primarily on implementation outcomes and operational performance of PPP projects, whereas limited evidence addresses behavioral intention, policy readiness, and decision-making processes preceding adoption. This gap is particularly important in fragile and conflict-affected settings where PPPs remain weakly institutionalized and insufficiently regulated. In such contexts, understanding decision-makers' perceptions, intentions, and governance concerns may be more critical than evaluating implementation outcomes alone.

The reviewed theories also reveal that no single theoretical perspective sufficiently explains PPP adoption in healthcare systems. The Theory of Planned Behavior provides a useful framework for understanding intention formation at the individual level through attitude, subjective norm, and perceived behavioral control. However, PPP adoption decisions are also influenced by broader institutional, political, governance, and economic determinants that extend beyond individual cognition. Similarly, institutional and governance theories explain structural and organizational influences but provide less attention to behavioral intention formation. Therefore, literature supports the need for a more integrated perspective that combines behavioral and contextual determinants in explaining PPP adoption.

Within the Palestinian and broader Arab context, the literature remains limited and fragmented. Existing local studies have mainly focused on outsourcing, coordination, purchasing arrangements, or private sector involvement in service delivery rather than structured PPP adoption itself. Despite increasing reliance on purchasing healthcare services from private and external providers, there remains insufficient empirical evidence concerning decision-makers' readiness, acceptance, and perceptions toward PPP strategies in the Palestinian healthcare sector. This knowledge gap constrains both policy formulation and the development of context-specific governance frameworks capable of supporting structured PPP implementation.

Overall, the literature suggests that PPP adoption should not be viewed merely as a technical or financing arrangement, but rather as a governance-sensitive and context-dependent policy process shaped by the interaction between behavioral intention, institutional conditions, regulatory structures, and healthcare system capacity.

2.3 Theoretical Framework

This section provides an overview of four theoretical perspectives considered in the development of the conceptual framework, namely the Theory of Planned Behavior (TPB), Contract Theory, Agency Theory, and Institutional Theory. These theories were reviewed in terms of their relevance and key constructs in relation to the study's research objectives and questions. However, only the Theory of Planned Behavior (TPB) was ultimately operationalized for the construction of the study instrument (questionnaire), where its core constructs formed the basis for item development. Accordingly, the questionnaire items were directly derived from TPB components to capture behavioral intentions related to the adoption of the PPP model in the Palestinian healthcare system. The other theories were used as complementary lenses to inform the broader conceptual understanding of the phenomenon rather than for direct measurement. It is also important to clarify that these theories are widely used in social sciences, management, and organizational studies due to their established explanatory value in understanding behavior, organizational relationships, and institutional dynamics.

2.3.1 Theory of Planned Behavior (TPB)

TPB explains how individual behavior is driven by behavioral intentions, which are influenced by attitudes toward the behavior, subjective norm, and perceived behavioral control. It is widely used to predict and understand behaviors in various contexts, including technology use, consumer behavior, and health actions. TPB is empirically supported and often extended to new domains, though it faces limitations such as the intention-behavior gap and measurement challenges (Ajzen, 1991, 2020; Armitage & Conner, 2001; Hagger & Hamilton, 2023; Rozenkowska, 2023; Ulker-Demirel & Ciftci, 2020)

2.3.2 Contracting Theory

Contracting theory, including both classical and behavioral approaches, examines how contracts are structured to manage relationships, incentives, and risks between parties. It addresses issues like moral hazard, information asymmetry, and incomplete contracts. Relational contract theory, a subset, emphasizes the role of social norms and long-term relationships in shaping contract outcomes, especially in complex projects (Kőszegi, 2014; Nwajei, 2021).

2.3.3 Agency Theory

Agency theory focuses on the principal-agent relationship, where one party (the principal) delegates work to another (the agent). It analyzes problems arising from conflicting interests, information asymmetry, and risk-sharing. Agency theory is widely applied in organizational governance, sales, public-private partnerships, and project management, often alongside stewardship theory for a more nuanced understanding (Chefor et al., 2025; Dong et al., 2021;

Eisenhardt, 1989; Hill & Jones, 1992; Madison et al., 2016; Parker et al., 2018; Pereira et al., 2020)

2.3.4 Institutional Theory

Institutional theory explores how institutions—formal rules, norms, and cultural beliefs—shape organizational behavior and social action. It highlights the role of social structures in enabling and constraining agency, emphasizing that actors' behaviors are influenced by their institutional context. Recent work integrates agency and institutional perspectives to explain organizational change and stability (Abdelnour et al., 2017; Geels, 2020; Hallett & Hawbaker, 2020)

In conclusion, together, these theories provide complementary frameworks for analyzing individual and organizational behavior, contract design, governance, and the influence of broader institutional environments. Each theory addresses different but interconnected aspects of decision-making and organizational dynamics.

2.3.5 Main Constructs in Theoretical Framework

Understanding the fundamental principles of each theory explains their implementation in research and practice. Table 2.4 presents the relevant theory pertaining to the PPP strategy.

Table 2.4: Review of Theory and Associated Constructs

Theory	Main Constructs
Theory of Planned Behavior	• Attitude toward the behavior-AB: Personal evaluation of performing the behavior (positive or negative) • Subjective Norm-SN: Perceived social pressure to perform or not perform the behavior • Perceived behavioral control-PBC: Perceived ease or difficulty of performing the behavior, similar to self-efficacy • Behavioral intention-BI: Motivation or intention to perform the behavior, influenced by the above constructs • Some extensions include personal norms and past behavior as additional constructs
Contract Theory	• Contractual terms: The specific agreements and obligations between parties. • Incentives: Mechanisms to align interests and motivate desired behaviors. • Risk allocation: Distribution of risks between contracting parties. • Information asymmetry: Differences in information held by each party. • Enforcement mechanisms: Methods to ensure compliance with the contract.
Agency Theory	• Principal: The party delegating authority (e.g., owner, shareholder). • Agent: The party acting on behalf of the principal (e.g., manager). • Agency relationship: The contractual arrangement between principal and agent. • Goal conflict: Divergence of interests between principal and agent. • Information asymmetry: The agent typically has more information than the principal. • Incentives and monitoring: Tools to align agent's actions with principal's interests.
Institutional Theory	• Institutions: Formal and informal rules, norms, and beliefs shaping behavior. • Isomorphism: The process by which organizations become similar due to institutional pressures. • Legitimacy: The extent to which actions are perceived as appropriate within the institutional context. • Institutional pressures: Regulatory, normative, and mimetic forces influencing organizations.

So, each theory is defined by a unique set of constructs that guide its application: TPB focuses on attitudes, norms, and control; contract and agency theories emphasize relationships, incentives, and information; institutional theory centers on rules, norms, and legitimacy.

2.3.6 What are the Commonalities Across Theories?

These four theories are foundational in social sciences, management, and organizational studies. Their commonality lies in explaining how individuals and organizations make decisions and interact within structured environments, but each emphasizes different mechanisms and levels of analysis.

- **Focus on Decision-Making and Behavior:** All four theories seek to explain how actors (individuals or organizations) make choices and behave within certain constraints or under specific incentives (Abdelnour et al., 2017; Ajzen, 1991; Eisenhardt, 1989; Köszegi, 2014)
- **Role of Structure and Agency:** Each theory addresses the interplay between individual agency (capacity to act) and structural factors (rules, contracts, institutions) that shape or constrain behavior (Abdelnour et al., 2017; Eisenhardt, 1989)
- **Emphasis on Rationality:** Agency Theory, contract Theory, and TPB assume actors are rational and goal-oriented, making decisions to maximize outcomes or utility
- **Governance and Control Mechanisms:** Agency and Contract Theories focus on contracts and incentives to align interests, while Institutional Theory and TPB consider broader social norms, legitimacy, and perceived Behavioral control (Abdelnour et al., 2017; Ajzen, 1991; Eisenhardt, 1989; Köszegi, 2014; Schillemans & Bjurstrøm, 2020)

2.3.7 Critical Evaluation of the Theories

The principal critiques of the examined theories can be summarized as follows (Table 2.5):
Table 2.5 Evaluations of Theory Review

Theory	Main Critiques	Citations
Theory of Planned Behavior	Overemphasis on rationality; intention-behavior gap; limited by measurement issues	(Ajzen, 1991; Ajzen, 2020; (Armitage & Conner, 2001))
Agency Theory	Assumes self-interest and rationality; neglects social/contextual factors; may oversimplify	(Eisenhardt, 1989; Schillemans & Bjurstrøm, 2020)
Contract Theory	Focuses on formal contracts, may ignore informal norms and psychological factors	(Köszegi, 2014; Pereira et al., 2020)
Institutional Theory	Can be too deterministic; sometimes underplays individual agency; complexity in operationalization	(Abdelnour et al., 2017; Schillemans & Bjurstrøm, 2020)

In conclusion, TPB, Agency Theory, Contract Theory, and Institutional Theory examine actor behavior within structured environments, however they diverge in their emphasis on rationality, contractual agreements, and institutional influence. Critiques frequently focus on their assumptions regarding rationality, the equilibrium between structure and agency, and

the intricacies of actual behavior. Upon revision, the TPB is deemed beneficial for examining intention and conduct, as it offers a rigorous, empirically supported framework explaining how attitudes, subjective norm, and perceived behavioral control influence intentions, which then forecast actual behavior. The Theory of Planned conduct asserts that three primary factors attitude toward the conduct, subjective norm, and perceived behavioral control—collectively affect an individual's intention to engage in a behavior, which is the most direct predictor of actual action. This framework enables TPB to systematically detect and measure the psychological factors influencing both intention and behavior across various domains. (Armitage & Conner, 2001; Ajzen & Schmidt, 2020; Ajzen, 2020; Greaves et al., 2013). Finally, while TPB is robust, it is not exhaustive. The "intention-behavior gap"—where intentions do not always lead to action—has led to extensions of the model, incorporating factors like habits, commitment, and motivation to improve predictive accuracy (Armitage & Conner, 2001; Fernández-Calderón et al., 2023; Hai et al., 2021; Zhang et al., 2022). TPB's effectiveness lies in its clear, empirically validated structure for linking psychological determinants to intention and behavior, making it a foundational tool for understanding and influencing human action across fields.

2.4 Conceptual Framework

After reviewing the major theories commonly used to explain organizational and behavioral adoption processes related to PPP strategies, this section presents the study's conceptual framework, including the hypothesized relationships illustrated in Table 2.6, list of variables in table 2.6.1 and Figure 2. The framework was developed by integrating relevant constructs from the Theory of Planned Behavior (TPB) and adapting them to the Palestinian healthcare sector context. Given the limitations of existing theoretical models in fully explaining PPP adoption within complex public health systems, this study employs TPB as the principal theoretical foundation for examining the determinants of adoption intention.

The conceptual model distinguishes clearly between independent variables, the dependent variable, and control variables. The independent variables consist of three TPB constructs: attitude toward the behavior, subjective norm, and perceived behavioral control. These variables are hypothesized to influence behavioral intention to adopt PPP strategies in the Palestinian health sector. Behavioral intention represents the primary dependent variable in the proposed model and reflects the degree to which decision-makers are willing to support or engage in PPP adoption. In line with TPB assumptions, behavioral intention is further conceptualized as a predictor of the actual PPP adoption decision.

In addition, demographic and professional characteristics, including age, gender, educational level, and years of experience, are incorporated as control variables to account for potential differences among respondents. These variables are not treated as mediating variables; rather, they are included to examine whether variations in respondent characteristics may influence the observed relationships between the TPB constructs and behavioral intention.

The proposed framework therefore provides a systematic basis for testing the hypothesized relationships among the identified constructs and assessing the applicability of TPB in explaining PPP adoption intention within the Palestinian healthcare context.

Table 2.6 Conceptual path model (relations) and hypothesis

Conceptual Path Model (Relations)	Hypotheses Statements
Attitude toward the Behavior → Behavior Intention (direct effect) Subjective Norm → Behavior Intentions (direct effect) Perceived Behavior Control → Behavior Intention (direct effect)	H1: Attitude toward the behavior positively influences behavioral intention. H2: Subjective Norm positively influence behavioral intention (BI). H3: Perceived behavioral control positively influences behavioral intentions.
Attitude toward the Behavior → Mediating Factor → Behavior Intention (indirect effect via mediation) Subjective Norm → Mediating Factor → Behavior Intentions (indirect effect) Perceived Behavior Control → Mediating Factor → Behavior Intentions (indirect effect)	H4: Attitude toward behavior positively influences the mediating factor. H5: Subjective Norm positively influences the mediating factor. H6: Perceived behavioral control positively influences the mediating factor. H7: The mediating factor positively influences behavioral intention. H8: The mediating factor mediates the relationships between AB → BI, SN → BI, and PBC → BI.
Demographics → Behavior Intention (control variables, possible moderators of direct paths)	H9a: Age has a moderating effect on the relationship between TPB constructs (AB, SN, PBC) and BI. H9b: Gender has a moderating effect on the relationship between TPB constructs and BI. H9c: Education level has a moderating effect on the relationship between TPB constructs and BI. H9d: Sector type (public/private) has a moderating effect on the relationship between TPB constructs and BI.

Table 2.6.1: Operational Classification and Structural Roles of Research Framework Variables

Variable Classification	Full Variable Name	Abbreviation	Operational Role in Empirical Model
Independent Variables (Exogenous)	Attitude toward the Behavior	AB	Predicts both the central mediating mechanism and the primary dependent outcome.
	Subjective Norm	SN	Measures social and environmental influences on the central mediating mechanism.
	Perceived Behavioral Control	PBC	Assesses internal and external resource constraints predicting the outcome.
Control Variables (Covariates)	Demographic Factors	Demographics	Constrains structural variance by directly predicting the final outcome variable to isolate core effects.
Dependent Variable (Endogenous Outcome)	Behavioral Intention	BI	Serves as the ultimate target variable and final endpoint of the conceptual structural model.

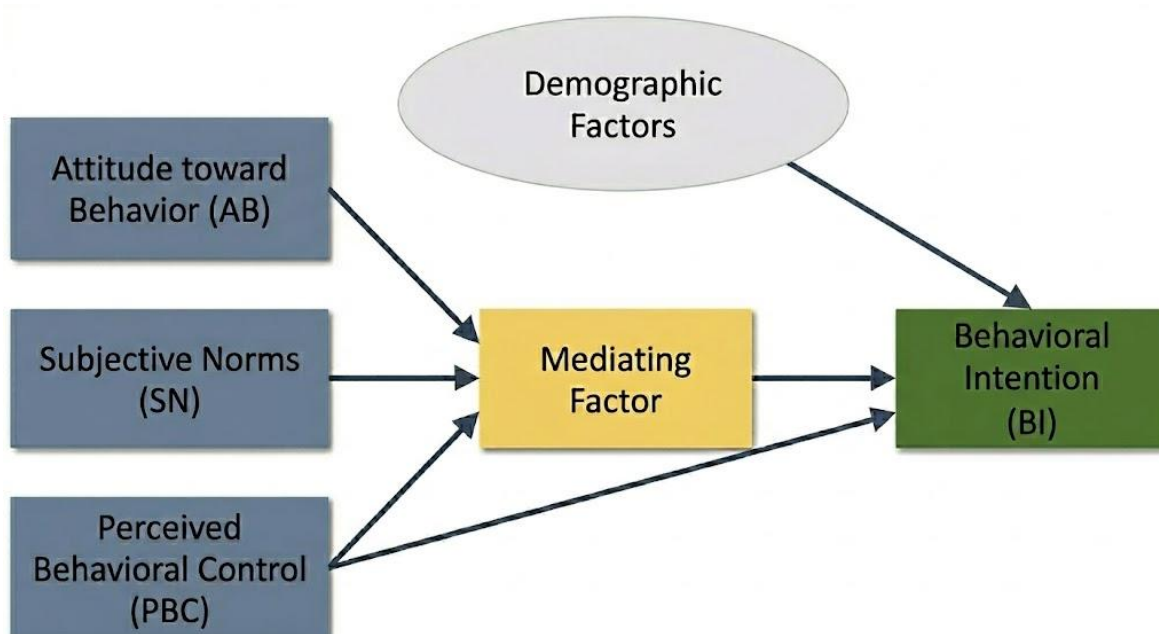


Figure 2.2 Study Conceptual Model

Figure 1. Conceptual path model integrating Theory of Planned Behavior (TPB) constructs with mediation and moderation effects. The framework illustrates the direct influence of Attitude toward the Behavior (AB), Subjective Norm (SN), and Perceived Behavioral Control (PBC) on Behavioral Intention (BI). Additionally, it depicts the indirect pathways via the Mediating Factor (MF). The dashed path from Demographics (Age, Gender, Education, and Sector) indicates hypothesized controlling effects on the direct structural relationships between the primary antecedents and the outcome variable (BI).

2.5 Operational Definition

This study conceptualizes AB, SN, and PBC in alignment with the TPB and operationalizes them as latent constructs evaluated through multi-item Likert-type measures that reflect the evaluative, normative, and control beliefs of healthcare sector's decision-makers concerning the adoption of PPP strategies. BI is operationally defined as the self-reported tendency of decision-makers to participate in and support PPP adoption. PPP determinants are conceptualized as mediating variables, assessed by validated multi-item measures that capture perceived relational political, business environment, economic and institutional capability, thus considering their potential influence on the intention–behavior relationship. Demographic factors, including age, gender, education level, and sectoral affiliation (Public and private), are considered observed covariates and analyzed for their moderating or confounding influences on the adoption of PPPs. The healthcare sector types operationally defined as governmental entities and private entities represents where the private sector including two sub-types: “private-for-profit ” and private-for-not profit.

TPB constructs play a significant but mediate role in shaping decision makers' intentions to adopt PPP strategies in the healthcare sector. SN, BI, PBC, and FC are four key constructs influencing the adoption of PPP strategies in the healthcare sector. SN refers to the perceived social pressure from important individuals or groups, which can positively shape decision makers' intentions to adopt PPPs. BI is the immediate antecedent to actual adoption, representing the decision maker's motivation and likelihood to implement PPP strategies. PBC reflects the extent to which decision makers feel capable of executing PPP adoption, considering their resources and perceived obstacles; higher perceived Behavioral control leads to stronger intentions and greater likelihood of adoption. FC, such as supportive policies, infrastructure, and resources, further enhance the ease with which decision makers can translate their intentions into actual PPP adoption, reinforcing the effects of the other constructs ((Luo et al., 2022); (Ivanov et al., 2024); (Tommasetti et al., 2018)). Influence of four constructs on PPP adoption decisions is presented in Table 2.7.

Table 2.7: Summarizing the four constructs and their influence on PPP adoption decisions.

Construct	Definition	Influence on PPP Adoption Decision	Citations
Subjective Norm	Perceived social pressure from important others	Positively affects intention to adopt PPP	(Ivanov et al., 2024; Luo et al., 2022; Tommasetti et al., 2018)
Behavioral Intention	Motivation and likelihood to perform the behavior	Direct and strongest predictor of actual adoption	
Perceived Behavioral Control	Perceived ease or difficulty of adopting PPP, based on resources/obstacles	Increases intention and likelihood of adoption	
Facilitating Conditions	External supports (policies, resources, infrastructure)	Enhances ability to implement PPP adoption	

2.5.1 Attitude toward the Behavior

Attitude toward the behavior is defined as an individual's positive or negative evaluation of performing a specific behavior, and it is a key predictor of behavioral intention, which in turn predicts actual behavior. Four items were employed to assess this construct, as illustrated in Table number 2.8.

Table 2.8 attitude toward the behavior Construct and its related items

The elements utilized to assess the AB- write in full construct
1. Participation in the Palestinian health sector can increase operational benefits such as increasing revenues, introducing new expertise to my institution, and other financial gains.
2. I can obtain potential investment opportunities through participation in the Palestinian health sector.
3. I can enhance the competitiveness of clinical (or non-clinical) work through partnership with government institutions.
4. Participation in the Palestinian health sector allows me to obtain external political privileges.

2.5.2 Subjective Norm

SN refers to an individual's perception of social pressure from important referent groups or people, expressed either through their expectations (injunctive norms) or their actual practices (descriptive norms). It is measured by the extent to which these perceived expectations and behaviors influence the individual's intention to adopt or not adopt the target behavior. This study assumes that DM will be influenced by their colleagues and instructors in the Palestinian healthcare sector contexts. Four items were employed to assess this construct, as depicted in Table 2.9.

Table 2.9: Subjective Norm Construct and its related items

The elements utilized to assess the Subjective Norm construct
1. Participating in healthcare service delivery allows me to gain a good social reputation in the Palestinian health sector.
2. There is an increasing number of competitors in health services in the same area I work in within the Palestinian health sector.
3. Investing in the Palestinian health sector helps me gain a prestigious position among competitors.
4. Investing in the Palestinian health sector helps me gain recognition from government entities.

2.5.3 Perceived Behavioral Control

PBC is operationally defined as the degree to which an individual perceives that they have the resources, abilities, and opportunities to perform a specific behavior, measured through self-reported items assessing perceived ease or difficulty of performing the behavior and the extent of control the individual feels they can exercise over it. In this study, PBC will be assessed based on the DM's view of their ability to utilize the PPP strategy by acquiring the requisite resources and sufficient assistance to utilize health services within the Palestinian context and resources settings. Three items were employed to assess this construct, as depicted in Table 2.10.

Table 2.10: Perceived Behavioral Control Construct and its related items

The elements utilized to assess the Perceived Behavioral Control
1. Given the available resources and knowledge, participating in the Palestinian health sector would be easy for me.
2. I can obtain the necessary knowledge and capital to invest in providing medical services in Palestine if I am willing to.
3. I consider the barriers to investment in the Palestinian health sector acceptable.

2.5.4 Facilitating Conditions

FC is operationally defined as the degree to which an individual perceives the availability of organizational, technical, and infrastructural resources (e.g., training, support, access to technology, and financial resources) necessary for the successful execution of a specific activity. They are evaluated using self-reported Likert-scale items that examine the availability of necessary resources, system compatibility, and sufficiency of organizational support. In this study, FC will be assessed based on the DM's view of their ability to implement the PPP strategy by acquiring the requisite resources and sufficient assistance to utilize health services within the Palestinian context and resources settings. Three items were utilized to evaluate this construct, as illustrated in Table 2.11.

Table 2.11: Facilitating Condition Construct and its related items

The elements utilized to assess the Facilitating Condition
1. Official guidelines are available for establishing partnerships with public authorities and investing in information exchange mechanisms.
2. Public authorities encourage private sector investors (for-profit and nonprofit) to participate in the Palestinian health sector.
3. There are supportive public policies with potential benefits that facilitate private capital investment in the Palestinian health sector.

2.5.5 Behavior Intention

BI is operationally defined as the self-reported strength of decision-makers' intention to adopt PPP strategies in the Palestinian healthcare sector. It reflects their willingness, readiness, and planned effort to engage in PPP adoption, measured through Likert-scale items assessing the extent to which they intend, plan, and are committed to adopting PPP in the future. BI is an immediate antecedent of usage behavior and gives an indication about an individuals' readiness to perform a specific behavior. Ajzen(1991) claimed that as a general rule, "the stronger the intention to engage in a behavior, the more likely should be its performance". In the context of this research and similar to previous studies, this research considered BI as dependent variables in the theoretical framework. It is expected that BI will have a direct influence in predicting the adopting PPP strategy in the healthcare sector in the future. Four items were utilized to evaluate this construct, as illustrated in Table 2.12.

Table 2.12: Behavior Intention Construct and its related items

Three items were employed to assess this construct, as depicted in Table 2.12

The elements utilized to assess the Behavior Intention	
1.	I am willing to participate in the Palestinian health sector in a phased manner.
2.	Employees in my institution would be happy to receive relevant training related to PPP in the health sector.
3.	Investing in the Palestinian health sector through public-private partnership (for-profit and nonprofit) or full privatization is a good idea.
4.	The Palestinian health sector is one of my preferred areas for investment through PPP (for-profit and nonprofit).

2.5.6 PPP Determinants

The mediating factor is operationally defined as the set of perceived contextual, institutional, economic, political, legal, and organizational conditions that influence the feasibility, effectiveness, and success of establishing and implementing PPP arrangements (both for-profit and non-profit) in the Palestinian health sector. This construct captures respondents' perceptions of enabling and constraining environmental factors that shape the PPP landscape. It is operationalized through a multi-item scale reflecting key dimensions including economic stability and funding availability, political context and movement restrictions, legal and regulatory frameworks, investment climate, societal acceptance of PPPs, prior institutional experience, availability of an independent regulatory authority, governance and transparency practices, and clarity of vision and objectives. Together, these items measure the extent to which the external and institutional environment is perceived to facilitate or hinder the successful implementation of PPPs in healthcare. Nine items were utilized to evaluate this construct, as illustrated in Table 2.13.

Table 2.13: Mediating Factor (PPP Determinants) Construct and its related items

The elements utilized to assess the PPP Determinants
2-1 I believe that economic stability, availability of capital, and adequate funding are essential factors for achieving PPPs (for-profit and non-profit) in the Palestinian health sector.
2-2 I believe that the political situation, such as occupation, land confiscation, and movement restrictions between cities, negatively affects PPPs (for-profit and non-profit) in the Palestinian health sector.
2-3 I consider the legal and regulatory framework to be a decisive factor in organizing and governing the terms and conditions of public–private partnerships (for-profit and non-profit) in the Palestinian health sector.
2-4 I consider the investment climate an important factor in attracting investors to the Palestinian health sector.
2-5 I consider societal acceptance of the concept of public–private partnership to be a facilitating factor for establishing such partnerships.
2-6 I consider prior experience and a professional track record to be important factors in implementing PPPs (for-profit and non-profit) in the Palestinian health sector.
2-7 I consider the existence of an independent specialized authority to regulate and oversee public–private partnerships (for-profit and non-profit) to be an important factor for the success of such partnerships.
2-8 I consider governance and transparency among the most important factors contributing to the success of public–private partnerships (for-profit and non-profit) in investing in the Palestinian health sector.
2-9 I believe that clarity of vision and objectives in establishing partnerships leads to improved intended outcomes, including enhanced quality of healthcare services.

2.6 Individual characteristics

In addition to the first category which is comprised of TPB constructs, there are also another category of factors (gender, age, educational level and experience and sector type) that may influence the relationships between the core constructs and BI as presented in Table 2.14. These variables will be discussed in the following section sequentially. Demographic and sectoral factors—such as gender, age, education, experience, and the distinction between public and private sectors—can affect decision makers' decisions regarding the adoption of PPPs in the health sector; nevertheless, their influences are varied and contextually sensitive.

2.6.1 Gender: Research highlights that gender can shape perspectives and participation in PPPs. Women's experiences and perceptions in public-private partnerships may differ from men's, affecting decision-making dynamics and priorities within these collaborations (Hawkes et al., 2017; Johnston, 2017). However, many partnerships lack gender-sensitive strategies, and gender is often underrepresented in governance and reporting (Hawkes et al., 2017).

2.6.2 Age: Age can mediate how decision makers perceive and respond to factors influencing PPP adoption, such as risk and innovation. For example, in related health technology adoption, age was found to mediate the impact of risk and coping appraisals on adoption intention (Guo et al., 2015).

2.6.3 Education Level: Higher education and literacy levels can make decision makers more critical and demanding regarding PPP performance and quality, influencing their satisfaction and potentially their willingness to adopt or renew PPP contracts (Carvalho & Rodrigues, 2022).

2.6.4 Experience: While direct evidence on experience is limited, studies suggest that experience in the health sector or with partnerships can affect openness to PPPs, especially in the context of private sector doctors' willingness to participate (Joudyian et al., 2021).

2.6.5 Type of Health Sector: The motivations and challenges for PPP adoption differ between public and private sector actors. Private sector participants may focus on business performance, while public sector actors prioritize social and policy objectives. The strength and readiness of each sector also affect partnership success (Joudyian et al., 2021; Carvalho & Rodrigues, 2022).

Table 2.14: Table summarizing how demographic and sectoral factors influence PPP adoption decisions.

Factor	Influence on PPP Adoption Decision	Citations
Gender	Shapes participation, priorities, and governance	(Hawkes et al., 2017; Johnston, 2017)
Age	Mediates perception of risk and innovation	(Guo et al., 2015)
Education	Increases critical evaluation and demand for quality	(Carvalho & Rodrigues, 2022)
Experience	Affects openness and willingness to participate	(Joudyian et al., 2021)
Sector Type	Alters motivations, challenges, and partnership dynamics	(Joudyian et al., 2021; Carvalho & Rodrigues, 2022)

Finally, demographic and sectoral characteristics play hidden roles in predicting decision makers' choices regarding PPP adoption in healthcare sector, with gender, age, education, experience, and sector type each contributing to the complexity of these decisions.

2.7 Summary

In this chapter we proposed a conceptual framework that can help understand the various factors that are expected to influence the adoption PPP in the Palestinian healthcare sector. The research model is based on prominent well-known theory that has been discussed in this chapter which is relevant to the context of this research. These factors reflect personal, social, cultural and organizational factors and specifically include SN, FC, PBC, BI and PPP determinants. In addition, demographic characteristics were integrated as two sets of moderators in the model.

Therefore, this research proposes and tests three types of hypotheses, in the first category, this study proposes 4 direct hypotheses from H1 to H4. In the second category, 4 individual characteristics and 4 cultural variables were hypothesized to have a moderating impact on the relationship between the main determinants and BI. While in the third category, 1 hypothesis was proposed to test the effect of PPP determinants on DM's decision of adopting the PPP in healthcare sector. The conceptual framework will be tested empirically in Palestine- West Bank, to achieve the objective of the research, as discussed in previous chapters. Therefore, the next chapter discusses the chosen methodology and includes a detailed explanation of the method of data collection, questionnaire development and the various tools to be used for the data analysis.

Chapter Three

Methodology

3.1 Introduction

This chapter describes the chosen methods that are essential to empirically test and understand the proposed PPP strategy and the conceptual model used. This chapter will also discuss the sampling method and the development of the qualitative interview guide and questionnaire, data collection process, explaining the data analysis, statistical techniques and finally the ethical considerations.

In this study, a mixed-methods design was employed, drawing on Cresswell's interactive model of research design (Cresswell, 2013) which emphasizes the iterative and complementary integration of qualitative and quantitative approaches. The qualitative phase, consisting of in-depth interviews with 17 key informants from public and private sector, was used to generate a contextualized understanding of the underlying factors shaping DMs' intentions toward adopting PPP strategies in the Palestinian healthcare sector. Insights from this exploratory phase informed the development of a structured questionnaire administered to 163 top-level DMs, thereby enhancing the validity, relevance, and cultural grounding of the quantitative instrument. The subsequent quantitative analysis enabled the testing and generalization of emergent themes to a broader population, while also providing statistical rigor to the exploration and examination of associations. Following Cresswell's approach, the integration of methods in this study is not sequentially isolated but interactively linked, ensuring that qualitative insights refine the quantitative measures and that quantitative results validate and extend qualitative findings. This complementarity strengthens both the interpretive depth and empirical robustness of the study, offering a comprehensive account of the complex factors influencing PPP adoption in the Palestinian context. A survey research approach based on positivism (emphasizing objectivity, empirical measurement, hypothesis testing, and the use of quantitative methods to examine relationships between variables) was employed to guide the research. Questionnaire was used as a data collection technique. Additionally, Structural Equation Model (SEM) using SmartPLS 4 was employed to predict the Behavioral intention that affect the PPP adoption. Accordingly, this chapter is structured as follows. Section 3.2 presents the overall study design, research setting, study tools, study population, eligibility criteria, and sampling procedures. Section 3.3 describes

the development of the qualitative interview guide, while Section 3.4 outlines the development of the quantitative questionnaire and the application of Structural Equation Modeling (SEM). Section 3.5 details the data collection and management procedures. Section 3.6 discusses the pilot study, instrument validation, reliability, and trustworthiness. Section 3.7 presents the data analysis procedures, including the justification for the use of non-parametric statistical techniques. Section 3.8 addresses the ethical considerations relevant to the study, Section 3.9 outlines the study limitations, and finally, Section 3.10 provides a summary of the chapter.

3.2 Study Design

This study adopts a mixed-methods sequential exploratory design underpinned by a combination of interpretivism and positivism, reflecting a pragmatic research philosophy. The interpretivist stance guided the initial qualitative phase, in which 17 in-depth interviews were conducted to explore decision-makers' subjective meanings, perceptions, and contextual influences regarding PPP adoption. This was essential because intentions toward policy adoption are socially constructed, value-laden, and shaped by institutional, cultural, and organizational contexts that cannot be fully captured through numbers alone. Building on these insights, the subsequent quantitative phase was grounded in positivism, using a structured survey with 163 DMs to test relationships, measure constructs with precision, and generalize findings across a larger population. The integration of interpretivist and positivist traditions is crucial in this context: interpretivism ensures the research remains sensitive to local realities and complex decision-making dynamics, while positivism provides the empirical rigor necessary for validation and broader policy relevance. By combining these paradigms, the study produces findings that are not only statistically robust but also socially meaningful, thereby offering a comprehensive understanding of the factors influencing DMs' intentions toward PPP adoption in the Palestinian health sector.

To achieve the objectives of the study; a mixed method study applied to understand the factor influencing the intention of DM to adopt PPP in the Palestinian healthcare system. Figure 3.1 showed the steps that have been taken to answer the three main defined research questions as shown in Table 3.1.

Table 3. 1: Summary of study design

#	Objective	Methods used	Population/ Sample
1	To explore the perceptions of decision-makers toward introducing the PPP strategy in the Palestinian healthcare system.	Formative research In-depth interviews	14 Key senior DMs from public and private sectors. 17 key senior DMs from the public and private sectors. Annex 01 showed the list of Key Informants - KIs
2	To assess the role of PPP determinants in shaping stakeholders' perceptions and willingness to engage in PPP initiatives within the Palestinian healthcare system.	Structural Equation Model (SEM) Policy analysis framework	• 38 Entities from the public sector. • 21 Entities from the private for-profit sector. • 27 Entities from the private for non-profit. • 86 entities with total 163 participants
3	To examine the factors influencing the intention to adopt PPP; i.e. <i>attitude toward the behavior</i> , subjective norm, and perceived behavioral control on the intention of key stakeholders to adopt PPP strategies in the Palestinian health sector.	Structural Equation Model (SEM)	Targeted entities included ministries, public institutions, private hospitals, and other relevant organizations in the healthcare sector, including healthcare providers, think tanks, research institutions, and regulatory ministries such as the Ministry of Economy-MoE and Ministry of Finance -MoF. The full list of entities is provided in Annex 02.

