PERFORMANCE OUTCOMES OF INTERORGANIZATIONAL TRUST IN BUYER – SELLER RELATIONSHIPS: THE CASE OF THE RELATIONSHIP BETWEEN A PHARMACY AND A DRUG WHOLESALER

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Approval of the Graduate School of Social Sciences

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I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science/Arts / Doctor of Philosophy.

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This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Doctor of Philosophy.

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ABSTRACT

PERFORMANCE OUTCOMES OF INTERORGANIZATIONAL TRUST IN BUYER-SELLER RELATIONSHIPS: THE CASE OF THE RELATIONSHIP BETWEEN A PHARMACY AND A DRUG WHOLESALER

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This study examines the performance outcomes of interorganizational trust using both qualitative and quantitative methods. Using qualitative data from four informants and drawing on the literature on trust, we define interorganizational trust and derive a model of its outcomes. Regression analysis results indicate that trust is negatively related to transaction costs and positively related to cooperation, conflict resolution, satisfaction, and risk taking tendency. Dependence has a moderating effect on trust while predicting satisfaction. Confirmatory factor analysis revealed four trust components: goodwill trust, competence trust, contractual trust, and distrust.

Further exploratory analyses between trust components and trust outcomes indicate that distrust is not a mere opposite of trust, but is a distinct component of it. Goodwill trust, by itself, is not sufficient for the reduction in transaction costs; it must be supplemented by the reliability and ability of the other party in the exchange relationship to fulfill obligations. Competence trust alone is not sufficient for better conflict resolution due to the divergence in the expectations of the exchange partners. Only goodwill trust affects the tendency towards risk taking, since it reduces the perceived potential for opportunistic behavior.

As a result of this study, the concept of trust and its outcomes were investigated in the Turkish context, different components of trust were identified, and these components were linked to the outcomes of trust. In addition, risk taking tendency was tested as an outcome of trust, which is an important contribution to the research in this field.

Key words: Trust, Trust-Performance Outcomes, Buyer-Seller Relationship, Drug Distribution Supply Chain.

ÖZ

ALICI-SATICI İLİŞKİLERİNDE GÜVENİN PERFORMANSA ETKİLERİ:
ECZANE-ECZA DEPOSU İLİŞKİSİ ÖRNEĞİ

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Bu çalışmada firmalar arası güvenin performansa etkileri nitel ve nicel yöntemler kullanılarak incelenmiştir. Dört katılımcının sağladığı nitel veriler ve güven üzerine yapılan akademik çalışmalar temel alınarak güvenin tanımı yapılmış ve performans sonuçlarına yönelik bir model geliştirilmiştir. Regresyon analizi sonuçları güvenin işlem maliyetleriyle olumsuz, işbirliği, anlaşmazlık çözümü, memnuniyet, ve risk alma eğilimiyle olumlu ilişkisi olduğunu göstermektedir. Karşılıklı bağımlılığın güven üzerinde etkileşimsel bir etkisi olup güven ile memnuniyet arasındaki ilişkiyi güçlendirmektedir. Doğrulayıcı faktör analizi güvenin dört bileşenden oluştuğunu göstermektedir: iyi niyete güven, ehliyete güven, sözleşme güveni, ve güvensizlik.

Güven bileşenleri ile güven sonuçları arasındaki keşfedici analiz sonuçları güvensizliğin güvenin tersi değil farklı bir bileşeni olduğuna işaret etmektedir. İyi niyete güven tek başına işlem maliyetlerini düşürmeye yetmemekte, karşı tarafın yükümlülüklerini yerine getirmedeki yeteneği ve güvenilirliğine de ihtiyaç duyulmaktadır. Tarafların beklentilerindeki farklılıklar nedeniyle ehliyete güven tek başına anlaşmazlıkların çözümünde yeterli olmamaktadır. Algılanan potansiyel fırsatçı davranışları azalttığı için iyi niyete güven risk alma eğilimini etkileyen tek güven bileşenidir.

Bu çalışma sonucunda güven kavramı ve performans sonuçları Türkiye'de incelenmiş, farklı güven bileşenleri belirlenmiş ve bu bileşenler güven sonuçları ile ilşkilendirilmiştir. Ayrıca, risk alma eğiliminin güvenin bir sonucu olarak test edilmesi bu alanındaki çalışmalara önemli bir katkı olarak değerlendirilmektedir.

Anahtar kelimeler: Güven, Güven-Performans Sonuçları, Alıcı-Satıcı İlişkileri, İlaç Dağıtım Tedarik Zinciri.

To my son Efe Deniz

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CHAPTER 1

INTRODUCTION

Recent changes in the global business environment have dramatically increased the intensity of competition and the demand for enhanced quality, versatility, and innovativeness of products. This has brought about changes in the organizational structure and strategy of industrial firms and as a response firms have begun to implement organizational innovations within themselves and in their relations with other firms. With respect to relationships with other firms, relational contracting, networks, strategic alliances and horizontal integration in industrial districts have become prevalent (Alter and Hage 1993; Piore and Sabel 1984; Ring and Van de Ven 1992; Sydow 1998).

Most theorists agree that this increased variety in exchange relations and the increased uncertainty and complexity in the business environment cannot be handled without the presence of interpersonal and/or interorganizational trust (Sabel 1990; Sako 1992). Trust is not only regarded as an important coordination mechanism (Bradach and Eccles 1989), but also as a precondition for superior performance and competitive success (Ring and Van de Ven 1992; Sako 1998; Zaheer et al. 1998). Zucker (1986, p.56) argues that trust is "vital for the maintenance of cooperation in society and necessary as grounds for even the most routine, everyday interactions". Fukuyama (1995, p.7) goes further and claims that "a nation's ability to compete is conditioned by a single pervasive characteristic: the level of trust inherent in a society".

The issue of trust in economic exchanges has recently received considerable attention in the academic literature (Barney and Hansen 1994; Mayer et al. 1995; Zaheer et al. 1998) as well as the popular press (Business Week January 27, 1992; Economist December 16 1996; Fukuyama 1995). Trust in exchange relationships has been hypothesized to be a valuable economic asset because it is believed to: 1) lower

transaction costs, 2) allow for greater flexibility to respond to changing market conditions (Barney and Hansen 1994; Dyer 1997; Gulati 1995; Uzzi 1997) and 3) lead to superior information sharing that improves coordination and joint efforts to minimize inefficiencies (Aoki 1988; Clark and Fujimoto 1991; Nishiguchi 1994). Some scholars even claim that national economic efficiency is highly correlated with a high-trust institutional environment (Casson 1991; Fukuyama 1995; North 1990). Indeed, numerous scholars have suggested that interorganizational trust is a key factor in explaining alliance success (Doz and Hamel 1998; Dyer 1996). These claims have increased our attention to the important role of trust in economic exchanges.

Although several theoretical traditions have recognized the importance of trust in economic exchange (e.g., Arrow 1974; Granovetter 1985; Macauley 1963), little research has been done to explain how trust operates to affect performance of interfirm exchange. In particular, the organizational and strategy literature has asserted that trust in interfirm exchange is beneficial and can be a source of competitive advantage (e.g., Gulati 1995; Barney and Hansen 1995). In the organizational economics literature, trust has been theorized to reduce opportunistic behavior and hence transaction costs of exchange, ultimately resulting in more efficient governance. However, although the link between trust and performance in economic exchange has been frequently theorized in general terms, elucidating the precise nature of the trust performance relationship remains an important theoretical and empirical challenge (Zaheer et al. 1998). In fact, to the best of our knowledge, with the exception of some anecdotal, case study evidence (Dore 1983; Fukuyama 1995) there are only two large-sample empirical studies (Dyer and Chu 2003 and Zaheer et al. 1998) on the relationship between trust and transaction costs.

According to Dyer and Chu (2003), one reason for the lack of empirical work examining the link between trust, transaction costs, and competitive advantage is that concepts such as 'trust' and 'transaction costs' are difficult to operationalize. As Williamson (1985, p. 105) has acknowledged: "A common characteristic of these studies [on transaction costs] is that, direct measures of transaction costs are rarely attempted." As Dyer and Chu (2003) claim, their study is the only one to directly examine the relationship between firm trustworthiness, transaction costs, and firm

profit performance to date. In this study, we attempt to contribute to this research by measuring the reduction in transaction costs as a performance outcome of trust.

Apart from the reduction in transaction costs, another important performance outcome of trust that is believed to affect economic value in an exchange relationship is 'risk taking'. Risk is a fundamental element of an organization's strategy because it has implications for performance (Andrews 1987). Since risk is difficult to be captured as an objective reality, research has addressed the notion of perceived risk, which is defined as the subjective probability of suffering a loss in pursuit of a desired outcome (Pavlou 2002; Yousafzai et al. 2003). This study is an attempt to measure 'risk taking' as an outcome of trust to make a contribution to this line of literature.

In this study, we examine the relationship between trust and performance in a large sample of buyer-seller exchange relationships between pharmacies and drug wholesalers in Turkey. The context is unique in a number of senses. Firstly, previous studies measuring the performance outcomes of trust were done in the manufacturing sectors of developed countries. However, due to social, economic, legislative and cultural differences, the results of a study done in a developed country may not totally conform to the context of a developing country such as Turkey (Wasti 1998). Besides, transaction costs are more important in the service sector since the appropriateness of a service can be regarded as more difficult to measure (Gilson 2003).

Secondly, the context is unique in the sense that the sector is a regulated one (i.e., by higher governmental authorities such as the Ministry of Health) and price competition is not allowed for both of the parties to the exchange. In such a sector, arm's length exchanges based on price are not possible and any type of exchange should therefore be relational. This aspect of the sector is believed to have important implications for the relationship between trust and its performance outcomes.

Thirdly, considering the fact that the product (drug) and its price are standard for every pharmacy and that the basic good that a pharmacy sells is the drug, comparative cost advantages can only be gained through the reduction of transaction costs since overhead costs of pharmacies are almost negligible compared to manufacturing firms, which is the context of the two previous studies measuring performance outcomes of trust (e.g. Dyer and Chu 2003; Zaheer et al. 1998). Hence,

transaction cost reduction is very important for a pharmacy to gain competitive advantage. The argument is that if trust does indeed decrease transaction costs and thereby reduce total costs (Butler et al. 1997; Dyer and Chu 2003; Hennart 1993; North 1990), then this cost relationship should be critical for the dyadic relationship between a pharmacy and a drug wholesaler. This study attempts to test the results of the prior studies found in the context of developing countries in the service sector of a developing country and further develop the measurement model conceptually.

Apart from risk taking and transaction costs, this study attempts to test the relationship between trust and three other performance outcomes: cooperation, conflict resolution, and satisfaction. Although there is much research done on the relationship between trust, satisfaction, and cooperation (Ganesan 1994; Morgan and Hunt 1994; Selnes 1998; Söderlund and Julander 2003; Young and Wilkinson 1989; Yu and Pysarchik 2002), there is still some doubt on the strength of the relationship between these measures. For example, some authors (Young and Wilkinson 1989) find considerable distrust reported in some cooperative relationships and argue that cooperation might be coerced through dependence. Others argue that it might be commitment rather than trust that leads to cooperative behavior (Morgan and Hunt 1994). Also, while some authors argue that cooperation implies the precondition of trust (Deutsch 1973; Lindskold 1978) others argue that "trust is not essential for cooperation" (Young and Wilkinson 1989, p.120). For the relationship between trust and satisfaction, some authors suggest that trust leads to higher satisfaction between exchange partners (Andersen and Narus 1990; Armstrong and Yee 2001; Michell et al. 1998; Siguaw et al. 1998) while others do not confirm such a finding (Ganesan 1994; Selnes 1998; Söderlund and Julander 2003; Yu and Pysarchik 2002). Dependence and commitment were also found to affect satisfaction by affecting trust between exchange partners (Andaleeb 1996; Selnes 1998).

As can be understood from the above explanation, the relationship between trust, commitment, dependence, cooperation, and satisfaction is away from being clear. In this respect, we include 'mutual commitment' and 'mutual dependence' in the analysis as moderator variables to understand their moderator (interaction) effect on 'trust' while predicting 'satisfaction' and 'cooperation' respectively.

Finally, conflict resolution is added into the analysis as a fifth outcome of trust. Although some authors suggest and find a negative relationship between a high level

of interorganizational trust and dysfunctional conflict and a positive relationship between trust and conflict resolution thereby (Andersen and Narus 1990; Sullivan and Peterson 1982; Zaheer et al. 1998), others argue for the conflict-promoting role of trust in relational exchange relationships (Sako 1992). We believe that this mixed-motive nature of buyer-seller relationships has to be analyzed further as a part of this study.

In summary, using data from pharmacy owners, owner pharmacists, pharmacy managers, intern pharmacists, and clerks, we investigate the relationship between interfirm trust and transaction costs, cooperation, conflict resolution, satisfaction and risk taking. More specifically, we seek to answer the following questions: Does a high level of interfirm trust between a buyer and a seller result in: 1) lower transaction costs for pharmacists, 2) higher cooperation between drug wholesalers and pharmacies, 3) higher conflict resolution between drug wholesalers and pharmacies, 4) higher satisfaction for the pharmacists, and 5) a higher tendency/attitude towards risk taking by the pharmacist?

The study is divided into nine sections. In the next section a brief review of the literature on trust is provided. In Chapter Three the hypotheses of the study are outlined with relevant support from literature. In Chapter Four a brief analysis of the research context is provided with an emphasis on the current conditions of the pharmaceutical sector in Turkey. In Chapter Five the qualitative analysis and results are discussed. In Chapter Six the quantitative methods used in the study are outlined with an emphasis on measure validation. In Chapter Seven the quantitative results are provided. Finally in Chapter Eight and Nine the results of the study are discussed and conclusions are reached.

CHAPTER 2

LITERATURE REVIEW

Many economists, psychologists, sociologists, and management theorists agree on the importance of trust in the conduct of human affairs, yet the concept is still away from being sufficiently clarified due to the divergence of the meanings attached to it by different scholars from different disciplines. Economists tend to view trust as either calculative (Williamson 1975) or institutional (Zucker 1986), psychologists frame the concept in terms of the attributes of the trustor and the trustee and sociologists often find trust in the socially embedded relationships among people (Granovetter 1985) or institutions (Zucker 1986). Scholars have seen trust as an essential part of a healthy personality, as a foundation for interpersonal relationships, cooperation, and stability in social institutions and markets (Lewicki and McAllister 1998). Several other researchers have identified the fact that trust is a multidimensional construct (Jones and George 1998). For example, Driscoll (1978) and Scott (1980) distinguish between the generalized aspects of trust and the situationally specific aspects of trust. Other theorists highlight the social and ethical facets of trust. For example, Hosmer (1995) characterizes trust as "the expectation of ethically justifiable behavior- that is, morally correct decisions and actions based upon ethical principals of analysis" (p. 399). Other authors emphasize the strategic and calculative dimensions of the concept in organizational settings. For example, Burt and Knez (1996, p. 68) defined trust simply as 'anticipated cooperation' arguing that "the issue isn't moral …it is office politics".

There is agreement across disciplines, however, on the critical components that underlie trust, which are identified as "confident expectations" and "a willingness to be vulnerable" (Rousseau et al. 1998). According to Rousseau et al. (1998), the conditions for trust to arise are: 1) risk or vulnerability, and 2) interdependence between parties. Regardless of the level of analysis, trusting parties must be

vulnerable to some risk or uncertainty for trust to become operational. Otherwise, in the case of full certainty, the behavior of the other party would be certain and there would be no need for trust. In the case of complete uncertainty, on the other hand, trust will obtain the characteristic of 'blind trust', which, as Williamson (1993) argues, is unwise and will not survive in competitive business settings. Although both risk and interdependence are required for trust to emerge, the nature of risk and trust changes as interdependence increases. Therefore, forms of trust change shape depending on the type and context of the relationship.

