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#### Review article

# Evaluation of outstanding theories in outsourcing with practices in the public health sector: The case of Türkiye

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#### ABSTRACT

Outsourcing is an essential tool in supply management. This study examines the current outsourcing application areas of the public health sector in Türkiye. Application examples are presented, together with the prominent theories in outsourcing (Transaction Cost Economics Theory (TCE), Core Competencies Theory (CCT), Agency Theory (AT), Resource-Based View Theory (RBVT), Relational Theory (RT), and Social Change Theory (SCT), Turkish public procurement legislation, Ministry of Health outsourcing practices, and public hospitals are discussed for review and example. The examination shows that foreign dependency on the public health sector is increasing, and more than one theory is applied in some procurement processes. As a result of this study, examining and comparing which theories come to the fore in outsourcing in other countries is recommended.

## 1. Introduction

Strategic management based on strategic thinking is a current issue that health managers should focus on to ensure the sustainability of health services within the framework of their dynamic structure, dependencies, and uncertainties [1]. Presenting the procurement process without interruption in the provision of health services is possible by providing a strategic purchasing perspective, and strategic procurement management becomes essential. The department's status that carries out the purchasing process helps the purchasing functionality and facilitates their work [2]. Strategies can be divided into three groups: corporate strategies, competitive strategies, and functional strategies within the classification framework made according to management levels [3]. Outsourcing significantly impacts survival in a highly competitive system and gaining strategic advantage over competitors [4]. Outsourcing is a valuable tool for strategic planning in improving internal processes in public institutions [5].

Outsourcing, which is part of the logistics process [6], is one of the frequently used methods to eliminate the risks that businesses may face both strategically and operationally, to cope with the difficulties in the design of activities, to find solutions to the complexity in shaping strategic plans, and use business resources rationally [7]. With outsourcing in purchasing and supply management, it goes out of the business and focuses on external resources and strategic management processes can be designed [8]. There are many reasons and justifications for preferring the outsourcing method. Factors such as cost minimization, a suitable model for strategic management, and ensuring managerial efficiency and compliance with contemporary norms stand out [9]. Ensuring cost effectiveness on the one hand and ensuring customer satisfaction on the other puts managers in a difficult position in carrying out and concluding two opposite

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situations together [10]. In this context, outsourcing has tremendous importance and attractiveness in overcoming managerial problems and removing the management burden. It can also be seen as a change [11]. However, there is also the fact that the market for goods or services to be supplied is a monopoly or monopolistic oligopoly, which may be a factor that will prevent the administration's strategic planning [12]. In our study, outsourcing practices based on joint venture strategy, licensing strategy, and public-private partnership strategy, which are included in the strategic collaborations in the subgroup of corporate strategies, and cost leadership strategy, which are in the subgroup of competitive strategies, were examined [3].

Public officials need help making decisions in procurement management and purchasing process, and managers must find solutions to these problems [13]. Adopting professional procurement and supply management approaches to find solutions and including employees in the management process after undergoing professional training contribute to purchasing and supply management [14]. Recently, outsourcing in the public sector has been steadily increasing [15], and public administrators have to meet society's most basic needs and find solutions to the problems they face because it is a legal obligation to solve the problems and to ensure the effective and efficient use of public resources.