The research setting was in Palestine, West Bank-WB, which is geographically segregated from Gaza Strip and Jerusalem. The research was performed in Feb 2024. The sequential phases and methodological steps of this research are illustrated in Figure 3.1, as outlined below:

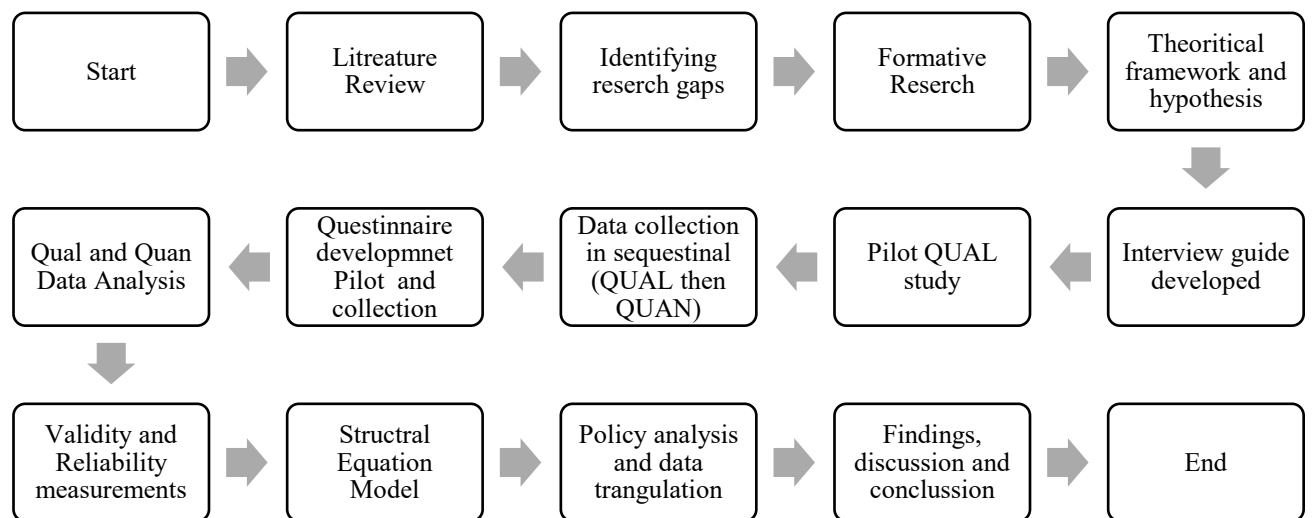


Figure 3.1: The sequential phases and methodological steps

Figure 3.2 presents the overall research design steps, which follows a sequential and interrelated process. The study began with a comprehensive literature review (Chapter 2) to develop an in-depth understanding of the research problem. Based on this review, a conceptual model with defined constructs was formulated to generate and test the study's hypotheses. Subsequently, the research methodology was outlined (Chapter 3), detailing the approach adopted to address the research problem. This included the choice of a quantitative method, the development of the survey instrument (validity checks, pilot testing), sampling strategy, and data collection procedures. To evaluate the proposed model, descriptive and inferential analyses were conducted on the collected data (Chapter 4), presenting the results of hypothesis testing. The research then progressed to a critical discussion of the findings (Chapter 5), followed by the conclusion and recommendations for future research.

This research adopts a sequential mixed-methods design, integrating qualitative and quantitative approaches in a structured, stepwise manner to provide a comprehensive understanding of the research problem. The sequential nature of the design enables the strengths of one method to inform and complement the other, thereby ensuring both contextual depth and generalizability of findings. Accordingly, the following phases are presented to explain and justify each step, while illustrating how they are sequentially integrated to generate robust evidence:

- Phase One: The study begins with a qualitative phase aimed at exploring key phenomena, uncovering contextual factors, and gaining an in-depth understanding of participants' perspectives. This phase employs methods such as in-depth interviews with key informants and thematic discussions with relevant stakeholders. The qualitative data are analyzed thematically, using systematic coding procedures to identify emerging constructs, patterns, and insights. The findings from this phase subsequently inform the development of the conceptual model and the design of the survey instrument for the quantitative phase, ensuring both content validity and contextual relevance.
- Phase Two: Quantitative methods are employed to test the conceptual model and hypotheses generated from the qualitative findings. A structured survey instrument is developed, validated, and pilot-tested prior to full-scale administration. Appropriate sampling techniques, such as stratified or purposive sampling, are applied to ensure the representativeness of the target population. The collected data were analyzed using both descriptive and inferential statistical methods. The Mann–Whitney U test was applied when the independent grouping variable consisted of two categories, whereas the Kruskal–Wallis H test was used when the grouping variable contained three or more categories. In addition, Structural Equation Modeling was employed to examine the relationships among constructs and to test the proposed hypotheses. In the final phase, results from both the qualitative and quantitative components are integrated to provide a comprehensive understanding of the research problem. The qualitative findings offer contextual depth and help explain the quantitative results, while the quantitative findings support generalization and hypothesis testing. This integration strengthens the validity, credibility, and overall robustness of the study. The sequential mixed-methods design is particularly well-suited to this research, as it allows for the initial exploration of complex constructs and contextual factors in Phase 1, followed by rigorous testing and validation of these constructs at scale in Phase 2. By combining contextual insights with

empirical evidence, this approach ensures that the study findings are both theoretically grounded and practically applicable for informing policy and practice.

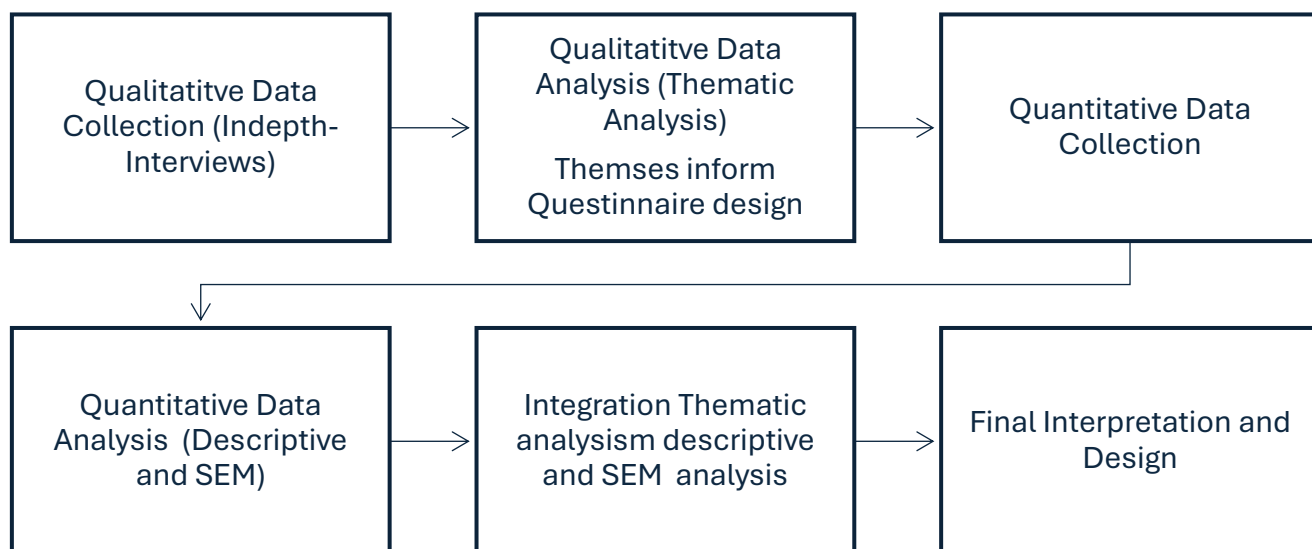


Figure 3.2: Sequential Exploratory Mixed Methods Design

3.2.1 Study Settings:

This study was conducted within the Palestinian healthcare sector in the West Bank, Palestine, a setting characterized by political instability, fiscal fragility, fragmented purchasing arrangements, and increasing demand for specialized healthcare services. The healthcare system consists of public, private for-profit, and private not-for-profit providers operating under constrained financial and institutional conditions. Although the Ministry of Health remains the primary steward and provider of healthcare services, substantial reliance exists on purchasing and referral arrangements with non-governmental and private providers, particularly for tertiary and specialized care. In this context, PPP strategies have increasingly emerged as a potential policy option for strengthening governance, improving strategic purchasing, and enhancing service delivery sustainability. The study targeted senior decision-makers and healthcare leaders from governmental institutions, public and private hospitals, and other organizations involved in healthcare financing, regulation, service delivery, and policy development. The quantitative phase included hospitals operating across the public, private for-profit, and private not-for-profit sectors in the West Bank, while the qualitative phase involved key informants with direct experience or influence in PPP-related policies and healthcare governance.

3.2.2 Study Tools

A qualitative guide interview was developed based on research observation and experience in the domain of health system development for long time in the Palestinian healthcare system. Literature review and formative research was applied as part of a research direction determination before developing the dissertation research title. Furthermore, a questionnaire formulated from 5 sections were developed, tested and applied. This section will present the qualitative guide and questionnaire.

3.2.3 Study population and sampling

The study population consisted of healthcare leaders, senior public experts, and healthcare investors in the Palestinian healthcare system. This included representatives from public and private hospitals, governmental ministries, and other relevant institutions with direct or indirect roles in shaping health sector strategies, including PPP adoption.

3.2.4 Eligibility criteria

Inclusion and exclusion criteria were established to guide the selection process clearly at the institutional or individual, as follows:

Inclusion's Criteria

- Private entities include those who have an investment and related experience in managing and leading healthcare facilities.
- Decision and policy makers who are working as senior officers in healthcare sector from both public and private sectors.
- Regulators, organizers and legal entities who are managing and supporting collaboration in public and private sectors.
- Regulators, organizers, legal entities, think tanks, and institutional actors involved in managing, supporting, regulating, or shaping collaboration between the public and private sectors.

Exclusion Criteria

- Entities and individuals with no previous experience in health investment industry in terms of healthcare provision and regulations.

As part of the sequential mixed-methods design, the principal investigator-initiated contact with potential participants through telephone calls and email correspondence, providing them with a copy of the study guide and survey instrument. For the qualitative phase, all experts identified for IDIs consented to participate, resulting in a total of 17 DMs. These interviews were critical in generating contextual insights and refining the survey. In the subsequent quantitative phase, 163 participants completed the survey. The sampling frame included all 59 hospitals (MOH, 2023) operating in the WB across various sectors, of which 42 hospitals responded, representing a 71% response rate. To ensure wider institutional

representation, the survey was also disseminated to other key stakeholders, including governmental ministries such as the MoE, MoF, and MoH, in addition to other entities listed in Annex 01, all of which responded positively. Stakeholders were selected based on findings from the qualitative phase, where key informants recommended extending participation beyond healthcare providers to include regulators, policy actors, universities, and think tanks involved in shaping partnership-related strategies and healthcare governance. Entities from the public and private sectors were targeted, encompassing ministries, think tanks, hospitals, and other institutional categories (Table 3.2). The stakeholders and entities were targeted based on qualitative insights from KIs where they recommended it to include not only healthcare providers but also the regulators and think tanks.

1. Public sector (government) includes 41 entities.
2. Private for-profit organizations include 27 entities.
3. Private non-profit organizations include 35 entities.

Table 3.2: List of targeted institutions across the public and private healthcare sector in WB

Sector Type	Number of in-depth interviews	Number of selected entities targeted in the survey	Total number of targeted entities
Public (Government)	3	38	41
Private for-profit organization	6	21	27
Private non-profit organization	8	27	35
Total	17	86	103

It is worth noting that the complete questionnaires were obtained from 103 entities, covering a total of 163 participants. Several entities submitted more than one questionnaire, as the inclusion criteria encompassed both managers and top-level managers, who are recognized as key decision-makers. The final sample consisted of 163 participants, with an approximately balanced distribution between public and private sector respondents. Detailed demographic and professional characteristics, including age, gender, education level, position, and years of experience, were collected to describe the sample profile comprehensively.

3.2.5 Study Sampling

This section provides a comprehensive overview of the study sample for both the qualitative and quantitative phases, including the rationale for participant selection, detailed profiles of the respondents, and the specific criteria applied to ensure that the participants were well-suited to address the research objectives. The sampling strategies differed across the two phases due to the distinct purposes of qualitative exploration and quantitative measurement.

3.2.6 Sampling frame

The sampling frame for the quantitative survey included all 59 hospitals operating in the WB across public, private for-profit sector, and private not-for-profit sector , and other entities

that provide, financing, monitoring and regulating health services as listed in Annex 02. For the qualitative phase, the sampling frame consisted of experts and senior decision-makers from ministries, hospitals, and related institutions identified as having direct experience or influence in PPP-related policies and practices. A purposeful sampling approach was employed to select participants for this study. The initial list of potential participants across sectors was developed based on the researcher's extensive professional knowledge and experience in the Palestinian health sector and further refined through consultations with health policy experts in the West Bank, Palestine, as well as a review of relevant grey literature in the local context. Participants were included in the sampling frame if they met the following criteria (1) Extensive experience within the health system in general, and specifically within healthcare service delivery (2) Occupied a senior management or leadership position within their organization (3) Possessed experience in health financing, procurement, and specifically in outsourcing of health services and health financing mechanisms. This approach ensured that the selected participants were highly knowledgeable and positioned to provide informed perspectives on PPP adoption in the Palestinian health sector. Expert consultation and snowball sampling were employed to identify participants and ensure adequate coverage of relevant facilities rather than individuals per se, as the unit of analysis was institutional-level experience. Participants were therefore selected based on their professional roles and their direct involvement with the targeted facilities.

To achieve sufficient informational depth, active engagement, and analytic saturation, a purposive sampling approach was adopted using multiple complementary strategies. First, criterion sampling was applied to include participants who met predefined eligibility criteria and could provide detailed insights into specific study domains. Second, critical case sampling targeted key experts capable of offering authoritative and fact-based perspectives on the phenomena under investigation. Third, snowball sampling was used to identify additional relevant informants, acknowledging that some key stakeholders may not have been known to the research team at the outset. An initial sampling frame encompassing the two study sectors (public and private) was developed based on the researcher's prior professional knowledge and refined iteratively through expert recommendations. Sampling continued until thematic saturation was reached, defined as the point at which no new substantive themes emerged during data analysis.

3.3 Qualitative Part: Interview Guide Development

The study employs a qualitative methodology utilizing semi-structured interviews to gain in-depth insights into DM' perceptions. KIs were considered the primary source of valuable input regarding the adoption of PPP strategies within the Palestinian healthcare system, given their knowledge of the country's institutional and resource environment. The interview guide was developed specifically for this study, drawing upon the literature review, relevant theoretical frameworks, the researcher's field observations, and prior empirical evidence. To strengthen its credibility and clarity, the guide was reviewed and refined through expert judgment in the qualitative research domain before being finalized. Semi-structured interviews were selected as the most appropriate tool because they allow for a balance

between structure and flexibility. While the pre-determined questions ensured consistency across interviews, the open-ended format provided participants with the freedom to elaborate on their views, allowing new themes and insights to emerge. This adaptability was essential in exploring the complex and context-dependent perceptions surrounding PPP adoption, which might not have been captured through structured interviews, while still maintaining more focus and comparability than fully unstructured interviews. To further ensure clarity and appropriateness of the questions, the interview guide was pilot-tested with a small number of participants similar to the target KIs. Feedback from these trial interviews was used to refine question wording, sequence, and coverage before the full-scale data collection. The guide, prepared in Arabic to ensure participants' ease and comfort, was shared with interviewees in advance. It contained open-ended questions designed to explore participants' awareness, perceptions of feasibility, and the potential benefits and challenges associated with PPP adoption. A consent form was also sent to participants by email to review, sign, and return prior to the interviews. All interviews were recorded, with participants' permission, for documentation and analysis purposes. The complete interview guide is available in Annex 03.

3.4 Quantitative Part: Questionnaire Development

The primary questionnaire used in this study was a self-administered questionnaire (Annex 04), developed specifically for this research. The development process was informed by an extensive review of existing literature and theoretical frameworks, particularly the TPB (Ajzen, 1992), as well as recent studies on PPP initiatives in municipalities (Marai & Marrar, 2018). The questionnaire was prepared in Arabic to ensure that the questions were easily understandable to the target participants, who are decision-makers in both public and private health sectors. The questionnaire comprised five main sections. The first section captured general demographic information and profile characteristics of the participants, such as age, gender, position, and years of experience. The second section was primarily developed based on the TPB framework and included 24 items categorized into four constructs. An additional construct was developed based on findings from the qualitative phase of this study, thereby allowing insights from the exploratory qualitative interviews to inform and enrich the quantitative instrument. While the questionnaire was specifically developed for this research and had not been used in prior studies, several items were utilized from other literature. The questionnaire was systematically structured into five thematic sections as indicated in Table 3.3, addressing a distinct dimension of PPP adoption in the Palestinian health sector, to capture both individual attitudes and contextual determinants shaping decision-making. Prior to these sections, the tool included an informed consent form that explained the purpose of the study, assured confidentiality and anonymity, clarified the voluntary nature of participation, and obtained respondents' agreement before proceeding. The tool was informed by an extensive review of literature and relevant theoretical frameworks, and all items were formulated to ensure clarity, contextual relevance, and alignment with the study objectives.

In the quantitative phase, the questionnaire items measured respondents' perceptions of PPP constructs. Questions 1, 3, 4, and 5 assessed respondents' level of agreement with statements related to PPP dimensions and were used to capture attitudes and perceptions toward PPP adoption. Question 2 specifically measured the perceived strength or intensity of PPP determinants, reflecting contextual and environmental factors influencing PPP feasibility in the Palestinian health sector.

Two Likert-type scales were utilized in the questionnaire. For Questions 1, 3, 4, and 5, a five-point Likert scale was applied, where 1 = strongly disagree and 5 = strongly agree. For Question 2, a three-point Likert scale was employed to assess the perceived strength of specific factors, where 1 = Weak, 2 = Moderate, and 3 = Strong. The use of two different scales was guided by the nature of the constructs being measured, ensuring appropriate measurement alignment with the type of perception captured in each section.

In the Trends and Opinions on PPP construct, two items were negatively worded and therefore required reverse coding prior to statistical analysis. Specifically, Statement 3 ("There is a lack of legislation and laws regulating the operation of health services by the private sector [for-profit and nonprofit]") and Statement 7 ("The public sector lacks the qualified departments to monitor the private sector if it assumes management of some projects") were framed to reflect institutional and regulatory gaps rather than direct supportive conditions for PPP adoption.

To ensure conceptual consistency—where higher scores uniformly indicate more favorable perceptions toward PPP adoption—these items were reverse-coded prior to computing composite scores and conducting reliability and structural analyses. The original Likert responses (1 to 5) were transformed into their inverse values (5 to 1, 4 to 2, etc.). This procedure ensured alignment of all indicators in the same directional interpretation, reduced measurement bias associated with negatively worded items, and improved the internal consistency and validity of the construct for subsequent statistical analyses.

Table 3.3: Description of questionnaire contents

Questionnaire sections	Number of statements (items)
Section 1: Factors related to the intention to adopt the PPP strategy	22
Section 2: Determinants of PPP in health projects	9
Section 3: Trends and opinions of DMs on PPPs	8
Section 4: Preferred PPP models in health projects/services (from the perspective of public and private sector decision-makers)	5
Section 5: Governance (transparency, trust, accountability, and clarity)	4

The first section, factors related to the intention to adopt PPP, consisted of 24 items measured on a five-point Likert scale (ranging from strongly disagree to strongly agree). These items explored decision-makers' motivations, perceived benefits, barriers, institutional readiness, and attitudes toward investment in the health sector. The section emphasized behavioral intention, perceived behavioral control, institutional capacity, and willingness to engage in PPP, thereby reflecting the determinants of adoption readiness that derived from TPB.

The second section, determinants of PPP in health projects, required respondents to rank key contextual factors—including economic stability, political environment, legal frameworks,

investment climate, governance, and community acceptance—on a three-point scale (low, medium, high). This section was designed to capture stakeholders' prioritization of structural and systemic elements that either enable or constrain the feasibility of PPP implementation in Palestine. The third section, trends and opinions on PPP, comprised eight statements assessed on a five-point Likert scale. These items gauged respondents' attitudes toward the role of PPP in managing both existing and new health projects, legislative requirements, service quality, and the government's strategic orientation. The aim was to capture the general acceptance of PPP, the perceived regulatory gaps, and the expected implications for healthcare service delivery. Section four focused on Preferred PPP Models, asking respondents to select from a range of partnership and privatization options that varied in ownership, control, and management structures. Section five measured perceptions of Governance through four Likert-scale items assessing transparency, accountability, clarity of roles, and conflict prevention. Together, these sections offered insight into not only the preferred modalities of PPP but also the determinants conditions required to ensure effective and sustainable partnerships in the Palestinian health sector. Overall, the tool provided a comprehensive framework for capturing stakeholders' perspectives on the intention, determinants, trends, preferred models, and governance of PPP in the Palestinian health sector, while ensuring participants' rights and ethical standards through the inclusion of informed consent.

3.4.1 Structural Equation Modeling (SEM)

The multivariate and complex model by using structural equation modelling, and this type of data analysis is a more complex comparison by the first-generation type. There are two ways to apply structural equation modeling, covariance-based structural equation modeling (CB-SEM) and partial least squares structural equation modeling (PLS-SEM). CB-SEM was used to confirm or reject the theories tested, while Partial Least Squares-Structural Equation Modeling - PLS-SEM was used to develop a conceptual study model. CB-SEM way requires different assumptions in the data set which are the normality distribution of the data, the number of indicators (items or observed variables) for constructs (factor or dimensions), and the sample size contrariwise PLS-SEM deal with the non-normal and small size of data set (Hair et al., 2013). Thus, PLS-SEM was selected because the study adopts a prediction-oriented and theory-building approach involving multiple latent constructs and complex interrelationships. In contrast to covariance-based SEM (CB-SEM), which is primarily confirmatory and focused on model fit, PLS-SEM is particularly suitable for maximizing explained variance and supporting exploratory modeling in contexts where theoretical development remains evolving

This study aims to develop a conceptual model, so the PLS-SEM must be used to evaluate the study model by Hair (Hair et al., 2013) describes the PLS-SEM way as a path analysis that represented the research hypotheses and relationships among variables by a diagram containing two parts, the structural part (inner model) that includes the relations between dependent and independent variables, while measurement part (outer model) include the relationship between construct and their items, this construct represented with their indicators by reflective or formative models.

In this study, both reflective and formative measurement models were employed to capture the multidimensional nature of factors influencing the adoption of PPP strategies in the Palestinian health sector. Reflective constructs, such as Attitude toward the Behavior, Subjective Norm, Perceived Behavioral Control, and Behavioral Intention, represent underlying perceptions and beliefs manifested through their indicators. Therefore, changes in the latent construct are expected to be reflected consistently across the associated indicators, which are assumed to be highly correlated and conceptually interchangeable.

In contrast, formative constructs, including Governance, Trust, and Transparency, were conceptualized as multidimensional contextual and institutional factors formed by several distinct indicators that collectively define the construct. In this case, each indicator captures a unique dimension of the construct and is not necessarily interchangeable with other indicators. Consequently, changes in a specific indicator may alter the overall meaning and level of the construct. The formative specification was selected based on the theoretical nature of these constructs, as governance, trust, and transparency are understood as composite organizational phenomena rather than single underlying latent traits (Hair et al., 2013; Hair et al., 2014).

Accordingly, the study adopts a mixed measurement model consisting of both reflective and formative constructs. Reflective constructs were assessed based on internal consistency and convergent validity criteria, whereas formative constructs were evaluated based on indicator relevance and multicollinearity assessment. This distinction ensures that the measurement model appropriately represents both the psychological determinants and the contextual enablers shaping PPP adoption decisions. Table 3.4 presents the study constructs and the number of associated measurement items.

Table 3.4: Study factors of SEM Model

Abbreviations	Construct	# of item
AB	Attitude toward the Behavior	4
SN	Subjective Norm	4
PBC	Perceived Behavioral Control	3
MF	Mediating Factor (PPP Determinants)	9
BI	Behavior Intention	4
Total number of items used in SEM Model		24

3.5 Data Collection and Management

For qualitative phase, the interviews were scheduled according to participants' availability and conducted at locations chosen by them. In some cases, online platforms such as Google Meet, Microsoft Teams, or Zoom were used. Each interview lasted between 30 and 60 minutes, depending on participant availability and willingness. All sessions were recorded with participants' informed consent and immediately transcribed to ensure data accuracy and to monitor data saturation. Debriefing sessions were conducted after each interview to capture additional observations, notes, and participants' reflections, minimizing the risk of missing valuable insights and enabling clarification of key points. Participants were assured that their participation was voluntary, recordings were confidential, and they had the right to

withdraw at any time. The quantitative component consisted of a structured, self-administered questionnaire designed to complement the qualitative findings and allow for broader generalization. Participants were offered the option to complete the questionnaire either online or on paper. Online responses were collected using Kobo Toolbox, while paper questionnaires were administered through field visits by trained data collectors. Participants could also request clarifications and coordination through WhatsApp, which was used to facilitate communication and reminders.

Training of data collectors was conducted based on a detailed Standard Operating Procedure (SOP), ensuring a standardized, systematic approach to data collection Annex 07. Training covered ethical considerations, participant engagement, explanation of study objectives, administration of self-administered questionnaires, and troubleshooting technical issues in both Kobo Toolbox and paper-based formats. Data collectors were explicitly instructed not to fill the questionnaire on behalf of participants; their role was limited to guidance, coordination, and ensuring adherence to ethical and procedural standards.

Data management procedures ensured that all qualitative and quantitative data were securely stored and accessible only to the research team. Paper questionnaires were filled in Kobo, while online responses were maintained in password-protected Kobo accounts. Interview recordings and transcripts were anonymized to protect participant identity. The combination of qualitative and quantitative data collection, alongside trained data collectors and digital tools, allowed triangulation of findings, enhancing the validity, reliability, and overall rigor of the study.

3.6 Pilot Study, Instrument Validation, Reliability, and Trustworthiness

3.6.1 Reliability

Reliability was assessed using Cronbach's Alpha coefficient in SPSS. Cronbach's Alpha was evaluated at two stages: first during the pilot study to assess the preliminary reliability of the instrument and identify potential weaknesses in the measurement scales, and subsequently during the main data collection phase to confirm the internal consistency of the final instrument using the full study sample. Table 3.5 presents the internal consistency reliability coefficients for the study constructs in both the pilot and final study samples. Cronbach's alpha values ranged from 0.672 to 0.776, indicating acceptable reliability and confirming the suitability of the measurement instrument for the main study analyses.

Table 3.5: Cronbach's Alpha Reliability Coefficients for the Study Constructs in the Pilot and Final Study Samples

Main constructs/ questions	Number of Items	Cronbach's Alpha- Pilot Study Sample	Cronbach's Alpha- Final Study Sample
1.0 Overall reliability of Question one	18	0.760	0.776
1.1 AB- <i>Attitude toward the Behavior</i>	4	0.726	0.760
1.2 Subjective Norm	4	0.758	0.726
1.3 Perceived Behavioral Control	3	0.729	0.758
1.4 Facilitating Condition	3	0.711	0.729
1.5 Behavior Intention	4	0.776	0.711
2.0 Determinants of Public-Private Partnership in Health Projects	9	0.735	0.735
Q3. Trends and Opinions on Public-Private Partnerships	7	0.672	0.672
Q4. Preferred Options for Public-Private Partnership Models in Health Projects/Services (From the Perspective of Public and Private Sector Decision-Makers)	5	0.713	0.713
Q5. Governance (Transparency, Trust, Accountability, and Clarity)	4	0.723	0.723

The pilot study reliability results indicate that all study constructs achieved acceptable levels of internal consistency, with Cronbach's Alpha values ranging from 0.672 to 0.760. Although one construct was slightly below the conventional threshold of 0.70, it remained within the acceptable range for exploratory and pilot research. These findings provided evidence that the questionnaire items were sufficiently reliable and suitable for use in the main data collection phase.

3.6.2 Trustworthiness of the Qualitative Component

The rigor of the qualitative phase was established using the trustworthiness criteria proposed by Lincoln and Guba, namely credibility, transferability, dependability, and confirmability.

- Credibility was strengthened through prolonged engagement with participants, triangulation across multiple stakeholder groups, and member checking. The study conducted 17 in-depth semi-structured interviews with key informants representing public, private, and non-governmental healthcare sectors. Preliminary interpretations were shared with selected participants to verify the accuracy of findings and ensure that the results faithfully reflected participants' perspectives.
- Transferability was enhanced through the provision of rich and detailed descriptions of the Palestinian healthcare context, participant characteristics, organizational settings, and the broader policy environment. Such contextual information enables readers to assess the applicability of the findings to similar settings.
- Dependability was ensured through systematic documentation of all stages of the research process, including interview guides, data collection procedures, coding strategies, theme development, and analytic decisions. This comprehensive documentation created a

transparent audit trail that supports the consistency and replicability of the research process.

- Confirmability was strengthened through reflexive practices and peer debriefing throughout the analysis process. An audit trail was maintained to document methodological decisions and analytical reflections, ensuring that interpretations were grounded in participants' accounts rather than researcher assumptions.

To further enhance transparency and reporting quality, the study applied the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist. The COREQ framework, consisting of 32 items covering research team characteristics, study design, data collection, analysis, and reporting, guided the qualitative component and ensured comprehensive documentation of the research process (Tong et al., 2007).

Collectively, these procedures strengthened the validity, reliability, and trustworthiness of the mixed-methods study, ensuring that the quantitative findings were robust and reliable while the qualitative insights were credible, dependable, and grounded in participants' experiences.

3.7 Data analysis

The study employed a mixed-methods approach to data analysis, addressing both qualitative and quantitative components through multiple phases. For the formative phase, responses were analyzed using descriptive statistics, including frequencies and means, to summarize expert consensus and identify the relative importance of factors potentially influencing the adoption of PPP strategies. This phase allowed prioritization of key determinants based on expert judgment, providing an initial framework for subsequent qualitative and quantitative analyses.

For the qualitative component, IDIs were analyzed using thematic analysis with the assistance of MAXQDA software, version 24. Transcriptions were prepared verbatim and reviewed multiple times, including repeated listening to recordings, to ensure familiarity with the data. Interviews were shared with participants for member checking to validate interpretations. Analysis followed Braun and Clarke's (2006) approach, involving coding, theme identification, and iterative refinement. Multiple strategies were employed to enhance trustworthiness, including involvement of at least two investigators in coding, triangulation of themes across cases, peer debriefing, and consensus meetings among the research team to finalize codes and themes. This process ensured that qualitative findings accurately reflected participants' perspectives and maintained methodological rigor.

For the quantitative component, Structural Equation Modeling (SEM) was estimated using SmartPLS software to examine relationships among constructs related to PPP adoption. The analysis consisted of two steps. First, the measurement model assessed construct reliability and validity using factor loadings, composite reliability, and average variance extracted (AVE). Indicators with factor loadings below the 0.70 threshold were reviewed and, when necessary, removed to strengthen construct validity. Discriminant validity was also confirmed to ensure distinctiveness of constructs. Second, the structural model evaluated hypothesized relationships between independent variables (e.g., age, gender, education, years of experience, sector type) and dependent variables (Behavioral Intention). Path

coefficients, significance levels (via bootstrapping), and R^2 values were calculated to determine the strength, direction, and explanatory power of relationships. This iterative SEM process provided robust evidence of the factors influencing the intention to adopt PPP strategies in the Palestinian health sector.

The univariate normality of the study's indicators and latent factors was evaluated using the Kolmogorov-Smirnov (K-S) test, alongside an assessment of skewness and kurtosis.

Finally, policy analysis was conducted to complement the qualitative and quantitative findings. The analysis followed the Walt and Gilson (1994) Policy Triangle, which comprises four interconnected components: context, process, actors, and content. This framework guided the systematic evaluation of the policy environment for purchasing health services from external providers outside the Ministry of Health. Contextual factors, including political, economic, and social conditions, were examined alongside the processes of policy formulation and implementation. Key actors, including DMs from public and private sectors, were identified and their roles and influence analyzed, while policy content was assessed to determine the objectives, strategies, and regulatory mechanisms supporting PPP adoption. By integrating formative phase results, thematic findings from interviews, SEM analysis, and policy insights, the study provided a comprehensive understanding of the factors influencing PPP adoption and offered evidence-based recommendations for guiding future strategies and implementation plans in the Palestinian health sector.

3.7.1 Justification for Non-Parametric Analysis

In light of the identified distributional violations, this study adopted a non-parametric analytical strategy to maintain statistical rigor and minimize Type I error rates. Differences between independent groups were analyzed using the Mann–Whitney U test and the Kruskal–Wallis H test for comparisons involving three or more groups. These rank-based procedures were selected as robust alternatives to parametric t-tests and ANOVA, as they do not require the assumption of normality and are less sensitive to violations such as the high kurtosis observed in constructs like PPPD and OP. Furthermore, to address the non-normal nature of the data in the structural model, Partial Least Squares Structural Equation Modeling (PLS-SEM) was utilized due to its robustness in handling non-normally distributed data, its suitability for prediction-oriented and complex models, and its appropriateness for studies with relatively small or unequal sample sizes. In addition, the use of bootstrapping procedures in PLS-SEM provides more reliable estimates for statistical inference under such conditions (Hair et al., 2022).

(Hair et al., 2022). In addition, the ordinal nature of the Likert-scale measurements, along with considerations related to sample size and unequal group sizes, further justified the use of non-parametric analytical approaches.

3.8 Ethical considerations

The research proposal was approved by the Research Ethics Committee at the School of Public Health (annex-copy). An informed consent form was attached to the questionnaires, through which participants received a full explanation of the study, including its purpose,

nature, and significance. Participants were assured of the confidentiality of their responses and the voluntary nature of participation, with the freedom to decline or withdraw at any time (Annex 01). Administrative approvals from the Ministry of Health and other relevant stakeholders were obtained (Annex 05). Ethical approval was subsequently granted by the Al-Quds University Ethical Review Board (ERB 14/24) as listed in Annex 06.

3.9 Study Limitations

This study faced several methodological and contextual limitations. Data collection was constrained by limited access to decision-makers, requiring repeated field visits and extended waiting times. The qualitative phase was also limited by participant availability, with government informants underrepresented compared to private for-profit and not-for-profit sectors, which may have affected the balance of perspectives. In addition, fieldwork challenges were amplified by the war on Gaza and conditions in the West Bank–Palestine following the October 7th, 2023 war, including restricted movement limitations across the West Bank, which may have influenced sample accessibility and representativeness. Although the empirical fieldwork was limited to the West Bank, many participating decision-makers represented institutions and organizations whose operational responsibilities, policies, and service delivery frameworks also extended to Gaza. Nevertheless, the inability to directly access Gaza and include participants physically based there remains an important contextual and representational limitation of the study.