Evidence from contemporary cross-disciplinary writings suggests that a widely held definition of trust is as follows: "Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al. 1998, p. 316). According to this definition, trust is not a behavior (e.g. cooperation) or a choice (e.g. taking risk), but an underlying psychological condition that can cause or result from such actions.

An alternative conception of trust as opposed to trust as a 'psychological state' is that of trust as 'choice behavior' (Arrow 1974). The advantage of this conception is that trust now becomes observable or explicit in choice behavior, rather than being an implicit psychological state. Within this literature, two contrasting images of trust have gained particular importance: 1) trust as a rational choice 2) trust as a relational choice (Kramer 1999).

2.1. Trust as a Rational Choice

Adopted largely from economic (Williamson 1975) and political theory (Hardin 1992), the rational choice perspective views decisions about trust as similar to other forms of risky choice. As with other risky choices, the individual is presumed to be motivated to maximize expected gains or minimize expected losses from their transactions. According to Hardin (1992), "A rational account of trust includes two central elements. The first is the knowledge that enables a person to trust another. The second is the incentives of the person who is trusted (the trustee) to honor or fulfill that trust" (p. 153). According to Hardin (1992), "you can more confidently trust me if you know that my own interest will induce me to live up to your expectations" (p. 189). The rational choice perspective focuses on trust in terms of 'rational prediction', wherein agents focus on collecting and processing

information to project likely outcomes of certain future events (Wicks, Berman and Jones 1999). In this view, the conditions of trust arise when parties have something at risk and trust is important because it promises to create preferred economic outcomes for the firm or individual given the risks in question.

Some concerns have been raised about the rational choice perspective of trust. Though the approach is robust in terms of clarifying how individuals *should* make decisions about trust, it is weak in describing how they actually *do* make decisions about trust, which is a basic theme of the behavioral decision making perspective and the 'bounded rationality' view (March and Simon 1958). To warrant the label of trust, other conditions must be present (Wicks, Berman and Jones 1999). The first of these conditions is affect or emotion (Kramer 1999). Trust occurs because an emotional bond is created between people that enable them to move beyond the rational prediction to take a 'leap of faith' in the trusted party (Lewis and Weigert 1985). The second condition is the existence of a moral element in the affective element (Wicks, Berman and Jones 1999). The emotional bond should have roots in the moral character or 'goodwill' of the trustee in the trusting relationship.

2.2. Trust as a Relational Choice

In response to the limitations of the rational choice view, scholars suggested the relational choice view of trust. According to this view, trust needs to be conceptualized not only as a calculative orientation, but also as a social orientation toward other people and toward the society as a whole. The impetus for the relational choice approach was provided by Granovetter's (1985) 'social embeddedness of economic action' argument. According to this argument, trust exists in context and is shaped by dynamics specific to particular social settings. In his discussion of embeddedness, Granovetter demonstrates that the models used in classical and neoclassical economics are under-socialized and neglect the role of 'concrete personal relations and structures or networks of such relations' (p. 490). According to Granovetter (1985), trust is neither a purely economic nor a purely moral concept. Rather, relationships between people and networks of such relationships are the mechanisms that enable trust to emerge.

Writings on trust in organizational theory show that most of the early definitions of the concept of trust were done by defining the term in different

contexts. These can be categorized as: a) individual expectations b) interpersonal relationships c) economic exchanges (Hosmer 1995). Since the meaning of the term may change with respect to the context in which it is used, it is essential to understand these different definitions and meanings attached to the concept in different contexts.

2.3. Trust as Individual Expectations

One of the academic definitions of trust was that which conceptualized the term as "an individual's optimistic expectation about the outcome of an event" (Hosmer 1995). Deutsch (1958) thought of trust as an irrational choice of a person faced with an uncertain event in which the expected loss was greater than the expected gain. He stressed the vulnerability aspects of the concept. Zand (1972), on the other hand, emphasized the 'giving up of control' over the outcome. Trust is now an individual decision based on the optimistic expectations about the outcome of an uncertain event, given personal vulnerability and lack of personal control over the actions of others. Here, trust is characterized as a set of "socially learned and socially confirmed expectations that people have of each other, of the organizations and institutions in which they live, and of the natural and moral social orders that set the fundamental understandings for their lives" (Lane and Bachmann 1998, p. 10).

All of these definitions regarded trust as the optimistic expectation of a single person with respect to the uncertain outcome of an event.

2.4. Trust in Interpersonal Relations

In the context of interpersonal relations, the definition of trust expands from the confident expectations of a single individual to the dependent interactions of a dyad. In the interpersonal relations context, trust is defined as the willingness of one person to increase his or her vulnerability to the actions of another person whose behavior he or she could not control (Zand 1972). Butler and Cantrell (1984) combined the interpersonal nature of trust as a condition for cooperation. They proposed five characteristics of people that might lead to interpersonal trust. These are: *integrity* (the reputation for honesty), *competence* (technical knowledge), *consistency* (reliability and predictability), *loyalty* (benevolence), and *openness*

(willingness to share ideas). Ring and Van de Ven (1992, p. 488), on the other hand, termed interpersonal trust as a mixture of two aspects: "1. Confidence or predictability in one's expectations 2. Confidence in the other party's goodwill."

According to Mayer et al. (1995), the most important antecedents of interpersonal trust can be grouped into three categories: the trustee's perceived *ability, benevolence,* and *integrity.* Ability refers to skills, competencies, and characteristics relevant to the specific situation, while benevolence is the extent to which a trustee is believed to want to do good to the trustor. This aspect also encompasses factors such as loyalty, receptivity, and caring, and suggests that the trustee has some specific attachment to the trustor aside from an egocentric profit motive. Finally, integrity involves a perception that the trustee adheres to a set of principles that the trustor finds acceptable. Such principles include consistency, fairness, reliability, openness, and general value congruence.

As is evident from the above definitions, the decision to trust is still made by one person, but the consequences of that decision are now dependent on the actions of others.

2.5. Trust in Economic Transactions

While the literature on interpersonal trust mainly focused on characteristics of individuals, the institutional economics literature expanded this focus to include principal-agent relationships and economic transactions. Economic transactions can also be seen as a specialized form of interpersonal behavior, but as Williamson (1975) suggests, the terms 'principal' and 'agent' may refer to individuals, groups, or firms, and transactions can be made between individuals, groups, firms, or a combination of these. So the concept of trust can be expanded to incorporate economic institutions.

One of the central assumptions of transaction cost economics (Williamson 1975) is that the agent is not to be trusted and that the risk of opportunism- defined as 'self interest seeking with guile'- is high. Therefore, in a market exchange the principals have to negotiate and monitor detailed contracts to protect themselves, and in a hierarchy, they have to establish bureaucratic control mechanisms. In a world without transaction costs, all activities would be carried as exchanges between parties in the market. Due to the failure of markets to allow for exchanges without

prohibitively high transaction costs, organizations came into existence. According to Williamson (1975), it is the difference between the costs of contracts versus the costs of controls that determines the structural form of organization of the exchange.

According to Hill (1990) it is possible to reduce transaction costs through a reputation for nonopportunistic behavior. He explains that trust can reduce transaction costs by reducing the cost of monitoring performance and eliminating the need for installing control systems. Therefore, 'trust' can be seen as an alternative governance mechanism in addition to 'price' and 'authority'.

Bradach and Eccles (1989) suggest trust as an alternative governance mechanism by adopting a sociologically informed notion of economic exchange. According to the authors, where there are common values and norms between exchange partners and where economic relations are embedded in personal relations of friendship, trust can develop and become a third mechanism of social control, which can be seen as functionally equivalent to price (market) and authority (hierarchy). Other adherents to the transaction costs approach stress the element of 'bounded rationality' and consider trust as bridging the information gap between exchange partners. Arrow (1974), for example, sees trust as a 'lubricant' of business transactions, or even the most efficient governance mechanism.

Nooteboom's (2002) analysis of the sociological and economic literature on exchange suggests that transactions can take place through loose connections of individuals who maintain impersonal and shifting exchange ties as in markets, or through stable networks of exchange partners who maintain close social relationships. The key distinction between these systems is the structure and quality of exchange ties, because these factors shape expectations and opportunities.

Trust which occurs at the organizational level is generally believed to enhance the success of interfirm relationships (Jefferies and Reed 2000). Research has shown that the network relationships in the Japanese automotive and Italian knitwear industries are characterized by trust and personal ties, rather than explicit contracts (Asanuma 1989; Dore 1983; Smitka 1991). It is further shown that these features make expectations more predictable and reduce monitoring costs.

According to Jarillo (1988), trust enables a network of firms to adapt to unforeseen circumstances that are common in a world of risk and uncertainty, thus reducing transaction costs. Also, trust promotes a supplier's willingness to invest in

customer specific assets (Dyer 2000). The literature on marketing channels suggests that lowered expenses will result from a higher level of trust (Frazier and Summers 1984; Frazier et al. 1988; Sullivan and Peterson 1982; Dwyer et al. 1987). The primary reasoning behind this is that high levels of interfirm trust allows the use of noncontingent influence strategies (e.g., recommendations, requests) instead of contingent ones (e.g., threats, legalistic pleas) (Frazier and Summers 1984).

2.6. The Benefits and Dangers of Trust

Trust offers both micro-level benefits for the parties involved in a relationship and macro-level benefits for the whole society. At a micro level, trust has the benefit of establishing stable and successful relationships which is almost impossible without trust (Kramer 1999). At the micro level, the benefits of trust include an overall efficiency gain resulting from reduced transaction costs in the form of search and contracting costs and monitoring and enforcement costs (Williamson 1985). Moreover, trust may promote broader redistributive action and solidarity, spontaneous sociability, a tolerant society, vibrant social community (Ulsaner 1999), and even moral unity within the wider society (Weinstock 1999). By institutionalizing trust toward citizens within social and political institutions, generalized trust might become the basis for a well-ordered society (Nooteboom 2003). The production of generalized trust is most important for developing countries that lack strong legal regimes which compounds the problem of creating trust between parties in an economic relationship (Humphrey and Schmitz 1998).

However, trust may also have dangers. At the micro level, trust may lead to corruption if the parties involved in the relationship gain at the expense of those outside it (Gilson 2003). Also, a power relationship might occur between the trustor and the trustee which may force the trustor to act in the interests of the trustee because the trustee holds some scarce resources that the trustor needs (Gilson 2003). Further, impersonal trust rooted in shared social norms of a group that identifies itself as in opposition to other groups may form what is called particularized trust of these groups which means ‘to trust only of your kind’ (Hartog 2003). This may lead to the formation of subcultures such as criminal gangs that are opposed to the broader public interest and promote conflict between groups in a society (Gilson 2003).

2.7. Categorizations of Trust

Theorists differ with respect to their identification of the grounds and social bases on which trust expectations may be based. Such divergences mostly depend on the model of human nature (i.e., whether man is an economic creature and a rational egoist) and on the ontological basis of social interaction (i.e., whether social interaction is viewed as being informed by moral considerations or by cultural scripts and meaning systems) (Lane and Bachmann 1998).

The following categories are offered in the literature with the aim of developing a typology of the concept. Though each of these categories deserves a detailed analysis, due to the scope of this study, only a brief review of them will be given below.

2.7.1.Calculus-based trust

This view of trust involves expectations about another, based on calculations which weigh the costs and benefits of certain courses of action to both the trustor and the trustee (Vos and Wielers 2003). A rational actor trusts another actor if his calculation suggests that the gain from reciprocated trust is higher than the loss threatened by a betrayal of trust and when trust relations are supported by negative sanctions (Vos and Wielers 2003). Calculus-based trust emerges when the trustor perceives that the trustee intends to perform an action that is beneficial (Doney 1998).

Criticisms of the calculus-based view center on the observation that the rational actor view fails to consider the social context in which economic action is embedded (Granovetter 1985). The trustee's response may be influenced by social norms which may complicate calculation and prediction of this response. On the other hand, "trust, unlike most economic commodities, can grow rather than wear out through use" (Nooteboom and Berger 1997, p. 989). Therefore, the stage of the relationship is another factor that may influence the calculations made by the trustor. Alternatively, if the relationship has no prior history, then the first step taken by the trustor may require a one-sided commitment based on mere 'beliefs/expectations' about the trustee rather than 'calculation' (Harrison et al. 1998).

2.7.2.Deterrence-based trust

This category emphasizes the view that one party will believe that another party will be trustworthy because the costly sanctions in place exceed any potential benefits from opportunistic behavior (Rousseau et al. 1998). Asset specificity and switching costs are examples of factors leading to deterrence-based trust. Here the question is whether this type of sanctions fosters or substitute trust.

Some scholars have raised the issue that deterrence-based trust is not trust at all (e.g., Yamagishi and Yamagishi 1994). For example, Sitkin and Roth (1993) suggest that deterrence in the form of coercion or fear of loss can as well promote cooperation or trust. Trust, in this regard, may not be viewed as a positive attitude about another's motives; rather, it may replace control. However, control should come into play when trust is absent. For example, a detailed business contract is a mechanism for control. However, such controls may decrease cooperation and trust development between parties, since people may not need to trust each other when they have a highly structured exchange relationship. This apparent incompatibility between control mechanisms and trust leads to conflict among scholars on the idea of deterrence based trust.

2.7.3.Process-based trust

This type of trust is one of Zucker's (1986) categories of trust. It entails the incremental process of building trust through the gradual accumulation of either direct or indirect knowledge (e.g. reputation, brands warranties, etc.) (Bachmann 2003). Such type of trust can sometimes be built at the organizational level, in the form of corporate culture. Evidence from individual psychology offers further insight into Zucker's (1986) notion of process-based trust. For example, research on trust development has shown that individual's perception of other's trustworthiness is a largely history-dependent process (Kramer 1999).

2.7.4.Value or norm-based trust

According to Parsons (1951), trust cannot develop unless individuals share common values. Parsons (1951) states that trust entails the suspension of self-interest in favor of the collectivity or society. He puts the concept of 'solidarity' at the center and identifies the concept as 'institutionalized shared values'. Defined in this manner, solidarity is seen as the main characteristic of a legitimate social order and

the moral aspect of trust is thus given primary emphasis. Parson's approach is taken up further by Fukuyama (1995), who states that 'trust comes out of shared values' and sees economic actors to support each other when they share common values in 'a community of trust'.

In contrast to the emphasis on the moral aspect of trust in the sense of a generalized morality in a given society, other writers emphasize the emergence of a trust relationship in a specific business exchange (Granovetter 1985). According to this view, values and norms may develop in a longstanding relationship where trust is created in an incremental manner through a process of repeated exchange. Sako and Helper (1998), for example, argue that norms and values toward a trusting relationship can exist even at the interorganizational level, but they also note that such 'obligational trust' relationships may be confined to a certain cultural context (e.g., Japanese society). Hagen and Choe (1998) add to this view by noting the importance of sanctions for fostering cooperation and trust in Japan. They explain that ostracism (whether from the family or from the business community) can be a severe penalty for 'putting self ahead of community interest' in Japan which leads to 'obligational trust' between firms.

2.7.5.Cognition-based trust

Scott (1995) defines cognitions as 'rules that constitute the nature of reality and the frames through which meaning is made'. He notes that cognitions are embodied in our expectations about the social order and about interactions with others which form the basis for trust. Cognition-based trust is a mechanism by which actors reduce the complexity of their interactions by adopting specific expectations about the behavior of others (Nooteboom 2003). Theorists from diverse backgrounds hold slightly different views of the notion of cognition-based trust. According to structural-functionalists, the general expectation of the persistence of the natural and social order forms the basis of trust (Bachmann 2003). Social exchange theory regards trust as a constitutive element in the society. It states that society is made up of relations of social exchange and such exchange would not be possible without trust (Lindenberg 2003).

2.7.6.Characteristic-based trust

This type of trust rests on social similarity and assumes cultural congruence because the trustor and the trustee belong to the same social group or community. They may share a common religion, ethnic status, or family background (Zucker (1986). That is, they may share a world in common. Such trust is based on ascribed rather than achieved characteristics and so cannot be created by conscious action.