Outsourcing is a concept that expresses the change of the activities carried out by an enterprise with its internal resources, the elimination of the units providing services, the re-determination of the duties of the employees, and, if necessary, their release. It is a tool that helps not only in the purchase of goods or services but also in corporate designs [11]. In the Cambridge Dictionary (2020), outsourcing is "the process of paying to have part of a company's work done by another company." Outsourcing, which is briefly defined as the transfer of an activity to an external supplier and attracts the attention of scientists in various aspects, was analyzed within the framework of some approaches, and the effectiveness and efficiency of its use instead of internal resources were discussed [16]. In 18th-century England, outsourcing was a highly effective method accepted since the last quarter of the 20th century, especially in the service and industrial sectors [17]. In some enterprises, outsourcing is evaluated regarding whether it can benefit from the service produced. In contrast, the buyer-seller (i.e., customer-supplier) relationship is the focal point in some enterprises. Success in outsourcing, an alternative method to production using internal resources, actually depends on the quality of the partnership between customer-supplier. At the same time, the decision-maker role in outsourcing is significant [16]. Outsourcing decisions can affect the enterprise's flexibility, customer service, customer relations, and, in this context, the enterprise's core competencies. In another respect, outsourcing guides enterprises to make necessary warnings and recommendations on strategic issues by conducting cost analyses in enterprises [18]. In addition to being important in restructuring the services offered by enterprises, outsourcing plays a crucial role in increasing the performance of leading companies in the sector while contributing to developing novice companies in the market [19].

One of the main reasons for the prevalence of outsourcing in the healthcare sector is that healthcare managers can maintain profitability and efficiency while achieving clinical excellence [20]. During COVID-19, it has become clear how important the logistical process, and therefore outsourcing, is in procuring vaccines and ensuring safe transportation to health institutions. It can be predicted that the slightest mistake in this process can lead to enormous economic, medical, and administrative consequences [21]. In developing countries, the private sector has an essential function in outsourcing, as the public sector manages the supply chain in healthcare services. This function helps improve the public health sector's effectiveness, efficiency, and performance [22].

The principal research questions the study focuses on is examining the theoretical relationship between the practices used in the procurement process in the public health sector in Türkiye by examining the theories available in the literature. In this respect, it is an original work.

Health service providers in Türkiye are generally structured as public and private. Currently, the largest public service provider is the Ministry of Health. It can be said that the Ministry of Health is the only executive in this field, as the public should carry out preventive health services. In curative health services, the institution's weight is approximately 2/3 [23].

The progress of the study is as follows. In the first part, the most well-known theories in outsourcing will be discussed from the perspective of the literature and explained with examples from the public health sector in Türkiye. The second part will explain the outsourcing areas in the Ministry of Health and affiliated organizations with examples.

## 2. Methodology

This study reviewed published literature and information from government organizations obtained from laws, decree-laws, and official websites. Scientific literature was collected unsystematically using electronic means from ISI Web of Knowledge, Science Direct, Springer, Google Scholar, and Research Gate databases.

## 2.1. Featured theories in outsourcing

Many theories appear in the literature on outsourcing. The most well-known of these are Transaction Cost Economics Theory (*TCE*), Core Competencies Theory (*CCT*), Agency Theory (*AT*), Resource-Based View Theory (*RBVT*), Relational Theory (*RT*), and Social Change Theory (*SCT*) [24–26]. These theories can be used simultaneously in the production processes of enterprises' goods and services.

#### 2.1.1. Transaction Cost Economics Theory

*TCE*, shown as the most widely used outsourcing theory, helps businesses make the most appropriate decision for outsourcing and offers some tools to optimize the arrangements that businesses will make in terms of planning [24,26,27]. In other words, this theory contributes to the savings of businesses by taking advantage of the market's competitive situation and ultimately focusing on ensuring

efficiency in the business [28]. The main theme of *TCE* is that the management structure is decisive in the characteristics of the transaction [18]. The enterprise's management structure examines its internal dynamics and market conditions before deciding on outsourcing. Moreover, it prefers outsourcing by comparing the production cost with the transaction costs [29]. *TCE* is a fundamental theory in drawing the firm's boundaries and making productivity analyses by focusing on the management skills of the enterprise [30]. There are three levels of analysis when businesses resort to outsourcing with *TCE*. The first is to reveal the comprehensive structure of the enterprise. The second focuses on the operational activities of the enterprise. In other words, in which service units in the business and for what reason the outsourcing will be benefited; examines the issues in which units will not be used. The third focuses on organizing human resources [28]. Transaction costs and the costs of contracts to be made with companies may arise due to the need for some special asset requirements within the framework of the uncertainty of an activity to be realized. Administrations make decisions by considering these costs while evaluating these results. In other words, they prefer implementing the services efficiently with their internal dynamics or outsourcing [31]. A business that serves many customers and has economies of scale will likely have low production costs. Choosing a low-cost company requires certain legal obligations for businesses that will produce. Transaction costs include deciding on the supplier before starting the production process, agreeing on the price, monitoring the suppliers after an agreement is signed and work is started, and pursuing the supplier's performance [32]. Due to the benefits of the number of companies in the market, lower production costs, and many factors that will cause higher transaction costs, businesses refer to outsourcing [19].