Qualitative data were collected between January and April 2023, while quantitative data were collected in February 2025. This time lag was intentional and reflected the sequential exploratory design of the study, where each phase addressed distinct but interconnected objectives. The study commenced with an exploratory qualitative phase aimed at understanding perceptions, experiences, and willingness toward PPP adoption. Following qualitative analysis and thematic development, the second phase focused on instrument development, model specification, and measurement refinement prior to conducting the quantitative validation and structural testing in 2025.

Future research should directly address these limitations by incorporating additional contextual and institutional variables, such as governance quality, institutional trust, and political stability, to improve model robustness. Longitudinal and comparative designs across different fragile or conflict-affected settings are also recommended to better understand PPP adoption dynamics under varying institutional conditions.

3.10 Summary

In conclusion, this chapter detailed mixed-methods approach combining formative research, thematic analysis, SEM analysis, and policy analysis. Careful attention was given to instrument development, pilot testing, and data collector training, ensuring validity, reliability, and trustworthiness of the findings. The integration of qualitative insights, quantitative modeling, and policy analysis allowed for a comprehensive examination of the factors influencing PPP adoption in the Palestinian health sector, providing a

methodologically rigorous foundation for the interpretation of results and evidence-based recommendations presented in subsequent chapters.

Chapter Four

Results

4.1 Introduction

This chapter presents the results and analysis of the dissertation. ~~The~~ It begins with the formative phase, which was conducted prior to the main study. This phase provided exploratory insights and informed the development of the research instruments. This was followed by the pilot study phase, which aimed to assess the validity and reliability of the measurement tools employed in the quantitative analysis. Subsequently, a thematic analysis of the qualitative data obtained from in-depth interviews was performed using MAXQDA version 24.0, adopting an open coding approach to identify the major themes and patterns that emerged from the participants' perspectives. The next section presents the results of the quantitative analysis, which includes descriptive statistics such as mean, standard deviation, level of agreement, in addition to demographic characteristics, reliability tests, and Mann-Whitney and Kruskal-Wallis tests. The Statistical Package for the Social Sciences (SPSS) version 20.0 was utilized to conduct these analyses. Furthermore, a Structural Equation Model (SEM) was applied to examine the relationships among the constructs of the TPB and the mediating factors influencing decision-makers' intentions to adopt PPP strategies, using SmartPLS 4 software. To contextualize these findings, a policy analysis was also conducted to better understand the structure of the Palestinian healthcare purchasing policy, including health financing and service purchasing mechanisms, which may provide further explanation for the observed quantitative and qualitative results. The chapter concludes with the integration of both quantitative and qualitative findings, offering a comprehensive interpretation of the overall study results within the framework of the mixed-method approach.

This chart presents the seven main phases of analysis, validation, and findings of the study as presented in Figure 4.1.

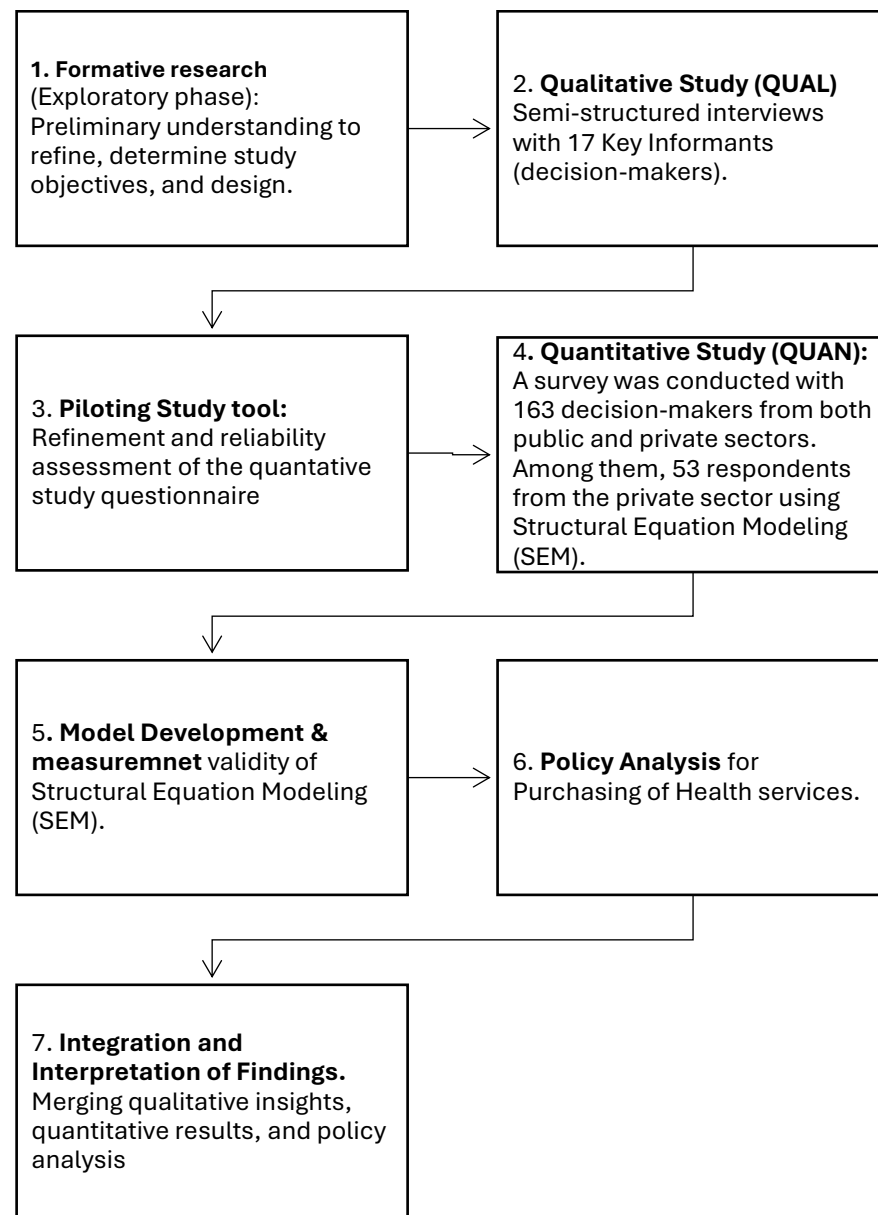


Figure 4.1 Main phases of study analysis

4.2 Formative Research (Exploratory Phase)

The formative phase of the study, conducted in 2022, aimed to provide preliminary insights that would inform the development of the main research objectives, design, and instruments. During this phase, telephone interviews were conducted with 20 senior officials from the Palestinian healthcare sector, of whom 14 participated, resulting in a response rate of 70%. The formative inquiry included several Likert-scale questions to identify the key determinants of PPP adoption, prioritize health sector projects, and assess attitudes toward PPP in healthcare service delivery.

The findings of this phase as shown in Table 4.1 revealed that governance, clarity of vision, transparency, and the prevailing economic situation were among the most influential determinants shaping decision-makers' perceptions of PPPs. Differences in priorities emerged across the sectors studied; however, the highest emphasis was placed on partnerships within the healthcare service domain, particularly in areas such as curative and diagnostic services, renovation of old health facilities, and investment in digital health applications, including big data analytics.

Regarding general attitudes, most respondents expressed overall acceptance of the PPP concept for managing both existing and new health projects. They highlighted the need for updated legislation to regulate the delegation of selected health services to the private sector, emphasizing that such arrangements could improve service quality and efficiency. When asked about preferred PPP models, participants consistently favored arrangements where the government retains full ownership of health facilities while allowing the private sector to manage operations under clearly defined contractual frameworks, possibly extending over longer periods. Importantly, there was a strong consensus rejecting full privatization, with participants supporting the preservation of government ownership and oversight roles while reducing its direct service provision functions. The PPP strategy was perceived to enhance service quality, improve efficiency, and reduce the operational burden on the public sector. The insights derived from this formative phase were instrumental in shaping the main research questions and in guiding the conceptualization of the study's objectives, which ultimately sought to understand the factors influencing decision-makers' intentions to adopt PPP strategies in the Palestinian health sector.

Table 4.1: Summary of formative research results (prior research implementation)

Theme / Focus Area	Key Findings	Implications for guiding the Main research question
Main Determinants of PPP Adoption	Governance, clarity of vision, transparency, and economic conditions are identified as key determinants.	Guided inclusion of governance and economic factors as main constructs.
Sectoral Priorities	Highest priority for partnerships in curative and diagnostic services, facility rehabilitation, and digital health (e.g., big data).	Informed focus areas for policy analysis and PPP model relevance.
Attitudes Toward PPP	General acceptance of PPP in managing current and new projects; recognition of need for updated PPP legislation.	Supported development of questionnaire items on perceived benefits and regulatory frameworks.
Preferred PPP Models	Preference for government ownership with private sector management under clear tendering systems (short or long term).	Shaped hypotheses on perceived governance and control influencing PPP intention.
Privatization vs. Partnership	Strong rejection of full privatization; support for maintaining government ownership and oversight.	Reinforced the conceptual focus on partnership rather than privatization models.

4.3 Qualitative Phase

4.3.1 Main Qualitative Findings

Table 4.2 presents the distribution of the 17 key informants, including decision-makers from the governmental sector, private for-profit sector, and private not-for-profit sector within the Palestinian healthcare system.

Table 4.2: Profile of Key Informants

Sector	Policy and decision makers
Government	3
Private for-profit organization	6
Private for non-profit organization	8
Total of key informants	17

The study identified four main themes capturing decision-makers' perceptions of adopting PPP in Palestinian healthcare sector, based on 113 revised codes and merged codes with similar meanings as presented in Figure 4.2



Figure 4.2. Code Cloud Visualization

The relative size of each code reflects the number of coded segments in which it was applied across all interviews. The visualization highlights the most significant concepts and themes identified in the data, offering an intuitive overview of prevalent topics and concerns discussed by the interviewees.

Across the sectors—public, private for-profit sector, and private not-for-profit sector—there is a shared recognition of PPP as a key mechanism for advancing healthcare services, particularly in facilitating access to advanced treatment and promoting effective collaboration dynamics among stakeholders. All sectors emphasize the importance of strong

governance and clear regulatory frameworks to ensure accountability and sustainability. However, the differences lie in focus and priorities: the public sector stresses the government's role as a regulator and the need for cost-benefit analysis to ensure value for money; the private sector highlights the necessity for a clear vision and governance structure to attract investment and align interests; while the private not-for-profit sector underlines governance, vision clarity, and health insurance reform, alongside navigating political and economic constraints. Together, these perspectives reveal complementary yet distinct approaches to achieving effective PPP implementation.

Main Themes

Four main themes emerged from the analysis with focus on the main perceptions and willingness of partnership adoption decision as shown in Table 4.3. Opinions varied as to whether PPP could advance the availability and quality of healthcare services to the Palestinian people or not due to lack of trust between the two sectors (Baniode & Hamdan, 2026).

Table 4.3-A: Main Themes emerged from qualitative study

Theme 1: Feasibility Study and Economic Evaluation	Main codes
A common viewpoint among interviewees stressed the importance of conducting a feasibility assessment to implement a PPP strategy in the Palestinian healthcare sector. This was a central issue in all the interviews. Some stressed the significance of collaborations to alleviate the government's financial burden while others observed that such partnerships could offer healthcare services at more reasonable and viable costs. Within these conversations, there was a notable emphasis on the requirement for analytical and assessment studies such as economic evaluations to determine the feasibility of these collaborations given the substantial expenses of healthcare services and their operational budgets. Furthermore, to ascertain the effectiveness of these approaches, they stressed the necessity to investigate and assess the procurement of health services from the private sector and contrast it with the public sector. This topic also underscored the significance of proactive assessment studies to promote investment in the health sector based on scientific and professional principles. A hospital general manager stated: <i>"I believe this matter requires consensus and national on the importance of economic feasibility studies. It is a proposal worthy of being examined in Palestine, considering the general situation and the possibility of MoH approval of this system"</i> (KI 14). The theme of economic evaluation recurred throughout the codes where one of the senior governmental managers focused on the importance of performing cost benefit analysis and cost effectiveness analysis to determine which services should be procured or outsourced from outside the MoH basket of services versus which specialized services should be localized within the MoH hospital setting. Health service managers provided many real examples in the interviews including, but limited to, hemodialysis, neonatal intensive care unit, and oncology services.	Increased financial hardship, governmental investment in the health sector, impact assessments, need for economic evaluation studies, economic impact considerations, cost-benefit analysis, cost minimization through PPP, increased health sector budget, and costliness of healthcare investments.

Table 4.2-B: Main Themes emerged from qualitative study

Theme 2: Investment Environment and Clarity of Healthcare Provider Roles in the Partnership	Main codes
This theme highlights the significance of offering a captivating investment environment for private sector health service providers as the public sector lacks the necessary capabilities and competencies. There is also a gap in the local services needed. Respondents on this theme emphasized the private sector's capabilities and the need to collaborate with them rather than just procuring services as the sole form of partnership. This theme also included the private sector's desire to invest in advanced tertiary health services to fulfill local needs and decrease the attachment with the Israeli occupation economy; however, this requires a strong governmental role and a clear governance partnership where the respondents expressed their explicit reservations on the government's ability to fulfill this role. A common viewpoint expressed among interviewees is that the partnership between public and private for non-profit organizations offers one form of the health system's resilience against political instability. The participant raised an important model of care as unique in the Palestinian context aimed at supporting the public healthcare sector increase continuity. The emphasized model that fits with the Palestinian health system is the family practice model that is linked to the health insurance system. Challenges linked to implementing public-private partnerships in government health trusts include government performance, political instability, and pressure on health service providers. After analyzing the challenges mentioned by each key informant, it was found that they ranged from operational factors to governance factors. The challenges included transparency in tenders, the structure of the bidding process for the current public health insurance scheme, and the lack of previous experience in forming partnerships between the public and private sectors. Other major challenges identified included discrepancies in healthcare services among providers and the influence of donor agendas on health sector development and reform.	Ensuring an attractive investment environment, shortage of health services in the public sector, specifying specialized roles for care providers in the market, willingness to invest in hospital services, healthcare service gaps, better utilization of resources, enhancing and strengthening local hospitals, localization and nationalization of services, alignment with healthcare goals, vision for PPP implementation.

Table 4.3-C: Main Themes emerged from qualitative study

Theme 3: Strategic Direction in Implementing Effective PPP in Healthcare	Main codes
This discussion centered on the various forms and models of collaboration and coordination, emphasizing the significance of sharing experiences between the public and private sectors as well as the dynamics that governs cooperation including the forces, factors, and influences at play. The theme highlights the advantages of collaboration and the necessity of learning from past experiences while also addressing certain reservations regarding the types and patterns of partnerships and their potential adverse effects. It underscores the importance of stability and continuity as well as the need to focus on the coordinating roles among different service providers which necessitates a reassessment of existing partnership models. A notable decision-maker illustrated this point with a real-world example from the COVID-19 pandemic, demonstrating the critical role of local government engagement and sustained involvement in ensuring sustainability. <i>“When the first cases of the coronavirus pandemic appeared in Bethlehem, the MoH turned to the Caritas Hospital, a non-governmental hospital as the government did not have COVID-19 laboratories at the time. This is an example of significant partnership and collaboration between the public and private sectors. This also occurred in Nablus” (KI 02).</i> The discussion emphasized the necessity for decision-makers to possess expertise and knowledge before establishing partnerships. Understanding the potential implications and consequences of partnership decisions is crucial for success in this domain while also considering technical and administrative factors particularly experience in managing large-scale projects. It is important to emphasize the distinction between PPP and privatization, as several stakeholders in this study expressed concern about conflating the two. Privatization typically involves the transfer of ownership and responsibility for service delivery to private actors, whereas PPPs are collaborative arrangements in which the public sector retains stewardship and regulatory authority while the private sector contributes resources, expertise, and capacity. Clarifying this difference is critical for policy debates in fragile contexts such as Palestine, where mistrust and fears of privatization may otherwise hinder constructive engagement with PPP as a complementary—not substitutive—strategy for strengthening health services.	Financial burden concerns, sharing country experiences, lessons learned, collaboration dynamics, negative impact of PPP, time-saving benefits, coordination of provider role, concerns about ownership, stability concerns, reviewing current partnerships, community engagement and inclusivity, reforms in the health insurance system, reforms in the procurement service system, government as a regulator, importance of adherence (compliance), private sector suitability for management, coordination of provider roles.

Table 4.3-D: Main Themes emerged from qualitative study

Theme 4: Operational Challenges related to Partnership Pattern and Structure	Main Codes
The challenges associated with the decision-making process regarding the adoption of partnerships in the Palestinian health sector resulted in the lack of a clear and comprehensible partnership framework. Cultural competency, particularly the cooperative behaviors that are integral to forming partnerships, plays a crucial role in this context. In the Palestinian health sector, the concept of cooperation holds distinct implications that influence how health services are procured, who the providers are, and the rationale behind supplier selection. Cultural competence, defined as "the skills and patterns of social behavior that enable effective and efficient activity execution," is a key factor in these dynamics. This competency is significant for partnership considerations as there are reservations concerning issues such as the potential for partnerships to foster corruption and monopolies, particularly given the sensitive nature of health services and the absence of clear contracting standards with suppliers. Additionally, there is a strong emphasis on the social responsibility that the private sector must demonstrate towards the public sector, which must surpass mere cosmetic efforts to genuinely support public interests. Participants addressed various issues related to the political economy including the political framework, employment, tax withholding, and an economic structure reliant on specific occupations. Additionally, some participants expressed concerns regarding the concept of partnership, as they view it as a reflection of capitalism and imperialism. They emphasized the importance of ensuring equitable access to services for all citizens. They highlighted the current context of Palestine, characterized by division, occupation, and democratic challenges, as a significant factor influencing the nature of possible partnerships. A KI clearly stated his concerns on PPP <i>"PPP strategy is a dangerous concept; it's part of capitalism"</i> (KI 13). This theme highlights the anticipated outcomes of partnerships between the private and public sectors in healthcare services which includes enhancing the availability and quality of health services, ensuring the sustainability of these services, and mitigating the risks associated with service shortages. These partnerships are viewed as a strategic tool to address and reduce the risks of service deficits. The discussion also emphasized the importance of monitoring and evaluating projects and partnerships, as well as fostering positive competition among partners.	Lack of trust in the government, cultural competency, potential source of corruption, concerns about private sector objectives (potential abuse), government compelled to purchase from the private sector, project design and planning considerations, government-only ownership and private management patterns, addressing monopoly concerns, infeasibility of Build-Operate-Transfer (BOT), government ownership and private sector management preferences, owned only by government, mixed ownership patterns, dominance of purchasing, concerns about ownership, valuing contracting for the people, social accountability, financial burden concerns, danger concept (private sector acquisition concerns), and associating PPP with capitalism.

* Further details of the qualitative component have been published in the peer-reviewed journal *BMC Health Services Research* as part of the PhD publication requirements (see Annex 08)."

4.4 Quantitative Phase

4.4.1 Data Screening and Analysis Methods

The questionnaire used in this research were screened for any missing answers before the data entry. Furthermore, a check of the descriptive statistics for each item was undertaken to ensure the accuracy of data. In this study, the researcher uses descriptive and inferential statistical tests to examine the hypothesis and questions as follows:

1. Descriptive statistics: Frequencies and percentages were used to describe the characteristics of the population sample.
2. Means and standard deviation and p-value were used to describe the responses about the study constructs. The positive percentage was calculated as summation of items answered with agree and strongly agree together.

Table 4.4 illustrates the distribution of mean value into one of the agreement classes.

Table 4.4: Mean score interpretation

Mean Score*	Interpretation
1.00 – 1.79	Very Low
1.80 – 2.59	Low
2.60 – 3.39	Medium
3.40 – 4.19	High
4.20 – 5.00	Very High

***Note:** Mean scores from the 5-point Likert scale were proportionally categorized into five levels (Very Low to Very High) to provide a clear and interpretable framework for data analysis, despite the absence of a formal reference for this classification.

Inferential statistics: Data analyses were performed using version 4 of the Smart-PLS (Ringle et al., 2012) to test the research hypothesis through structural equation modeling (SEM).

4.4.2 PLS-SEM Model evaluation

Two steps of the analytical procedure were performed to evaluate the research model: measurement evaluation (validity and reliability of the measures) and structural model evaluation (study hypothesis evaluation). Two steps of the analytical procedure were performed to evaluate the research model as presented in Table 4.5

Table 4.5: Measurement model evaluation criteria

Criteria	Cut off value
A. Validity:	(Polit, D. et al, 2007)
A.1 Content Validity	
A.2 Convergent validity	
A2.1 Outer loading	It should be more than 0.50 (Hair et al., 2017).
A2.2 Average Variance Extracted (AVE)	It should be more than 0.50 (Fornell & Larcker, 1981).
A.3 Discriminant validity	
A.3.1 Cross Loading	Every outer loading of any indicator is the highest for its assigned construct compared with the others (Hair et al., 2017).
A.3.2 Fornell-Larcker criterion	The squared root of AVE for any construct should be greater than any correlation between it and any other construct (Fornell & Larcker, 1981)
A.3.3 Heterotrait-monotrait ratio of correlations (HTMT)	Should be less than 0.90 Henseler et al. (2015).
B. Reliability (Internal consistency)	It should be more than 0.70 (Hair et al., 2017).
B.1 Cronbach's α coefficient (CA)	
B.2 Composite Reliability coefficient (CR)	

Structural Model Evaluation

The structural model evaluation (study hypothesis evaluation) as presented in Figure 4.3.
Figure 4.3 PLS-SEM of the research model.

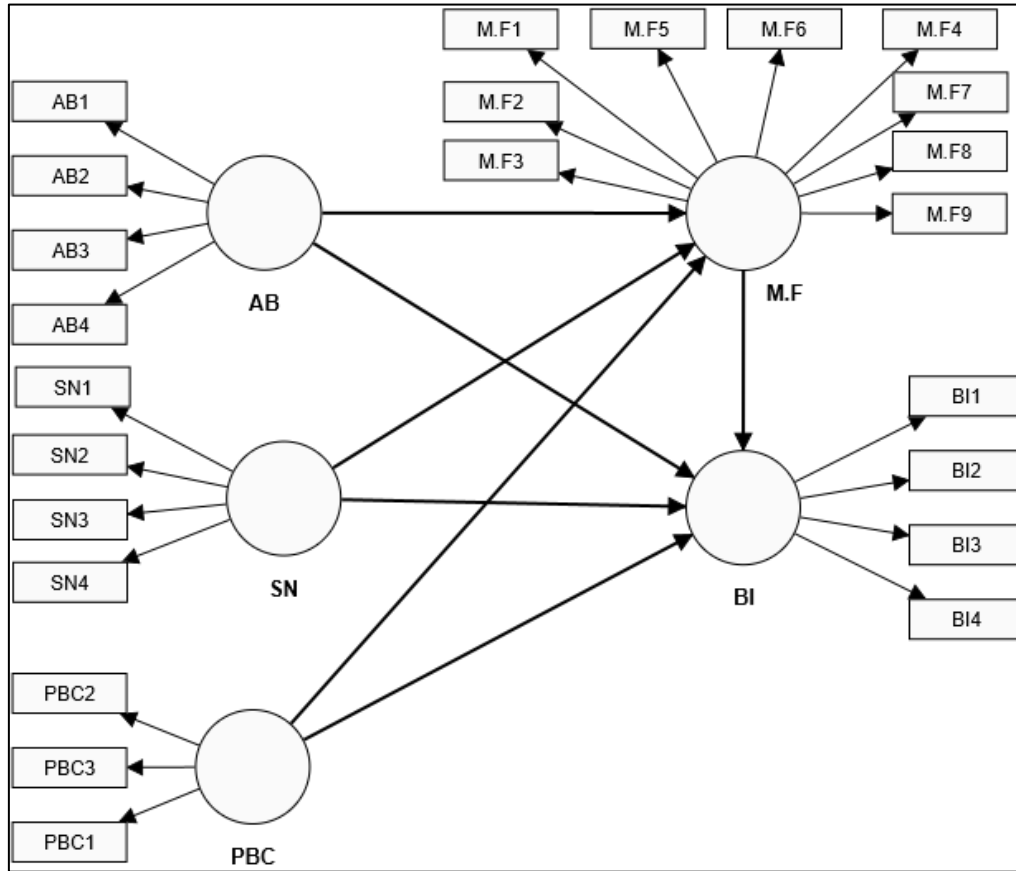


Figure 4.3: PLS-SEM of the research model

The measurement model is evaluated in three main stages: internal consistency, convergent validity, and discriminant validity. Table 4.8 represents the measurement model evaluation criteria. Hair and colleagues determined four tests for assessing the structural model of PLS-SEM, and Table 4.6 represents the structural model evaluation criteria (Hair et al., 2017) .

Table 4.6: Structural model evaluation criteria

Criteria	Cut off value
1. Collinearity test	The construct's Variance Inflation Factors (VIF) should be below 5 (Hair et al., 2017).
2. Coefficient of determination (R^2)	Cohen (1988) suggests that the R^2 value less than 0 is rejected, and 0.02, 0.15, and 0.35 are often used as weak, moderate, and strong coefficients of determination, respectively.
3. Predictive Relevance(Q^2)	Q^2 It should be greater than Zero (Henseler et al., 2009).
4. Effect size (f^2)	Cohen (1988) suggests that the f^2 values of 0.02, 0.15, and 0.35 are often used for small, medium, and large effects.

4.4.3 Validity and Reliability Evaluation of the SEM Model

The first step of study model evaluation is measurement model evaluation, which aims to evaluate: (A) the validity which is include three types of validity assessment: content validity, convergent validity, and ciscriminant validity, and (B) the reliability of the study instrument that measures the internal consistency to assess reliability.

A. Validity Evaluation

A.1 Content Validity

Content validity was assessed using the Content Validity Index (CVI) based on evaluations from five experts in health policy and public health. Each item was rated on a four-point relevance scale, with ratings of 3 (relevant) and 4 (highly relevant) considered acceptable for content validity assessment. All items received ratings within this acceptable range from all experts, resulting in an Item-Level Content Validity Index (I-CVI) of 1.00 for all items. Consequently, the Scale-Level Content Validity Index (S-CVI/Ave) was also 1.00, indicating excellent content validity of the instrument. According to Polit et al. (2007), I-CVI values of 0.78 or higher are considered acceptable, while S-CVI/Ave values of 0.90 or above indicate excellent content validity. Minor expert recommendations were ncorporated to improve item wording, clarity, and contextual relevance without altering the underlying constructs measured.

The questionnaire was originally developed in English and subsequently translated into Arabic to ensure linguistic and cultural appropriateness. A pilot study involving 20 participants was then conducted to assess the clarity, structure, comprehensibility, and cultural suitability of the instrument. Feedback from the pilot study led to several refinements, including rephrasing ambiguous statements, removing duplicate items, improving content clarity, reorganizing items to enhance logical flow, merging overlapping statements, and adding relevant items where necessary. These modifications strengthened the clarity and contextual appropriateness of the questionnaire and supported its suitability for use in the main study.

A.2 Convergent Validity

Hair et al. (2013) defined convergent validity as “the extent to which a measure correlates positively with alternative measures of the same construct”. Both outer loading and Average Variance Extracted (AVE) were used to assess the convergent validity of the measurement model.

A.2.1 Outer Loading

The outer loading or indicator's reliability represents the association between the constructs and indicators (Hair et al., 2017) as presented in Figure 4.4. The outer loading results

presented in Table 4.7 indicate that all indicators demonstrate, in general, acceptable levels of reliability in measuring their respective constructs, with loadings ranging from 0.591 to 0.911, in line with the threshold of 0.60 recommended by Hair et al. (2017) for exploratory research. It is acknowledged, however, that the indicator with a loading of 0.591 is considered borderline and was carefully evaluated in terms of both statistical adequacy and theoretical relevance prior to retention. Within the Attitude toward the Behavior (AB) construct, loadings ranged from 0.684 to 0.885, showing that all items contribute meaningfully to capturing respondents' attitudes toward participation in the Palestinian health sector. Similarly, SN indicators exhibited loadings between 0.591 and 0.804, reflecting moderate to strong associations with the construct, while PBC items demonstrated robust reliability, particularly PBC3 (0.911), indicating strong representation of participants perceived ease and capability in engaging with the sector. Overall, these results confirm that all measurement items are suitable for inclusion in the model, ensuring construct validity and reliability for subsequent structural equation modeling.

Table 4.7: Outer loading of indicators

	AB- Attitude toward the Behavior	Outer Loading
AB1	I can obtain potential investment opportunities through participation in the Palestinian health sector.	0.74
AB2	Participation in the Palestinian health sector can increase operational benefits such as increasing revenues, introducing new expertise to my institution, and other financial gains.	0.701
AB3	Participation in the Palestinian health sector allows me to obtain external political privileges.	0.684
AB4	I can enhance the competitiveness of clinical (or non-clinical) work through partnership with government institutions.	0.885
	Subjective Norm	
SN1	Participating in healthcare service delivery allows me to gain a good social reputation in the Palestinian health sector.	0.76
SN2	There is an increasing number of competitors in health services in the same area I work in within the Palestinian health sector.	0.785
SN3	Investing in the Palestinian health sector helps me gain recognition from government entities.	0.591
SN4	Investing in the Palestinian health sector helps me gain a prestigious position among competitors.	0.804
	Perceived Behavioral Control	
PBC1	I consider the barriers to investment in the Palestinian health sector acceptable.	0.771
PBC2	I can obtain the necessary knowledge and capital to invest in providing medical services in Palestine if I am willing to.	0.736
PBC3	Given the available resources and knowledge, participating in the Palestinian health sector would be easy for me.	0.911

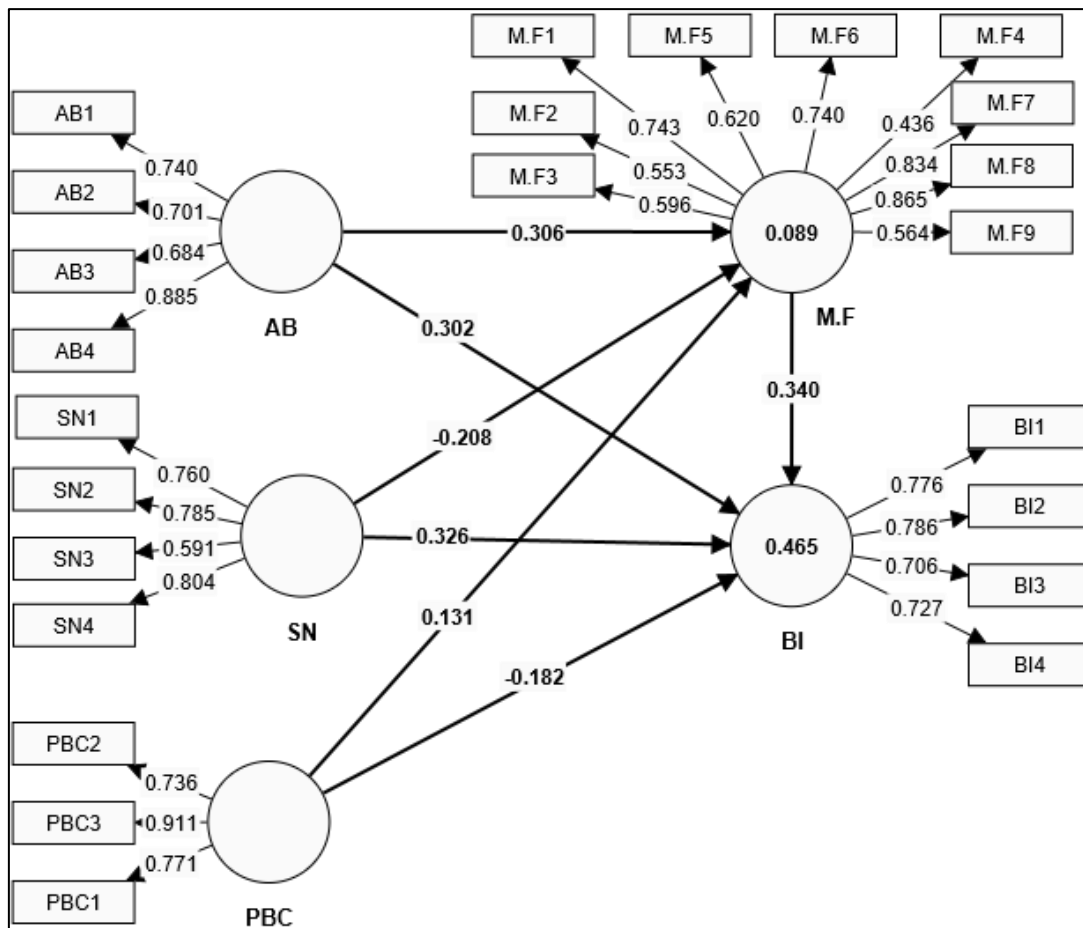


Figure 4.4: Measurement modal; value in the path represents outer loading of the indicator.

A.2.2 Average Variance Extracted

Average Variance Extracted (AVE) is the popular measure of convergent validity. It measures the total squared outer loading of all indicators in that construct divided by the number of indicators. Table 4.8 shows that the Average Variance Extracted (AVE) values for most constructs exceed the recommended threshold of 0.50, except for the Mediating Factor (PPP Determinants), which recorded a value of 0.455. Overall, the results indicate that most constructs demonstrate satisfactory levels of convergent validity. (Fornell & Larcker, 1981).

Table 4.8: Result of average variance extracted (AVE)

Construct	Average variance extracted (AVE)
Attitude toward the Behavior	0.572
Behavior Intention	0.562
Mediating Factor – (PPP Determinants)	0.455
Perceived Behavior Control	0.655
Subjective Norm	0.548

A.3 Discriminant validity

Discriminant validity indicates the extent to which one given construct is distinct from others. Three criteria for evaluating discriminant validity have been proposed: Cross-loading indicators, Heterotrait-monotrait correlation ratio (HTMT), and the Fornell-Larcker criterion.

A3.1 Cross Loading

Cross-loading results showed that the outer loading of each indicator was highest on its respective construct relative to all other constructs, as shown in Table 4.9. These findings support the discriminant validity of the measurement model.