2.7.7.Competence-based trust

This type of trust implies the expectation of technically competent role performance and predictability of behavior for the trustee (i.e., trust in a lawyer or physician) (Lane and Bachmann 1998). Here, credentials such as 'diplomas' or 'licenses' are important. A more general definition of competence-based trust, which also encompasses reliability, is "the partner's ability to perform according to expectations" (Woolthuis et al. 2002, p. 6).

2.7.8.Institution-based trust

Institution-based trust is one of Zucker's (1986) trust types. It is sometimes considered together with the concept of *system trust.* Though both concepts refer to impersonal trust, they are not totally the same. System trust is trust or confidence in an abstract system, whereas institutional based trust refers to institutions as sources of trust (Kadefors 2003). The notion is important for the understanding of the nature of the modern society and the social context in which relations of trust within and between organizations occur (Sydow 1998).

Another notion related to institution-based trust is *societal trust*. Fukuyama (1995) sees societal trust as a generalized notion of value or norm based trust. According to Fukuyama, trust "is the expectation that arises within a community of regular, honest and cooperative behavior based on commonly shared norms, on the part of the members of the community" (p. 26). The prevalence of trust in a society results in 'social capital' and societies are distinguished from each other by the extent to which trust prevails in the whole society rather than being confined to the family, clan, or close friends. Institution-based trust is a type of trust which is not dependent on personal familiarity and common history, but on formal, socially produced, and legitimated structures which guarantee trust (Nooteboom 2003).

Shapiro (1987) points out the dilemma posed by the reliance on institution-based mechanisms for producing trust in the modern society. She particularly emphasizes the control mechanisms used to guard principals against the actions of agents (i.e., professional norms, codes of practice, auditors, etc.) and suggests that such mechanisms in turn produce a spiral of distrust. Such 'guardians of trust' provide no guarantee that the principal will not be cheated, and those guardians (institutional solutions) also need to be guarded. This introduces the paradox that 'the more we control, the more control we need'. Her argument is compatible with that of Granovetter (1985), who argues that institutional mechanisms can only provide substitutes for trust, not trust.

2.8. Interorganizational Trust

Although considerable research in psychology and sociology has focused on trust in individuals and in social groups, in the organizational and interorganizational context the role of trust has only recently attracted interest (Zaheer et al. 1998). This interest has notably been in the literature on marketing channels (e.g., Andersen and Narus 1990) and in strategy and organizational research (e.g., Bradach and Eccles 1987, Ring and Van de Van 1992, Zaheer and Venkatraman 1995). In the strategy and marketing literature, interorganizational trust has been related to desirable outcomes such as competitive advantage (Barney and Hansen 1994), firm performance and opportunism reduction (Zaheer et al. 1998), and satisfaction (Geyskens et al. 1998). In addition, recent research in management (e.g. Chow and Holden 1997; Doz 1996; Smith, Carroll and Ashford 1995; Zaheer, McEvily and Perrone 1998), marketing (Doney and Cannon 1997), and materials management (Moore 1998; Morgan and Hunt 1994) indicate that trust is an important factor in the success of long-term relationships between firms.

The idea behind the conceptualization of interfirm trust is that trust occurs at the level of the organization and has empirically found to be different from interpersonal trust (Doney and Cannon 1997). Conceptually, organizations are not able to trust each other; trust is a micro level phenomenon and has its basis in individuals. Trust can be placed by one individual in another individual or in a group of individuals (e.g., within an organization). However, individuals in an organization may share an orientation toward individuals within another organization. From this

perspective, "interorganizational trust describes the extent to which organizational members have a collectively held trust orientation toward the partner firm" (Zaheer et al., p. 143). This definition closely matches the understanding of macro level trust in sociology. Macro level trust is a generalization of the two actor system of mutual trust but it involves a greater number of actors (Nooteboom 2002). According to Doucette (1993), another aspect of the issue of interfirm trust is what is risked by trusting. In the interpersonal case, individuals expose themselves and their resources to loss while in the interfirm case the firm's assets are risked.

2.9. Trust Defined in This Study

In this study, we assume trust to exist between a drug wholesaler and a pharmacy based on the results of the qualitative analysis of the context (to be discussed in chapter five) and the theoretical view that trust is necessary for even the most routine everyday interactions (Zucker 1986) and virtually all forms of exchange (Arrow 1974). We draw on prior literature in defining trust generally as *one party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities* (Barney and Hansen 1994; Ring and Van de Ven 1992; Zaheer et al. 1998). Our definition of trust is of a multidimensional type and therefore we draw on the two general definitions of trust provided in the literature on interorganizational relations: Confidence or predictability in one's expectations about another's behavior, and confidence in another's goodwill (Doney and Cannon 1997; Ganesan 1994; Ring and Van de Ven 1992). Both types of confidence are expected to emerge in situations where the trusted party in the exchange relationship: 1) is known to reliably make good-faith efforts to behave in accordance with prior commitments (Mayer et al. 1995), 2) is able to perform according to expectations (Woolthuis et al. 2002), 3) can be relied on to fulfill obligations (Anderson and Weitz 1989), and 4) does not take excessive advantage of an exchange partner even when the opportunity is available (Anderson and Narus 1990). Scholars have used these definitions of trust in such interfirm relationships as supplier relations (Lane and Bachmann 1998; Sako and Helper 1998), joint ventures (Inkpen and Currall 1997), and strategic alliances in general (Ring and Van de Ven 1992; Zaheer and Venkatraman 1995).

Drawing on the above definitions of trust, in the next chapter we provide theoretical support for the relationship between interorganizational trust and transaction costs, cooperation, satisfaction, conflict resolution, and risk taking.

CHAPTER 3

HYPOTHESES

Trust seems to be an important asset for firms in that it enhances the performance of a firm by facilitating cooperation (Mayer, Davis and Schoorman 1995), lowering agency and transaction costs (Frank 1988; Jones 1995), promoting smooth and efficient market exchanges (Arrow 1974; Smith 1981), and improving the firm's ability to adapt to complexity and change (Korsgaard, Schweiger and Sapienza 1995; McAllister 1995). In this study, we investigate trust and its relationship with five performance outcomes: transaction cost reduction, facilitation of cooperation, conflict resolution and satisfaction, and tendency/attitude towards risk taking.

3.1. Trust and transaction costs

Trust is of most economic value when it is based on noncontractual rather than contractual mechanisms (Dyer and Chu 2003). The rationale for the economic value of 'noncontractual' trust is straightforward: Trust eliminates the need for formal contracts, which are costly to write, monitor, and enforce (Hill 1995; Barney and Hansen 1994). Thus trust is believed to reduce transaction costs.

Historically, economists have viewed the firm as a 'production function'. Consequently, the firm with the most efficient (lowest cost) production function would win in the marketplace. The value chain reflected the combined production functions of all of the firms that engaged in exchanges, from 'upstream' raw materials to 'downstream' final assembly. Theoretically, the value chain that was comprised of firms with the combined 'low-cost' production functions would produce the final assembled product at the lowest total cost (Carroll and Teece 1999). However, transaction cost economics has recognized that the productivity of a

value chain is a function of both *production costs* and *transaction costs* (Williamson 1985).

Transaction costs involve all of the costs associated with conducting exchanges between firms and can be decomposed into costs associated with developing and negotiating an exchange relationship, and costs associated with monitoring the other party for opportunism and solving problems when conflicts arise (Grover and Malhotra 2003). These two general categories of costs can more generally be termed as *search and contracting costs* and *monitoring and enforcement costs* (Williamson 1985; Hennart 1993; North 1990). Thus our definition of transaction costs characterizes this construct based on the two general components stated above.

Search and contracting costs include the costs of locating a desirable trading partner and then negotiating and writing a mutually acceptable agreement (Dyer and Chu 2003). Consistent with the organizational economics literature (Barney and Hansen 1994; Bradach and Eccles 1989; Williamson 1975), we define search and contracting costs as negotiating costs. By this definition, negotiating costs include the time and effort required to determine " 'efficient courses of action' and to settle on 'divisions of costs and benefits' " (Milgrom and Roberts 1992, p. 147). In particular, bounded rationality, uncertainty, and information asymmetries stemming from imperfect communication, private information, and observation and verification difficulties, all contribute to increasing costs of negotiation (Zaheer et al. 1998)

As suggested in Zaheer et al. (1998), negotiations are less costly under conditions of high interorganizational trust because agreements are reached more quickly and easily as parties are more readily able to arrive at a 'meeting of the minds'. Interorganizational trust mitigates the information asymmetries inherent in interfirm exchange by allowing more open and honest sharing of information. When interorganizational trust is high, negotiating positions are based on similar underlying assumptions and agreements are likely to be reached more quickly. In a related vein, it is suggested that trust promotes negotiating efficiency by enabling each exchange partner to be more flexible in granting concessions because of the expectation that the other exchange partner will reciprocate in the future (Dore 1983). This allows transactors to achieve 'serial equity' (equity over a longer period of time) rather than requiring immediate or 'spot equity' (Ouchi 1984; Dyer 1997). Consequently, it reduces the need for transactors to invest heavily in ex ante bargaining. In addition,

negotiations will likely be more efficient because transactors will have greater confidence that information provided by the other organization is not misrepresented.

As explained in Dyer and Chu (2003), trust is also believed to have an inverse relationship with *monitoring and enforcement costs* for two main reasons. Firstly, under conditions of high trust, trading partners will spend less time and resources on monitoring to see if the other party is shirking or fulfilling the 'spirit' of the agreement. If each exchange partner is confident that the other party will not be opportunistic, then both parties can devote fewer resources to monitoring. In contrast, transactors without goodwill trust (who rely only on contract-based trust) will need to invest resources both in monitoring the other party's actions (to ensure compliance with the contract) and in enforcing the contract.

Secondly, trust may reduce transaction costs by reducing the amount of time and resources that transactors spend on ex post bargaining and haggling over problems that arise in the course of transacting. If trust is high, then each party will assume that the other party is acting in good faith and will interpret behaviors more positively. Relational exchange ties that are imbued with trust are characterized by the internal harmonization of conflict and an array of norms and social processes that work to preserve the relationship (Macneil 1980).

HYPOTHESIS 1: *The greater the interfirm trust between parties, the lower the transaction costs incurred by the exchange partners.*

3.2. Trust and cooperation

Cooperation is linked to those actions taken by trading partners in which they work together to achieve mutual goals in addition to individual goals (Morgan and Hunt 1994; Anderson and Narus 1990). Cooperation allows firms to find means of: 1) coordinating their planning, communicating, and decision making, and 2) arranging the payoff structure so that each firm can justify joint goals using their own criteria (Stern and El-Ansary 1992). Cooperation can be viewed as the process in which firms pursue their own goals and thus retain autonomy, while at the same time orienting their actions toward joint outcomes (Doucette and Wiederholt 1997). Interest in trust and how to promote it in organizations is increasing due to the fact that today is an era when organizations are trying to find new ways to promote

cooperation between people, groups and organizations to enhance the value they create (Jones and George 1998).

Cooperation has been linked to the presence of trust in a relationship (Deutsch 1973; Loomis 1959; Marwell and Schmitt 1975; Bonoma 1976; Lindskold 1978; Matthews and Shimoff 1979). Scholars have widely acknowledged that trust can lead to cooperative behavior among individuals, groups, and organizations (Axelrod 1984; Mayer, Davis and Schoorman 1995; McAllister 1995), others have seen trust as a major cooperation mechanism (Komorita, Sheposh and Braver 1968; Kramer and Tyler 1996; Smith et al. 1995) and thought of cooperation as a manifestation of trust. As reported in Rousseau et al. (1998, p. 394) "when we say we trust someone or that someone is trustworthy, we implicitly mean that the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him". They further offer the following general definition of interpersonal trust: "Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al. 1998, p. 395). Similarly, Mayer, Davis and Schoorman (1995, p. 712) define trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party". As suggested in these definitions, the expectation of cooperation on the part of the trusted party is central to the idea of trust (Malhotra and Murnigham 2002).

Several scholars have investigated the relationship between trust and cooperation in repeated prisoner's dilemma situations. For example, Parks et al. (1996) explored how messages expressing cooperative intentions impact upon trust which in turn leads to increased cooperation. Parks and Hulbert (1995) showed that those who trust others to 'do the right thing' (cooperate) will show high rates of cooperation over time, compared to those who have low trust of others. Both authors found that higher levels of trust lead to increased cooperation in repeated prisoner's dilemma situations.

According to Lindskold (1978, p. 772-773), "if the other party could only be trusted to be cooperative in search of the mutually beneficial solution, then the cycle could be reversed, and both parties could gain rather than lose". Basing his argument

on game theory, Deutsch (1973) states that trust of the other party is fundamental to cooperation. When a social relationship is viewed as a series of exchanges, the relationship between trust and cooperation becomes clearer.

According to Matthews and Shimoff (1979), in a social exchange, one actor initially confers some benefits onto another, which involves some cost to the giver. The giver then is at risk of suffering a net loss of outcomes if benefits are not reciprocated. Thus the initial giver in an exchange exhibits trusting behavior. The exchange sequence is completed when the recipient cooperates with the giver by reciprocating the provision of benefits. Thus the initiation and maintenance of sequential cooperative exchange requires trusting behavior by at least one party.

For example, in the drug wholesaler-pharmacy relationship, which is the context of this study, a common exchange sequence would include shipment of drugs to the pharmacy, followed by payment to the wholesaler at a later date. Cooperative behaviors also include working together to coordinate logistic activities between wholesalers and pharmacies and coordinated actions that allow each to pursue their own goals, as well as mutual goals.

HYPOTHESIS 2: *The greater the trust between parties, the higher the cooperation between the exchange partners.*

As explained in the introduction chapter, the relationship between trust, cooperation, dependence, and commitment is far from being clear. Some authors (e.g., Young and Wilkinson 1989) find considerable distrust reported in some cooperative relationships and argue that cooperation might be coerced through dependence. Others argue that it might be commitment rather than trust that leads to cooperative behavior (e.g., Morgan and Hunt 1994). Also, while some authors argue that cooperation implies the precondition of trust (Deutsch 1973; Lindskold 1978) others argue "trust is not essential for cooperation" (Young and Wilkinson 1989, p.120). It can be argued that commitment and dependence have an interaction effect on trust that affects cooperation. Therefore, as a side analysis, we posit the following hypotheses to understand the moderator effect of dependence and commitment on trust while predicting cooperation:

HYPOTHESSIS 2a: *The higher the mutual dependence between parties, the stronger the positive relationship between trust and cooperation.*

HYPOTHESSIS 2b: *The lower the mutual dependence between parties, the stronger the positive relationship between trust and cooperation.*
HYPOTHESIS 2c: *The higher the mutual commitment between parties, the stronger the positive relationship between trust and cooperation.*
HYPOTHESIS 2d: *The lower the mutual commitment between parties, the stronger the positive relationship between trust and cooperation.*

3.3. Trust and conflict resolution

In exchange relationships, conflict arises due to the divergence of goals and unforeseen contingencies in the day-to-day relationships of exchange partners (Dwyer 1998; Zaheer et al. 1998). Conflict can be destructive, resulting in hostility, bitterness, and isolationism (Selnes 1998). There always will be disagreements or 'conflict' in relational exchanges (Dwyer et al. 1987). Therefore, conflict resolution might be crucial in the life of a relational exchange.

It is argued that relational ties that are imbued with trust are characterized by the internal harmonization of conflict and an array of norms and social processes that work to preserve the relationship (Macneil 1980). In such relationships, since disputes are resolved in a friendly atmosphere, disagreements are referred to as 'functional conflict' (Morgan and Hunt 1994). Andersen and Narus (1990) found a negative correlation between trust and conflict. Similarly, they found a positive relationship between trust and the functionality of conflict. Functionality of conflict refers to the use of disagreements to 'clear the air' so that conflict can have productive consequences. Zaheer et al. (1998) further suggest that partners in a relational exchange that have forged a high level of interorganizational trust are more likely to give each other the benefit of the doubt and greater leeway in mutual dealings, which decreases the frequency of dysfunctional conflict. Thus, trust is associated with constructive conflict resolution. Shelby and Hunt (1994) find that past cooperation and communication result in increased functionality of conflict (i.e., constructive conflict resolution) as a result of increasing trust between exchange partners. As they argue, when trust is present, parties will view conflict as functional and can discuss problems openly.