#### 2.1.2. Core Competencies Theory

The second most popular outsourcing theory after *TCE* is *CCT* [26], developed based on *RBWT* [27]. There are three tests used to determine core competencies in businesses. The first is potential access to various markets, and the second is that the final product offered contributes to perceived customer benefit. Finally, it is difficult for competitors to imitate [33].

The first of the fourteen reasons for outsourcing in a study conducted in the United States and Europe is to achieve best practices across the enterprise. The second is to provide the managers with cost discipline and to develop their control skills [10]. One of the critical issues is the cost companies will face when they lose their core competencies. The other is that they will have difficulty entering the market if they do not develop their core competencies in the long term. In other words, they will not be more than just a company in the distribution channel [33]. Because outsourcing positively affects the business's production costs by providing a perfectly competitive environment in free market conditions. Thus, legal arrangements are made for public administrations to use free market opportunities optimally. In this context, public procurement legislation has an important place.

By outsourcing, significant increases in production outputs can be observed. To give an example from the automobile industry, Toyota has produced far more vehicles than its rival General Motors with outsourcing [34].

#### 2.1.3. Agency Theory

One of the oldest and most common coded forms we encounter in social interaction is the agency, that is, the proxy relationship. For a power of attorney relationship to arise, a person must be appointed as a proxy for another person and must take action/action on behalf of the appointer [35]. The basis of *AT* is to authorize another person, that is, the proxy, to perform a job. For the work to be performed with authorization, the control of the proxy over that work is ensured. A contract is signed between the proxy and those who give power of attorney for authorization [36]. In this theory, the organization meets with many vendors before deciding and deciding what kind of relationship to establish between them [26]. Those relationships include an employer and an employee, a manager and those they manage, and a main contractor and a subcontractor, for instance.

#### 2.1.4. Resource-Based View Theory

Along with *TCE*, *RBVT* is shown as one of the most widely used outsourcing theories [24]. The main reason for the emergence of *RBVT* is that they want to ensure a more organized execution of their resources by resorting to service provider intermediaries to meet the needs of enterprises in areas where they are weak. It is a theory used especially in decision-making processes in enterprises when preparing for outsourcing and selecting appropriate vendors. It is also used to explain some essential issues in relationship management and the management of reappraisal stages [27]. According to this theory, no business is self-sufficient and needs resources to provide services. He establishes an organization to procure these resources outside the enterprise [37]. The main issue in this approach is providing the resources required for the production the enterprises need from outside the enterprise.

## 2.1.5. Relational Theory

*RT* is used in the study of transition, relationship management, and evaluation phases. In this context, this theory is the only approach that can be applied to studying all stages of outsourcing [26]. *RT*, which is applied to examine the strategic cooperation between supplier and buyer, includes elements such as asset production, information sharing, information coding, resource complementarities and governance mechanisms to examine the direction of the relationship between the parties within the framework of the value it adds to both the buyer and the supplier [38]. *RT* provides significant support to experts and especially managers in their decision-making to minimize the uncertainties that may arise in the health sector, where uncertainties are most intense [39].

## 2.1.6. Social Change Theory

The Social Change Theory (*SCT*) was born out of Thorndike's (1932, 1935) work on developing the empowerment theory and Mill's marginal utility theory. Its influence in the late 1990s was influenced by the work of sociologists such as Homans (1950, 1961), Blau (1964), and Emerson (1972) [40]. The modern *SCT*, which enables the exchange of resources between individuals and groups, was developed through the work of LeviStrauss (1969), Homans (1961), Blau (1964), and Emerson (1972) [41]. According to this theory,

social participation and social change are necessary to interpret interpersonal transactional relationships and economic cost-benefit analysis is used for this [26].