Table 4.9: Result of cross loading

Cross loadings					
	AB	BI	MF	PBC	SN
AB1	0.74	0.333	-0.054	-0.236	0.43
AB2	0.701	0.363	-0.052	-0.221	0.545
AB3	0.684	0.318	0.216	0.261	0.285
AB4	0.885	0.548	0.318	0.066	0.395
SN1	0.384	0.278	-0.101	-0.098	0.76
SN2	0.312	0.376	-0.168	-0.176	0.785
SN3	0.355	0.217	0.238	0.134	0.591
SN4	0.498	0.451	-0.003	0.104	0.804
PBC1	0.164	-0.097	0.073	0.771	0.135
PBC2	0.054	0.013	0.136	0.736	-0.092
PBC3	-0.113	-0.184	0.127	0.911	-0.079
BI1	0.443	0.776	0.218	-0.178	0.511
BI2	0.379	0.786	0.119	-0.223	0.454
BI3	0.225	0.706	0.39	-0.193	0.164
BI4	0.543	0.727	0.38	0.163	0.227
MF1	0.035	0.15	0.743	0.222	-0.047
MF2	0.193	0.371	0.553	-0.239	0.222
MF3	0.173	0.134	0.74	0.234	-0.165
MF4	0.215	0.22	0.834	0.254	-0.083
MF5	0.049	0.143	0.865	0.011	-0.098
MF6	-0.089	0.034	0.564	0.003	-0.014
MF7	0.215	0.220	0.834	0.254	-0.083
MF8	0.049	0.143	0.865	0.011	-0.098
MF9	-0.089	0.034	0.564	0.003	-0.014

Note: The bold number represents the outer loading of its assigned construct. AB: Attitude toward the Behavior ; SN: Subjective Norm; PBC: Perceived behavior control; BI: Behavior intention; MF: Mediating Factor (PPP Determinants).

A3.2 Fornell-Larcker criterion

The Fornell–Larcker criterion was also used to assess discriminant validity. As shown in Table 4.10, the square root of the Average Variance Extracted (AVE) for each construct exceeded its correlations with all other constructs, thereby supporting discriminant validity.

Table 4.10: Fornell-Larcker criterion for the first-order construct constructs

Constructs	AB	BI	MF	PBC	SN
AB: <i>Attitude toward the Behavior</i>	0.757				
BI: Behavior intention	0.540	0.749			
MF: Mediating Factor (PPP Determinants)	0.197	0.358	0.675		
PBC: Perceived behavior control	-0.002	-0.144	0.136	0.810	
SN: Subjective Norm	0.524	0.471	-0.051	-0.025	0.740

A3.3 Heterotrait-monotrait ratio of correlations (HTMT)

The Heterotrait–Monotrait ratio of correlations (HTMT) was used to further assess discriminant validity, as recommended by Henseler et al. (2015). As shown in Table 4.11, all HTMT values were below the conservative threshold of 0.90, ranging from 0.236 to 0.725 across all construct pairs (Attitude toward Behavior, Behavioral Intention, Mediating Factor, Perceived Behavioral Control, and Subjective Norm). These results indicate that the constructs are empirically distinct despite their theoretical relatedness, thereby providing additional evidence of satisfactory discriminant validity within the measurement model.

Table 4.11: Heterotrait-monotrait ratio result

Discriminant validity	<u>AB</u>	BI	MF	PBC	SN
AB: Attitude toward the Behavior					
BI: Behavior intention	0.670				
MF: Mediating Factor (PPP Determinants)	0.292	0.396			
PBC: Perceived behavior control	0.371	0.332	0.291		
SN: Subjective Norm	0.725	0.582	0.319	0.236	

B. Reliability (Internal Consistency)

The internal consistency was assessed by Cronbach's α coefficient (CA) and the Composite Reliability coefficient (CR). According to the result in Table 4.12:

B1. Cronbach's Alpha

The CA value for the construct was found to range from 0.730 to 0.861, which indicates good to very good internal consistency among constructs (Hair, 2010).

B2. Composite Reliability

Composite reliability (CR) values exceeded the recommended threshold of 0.70 for all constructs (Hair et al., 2017), demonstrating satisfactory internal consistency reliability.

Table 4.12: Result of Cronbach's α (CA) and the Composite Reliability (CR) coefficients

Construct reliability and validity	Cronbach's alpha	Composite reliability (rho_a)
AB: Attitude toward the Behavior	0.759	0.852
BI: Behavior intention	0.741	0.750
MF: Mediating Factor (PPP Determinants)	0.861	0.855
PBC: Perceived behavioral control	0.760	0.953
SN: Subjective Norm	0.730	0.776

4.5 Descriptive Statistics

This section presents a comprehensive overview of the descriptive statistics of the study. It includes a discussion of the sampling frame, the demographic and professional characteristics of the respondents, as well as the main survey results in terms of means and p-values.

4.5.1 Reflection on the Sampling Frame

This study employed a sequential multi-phase mixed-methods design integrating formative exploration, qualitative refinement, and quantitative validation as shown in Table 4.13. Each phase was guided by a distinct methodological objective and utilized independently selected participants to preserve analytical integrity and avoid cross-phase sensitization effects. The formative exploratory phase involved 14 purposively selected senior health-sector decision-makers representing governmental, private for-profit, and non-profit institutions. Selection criteria emphasized strategic authority and direct involvement in partnership or policy processes. The objective was to construct identification and contextual mapping rather than empirical generalization. A subsequent qualitative refinement phase engaged 17 independently selected experts, none of whom participated in the formative or quantitative stages. This separation ensured epistemological independence between exploratory insight generation and instrument validation. The qualitative phase focused on construct

clarification, contextual adaptation of theoretical variables, and strengthening content validity prior to large-scale administration.

The quantitative phase comprised 163 senior officials drawn through purposive, sector-stratified sampling across public and private institutions. Participants in this phase were not involved in prior phases, reducing priming bias and reinforcing internal validity. The unit of analysis was institutional decision-makers with authority over PPP engagement. A sector-sensitive instrument design was implemented: one item was exclusive to private-sector respondents ($n = 53$), while remaining constructs were measured across both sectors, enabling both subgroup modeling and cross-sector comparison. This sampling framework does not aim for probabilistic representativeness; rather, it prioritizes theoretical relevance, decision authority, and contextual validity. While purposive selection limits statistical generalizability, it is methodologically appropriate for institutional pre-adoption research where insight into strategic behavior outweighs population estimation. This study adopts a pragmatic paradigm integrating interpretivist construct exploration with post-positivist structural testing. The qualitative phases acknowledge that institutional actors construct context-dependent meanings around PPP adoption, while the quantitative phase assumes that these meanings can be operationalized and examined through measurable latent constructs. The sequential design reflects methodological pluralism, prioritizing explanatory adequacy and contextual validity over adherence to a single philosophical doctrine.

Table 4.13: Summary of research phases and study samples (Participants)

Phase	Participants/ sample	Sampling Strategy	Instrument / Focus
Formative (Exploratory)	14 Key Decision-Makers	Purposive Sampling	Exploratory discussions addressing strategic, institutional, and regulatory dimensions of PPP implementation
Qualitative (Insight understanding)	17 Key Informants (independent from Phase I)	Purposive Expert Sampling	Structured interview guide aligned with study constructs.
Quantitative (latent factors)	163 Senior Officials (Public & Private Sectors)	Purposive, Sector-Stratified Sampling	Five-question survey instrument: Question 1 answered exclusively by private-sector respondents ($n = 53$); Questions 2–5 answered by both sectors

4.5.2 Sample Characteristics

A total of 163 participants were included in the study as shown in table 4.14. The average age of respondents was 47.06 years ($SD = 9.67$), with an average of 21.06 years of professional experience ($SD = 9.23$), indicating that most participants have long-standing engagement within the health sector. The sample consisted of 67.5% males ($n = 110$) and 32.5% females ($n = 53$). In terms of sectoral distribution, 55.2% were affiliated with the public sector, 25.2% with the private sector, and 19.6% with private not-for-profit sector. Regarding educational attainment, the majority held bachelor's (35.0%) and master's degrees (33.1%), while 28.8% possessed doctoral qualifications, and 1.8% had a diploma. The high levels of education and extensive years of professional experience reflect the participants' high qualifications and capacity to act as decision-makers and policy

influencers within their respective institutions. This composition reinforces the suitability of the sample for exploring the determinants of PPP adoption in the health sector.

The survey instrument incorporated a filter mechanism and mandatory response structure to prevent item non-response (Mandatory filed question). As a result, the final dataset (N = 163) contained no missing values across all measured indicators.

Table 4.14: Study participant characteristics

Variable	Mean	Standard deviation
Age	47.06	9.670
Experience	21.06	9.226
Variable	Frequency	Percent
Gender		
Female	53	32.5
Male	110	67.5
Sector		
Private	41	25.2
public	90	55.2
private not-for-profit sector	32	19.6
Education		
Diploma	3	1.8
Bachelor's	57	35.0
Master's	54	33.1
Ph.D.	47	28.8

4.5.3 Attitude toward the Behavior Analysis

Table 4.15 presents descriptive statistics for items measuring AB among respondents. The overall mean score for this construct was 3.52, corresponding to a **high level of agreement (70.47%)**, indicating generally positive attitudes toward participation in the Palestinian health sector. The highest mean was observed for AB2 (“Participation in the Palestinian health sector can increase operational benefits...”) with a mean of 3.89, reflecting strong agreement on the perceived financial and operational benefits, and this item also showed a significant difference ($p = 0.011$) between private for-profit sector, and private not-for-profit sector participants. Private sector respondents consistently reported higher mean scores across all items compared to private not-for-profit sector respondents, particularly on AB4 ($p = 0.051$), suggesting that private institutions view partnerships with government entities as more advantageous for enhancing competitiveness. These results highlight that private sector participants demonstrate a stronger and more favorable attitude toward engaging in PPP initiatives than their private not-for-profit sector counterparts.

Table 4.15: Descriptive statistics for items on Attitude toward the Behavior

Item code	Sentence	Mean	Private Sector Mean (SD)	private not-for-profit sector Mean (SD)	P-value *
AB1	I can obtain potential investment opportunities through participation in the Palestinian health sector.	3.55	3.63 (.968)	3.25 (.866)	0.146
AB2	Participation in the Palestinian health sector can increase operational benefits such as increasing revenues, introducing new expertise to my institution, and other financial gains.	3.89	4.05 (.740)	3.33 (.888)	0.011
AB3	Participation in the Palestinian health sector allows me to obtain external political privileges.	3.17	3.24 (.888)	2.92 (.793)	0.228
AB4	I can enhance the competitiveness of clinical (or non-clinical) work through partnership with government institutions.	3.49	3.63 (.859)	3.00 (1.044)	0.051
Average		3.52	3.64 (.637)	3.12 (0.711)	0.02

* Mann–Whitney U test was used to compare differences between two independent groups ($k = 2$) to calculate p-values. The public sector was excluded from this analysis, as Question 1 (Q1) specifically targeted private sector respondents only; therefore, the analysis was restricted to a subsample of 53 private sector participants. In contrast, for Questions 2–5 (Q2–Q5), which were answered by participants across all sectors (163 participants), the Kruskal–Wallis H test was employed to compare differences across three independent groups ($k = 3$)—namely the public sector, private for-profit sector, and private non-profit sector—to calculate p-values.

The K-S results revealed that nearly all constructs significantly deviated from a normal distribution ($p < 0.001$), with the exception of the PB factor ($p = 0.200$). Analysis of distributional shape indicated prevalent negative skewness, most notably in the PPPD construct (Skewness = -3.105; Kurtosis = 11.644), suggesting a clustering of responses at the higher end of the measurement scales. While some indicators remained within the liberal thresholds of $|3|$ for skewness and $|10|$ for kurtosis suggested by Kline (2023), the systematic significance of the K-S test across the dataset confirms that the assumption of normality was violated.

4.5.4 Subjective Norm Analysis

Table 4.16 presents the descriptive statistics for items related to the SN construct. The overall mean score was 3.74, corresponding to a high level of agreement (74.81%), indicating that respondents generally perceive strong social and competitive motivations for engaging in

the Palestinian health sector. The highest agreement was recorded for SN1 (“Participating in healthcare service delivery allows me to gain a good social reputation”), with a mean of 4.08, reflecting the importance of social recognition as a motivating factor. A significant difference ($p = 0.023$) was observed for SN2, suggesting that private sector participants ($M = 4.05$) were more likely than private not-for-profit sector respondents ($M = 3.42$) to perceive increased competition in health services. Overall, private sector respondents consistently reported higher mean scores across all items, reflecting stronger perceptions of social prestige and competitive positioning associated with health sector participation compared to their private not-for-profit sector counterparts.

Table 4.16: Descriptive statistics for items on the Subjective Norm

Symbol	Sentence	Mean	Private Mean (SD)	private not-for-profit sector Mean (SD)	p-value
SN1	Participating in healthcare service delivery allows me to gain a good social reputation in the Palestinian health sector.	4.08	4.12 (.748)	3.92 (.515)	0.209
SN2	There is an increasing number of competitors in health services in the same area I work in within the Palestinian health sector.	3.91	4.05 (.865)	3.42 (.900)	0.023
SN3	Investing in the Palestinian health sector helps me gain recognition from government entities.	3.36	3.37 (.829)	3.33 (.651)	0.095
SN4	Investing in the Palestinian health sector helps me gain a prestigious position among competitors.	3.62	3.71 (.782)	3.33 (.778)	0.936
Average		3.74	3.81 (.594)	3.5 (.543)	0.083

4.5.5 Perceived Behavioral Control Analysis

Table 4.17 presents the descriptive statistics for items under the Perceived Behavioral Control (PBC) construct. The overall mean score was 2.97, indicating a medium level of agreement (59.37%) among participants regarding their perceived ability to invest and participate in the Palestinian health sector. None of the individual items reached a high level of agreement, suggesting that respondents view the enabling conditions for investment—such as resources, knowledge, and capital—as only moderately attainable. A significant difference ($p = 0.043$) was observed in the overall mean between private for-profit sector, and private not-for-profit sector participants, where private not-for-profit sector respondents ($M = 3.33$) expressed a higher sense of control and readiness compared to private sector participants ($M = 2.86$). This implies that private not-for-profit sector representatives perceive fewer barriers and greater capability to engage in health sector initiatives than those from the private sector.

Table 4.17: Descriptive statistics for items on the Perceived behavior Control

Symbol	Sentence	Mean	Private Mean (SD)	private not-for-profit sector Mean (SD)	P-value
PBC1	I consider the barriers to investment in the Palestinian health sector acceptable.	2.83	2.78 (.962)	3.00 (1.128)	0.418
PBC2	I can obtain the necessary knowledge and capital to invest in providing medical services in Palestine if I am willing to.	3.04	2.90 (.995)	3.50 (1.087)	0.068
PBC3	Given the available resources and knowledge, participating in the Palestinian health sector would be easy for me.	3.04	2.90 (1.114)	3.50 (1.168)	0.144
Average		2.97	2.86 (.820)	3.33 (.974)	0.043

4.5.6 Facilitating Condition Analysis

Table 4.18 presents the descriptive statistics for the Facilitating Condition (FC) construct. The overall mean score was 2.73, representing a medium level of agreement (54.59%), which indicates that respondents moderately perceive the existence of supportive public policies and institutional mechanisms for facilitating private sector participation in the Palestinian health sector. None of the items achieved a high level of agreement, suggesting a general perception of limited governmental encouragement and weak policy support for partnership initiatives. No statistically significant differences were observed between private and private not-for-profit sector participants ($p > 0.05$) across all items, although private sector respondents reported slightly higher means for FC1 and FC3. These results imply that both sectors share a similar view regarding the insufficient facilitating environment for effective public-private collaboration in the health sector.

Table 4.18: Descriptive statistics for items on facilitating condition

Symbol	Sentence	Mean	private for-profit sector mean (SD)	private not-for-profit sector mean (SD)	P-value
FC1	Public authorities encourage private sector investors (for-profit and nonprofit) to participate in the Palestinian health sector.	2.75	2.80 (1.030)	2.58 (1.084)	0.543
FC2	There are supportive public policies with potential benefits that facilitate private capital investment in the Palestinian health sector.	2.64	2.59 (.894)	2.83 (.835)	0.322
FC3	Official guidelines are available for establishing partnerships with public authorities and investing in information exchange mechanisms.	2.79	2.80 (.928)	2.75 (.622)	0.884
Average		2.73	2.73 (.765)	2.72 (.209)	0.974

4.5.7 Behavior Intention Analysis

Table 4.19 presents the descriptive statistics for items measuring BI. The overall mean score was 3.76, reflecting a high level of agreement (75.28%), which indicates a generally positive intention among participants to engage in the Palestinian health sector through PPP models. The highest agreement was observed for BI1 (“I am willing to participate in the Palestinian health sector in a phased manner”) with a mean of 4.00, showing strong readiness to engage gradually in investment initiatives. This item also demonstrated a significant difference ($p = 0.025$) between private ($M = 4.07$) and private not-for-profit sector ($M = 3.75$) participants, indicating that private sector respondents expressed stronger willingness to participate than their private not-for-profit sector counterparts. Although the remaining items did not show statistically significant differences, the private sector consistently reported slightly higher mean values, suggesting a more favorable behavioral intention toward PPP engagement compared to the private not-for-profit sector.

Table 4.19: Descriptive statistics for items on Behavior Intention

Symbol	Sentence	Mean	private for-profit sector, mean (SD)	private not-for-profit sector mean (SD)	P-value
BI1	I am willing to participate in the Palestinian health sector in a phased manner.	4.00	4.07 (.412)	3.75 (.452)	0.025
BI2	Investing in the Palestinian health sector through public-private partnership (for-profit and nonprofit) or full privatization is a good idea.	3.70	3.80 (.901)	3.33 (.888)	0.109
BI3	Employees in my institution would be happy to receive relevant training related to PPP in the health sector.	3.98	4.05 (.545)	3.75 (.622)	0.183
BI4	The Palestinian health sector is one of my preferred areas for investment through PPP (for-profit and nonprofit).	3.38	3.39 (.891)	3.33 (.778)	0.856
Average		3.76	3.83 (.520)	3.54 (.520)	0.203

Across all constructs, the findings reveal a generally positive orientation toward participation in the Palestinian health sector, though with varying levels of intensity across dimensions. Attitude toward the Behavior (AB) and Behavioral Intention (BI) recorded high levels of agreement, indicating that respondents, particularly from the private sector, recognize clear operational, financial, and reputational benefits from engaging in PPP initiatives. Subjective Norm (SN) also showed high agreement, underscoring the influence of social recognition and competitive positioning as motivators, with a significant difference highlighting stronger perceptions among private sector participants. In contrast, Perceived Behavioral Control (PBC) and Facilitating Condition (FC) exhibited only moderate levels of agreement, suggesting that while the willingness to engage exists, participants perceive structural and institutional barriers—such as limited resources, unclear policies, and insufficient governmental facilitation—as key constraints. Overall, the results indicate that attitudes and intentions toward PPP adoption are strong, but their translation into action is moderated by governance and enabling environment challenges, emphasizing the need for stronger policy

frameworks and institutional support to enhance private for-profit sector, and private not-for-profit sector engagement in health sector partnerships.

4.5.8 Determinants of Public-Private Partnership in Health Projects

Table 4.20 presents the descriptive statistics for the determinants influencing PPP in the Palestinian health sector. The results show uniformly very high levels of agreement across all items, with overall means ranging between 2.32 and 2.83. Respondents strongly agreed that economic stability, governance and transparency, legal frameworks, and the existence of an independent regulatory authority are fundamental to successful PPP implementation. The highest mean was recorded for PPPD9 (“Clear vision and objectives of partnerships lead to improved outcomes”) at 2.83 (94.33%), followed by PPPD5 on governance and transparency (90.67%), emphasizing the perceived importance of strategic clarity and sound governance structures. No statistically significant differences were observed among the public, private for-profit, and private not-for-profit sectors ($p > 0.05$), suggesting a shared consensus across all stakeholder groups regarding the key determinants of PPP success in the health sector.

Table 4.20-A: Descriptive statistics for on the determinants of PPP in health projects

Symbol	Sentence	Mean*	private for-profit sector, Mean (SD)	public Mean (SD)	private not-for-profit sector Mean (SD)	P-value
PPPD1	I believe that economic stability, capital availability, and financing are fundamental factors in achieving PPP in the Palestinian health sector.	2.62	2.54 (0.71)	2.66 (0.62)	2.63 (0.66)	0.378
PPPD2	I believe that the political situation negatively affects PPP implementation.	2.58	2.68 (0.61)	2.50 (0.69)	2.66 (0.55)	0.265
PPPD3	I believe that the legal and legislative framework is a decisive factor in regulating and governing the terms of PPP in the Palestinian health sector.	2.61	2.44 (0.71)	2.68 (0.60)	2.63 (0.71)	0.804
PPPD4	I believe that a supportive investment environment is important for attracting investors to the health sector.	2.58	2.63 (0.70)	2.51 (0.72)	2.72 (0.58)	0.776
PPPD5	I believe that societal acceptance of PPPs facilitates partnership establishment.	2.32	2.51 (0.68)	2.26 (0.73)	2.25 (0.72)	0.714

Table 4.20-B: Descriptive statistics for on the determinants of PPP in health projects

Symbol	Sentence	Mean*	private for-profit sector, Mean (SD)	public Mean (SD)	private not-for-profit sector Mean (SD)	P-value
PPPD6	I believe that prior experience and professional reputation are important factors in implementing PPP in the Palestinian health sector.	2.62	2.56 (0.74)	2.63 (0.59)	2.66 (0.55)	0.299
PPPD7	I believe that the existence of an independent regulatory authority to oversee PPP is an important factor for success.	2.55	2.56 (0.74)	2.51 (0.80)	2.62 (0.71)	0.055
PPPD8	I believe that governance and transparency are among the most important factors contributing to successful PPP in Palestinian healthcare.	2.72	2.68 (0.72)	2.73 (0.60)	2.75 (0.57)	0.501
PPPD9	I believe that clear vision and objectives of partnerships lead to improved outcomes, including service quality.	2.83	2.76 (0.58)	2.83 (0.43)	2.91 (0.30)	0.256
Overall		2.60	2.60 (0.49)	2.59 (0.34)	2.65 (0.33)	0.741

*Note: All constructs in this table were assessed using three-item Likert-type scales.

Mean score interpretation (3 items)

Mean Score*	Interpretation
1.00 – 1.66	Low
1.67 – 2.33	Medium
2.34 – 3.00	High

*Note: Mean scores from the 3-point Likert scale were proportionally categorized into five levels (Low to High) to provide a clear and interpretable framework for data analysis, despite the absence of a formal reference for this classification.

4.5.9 Trends and Opinions of Decision Makers Regarding PPPs

Respondents showed an overall high level of agreement ($M = 3.55$, 70.96%) regarding the importance and potential benefits of PPPs as presented in table 4.21. Items OP1, OP3, and OP4 scored highest, indicating strong acceptance of PPPs and recognition of the need for updated legislation to regulate private sector engagement. Notably, OP5 (PPP improves service quality) revealed a significant difference ($p = 0.001$), with the private sector ($M = 4.12$) expressing greater optimism than public ($M = 3.39$) and private not-for-profit sector ($M = 3.56$) participants. Conversely, OP6 (public sector lacks capacity to monitor private

partners) was also significant ($p = 0.003$), reflecting divergent perceptions on regulatory capability—private respondents showing higher concern. Overall, these results underscore both enthusiasm for PPPs and awareness of governance and capacity challenges, particularly from private-sector viewpoints.

Table 4.21: Descriptive statistics for items on trends and opinions on PPP

Symbol	Sentence	Mean	private for-profit sector, Mean (SD)	Public Mean (SD)	private not-for-profit sector Mean (SD)		P-value
OP1	I generally accept the idea of PPP (for-profit and nonprofit) in managing health projects (both existing and new).	3.75	3.78 (.881)	3.82 (.967)	3.53 (1.047)		0.286
OP2	I only accept the idea of PPP for managing new projects, not existing ones.	3.31	3.51 (.840)	3.33 (1.112)	3.00 (.984)		0.103
OP3	There is a lack of legislation and laws regulating the operation of health services by the private sector (for-profit and nonprofit).	3.72	3.90 (.889)	3.62 (1.001)	3.75 (1.016)		0.31
OP4	New laws are needed to regulate the transfer of existing public health services to the private sector.	3.90	4.10 (.831)	3.84 (1.016)	3.78 (1.008)		0.315
OP5	Transferring health service projects to the private sector would improve service quality for the public.	3.61	4.12 (.678)	3.39 (1.129)	3.56 (1.076)	0.001	
OP6	The public sector lacks the qualified departments to monitor the private sector if it assumes management of some projects.	3.26	3.61 (1.022)	2.99 (1.096)	3.56 (.914)	0.003	
OP7	I prefer to invest in some public assets (e.g., lands and buildings) through the private sector for the benefit of health projects.	3.29	3.51 (.978)	3.28 (1.060)	3.03 (1.150)	0.22	
Average		3.55	3.79 (.532)	3.47 (.579)			

4.5.10 Preferred Options for PPP models in Health Projects/Services from the Perspective of Public and Private Sector DM

The overall mean ($M = 2.81$, 56.12%) indicates a moderate inclination toward selective PPP models rather than full privatization, as presented in table 4.22. Respondents moderately favored PATT2 and PATT5, which advocate shared management and transparent bidding systems, reflecting preference for balanced collaboration between sectors. In contrast, PATT1 and PATT3 (government-only control and full privatization) received low agreement, suggesting resistance to extreme models. A marginally significant difference ($p = 0.05$) in PATT3 shows that private participants ($M = 2.83$) were more open to full privatization compared to their public counterparts ($M = 2.33$), emphasizing differing comfort levels with private control. The findings suggest a collective inclination toward hybrid PPP structures that preserve government oversight while leveraging private expertise.

Table 4.22: Descriptive statistics for items on Preferred Options for PPP Models in Health Projects/Services from the Perspective of Public and Private Sector Decision-Makers

	Sentence	Mean	Level of agreement	private for-profit sector, Mean (SD)	Public Mean (SD)	private not-for-profit sector Mean (SD)	P-value
N0							
01	The government retains full ownership and full responsibility for delivering services and managing health projects without private sector involvement.	2.52	Low	2.41 (1.048)	2.54 (1.163)	2.56 (1.014)	0.838
02	The government retains full ownership of facilities/services, but the private sector (for-profit and nonprofit) manages them through a transparent bidding system.	3.12	Medium	2.83 (1.202)	3.20 (1.144)	3.28 (1.023)	0.165
03	Full privatization (management and operation by the private sector) with full control over services and pricing.	2.48	Low	2.83 (1.116)	2.33 (1.060)	2.47 (1.047)	0.05
04	Full privatization (management and operation by the private sector) for a limited time, after which the project returns to government management.	2.67	Medium	2.80 (1.100)	2.62 (1.137)	2.63 (1.040)	0.651
05	Full privatization (management and operation by the private sector) without giving complete control to a single party.	3.24	Medium	3.07 (1.212)	3.28 (1.132)	3.34 (.971)	0.624
		2.81	Medium	2.79 (.839)	2.80 (.774)	2.86 (.610)	0.967

4.5.11 Governance (Transparency, Trust, Accountability, and Clarity of vision)

Governance-related items achieved the highest consensus across all constructs ($M = 4.22$, 84.42%, Very High), underscoring the perceived criticality of clear governance frameworks in successful PPPs, as presented in table 4.23. Items GOV3 and GOV4 scored the highest ($M = 4.39$ and 4.32), highlighting the essential role of accountability and transparency in fostering trust and minimizing risk. While sectoral means were closely aligned, the private sector maintained slightly higher agreement levels, indicating stronger emphasis on governance clarity as a prerequisite for engagement. The absence of significant differences (all $p > 0.05$) reflects cross-sectoral consensus that robust governance mechanisms are a unifying factor for PPP success and sustainability.

Table 4.23: Descriptive statistics for items on Governance (Transparency, Trust, Accountability, and Clarity)

Symbol	Sentence	Mean	Level of agreement	private for-profit sector, Mean (SD)	public Mean (SD)	private not-for-profit sector Mean (SD)	P-value
GOV1	Clear governance mechanisms reduce the likelihood of conflicts of interest between parties in PPPs.	4.15	High	4.20 (.601)	4.18 (.696)	4.00 (.622)	0.298
GOV2	Roles and responsibilities are clearly defined in PPP contracts.	4.03	High	4.10 (.664)	3.99 (.841)	4.06 (.759)	0.892
GOV3	A system of accountability and oversight reduces the risks arising from the misconduct of any party in the partnership.	4.39	Very High	4.44 (.594)	4.39 (.612)	4.31 (.471)	0.48
GOV4	Clear and transparent obligations and distribution of responsibilities in partnership contracts enhance trust between partners.	4.32	Very High	4.39 (.586)	4.32 (.577)	4.22 (.420)	0.283
		4.22	Very High	4.28 (.478)	4.22 (.490)	4.15 (.457)	0.421

In conclusion, across the four questions (Q2-Q5), respondents demonstrated an overall positive orientation toward adopting Public-Private Partnerships (PPPs) in the Palestinian health sector. Findings from Question 2 revealed that participants, especially those from the

private sector—exhibited stronger behavioral intentions and more favorable attitudes toward PPP engagement, suggesting higher confidence and motivation among those already familiar with market-driven management. Question 3 showed a high level of acceptance ($M = 3.55$, 70.96%) toward PPP implementation, coupled with recognition of the need for updated legal frameworks to regulate private involvement. Significant differences emerged in perceptions of service quality improvement ($p = 0.001$) and monitoring capacity ($p = 0.003$), with private sector respondents showing greater optimism and concern, respectively. In Question 4, participants expressed moderate preference ($M = 2.81$, 56.12%) for hybrid PPP models where government retains ownership but allows private sector management under transparent procedures, while rejecting full privatization or full public control. Finally, Question 5 underscored a very high consensus ($M = 4.22$, 84.42%) on the importance of governance elements—transparency, accountability, and role clarity—as essential enablers of trust and success in PPP arrangements. Collectively, the results indicate that while all sectors recognize the value of PPPs, their acceptance is strongly conditioned by the presence of clear governance mechanisms and well-defined legal and monitoring frameworks.

4.5.12 Structural model evaluation

After establishing the reliability and validity of the constructs, the next step is to examine the study hypothesis and the structural model. To assess the structural model, four different tests were used before the test of the study hypotheses: the collinearity test, coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2).

4.5.12.1 Collinearity test

The Variance Inflation Factor (VIF) values for all paths range between 1.001 and 1.481, as presented in Table 4.24, which are well below the threshold of 5, indicating acceptable collinearity among the predictor constructs in the inner model. Therefore, the model demonstrates acceptable levels of collinearity.

Table 4.24: Collinearity Assessment

Paths	VIF
Attitude toward the Behavioral Intention	1.481
Attitude toward the Behavior → Mediating Factor	1.379
Mediating Factor → Behavioral Intention	1.097
Perceived Behavioral Control → Behavioral Intention	1.020
Perceived Behavioral Control → Mediating Factor	1.001
Subjective Norm → Behavioral Intention	1.427
Subjective Norm → Mediating Factor	1.379

4.5.12.2 Coefficient of determination (R^2)

A common criterion to assess the structural model is the coefficient of determination (R^2), this coefficient represents the amount of variance in the endogenous construct that is explained by all of the exogenous constructs. The coefficient (R^2) amount ranges from zero to one, with higher values suggesting higher degrees of predicting accuracy. Table 4.25 shows that the estimated R^2 values range between 0.089 and 0.465. The model explains 46.5% of the variance in Behavioral Intention, indicating moderate explanatory power, while only 8.9% of the variance in Mediating Factor is explained, suggesting limited predictive ability for this construct.

Table 4.25: Result of R^2

Exogenous variables	R-square	Degree of explanation
BI	0.465	Medium
MF	0.089	Low

4.5.12.3 Predictive relevance (Q^2)

The predictive relevance of the structural model was assessed using the blindfolding procedure (Geisser, 1974; Stone, 1974). The results showed that all Q^2 values were equal to or below zero (AB = 0.000, BI = -0.182, MF = -0.004, PBC = 0.000, SN = 0.000) as depicted in Table 4.26, indicating an absence of predictive relevance for the endogenous constructs. According to Hair et al. (2021), Q^2 values greater than zero reflect predictive capability, whereas values of zero or below suggests poor predictive performance. Therefore, although the model may explain variance adequately (based on R^2), its ability to predict new or unseen data is limited, suggesting a need for model refinement and inclusion of stronger predictors to enhance predictive validity.

Table 4.26: Result of Q^2

Q2	SSO	SSE	Q2 (=1-SSE/SSO)	Interpretation
AB	212	212	0.000	No predictive relevance
BI	212	173	-0.182	Model fails to predict Behavioral Intention
MF	477	478	-0.004	No predictive relevance
PBC	159	159	0.000	No predictive relevance
SN	212	212	0.000	No predictive relevance

4.5.12.4 Effect size (f^2)

The effect size (f^2) was calculated to determine the contribution of each predictor to the endogenous constructs (Cohen, 1988). The path from Mediating Factor (MF) to Behavioral Intention (BI) exhibited a medium effect ($f^2 = 0.198$), indicating a substantial influence. Other paths, including AB $\rightarrow$ BI ($f^2 = 0.115$) and SN $\rightarrow$ BI ($f^2 = 0.139$), showed small-to-moderate effects, suggesting that these predictors contribute meaningfully but less strongly. The remaining paths, such as PBC $\rightarrow$ MF ($f^2 = 0.019$) as showed in Table 4.27, had small or negligible effects, indicating minimal influence on the respective endogenous constructs.

Overall, while the model demonstrates meaningful explanatory power, its predictive capability is limited, and some predictors have only small contributions, which should be considered when interpreting the results and planning future studies.

However, despite the presence of small-to-moderate local effect sizes, these findings should be interpreted with caution in light of the overall weak predictive relevance of the model, which suggests limited out-of-sample predictive performance. This indicates a clear tension between structural in-sample explanatory contributions (as reflected in f^2 values) and the model's overall predictive capability, where statistically meaningful path effects do not necessarily translate into strong predictive accuracy at the model level. Accordingly, the results should be understood primarily in explanatory terms rather than predictive strength, and the relatively modest effect sizes should not be over-interpreted as evidence of strong practical or predictive influence within the model.