As a specific example, Yu and Pysarchick (2002) discriminate between economic and non-economic conflict in a channel relationship in Korea. According

to them, economic conflict defines channel member A's negative reaction to economic decline (such as profit or financial loss from its partner B), whereas non-economic conflict is channel member A's negative reaction to a non-economic encounter (such as an impolite or disrespectful attitude from its partner B). They find that although economic conflict is not related to trust at all, non-economic conflict is negatively related to trust. The negative relationship between non-economic conflict and trust is explained as a cultural underpinning of the collectivist Korean culture where social relationships are much more important in governing channel relations than in individualistic countries. Since Turkey is a country having a collectivist culture (Wasti 1998), such an association may also be true in Turkey. Here, however, we are investigating the relationship between 'non-economic conflict resolution' (in Yu and Pysarchick's (2002) terms) and trust. Therefore we would expect a positive relationship between the two.

HYPOTHESIS 3: *The greater the trust between parties, the higher the usage of constructive conflict resolution between the exchange partners.*

3.4. Trust and satisfaction

Satisfaction has been regarded as an important component of exchange relationships by various researchers (Crosby, Evans and Cowles 1990; Dwyer 1980; Frazier 1983). Satisfaction can affect channel members' morale and consequent intentions to participate in joint activities (Schul, Little and Pride 1985). According to Hunt and Nevin (1974), the positive implications of satisfaction are higher morale, greater cooperation, fewer terminations of relationships, fewer lawsuits, and lower likelihood of seeking protective legislation. Lusch (1976) argues that satisfaction reduces intra-channel conflict and promotes greater channel efficiency. Despite the importance of satisfaction in exchange relationships, it has not been researched effectively (Andaleeb 1996; Ruekert and Churchill 1984).

Satisfaction has been defined in several ways (Gaski and Nevin 1985; Ruekert and Churchill 1984). In this study, satisfaction is conceptualized as the focal organization's (a buyer) overall contentment regarding its relationship with another party (a seller), as in Andaleeb (1996) and Doucette (1993). The marketing and related literature posits a positive relationship between trust and satisfaction (Andersen and Narus 1990; Armstrong and Yee 2001; Michell et al. 1998; Siguaw et

al. 1998; Söderlund and Julander 2003; Yu and Pysarchik 2002). Anderson and Narus (1990) propose that a distributor's trust toward a manufacturer increases cooperation and decreases conflicts in a channel system. Lower conflicts and higher cooperation, in turn, increase the overall satisfaction of the distributor (buyer) toward the manufacturer (seller). Claro et al. (2003) find that interorganizational trust leads to better joint problem solving and planning between organizations which results in higher perceived satisfaction by the buyer organization. Söderlund and Julander (2003) also find a positive relationship between that trust and satisfaction, but further argue that trust by itself is not able to offset the negative consequences of poor service performance on satisfaction.

HYPOTHESIS 4: *The greater the trust between parties, the higher the satisfaction of the exchange partners.*

Chiou et al. (2004) argue that a relationship that is characterized by trust will be valued highly by the parties in the exchange relationship and the parties to the exchange will have a desire to commit themselves to the relationship. They also argue that trust and satisfaction are positively correlated. In addition, commitment was found to affect the relationship between trust and satisfaction positively (Andaleeb 1996; Selnes 1998).

Several other studies have sought to link dependence and satisfaction either directly or indirectly (Anderson and Narus 1990; Dwyer 1980; Keith et al. 1990), but could not establish a clear linkage. For example, Kotter (1979) suggests that if dependencies are so high that they can pose a threat to organizational survival, then they can lead to dissatisfaction. According to Andersen and Narus (1990), when a party is not dependent on the other, it is likely to have greater influence over its partner and hence experience greater satisfaction. Lewis and Lambert (1985), on the other hand, indicate that satisfaction with the other party in the exchange relationship depends on the perceived contribution of the other party on the to the focal party's performance outcomes. Thus, a dependent focal party is likely to attribute its outcomes to the party on which it depends, and hence be more satisfied with the other party. One can doubt that commitment and dependence have an interaction effect on trust that affects satisfaction. Therefore, as a side analysis we posit the following hypotheses to understand the moderating effect of dependence and commitment on trust while predicting satisfaction:

HYPOTHESIS 4a: *The higher the mutual dependence between parties, the stronger the positive relationship between trust and satisfaction.*
HYPOTHESIS 4b: *The lower the mutual dependence between parties, the stronger the positive relationship between trust and satisfaction.*
HYPOTHESIS 4c: *The higher the mutual commitment between parties, the stronger the positive relationship between trust and satisfaction.*
HYPOTHESIS 4d: *The lower the mutual commitment between parties, the stronger the positive relationship between trust and satisfaction.*

3.5. Trust and risk taking

Risk is the subjective possibility of loss as perceived by the decision maker (Chiles and McMackin 1996). As Orbell (1993) argues, a decision maker confronts risk when he or she can attach probabilities to alternative states of the world. A decision maker confronts uncertainty when he or she can in no way confidently attach probabilities to alternative states of the world.

Risk has been called the element that gives the trust dilemma its basic character (Johnson-George and Swap 1982). If there were no risk and actions could be taken with complete certainty, no trust would be needed. Although numerous authors have recognized the importance of risk to understand trust (March and Shapira 1987; Vos and Wieler 2003), no consensus on its relationship with trust exists. According to Mayer et al. (1995), it is unclear whether risk is an antecedent to trust, is trust, or an outcome of trust. Other authors, on the other hand, suggest that a party will undertake high risk if trust exists (Inkpen and Currall 1998). In the transaction cost economics framework, "the perceived risk of opportunistic behavior by a counter party to a transaction that involves asset specific investments will be influenced by the risk preferences of a firm's managers and the level of trust in the relationship" (Chiles and McMackin 1996, p. 92).

Many definitions of trust incorporate the element of risk. For example, Boon and Holmes (1991) define trust as 'positive expectations about another's motives with respect to oneself in situations entailing risk' (p. 194). Trust is thought to become irrelevant in completely certain situations (Deutsch 1958). Therefore, without uncertainty in the outcome, trust might have no role to play. Baier (1996) claims that if one actually reviewed all the possible bad outcomes of some avoidable

dealing with another party before going ahead with it, the calculated risk would scarcely warrant the label 'trust'. Trusting is taking not-so-calculated risks. Part of what it is to trust is not to have too many thoughts about possible betrayals.

Considering risk separately as 'relational risk' and 'performance risk' and trust as 'goodwill trust' and 'competence trust', Das and Teng (2001) suggest that goodwill trust reduces partner firm's perceived relational risk, and competence trust reduces the perceived performance risk in an alliance. Relational risk is defined as "the probability and consequences of not having satisfactory cooperation" and performance risk is defined as "the probability and consequences that alliance objectives are not achieved, despite satisfactory cooperation among partner firms" (p. 253).

Risk is present when an actor's outcomes are determined at least partially by some future state, particularly the behavior of another person (Schlenker et al. 1973). It can also be conceptualized as variances in outcomes of importance to the risk-taking subject (Das and Teng 2001). Perceived risk, on the other hand, relates to the estimated probabilities of several outcomes. Such risky conditions are common within interfirm relationships. The outcomes of one firm are often contingent upon the occurrence of some uncertain future behavior of another firm.

Trust in a social relationship has a number of functions, one of which is risk taking (Doucette 1993). For example, Koller (1988) found greater risk taking associated with greater trust in the context of lending books of different values. When Luhmann (1979) stated that trust reduces complexity in social systems, he was referring to a reduction of uncertainty. Trust and risk can also be considered as 'mirror images' of each other (Das and Teng 1998). Trust leads to risk taking by the trustor, and risk taking by the trustor in turn leads to an obligation for the trustee to behave in a trustworthy manner (Madhok 1995).

Since risk is difficult to be captured as a subjective reality, research has addressed perceived risk, which is defined as "the subjective probability of suffering a loss in pursuit of a desired outcome" (Pavlou 2002, p. 225). A reduction in uncertainty through trust can be accompanied by reduction in expectations of opportunistic behavior (Sako and Helper 1998) and thereby a reduction in perceptions of risk, especially of being taken advantage of by the other party (Ganesan 1994; Anderson and Weitz 1989). Trust has been shown to reduce the risk

of being taken advantage of by sellers in channel relationships (Anderson and Weitz 1989), and it has been associated with reduced perceived risk in interorganizational exchanges (Corbitt et al. 2003; Doney and Cannon 1997; Siegrist 2000; Yousafzai et al. 2003). There is a positive association between reduced risk perception and risk taking tendency (Forlani and Mullins 2000). The lower the risk perception by the decision maker, the higher will be his tendency toward risk taking.

As will be explained in the qualitative findings section of this study, the risks associated with the drug wholesaler-pharmacy dyad relationship in Turkey often come in the form of contractual and purchase risks. Contractual risks are the risks that the pharmacist confronts as a result of his/her formal agreements with governmental or private institutions. Purchase risks take place as a result of the pharmacist's own decisions regarding his/her drug purchases from the wholesaler.

HYPOTHESIS 5: *The greater the trust between parties, the higher the tendency/attitude towards risk taking by the pharmacy.*

Figure 1 below shows the hypothesized model trust-performance outcomes relationship. These hypotheses will be tested on the pharmacy-drug wholesaler relationship in Turkey based on a sample of 360 pharmacies in Ankara.

In the next section the research context is outlined with emphasis on the current conditions of the Turkish pharmaceutical sector and the drug distribution system.

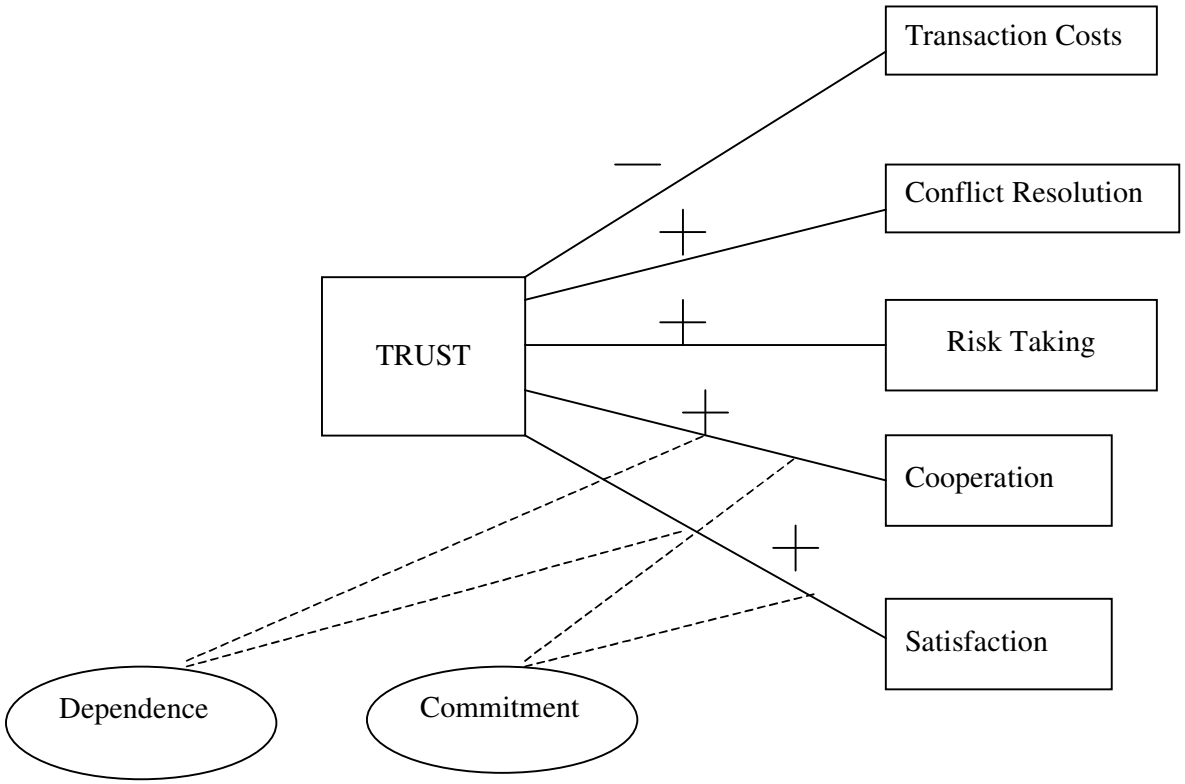

Fig. 3.1: Hypothetical model of the relationship between trust and its performance outcomes.

CHAPTER 4

THE RESEARCH CONTEXT

In this study, we consider the trust of a pharmacist in its drug wholesaler. The channels of distribution for human drug products are a vital component in the delivery of health care. The presence of problems within the drug wholesaler-pharmacy interfirm relationship can affect the delivery of pharmaceutical goods. If the pharmacist is unable to dispense medication when needed because of problems with a wholesaler, the quality of a patient's care may be negatively affected.

One potential deterrent of the interfirm relationship problems between a drug wholesaler and pharmacy is the establishment and maintenance of interfirm trust. Though the drug wholesaler-pharmacy relationship has become an integral component of the distribution of pharmaceuticals, little has been published on it (Doucette 1993). The study of this relationship could help in reducing or eliminating the negative aspects that decrease the quality of care provided to pharmacy customers and lower a pharmacy's profitability.

From a transaction cost perspective, the study of the performance outcomes of interorganizational trust between a pharmacy and drug wholesaler is important for the economic well-being of a pharmacy. This in turn influences the economic positions of drug wholesalers and drug producer companies on the upstream channel. In Turkey, the poor economic conditions of pharmacies pose an additional burden on wholesalers and thereby on the industry as a whole. The delays in payments of social security institutions lead to delays in payments of pharmacies to wholesalers and of wholesalers to drug companies. This, in turn, leads to a weakening of the financial positions of the channel members and the industry as a whole that may even threaten the viability of the drug industry.

4.1. A Brief History of Pharmaceutics

The history of pharmaceutics can be said to have begun with the creation of animals and men on earth. As man progressed, he started to search for substances in the nature surrounding him that could cure and heal his pain.

As reported by Baylav (1968), the earliest information on drugs is found in Sumerian, Egyptian, Chinese, Indian, and Arabic writings. In ancient times it was believed that God would send diseases to warn and punish those who did not obey his rules. As a result of these beliefs, priests, magicians, and witches gained special status for the treatment of sicknesses. In these times priests were also physicians and pharmacists, and pharmaceutics had to do with knowing about different types of herbs (also called *drog*) and preparing simple drugs using them. Even the shapes of herbs and their similarities to different diseases would be sufficient to classify them as drugs. For example, because the herb named *echium vulgare* resembled the head of a snake, it was used to heal people poisoned by snakes. Some stones were believed to have supernatural powers. As a result, necklaces, rings, bracelets made of these stones were used both as accessories and for health purposes.

During this time, the progress made on the treatment of illnesses was transferred from one country to another by traveling merchants and sailors. This information would then be transferred from father to son and live through generations. Also in this period, doctors would also prepare the drug to be used by the patient, but there was another group of tradesmen who would gather, dry, and sell herbs. Starting from the 6th century, doctors stopped preparing drugs. Instead, drugs were prepared by a specialized group of tradesmen named 'apothicaire' and members of this group were recognized as artisans rather than ordinary tradesmen.