## 2.2. Advantages and disadvantages of outsourcing

In this section, the advantages and disadvantages of outsourcing will be assessed in general terms from a strategic perspective.

#### 2.2.1. Advantages

A business considering outsourcing will likely achieve a much more efficient output through a firm. Because it focuses on cost savings [42]. Many advantages have been mentioned in the literature regarding the use of outsourcing. The approach of some scientists is given from different perspectives. [19], one of them, listed the advantages of outsourcing as follows:

- Strategic focus/reduction of assets
- Complementary capabilities/lower production costs
- Strategic flexibility
- Avoiding bureaucratic costs
- · Relational lease

#### 2.2.2. Disadvantages of outsourcing

[19] listed the disadvantages of outsourcing as follows:

- · Interfaces and economies of scope
- Gap state
- Opportunistic behaviors
- · Increased transaction and coordination costs
- · Limited learning and limited innovation

#### 2.3. Outsourcing procedures in the public health sector

Hospitals have an essential share in service provision in the public health sector. Hospitals are divided into four basic classes according to their purposes and functions: treatment, preventive and developmental health, education, and research services. They are generally classified as property status, education status, type of service, size, length of stay of patients, accreditation status, vertical integration level, and place of establishment [43]. Türkiye's hospitals are divided into public and private hospitals according to their ownership status [44]. Public hospitals affiliated with the Ministry of Health are divided into five classes according to their functions in the Operating Regulation of Inpatient Treatment Institutions. These are district/town, day, general, particular branch, and training and research hospitals [45]. Among the public hospitals, university hospitals that provide services to the public can be given as an example. Universities in Türkiye are divided into three according to their type: state universities, foundation universities, and foundation vocational schools. Universities with hospitals within state universities provide public health services [46].

There are many procedures for outsourcing public administrations. The most well-known of these procedures are tenders and direct procurements. In addition to these procedures, public administrations apply outsourcing methods with advanced methods and intermediary institutions and organizations (such as the State Supply Office).

Tender, according to the definition made in the Public Procurement Law No. 4734, means "the proceedings which involve the award of a goods, services or works contract to the tenderer selected by the procedures and conditions laid down in this Law, and which is completed by signing of the contract following the approval of the contracting officer." The administrations must apply tender procedures for procuring goods or services and construction works within Law 4734. These procedures are specified in Article 18 of the Public Procurement Law as open, restricted, and negotiated procedures. Open procedure is the method in which all bidders can bid (article.19). Restricted procedure is the method in which the bidders invited by the administration according to the result of the prequalification assessment to be made can submit bids (article.20). Negotiated procedure has more than one justification (article.21). These justifications are stated in subparagraphs (a), (b), (c), (d), (e), and (f) of Article 21.21 (b), (c), and (f) do not have to be announced according to subparagraphs [47]. In a study by Uysal (2019), 90% of the bargain tenders held by the Ministry of Health with the tender registration number 2018 were carried out according to clause 21 (b). In other words, in cases where sudden and unexpected events such as natural disasters, epidemics, the danger of loss of life or property or which are peculiar to the construction technique, or which must be done urgently in terms of ensuring the safety of the building or life and property, are determined by the administration or upon the emergence of events that the administration cannot foresee, the tender shall be made urgently. This method is used in cases where it is necessary to do so [47].

## 2.4. Outsourcing areas in the Ministry of Health and affiliated organizations

More than one institution is needed to decide on outsourcing. In order to reach an outsourcing decision, at least two organizations/firms/enterprises must participate in the procurement process and meet a common consensus. With the emergence of the need, the necessary ground is created for outsourcing [15,31]. Since health services are an area where just-in-time production (JIT) takes place

[48], the method of service procurement is applied within the framework of the agreement to be made with companies that will benefit from the outside. Outsourcing is used in many health services, from laboratory services to catering services, from imaging services to information systems. Since an essential part of these services is done through labor, contracts based on employing workers are signed [49].