Table 4.27: Result of effect size (f^2)

Path	f^2	Effect size
AB → BI	0.115	Small-to-moderate effect
AB → MF	0.074	Small effect
MF → BI	0.198	Medium effect
PBC → BI	0.061	Small effect
PBC → MF	0.019	Very small/negligible effect
SN → BI	0.139	Small-to-moderate effect
SN → MF	0.034	Small effect

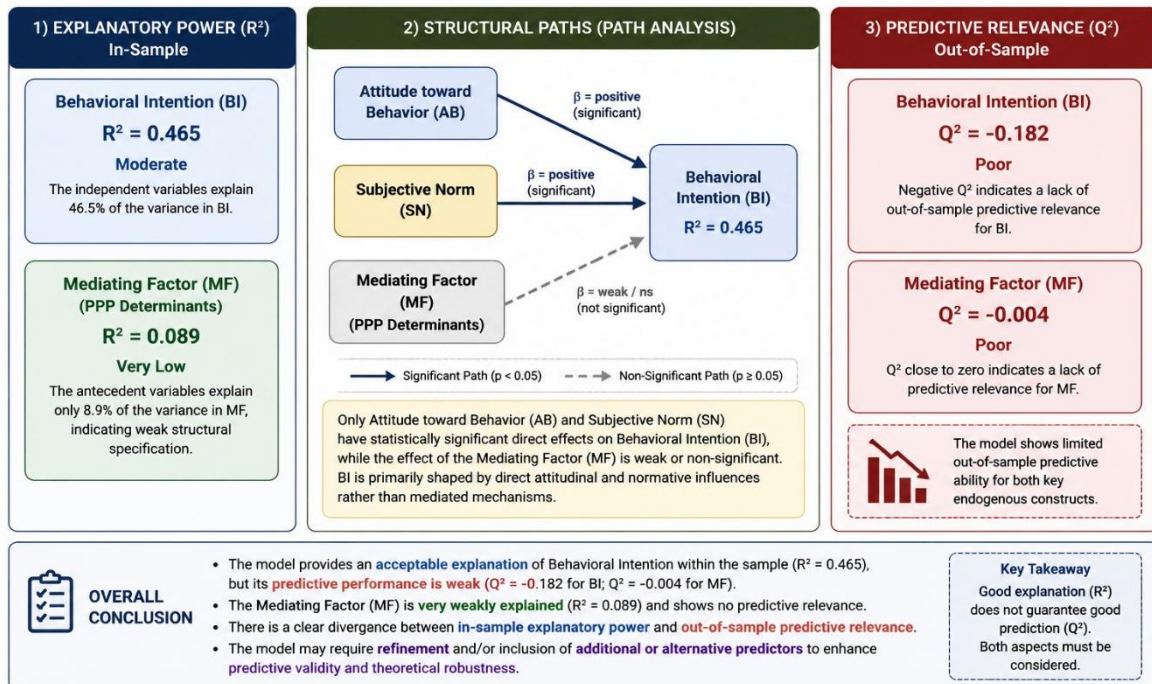
Cohen (1988) suggests that the f^2 values of 0.02, 0.15, and 0.35 are often used for small, medium, and large effects.

Overall, as presented in figure 4.5 the structural model demonstrates a moderate explanatory power for Behavioral Intention ($R^2 = 0.465$), indicating that the independent variables explain a meaningful proportion of variance within the sample. However, this explanatory strength is not supported by predictive relevance, as the Q^2 values are negative or close to zero for both Behavioral Intention ($Q^2 = -0.182$) and the Mediating Factor ($Q^2 = -0.004$), reflecting limited out-of-sample predictive ability. Path analysis further shows that only Attitude toward the Behavior and Subjective Norm exert statistically significant effects on Behavioral Intention, while the Mediating Factor remains weak or non-significant, suggesting that intention formation is primarily driven by direct attitudinal and normative influences rather than mediated mechanisms. In addition, the Mediating Factor exhibits a very low explanatory power ($R^2 = 0.089$), indicating weak specification within the structural model. Taken together, these results reveal a clear divergence between in-sample explanatory power and out-of-sample predictive relevance: while the model provides an acceptable explanation of Behavioral Intention within the observed data, its overall predictive performance is limited, particularly for the mediating construct, highlighting the need for model refinement and/or inclusion of additional explanatory variables to enhance both predictive validity and theoretical robustness.

4.6 Structural Model Assessment Using PLS-SEM

Structural Model Results: Explanatory Power, Path Analysis, and Predictive Relevance

PLS-SEM Results Summary



4.7 Research hypotheses assessment

The final step of the structural model evaluation was to test the hypothesized relationships using the path coefficient test. Hair et al. (2017) proposed bootstrapping techniques (5000 subsamples) to test the study hypotheses. Figure 4.5 displays the results of the study hypotheses.

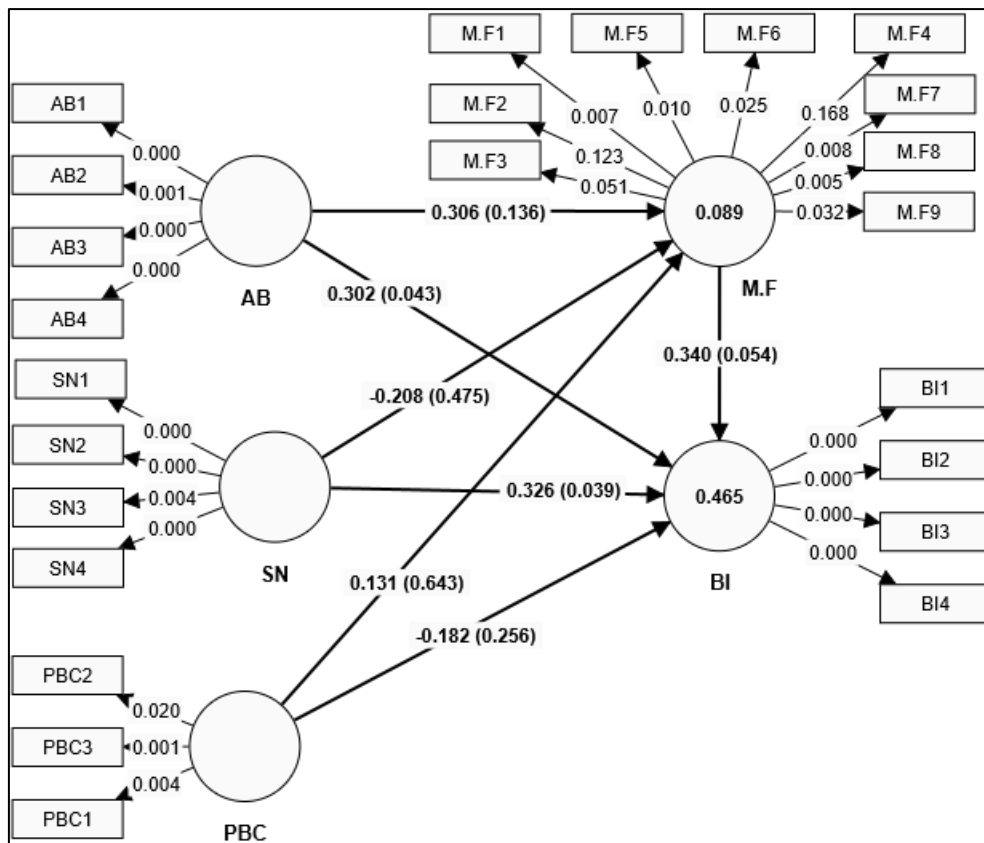


Figure 4.5: Result of path analysis; values in the inner model represent path coefficient (p-value); values in the outer model represent p-value

4.7.1 Result of the Hypothesis Test

As shown in Table 4.30, the structural model results indicate that out of the seven hypothesized relationships, two paths were statistically significant (H1 and H6), while one relationship (H3) showed a marginal effect, and the remaining four hypotheses were not supported. Specifically, **H1 (AB → BI)** and **H6 (SN → BI)** were significant, confirming that both Attitude toward the Behavior and Subjective Norm exert a positive influence on Behavioral Intention. In contrast, the remaining hypothesized relationships involving Perceived Behavioral Control (PBC) and the Mediating Factor (MF) were not statistically significant, with the exception of a marginal effect observed for H3 (MF → BI).

This pattern of results suggests that attitudinal and social influence constructs are the primary determinants of Behavioral Intention, whereas perceived control and the proposed mediating mechanism do not demonstrate strong explanatory contribution within the current model specification. Accordingly, the hypothesized structural framework is only partially supported, and the role of several constructs—particularly the mediating factor—appears limited in this dataset.

4.7.2 Individual Hypotheses Interpretation

H1 (AB → BI): Supported. Attitude toward the Behavior has a significant positive effect on Behavioral Intention ($\beta = 0.302$, $p = 0.043$), indicating that favorable attitudes enhance the intention to engage in PPP initiatives. The effect size is **moderate in magnitude**, suggesting a meaningful but not strong influence.

H2 (AB → MF): Not supported. Although the coefficient was positive ($\beta = 0.306$), it was not statistically significant ($p = 0.136$), suggesting that attitude does not meaningfully influence the mediating factor.

H3 (MF → BI): Marginally supported. The mediating factor showed a near-significant positive effect on Behavioral Intention ($\beta = 0.340$, $p = 0.054$), implying a potential but weak mediating role that requires further examination.

H4 (PBC → BI): Not supported. The negative and insignificant coefficient ($\beta = -0.182$, $p = 0.256$) indicates that perceived behavioral control does not enhance intention and may even slightly hinder it.

H5 (PBC → MF): Not supported. PBC has no significant effect on the mediating factor ($\beta = 0.131$, $p = 0.643$), reflecting weak perceived capability influences.

H6 (SN → BI): Supported. Subjective Norm positively and significantly affect Behavioral Intention ($\beta = 0.326$, $p = 0.039$), confirming that social influence and peer expectations are important determinants of intention. The effect size is **moderate**, suggesting a meaningful contribution rather than a dominant effect.

H7 (SN → MF): Not supported. The relationship between Subjective Norm and the mediating factor is negative and insignificant ($\beta = -0.208$, $p = 0.475$), showing no meaningful link between social influence and mediation.

In summary, the findings indicate that Behavioral Intention is primarily influenced by Attitude toward the Behavior and Subjective Norm, both of which show statistically significant and moderate effects. In contrast, Perceived Behavioral Control and the Mediating Factor do not demonstrate statistically reliable relationships within the model. Although the Mediating Factor shows a moderate coefficient in one pathway (MF → BI), this effect is not statistically significant and therefore does not provide sufficient evidence to support a mediating role. Overall, the results suggest that while the model captures some meaningful associations, the evidence for mediation is weak and should be interpreted cautiously. Policy implications derived from these findings should therefore be framed conservatively, given the limited and partially inconsistent predictive strength of the structural model.

Table 4.28: Structural Model Path Coefficients and Hypothesis Testing Results

No.	Hypothesis	β (O)	STDEV	T-stat	P-value	Result
H1	AB → BI	0.302	0.149	2.028	0.043	Significant
H2	AB → MF	0.306	0.205	1.490	0.136	Not significant
H3	MF → BI	0.340	0.177	1.926	0.054	Marginal
H4	PBC → BI	-0.182	0.160	1.137	0.256	Not significant
H5	PBC → MF	0.131	0.282	0.464	0.643	Not significant
H6	SN → BI	0.326	0.158	2.065	0.039	Significant
H7	SN → MF	-0.208	0.291	0.715	0.475	Not significant

4.7.3 Hypotheses with Mediating factors

The results as presented in table 4.31 of the bootstrapped specific indirect effects indicate that none of the mediating paths through the MF were statistically significant, as all p-values exceeded the 0.05 threshold and the 95% confidence intervals included zero. This suggests that MF does not play a meaningful mediating role between the independent variables (Attitude toward the Behavior, Subjective Norm, and Perceived Behavioral Control) and Behavioral Intention. Although some coefficients were in the expected positive direction, their effects were weak and statistically non-significant, implying that the indirect influence of these predictors on behavioral intention through MF is minimal.

Hypotheses Interpretation

- Ha (PBC → MF → BI): Not supported. The indirect effect ($\beta = 0.045$, $p = 0.623$) was insignificant, indicating that the Mediating Factor does not transmit the effect of Perceived Behavioral Control on Behavioral Intention.
- Hb (SN → MF → BI): Not supported. The indirect path ($\beta = -0.071$, $p = 0.450$) was insignificant and slightly negative, suggesting that Subjective Norm do not influence Behavioral Intention indirectly through the Mediating Factor.
- Hc (AB → MF → BI): Not supported. The indirect effect ($\beta = 0.104$, $p = 0.203$) was positive but non-significant, showing that Attitude toward the Behavior does not significantly affect Behavioral Intention via the Mediating Factor.

Overall, the mediation analysis provides no evidence of significant indirect effects, implying that the MF does not function as a significant intermediary between the key determinants and (AB, SN, and PBC) and Behavioral Intention. Consequently, the relationships between these constructs appear to be primarily direct rather than mediated, suggesting that individuals' behavioral intentions are more directly shaped by their attitudes and social influences than by indirect pathways through mediating mechanisms.

Table 4.29: Result of indirect effects

Hypothesis	Original sample (O) B coefficient	Bootstrapped Confidence Interval		Sample Mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
		2.50%	97.50%				
PBC → MF → BI	0.045	-0.151	0.188	0.018	0.091	0.491	0.623
SN → MF → BI	-0.071	-0.197	0.183	-0.029	0.094	0.756	0.45
AB → MF → BI	0.104	-0.093	0.237	0.081	0.082	1.272	0.203

4.8 Mixed-Methods Findings (Results Integration)

The integration and triangulation of results, as summarized in Table 4.32, aimed to synthesize evidence from quantitative (SEM and inferential analysis) and qualitative phases to develop a comprehensive understanding of behavioral intention toward PPP engagement at the individual level and its enabling institutional context in the Palestinian healthcare sector. This triangulation combines behavioral (individual), and structural (institutional and policy) evidence to enhance analytical depth and interpretive validity. At the behavioral level, SEM analysis identified that Attitude toward the Behavior and Subjective Norm were the only statistically significant predictors of Behavioral Intention, while Perceived Behavioral Control (PBC) and Facilitating Conditions (FC) did not exhibit significant direct effects within the structural model. Inferential statistics further complemented these findings by identifying significant group-level differences across selected indicators, reflecting heterogeneity in perceptions across stakeholder categories rather than structural causal relationships. At the institutional and contextual level, qualitative findings provided explanatory depth by highlighting the influence of institutional trust, governance capacity, regulatory ambiguity, and resource constraints in shaping these behavioral patterns. The policy analysis further situated these results within the broader health system context, showing how Ministry of Health purchasing and contracting practices—developed under conditions of fiscal limitation, fragmented service provision, and ongoing conflict pressures—indirectly shape the environment in which PPP-related intentions are formed, despite the absence of a formalized PPP policy framework. Overall, the integration demonstrates a layered explanation in which individual behavioral intentions are primarily driven by attitudinal and normative factors, while their expression and potential translation into practice are conditioned by institutional, governance, and policy-level constraints.

The quantitative items presented in this table were measured using mixed Likert scales, where some constructs (first set of items) were assessed using a 3-point Likert scale, while the remaining items were measured using a 5-point Likert scale; therefore, interpretation of mean values should be considered within the context of their respective scaling systems

.Table 4.30-A: Integrated and Triangulated Results from Quantitative, Qualitative, Formative, on PPP Adoption in the Palestinian Health Sector

Main Themes (Qualitative)	Quantitative Items Mean Level of Agreement	Mixed-Methods Interpretation
1. Feasibility, Economic Viability, and Governance Preconditions	• Economic stability, capital availability, and financing are fundamental for PPP (M = 2.62 – Moderate). Note: 3 3-point Likert scale • Legal and legislative framework is decisive for PPP regulation (M = 2.61 – Moderate) • Prior experience and reputation are important for PPP implementation (M = 2.62 – Moderate) • Independent regulatory authority is important for PPP success (M = 2.55 – Moderate) • Governance and transparency are key to successful PPP (M = 2.72 – Moderate) • Clear vision and objectives improve outcomes (M = 2.83 – Moderate)	The quantitative results indicate moderate agreement rather than strong endorsement that PPP success depends on financial stability and governance structures. Qualitative findings do not contradict this pattern; instead, they contextualize the moderate perceptions by revealing underlying structural constraints, including fiscal limitations, fragmented financing capacity, and uncertainty regarding regulatory readiness. The integration suggests that feasibility is perceived as a necessary but insufficient condition for PPP engagement, where willingness exists but is constrained by institutional and economic realism.

Table 4.30-B: Integrated and Triangulated Results from Quantitative, Qualitative, Formative, on PPP Adoption in the Palestinian Health Sector

Main Themes (Qualitative)	Quantitative Items Mean Level of Agreement	Mixed-Methods Interpretation
2. Investment Motivation, Social Value, and Role Ambiguity	• Investment opportunities through health sector participation (M = 3.55 – High) • Operational and financial benefits from participation (M = 3.89 – High) • Political privileges (M = 3.17 – Medium) • Competitiveness improvement through partnership (M = 3.49 – High) • Social reputation gain (M = 4.08 – High) • Increasing competition in health services (M = 3.91 – High) • Recognition from government (M = 3.36 – Medium) • Prestige among competitors (M = 3.62 – High)	Quantitative findings demonstrate strong attitude and normative appeal of PPP participation, particularly in relation to financial benefits, competitiveness, and social recognition. However, qualitative evidence refines this interpretation by showing that these positive perceptions are tempered by uncertainty in institutional roles, trust deficits, and unclear regulatory boundaries. This indicates that favorable attitudes coexist with ambiguity about implementation mechanisms, suggesting that motivation is high but structurally unanchored.
3. Governance, Strategic Direction, and Behavioral Readiness for PPP Engagement	• Willingness to participate in PPP in a phased manner (M = 4.00 – High) • PPP/privatization is a good idea (M = 3.70 – High) • Interest in PPP-related training (M = 3.98 – High) • PPP as preferred investment area (M = 3.38 – Medium) • Clear governance reduces conflicts (M = 4.15 – Very High) • Roles and responsibilities clearly defined (M = 4.03 – High) • Accountability reduces risk (M = 4.39 – Very High) • Transparency enhances trust (M = 4.32 – Very High)	The quantitative results indicate strong behavioral intention alongside very high valuation of governance principles, suggesting that respondents conceptually support PPP engagement. However, qualitative findings reveal a critical refinement: this intention is not matched by institutional readiness or strategic coherence, particularly in terms of awareness, planning frameworks, and implementation capacity. The integration therefore indicates a gap between conceptual acceptance and operational preparedness, rather than full readiness for PPP deployment.
4. Operational Design, Trust Deficit, and Structural Constraints of PPP Models	• Government-only provision (M = 2.52 – Medium) • Government ownership with private management (M = 3.12 – Medium) • Full privatization (M = 2.48 – Low) • Time-limited privatization (M = 2.67 – Medium) • Mixed control privatization model (M = 3.24 – Medium) • Barriers are acceptable (M = 2.83 – Medium) • Ability to obtain knowledge and capital (M = 3.04 – Medium) • Ease of participation (M = 3.04 – Medium)	The results show moderate acceptance of hybrid PPP models and clear resistance to full privatization, reflecting a preference for controlled collaboration rather than market dominance. Qualitative evidence explains this pattern by highlighting systemic distrust, governance concerns, and political instability, which shape perceptions of risk. Integration indicates that operational design is the most sensitive dimension of PPP adoption, where structural uncertainty directly limits translation of positive attitudes into implementation readiness.

Finally, the integrated findings demonstrate a pattern of convergence and complementarity with partial divergence across quantitative, qualitative, and policy evidence. Convergence is observed in the consistent identification of Attitude toward the Behavior and Subjective Norm as key determinants of Behavioral Intention, supported by qualitative evidence

highlighting economic incentives, social recognition, and reputational effects. Complementarity is evident as qualitative and policy data contextualize the non-significant role of Perceived Behavioral Control and Facilitating Conditions, reframing them as shared structural constraints (financial limitations, regulatory ambiguity, and institutional fragmentation) rather than differentiating predictors of intention. A partial divergence emerges between relatively high behavioral intentions and governance perceptions on one hand, and moderate enabling conditions on the other, indicating a gap between motivational readiness and implementation capacity. Overall, the integration suggests that PPP-related behavioral intention is primarily shaped by attitudinal and normative mechanisms, while constrained by systemic and institutional conditions that limit translation into implementation. Based on the convergence, complementarity, and partial divergence identified across the qualitative, quantitative, and policy findings, Figure 4.6 presents the study's integrated interpretive model, which conceptualizes the interaction between attitudinal, normative, institutional, and contextual determinants influencing PPP adoption in the Palestinian health sector.

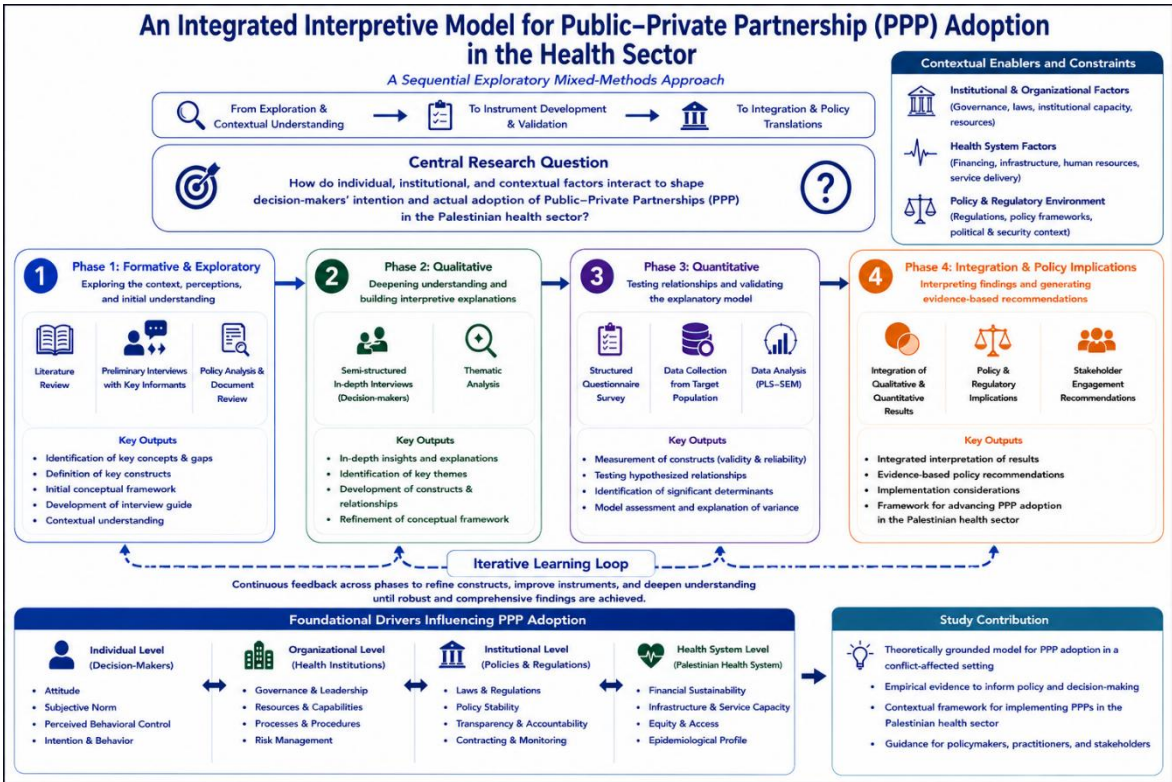


Figure 4.6 Proposed Integrated Interpretive Model for PPP Adoption

Figure 4.6: Presents the integrated interpretive model developed from the sequential exploratory mixed-methods design used in this study. The model illustrates how evidence generated across the formative, qualitative, quantitative, and policy analysis phases was progressively integrated to explain decision-makers' intentions toward the adoption of PPPs in the Palestinian health sector. It demonstrates the interaction of individual, organizational, institutional, and health system factors within the broader policy and regulatory context, while highlighting the iterative learning process through which findings from each phase informed subsequent stages of inquiry. The model synthesizes the study's empirical findings

into a coherent explanatory framework and provides a contextualized understanding of the determinants influencing PPP adoption in the Palestinian healthcare sector.

4.9 Health Services Purchasing Policy Analysis

The Palestinian Ministry of Health policy of purchasing health services from external providers constitutes a state-led outsourcing mechanism designed to address structural capacity constraints within the public health system. While this arrangement involves engagement with private sector providers, it should be analytically distinguished from PPPs, as it primarily reflects transactional contracting rather than structured, risk-sharing, and jointly governed partnership models. In its current form, the policy represents an early-stage form of inter-organizational collaboration, but it does not yet meet the defining characteristics of PPPs such as long-term co-governance, shared investment, or formalized performance-based accountability mechanisms.

The evolution of this purchasing policy has been shaped by incremental administrative decisions and fiscal necessity rather than by a comprehensive strategic reform agenda. Its development has been largely reactive, responding to hospital capacity shortages, financial constraints, and external pressures on service continuity. This reactive trajectory limits institutional learning and constrains the policy's transition toward more integrated and sustainable partnership frameworks.

From a policy content perspective, the mechanism enables the MoH to contract external providers for services not available within public facilities, particularly specialized and tertiary care. However, the design remains predominantly cost-containment and referral-oriented, with limited integration of quality assurance frameworks, performance incentives, or governance structures that are typically associated with PPP arrangements. Consequently, while the policy enhances short-term service availability, it does not yet institutionalize the relational or regulatory foundations required for effective PPP implementation.

The broader policy context is characterized by prolonged political instability, fiscal fragmentation, and restricted resource flows, including constraints on revenue collection and external dependency. These systemic conditions have reinforced reliance on external purchasing as a coping strategy for maintaining service continuity. However, the absence of institutionalized evaluation mechanisms limits the ability to systematically assess efficiency, equity, and long-term sustainability of this approach. As a result, purchasing practices tend to persist as administrative routines rather than evolving through evidence-informed reform cycles.

In terms of actors, the policy space is highly fragmented, involving governmental bodies (MoH, MoF, Prime Minister Office), donors, UN agencies, Non-Governmental Organizations, private providers, and other semi-public institutions. Despite this multiplicity of stakeholders, interactions remain largely contractual and operational, with limited strategic coordination or joint planning. The dominance of MoH as the central purchaser reinforces a hierarchical governance structure rather than a collaborative partnership model. This fragmentation constrains the emergence of integrated PPP governance arrangements that would require shared decision-making and coordinated accountability mechanisms.

Overall, the analysis indicates that the current purchasing policy functions primarily as an outsourcing and service procurement system, which—while contributing to health system resilience under crisis conditions—does not yet constitute a mature PPP framework. However, it does create an institutional entry point that could be leveraged for future PPP development, provided that reforms introduce clearer governance structures, performance-based contracting, and formalized risk-sharing arrangements.

. Table 4.31 analyzed the purchasing health services from outside MoH benefits package.

Table 4.31: Policy Analysis of Health Services Purchasing under the MoH Based on Gilson and Walt (1993) Framework

Policy Dimension	Description and Analytical Insights
Policy Process	The policy on purchasing health services from outside the MoH evolved gradually through series of laws, cabinet decisions, and administrative regulations. It was primarily designed as an instrumental policy to fill service gaps and reduce the cost of establishing secondary and tertiary hospitals. However, the process has been reactive driven by media pressure, public demand, and political momentum rather than strategic planning or stakeholder consultation. This reactive nature highlights the absence of a structured policy learning or adaptive process, limiting opportunities to shift toward sustainable partnership modalities such as PPPs.
Content	The policy allows the MoH to purchase advanced or unavailable health services from non-MoH providers through a formal referral system. While this policy provides short-term solutions to service gaps, it remains transactional and cost-driven, lacking components that promote quality assurance, efficiency, or innovation. The content is publicly available on the MoH website, yet it is still limited to purchasing arrangements rather than fostering collaborative partnership frameworks. Based on the current study's findings, the MoH demonstrates a positive attitude toward partnership, but implementation remains narrowly focused on outsourcing rather than developing integrated PPP models that could enhance sustainability and shared accountability.
Context	The policy operates within a highly constrained political and economic context, marked by Israeli occupation, fiscal dependency, and fragmented governance and split between the West Bank and Gaza. These challenges exacerbate the financial burden of service purchasing, which has increased exponentially over time. The weak infrastructure, shortages in human and technological resources, and limited institutional accountability further restrict policy evolution. Although the MoH provides an extensive benefits package, civil society organizations (e.g., AMAN, ICHR) have criticized the system's transparency and fairness. The absence of an evidence-based policy review mechanism means the purchasing policy continues by inertia, without exploring more sustainable partnership solutions.
Actors	The policy arena involves multiple actors: the Presidential Office, Council of Ministers, MoH, MoF, PMO, donors, private/ NGO hospitals (e.g., Augusta Victoria), military medical services, Gaza health authorities, UNRWA, NGOs, CBOs (e.g., AMAN), media, and academic and research institutions. Despite this diversity, coordination among actors remains weak, with the MoH acting as the dominant policy implementer. Donors and the private sector are largely engaged in a contractual rather than strategic partnership role. Strengthening coordination and embedding PPP models into the national health strategy could leverage existing capacities, particularly amid the war on Gaza and fiscal constraints due to Israeli control over clearance revenues.

4.10 Summary

This chapter integrates quantitative, qualitative, formative, and policy analyses to examine the determinants of PPP adoption in the Palestinian health sector. Quantitative results indicate that decision-makers, particularly from the private sector, exhibit moderate to relatively high behavioral intention ($R^2 = 0.465$) and generally positive attitudes toward PPP engagement. Measurement constructs demonstrated acceptable reliability, with outer loadings ranging from 0.591 to 0.911. Respondents consistently emphasized governance-related factors—particularly transparency, accountability, and role clarity—as critical enablers of effective partnership arrangements.

However, mediating constructs demonstrated limited explanatory power ($R^2 = 0.089$) and weak predictive relevance, suggesting that additional unmeasured contextual, institutional, or political factors may influence PPP adoption beyond the proposed model.

Qualitative insights and formative assessments further indicate that participants' experience, educational background, and sector affiliation shape their perceptions and capacity for engagement, thereby complementing and contextualizing the quantitative findings. Respondents consistently highlighted the need for clear legal frameworks, monitoring systems, and participatory governance to enhance trust and implementation feasibility.

Policy analysis shows that the MoH's current practice of purchasing health services from external providers—driven by limited hospital capacity, fiscal constraints, and conflict-related pressures—creates an enabling environment for collaboration with non-state actors. However, this mechanism remains primarily transactional (outsourcing-based) rather than constituting formal PPP arrangements. While it contributes to continuity of care and system resilience, gaps persist in cost-effectiveness assessment, transparency, and accountability, indicating the need for more structured oversight mechanisms.

In summary, the findings demonstrate moderate and conditional support for PPP development in the Palestinian health sector rather than fully mature readiness. Advancing PPP adoption requires aligning evidence-based policy reform with strengthened governance mechanisms and structured inter-sectoral collaboration to ensure sustainability, accountability, and responsiveness to health system constraints.

Chapter Five

Discussion

5.1 Introduction

The findings of this study are discussed through political economy and health policy perspectives, while considering the unique Palestinian context characterized by prolonged occupation and colonial settlement. These structural conditions have constrained local autonomy in health system development, limited resource availability, and created persistent challenges affecting health financing, governance, and service delivery. Understanding these contextual realities is essential for interpreting the study findings and their implications for the adoption of PPP strategies within the Palestinian healthcare sector. The chapter begins by discussing the formative research findings in Section 5.2, followed by an examination of the historical foundations shaping the Palestinian health system in Section 5.3. Section 5.4 presents a discussion of the qualitative findings, focusing on the perceptions and attitudes of decision-makers toward PPP adoption. Section 5.5 discusses the factors influencing decision-makers' intentions, drawing on the quantitative findings, including descriptive, inferential, and structural equation modeling (SEM) analyses. The study's contribution to knowledge is then presented in Section 5.6, followed by a discussion of its theoretical and practical implications in Section 5.7. Section 5.8 addresses the study limitations and identifies directions for future research. Finally, Sections 5.9 and 5.10 present the chapter conclusion and recommendations, respectively.

5.2 The formative research

The formative research phase highlighted the willingness of decision-makers to consider PPP, with some conservative acceptance from private not-for-profit sector, where they concern the health equity and health rights for people. The decision makers emphasized several governance determinants as critical for successful adoption, including clarity of vision, transparency, and prevailing economic conditions, consistent with findings from similar health system studies in fragile and conflict-affected settings (World Bank, 2023). Sectoral priorities identified in this phase included curative and diagnostic services, facility rehabilitation, building renovation, and the utilization of digital health technologies such as big data with health facilities. These priorities reflect existing gaps and unmet needs in the health sector and align with national strategic documents, including the Palestinian Health

Strategic Plan 2017–2023, the National Priority Agenda 2019, and the National Health Accounts 2022. Both public and private sector stakeholders expressed interest in investing in these domains as part of a broader vision for health service localization. Health service localization as presented in the MoH strategic plan is defined as purchasing health services from the Palestinian local health sector and/or establish the services within the public sector settings to avoid purchasing from outside MoH health service package (MoH, 2023).

At this early stage of the study, attitudes toward PPP adoption revealed general acceptance with high demand and emphasis on the importance of formulating legislation that enables partnerships between the public and private sectors. The preferred PPP models reflected common perspectives within the local context, suggesting that the government should retain ownership but not directly operate services. A notable finding was the conflation of privatization with partnership, with stakeholders clearly rejecting full privatization due to concerns about monopolistic practices in the health sector. These insights from the formative phase provide a foundational understanding for subsequent qualitative and quantitative phases.

5.3 Historical foundation

By considering the longstanding challenges since 1948, the war on Gaza since October 7, 2023, has further drained the Palestinian health system, intensifying existing difficulties and introducing additional barriers to healthcare access. According to the MoH in Gaza, over 67,000 Palestinians have been killed, and more than 170,000 injured since the onset of hostilities, with significant casualties occurring among those attempting to access aid supplies (OCHA, 2023a). The World Health Organization has documented 772 attacks on healthcare facilities, affecting 122 health centers and 180 ambulances, leading to widespread service disruptions (OCHA, 2023b). Within the West Bank, the number of checkpoints and barriers has increased, complicating the ability of patients and healthcare workers to reach medical facilities, thereby increasing the burden on an already overwhelmed system (OCHA, 2023b).

The volume of purchased services increased significantly, from 61,635 in 2022 to 110,495 in 2023. This surge in external referrals highlights the financial strain on the health sector, with MoH expenditures on service procurement reaching 1.13 billion NIS (approximately 319 million USD) in 2023, representing 40.2% of total health expenditures. These challenges underscore the urgent need for innovative strategies, such as PPPs, to address inefficiencies, reduce reliance on external providers, and enhance service delivery within the local healthcare system. The potential feasibility of PPP in Palestine is influenced by prolonged political instability, recurrent conflict, and donor-dependence. These factors undermine financial sustainability and exacerbate system fragmentation. Although PPPs have not yet been implemented, decision-makers' perceptions indicate growing acceptance and consideration of this strategy to reduce reliance on unstable aid for financing and costly external referrals in service delivery. However, the feasibility of adopting the strategy remains constrained by the unstable political context and lack of proper regulatory measures. The withholding of Palestinian tax revenues by Israeli occupation measure has exacerbated financial constraints on the MOH and other public sectors. More than 2 billion dollars are

withheld from the Israeli occupation side and refuse to release them (Wafa, 2024). This has led to delays in salary payments, accumulation of debts to private healthcare providers, and a growing reliance on referrals for treatment outside the MoH system. National Health Accounts data indicate a rising trend in health service purchasing from external providers, reflecting the internal system's inability to meet the increasing demand for specialized care (Ministry of Health, 2023; World Bank, 2023). Furthermore, the threat of annexation of West Bank by Israel poses a significant risk to the integrity and harmonization of the Palestinian health system. Such actions could lead to fragmentation of services, loss of control over health policy, and further marginalization of Palestinian healthcare needs. These compounded challenges underscore the necessity of exploring innovative solutions and health services provision, health financing strategy, such as PPP, to enhance the resilience and effectiveness of the Palestinian health system. However, the complex political and economic landscape requires careful consideration to ensure that such partnerships are equitable, sustainable, and aligned with the overarching goal of achieving comprehensive and accessible healthcare for all Palestinians.