Some civilizations laid the milestones of medicine and pharmaceutics in ancient times. For example, the first civilization to write down the curing properties of different herbs was the Sumerian civilization. The Sumerians are also said to have found the fundamentals of pharmaceutics and medicine. Also, according to nail tablets, in Babylon there was another group of physicians apart from priests who were the main physicians in other ancient civilizations. Additionally, Hippocrates who lived in the 5th century B.C. Greece and is known to be the father of medicine, opened a new era for medicine and pharmaceutics. In the Roman Empire, the

medical civilization was founded by the Greek and Anatolian Turks. Two Anatolian scientists, Asklepyad and Galien, established the Roman medical convention. According to some sources, Galien is actually known to be a pharmacist rather than a physician. In his time pharmaceutics progressed equally with medicine and became a distinct profession. Pharmacists started to perform their own profession separately from physicians.

After Galien's death, his followers could not succeed in filling his place. In the middle ages, the church gained back its influence on science and medicine. During this time Islamic civilizations made progress especially in botany, chemistry, anatomy, and pharmaceutics. The master of Islamic medicine is known to be Razeh who is a Khorasan (Horasan) Turk. Another master is Djabir (Cabir), who is said to be the founder of modern pharmaceutics. Avicenna (İbni Sina) is another master and is known to be the Hippocrates of Islamic medicine. He argued that health could only be achieved by drug treatment specialized for each individual. In a way, he made the use of drugs conditional on specific circumstances, such as the physical power of the individual, the phase of the disease, etc. He recorded around 800 drugs and categorized them according to color, odor, and effect.

During the Renaissance period in Europe, pharmaceutics had been clearly separated from the medical sciences with its own rules and norms. According to these rules, only those who have a pharmacist's certificate could open a pharmacy and only a pharmacist could prepare drugs. In the beginning, pharmaceutics was learned by practice. Someone who wanted to learn about pharmaceutics would first be an apprentice with a master and would become a master himself after years of apprenticeship and a final examination.

In the Ottoman era, the supply of herbs and preparation of simple drugs was accomplished by a group of tradesmen named 'aktar'. Before 1850, in İstanbul, pharmacists were practitioners who had no theoretical knowledge on pharmaceutics. By 1861 a new regulation brought about the recognition of pharmaceutics as an independent art and occupation through which pharmacies became modern institutions like their European counterparts. During this time, pharmacies were made of two sections: one where prescriptions were taken and the other (also called the 'laboratory') in which drugs were prepared. Ointments were placed in special porcelain cylindrical pots and French-made silvered porcelain jars with lids. Liquid

drugs or oils were put into different shaped glass bottles. The labels on them were generally in French.

During the Ottoman Empire era, an association was established by pharmacists. This association tried to prevent unfair competition between pharmacists by limiting the number of pharmacies, establishing drug treatments that all the pharmacies would go by, preventing people from opening a pharmacy without a diploma, preventing the wholesalers and doctors from selling drugs, and making pharmacists stay for night shifts. These and many other rules and norms were listed in the pharmacists' law.

From the history of pharmaceutics by Baylav (1968), we can reach a number of conclusions with respect to pharmacists, wholesalers, and their relationships.

1. The pharmacy and the wholesaler are two firms in a marketing channel. However, this is a channel in which prices are standard, no advertisements are allowed, and there are a list of norms and regulations by which a pharmacist should abide. These same norms, rules and regulations, however, are not valid for wholesalers. Therefore, the wholesaler assumes the role of a tradesman while the pharmacist is both a tradesman and a professional.
2. As the above history suggests, the difference between a pharmacist and a wholesaler used to be more pronounced. The pharmacist would himself produce the drug and therefore was both an artist and a scientist. The wholesaler owner was just a tradesman. This difference was also reflected in the material culture. Most pharmacists would wear white aprons to reflect their role as professionals dealing with public health. Today, due to the mass production of drugs by pharmaceutical firms, pharmacists do not prepare drugs themselves; rather they just sell the drugs. Therefore their role is almost the same as a wholesaler and the pharmacist is seen as more a trader rather than a professional. However, although their drug preparation role is no longer valid, pharmacists are still a medium between the doctor and the patient. They are a first health reference in case the patient cannot reach a hospital or a doctor. They are responsible for the treatment they give the patient and therefore have responsibility with respect to community health. Such responsibilities are not applicable to a wholesaler.

4.2. Overview of the Turkish Pharmaceutical Industry

The pharmaceutical industry is an industry branch, which, through the application of scientific standards, puts synthetic, vegetable, animal, and biological substances used in human and veterinary medicine as curing, protecting, and nourishing, into simple or compound pharmaceutical forms and offers for medical treatment by mass production.

The existence of a drug producing industry in Turkey is important for the protection of community health and for economic and strategic reasons. From an economic viewpoint, the industry is important for recruitment, value added, investment and export potential, while from a strategic point of view, it is important for producing the drug need of the country in the case of embargo, war, epidemic diseases.

4.2.1. Current Condition and Problems of the Turkish Pharmaceutical Sector

Currently there are 196 companies operating in the Turkish pharmaceutical sector. Two of these companies, namely, the Social Insurance Institution[1] Drug and Medical Material Industry Organization[2], and Ministry of National Defense Army Drug Factory[3], belong to the public sector, while the others belong to the private sector. According to the data provided by the Turkish Ministry of Defense, the number of production organizations in Turkey is as follows (Table 4.1):

Table 4.1: Drug producing organizations in Turkey

Drug production organization	84
Medical and surgical material production organization	45
Raw material production organization	12

(Source: State Planning Organization (SPO), 2001).

Eight of the 35 foreign capital firms operating in the sector have production plants in Turkey. According to data provided by the Drug Industry Employers'

[1] Sosyal Sigortalar Kurumu.

[2] İlaç ve Tıbbi Malzeme Teşkilatı.

[3] Milli Savunma Bakanlığı Askeri İlaç Fabrikası.

Union[4], in 1998, the share of domestic capital firms in total sales was 49%, while that of foreign capital firms was 51%. The number of foreign capital firms increased after 1984. Table 4.2 below shows the operation starting dates of the foreign capital firms in Turkey.

In addition to the information on the above table, Schering and Knoll left the united German firm in 1989 and formed different marketing firms. Also, Glaxo and Wellcome merged under the name GlaxoWellcome and Ciba and Sandoz merged under the name Novartis and continued their operations.

Table 4.2: Beginning years of operation of foreign capital firms in Turkey

Company	**Operation starting date**
Servier	1986
Abbott	1987
Rhone Poulenc	1988
Wellcome	1989
Pasteur Merieux	1990
Fresenius	1990
UCB	1991
Novo Nordisc	1991
Alcon	1991
Zeneca	1992
Eli Lilly	1993
Merc Sharp and Dohme	1993
Synthelabo	1993
Boehringer Ingelheim	1994
Bristol Myers Squibb	1994
Guerbet	1994
Schering Plough	1994
Pierre Fabre	1995
Smith Klein Beecham	1995
Fournier	1998
Sereno	1998
Lunbeck	1999

(Source: State Planning Organization (SPO) Drug Industry Special Expertise Commission Report,

[4] İlaç Endüstrisi İşverenleri Sendikası.

The market share in terms of total sales value of the first 20 firms operating in Turkey is given in Table 4.3 below:

If the geographical distribution of the industry is analyzed, it is seen that the majority of the industry is located in İstanbul, Kocaeli, and Tekirdağ, due to such factors as the infrastructure, recruitment of technical personnel, supply of material, transportation, and concentration of health institutions in the Marmara region.

Table 4.3: Share of the first 20 firms in Turkey in terms of sales

Years	Share (%)
1993	82.01
1994	84.55
1995	79.82
1996	78.95
1997	77.10
1998	75.48

(Source: SPO, 2001).

4.2.2. Current Capacity in the Drug Industry and Its Utilization

There is a huge difference between the stated and actual capacity for the drug industry. In general, in the drug industry drugs having different compositions are produced in the same machines. According to Good Manufacturing Practices (GMP), while passing from one production to another, the machines should be cleaned, the packing lines should be prepared so that there is no material left over the previous production, some machines should only be used for the production of certain drugs (i.e., for some hormones and penicillin type drugs, different buildings, infrastructure, and machines have to be used). As a result, actual capacity is very much lower than stated capacity. Between 1995 and 1998 the capacity usage rate had been 50-60% for solid, liquid, and other drug types (SPO, 2001).

4.2.3. Production

Since 1984, when the GMP regulation was accepted, the drug industry has renewed its technology and adjusted its machine park capacity for the production requirements of Turkey. The technologies used in production are selected according to the properties and amount of the product to be produced.

Except for drugs requiring very advanced technology, all pharmaceutical forms are produced in the human drug production organizations of the private sector. Table 4.4 shows production by years in unit packs. There was a 13% decrease in 1994 due to the economic crisis. There were unit production increases of 17% between 1994 and 1995, 5.5% between 1995 and 1996, 6.2% between 1996 and 1997 and 4% between 1997 and 1998.

Table 4.4: Production in the Turkish drug industry

Years	Unit Packs
1995	975,146
1996	1,028,920
1997	1,092,988
1998	1,136,607

(Source: SPO, 2001).

Table 4.5 compares the drugs produced and their offering forms (i.e., tablets, granules, etc.) in Turkey and other selected countries. As can be seen from the table, the number of drugs produced in Turkey is at a level comparable to the selected countries in the table.

Table 4.5: Drugs and their offering forms (i.e., tablets, granules, etc.) in Turkey and other countries

Countries	Number of drugs	Offering Forms
Germany	9,438	31,090
Belgium	4,830	5,736
France	3,640	7,500
Switzerland	8,000	25,000
Italy	4,158	8,668
Pakistan	9,000	15,000
Portugal	4,370	12,301
Thailand	8,835	16,175
Turkey	3,100	8,839

(Source: SPO, 2001).

As of 1998, the first five treatment groups that were produced most were as shown in Table 4.6. The majority share of antibiotics is generally tied to the low education level and drug usage in our country.

In Turkey, drugs sold to the public and social security institutions compose 62% of total drug sales. As of 1996, the distribution of the drug market in Turkey is as shown in Table 4.7 below.

In general the structure of drug production in Turkey can be grouped as follows:

- Production done by international companies in Turkey (Bayer, to some extent GlaxoWellcome, Hoechst, Novartis Pfizer, Roche).
- Production done for those international companies which came to Turkey through partnerships and/or licensing agreements with domestic industry and which have their products produced in these national firms (Chugai, Pharmacia-Upjohn, Sanofi, Syntex, Warner-Lambert, etc.).

Table 4.6: Most produced five treatment groups

Drug	**Share (%)**
Antibiotics	21
Analgesics, anesthesics	17.5
Flu, cough drugs	7.8
Vitamins, minerals	6.8
Antirhemautismal and myorelaxing drugs	6.5

(Source: SPO, 2001).

- Production done for those international companies which only established their marketing organizations in Turkey and which have their products produced in national or foreign firms in Turkey (Bristol Myers-Squibb, Merck Sharp and Dohme, Smithkline Beecham, Wyeth, etc.).
- Production done by national firms for the products they have themselves developed and for the products for which they had acquired license (Abdi İbrahim, Bilim, Deva, Eczacıbaşı, Fako, İbrahim Ethem, Mustafa Nevzat, etc.).

4.2.4. Foreign Trade

4.2.4.1.Drug Imports

The Turkish pharmaceutical industry imports some products as finished goods. Among these drugs are implanted drugs, vaccines, blood factors, cancer drugs, some hormones, radionucleids, some ophthalmic drugs, and antidotes. As a result of the liberal regime followed by the Ministry of Health after the acceptance of the

Customs Union and the permissions given by the Ministry of Agriculture, some drugs similar to those produced in Turkey have begun to be imported, which increased the import volume for finished drugs. In 1998, the imported drugs in unit packs have increased by 91% to 63 million packs from 33 million packs in 1995. In terms of dollar value, these numbers correspond to 445.5 million and 188.4 million dollars respectively.

Table 4.7: Distribution of the Turkish drug market (1996)

Institution	Expenditure (Million dollars)	Ratio (%)
Social Insurance Institution (SSK)	397.4	20
Consolidated Budget	326.3	21
Retirement Fund	274.6	14
Social Security Organization of Craftsmen, Tradesmen and Other Self Employed	132.5	7
Private insurance	772.9	38

(Source: SPO, 2001).

4.2.4.2.Drug Exports

The Turkish pharmaceutical industry has the potential to enter foreign markets and be successful. However, the industry could not continue the export performance that it reached in 1989 in the former Soviet Union, Iran, and Iraq after the gulf crisis in 1991. In recent years, the finished drug and raw material exports altogether reached only 100 million dollars. Table 4.8 shows the export volume with respect to treatment groups in 1998.

Table 4.8: Export with respect to treatment groups

Treatment Group	Million packs	Ratio in total
Antibiotics	9.8	26
Liver and gall bladder drugs	7.9	21
Analgesics	5.0	13
Digestive system drugs	3.6	10
Antihypertensive	1.3	3

(Source: SPO, 2001).

Potential demand opportunities in certain markets should be acted upon by the industry. For example, Central European countries, the Russian Federation, and

Middle Asian countries are target markets for the Turkish drug industry due to the systematic and organizational failures that emerged after the collapse of the Soviet Union and the Eastern Bloc. The annual drug need of the former Soviet republics amounts to 6 million dollars and only 1 million dollars of this need can be satisfied by the domestic industry in those republics. Though smaller in volume, the Middle Eastern and North African countries are also promising markets.

4.2.5. Pricing in the Turkish Drug Industry

The drug industry is one of the industries in Turkey in which there is governmental intervention on prices. The prices are under the control of the Ministry of Health. The retail price of a drug is determined by adding sales, marketing, finance, and administrative costs, then adding the manufacturer's and distribution channel members' fixed profit margins, and finally value added tax to the manufacturing cost of the drug. The parts composing the retail price of a drug sold for 1 million TL is shown in the below table.

For the imported products, the retail price is found by adding at most 14% importer's profit, 9% drug wholesaler's profit, 25% pharmacist's profit, and 17% value added tax to the import cost of the drug. As a result, the prices of drugs are adjusted to currency rate increases or decreases automatically. This makes importing more advantageous than production, since the price of the drug does not erode due to inflation. In 2001, the Ministry of Health insisted that firms should produce drugs themselves if the production of the product does not require advanced technology.

Table 4.9: Parts composing the retail price of a drug

Component	**Ratio in price (%)**
Cost of the drug *(raw material +packaging +labor +overhead +marketing +finance +managerial costs)*	34
Manufacturer's profit	15
Drug Wholesaler's profit	9
Pharmacist's profit	25*
Value added tax	17*

(Source: SPO, 2001).

*Currently the value added tax and pharmacists' profit are determined based on a ratio of the price of the drug.

Today, with a few exceptions, the prices of drugs produced in Turkey are significantly below similar drugs produced in Europe. Table 4.10 below shows the inflation rates, drug price increases, and the profit-loss balance of the industry in the 1994-1999 period. As can be seen in the table, although the manufacturer's profit is restricted to 15% for the firm and 20% for each drug, the industry could not reach these ratios in the given period. Actually, the industry made a loss for the 1994-1999 period.

Table 4.10: Annual inflation (change with respect to last December), drug price increases, and industry profit-loss

Years	WPI* Inflation	Drug price increases	Average profit-loss
1994	149.6	147.1	-4.4
1995	65.6	41.6	-7.9
1996	84.9	86.3	-1.1
1997	91.0	79.0	-7.6
1998	54.3	58.7	-3.0
1999	62.9	64.0	-5.8

(Source: SPO, 2001.)

*Wholesaler Price Index

4.2.6. Recruitment of Personnel in the Turkish Drug Industry

Recruitment in the Turkish drug industry is given in Table 4.11 below. According to these data, in addition to the 22% increase in recruitment during 1980-1990, there was a 21% increase during 1990-1994 and a 31% increase during 1994-1998. In the 1980-1998 period, there was a total increase of 95%. This also corresponds to an increase of 2.5 times in the highly educated personnel segment of the sector, which is considered to be an important progress.

4.2.7. Reimbursement in Turkey

Reimbursement is the payment of the total amount or some ratio of the medical product or health service to the consumer or the institution providing the service by the insurance company. A major part of the drug expenses made by insured people is reimbursed by the public social security institutions they are registered with or the private insurance companies.