On the other hand, even if some services are carried out with in-house resources, unit price agreements are made at much more affordable prices within a transaction cost economy framework. This situation contributes positively to the reduction in expense items of health enterprises. It positively affects cost minimization. Below, we are trying to explain the essential areas of outsourcing.

#### 2.4.1. Information systems

With the developing and advancing technology, many methods are used in health service production processes, and many techniques are changing and developing within this framework. For example, systems such as Centralized Doctor Appointment System (CDAS), E-Nabız, Hospital Information Management System (HIMS), Clinical Engineering Information Management System, and Needs Management Information System are information systems that are realized by applying outsourcing methods [49].

The contribution and result of information systems in the functionality of office machines, medical devices, Etc., used in health institutions producing medical services have an essential place in the productivity changes of health enterprises [50]. For example, with the HIMS program on the computer used by an officer performing the patient registration process, the patients' waiting times in the queue have decreased. At the same time, there have been significant decreases in stationery materials (such as paper and pencil) used in patient registration procedures in the past years [51–53].

## 2.4.2. Medical imaging and radiotherapy services

Medical imaging and radiotherapy services are essential in hospitals providing secondary and tertiary care services and are mainly supplied and maintained by outsourcing methods. Imaging services include radiotherapy, positron emission tomography (PET) – computed tomography (CT), scintigraphy, Etc., the installation of infrastructure (device, instrument, material, Etc.) to store medical images and make them ready for radiological evaluation, and maintenance of the installed systems. Companies contracted by health institutions to purchase medical imaging services can apply for outsourcing on behalf of the hospital. For example, in creating physical equipment against radiation, the company is responsible for covering all expenses for the license to be obtained from the Turkish Energy, Nuclear, and Mineral Research Agency on behalf of the hospital. Again, an agreement is signed to cover the dosimeter expenses of the personnel working in environments where the company covers radiation exposure (such as radiotherapy and nuclear medicine). As seen here, the company indirectly carries out procurement transactions with outsourcing on behalf of the hospital [49].

#### 2.4.3. Laboratory services

Various techniques are used to produce laboratory services, which are among the auxiliary services and have a significant role in health care [54]. The method that results from providing medical supplies for medical equipment (i.e., laboratory equipment), which are included in the hospital's furniture. In this approach, the laboratory supplies or kit required for the execution of service production is acquired through outsourcing and carried out by the medical staff by operating the devices. Consumables are outsourced by obtaining human resources and medical equipment from internal sources.

A study conducted in Poland determined that health institutions mainly benefit from outsourcing laboratory diagnostics [55].

#### 2.4.4. Human resources

The provision of human resources in public health institutions and organizations is carried out by appointment [56], contract-signing methods [57], and outsourcing [47]. Student Selection and Placement Center determine the appointment method within the planning framework of the Ministry of Health; the Ministry of Health carries out the method of signing the contract. Subcontractor personnel who provide services through outsourcing in public health institutions have been brought to the status of public employees by making staff arrangements. Thus, within the framework of routine outsourcing, public procurement procedures were carried out, and the personnel employed were permanently transferred to the staff [47]. However, it is seen that human resources continue to be utilized by outsourcing methods in the fulfilment and execution of services such as medical imaging services, cafeteria services, laboratory services, and information systems services. At the same time, with Decree-Law No. 663 issued in 2011 in the Ministry of Health, the contracted management period [57].

#### 3. Associating theories with outsourcing practices of the Ministry of Health

#### 3.1. TCET

Many services offered in public hospitals for TCE are pioneers in developing new models to ensure cost minimization [58]. From IT services to imaging services, from laboratory services to catering services, new methods are being tried and applied to reduce transaction costs in all services carried out through outsourcing. The establishment of central laboratories for public hospitals serving under the Ministry of Health can be shown as an example of this. The Electronic Public Procurement Platform (EPPP) scans show that tender procedures are being carried out for medical supplies for the services implemented in central laboratories [49].