5.4 Qualitative Findings: Perceptions and Attitudes of Decision-Makers

Four key themes revealed from the qualitative study: feasibility studies, investment climate, strategic planning, and operational challenges emerged from the in-depth interviews conducted with a diverse group of decision-makers in the Palestinian healthcare sector. By analyzing perspectives of government officials and private sector KIs, the study aims to gain a comprehensive understanding of the factors influencing the decision to adopt the PPP strategy in this context. The interviews provided valuable insight into the complexities and variation of perceptions towards PPP adoption in the Palestinian healthcare sector. Participants shared their experiences, challenges and perspectives, and shed light on the potential benefits and drawbacks of the partnership concept. Through careful analysis of the data, the study identified four key themes that will be discussed in detail in this section.

There was consensus among all Key Informants (KIs) on the importance of conducting an economic evaluation to determine the national priority of the health service purchasing package. Therefore, the most frequent code that emerged from the interviews was a request for Cost Benefit Analysis to determine what to purchase from outside the MoH service package and what the rationality of investment in the healthcare sector is. Feasibility studies and economic evaluations are critical in guiding PPP decision-making in healthcare. These assessments provide insights into economic efficiency and potential outcomes of healthcare interventions, ensuring that resources are effectively allocated.

Feasibility studies assess the practicality of proposed healthcare projects, considering factors such as infrastructure, technology, and community needs. For instance, a techno-economic evaluation of a hybrid photovoltaic system in Bangladesh demonstrated how renewable energy could enhance healthcare service delivery, emphasizing the need for reliable power sources in rural settings (Ahmed et al., 2023). Such studies help identify potential risks and benefits, allowing stakeholders to make informed decisions about project viability. Economic evaluations include cost-effectiveness analyses, quantify the relationship between cost and health outcomes and help guide resource allocation. For example, the incremental

cost-effectiveness ratio is a key metric used to compare different healthcare interventions (Kim et al., 2022). These evaluations reveal the financial implications of healthcare services as seen in studies across sub-Saharan Africa which highlighted the positive correlation between healthcare cost and health outcomes (Idris et al., 2023). Neglecting these assessments can lead to poorly informed decisions, resulting in wasted resources, ineffective interventions, and ultimately, adverse health outcomes. Thus, integrating feasibility and economic evaluations is essential for successful healthcare PPP.

The role of healthcare providers was raised as one of the determinants of the PPP adoption decision. While many KIs agreed that the government should primarily act as a regulator rather than a service provider, this perspective often clashed with the government's own desire to maintain a significant role in service delivery, particularly at the local level. The private for profit focused on the importance of improving investment conditions to invest heavily in tertiary health services. The private for non-profit decision-makers focused on the importance of risk sharing. One common point centered on the importance of restructuring and reforming health insurance and increasing the pool and subscribers by improving the quality of care and increasing providers as a partnership outcome. Skepticism and negative perspectives were raised by private not-for-profit sector on the private for-profit sector intention, and they voiced concern regarding the ownership issue to favor health equity and right to access healthcare. The analysis highlights the significance of leveraging private sector capabilities to address gaps in service provision, especially in tertiary healthcare. Private for-profit entities emphasized the need to improve investment conditions for their involvement in these high-cost areas. Conversely, private non-profit decision-makers focus on the importance of risk-sharing in partnership agreements. Studies show that government policy plays a crucial role in the adoption and success of PPP by influencing private sector participation, project performance, and financial viability.

Research indicates that supportive policies enhance the willingness of private enterprises, particularly small and medium-sized enterprises to engage in PPP projects by improving their financing capacity and market access (Xue & Chen, 2019). Additionally, macroeconomic policy adjustments such as lowering loan interest rates and increasing self-owned capital rates can stimulate private investment in PPP (Liu et al., 2023). Moreover, government equity investment is shown to have a complex outcome on PPP performance with effective communication between public and private sectors serving as a mediating factor (Hu et al., 2021). Policies like performance guarantees and subsidies are also vital as they help prevent inefficient project liquidation and ensure the sustainability of socially beneficial infrastructure projects (Shi et al., 2018). Finally, various instruments designed to enhance access to credit for PPP are essential to attract private capital, underscoring the importance of tailored government interventions to foster PPP development (Vecchi et al., 2017).

Although interviewees demonstrated a clear understanding of PPP strategy, they struggled to envision concrete PPP models tailored to the unique circumstances of the Palestinian context. They showed common agreement on collaboration and learning from other countries. The participants generally agreed on the value of learning from international experiences in PPP, but they emphasized the importance of tailoring these models to the specific Palestine context, recognizing that a one-size-fits-all approach may not be suitable.

No one agreed on Palestinian preparedness and competency to start PPP adoption in the health sector. There was agreement from all stakeholders regarding weakness in planning, vision, and capabilities with slight differences from the governmental decision-makers that claimed they have a vision, but political conditions hinder them from development and advancement. A distinctive viewpoint emerged from the private and non-profit sectors, emphasizing the importance of civil society engagement as a crucial dimension of collaboration to bolster Palestinian resilience in the face of on-going political challenges.

Operational challenges such as trust in government, transparency in tendering processes, and balancing interests between the public and private sectors further complicates the successful implementation of partnerships. There is a clear discrepancy among decision-makers regarding the perceived form and preferred structure of PPP. While there is a general agreement on the need for such partnerships, there is no consensus on its specific shape or form within the Palestinian context. The inability to envision the PPP structure in the Palestinian health sector may stem from the limited implementation of PPP strategies in Palestine. This concern is rooted in KI perceptions of weak governance and a lack of trust. Moreover, skepticism persists among private about the intentions of for-profit private entities, particularly regarding ownership issues and the potential impact on health equity and access to care. This skepticism underscores a broader concern about the potential for PPPs to contribute to corruption, given the lack of a legislative authority in Palestine. The absence of a functioning legislative framework may contribute to the perception that there are no mechanisms in place to ensure transparency and accountability in PPPs. India's healthcare system illustrates that legislative support for flexible PPPs models can enhance resource allocation and reach vulnerable populations, addressing infrastructure gaps (Birla Bharti & Taneja Udit, 2010).

The partnerships as an alternative financing strategy for health service delivery continue to appear in decision-makers' speeches, government announcements, and media discussions, particularly given the persistent risk of collapse of governmental health services in the West Bank. During the ongoing war post October 7th, 2023, several meetings have taken place between the MoH, local partners, and the private sector to explore potential solutions to the threats facing governmental healthcare system capacity (Palestinian MoH Facebook Page, 2025). In such challenging circumstances, the private sector continues to hold relatively stronger resources and tools to support healthcare service delivery and to invest in the Palestinian healthcare sector.

In Lesotho unexpected high payments to private operators created budgetary uncertainties, emphasizing the importance of robust financial planning and contract management (Hellowell, 2019).

The lack of trust between stakeholders significantly hinders the success of PPPs in healthcare. Trust issues can lead to misaligned objectives, opportunistic behaviors, and ineffective collaboration that ultimately can undermine project outcomes. To mitigate these challenges, several strategies can be employed. Trust is foundational for effective collaboration, as evidenced by studies showing that interpersonal relationships and transparent communication enhance stakeholder engagement and project success (Dove et al., 2024) . Lack of trust can result in opportunistic behaviors such as underbidding and delays in fund disbursement which compromise project integrity (Sanda et al., 2022). While

these strategies can significantly improve trust and collaboration, it is essential to recognize that building trust is a gradual process that requires sustained effort and commitment from all stakeholders.

The study also explores the influence of political and economic factors on partnership decisions. Respondents expressed concerns about capitalist ideologies infiltrating the healthcare sector and emphasized the importance of ensuring fair access to services, especially in a politically volatile environment. Governance and capacity-building are crucial themes, with participants calling for stronger regulatory frameworks, better coordination among service providers, and strict adherence to laws and regulations to enhance service quality and rebuild citizen trust. The absence of a clear legislative framework contributes to the uncertainty surrounding the adoption of specific PPPs models, such as Build-Operate-Transfer (BOT), with decision-makers expressing mixed opinions on their feasibility.

Cultural competency emerges as a unique and significant factor in shaping partnership strategies. For instance, the National Health Services-NHS Innovation Accelerator in the UK exemplifies how cultural alignment can lead to effective collaboration and enhancing healthcare delivery through innovative solutions (Abdul et al., 2024). In Pakistan, PPPs have shown potential in bridging healthcare gaps, emphasizing the need for transparent communication and mutual understanding to ensure equitable access to services (Mehboob, 2023). While cultural competency is vital for the success of PPPs, challenges remain such as divergent interests and regulatory complexities. Addressing these issues requires ongoing dialogue and adaptation to local cultural contexts to ensure sustainable partnerships.

The study highlights concern about the potential for partnerships to foster corruption and monopolies, particularly in the sensitive area of healthcare. The lack of a decisive vision for PPPs combined with cultural sensitivities complicates the adoption of these partnerships. Decision-makers across sectors agree on the importance of institutionalized monitoring and evaluation as a means to ensure the agility and responsiveness of partnership initiatives. There is also a shared understanding of the need for continuous improvement in service procurement systems to meet the evolving needs of the population.

While there is a common agreement on the value of collaboration and learning from international experiences, decision-makers caution against adopting a one-size-fits-all approach. The Palestinian context, with its unique political, economic, and social challenges, requires a tailored approach to PPPs. Nonetheless, there is no clear consensus on the country's readiness or competence to begin adopting PPPs. Government officials acknowledge the challenges posed by the political environment which they argue hinders the health sector's development and advancement. Additionally, the engagement of civil society is viewed as an essential component of a patient-centered approach, particularly by non-profit entities.

The findings from other literature also align with experiences in fragile or conflict-affected contexts, supporting the transferability of our results. Decision makers and stakeholders generally recognize the value of PPPs in expanding access and improving service quality, especially in underserved areas (Salangwa et al., 2025) (Vian et al., 2015) (Azzopardi et al., 2021). However, they also express concerns about sustainability, financial risks, policy alignment, and the need for ongoing government support (Salangwa et al., 2025) (Paltiel et

al., 2020). Resistance from public sector staff, mistrust between partners, and lack of clear governance frameworks are common barriers (Khan & Puthussery, 2019) (Tabrizi et al., 2020). Effective PPPs require transparent communication, well-defined roles, strong leadership, and mechanisms for monitoring and evaluation ((Azzopardi et al., 2021) (Tabrizi et al., 2020) (Dove et al., 2025) (Rennert et al., 2019). Decision makers emphasize the importance of aligning incentives, ensuring local ownership, and adapting models to local needs and contexts (Azzopardi et al., 2021; Dove et al., 2025; Joudyian et al., 2021; Salangwa et al., 2025). The study concludes by emphasizing the anticipated outcomes of PPPs, such as improved service accessibility, quality, and sustainability. However, achieving these outcomes will require comprehensive evaluations, effective stakeholder collaboration and a nuanced understanding of the political, economic, and social contexts. Policymakers and stakeholders must navigate these complexities carefully to design and implement partnerships that not only enhance healthcare delivery but also promote equity and mitigate risks. The study highlights the need for continuous learning, adaptability, and cultural competency in shaping the future of PPPs in the Palestinian healthcare sector. There are some strategies for building trust, i.e. clear governance structures and establishing formal governance frameworks that can facilitate accountability and transparency and foster trust among stakeholders (Samira Abdul et al., 2024) (Mehboob, 2023). Additionally, stakeholder engagement, involving all parties in decision-making processes, will help align interests and build mutual respect. Finally, applying incentive mechanisms i.e. implementing incentives to discourage opportunism and promote collaboration can enhance trust and commitment (Sanda et al., 2022).

5.5 Factors Affecting Decision-Makers’ Intentions

Research using the Theory of Planned Behavior (TPB) in healthcare PPPs highlights four main factors influencing private sector decision-makers: attitude toward participation, Subjective Norm (perceived social pressure), perceived behavioral control (confidence in the ability to participate). The studies indicate that these factors significantly predict behavioral intention to participate, which in turn predicts actual behavior. Attitude is identified as the strongest predictor, followed by perceived behavioral control, while Subjective Norm also plays a meaningful role, as shown in Table 5.1. (Yang et al., 2020; Hagger et al., 2022; Hagger & Hamilton, 2023).

Table 5.1: TPB Constructs and Their Influence on PPP Adoption

TPB Construct	Influence on Intention/Behavior	Citations
Attitude	Strongest positive effect	(Yang et al., 2020; Hagger et al., 2022; Hagger & Hamilton, 2023)
Subjective Norm	Moderate positive effect	(Yang et al., 2020; Hagger et al., 2022; Hagger & Hamilton, 2023)
Perceived Behavioral Control	Significant positive effect	(Yang et al., 2020; Hagger et al., 2022)

Meta-analyses confirm that TPB reliably predicts health-related decision-making, with perceived behavioral control moderating the link between intention and actual behavior. However, effects can vary by context and over time, suggesting the need for tailored interventions to strengthen key determinants (Hagger et al., 2022; Hagger & Hamilton, 2023; Randall & Gibson, 1991). The Theory of Planned Behavior provides a robust framework for

understanding and influencing decision-makers' adoption of PPPs in health. Strengthening positive attitudes, supportive norms, perceived behavioral control, and facilitating conditions can enhance private sector participation and improve PPP outcomes.

5.5.1 Attitude toward the Behavior The study found a statistically significant positive relationship between Attitude toward the Behavior and behavioral intention ($\beta = 0.302$, $p = 0.043$). This indicates that policymakers' positive evaluations of PPPs, including perceived improvements in service efficiency and resource utilization, are associated with stronger intentions to engage in such arrangements. However, the moderate effect size suggests that attitude alone is insufficient to explain PPP intention and that other institutional and contextual factors also influence decision-making. Within the Theory of Planned Behavior, attitude is an important predictor of intention; however, the present findings do not support the claim that it is the strongest predictor within this study's model.

Comparative evidence supports the positive role of attitude in PPP adoption. For example, a study of 248 private-sector decision-makers in China found that attitude toward PPP participation exerted a stronger influence on intention ($\beta = 0.466$, $p < 0.001$), reflecting perceived market opportunities and investment incentives (Yang et al., 2020). While this finding supports the TPB proposition that favorable attitudes contribute to behavioral intention (Ajzen, 1991), the magnitude of this relationship appears to be context dependent. In the Palestinian context, interpretation of attitude requires consideration of a fragile and politically constrained health system characterized by fiscal dependency, fragmented governance, and limited institutional autonomy. Under such conditions, positive attitudes toward PPPs may reflect not only rational assessments of potential benefits but also adaptive responses to service delivery pressures, donor influence, and institutional constraints. Consequently, while attitude contributes significantly to explaining intention, its translation into actual PPP implementation is likely constrained by structural barriers, including bureaucratic rigidity, regulatory uncertainty, and limited fiscal sovereignty. Accordingly, Attitude toward the Behavior should be viewed as an enabling—but insufficient—condition for PPP adoption, requiring complementary reforms in governance, accountability, and regulatory capacity to convert intention into practice.

Table 5.2: Table comparing the effects of TPB constructs on PPP adoption intention in healthcare.

TPB Construct	This Study (β)	Relative Effect	Interpretation in This Study	Literature Context
Attitude	0.466	Moderate predictor	Primary driver of PPP adoption intention, reflecting positive evaluation of PPP benefits and feasibility	Consistent with Yang et al. (2020); Zheng et al. (2018)
Perceived Behavioral Control	0.231	Small predictor	Indicates partial institutional and resource constraints affecting perceived ability to adopt PPP	Mixed evidence in prior studies
Subjective Norm	0.167	Weakest but significant	Suggests limited but meaningful influence of institutional and peer pressure in decision-making	Varies across governance contexts

5.5.2 Subjective Norm

Subjective Norm also demonstrated a significant positive effect on behavioral intention ($\beta = 0.326$, $p = 0.039$). This underscores the influence of societal expectations and institutional pressures on decision-making. In the Palestinian context, where external actors and political entities exert substantial influence, adherence to prevailing norms and expectations may drive the adoption of PPPs, even in the absence of robust internal capabilities. In the Palestinian health sector, this suggests that when policymakers perceive PPPs as effective mechanisms for improving service delivery, resource mobilization, and innovation, they are more inclined to endorse them as viable policy instruments. This finding aligns with prior evidence in other health systems—such as Al-Hanawi et al. (2022) in Saudi Arabia and Liu et al. (2020) in China—where positive attitudes toward PPP initiatives were linked to stronger policy commitment and implementation readiness.

However, in fragile and colonially constrained settings such as Palestine, attitudes toward reform are deeply shaped by broader political economy structures. The occupation's control over borders, fiscal autonomy, and resource distribution limits the state's ability to independently operationalize PPP projects, constraining the translation of positive attitudes into actionable policy (Abu-Zahra & Kay, 2013; Hanafi & Tabar, 2022). Thus, while Palestinian officials may hold favorable beliefs about PPP as a pathway to efficiency and modernization, these attitudes are often moderated by systemic dependency on external donors and restrictions imposed by colonial governance regimes. This highlights a paradox where attitudinal positivity reflects a strategic aspiration for reform under constraint, rather than pure behavioral readiness. In such contexts, the predictive power of attitude reflects not only cognitive evaluation but also a symbolic resistance to structural disempowerment—an

attempt by policymakers to reclaim agency through reform discourse within externally imposed limits (Hanieh, 2016; Hilal, 2021).

5.5.3 Perceived Behavioral Control

Perceived Behavioral Control (PBC) did not demonstrate a statistically significant effect on Behavioral Intention ($\beta = -0.182$, $p = 0.256$). Accordingly, the findings do not provide sufficient empirical evidence to conclude that perceived control factors significantly influence policymakers' intentions to adopt PPP strategies in the Palestinian healthcare sector. Although the coefficient was negative, its non-significance indicates that the direction and magnitude of the relationship should be interpreted with caution.

This finding may suggest that factors related to perceived control, such as financial autonomy, administrative flexibility, and institutional capacity, were not sufficiently influential within the study model to predict behavioral intention. From a theoretical perspective, this result contrasts with the assumptions of the Theory of Planned Behavior, where PBC is often expected to contribute to intention formation. However, similar inconsistencies have been reported in organizational and policy-related contexts where decision-making is shaped by broader political, institutional, and contextual considerations. In addition, the study did not identify statistically significant mediating effects within the proposed model. Therefore, no empirical conclusion can be drawn regarding the presence or absence of intermediary mechanisms influencing the relationship between the independent variables and behavioral intention. These findings should be interpreted within the limitations of the study design and context.

5.6 Contribution to Knowledge

This study contributes to the body of knowledge by providing one of the first empirically grounded mixed-method investigations of the determinants influencing decision-makers' intention toward adopting PPP strategies in the Palestinian healthcare sector, a context characterized by political instability, fragmented governance, and resource constraints. The study addresses a significant gap in the literature, where most PPP research has focused on implementation and financial performance in stable settings, with limited attention to the pre-adoption phase in fragile and conflict-affected health systems.

Theoretically, the study extends the application of the Theory of Planned Behavior by integrating behavioral determinants with institutional and governance dimensions, including trust, transparency, accountability, and regulatory clarity. The findings demonstrate that PPP adoption in fragile health systems cannot be explained solely through individual behavioral intention but is also shaped by broader institutional and political conditions. This provides a more context-sensitive interpretation of PPP adoption beyond traditional technocratic and economic perspectives.

Methodologically, the study contributes through the use of a rigorous sequential mixed-methods design integrating formative inquiry, qualitative interviews, descriptive and inferential statistical analysis, Structural Equation Modeling (PLS-SEM), and policy analysis. The triangulation of findings strengthened the explanatory depth of the research

and enabled the integration of individual, institutional, and policy-level perspectives within a single analytical framework.

Empirically, the study generates original evidence from the Palestinian healthcare sector regarding stakeholders' perceptions, preferred PPP models, governance concerns, and determinants of adoption intention. The findings identified Attitude toward the Behavior and Subjective Norm as significant predictors of Behavioral Intention, while qualitative evidence revealed that institutional fragmentation, limited trust, governance weaknesses, and unclear provider roles remain major barriers to operationalization.

Practically and policy-wise, the study contributes by proposing evidence-informed directions for PPP governance and strategic planning in Palestine, including the importance of transparency, accountability, phased partnership models, institutional readiness, and equitable risk-sharing mechanisms. The study therefore provides a contextualized foundation for future PPP policy development and health sector reform in fragile and conflict-affected settings.

5.7 Theoretical and Practical Implications

The findings partially support the Theory of Planned Behavior, particularly the roles of attitude and Subjective Norm in shaping behavioral intentions. However, the non-significant effect of perceived behavioral control does not invalidate the theory, but may reflect contextual, institutional, or measurement-related factors specific to the study setting. Therefore, the results suggest limited empirical support for this construct in the present model rather than a challenge to the theory as a whole. Practically, the findings should be interpreted cautiously, as they relate to behavioral intention rather than actual PPP adoption, indicating that policy efforts may benefit from focusing on attitudinal and normative influences while acknowledging the presence of structural constraints without assuming direct causal effects. Figure 5.1 presents A Context-Sensitive Framework for PPP Modality Selection in the Palestinian Health Sector.

POLICY DECISION TOOL FOR SELECTING THE MOST APPROPRIATE PUBLIC-PRIVATE PARTNERSHIP (PPP) MODALITY

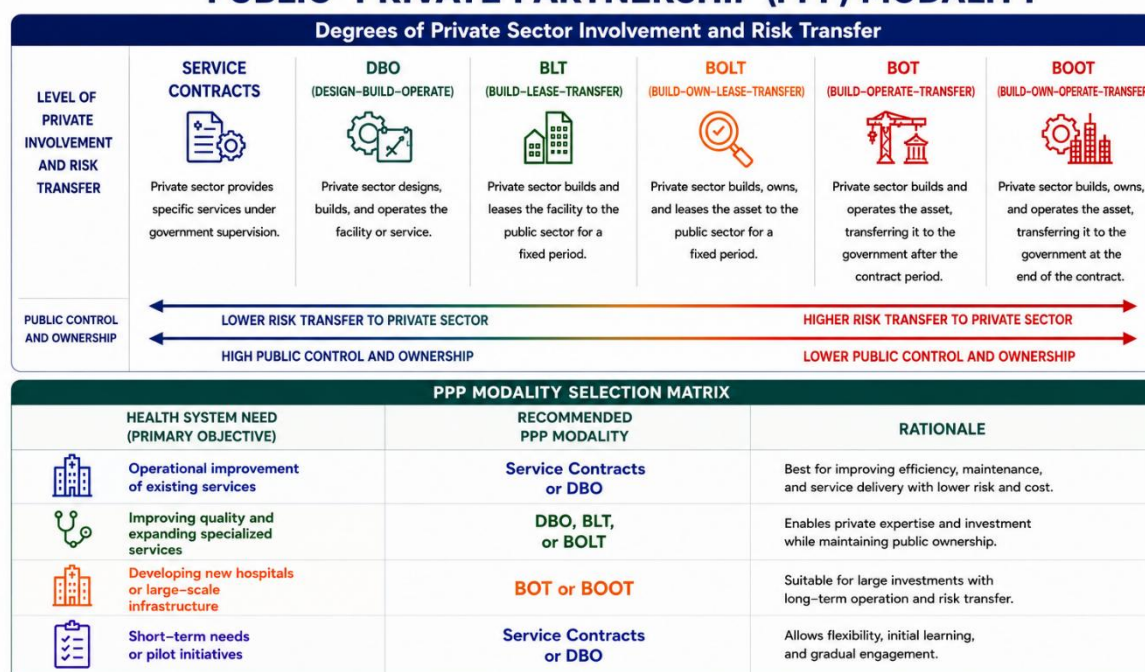


Figure 5.1 Policy decision tool for the most appropriate PPP Modality

This figure presents a practical decision-support framework developed from the findings of the current study to assist policymakers in selecting the most appropriate PPP modality according to health system needs, institutional capacity, and risk considerations. The framework conceptualizes PPP arrangements as a continuum of increasing private sector involvement and risk transfer, ranging from service contracts to large-scale infrastructure partnerships. It further links specific health sector objectives—such as operational improvement, expansion of specialized services, and development of new healthcare infrastructure—to the PPP modalities most suitable for achieving these objectives while maintaining appropriate levels of public ownership, oversight, and accountability.

5.8 Limitations and Future Research

This study faced several methodological and contextual limitations. Data collection was constrained by limited access to decision-makers, requiring repeated field visits and extended waiting times. The qualitative phase was also limited by participant availability, with government informants underrepresented compared to private for-profit and not-for-profit/NGO sectors, which may have affected the balance of perspectives. In addition, fieldwork challenges were amplified by the war in Gaza and West Bank-Palestine conditions following the October 7th, 2023 war on Gaza, including restricted online access and movement limitations across the West Bank, which may have influenced sample accessibility and representativeness. Future research should directly address these limitations by incorporating additional contextual and institutional variables, such as governance quality, institutional trust, and political stability, to improve model robustness. Longitudinal and comparative designs across different fragile or conflict-affected settings are also recommended to better understand PPP adoption dynamics under varying institutional conditions.

5.9 Conclusion

This dissertation examined the determinants of decision-makers' intentions to adopt PPPs in the Palestinian health sector using a mixed-methods design that integrated quantitative, qualitative, descriptive, and policy analysis approaches. The findings across these complementary strands consistently indicate that PPP adoption is primarily shaped at the level of behavioral intention, which is influenced by a combination of individual perceptions, institutional conditions, and broader contextual factors.

The quantitative results, including Structural Equation Modeling and descriptive analysis, demonstrated that Attitude toward the Behavior is the strongest and most consistent predictor of behavioral intention, while Subjective Norm also plays a meaningful role in shaping decision-makers' intentions. Perceived behavioral control, however, did not show a statistically significant effect, suggesting that perceived constraints alone are not sufficient to predict intention within the current institutional setting. Descriptive findings further supported these results by showing relatively higher levels of agreement with statements related to perceived benefits and normative expectations compared to perceived control barriers.

The qualitative findings provided important explanatory depth to these patterns. Participants consistently emphasized issues related to institutional capacity, trust, coordination challenges, and dependency on external actors. These factors were described not only as structural constraints but also as elements that shape perceptions, legitimacy, and willingness to engage with PPP arrangements. The qualitative evidence also highlighted variation in perspectives across stakeholder groups, particularly between governmental, private, and NGO actors, reflecting differing institutional interests and levels of perceived readiness.

From a policy perspective, the analysis indicates that PPP discourse in the Palestinian health sector is strongly influenced by governance arrangements, donor involvement, and institutional fragmentation. Policy documents and stakeholder narratives suggest that PPP initiatives are often framed within broader health system reform agendas, yet their feasibility is moderated by implementation capacity, regulatory clarity, and stakeholder alignment. This highlights a gap between policy intentions and operational readiness.

The integration of findings across methods suggests that PPP adoption cannot be understood solely through a behavioral framework, but rather as a multi-layered decision-making process in which psychological factors (attitudes and norms), institutional realities, and policy environments interact. While the Theory of Planned Behavior provides a useful explanatory foundation, the results indicate that its predictive capacity is strengthened when interpreted in conjunction with contextual and governance-related insights.

Overall, the study concludes that readiness for PPP adoption in the Palestinian health sector is primarily driven by favorable attitudes and normative influences, while constrained by institutional and contextual factors that shape—but do not directly determine—behavioral intention. This underscores the importance of aligning stakeholder perceptions, strengthening governance capacity, and ensuring coherence between policy design and institutional implementation structures.

5.10 Recommendations

The findings of this study suggest several implications for decision-makers regarding the development and implementation of Public-Private Partnership (PPP) initiatives in the Palestinian health sector. Given that behavioral intention was found to be primarily influenced by attitudinal and subjective norm factors, policy efforts should prioritize strengthening positive perceptions of PPP benefits among stakeholders and reinforcing constructive normative pressures through coordinated engagement among key actors. In this regard, structured economic and feasibility assessments of PPP initiatives are recommended, provided that they integrate contextual considerations such as institutional capacity, governance arrangements, and sector-specific constraints within the Palestinian environment.

The results also highlight the importance of stakeholder engagement processes in shaping intentions toward PPP adoption. Therefore, participatory dialogue between the Ministry of Health, private for-profit providers, not-for-profit organizations, and civil society actors is recommended to enhance mutual understanding and support for PPP models. Such engagement should aim to align perceptions and expectations rather than assume direct implementation outcomes. Furthermore, strengthening administrative and legal capacities within public institutions is recommended to improve readiness for potential PPP arrangements, particularly in relation to negotiation, oversight, and evaluation functions.

For researchers, the study indicates the value of further refining behavioral and governance frameworks, including the Theory of Planned Behavior, within fragile and politically constrained health systems. Future research may also benefit from integrating quantitative approaches such as Structural Equation Modeling with qualitative methods to better capture contextual and institutional influences shaping behavioral intention. Comparative and longitudinal studies across similar fragile settings are further recommended to deepen understanding of how PPP-related intentions evolve over time and under varying governance conditions.

At the level of the scientific and academic community, the findings underline the importance of incorporating socio-political and institutional dimensions when examining health sector partnerships in fragile contexts. This includes advancing context-sensitive and interdisciplinary approaches that better reflect the role of governance structures, trust, and external constraints in shaping policy-related intentions. Palestine may serve as a critical case for broader comparative inquiry into PPP adoption in conflict-affected and resource-constrained environments, contributing to more grounded and contextually informed scholarship.

In summary, the study suggests that PPP adoption in the Palestinian health sector is primarily shaped at the level of behavioral intention through attitudinal and normative mechanisms, rather than through perceived control factors alone. Accordingly, strengthening governance capacity, stakeholder alignment, and evidence-informed policymaking represents a key direction for improving readiness for future PPP implementation under conditions of institutional fragility.