For outpatient services in Turkey, all three public social security institutions (Social Insurance Institution[5], the Retirement Fund[6], and the Social Security Organization of Craftsmen, Tradesmen and Other Self Employed Persons[7]) reimburse 80% of the drug expenses for the active employed and 90% for the retired. In cases when the sickness has vital importance and is documented by formal reports, then 100% of the expenses are paid back to the patient. For the inpatient services, the total amount of drug expenses are paid back by social security institutions.

Table 4.11: Recruitment

Work force	**Occupation type**	**1995**	**1996**	**1997**	**1998**	**1996 % increase**	**1997 % increase**	**1998 % increase**
High	Pharmacist	248	475	530	645	67	12	22
	Chemical-engineer	340	377	407	437	11	8	7
	Chemist	221	270	303	358	22	12	18
	Doctor	150	162	171	233	8	6	36
	Biologist	220	262	312	366	19	19	17
Middle	Engineer	384	380	445	533	-1	17	20
	Economist	588	613	629	759	4	3	21
	Managerial	1382	1552	1720	1901	12	11	11
	Other	1451	1774	2099	2747	22	18	31
Worker	Technician	295	294	370	452	0	26	22
	Laboratory assistant	156	171	168	194	10	-2	15
	Officer	1391	1657	1848	2205	19	12	19

(Source: SPO, 2001).

[5] Sosyal Sigortalar Kurumu.
[6] Emekli Sandığı.
[7] Bağ-Kur.

4.2.7.1.Operations of the Social Insurance Institution (SSK)

There are 261 pharmacies under the SSK structure. In all of the SSK hospitals and in some of its health service units pharmacies directly buy drugs from the producers. Currently, SSK buys drugs from the industry at a 10% discount and 45-day payment period basis. However, from time to time, SSK payments are delayed. For example, the SSK debt crisis in 1992 put the industry into a financial bottleneck. Besides, the payables of pharmacists by the public social insurance institutions are not paid on time. Such problems put distribution channels into financial problems and lead to delays in the payments to the industry.

Insured people who are bound to SSK buy their prescribed drugs from pharmacies under the SSK structure. Drugs that are prescribed but not found in SSK pharmacies are supplied from pharmacies that have contracts with SSK. Over 80% of SSK's drug consumption is supplied by SSK pharmacies.

4.2.7.2.Operations of the Retirement Fund (Emekli Sandığı)

The Retirement Fund meets the drug expenses of governmental employees and retired officials, their relatives, widows, and orphans. However, the retirement fund does not directly buy drugs from the producers. Rather, it pays back the fixed ratios of the value of prescribed drugs to the pharmacies which have contractual agreements with the Retirement Fund. The Retirement Fund has contracts with around 15,700 pharmacies. For inpatient treatment, the active employed patient pays a 20% fee, and the retired patient pays a 10% fee for drug expenses.

4.2.7.3.Operations of the Social Security Organization of Craftsmen, Tradesmen and Other Self Employed Persons (Bağ-Kur)

Bağ-Kur is not a direct buyer in the market. It meets the drug expenditures of its insured the same way as the Retirement Fund. Those insured by Bağ-Kur supply their prescribed drugs from the pharmacies having contractual agreements with Bağ-Kur by paying a certain fee (20% for the active employed and 10% for the retired).

4.2.8. Distribution Channels

In the process between the production of the drug and its reaching the customer, the drug has to be shipped, stored, and sold. These steps are carried put by the distribution channel members such as drug warehouses, hospitals, health

institutions, and pharmacies. While carrying out these actions, the channel members have to obey certain rules, procedures and regulations. It is these rules and regulations that ascertain the quality, security, and effect of the drug after production.

There are basically two major categories in the Turkish distribution system: drug wholesalers/pharmacist cooperatives, and pharmacies. Figure 4.1 below shows the drug flow and the distribution channels in Turkey.

4.2.8.1.Drug Wholesalers/Pharmacist Cooperatives

As a major element in the Turkish drug distribution system, the number of wholesalers has constantly increased since the 1970s. In 1995 there were 470 wholesalers in Turkey. However, since 1997 this number started to decrease due to increased competition and adverse market conditions. As of 1999 there were 197 drug wholesalers. Table 4.12 below shows the distribution of wholesalers.

Table 4.12: Distribution of drug wholesalers

Drug wholesalers	182
Pharmacists' cooperatives	15

(Source: SPO, 2001).

4.2.8.2.Pharmacists

As of 2001 there are 20,190 pharmacies in Turkey. Some of these pharmacies provide drugs to those insured by public and private health insurance companies with which they have contractual agreements.

In the next section the relationship between a pharmacy and a drug wholesaler in the Turkish context will be analyzed from a qualitative research perspective.

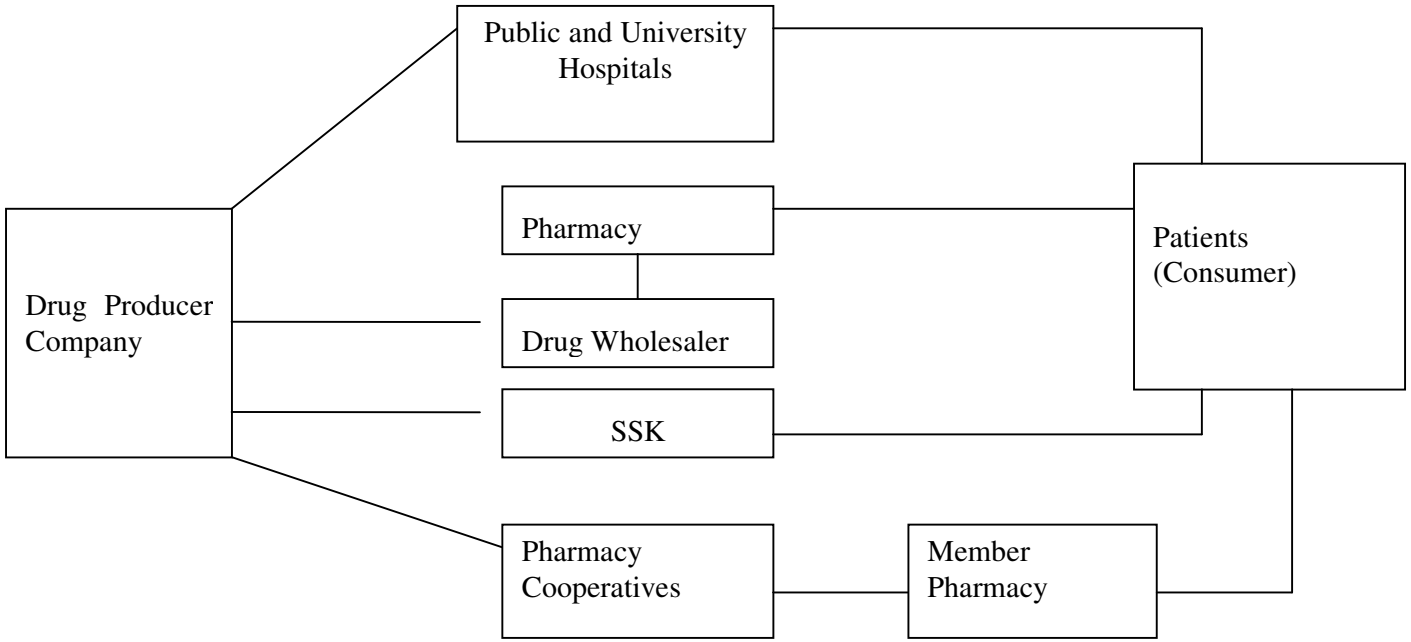

Fig. 4.1: Drug flow chart and the distribution channels in the Turkish drug industry.

CHAPTER 5

THE RELATIONSHIP BETWEEN A PHARMACY AND ITS PRIMARY DRUG WHOLESALER IN TURKEY: A QUALITATIVE INVESTIGATION

In order to understand the details of the relationship between a pharmacy and its primary drug wholesaler in Turkey, the first stage of data collection was planned as a qualitative study. In this study, the purpose was to understand the context which is new compared to other contexts in the literature (i.e., a service sector in a developing country) and what 'trust' means in this context. The idea was to identify the components of trust and their meanings for the current context. This analysis was essential for the operationalization of the 'trust' measure as well. Also, through this analysis the appropriateness of the generic hypotheses outlined in chapter three to the current context was confirmed.

5.1. Qualitative methods

Qualitative research was used at the first stage of the study since this type of inquiry is an interpretive and naturalistic approach to social research and focuses on idea/theory generation rather than theory testing (Berg 1998; Denzin and Lincoln 1994) (refer to Table 5.1 for the qualitative sample structure). The emphasis is on meanings, practice, and context rather than solely on behavior. In the qualitative part of this study, data was collected through observation (Adler and Adler 1994), interviewing (Berg 1998; McCracken 1988), focus groups (Berg 1998; Morgan 1988), and a projective technique (collage) (Belk, Ger and Askegaard 1997; Levy 1985) with four pharmacist informants in the March - April 2003 period. Also, historiography and material culture research of the Turkish drug industry (Berg 1998; Lavin 1995) was done.

Table 5.1: Qualitative sample structure

Informant	Pharmacy founding date	# of wholesalers	Size / Location	Sex / Age	Attended	Hours in the field
1	1973	5	Medium / Hoşdere street	F / 51	Observation, 1st interview, focus group	5
2	1976	4	Small / Hoşdere street	F / 50	2nd interview	1,5
3	1985	10	Large / Tunalı Hilmi street	F / 43	Focus group	1,5
4	1988	3	Small / Tunalı Hilmi street	F / 40	Focus group, collage	3

The purpose of the observation technique is to get directly involved in the *here and now* of everyday life in order to study processes, relationships among people and events, continuities over time, patterns, and immediate socio-cultural contexts of human existence (Jorgensen 1989). Such an involvement provides experiential and observational access to the insider's world of meaning. In the current study, a medium-sized pharmacy context (first case on Table 5.1) was observed for two hours during which the role of the researcher was an outsider participant observer. An outsider participant observer is an observer who is not an active member of the context, but observes the context by participating in it for some time duration.

The interviewing technique is a conversation with the purpose of gathering information and a version of the world sequentially constructed by the interviewer-interviewee interaction (Denzin and Lincoln 1994). It is important to note the display of perspectives and moral forms and the repertoire of narratives used in producing accounts, which are part of the world the interviewee describes (Denzin and Lincoln 1994; McCracken 1988). In this study, two interviews, each lasting about one and a half hour, were done. The interviews were done with the first and second informant on Table 5.1 and conformed to a semi-structured type. In such type of an interview, the outline of the broad categories relevant to the study is identified as a framework for the main questions and the rest of the dialogue is determined in the course of the interview.

The focus group may be defined as an interview style designed for small groups. Focus group interviews are either guided or unguided discussions addressing a particular topic of interest or relevance to the group and the researcher (Berg 1998). In this study, a focus group was done with three participants (first, third, and fourth informants on Table 5.1) lasting for two and a half hours. The role of the researcher was that of a *moderator*. The role of the moderator is to facilitate open discussion between informants and adjust the flow of the focus group so that the informants do not diverge from the focal subject of the study (Denzin and Lincoln 1994).

Contrary to interviewing and focus group techniques the purpose of projective is to uncover the latent, hidden, 'below the surface' thoughts, associations, feelings, motives. In this study 'collage' was chosen as a projective technique from among other techniques such as associations, fairy tales, sentence completion, picture drawing, etc. The reason for the choice of the collage was straightforward: in other techniques the informants would either be given a sentence or a word and would be asked to associate it with 'trust' or they would be asked to draw a picture, tell a story, etc. It was thought that providing the word or sentence in advance would limit the thinking of the informant about 'trust'. Another problem was that some people are not very good at drawing or telling stories and it was thought that pressure to do what they are not so capable of would frustrate them. Therefore, the collage would be an easier way for the informants to express their feelings, fantasies, intuitions, imaginings, and associations. The collage done with one informant (fourth informant on Table 5.1) lasted about one and a half hour. The informant was provided seven magazines which included sports, decoration, fashion, technology, etc. in scope and two newspapers with high trading volumes. She was asked to express 'trust in the wholesaler' by cutting pieces (i.e., pictures, words, illustrations, etc.) from the available material and sticking them on a large board to make a collage.

Historiography is the study of events to uncover accounts of what happened in the past. The aim is to collect information from the past and weave these pieces of information into a meaningful set of explanations to understand what shaped the present world and lives (Berg 1998; Ger and Belk 1997). In this study, the Turkish pharmaceutical sector was analyzed historically using both historical texts and the internet. Also, the material culture in the relationship between a pharmacy and a drug wholesaler was analyzed. The material culture involves every single material (i.e.,

paperwork, communication devices, etc.) that is involved in the conduct of the relationship.

To assure validity and reliability of the study, credibility, transferability, dependability, confirmability, integrity, and ethics were tried to be ensured. To ensure credibility, prolonged engagement in the field (around 10 hours in total) and triangulation across methods were assured. To ensure transferability, triangulation across sites was done by studying different pharmacies with differing sizes. Dependability was ensured through interviewing different pharmacies over time (i.e., weeks) to account for changes. Also negative case analysis was used to account for all cases without exception. For doing this, the texts in the interviews, focus group and the collage were analyzed by noting contradictions. Each contradiction was then tried to be negated and this would go on until all contradictions are accounted for. Confirmability was ensured through reflexive journals, member checks and peer reviews. Reflexivity means that the researcher writes down everything he/she did (i.e., his/her presumptions, feelings, prejudices, weaknesses, why he/she did what he/she did, etc.) during both the data collection and the analysis phases. The results of the qualitative analysis were checked by two of the pharmacists (i.e., members) and a professor at Bilkent University (i.e., peer). Integrity was ensured by gaining rapport with informants and emphasizing confidentiality. Finally, informed consent of the informants was ensured for ethical purposes.

The results of the qualitative study were analyzed using open coding, axial coding, ethnomethodology, semiotics, and narrative analysis (Berg 1998; Riessman 1993; Spiggle 1994). Open coding involves categorization of what is said in the transcripts without any constraints (Berg 1998). Inductive categorization of in vivo codes (i.e., words of the informant) was used for open coding the transcriptions from the interviews, the focus group, and the collage. As a result of open coding, around 200 codes were identified. Axial coding involves the abstraction of the codes or categories found in open coding (Berg 1998). In axial coding, the codes or categories identified during open coding were moved to a more abstract level. This level of abstraction resulted in 86 categories. Iterations between the transcripts, comparisons, contrasts, induction, deduction, verification, and negative case analysis ended up with 5 abstract categories and their subcategories.

Narrative analysis assumes that any text is interpretive rather than real and that the researcher interprets the text according to the attendance and telling of the story by the informant and his own transcription and reading of the material (Spiggle 1994). Therefore, the interview and projective transcripts were considered as narratives (i.e., stories) and were interpreted with respect to attendance, telling, transcription and reading phases. The contradictions in views of the informants within and between texts and their story lines were identified and accounted for. The transcript of the focus group was not chosen for narrative analysis since it does not represent a single story and therefore is not as authentic (e.g., a story belonging to a single informant) as the interviews and the collage.

Ethnomethodology assumes that there are 'do's' and 'don'ts' in any relationship and that these are the very norms through which people make sense and attach meaning to interactive processes (Riessman 1993). The transcripts from the interviews, the focus group and the projective were analyzed and interpreted using this technique to understand how people make sense of actions and interactions and the processes and procedures that lead to this sense making. As a strategy, only those parts of each interview and the focus group that came before the researcher or the informant utters the word 'trust' were analyzed. The reason for this strategy was to decrease the chances of an artificiality in speech since the moment the word 'trust' is uttered, the dialogue takes a different stance and the informants try to mold and shape the speech in a way as to rationalize what they say and do.