On the other hand, it is well known that many medical supplies acquired through the State Supply Office support the supply management procedures of public health institutions and organizations. The Health Market is the clearest example of this in the State Supply Office [59]. The rationality of the emergence of the Health Market is the cost problem arising from the purchase transactions

carried out by all public health institutions and organizations. The price differences that arise after the tender made by each public hospital can be followed by the Ministry of Health Supply Resources Management System (SRMS). With the help of the SRMS, it is possible to monitor prices and excess inventory and carry out material follow-up for all institutions connected to the Ministry of Health. Buying materials, devices, and fixtures at low prices with bulk purchases was necessary because suppliers offered different prices for the same product purchased by all public health institutions and organizations [60].

Another crucial issue is that while the medical supplies, medical devices, or medical instruments supplied by outsourcing are priced by the Social Security Institution (SSI) to the public institutions and organizations providing services affiliated to the Ministry of Health within the scope of the Health Practice Communiqué (HPC), planning is carried out within the framework of the low cost within the scope of the Public Procurement Law No. 4734 and the procurement procedures are carried out within the approximate cost framework. On the one hand, the laws governing public procurement and the HPC's proposed approximate cost and price policy influence the procurement procedures that public health institutions must follow. Health managers make thorough supply plans as a result of this circumstance.

#### 3.2. CCT

Laboratory services offered in hospitals can be given as an example of CCT. Blood samples are taken from patients and sent to an outside laboratory or a hospital's laboratory for analysis. The doctors then use this information to diagnose the patients during their examinations [49]. Another example is that health institutions or organizations can take advantage of the services by signing a protocol with outsourcing (that is, by going through the tender processes) or by signing a protocol with the healthcare facilities that have the opportunity but lack the technical and technological means to offer services within their structure for imaging services. The protocol is signed, the issues to be received or provided are recorded with the protocol, and the services provided are invoiced for this reason, all within the parameters of the agreement reached between the two institutions [61]. On the other hand, the Health Market application, which can serve as an illustration of how the Ministry of Health has applied the CCT in the context of central procurements, has been a crucial tool in resolving issues that might arise for healthcare facilities that encounter difficulties during the procurement process [59].

## 3.3. AT

In the execution of public health services with outsourcing, the price scale obtained by the managers of health facilities for the supply of goods/services from the market before the decision process helps to plan the work to be carried out by proxy with the suppliers/companies [62]. It indicates that the method to be applied to procure goods/services/construction work from the market, whether a tender procedure or a direct procurement method, will be carried out by proxy [47]. However, it is crucial to make arrangements regarding the contract's content between the procurator and the agent in tenders and direct procurement, among the procurement procedures, because of legal differences regarding the bindingness of tender contracts and the bindingness of direct supply contracts. While preparing the tender document before the tender, all the issues and elements that may arise and may be encountered during the execution of the work are presented to the tenderers who will participate in the tender in the draft contract. If the bidders have no objection, the contract draft is accepted. Therefore, by signing the tender contract with the tenderer who submitted the most economically advantageous price offer, the binding for the work to be carried out is fulfilled according to legal procedures. However, in market research in direct procurement, since standard documents are not presented to the bidders/companies, signing a contract with the bidder/company that gives the most economically advantageous bid becomes a relative situation. It is impossible to sign a contract since the goods/materials to be procured in direct procurement will be delivered at once. However, the case of signing a contract in direct procurement and service procurement may be relative to the nature of the work. It may be left to the discretion of the administration. Finally, the sanction of *AT* in tenders is much more deterrent and much higher than direct procurement.