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Annexes

Annex 01: List of targeted DMs – In depth interview

S.N	الهيئة / المؤسسة	Entity Name
1	الإدارة العامة للمستشفيات	MoH- General Directorate of Hospitals
2	الإدارة العامة للسياسات والتخطيط الصحي	MoH- General Directorate of Health Policy and Planning
3	الكاريتاس للأطفال/ بيت لحم	Karitas Baby Hospital
4	مستشفى الرعاية العربية	Arab Care Hospital
5	جمعية الهلال الأحمر	Palestinian Red Crescent Society
6	مستشفى اتش كلينيك	H-Clinic Hospital
7	المستشفى الاستشاري العربي	Arab Specialized Hospital
8	مختبرات ميديكير	Medicare Laboratories
9	مركز دنيا التخصصي	Dunya Specialized Center
10	الإغاثة الطبية	Palestinian Medical Relief Society
11	لجان العمل الصحية	Health Work Committees
12	مستشفى سانت جون -العيون	St. John Eye Hospital
13	النجاح الوطني الجامعي/ نابلس	An-Najah National University Hospital
14	المستشفى الأهلي - خليل	Al-Ahli Hospital - Hebron
15	مستشفى الميزان التخصصي - الخليل	Al-Mizan Specialized Hospital
16	المعهد الوطني الفلسطيني للصحة العامة	Palestinian National Institute of Public Health
17	مؤسسة جذور للانماء الصحي	Juzoor Foundation for Health and Social Development

Annex 02: List of targeted Entities by sector – Survey Questionnaire

	القطاع والهيئة	Entity Name in English language
Serial No.	القطاع الحكومي	Public Sector
1	وزارة الصحة الفلسطينية	Palestinian Ministry of Health
2	المعهد الوطني الفلسطيني للصحة العامة	Palestinian National Institute of Public Health
3	الرعاية الصحية الأولية - مديرية صحة القدس	Primary Healthcare – Jerusalem Health Directorate
4	وزارة الاقتصاد	Ministry of Economy
5	وزارة المالية	Ministry of Finance
6	مستشفى اريحا الحكومي	Jericho Governmental Hospital
7	مستشفى دورا الحكومي	Dura Governmental Hospital
8	مستشفى يطا الحكومي	Yatta Governmental Hospital
9	مستشفى الرئيس محمود عباس الحكومي	President Mahmoud Abbas Governmental Hospital
10	مستشفى الامل للتأهيل	Al-Amal Rehabilitation Hospital
11	مستشفى الهلال الاحمر التخصصي	Palestine Red Crescent Specialized Hospital
12	مستشفى الخليل الحكومي (عاليه)	Hebron Governmental Hospital (Alia)
13	وزارة العمل	Ministry of Labor
14	مستشفى سلفيت الحكومي	Salfit Governmental Hospital
15	المستشفى الوطني الحكومي	National Governmental Hospital
16	المجلس الأعلى للشباب والرياضة	Higher Council for Youth and Sports
17	مستشفى محمد علي المحتسب	Mohammad Ali Al-Muhtaseb Hospital
18	مستشفى الدكتور درويش نزال الحكومي	Dr. Darwish Nazzal Governmental Hospital
19	مستشفى رفيديا الجراحي الحكومي	Rafidia Surgical Governmental Hospital
20	مستشفى بيت لحم للطب النفسي	Bethlehem Psychiatric Hospital
21	مستشفى بيت جالا الحكومي	Beit Jala Governmental Hospital

	القطاع والهيئة	Entity Name in English language
22	مستشفى الشهيد ثابت ثابت الحكومي	Martyr Thabet Thabet Governmental Hospital
23	وحدة شراء الخدمات الصحية - وزارة الصحة	Health Services Purchasing Unit – Ministry of Health
Serial No.	القطاع الخاص غير الربحي	Non-Profit Private Sector
1	المركز الصحي العربي / جامعة القدس	Arab Health Center / Al-Quds University
2	المستشفى الانجيلي العربي	Arab Evangelical Hospital
3	الهيئة المستقلة لحقوق الإنسان	Independent Commission for Human Rights
4	معهد ماس للسياسات الاقتصادية	MAS Institute for Economic Policy Research
5	مؤسسة جذور للانماء الصحي والاجتماعي	Juzoor Foundation for Health and Social Development
6	مستشفى العائلة المقدسة	Holy Family Hospital
7	مستشفى الهلال الاحمر	Palestine Red Crescent Hospital
8	لجان العمل الصحي	Health Work Committees
9	مستشفى المقاصد الخيرية	Al-Makassed Charitable Hospital
10	مستشفى الهلال الأحمر الفلسطيني / حلحول	Palestine Red Crescent Hospital / Halhul
11	مستشفى الرازي (الزكاة)	Al-Razi Hospital (Zakat)
12	المجلس الاقتصادي الفلسطيني للتنمية والإعمار "بكدار"	Palestinian Economic Council for Development and Reconstruction (PECDAR)
13	جمعية بيت لحم العربية للتأهيل - المستشفى التخصصي للتأهيل والجراحة	Bethlehem Arab Society for Rehabilitation – Specialized Rehabilitation and Surgery Hospital
14	مستشفى حقل الرعاة	Shepherds' Field Hospital
15	هيئة تشجيع الاستثمار الفلسطينية	Palestinian Investment Promotion Agency
16	مستشفى النجاح الوطني الجامعي	An-Najah National University Hospital
17	منظمة الصحة العالمية	World Health Organization

Serial No.	القطاع الخاص الربحي	For-Profit Private Sector
1	مختبرات ستي لاب	City Lab Laboratories
2	مختبر الجود الطبي	Al-Joud Medical Laboratory
3	شركة اليسون	Alisson Company
4	مختبر الجامعة العربية الامريكية	Arab American University Laboratory
5	سنا للأشعة التشخيصية	SNA Diagnostic Imaging
6	مركز دلتا للأشعة	Delta Radiology Center
7	شركة دار الشفاء لصناعة الادوية	Dar Al-Shifa Pharmaceutical Manufacturing Company
8	شركة النخبة للخدمات والاستشارات الطبية	Al-Nukhba Medical Services and Consulting Company
9	مختبرات جينوم للتحاليل الوراثية والطبية	Genome Laboratory for Genetic and Medical Testing
10	المختبر الطبي الفرنسي	French Medical Laboratory
11	شركة التأمين الوطنية	National Insurance Company
12	مستشفى العائلة المقدسة	Holy Family Hospital
13	مستشفى المستقبل	Al-Mustaqbal Hospital
14	مستشفى وليد الناظر	Walid Al-Nazir Hospital
15	مستشفى بني نعيم للولادة والجراحة	Bani Na'im Maternity and Surgery Hospital
16	المستشفى الاهلي	Al-Ahli Hospital
17	مؤسسة نصر الطبية	Nasr Medical Institution
18	مستشفى ناصر	Nasser Hospital
19	مستشفى نابلس التخصصي	Nablus Specialized Hospital
20	مستشفى الهلال الاحمر لحلول	Palestine Red Crescent Hospital – Halhul
21	الهلال الاحمر لحلول	Red Crescent – Halhul
22	مستشفى جمعية الهلال الاحمر الفلسطيني /حلول	Palestinian Red Crescent Society Hospital / Halhul
23	مجموعه مستشفيات العربي	Arab Hospitals Group
24	مستشفى اليمامة	Al-Yamama Hospital

25	مستشفى حقل الرعاة	Shepherds' Field Hospital
26	لجان العمل الصحي	Health Work Committees
27	مستشفى الدبس للولادة	Al-Dibs Maternity Hospital
28	مستشفى الجمعية العربية لتأهيل	Arab Rehabilitation Society Hospital
29	مستشفى العائلة المقدسة	Holy Family Hospital
30	مستشفى الميزان	Al-Mizan Hospital
31	مستشفى الكاريتاس	Caritas Hospital
32	مستشفى النجاح الوطني الجامعي	An-Najah National University Hospital
33	المستشفى الاستشاري	Istishari Arab Hospital (Consultative Hospital)

Annex 03: Interview Guide

أسئلة ومحاوَر المقابلة الفردية
دراسة إستكشافية حول توجهات وآراء مقدمي الخدمات الصحية حول إستراتيجية الشراكة بين القطاع العام والخاص

المحور الأول: مدى معرفة وخبرة المبحوثين حول الشراكة بين القطاع العام والخاص في القطاع الصحي

- هل سمعت بمفهوم الشراكة بين القطاع العام والخاص او ما يعرف ب -Public Private Partnership PPP
- كيف يمكن أن تصف خبرتك و معرفتك حول مفهوم الشراكة بين القطاع العام والخاص و المجال الصحي تحديدا
- هل يمكن ان تعطينا امثلة من واقع معرفتك وخبرتك عن مشاريع حالية أو مستقبلية في المجالات الصحية تتبنى إستراتيجية الشراكة بين القطاع العام والخاص. (أمثلة محلية أو إقليمية أو دولية إن أمكن)
- حسب خبرتك ومعرفتك: هل يوجد خطة قطاعية أو عبر قطاعية تشجع أو تنظم موضوع الشراكة بين القطاعين في المجالات الصحية في فلسطين.

المحور الثاني: ما هي أنماط الشراكة الموجودة حالياً في المجالات الصحية في القطاع العام والخاص

هل يمكنك ذكر أهم المشاريع الصحية التي من الممكن اجراؤها من خلال تبني مفهوم الشراكة بين القطاع العام والخاص؟

أنماط الشراكة	الخدمات / الأنشطة	المحافظات الأكثر تنبياً/انتشاراً للاستثمار الصحي والشراكة بين القطاعين
الملكية والإدارة من قبل الحكومة		
الملكية للمنشآت الصحية والإدارة من قبل القطاع الخاص على أساس سنوي		
الملكية للحكومة والإدارة من قبل القطاع الخاص على أساس عقود لمدة تزيد عن السنة		
الملكية للحكومة واستئجار من قبل القطاع الخاص على أساس شهري		
بناء – تشغيل – ونقل الملكية للهيئة المحلية (Build Operate Transfer)		

المحور الثالث: - من وجهة نظرك ما هي أهم الإيجابيات لتنفيذ مثل هذه الشراكات في المجالات الصحية في فلسطين؟ وما هي أهم السلبيات والتحديات لتنفيذ مثل هذه الشراكات في المجالات الصحية في فلسطين؟ هل يمكنك اعطاء أية أمثلة على ذلك؟

" انتهت المقابلة "

Annex 04 – Survey Questionnaire



كلية الدراسات العليا - برنامج الدكتوراه في الصحة العامة

دراسة إستكشافية حول مستوى المعرفة والخبرة لمفهوم الشراكة بين القطاع العام والخاص لدى صانعي القرار في القطاع الصحي الفلسطيني

عزيزي/تي المشارك/ة

تحية طيبة وبعد،

هذه الدراسة هي إحدى المتطلبات الدراسية للحصول على درجة الدكتوراه في تخصص الصحة العامة من جامعة القدس، حيث تتكون من إستبانة ومقابلة فردية. راجياً منكم التعاون في تعبئة الإستبانة وإجراء المقابلة والتي تهدف الى التعرف على مستوى المعرفة والخبرة حول مفهوم الشراكة بين القطاع العام والخاص لدى صانعي القرار في القطاع الصحي (القطاع العام والخاص) في فلسطين.

أولاً: الإستبانة: تتكون من مجموعة من المقولات والآراء حول مفهوم الشراكة بين القطاع العام والخاص. لكل جملة خمس أجوبة محتملة متدرجة من رقم (1) غير موافق بشدة إلى رقم (5) موافق بشدة وعليه أرجو إختيار الإجابة التي تتوافق مع رأيك الخاص في الجدول المخصص لذلك. تستغرق اجابة هذه الإستبانة 10 دقائق.

ثانياً: المقابلة: تتكون من مجموعة أسئلة حول واقع المشاريع الصحية الحالية والمتوقعة مستقبلياً للإستثمار في المجالات الصحية في القطاعين العام والخاص ومدى المعرفة والخبرة الحالية لديهم حول مفهوم الشراكة وأهم الأولويات للشراكة بين القطاعين وأخيراً أهم التحديات التي قد تعيق تطبيق مثل هذه النماذج التشاركية.

و أخيراً، نود أن ننوه إلى أن المشاركة في الدراسة طوعية وأن السرية التامة حول هوية الشخص الذي قام بتعبئة الإستبانة مضمونة في هذا البحث. كذلك نود إعلامكم بأنه لن يستطيع أحد معرفة هوية المشاركين في الدراسة، حيث ستم معالجة المعلومات بشكل عام وليس بشكل خاص. ولمزيد من الإستفسار والمعرفة حول هذه الدراسة يرجى التواصل مع المشرف أ.د. معتصم حمدان، أستاذ السياسات الصحية في جامعة القدس mhamdan@staff.alquds.edu علماً بأننا سنقوم بتزويدكم بنسخة من هذه الدراسة عند نشرها في المجالات العلمية.

لقد قمتُ بقرءة المعلومات أعلاه أو تمت قراءتها لي وأقر بأن هذه المقابلة مسجلة وطوعية ولي حرية الانسحاب متى أردت بدون إبداء الأسباب وإنه سيتم تزويدي بنسخة الموافقة التي وقعت عليها.

توقيع المشارك/ة في الدراسة: ----- التاريخ -----

الباحث: محمد بني عودة جامعة القدس، طالب دكتوراه في الصحة العامة

نقال رقم: 0598251613

بريد الكتروني: Mohammad.baniode@gmail.com

السؤال الأول: العوامل المتعلقة بنية تبني استراتيجية الشراكة	أرجو إختيار الإجابة التي تتوافق مع رأيك الخاص في العمود الثاني : (1) غير موافق بشدة (2) غير موافق (3) محايد (4) موافق (5) موافق بشدة .
1-1 يمكنني الحصول على فرص محتملة للاستثمار من خلال المشاركة في القطاع الصحي الفلسطيني.	
2-1 المشاركة في القطاع الصحي الفلسطيني يمكنني أن أزيد من الفوائد التشغيلية مثل زيادة الإيرادات وادخال خبرات جديدة لمؤسستي وغيرها من المنافع المادية.	
3-1 المشاركة في القطاع الصحي الفلسطيني تمكنني من الحصول على امتيازات سياسية خارجية.	
4-1 يمكنني تعزيز القدرة التنافسية للعمل غير السريري (أو السريري) من خلال إقامة شراكة مع المؤسسات الحكومية.	
5-1 المشاركة في تقديم خدمات الرعاية الصحية تمكنني من اكتساب سمعة اجتماعية حسنة في القطاع الصحي الفلسطيني.	
6-1 يوجد عدد متزايد من المنافسين في الخدمات الصحية في نفس المجال الذي اعمل به في القطاع الصحي الفلسطيني.	
7-1 يساعدني الاستثمار في القطاع الصحي الفلسطيني في كسب التقدير من الجهات الحكومية	
8-1 الاستثمار في القطاع الصحي الفلسطيني يساعدني على اكتساب المكانة المرموقة بين المنافسين.	
9-1 اعتبر ان العوائق التي تعيق الاستثمار في القطاع الصحي الفلسطيني مقبولة بالنسبة لي	
10-1 يمكنني الحصول على المعرفة اللازمة وجلب رأس المال اللازم للاستثمار في تقديم الخدمات الطبية في فلسطين إذا كنت راغباً في ذلك.	
11-1 نظرًا للموارد والمعرفة اللازمة، فإن المشاركة في القطاع الصحي الفلسطيني ستكون سهلة بالنسبة لي.	

12-1	تشجع السلطات العامة المستثمرين من القطاع الخاص (الربحي و الأهلي) على المشاركة في القطاع الصحي الفلسطيني .
13-1	يوجد سياسات عامة داعمة ذات فوائد محتملة لتسهيل نهج الاستثمار الرأسمالي الخاص في القطاع الصحي الفلسطيني.
14-1	تتوفر لي الإرشادات الرسمية لإقامة شراكة مع السلطات العامة والاستثمار في آلية تبادل المعلومات.
15-1	تلقى الموظفون في مؤسستي التدريبات اللازمة للمشاركة في تقديم خدمات الرعاية الصحية في القطاعين العام والخاص ضمن القطاع الصحي الفلسطيني.
16-1	أنا على استعداد للمشاركة في القطاع الصحي الفلسطيني ضمن مراحل متدرجة
17-1	الاستثمار في القطاع الصحي الفلسطيني من خلال الشراكة بين القطاعين العام والخاص (الربحي و الأهلي) أو الخصخصة الكاملة هي فكرة جيدة.
18-1	سيكون الموظفون في مؤسستي سعداء بقبول التدريب ذي الصلة بالشراكة بين القطاعين العام والخاص (الربحي و الأهلي).
19-1	سيكون القطاع الصحي الفلسطيني أحد المجالات المفضلة لدي للاستثمار من خلال الشراكة بين القطاعين العام والخاص (الربحي و الأهلي).
20-1	لقد شاركت في توريد مستلزمات أو أدوية أو لوجستيات كموارد للرعاية الصحية الفلسطينية من خلال الشراكة بين القطاعين العام والخاص (الربحي و الأهلي)
21-1	اقترحت على شركاء آخرين أيضًا المشاركة في القطاع الصحي الفلسطيني من خلال الشراكة بين القطاعين العام والخاص (الربحي و الأهلي).
22-1	سأستمر في الشراكة مع السلطات العامة والاستثمار في القطاع الصحي الفلسطيني.

أرجو الاختيار من 1 الى 5	السؤال الثاني: محددات الشراكة بين القطاع العام والخاص في المشاريع الصحية. أرجو إختيار الإجابة التي تتوافق مع رأيك الخاص في العمود الثاني : (1) غير موافق بشدة (2) غير موافق (3) محايد (4) موافق (5) موافق بشدة .
	يرجى ترتيب العوامل أدناه حسب درجة الأهمية من وجهة نظرك (ضعيف , متوسط , كبير)
	1-2 أرى أن استقرار الوضع الاقتصادي ووفرة رأس المال ووفرة التمويل يعتبر عاملا أساسيا لتحقيق الشراكة بين القطاعين العام والخاص (الربحي و الأهلي) في القطاع الصحي الفلسطيني
	2-2 أعتقد أن الوضع السياسي مثل الاحتلال ومصادرة الاراضي و الحواجز بين المدن يؤثر سلبيا على الشراكة بين القطاعين العام والخاص (الربحي و الأهلي) في القطاع الصحي الفلسطيني
	2-3 أعتبر أن الإطار القانوني والتشريعي عاملا حاسما في تنظيم وحوكمة شروط و أحكام الشراكة بين القطاعين العام والخاص (الربحي و الأهلي) في القطاع الصحي الفلسطيني
	2-4 أعتبر أن البيئة الاستثمارية عاملا مهما لجذب المستثمرين في القطاع الصحي الفلسطيني.
	2-5 أعتبر أن القبول المجتمعي لفكرة الشراكة بين القطاعين العام و الخاص عاملا ميسرا لحصول الشراكة.
	2-6 أعتبر أن وجود عامل الخبرة السابقة والسيرة المهنية الإحترافية عاملا مهما في تطبيق الشراكات بين القطاعين العام والخاص (الربحي و الأهلي) في القطاع الصحي الفلسطيني
	2-7 أعتبر أن وجود هيئة مختصة مستقلة تنظم وتشرف على هذه الشراكات بين القطاعين العام والخاص (الربحي و الأهلي) عاملا مهما لانجاح الشراكة بين القطاعين
	2-8 أعتبر أن الحوكمة والشفافية من اهم العوامل التي تساهم في انجاح الشراكات بين القطاعين العام والخاص (الربحي و الأهلي) للاستثمار في القطاع الصحي الفلسطيني
	2-9 اعتقد أن وضوح الرؤية والغايات من عقد الشراكات يؤدي الى تحسين النتائج المرجوة من الشركات ومنها تحسين جودة الخدمات الصحية
	السؤال الثالث: التوجهات والآراء حول الشراكة بين القطاع العام والقطاع الخاص
	لكل جملة خمس أجوبة محتملة متدرجة من (غير موافق بشدة) إلى (موافق بشدة) وعليه ارجو إدخال الإجابة التي تتوافق مع رأيك الخاص في العبارات التالية :
	3-1 أقبل بفكرة الشراكة بصورة عامة بين القطاع العام و القطاع الخاص (الخاص والاهلي) في إدارة المشاريع الصحية (القائمة والجديدة)
	3-2 أقبل فكرة الشراكة بصورة عامة بين القطاع العام والقطاع الخاص في إدارة مشاريع جديدة فقط وليست القائمة حالياً
	3-3 هناك نقص في التشريعات والقوانين لتنظيم تشغيل خدمات الصحة من قبل القطاع الخاص (الربحي و الأهلي)

3-4	هناك حاجة لعمل قوانين جديدة لتنظيم نقل خدمات الصحة المقدمة حالياً إلى القطاع الخاص (الربحي و الأهلي)
3-5	إن نقل مشاريع خدماتية صحية للقطاع الخاص (الربحي و الأهلي) سيحسن نوعية الخدمة للجمهور
3-6	لا يوجد لدى القطاع العام الدوائر المؤهلة للرقابة على القطاع الخاص (الربحي و الأهلي) في حالة نقل إدارة بعض مشاريعها إليه
3-7	لدى الحكومة خطة واضحة حول الفرص الاستثمارية في القطاع الصحي المعروضة على القطاع الخاص (الربحي و الأهلي) .
3-8	أفضل استثمار بعض الأصول مثل الأراضي والمباني المملوكة للقطاع العام من قبل القطاع الخاص (الربحي و الأهلي) لصالح المشاريع الصحية.
	السؤال الرابع: الخيارات الأكثر تفضيلاً لأنماط الشراكة في المشاريع والخدمات الصحية حسب وجهة نظر صانعي القرار في القطاعين العام والخاص (الربحي و الأهلي)
	أرجو إختيار الإجابة التي تتوافق مع رأيك الخاص في العمود الثاني : (1) غير موافق بشدة (2) غير موافق (3) محايد (4) موافق (5) موافق بشدة .
4-1	احتفاظ الحكومة بالملكية الكاملة والمسؤولية الكاملة عن تقديم الخدمات وإدارة المشاريع الصحية بدون تدخل القطاع الخاص (الربحي و الأهلي)
4-2	احتفاظ الحكومة بالملكية الكاملة للمرافق/الخدمات لكن يقوم القطاع الخاص (الربحي و الأهلي) بإدارتها من خلال نظام عطاءات واضح
4-3	الخصخصة الكاملة (التشغيل والإدارة من قبل القطاع الخاص) مع السيطرة الكاملة على الخدمات والأسعار
4-4	الخصخصة الكاملة (التشغيل والإدارة من قبل القطاع الخاص) لفترة محددة من الزمن ومن ثم يعاد المشروع للحكومة لإدارة الحكومه بشكل كامل
4-5	الخصخصة الكاملة (التشغيل والإدارة من قبل القطاع الخاص) بدون سيطرة كاملة لصالح جهة واحدة.
	السؤال الخامس: (الشفافية الثقة المساءلة والوضوح)
	أرجو إختيار الإجابة التي تتوافق مع رأيك الخاص في العمود الثاني : (1) غير موافق بشدة (2) غير موافق (3) محايد (4) موافق (5) موافق بشدة .
5-1	وجود آليات حوكمة واضحة يقلل من احتمالية تضارب المصالح بين الأطراف في الشراكات بين القطاع العام والخاص (الربحي و الأهلي).
5-2	توزيع الأدوار والمسؤوليات واضحة في العقود بين القطاع العام والخاص (الربحي و الأهلي).

	3-5 يؤدي وجود نظام للمساءلة والرقابة إلى تقليل المخاطر الناتجة عن سوء تصرف أحد الأطراف في الشراكة.
	4-5 تؤدي الالتزامات الواضحة والشفافة وتوزيع المسؤوليات بوضوح في عقود الشراكة الى تعزيز الثقة بين الشركاء.

Annex 05: Administrative approval

State of Palestine
Ministry of Health
Education in Health and Scientific
Research Unit



دولة فلسطين
وزارة الصحة
وحدة التعليم الصحي
والبحث العلمي

Ref.:
Date:.....

الرقم: ٢٠٢٠/١٩٧/١٦٦
التاريخ: ٢٠٢٠/١١/١٦

معالي وزير الصحة حفظه الله
عطوفة وكيل وزارة الصحة حفظه الله
عطوفة الوكلاء المساعدون المحترمون
المدراء العامون المحترمون
تعبية واحترام...

الموضوع: تسهيل مهمة طالب دكتوراه

يرجى تسهيل مهمة الطالب: محمد محمود مصطفى بني عودة - برنامج دكتوراه الصحة العامة/ جامعة القدس، في عمل بحث بعنوان:

تحليل العوامل المؤثرة على قرار تبني إستراتيجية الشراكة بين القطاع العام والخاص في القطاع الصحي الفلسطيني

من خلال السماح للطلاب بجمع معلومات من خلال عمل مقابلات مع الفئات الادارية التالية:

معالي وزير الصحة
عطوفة وكيل وزارة الصحة
عطوفة الوكلاء المساعدون والمدراء العامون
جميع المدراء في المستشفيات الحكومية
على ان يتم تزويد الوزارة بنسخة PDF من نتائج البحث، التعهد بعدم النشر لحين الحصول على موافقة الوزارة على نتائج البحث.

مع الاحترام...

د. عبد الله القواسمي
رئيس وحدة التعليم الصحي والبحث العلمي



نسخة: عميد كلية الصحة العامة المحترم/ جامعة القدس

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تلفاكس: 09-2333901

Annex 06: Al Quds University Review Board - Ethical Approval

Al-Quds University
Jerusalem
School of Public Health



جامعة القدس
القدس
كلية الصحة العامة

التاريخ: 2024/2/15

الرقم: REF. 14/24

عزيري الطالب محمد بني عودة المحترم
برنامج الدكتوراة في الصحة العامة

الموضوع: موافقة لجنة أخلاقيات البحث العلمي

قامت اللجنة الفرعية لأخلاقيات البحث التابعة لكلية الصحة العامة بمراجعة مشروع الرسالة بعنوان:

“Understanding the perceptions of policy and decision makers toward adoption of Public-Private Partnership strategy in the Palestinian healthcare system”

المقدم من (مشرف البحث/أ.د. معتصم حمدان).

يعتبر مشروعك مستوفياً لمتطلبات أخلاقيات البحث في جامعة القدس.

نتمنى لكم كل التوفيق في تسيير المشروع.

ملاحظة: في حالة الحاجة الى موافقة من اللجنة المركزية في الجامعة، تستطيع التقدم باستخدام هذه

الموافقة على الرابط: <https://research.alquds.edu/en/ethics/48-how-to-apply.html>

رئيسة اللجنة الفرعية لأخلاقيات البحث

كلية الصحة العامة

د. نهى الشريف

نسخة/ أعضاء لجنة البحث

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فرع غزة / تليفاكس 08-2644220-2644210
ص.ب. 51000 القدس

Annex 07: Data collection SOP

- Data Collection Flowchart – SOP for Researchers and Data Collectors
- **Ethical & Administrative Preparation**
- Ensure ethical approval (Al-Quds University ERB 14/24) and administrative approvals (MoH and stakeholders) are obtained.
- Prepare an introduction script with researcher/data collector name, affiliation, and study purpose.
- **Introductory Email to Decision-Makers (DMs)**
- Send email explaining study objectives, importance of participation, voluntary nature, and confidentiality.
- Attach the **questionnaire** for review before any visit or follow-up.
- **Questionnaire Completion Options Offered to DMs**
- **Option 1:** Online submission via secure platform.
- **Option 2:** Paper-based completion during scheduled meeting.
- **Self-Administration Only**
- DMs complete the questionnaire independently.
- Data collectors provide **clarifications only**; they **do not fill in responses**.
- **Follow-up & Reminders**
- Data collectors send polite reminders and assist with procedural questions.
- Schedule meetings or provide guidance as needed to ensure timely completion.
- **Collection & Documentation**
- Paper questionnaires: securely collected and transported.
- Online submissions: stored in password-protected database.
- Log all contacts, mode of delivery, and completion status.
- **Data Integrity & Confidentiality**
- Maintain participant anonymity and confidentiality throughout.
- Ensure no unauthorized access to complete questionnaires.

Annex 08: Author's Published Paper (PhD Requirements)

BMC Health Services Research

<https://doi.org/10.1186/s12913-026-14101-4>

RESEARCH

Open Access

Understanding perceptions and the willingness of decision-makers to adopt a public-private partnership strategy in the Palestinian health sector: an exploratory study

Mohammad Baniode^{1*} and Motasem Hamdan^{1*}



Abstract

Background Public-private partnerships (PPPs) are an alternative global financing strategy. It emerged as a key driving strategy in the previous century, coinciding with a global health direction that focused on risk sharing. Exploring the readiness and preferences of Palestinian stakeholders toward partnerships offers important perspectives for shaping the future adoption of PPPs.

Methods This study employed qualitative methodology, including semi-structured interviews, to gain insight into decision-maker perceptions. Seventeen participants were interviewed, including three from the public sector, eight KIs from non-profit organizations, and six health care providers from the private sector or for-profit organizations. The thematic analysis method was used to analyze data at each stage. Data was transcribed and analyzed descriptively using Braun and Clarke's (2006) thematic analysis approach.

Results Four key themes emerged from the in-depth interviews conducted with a diverse group of decision-makers in the Palestinian healthcare sector: (1) The importance of conducting feasibility studies and economic evaluations prior to the decision to adopt PPPs (2) The investment environment and clarity of healthcare provider role(s) in the partnership (3) The strategic direction in implementing effective PPPs in the healthcare system (4) Operational challenges related to partnership patterns and structure. The decision to adopt PPPs in the Palestinian healthcare sector offers a promising avenue to enhance service delivery, improve financial sustainability, and address gaps in healthcare provision that might lead to advancing universal health coverage. However, the success of these partnerships is contingent upon a thorough understanding of the local context, including the economic, cultural, and political factors that influence healthcare delivery. Policymakers should prioritize feasibility assessments, establish clear governance structures, and design partnerships with social responsibility at their core.

Keywords The topics covered include health care delivery, Public-private partnerships, And health policy

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Reflexivity

The first author brings over a decade of experience as a health system officer at the World Health Organization (WHO), complemented by a master's degree in health policy. This extensive background, along with ongoing doctoral research, provides a robust foundation for exploring public-private partnerships (PPPs) in the health sector. Additionally, the author has actively contributed to numerous evaluations of the health financing system in Palestine over the past 10 years. The second author, Motasem Hamdan, the supervisor of the research project, is a professor of health policy and management. Prof. Hamdan is an expert in health policy and health system development and has profound experience in the Palestinian health care system. He served as senior health policy advisor to the Palestinian Ministry of Health and consultant for many national and international health organizations, and he was the national program officer in the WHO office for Palestine for many years. The authors' combined extensive knowledge and experience in the setting ensures a comprehensive and informed approach to the study of PPPs in the Palestinian health sector. Both researchers have substantial experience in qualitative data collection and thematic analysis, supported by formal training in qualitative research methods and hands-on expertise using MAXQDA for coding and theme development.

Background

PPPs are increasingly recognized as an alternative financing strategy in the health sector globally. PPPs are defined as long-term agreements in which a private partner finances, delivers, and manages public services while sharing associated risks with the government [1] PPPs models have been widely applied in sectors such as transportation, telecommunications, and health [2] In line with global commitments, United Nations member states adopted the Sustainable Development Goals (SDGs), including SDG 3.8 on achieving universal health coverage (UHC) with financial risk protection and access to quality essential services. 4. International organizations such as the OECD, World Bank, and UNECE promote governance principles—including transparency, accountability, and stakeholder engagement—to ensure effective and risk-responsive PPP arrangements [3].

Our focus will be on the traditional definition of PPPs. People-first Public-private partnerships refer to an innovative approach to projects that emphasize social, environmental, and economic advantages, centering on the well-being of individuals. In

contrast to conventional public-private partnerships, these collaborations emphasize the creation of both societal and environmental values, thereby playing a crucial role in achieving the SDGs and ensuring alignment with the 2030 Agenda. Peoplefirst PPPs are designed to deliver clear, measurable outcomes that address societal needs, such as improved infrastructure, utilities, and social services, while fostering sustainable development. This approach marks a shift toward a more inclusive and purpose-driven model of collaboration, paving the way for the next generation of PPPs [3].

Locally, existing studies have explored PPP adoption in non-health sectors, such as transportation, power, and the water industry. These studies have examined various dimensions of PPPs adoption, including infrastructure improvement [4] the level of coordination and trust between the public and private sectors [5] and the expansion of private sector involvement in service provision [6]. However, none of these studies have specifically addressed the health sector.

The private sector's involvement in health systems is expanding globally and in the

Eastern Mediterranean Region [7]. Although the Palestinian government's resources are highly limited, it actively encourages the private sector to invest in the health sector [8, 9].

Governments around the world have increasingly used PPPs in developing, financing, and providing public health infrastructure and service delivery [10]. PPPs have emerged as vital mechanisms for fostering healthcare innovation, as seen in the UK's NHS Innovation Accelerator, which fast-tracks the adoption of modern technologies [11]. Therefore, it is crucial to explore the perceptions and direction of Palestinian decision-makers on adopting such financing strategies in health sector. Understanding the preparedness and preferences of stakeholders towards partnership is considered the first exploratory factor to adopt PPPs in the future. In Palestine, in-depth understanding is still lacking as to how PPPs can contribute to improving the health system. In addition, in the Arab region there is limited research on PPPs strategy, thus, a need exists for exploratory and investigation efforts [12].

Palestine is a country in chronic conflict and economic emergency [13]. The Palestinian economy is characterized as a developing economy, and it is still dependent on the Israeli economy and the political dynamics [14]. The World Bank review of the health sector shows serious challenges in the health sector including financial fluctuation and uncertain aid flow, increasing cost of medical referrals, inefficiency and duplication of services, and excessive focus on tertiary care [15]. This review also points to the fragile sustainability of the Governmental Health Insurance (GHI) scheme. The increasing costs of GHI are attributed to an increasing number of GHI noncontributing enrollees [16]. On the other hand, health care provision shows a mixed pattern. The Palestinian public sector is the

major health care provider, mainly for PHC and secondary care [17]. The private non-profit sector and UNRWA play an active role in the provision of health care primarily for vulnerable groups and refugees. In the meanwhile, private for-profit institutions are still the primary provider of tertiary health care services, e.g., treatment and diagnoses. In addition, the government procures tertiary services from local and overseas providers [18]. The Palestinian public health sector suffers from a shortage of specialized human resources, equipment, and facilities.

In 2023, the Gross Domestic Product (GDP) of Palestine at current prices is approximately 19,165.5 million USD, with health expenditure accounting for 9.7% of GDP, amounting to 1,860.2 million USD (20). However, 33.6% of health financing relies on household out-of-pocket payments, raising significant equity concerns [19]. This challenge may partly explain the low uptake of voluntary health insurance, which constitutes only 16% of the financing schemes. In 2023, 8.9% of medical referrals were made for treatment outside Palestine. Data from 2022 to 2023 reveals that 90% of health services purchased by the MoH were provided by external providers, totaling 100,650 out of 110,495 referrals. The volume of purchased services increased significantly, from 61,635 in 2022 to 110,495 in 2023. This surge in external referrals highlights the financial strain on the health sector, with MoH expenditures on service procurement reaching 1.13 billion New Israeli Shekels (approximately 319 million USD) in 2023, representing 40.2% of total health expenditures. These challenges underscore the urgent need for innovative strategies, such as PPPs, to address inefficiencies, reduce reliance on external providers, and enhance service delivery within the local healthcare system. The potential feasibility of PPPs in Palestine is influenced by prolonged political instability,

recurrent conflict, and donor dependence. These factors undermine financial sustainability and exacerbate system fragmentation. Although PPPs have not yet been implemented, decision-makers' perceptions indicate growing acceptance and consideration of this strategy to reduce reliance on unstable aid for financing and costly external referrals in service delivery. However, the feasibility of adopting the strategy remains constrained by the unstable political context and lack of proper regulatory measures.

Public entities often emphasize transparency and accountability, while private partners focus on financial viability and risk management [20]. In a study in Jordan, financial risks and securing funds were perceived as one of the concerns in the Jordanian context [20]. The perception of risk such as corruption varies between sectors thus impacting project performance and stakeholder satisfaction [21, 22]. Conflicting interests can arise, particularly in megaprojects where public stakeholders prioritize social outcomes over profitability [20]. However, there is limited knowledge regarding the perception of Palestinian decision-makers towards the adoption of the PPPs strategy. Therefore, this study aims to provide an indepth understanding of the awareness, feasibility, barriers, willingness, acceptability, and

perceptions of Palestinian decision-makers to adopt PPPs in the health sector. In addition to examining awareness and knowledge of PPPs regarding Palestinian health system capacity, feasibility of implementation, advantages, and disadvantages in the Palestinian local context, the study will also examine factors that might affect its adoption. The generated knowledge will serve to enlighten policy and provide strategy notes for decision-makers in public and private sectors in addition to

providing the necessary evidence related to PPPs strategy adoption in the future.

Methods

The study employs a qualitative methodology using semistructured interviews to explore the depth and complexity of decision-makers' perceptions, which cannot be adequately captured through quantitative methods. To ensure participants felt as comfortable as possible, the interview guide was developed specifically for this study and informed by the literature review, relevant theoretical frameworks, field observations, and prior empirical evidence, then sent to the interviewees in Arabic. The semi-structured interview guide included open-ended questions with probing prompts covering participant background, understanding of PPP concepts, perceived feasibility and challenges, and policy recommendations, allowing for natural conversation and the emergence of new insights. Additionally, a consent form was emailed to participants to review, sign, and return. The complete interview guide is available in Annex A.

To enhance the trustworthiness of this qualitative study, the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was applied. The COREQ framework, a comprehensive 32-item checklist designed to ensure transparency and rigor in reporting qualitative research involving interviews and focus groups, guided the research design, data collection, analysis, and reporting processes [23].

Study sample

The study adopted a purposive sampling approach targeting key informants in the study area to ensure the inclusion of diverse perspectives. Eligible KIs met the following selection criteria: (1) Holds lengthy experience within the health system in

general and specifically health care systems (2) Holds senior management and leadership positions (3) Possesses experience in health financing, procurement, and particular outsourcing of health services and health financing.

Administrative approval was sought from the MoH as the primary care provider in the West Bank and the Institutional Review Board of the authors' institute. Data collection for this study was conducted in 2023, prior to October 7th, 2023. KIs were considered the primary source of insight on PPP strategy adoption and consisted of healthcare leaders, senior public experts, and healthcare investors within the Palestinian health system. After selection of the initial sample, participants were asked to recommend other experts for inclusion.