Finally, semiotic analysis assumes that all communication is symbolic and that words have different levels of meaning and looks for surface manifestations and the underlying structure that gives meaning to these manifestations (Denzin and Lincoln 1994). To this end, the transcripts were analyzed and interpreted according to the principles of semiotics. This time, however, contrary to the strategy used during ethnomethodology, the parts of the interviews and the focus group that came after the utterance of the word 'trust' were used for the analysis. The idea was to understand the levels of meaning of 'trust' in this particular relationship. For the most part, metonymy (i.e., similarities) was used to understand the connotative (i.e., in situ) meanings of 'trust' from the denotative (i.e., what the informant actually says) words and expressions.

5.2. Qualitative analysis

This section involves the narrative, ethnomethodological and semiotic analysis of the qualitative data (i.e., observation, interviews, focus group, collage, historiography, and material culture analysis).

5.2.1. Narrative analysis

5.2.1.1.The Story Line

The first informant starts talking about the payment conditions when she is asked to describe her relationship with the wholesaler, while the second informant talks about the frequency with which she is called by the wholesaler (every day). When asked to tell more, they both talk about other relationships with the wholesaler such as eating lunches and that the wholesaler would send flowers at special dates such as women's day and mothers' day. When the question is 'What about trust in the wholesaler?' the first informant talks about the cashing of the bank check on exactly the date she writes on the bank check and the second informant talks about the reliability of service and timely delivery of drugs.

From the above narrative analysis it is understood that the most salient aspects of the relationship are reliability of service, payment conditions, and deferral of debt. There is a positive expectation with respect to the equal treatment of wholesalers toward all pharmacies. It is accepted that some disputes might come up during the course of the relationship. Some of these are considered as minor disputes, while some others are considered as major mistakes depending on the characteristic of the relationship.

5.2.1.2.Quotations

This section outlines the quotes of the pharmacists in the interviews, the focus group or the collage (the Turkish version of the exact quotes are provided in Appendix F).

Table 5.2: Quotations representing a component or consequence of trust

Quotation	Component or consequence of trust	Data source	Informant
"The warehouse sends my drugs, then calls and asks which day is suitable for me (for payment). I pay the money even if it costs my death. If the payment day is Wednesday and they ask me not to extend it, then I say 'Postpone it two more days', because I cannot say 'I will not be able to pay' when the date comes. If you work firmly like this with your wholesaler, then when you have an extraordinary demand, they accept it. There are bad examples as well. There are pharmacists who move to another city in one night." "I have not experienced any material distrust or deception by the wholesaler until now. Or if it might have been by accident…I do not think that a wholesaler will risk his credibility with such a thing."	Calculation	2nd interview	2
"For example let's say the wholesaler does not extend credit to the pharmacist when the pharmacist is in a tight situation…This will deeply affect the pharmacist and should not be done in a friendly relationship that lasted for years. It is a mistake to disfavor a pharmacist in a commercial issue. The wholesaler and the pharmacist work in a perfectly family-like practice. If in the past I did not have any occurrence that might lead to any discredit, then the wholesaler will really be losing a lot by disfavoring me."	Calculation and length of the relationship	2nd interview	2
"For example sometimes there can be emergencies…they deliver (the drugs) in one hour though they have to deliver at most in half an hour. Once, twice, and if it happens for the third time, then I understand that there is a problem with the system…then I leave that wholesaler. The patient asks me when the drug will be in, I ask the wholesaler, for example he says 40 minutes, and then I say 'It will be here in half an hour'. There I have made a promise to the patient, for how long can I keep the patient busy?" "Once, it happened…I called (the wholesaler) at 11.00 am, they said the service bus is on the way, and I said 'OK'. I had to deliver the drug at 1.00 pm; they did not come on time. Then the second time, I said 'Do not deliver with the service bus, it is not on time', but they did the same, and I said 'I will not call you on shifts'(nöbet). "	Competence	Focus group	3 1

Table 5.2 (cont'd)

Quotation	Component or consequence of trust	Data source	Informant
"When you start working with a wholesaler, you are given a phone man. If you are not on the same wavelength with that phone man you will change him immediately…I have to feel some closeness with the phone man…this closeness can be a humorous joke, in the way a word is said or in the way he says 'good morning'." "My phone man should read my brain…that is, he has to know which drugs I buy. For example, pharmacists always buy the same drugs. The phone man knows about this quite well. If he is an idiot, he cannot sell either. He will know and tell you about the drugs immediately. If he cannot, he is not my type. The phone man should think a lot and be creative."	Competence	Focus group	3
"I bought a house and I said (to the wholesaler) 'You apply the legal interest, I will pay my debt later'. Next month, I saw that they did not apply any interest on my debt, I liked that and I thanked them." "Sometimes when we are in need of a drug and they (the wholesaler) go and find the drug from a pharmacy in Kırıkkale or Elmadağ. They know that it cannot be found anywhere else. It is like a cry for help." "For example, the day before, (when I called the wholesaler), the phone man said 'Do not buy drugs these days'. I think he heard that the VAT will be decreased."	Goodwill	Focus group 1st interview	1
"The communication between pharmacists is very strong; you see how many pharmacies it costs a wholesaler to behave adversely to a single pharmacy." "For example, a wholesaler at Belendir tried to sell drugs…wholesalers cannot sell directly to the customer…The second time I warned them not to sell drugs. There were friends from around who heard about it as well. Then we all ceased our orders and did not work with that wholesaler anymore."	Reputation / Contractual trust	1st interview	1
"For example, I give the bank check and the wholesaler collector says 'I do not have the invoice'. I say 'Then there is no bank check'. Then he may say 'You know me', and I say 'You know me as well, I am not going anywhere'. He acts in goodwill, but something may happen to him, there can be an accident. What if it is forgotten and the invoice is not returned to me?"	Distrust	Focus group	3

Table 5.2 (cont'd)

Quotation	Component or consequence of trust	Data source	Informant
"For example, I sometimes test my wholesalers. I tested 4-5 of them and I feel confident. I said that I did not have money, though I did and that I did not know when I would have some. They said 'OK, we will come next week'."	Distrust	Focus group	3
[Explaining the picture of a burst tomato]: "The promotion (i.e., quantity discount) has burst on your head. You have bought a drug in huge amounts and the governmental institution that you thought you could sell it to declares that it will not pay back that drug." Then she explains that she had such a problem with Supradyn (a drug) and that the warehouse knew that governmental institutions would not reimburse it, but still sold it to her. She had financial problems after that. [Explaining the picture of an Easter egg]: "The wholesaler presented you a beautiful campaign, you are not sure whether to join it or not. It looks beautiful, but is fragile. It can easily be broken in your hand."	Risk taking	Collage	4

5.2.1.3.Contradictions

In the first interview with informant 1 and in the focus group and the collage with informant 4 a number of contradictions were identified:

1. Informant 1 says that she had no significant disputes with her wholesalers that would lead to completely halting the relationship with the wholesaler, but later in the interview she gives examples of such disputes.
2. Informant 1 first argues that wholesalers do not discriminate between pharmacies in terms of discount rates and excess stock, but she then admits that wholesalers may favor larger pharmacies that buy in large amounts. In the second interview, the informant argues that the only issue that may require her trust in the wholesaler is its timely service, but then she adds that she might end the relationship if the wholesaler does not provide any payment flexibility in a tight situation.
3. In the focus group, informant 4 argues that wholesalers will not harm a pharmacy on purpose and that she did not experience such a thing until that time. In the

collage study, in contrast, she explains in detail how wholesalers tried to deceive her in several situations.

5.2.2. Ethnomethodology

In the interviews, the focus group, and the collage, a list of norms came out which lead to the creation of a 'world in common' within this culture of relationship. Here, the norms that are common across at least two sets of qualitative data will be provided:

1. The relationship between a pharmacy and a drug wholesaler starts with the referral of an elderly pharmacist. The elderly pharmacist advises the young one a drug wholesaler to work with and this reflects the trust the elderly pharmacist feels for the wholesaler.
2. It is common practice for the wholesaler to call the pharmacy or the pharmacy to call the warehouse a number of times a day. The decrease in the frequency of calls suggests a problem.
3. The fact that there is no written contract between the wholesaler and the pharmacy signifies the credibility of both sides.
4. It is accepted that the wholesaler can behave more favorably to larger pharmacies since they buy in large amounts.
5. It is a must for the wholesaler to provide reliable and timely service.
6. If the sales representative arrives before the agreed time for the collection of debt, the wholesaler is considered to be materialistic and not trusting the pharmacy.
7. If the wholesaler does something wrong in charging debt, this is a huge mistake and a sign of opportunistic behavior.
8. The phone-man is expected to work like the brain of the pharmacy.
9. The communication between the pharmacists is used to judge the credibility and trustworthiness of wholesalers.
10. If the wholesaler does not provide payment flexibility when the pharmacist is in need of cash, the wholesaler is considered not to be trustworthy.
11. Off-the-job relationships with the wholesaler (such as eating lunches together) lead to more understanding and closeness between the parties.

12. It is accepted that from time to time there can be disputes and instability in the relationship between the wholesaler and the pharmacy, but these are only slight interruptions in an ongoing relationship that is based on mutual trust and understanding.

5.2.3. Semiotic Analysis

In this section, a list of the words and expressions that the informants use either with trust or to exemplify an occurrence related to trust are introduced with their connotative meanings. Below are some of the words that are used in direct or indirect relationship to the concept of trust. 'Denotative' means as used by the informant and 'connotative' means what the researcher thinks is meant by the informant when using that particular word. Most of the connotative words and expressions are synonyms unless otherwise stated in brackets.

Table 5.3: Denotative and connotative meanings of words and expressions

Denotative	**Connotative**
Mutual	To know
Keeping promises	Keeping promises
Did not encounter problem	Disappointment (opposition)
Goodwill	Positive expectations
Tolerance	Tolerance
Not eternal	Extraordinary
Keeping some distance	Negative expectations
Intimacy	Goodwill
Credit	Tolerance
Relaxed	In peace
Strong, sound	Keeping promises
Respect	Seriousness
To benefit from, play games	Deception
Indecisive	Uncertainty
Expectation	Disappointment
Forever	Never (opposition)
To support	Family, friend (metaphor)
Effort	To be serious
Honesty	Keeping promises
Time	Intimacy
Risk	Debt

Table 5.3 (cont'd)

Denotative	**Connotative**
Self-sacrifice	Family (metaphor)
Concentrate	Think
To be deceived	Disappointment
Fragile	Solid (opposition)
Balance	Dancing (metaphor)

These words are further related to a component or consequence of trust. Some examples can be found in Table 5.4 below.

Table 5.4: Denotative or connotative expressions and related component or consequence of trust

Expression	**Component or consequence of trust**	**Data source**
Know, understand, time seriousness, promise, disappointment, positive expectations, negative expectations, family, friend	Competence trust, transaction costs, cooperation	Focus group and interviews
Deceive, to be deceived, uncertainty, to foresee, extraordinary, solid, tolerance, caution, risk, undecided, troubled, fragile, games played, other intentions	Risk taking	Focus group and collage
Steady state, peaceful state, happiness, being confident	Psychological relief, satisfaction	Collage
Weighing, balances, imbalance, calculation, concentration, stages, getting a hold of things, solving problems	Calculation, conflict resolution	Collage

As a result of the semiotic analysis, the following ideas are reached with respect to the concept of 'trust':

Trusting someone is considered to be a big deal; it is not easy to trust a person. Knowing someone for a long time such as being a family member may increase the chance of being trusted. Trust represents a state of balance and peace, but it is not without problems, it can easily be broken. Therefore, it is a risk to trust

someone. One has to be cautious not to be deceived and think thoroughly before granting trust. There is always a limit for trusting someone; it is not indefinite and for all. The limit to trusting depends on the tolerance level of the trustor and it brings about positive expectations on the one to be trusted.

5.2.4. Historiography and material culture

The material culture of the relationship between a pharmacy and a wholesaler consists of an abundance of bills and documents detailing the payment dates of these bills. They have the same format for every pharmacy. This points to the standard payment relationship between the pharmacy and the wholesaler. Also, it signifies the necessity that every transaction has to be documented due to the control of the Ministry of Health and other related governmental institutions.

The historiography was done using the book by Baylav (1968) and the web site www.eczacilik.com.tr on the internet. This research revealed the following results concerning the history of the relationship between wholesalers and pharmacies.

In the relationship between a pharmacy and a wholesaler, the wholesaler assumes the role of a tradesman while the pharmacist is both a tradesman and a professional. Before the mass production of drugs, the difference between a pharmacist and a wholesaler was more pronounced. Today, pharmacists prepare only a very small percentage of drugs themselves. Therefore their role is almost the same as a wholesaler although the pharmacist is seen as just a tradesman, rather than a professional. Although their drug preparation role is no longer valid, pharmacists are responsible for the treatment they give to the patient and therefore have responsibility with respect to the health of the community as a whole. Such responsibilities do not apply to a wholesaler.

In view of the historiography and material culture analysis, it can be argued that the relationship between a pharmacy and wholesaler is generally a standard relationship with its rules and regulations determined by governmental and other professional authorities. The different roles assumed by the wholesaler and the pharmacist may bring about different expectations for the relationship. While the wholesaler would only care about his profit, the pharmacist would care both about his profit and the health of the general community.

In the collage study, informant 4 gives an example to this. She explains that two pharmaceutical firms can produce drugs that have the same content and function under different names. The wholesaler can try to sell the pharmacist the drug that he bought more advantageously from the producing firm. He may try to show one drug to be better than the other. The pharmacist may get into trouble if one of the client institutions of the pharmacy rejects to reimburse the amount of that drug to the patient. Then the pharmacist has to sell the drug somehow. The easiest way is to sell the drug over the counter (i.e., to patients without a prescription). Here, the pharmacist is left to his/her conscience. If the pharmacist knows that another drug is more appropriate for the characteristics of the patient and can heal him/her as well, then he may experience a tradeoff between her professional ethics and her financial bottleneck. Therefore, the different roles assumed by these two parties might impact the formation of trust between them. Granting trust to the wholesaler might pose a risk on the side of the pharmacy since the wholesaler works with a financial motive most of the time. Therefore, it might not be wrong to say that a trust-based relationship between the two parties will affect the performance of a pharmacy positively.

5.2.5. A Summary of the Qualitative Findings

In the drug wholesaler – pharmacy dyadic relationship in Turkey, trust between the two parties is important for the length and well being of the relationship. In this particular relationship, trust consists of many components. Pharmacists and wholesalers both calculate the costs of another party cheating. They trust each other if they believe that it would be in the best interests of the other party not to cheat. Cheating by a pharmacy means that the pharmacy does not pay its debt regularly or does not pay it at all. Pharmacists feel that wholesalers trust them because they send the drugs to pharmacists who order by phone without any legal contract. Cheating by a wholesaler means that the wholesaler charges more debt to the pharmacy than it really has, does not extent credit to the pharmacy when the pharmacist is in a tight situation, or sells drugs directly to the patient (which is an act that is forbidden by law). These are critical mistakes that drastically deteriorate the reputation of the wholesaler.

To deter wholesalers from cheating, pharmacists use a ranking system for drug wholesalers to ensure smooth flow of operations (i.e. timely and accurate delivery). They shift their orders to the higher ranking wholesalers, pay their debt to these wholesalers on time, and do not act opportunistically towards these wholesalers. The length of time that the relationship lasts is another factor that the parties think should deter the other from cheating. They think that over time, a certain bond between the buyer and the seller defined by mutual norms, sentiments, and friendship forms.

Competence is also important for the formation of trust between the parties. In this relationship, competence means that the other party is able to reliably deliver a particular service, duty, or obligation. To be able to believe in this, the trusting party must have information about the trustee's past behavior and promises. Repeated interaction enables a pharmacy to better assess the reliability of a wholesaler. A wholesaler who "says what he does and does what he says" is more likely to be trusted since he can be relied upon to act in a predictable manner. Competence is also related to integrity or honesty of the other party, which refers to the extent to which a person repeatedly acts according to a moral code and standard. In the drug wholesaler–pharmacy relationship, these moral standards include the deontological norms of the sector as well. Competence can also be explained as the ability of a person to work with people, such as listening and/or negotiating effectively, etc. These types of skills are especially important for the 'phoneman' of the drug wholesaler who receives orders from pharmacies on the phone and the sales representative who is in direct contact with pharmacists. Competence refers to an individual's experience, wisdom, and common sense. This may occur in specific areas such as knowing the specifics of a drug. All of the members of the drug wholesaler should have such a competence, especially the phoneman. For example, if the pharmacist is working with an experienced phoneman who knows about the intricate details of the business, the pharmacist is more likely to trust him.