## 3.4. RBVT

Examples of *RBVT* in the public health sector include cleaning, food, and imaging services. Not only in the public health sector but also in the private health sector (especially in inpatient treatment institutions), service providers are consulted within the framework of *RBVT* [49]. For example, the private hospital has the blood samples obtained from the patients analyzed in a private laboratory within the framework of the agreement.

## 3.5. RT

Many service procurements in the public health sector are carried out within the framework of *RT*. In the technical specifications for Hospital Information Management System (HIMS) service purchases carried out by hospitals, the systems that the HIMS system should be integrated must be expressed. This integration is necessary for some services used in the hospital and to be carried out with other institutions and organizations outside the hospital. For example, polyclinic procedures performed in HIMS play a crucial intermediary role in fulfilling income accrual transactions. Alternatively, with the integration of magnetic resonance imaging or tomography images produced within the scope of imaging services into HIMS, all hospital's authorized units can access these images [49]. Therefore, procuring one service is related to purchasing other services directly and indirectly.

3.6. SCT

When we look at the practices in health services, individuals who apply to health institutions and organizations to receive services make a social change and reveal a demand mechanism. Hotel management services in hospitals can be handled in this context. Managers need to plan resource use within the framework of this change.

#### 4. Discussion

The outsourcing method is a very effective model for the business, transactions that the administration cannot obtain from its internal resources to provide services, or business/transactions where outsourcing is more effective regarding cost-effectiveness and cost-benefit (within the legislation framework). Besides being a choice, outsourcing is a legal requirement for public administrations. Because all public administrations are subject to public procurement legislation to carry out procurement transactions through outsourcing, it is seen that outsourcing is highly utilized in the production and delivery of health services carried out in the central and provincial organizations of the Ministry of Health. It is almost only possible to produce a service with outsourcing. We can understand this impossibility by examining the tenders made on the EPPP. For example, outsourcing purchases the fuel required for a service vehicle rented in institutions. Alternatively, car rental services, including fuel, can be purchased. As another example, purchasing a kit and a device for blood analysis in the laboratory is necessary. Sometimes, with the purchase of a device against a kit, the process is managed through only one purchase.

In terms of public outsourcing models, the most striking model is *TCE*. The tenderer who offers the lowest price in the purchasing process is considered the most advantageous. However, according to the evaluation made by the commissions (tender/purchasing commission) based on the technical features of the bid given for the said job/transaction, the relevant job is left in the hands of the bidder who submitted the lowest price offer. *CCT* is a theory that emphasizes the use of professional service companies in public health services. Since providing imaging services is difficult or impossible with in-house resources, it is a more effective method to provide services through companies that are competent in imaging services. *AT* is a theory that comes to the fore in providing health services. It is based on the principle that a proxy carries out services (i.e., the firm) in administrative and health areas. For this purpose, services are performed by proxy with a time-limited agreement between the parties (administration and company). *RBVT* is a theory used mainly in city hospitals built within the framework of the Build-Operate-Transfer model, as it comes to the fore in the effective and efficient use of financial resources. *RT* is a prominent theory in the execution of information systems and requires procuring another software (such as CDAS) for purchased software. *SCT* is a theory that comes to the fore within the framework of social mobility created by individuals who will receive health services.

#### 5. Conclusion

All outsourcing theories show that producing health services is possible with the joint combination of both public and company resources. There are some gains or losses in the framework of the advantages and disadvantages of outsourcing, and it has a crucial role for health enterprises in areas that are problematic in service supply. It has a positive contribution to efficiency, especially in the provision of health services. According to the conclusion of this study, outsourcing practices used by other public institutions and organizations should be discussed in a theoretical framework and compared with our study. It is suggested that the prominent theories in outsourcing in the Türkiye public health system should be compared with those used in public procurement in other countries.

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**Burhanettin Uysal:** Writing – review & editing, Writing – original draft, Supervision, Resources, Investigation, Conceptualization. **Mehmet Yorulmaz:** Writing – review & editing, Resources, Conceptualization. **Mustafa Demirkiran:** Writing – review & editing, Supervision, Investigation, Conceptualization.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to

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