Sampling concluded when no new codes emerged, indicating data saturation, which was continuously assessed through immediate transcription following each interview. Accordingly, 17 professionals and experts in the health system were interviewed, including three from the public sector, 14 representatives from the private sector, eight KIs from non-profit organizations, and six health care providers from the private sector or profit organizations. To start, the interview guide was prepared in accordance with the Robin Legard interview guidebook [24] and the literature review took place in a semi-structured form with three main questions and related probe questions.

Data collection and management

The interview questions were derived from components of previous studies, literature, and the World Bank's PPPs readiness assessment tool [15]. This effort began by exploring the decision-makers knowledge of PPPs, their perceptions, and experiences and subsequently their views on the determinants and factors influencing the adoption of PPPs

strategies within the Palestinian context. The interview concluded with their perspectives on the advantages and disadvantages of PPPs. To enhance clarity and credibility, the interview guide was pilot tested through three pilot interviews with non-participants and refined based on expert qualitative research review, resulting in the removal of invalid and irrelevant questions.

The interview process was managed based on the answers to questions. Interviews were conducted by appointment at locations selected by participants, primarily at their workplaces. Sometimes interviews were conducted through online platforms, including Google Meet, Microsoft Teams, and Zoom. Thus, after coordination, the duration of each interview ranged between 30 and 60 min, depending on the conditions and the participant's willingness. All interviews were recorded with participant consent and transcribed immediately after each session for documentation and accuracy. They were assured that their information would remain confidential and available only to the researchers. Debriefing sessions were conducted immediately after each interview to ensure the capture of qualitative observations, notes, and participants' reflections. This process helped to minimize the risk of missing valuable insights and allowed for immediate clarification of any aspects of the interview, enhancing the depth, saturation and accuracy of the data collected. **Coding and analysis**

The thematic analysis method was used to analyze data at each stage. Data was transcribed and analyzed descriptively using Braun and Clarke's (2006) thematic analysis approach. This method is a specialized technique to process scientific data, and it is used to determine the presence of certain words and concepts in the text to summarize, describe, and interpret the data. To this end, the interviewer transcribed the contents after each interview. The transcriptions were

studied several times, starting with naïve readings, second and third readings, as well as listening to the recordings two to three times to obtain a general understanding. In addition, the transcribed texts of each interview were given to the relevant interviewees so they could provide comments or revisions. The following primary techniques were incorporated into the analyses to enhance the trustworthiness of the findings: (a) A minimum of two investigators involved in analysis; (b) Triangulation of themes within and across cases; (c) In-depth thematic descriptions.

The interview texts were fed into MAXQDA software, version 24, and the initial codes were extracted. Then, the research team, along with the participants, cooperated to extract the final codes and themes of the study. With the consensus of two research team members on the transcribed texts, the extracted codes and themes were agreed upon, and they also confirmed the absence of any conflict of interest regarding the study subject. Together with second reviewers, the coding and themes were reviewed. The larger investigative team reviewed the coding themes to ensure a more accurate interpretation of the study results and to provide guidance for future PPP plans.

Results

Table 1 presents the distribution of 17 key decision-makers from both the public and private sectors within the Palestinian healthcare system.

Table 1 Profile of key informants

Sector	Policy and decision makers
Private for-profit organization	6
Government	3
Private for nonprofit organization	8

Total of key informants 17

The study identified four main themes, capturing decision-makers’ perceptions of adopting PPPs in Palestinian healthcare services, based on 113 revised codes and merged codes with similar meanings. Table 2 presents these themes along with their descriptions and

Table 2 Themes emerged among decision-makers

Main Theme and related codes Main Codes corresponding codes. The themes in Table 2 demonstrate how the interplay of trust, governance, and financing fundamentally shapes PPP adoption in Palestine. Concerns about feasibility and economic evaluation point to critical **financing considerations**, while the investment environment, role clarity, and strategic direction highlight gaps in **governance** needed to guide realistic partnerships. Operational barriers further emphasize the need to build **trust** between actors, which remains essential for reducing uncertainty and enabling sustainable PPP implementation.

Figure 1. Code cloud visualization of the most frequently appearing codes. The relative size of each code reflects the number of coded segments in which it was applied across all interviews. Visualization highlights the most significant concepts and themes identified in the data, offering an intuitive overview of prevalent perceptions, attitudes, and concerns discussed by the interviewees.

Key codes—such as coordination of provider roles, clarity of vision, collaboration dynamics, political economy, governance concerns, improved service delivery, monitoring and evaluation, and capacity concerns—reflect the central issues shaping decision-makers’ perceptions of PPP adoption. This visual summary provides an intuitive overview of the prevalent attitudes, priorities, and challenges identified in the data, allowing readers to quickly grasp the most significant themes discussed by stakeholders.

In addition, a more categorical analysis of the codes prior to merging (overlapping or redundant codes) is shown in Table 3, providing insight into the most frequently repeated codes by decision-makers’ sector type.

Table 3 presents the frequency of codes derived from the thematic analysis of 17 key informant interviews. Codes are categorized by sector type: public sector (government), private for-profit (non-governmental

organizations), and private for-profit organizations. The distribution

highlights variations in emphasis across sectors regarding public private. Code distribution across sectors reflects differences in frequency in codes, as public sector representation was limited. Interviews with public key informants were longer and richer, providing in-depth insights into perceptions of partnerships compared to other sectors. The use of descriptive counts and visualizations will enhance clarity and transparency in qualitative research [25, 26].

Four main themes emerged from the analysis, with a focus on the main trends and determinants of the partnership’s selection pattern. Opinions varied as to whether PPPs could advance the availability of health care services to the Palestinian people or not due to lack of trust between the two sectors.

Theme 1: Feasibility study and economic evaluation A feasibility study helps enlighten the decision-makers by showing the financial benefits and service quality improvements that can result from adopting partnership models. A common viewpoint among interviewees stressed the importance of conducting a feasibility assessment to implement a PPPs strategy in the Palestinian health care sector. This was a central issue in all the interviews. Within these conversations, there was a notable emphasis on the requirement for analytical and assessment studies, such as economic evaluations, to

determine the feasibility of these collaborations given the substantial expenses of healthcare services and their operational budgets. Furthermore, to ascertain the effectiveness of these approaches, they stressed the necessity to investigate and assess the procurement of health services from the private sector and compare it with the public sector. This topic also brought attention to the need for proactive assessment studies to promote investment in the health sector based on scientific and professional principles. A hospital general manager stated:

I believe this matter (partnership) requires consensus at the national level regarding the importance of economic feasibility studies. It is a proposal worthy of being examined in Palestine, considering the general situation and the possibility of MoH approval of this approach (KI 14)

This quote illustrates the governmental perspective on the necessity of national-level feasibility studies before PPP adoption, highlighting concerns about economic evaluation, consensus-building, and regulatory approval. The theme of economic evaluation recurred throughout the codes, where one of the senior governmental managers focused on the importance of performing CBA and cost-effectiveness analysis to determine which services

is a shortage of necessary local services. This theme also included the private sector's desire to invest in advanced tertiary health services to fulfill local needs and decrease attachment to the Israeli occupation economy; however, this requires a strong governmental role and a clear governance partnership, and the respondents expressed their explicit reservations about the government's ability to fulfill this role.

should be procured or outsourced from outside the MoH basket of services versus which specialized services should be localized within the MoH hospital setting. Health service managers provided many real examples in the interviews, including, but not limited to, hemodialysis, neonatal intensive care units, and oncology services. *In the end, the MoH at the time discovered that they were operating in the private sector and needed to nationalize the health care service. Then, I sat down with the general director of hospitals in the MoH and calculated it for him on paper; the MoH will pay more than what it pays to the private sector (KI 11)*

This quote reflects the public sector's perspective on service localization versus outsourcing and exemplifies the practical application of economic evaluation in PPP decision-making.

Theme 2: Investment environment and clarity of healthcare provider roles in the partnership

This theme highlights the significance of offering a captivating investment environment for private sector health service providers, as the public sector lacks the necessary capabilities and competencies. Additionally, there

Rodrigues highlights that understanding the local context can enhance the performance and cost-effectiveness of healthcare units [27]. The case of "Lab@AOR" illustrates how aligning public needs with private competencies, while being culturally aware, can lead to successful digital transformations in healthcare [28]. Additionally, this theme stressed the significance of allowing private sector and civil society institutions to

provide services due to their national role before the rise of political power. The respondents representing non-governmental decision-makers discussed the private sector's capabilities and their preference to allow the private sector a larger share of the health care market due to its good reputation and high-quality services.

It is important to emphasize the distinction between PPPs and privatization, as several stakeholders in this study expressed concern about conflating the two concepts. Privatization typically involves the transfer of ownership and responsibility for service delivery to private actors, whereas PPPs are collaborative arrangements in which the public sector retains stewardship and regulatory authority while the private sector contributes resources, expertise, and capacity. Clarifying this difference is critical for policy debates in fragile contexts such as Palestine, where mistrust and fears of privatization may otherwise hinder constructive engagement with PPPs as a complementary—not substitutive—strategy for strengthening health services.

A common viewpoint expressed among interviewees is that the partnership between public and private for nonprofit organizations offers one form of the health system's resilience against political instability. The participant raised an important model of care as unique in the Palestinian context aimed at supporting the public health care sector increase continuity. The highlighted model suitable for the Palestinian health system is the family practice model, which is connected to the health insurance system. After analyzing the challenges mentioned by each key informant, it was found that they ranged from operational factors to governance factors. The challenges included transparency in tenders, the structure of the bidding process for the current public health insurance scheme, and the lack of previous

experience in forming partnerships between the public and private sectors. Other major challenges identified included discrepancies in healthcare services among providers and the influence of donor agendas on health sector development and reform. Finally, investors are more optimistic due to the level of trust and clear governance demonstrated by the public sector. Trust within these partnerships develops through organizational reputation, interpersonal relationships, and evidence of performance [29].

Theme 3: Strategic direction in implementing effective PPPs in healthcare This discussion centered on the various forms and models of collaboration and coordination, emphasizing the significance of sharing experiences between the public and private sectors as well as the dynamics that govern cooperation, including the forces, factors, and influences at play. It underscores the importance of stability and continuity as well as the need to focus on the coordinating roles among different service providers, which necessitates a reassessment of existing partnership models. A notable decision-maker illustrated this point with a realworld example from the COVID-19 pandemic, demonstrating the critical role of local government engagement and sustained involvement in ensuring sustainability.

When the first cases of the coronavirus pandemic appeared in Bethlehem, the MoH turned to the Caritas Hospital, a non-governmental hospital, as the government did not have COVID-19 laboratories at the time. This is an example of significant partnership and collaboration between the public and private sectors. This also occurred in Nablus (KI 02)

This quote exemplifies how strategic coordination and local government engagement were critical for maintaining

health service continuity. It demonstrates the practical application of Theme 3 by showing the necessity of structured collaboration and adaptive response in emergencies, reflecting perspectives from both public and private stakeholders.

This theme addresses the critical aspects of governance, organizational structure, and transparency, emphasizing the significance of community integration and the government's proposed role as a regulator rather than a direct service provider. We propose this shift to enhance service quality by fostering improved coordination among service providers and clearly delineating their responsibilities. Furthermore, the discussion highlights the distinct capabilities of both sectors, particularly in terms of their scientific, technical, and technological proficiencies. This theme also examines the challenges related to compliance with existing laws and regulations which reveal notable deficiencies in government oversight. Ultimately, this theme underscores the lack of a well-defined partnership model, indicating a trend towards diminishing the government's role as a service provider which in turn limits its effectiveness and contributes to a decline in public trust regarding the quality of its services.

In discussing partnership models, participants highlighted successful global frameworks such as BOT. However, they expressed skepticism about the feasibility of these models in the Palestinian health sector from the private sector's perspective. Nonetheless, both the private and public sectors have shown a growing willingness to embrace the concept of partnerships.

Participants also explored alternative approaches to partnerships or potential entry points for partnership development, such as service purchasing, privatization, and cooperation between private hospitals,

clinics affiliated with institutions, and the government—whether or not these align with globally accepted definitions of partnerships. The discussion emphasized the necessity for decision-makers to possess expertise and knowledge before establishing partnerships. Understanding the potential implications and consequences of partnership decisions is crucial for success in this domain while also considering technical and administrative factors, particularly experience in managing large-scale projects.

Participants further reported that PPPs significantly contributed to improvement of the health system based on the model of the care where the government should adopt a clear form and position in the health system as one of these main role providers, payers, and regulators, but not all of them. A senior policymaker stated: *"In my opinion, the government also needs to reduce its role in service provision. The concept of financial reform partly involves relinquishing some responsibilities. I'm not in favor of privatization. We're not talking about privatization but rather that you let go a bit because you can't handle everything. Your focus on monitoring (which is your primary role in the country), policies, regulation, and following up is declining. Let go somewhat and let them take on 60% while you handle 40%"* (KI 16). The quotes below illustrate opposing perspectives on the MoH's role as a service provider versus a regulator and guarantor of health services.

Here comes the crucial role of classifying healthcare providers to enhance the quality of health services. We return to the notion that the MoH has not officially clarified its role—whether it is a service provider, a regulator, or a guarantor of services provided by either the government or the private sector. Any type of partnership is worth testing, reassessing, and evaluating risks. If

there is an overlap of interests and we disregard the interests of the citizens, then their rights will be compromised, which would be considered a disaster (KI01)

Effective governance structures that account for cultural context are essential for managing PPPs. Global health governance now involves a wide array of actors beyond WHO and health ministries, including financial institutions, PPP initiatives, business coalitions, and civil society [30]. PPPs have increasingly become agents of global governance rather than merely cooperative mechanisms [31].

Theme 4: Operational challenges related to partnership pattern and structure

The decision-making process for adopting partnerships in the Palestinian health sector faced challenges that led to a lack of a clear and comprehensible partnership framework. Cultural competency, particularly the cooperative behaviors that are integral to forming partnerships, plays a crucial role in this context. In the Palestinian health sector, the concept of cooperation holds distinct implications that influence how health services are procured, who the providers are, and the rationale behind supplier selection. The following sections highlight contextual factors that shape operational challenges in partnerships, including cultural, social, and politiceconomic influences.

Cultural and social context influencing operational decisions

Cultural competence, defined as “the skills and patterns of social behavior that enable effective and efficient activity execution,” is a key factor in these dynamics. This competency is significant for partnership considerations as there are reservations concerning issues such as the potential for partnerships to foster corruption and monopolies, particularly given the sensitive nature of health services and the absence of clear contracting standards with

suppliers. Additionally, there is a strong emphasis on the social responsibility that the private sector must demonstrate towards the public sector, which must surpass mere cosmetic efforts to genuinely support public interests.

Political economy constraints affecting partnerships

Participants addressed various issues related to the political economy, including the political framework, employment, tax withholding, and an economic structure reliant on specific occupations. Additionally, some participants expressed concerns regarding the concept of partnership, as they view it as a reflection of capitalism and imperialism. They emphasized the importance of ensuring equitable access to services for all citizens. They pointed out that the situation in Palestine, which includes division, occupation, and issues with democracy, is an important factor affecting potential partnerships. A key informant clearly stated his concerns about public-private partnerships (PPPs). “*PPPs strategy is a dangerous concept; it’s part of capitalism control*” (KI 13).

This quote highlights the public skepticism toward PPPs in the Palestinian context, reflecting concerns about economic and political power dynamics. It connects to Theme 4 by illustrating how political economy constraints and perceptions of privatization can influence operational feasibility, trust, and equity in partnership implementation.

This theme highlights the anticipated outcomes of partnerships between the private and public sectors in healthcare services, which include enhancing the availability and quality of health services, ensuring their sustainability, and mitigating the risks associated with service shortages. We view these partnerships as a strategic tool to address and reduce the risks of service

deficits. The discussion also emphasized the importance of monitoring and evaluating projects and partnerships, as well as fostering positive competition among partners.

Discussion

Four key themes: feasibility studies, investment climate, strategic planning, and operational challenges—emerged from the in-depth interviews conducted with a diverse group of decision-makers in the Palestinian healthcare sector. By analyzing the perspectives of government officials and private sector KIs, the study aims to gain an in-depth understanding of the factors influencing the decision to adopt the PPP strategy in this context. The interviews provided valuable insight into the complexities and variation of perceptions towards PPPs adoption in the Palestinian healthcare sector. Participants shared their experiences, challenges and perspectives, and shed light on the potential benefits and drawbacks of the partnership concept. Through careful analysis of the data, the study identified four key themes that will be discussed in detail in this section. **Theme 1: Economic evaluation**

There was consensus among all KIs on the importance of conducting an economic evaluation to determine the national priority of the health service purchasing package. Therefore, the most frequently mentioned code from the interviews was a request for CBA to identify which services to purchase outside the MoH service package and to clarify the rationale for investing in the healthcare sector. Feasibility studies and economic evaluations are critical in guiding PPPs' decision-making in healthcare. These assessments offer information about the economic efficiency and potential outcomes of healthcare interventions, ensuring that resources are effectively allocated.

Feasibility studies assess the practicality of proposed healthcare projects, considering factors such as infrastructure, technology, and community needs. For instance, a techno-economic evaluation of a hybrid photovoltaic system in Bangladesh demonstrated how renewable energy could enhance healthcare service delivery, emphasizing the need for reliable power sources in rural settings [32]. Such studies help in identifying potential risks and benefits, allowing stakeholders to make informed decisions about project viability. Cost-effectiveness analyses, quantify the relationship between cost and health outcomes help in guiding resource allocation. Incremental cost-effectiveness ratio is a key metric used to compare different healthcare interventions [33]. These evaluations reveal the financial implications of healthcare services as seen in studies across sub-Saharan Africa which highlighted the positive correlation between healthcare cost and health outcomes [34]. Neglecting these assessments can lead to poorly informed decisions, resulting in wasted resources, ineffective interventions, and ultimately, adverse health outcomes. Thus, integrating feasibility and economic evaluations is essential for successful healthcare PPPs.

Theme 2: Investment climate and role of providers The role of healthcare providers was raised as one of the determinants of the PPPs adoption decision. While many KIs agreed that the government should primarily act as a regulator rather than a service provider, this perspective often clashed with the government's own desire to maintain a significant role in service delivery, particularly at the local level. The private for profit focused on the importance of improving investment conditions to invest heavily in tertiary health services. The private for non-profit decision-makers focused on the importance of risk sharing.

One common point centered on the importance of restructuring and reforming health insurance and increasing the pool of subscribers by improving the quality of care and increasing providers as a partnership outcome. Skepticism and negative perspectives were raised by NGOs on the private for-profit intention, and they voiced concern regarding the ownership issue to favor health equity and the right to access health care. The analysis stresses the importance of leveraging private sector capabilities to address gaps in service provision, especially in tertiary healthcare. Private for-profit entities emphasized the need to improve investment conditions for their involvement in these high-cost areas. Conversely, private non-profit decision-makers focus on the importance of risk-sharing in partnership agreements. Studies show that government policy plays a crucial role in the adoption and success of PPPs by influencing private sector participation, project performance, and financial viability.

Research indicates that supportive policies enhance the willingness of private enterprises, particularly small and medium-sized enterprises, to engage in PPPs projects by improving their financing capacity and market access [35]. Additionally, macroeconomic policy adjustments such as lowering loan interest rates and increasing self-owned capital rates can stimulate private investment in PPPs [36]. Moreover, government equity investment is shown to have a complex outcome on PPPs performance with effective communication between public and private sectors serving as a mediating factor [37]. Policies like performance guarantees and subsidies are also vital as they help prevent inefficient project liquidation and ensure the sustainability of socially beneficial infrastructure projects [38]. Finally, various instruments designed to enhance access to credit for PPPs are essential to attract private

capital, underscoring the importance of tailored government interventions to foster PPPs development [39].

Theme 3: Strategic planning, preparedness, collaboration, and international learning
Although interviewees demonstrated a clear understanding of PPPs' strategy, they struggled to envision concrete PPPs models tailored to the unique circumstances of the Palestinian context. They shared a common agreement on collaboration and learning from other countries. Similarly, the participants agreed on the value of learning from international experiences in PPPs, but they emphasized the importance of tailoring these models to the specific Palestine context, recognizing that a one-size-fits-all approach may not be suitable. However, no one agreed on Palestinian preparedness and competency to start PPPs adoption in the health sector. There was agreement from all stakeholders regarding weakness in planning, vision, and capabilities, with slight differences from the governmental decision-makers that claimed they have a vision, but political conditions hinder them from development and advancement. A distinctive viewpoint emerged from the private and nonprofit sectors, emphasizing the importance of civil society engagement as a crucial dimension of collaboration to enhance Palestinian resilience in the face of ongoing political challenges. A novel cross-sector model emerged, enabling the public sector to sustain health services, the private sector to reduce unemployment, and NGOs to continue their humanitarian role amid political instability in Palestine. Grounded in cooperation (Tawaun) and resilience (Sumud), it positions collaboration as the key mechanism for resilient healthcare in challenging contexts.

Theme 4: Operational challenges (trust, governance, political economy, corruption, capacity)

Operational challenges such as trust in government, transparency in tendering processes, and balancing interests between the public and private sectors further complicate the successful implementation of partnerships.

There is a clear discrepancy among decision-makers regarding the perceived form and preferred structure of PPPs. While there is a general agreement on the need for such partnerships, there is no consensus on their specific shape or form within the Palestinian context. The inability to envision the PPP's structure in the Palestinian health sector may stem from the limited implementation of PPPs strategies in Palestine. This concern is rooted in KIs perceptions of weak governance and a lack of trust. Moreover, skepticism persists among NGOs about the intentions of for-profit private entities, particularly regarding ownership issues and the potential impact on health equity and access to care. This skepticism underscores a broader concern about the potential for PPPs to contribute to corruption, given the lack of a legislative authority in Palestine. The absence of a functioning legislative framework may contribute to the perception that there are no mechanisms in place to ensure transparency and accountability in PPPs. India's healthcare system illustrates that legislative support for flexible PPPs models can enhance resource allocation and reach vulnerable populations, addressing infrastructure gaps [40].

Partnerships as an alternative financing strategy for health service delivery continue to appear in decisionmakers' speeches, government announcements, and media discussions, particularly given the persistent risk of the collapse of governmental health services in the West Bank. During the ongoing war post October 7th, 2023, several

meetings have taken place between the MoH, local partners, and the private sector to explore potential solutions to the threats facing governmental healthcare system capacity [41]. In such challenging circumstances, the private sector continues to hold relatively stronger resources and tools to support healthcare service delivery and to invest in the Palestinian healthcare sector.

In Lesotho, unexpected high payments to private operators created budgetary uncertainties, emphasizing the importance of robust financial planning and contract management [42].

The lack of trust between stakeholders significantly hinders the success of PPPs in healthcare. Trust issues can lead to misaligned objectives, opportunistic behaviors, and ineffective collaboration that ultimately can undermine project outcomes. To mitigate these challenges, several strategies can be employed. Trust is foundational for effective collaboration, as evidenced by studies showing that interpersonal relationships and transparent communication enhance stakeholder engagement and project success [43, 44]. Lack of trust can result in opportunistic behaviors such as underbidding and delays in fund disbursement which compromise project integrity [45]. While these strategies can significantly improve trust and collaboration, it is essential to recognize that building

Table 4 Theme-specific recommendations for PPP development in the Palestinian healthcare sector

Theme	Recommendations
1. Feasibility & Economic Evaluation	• Institutionalize CBA and feasibility studies as mandatory prerequisites for all PPP decisions and external service purchasing.
2. Investment Climate & Policy Environment	• Strengthen regulatory and macroeconomic policies to improve private sector entry, financing capacity, and risk mitigation.
3. Strategic Planning & Preparedness	• Develop a national PPP vision grounded in realistic context analysis, cross-sector coordination, and adaptive planning. • Incorporate structured learning from international PPP models while tailoring implementation pathways to Palestinian institutional capacity.
4. Operational Governance Challenges	• Build trust through formal governance frameworks ensuring transparency, stakeholder participation, and accountability in contracting. • Implement institutionalized monitoring, evaluation, and incentive mechanisms to minimize opportunism and ensure equitable service delivery.

trust is a gradual process that requires sustained effort and commitment from all stakeholders.

The study also explores the influence of political and economic factors on partnership decisions. Respondents expressed concerns about capitalist ideologies infiltrating the healthcare sector and emphasized the importance of ensuring fair access to services, especially in a politically volatile environment. Governance and capacity-building are crucial themes, with participants calling for stronger regulatory frameworks, better coordination among service providers, and strict adherence to laws and regulations to enhance service quality and rebuild citizen trust. Cultural competency emerges as a unique and significant factor in shaping partnership strategies. For instance, the NHS Innovation Accelerator in the UK exemplifies how cultural alignment can lead to effective collaboration and enhanced healthcare delivery through innovative solutions [11]. In Pakistan, PPPs have shown potential in bridging healthcare gaps, emphasizing the need for transparent communication and mutual understanding to ensure equitable access to services [46].

While cultural competency is vital for the success of PPPs, challenges remain such as divergent interests and regulatory complexities. Addressing these issues requires ongoing dialogue and adaptation to local cultural contexts to ensure sustainable partnerships.

The study highlights concern about the potential for partnerships to foster corruption and monopolies, particularly in the sensitive area of healthcare. The lack of a decisive vision for PPPs combined with cultural sensitivities complicates the adoption of these partnerships. Decision-makers across sectors agree on the importance of institutionalized monitoring and evaluation to ensure the agility and responsiveness of partnership initiatives. There is also a shared understanding of the need for continuous improvement in service procurement systems to meet the evolving needs of the population.

The findings from other literature also align with experiences in fragile or conflict-affected contexts, supporting the transferability of our results. Decision makers and stakeholders generally recognize the value of PPPs in expanding access and

improving service quality, especially in underserved areas [47–49]. However, they also express concerns about sustainability, financial risks, policy alignment, and the need for ongoing government support [47, 50]. Resistance from public sector staff, mistrust between partners, and lack of clear governance frameworks are common barriers [51, 52]. Effective PPPs require transparent communication, well-defined roles, strong leadership, and mechanisms for monitoring and evaluation ([49, 52–54]. Decision makers emphasize the importance of aligning incentives, ensuring local ownership, and adapting models to local needs and contexts [47, 49, 53, 55]. The study concludes by emphasizing the anticipated outcomes of PPPs, such as improved service accessibility, quality, and sustainability. However, achieving these outcomes will require comprehensive evaluations, effective stakeholder collaboration and a nuanced understanding of the political, economic, and social contexts. Policymakers and stakeholders must navigate these complexities carefully to design and implement partnerships that not only enhance healthcare delivery but also promote equity and mitigate risks. The study highlights the need for continuous learning, adaptability, and cultural competency in shaping the future of PPPs in the Palestinian healthcare sector. There are some strategies for building trust, i.e. clear governance structures and establishing formal governance frameworks that can facilitate accountability and transparency and foster trust among stakeholders [46, 56]. Additionally, stakeholder engagement, involving all parties in decision-making processes will help align interests and build mutual respect [44]. Finally, applying incentive mechanisms i.e. implementing incentives to discourage opportunism and promote collaboration can enhance trust and commitment [45]. Table 4 presents concise, theme-specific recommendations, with

targeted actions proposed for each area to guide PPP development in the Palestinian healthcare sector.

Study limitations

Due to limited geographical access to Gaza, the study targeted healthcare decision-makers in the West Bank. Additionally, only three government representatives participated in the study compared to a larger number of private and NGO participants, which may have limited the range of public perspectives captured.

Conclusions

While the findings illustrate diverse perceptions of PPPs, their implications extend beyond descriptive insights. A critical theme emerging from this study is the centrality of governance in shaping the feasibility of adopting PPPs. Equally important is the role of trust as both a prerequisite and an outcome of successful collaboration: without mechanisms to ensure transparency, stakeholder engagement, and equitable risk-sharing, mistrust may persist and hinder implementation efforts. Thus, equity must remain a guiding principle; unless PPPs are designed with safeguards to prevent marginalization of vulnerable populations, they may exacerbate existing disparities rather than alleviate them. The implementation of PPPs is not merely a technical or financial choice; it is a profound political and social process necessitating purposeful policy formulation, strong institutional structures, and ongoing engagement among all stakeholders.

However, the efficacy of these partnerships relies on a thorough understanding of the local context, incorporating the economic, cultural, and political forces that affect healthcare delivery. Consequently, health policy analysts must consider this mediating element when formulating and evaluating adoption policies. Future research could

extend these exploratory findings through mixed-methods designs, enabling triangulation and quantification of key factors—such as governance, and financing constraints—across larger samples. In the Palestinian context, longitudinal and comparative studies examining the impact of feasibility assessments, governance structures, and partnership models could generate critical evidence to guide policymakers in designing socially responsible PPPs strategies that might advance universal health coverage.

Abbreviations

PPPs Public private
partnerships COREQ
Reporting qualitative
research

Supplementary Information

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Supplementary Material 1
Supplementary Material 2
Supplementary Material 3

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Author contributions

Both authors have made substantial contributions to the conception or design of the work, the acquisition, analysis, or interpretation of data, or the creation of new software used in it. Additionally, all authors have been involved in drafting the manuscript or critically revising it for important intellectual content. All authors have approved the submitted version of the manuscript and any substantially modified version that involves their contribution to the study. Furthermore, all authors agree to be personally accountable for their own

contributions and to ensure that questions related to the accuracy or integrity of any part of the work, even those in which they were not personally involved, are appropriately investigated and resolved, and the resolution documented in the literature.

Data availability

The data generated and analyzed during the current study are not publicly available due to privacy and confidentiality agreements with the participants. We cannot share the interview transcripts publicly to protect participants' privacy, as they contain sensitive and identifiable information. However, non-identifiable excerpts relevant to the study's findings are available from the corresponding author upon reasonable request, provided that ethical approval is obtained and confidentiality agreements are in place.

Declarations

Ethics approval and consent to participate
This study was approved by the Al Quds University Research Ethics Committee, which is aligned with the Helsinki guide. The reference number for this study is Al-Quds University/Public Health faculty/14/24. Committee head: Dr. Nuha El Shareef. Participants' consent was obtained via email and interview recordings. Informed consent was obtained from all participants prior to their involvement in the study. Consent was provided via email and confirmed verbally during the recorded interviews. Participants were informed about the purpose of the study, their voluntary participation, the confidentiality of their responses, and their right to withdraw at any time without consequence. All procedures adhered to ethical guidelines approved by Al Quds University's ethical committee.

Consent for publication

Not applicable

Competing interests

The authors declare no competing interests.

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فهم المحددات المؤثرة في تبني صناع القرار لإستراتيجية الشراكة بين القطاعين العام والخاص في قطاع الرعاية الصحية الفلسطيني: دراسة مختلطة المنهج
إعداد: محمد محمود مصطفى بني عودة

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ملخص

الخلفية:

تُعد الشراكات بين القطاعين العام والخاص إحدى الآليات السياساتية المهمة لتحسين الكفاءة والجودة والاستدامة في النظم الصحية، خاصة في البيئات محدودة الموارد والهشة. وعلى الرغم من إدراج هذا التوجه ضمن الخطاب والسياسات الصحية الفلسطينية، إلا أن تطبيقه العملي ما يزال محدودًا. هدفت هذه الدراسة إلى استكشاف العوامل المؤثرة في نية صانعي القرار لتبني الشراكات بين القطاعين العام والخاص، بالإضافة إلى تفضيلات القطاعات المختلفة والاعتبارات الحوكمية المرتبطة بتطبيقها.

المنهجية:

استخدمت الدراسة تصميمًا مختلطًا استكشافيًا متتابعًا نُفذ خلال الفترة 2023-2025. تضمنت المرحلة التمهيديّة 14 مشاركًا للمساهمة في تحديد نطاق الدراسة وتطوير أدواتها. وشملت المرحلة النوعية إجراء 17 مقابلة متعمقة مع مخرين رئيسيين من القطاعات الصحية الحكومية والخاصة الربحية والخاصة غير الربحية. واستنادًا إلى نتائجها، تم تطوير استبانة كمية مبنية على نظرية السلوك المخطط (TPB). أما المرحلة الكمية فقد شملت 163 من كبار صانعي القرار من 42 مستشفى في الضفة الغربية بنسبة استجابة بلغت 71%. وتم تحليل البيانات باستخدام التحليل الموضوعي والإحصاءات الوصفية والاختبارات اللامعلمية ونمذجة المعادلات الهيكلية (SEM).

النتائج:

ساهمت المرحلة التمهيديّة في تحديد العوامل السياقية المؤثرة في تبني الشراكات وتطوير أدوات الدراسة. وكشفت النتائج النوعية عن تحديات حوكمية ومالية وتشغيلية، شملت محدودية الأدلة المتعلقة بالجدوى الاقتصادية، وعدم وضوح الأدوار بين الشركاء، وضعف التنسيق، والقيود التنظيمية. كما أظهرت النتائج اختلافات بين القطاعات؛ إذ فضّل المشاركون من القطاع الحكومي نماذج شراكة أكثر تنظيمًا، بينما فضّل القطاع الخاص الربحي ترتيبات أكثر مرونة، في حين ركز القطاع الخاص غير الربحي على قضايا العدالة وإمكانية الوصول للخدمات. وأظهرت النتائج الكمية أن كلاً من الاتجاه نحو السلوك

والمعيار الذاتي يُعدان متنبئين دالين إحصائيًا ب النية السلوكية لتبني الشراكات، في حين لم يكن التحكم السلوكي المدرك والمتغير الوسيط دالين إحصائيًا. وقد فسّر النموذج 46.5% من التباين في النية السلوكية. كما أظهر تحليل السياسات تفضيلاً واسعاً لنموذج تتولى فيه الجهات الخاصة إدارة وتشغيل الخدمات مع احتفاظ الحكومة بملكية الأصول، في حين رُفضت الخصخصة الكاملة من مختلف الأطراف. وأكد دمج النتائج أن تبني الشراكات يتأثر بعوامل سلوكية ومؤسسية وحوكومية، إضافة إلى تفضيلات القطاعات المختلفة.

الخلاصة:

تشير الدراسة إلى أن نية تبني الشراكات بين القطاعين العام والخاص في القطاع الصحي الفلسطيني تتأثر بصورة رئيسية بالعوامل الاتجاهية والمعارية، بينما تحدد العوامل المؤسسية والحوكومية مدى إمكانية تطبيقها عملياً. ويتطلب تطوير شراكات مستدامة وفعّالة تعزيز الأطر التنظيمية والرقابية، وتحسين التنسيق بين القطاعات، وتبني نماذج شراكة تتواءم مع السياق المحلي واحتياجات أصحاب المصلحة.

الكلمات المفتاحية: الشراكة بين القطاعين العام والخاص، السياسات الصحية، نظرية السلوك المخطط، نمذجة المعادلات الهيكلية، المنهجية المختلطة، حوكمة الخدمات الصحية.