Another component of trust in the drug wholesaler-pharmacy relationship is goodwill. In this relationship, goodwill can be described as 'doing favors'. Pharmacists think that by actively working to meet the pharmacists' financial and service-related needs, the wholesaler will ensure the continuation of the relationship since pharmacists will feel indebted. This can be explained as a 'helped him when he

really needed it' situation. So a wholesaler's occasional willingness to help the other party in a critical situation often leads to a deeper sense of trust by the pharmacist and a greater commitment to maintaining the relationship in the future.

Another indicator of goodwill trust is the commitment by the wholesaler to protect the rights and interests of the pharmacy even under extraordinary situations. For example, if a pharmacy suddenly gets a rush order from a major customer institution that requires a drug that is currently not in stock and is scarce in the market, there is a need for the drug wholesaler to procure the drug. In such a situation, the wholesaler is putting extra effort in order to protect the rights of the pharmacy. Another aspect that invokes goodwill trust is confidential information sharing. This involves the extent to which a wholesaler shares private information with pharmacies and thereby provides a signal of 'good faith'. For instance, if the drug wholesaler knows that a certain social security institution will quit reimbursing a certain drug or that the price of all the drugs will decrease by a certain percentage in the near future and shares this information with the pharmacy, then the pharmacy will think that the wholesaler is acting in 'good faith'.

Reputation is another important component of trust in this particular relationship. Reputation can be explained as the extent to which pharmacists in the sector believe a wholesaler is honest and concerned about its customers and the deontological rules of the sector. So if a pharmacist thinks that a drug wholesaler's reputation is well deserved, trust will be more easily granted.

5.2.5.1.Trust and risk taking

As the qualitative research suggests, trusting in someone is a psychological need. Trust brings about psychological relief, a steady state of mind and peace. However, it is as well and can easily be broken and therefore it is risky to trust someone. In the case of a drug wholesaler–pharmacy dyad, trusting in the wholesaler might lead to a tendency toward risk taking on the side of the pharmacy. Pharmacists who believe in the goodwill, reliability, reputation, and competence of the wholesaler and who calculate that the benefits of cheating will be lower than not cheating will trust their wholesaler.

As a result of this trust, the pharmacist might buy drugs in huge amounts since he thinks that his wholesaler will not desert him and support him in tight

situations (i.e., when the payments of a governmental institution are deferred). He might also make contractual agreements with institutions that have strict service rules (such as the military) believing in the reliability of the service of his wholesaler. He might further enter into drug promotions (i.e., quantity discount) offered by his wholesaler believing in his good faith.

Therefore, in this relationship, the risk that pharmacists face takes two forms: *contractual risks* and *purchase related risks*. Contractual risks comprise the risk due to delays in the payments of public social security institutions (which hold the majority of the market) to pharmacies. Pharmacies that cannot pay their debt on the specified date (generally one month after the receipt of drugs) to the wholesaler are charged a certain amount of interest on their debt. As a result, entering contracts with public institutions in general poses a risk for the pharmacies that can at times be fatal. Another contractual risk has to do with delays in the delivery of drugs by wholesalers. Entering a contract with many institutions that have varying drug demands might pose another risk for pharmacies. This may be a problem for a pharmacy especially in the case of the orders by the military institutions. Public institutions are major buyers and hold the majority of the drug sales market in Turkey (i.e., 70% of total sales). Therefore military institutions are one of the most important clients of pharmacies. They buy drugs in large quantities and want it delivered exactly on time due to the strict norms regarding the passage of shipments from the main gates. If the pharmacy cannot deliver the order on time, he/she gets a warning and a certain credit is decreased from the total credit points of that pharmacy.

Purchase related risk consists of the purchases of pharmacies from wholesalers in huge amounts. Every pharmacy has a certain capacity and variety of drugs that it can sell. The wholesaler, if acting in good faith, should know about the drug capacity and sales format of the pharmacy and suggest drugs accordingly. If the wholesaler sells the drugs just for the sake of emptying its stock, then the pharmacist may be at a risk of not being able to sell the drugs and pay its debt to the wholesaler. The reason for not selling the drug may be the delays in payments of public social security institutions, lack of demand for the drug by the customers of the pharmacy (especially true for small pharmacies not located at city centers), or a decision by the

cabinet not to reimburse the amount of a specific drug to pharmacies (though the pharmacist has already sold the drug to some public institutions).

As explained in the qualitative analysis section, wholesalers sometimes might not deliver reliable service or act in good faith and might even try to get control of a pharmacy if the pharmacist cannot pay his debt. They might try to convince the pharmacist to buy drugs that are no longer reimbursed by institutions. This, in turn, brings about a certain degree of distrust by pharmacists for their wholesalers. As a result, both pharmacists and wholesalers should keep track of every single transaction either through computers or an assistant in order to be able to document their operations and this costs time, effort, and energy on both sides.

5.2.5.2.Trust and transaction costs, cooperation, conflict resolution, and satisfaction

Besides the relationship between trust and risk taking, the qualitative analysis provides support for the relationship between trust and transaction costs, cooperation, and satisfaction (see Table 16 on page 54). The transaction costs between a pharmacy and drug wholesaler involve:

1) Finding a suitable drug wholesaler,
2) Determining the working conditions,
3) Monitoring for opportunism,
4) Solving problems that arise in the course of operations.

At the start out phase of a pharmacy, the pharmacist refers to an elderly pharmacist to advise him/her an appropriate and trustworthy drug wholesaler with whom to work. While the pharmacy is continuing its operations, the pharmacist selects his/her drug wholesaler based on the drug wholesaler's reputation. To determine the working conditions of the dyad, the pharmacist relies on the reliability and competence of the drug wholesaler to carry out his obligations. If the drug wholesaler is perceived to be reliable and competent, the pharmacist does not spend much time and effort on determining the minute details of the working conditions. The drug wholesaler's trustworthiness also reduces the time and effort the pharmacist spends in monitoring the wholesaler's operations for opportunism. This way, problem solving becomes easier and straightforward since each party believes in the other's goodwill, competence, and reliability.

Cooperation between a drug wholesaler and a pharmacist involves planning, coordination, communication, and goal congruence. The more one party knows about the other party in the course of a repetitive and ongoing relationship, the more they trust each other. This trust, in turn, brings about a synchronization of goals and objectives between the parties which eliminates divergence of interests and leads to better coordination and planning to achieve mutual objectives.

Conflicts between a pharmacy and drug wholesaler arise due to a perception of opportunism on the side of the drug wholesaler by the pharmacist. If the wholesaler miscalculates the pharmacist's debt and/or does not extend credit in a tight situation, this is a sign of opportunism of the wholesaler and negatively affects his trustworthiness. If there is trust between the parties, they will give each other greater leeway in mutual dealings. For example, the pharmacist might 'calculate' that it is a huge mistake on the side of the wholesaler to behave opportunistically and will attribute his behavior to misunderstanding or simply unintentional error. This way, either conflicts do not arise or are solved more easily than if there were no trust between the parties.

As a result of all the above outcomes of trust (i.e., transaction cost reduction, higher cooperation, and better conflict resolution) the parties will feel a general contentment and psychological relief toward the relationship which in turn increases the satisfaction from mutual dealings. In the view of the above discussion, it can be concluded that the qualitative study of the drug wholesaler-pharmacy dyadic relationship provides support for the generic hypotheses outlined in Chapter Three.

In the next section the quantitative methods used for testing the hypotheses of the study will be outlined.

CHAPTER 6

QUANTITATIVE METHODS

In this chapter, the research design, the sampling plan, data collection method, pretest, and measure development of the study will be explained. The research design of this study is cross sectional and based on a field survey.

6.1. Sampling Plan

The sampling plan is divided into four steps: 1) definition of the population, 2) identification of the sampling frame, 3) selection of a sampling procedure, 4) determination of the sample size (Churchill 1983).

The population for this study is privately owned pharmacies in Ankara. This currently constitutes around 1,500 pharmacies. The sampling frame is the list for the year 2004 provided by Ankara Pharmacists' Chamber. The list is organized with respect to the locations of pharmacies in ten regions in Ankara. The sampling procedure was cluster sampling; a sample of pharmacies was taken from each of the ten regions. This allowed the sample to contain a representative proportion of pharmacies from each region. The sample size for each region was determined according to the number of pharmacies in that region.

The sample size was predetermined to be over 300 since this is the minimum number of observations required for doing a reliable factor analysis (both exploratory and confirmative).

6.2. Data Collection Method

The data was collected by an independent research agency under supervision of the researcher. The number of pharmacies to be visited in the ten regions of Ankara was determined according to the number of pharmacies in that region. The data collectors of the agency would visit the pharmacies in a certain region on a

random basis. The pharmacy is selected on a random basis and if the data collectors were refused by a pharmacy in a certain region, they would try another pharmacy in the same area to conduct the survey. If they conducted the survey in a pharmacy on a certain street, they were asked to call on a pharmacy on another street in the same region in order to increase the geographic diversity of the pharmacies in the sample.

According to Campbell (1955), certain criteria should be met to assure that a reliable source (key informant) is selected. One criterion is that the informant be knowledgeable about the subject of the inquiry. A second requirement is that the informant be able to communicate effectively with the researcher. In light of these considerations key informants were selected to be owner pharmacists, pharmacy owners, managers, intern pharmacists, clerks, and others (i.e., pharmacist's parents, friends, etc.) knowledgeable about the business. Different types of respondents were selected for the purpose of decreasing the potential for respondent bias. For confidentiality purposes the names of the respondents were not asked. Respondents were offered a copy of a summary report upon completion of the study to motivate the completion of the questionnaires.

6.3. Pretest

Before doing the pilot study, the questionnaire items were reviewed by seven people. Four were research assistants, one was my mother, one was a doctor, and one was my son's babysitter. Reviewers with diverse backgrounds were chosen in order to pinpoint possible problem areas in the questionnaire with respect to comprehensibility and order of the questions. Later, three peers (professors and members of the Ph.D. thesis committee) reviewed the questions. On the basis of these reviews, the questions were revised. Then the questions were back-translated into English by a research assistant not familiar with the topic and who has fluent English. The reverse translated items were checked for correspondence with the original items by a colleague and myself. These steps took place between January 3rd and February 25,th 2004.

After the revision of the items, a pilot test of the questionnaire was conducted between the beginning and middle of March 2004. The pilot study was performed to test the appeal of the cover letter, to check the interpretability of the construct items, and to examine the utility of the scales. The pilot test was done on a sample of nine

pharmacies in the Ayrancı, Kavaklıdere, Maltepe, Sıhhiye, and Ulus regions in Ankara.

The items were revised once more in light of the responses from the pharmacists. The order of some of the items was changed, some were eliminated to purify the measure, and some items were changed since they were not well understood. After the changes, three people evaluated the measures for comprehensibility. Later two people did a reverse translation, the original items were compared to this translation, and necessary changes were made.

6.4. Operational Measures

A major question was how to operationalize interfirm trust. The interfirm trust measure was chosen as a result of a thorough investigation of the literature and interpretation of the qualitative data. As a result of this investigation some of the interfirm trust scales in the literature were eliminated and some were retained. Among those that were retained, the following studies were considered as relevant for the current study: Zaheer et al. (1998), Doucette (1993), and Möllering (2003). Doucette's (1993) study is a Ph.D. dissertation that also measured performance outcomes of interfirm trust in the relationship between pharmacied and drug wholesalers in the U.S. The relevance of this study for the current purposes of this research is obvious. Both of the other two studies were chosen for the match between the items they use and the trust definitions that we adopt, and also with respect to their relevance for the current context of the study. Some of the items in the above mentioned studies were eliminated due to irrelevancy for the current context of the study (i.e., manufacturing vs. service sector) and redundancy (i.e., only one of the items was chosen among those having the same meaning). The items were adjusted based on our knowledge of the context and the relationships in Turkey.

Except for the 'risk taking' measure, which includes new items developed for this study, the questionnaire items for the trust outcome measures were chosen based on their relevance for a study measuring the performance outcomes of interfirm trust, the research context of the present study, and results of the qualitative data. In this respect, the items for the construct 'transaction costs' were adapted from Grover and Malhotra (2003), the items for the 'cooperation', 'conflict resolution', and

'satisfaction' measures were adapted from Doucette (1993) (refer to Table 6.1 for a review of the list of items).

All items on the questionnaire have five-point response scales because most of the original questions from which the items were adapted had five-point scales and it was thought that having the same scale for all the questions would increase the uniformity of the overall questionnaire. The person filling in the questionnaire was to choose the pharmacy's primary drug wholesaler (since it is the wholesaler that mostly affects the performance of the pharmacy compared to other wholesalers) and answer the questions with that particular wholesaler in mind (henceforth called Wholesaler X).

6.5. Response Rate and Non-response Bias

Since the questionnaires were not mailed, there were no non-respondents in the usual sense. However, some of the pharmacies visited refused to respond either because they did not have time or did not want to participate. The number of pharmacists that did not respond in this way was 131 in total. These pharmacies were evenly distributed across the ten regions in Ankara from which the sample was drawn. However, it is not possible to compare those who did not respond to those who did, since the research agency did not keep track of the nonrespondents, though they were told to do so in advance. Yet we were able to reach the names of eight pharmacies that refused to respond. All of these eight pharmacists refused to respond since they were busy at the time the data collector came. Since eight pharmacies is a small number to calculate a healthy statistical difference test, these non-respondent pharmacies were contacted by phone instead to understand whether they represented a biased sample compared to the general characteristics of the pharmacies that responded. They were asked questions 1-5, 7 and 9 in the questionnaire. These questions were general questions about pharmacy characteristics and would signal whether there was any significant bias in the non-respondent sample or not. It was found that the non-respondent pharmacies were in no sense different from the respondent pharmacies in general and that they did not represent a consistent bias with respect to the general characteristics sought.

Table 6.1: Construct measures

Measures and Items	Internal consistency/ Reliability (α)	Items adapted from
Interfirm Trust 1. Wholesaler X is an excellent source of accurate information. 2. In a tight situation, Wholesaler X would put its own interests first and those of my pharmacy second. 3. Wholesaler X is very reliable. 4. The employees of Wholesaler X really know their business. 5. Wholesaler X is very honest. 6. If Wholesaler X promises to do something for my pharmacy, it may not be done. 7. Wholesaler X tries to help our pharmacy achieve its goals. 8. Wholesaler X tells both the advantages and disadvantages of its services. 9. Wholesaler X is consistent in its applications. 10. Wholesaler X has always been evenhanded in its negotiations with us. 11. Wholesaler X may use opportunities that arise to profit at our expense. 12. I am hesitant to transact with Wholesaler X when the contract specifications are vague. 13. Wholesaler X has a good reputation in the industry. 14. Legal disputes with Wholesaler X are unlikely. Scale: 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree.	0.83	Doucette (1993); Möllering (2003); Zaheer et al. (1998)
Transaction costs 1. Significant effort was required to gather the information necessary to outline the working relationship with Wholesaler X. 2. There were many unspecified terms which had to be worked out as the relationship with Wholesaler X developed. 3. It takes significant effort to detect whether or nor Wholesaler X conforms to specifications and quality standards. 4. It is easy to tell if we are receiving fair treatment from Wholesaler X or not. 5. Accurately evaluating wholesaler X requires a lot of effort. 6. I don't have much concern about Wholesaler X taking advantage of this relationship. 7. The approach to solving problems in our relationship with Wholesaler X is clear-cut. 8. Problem solving is often challenging with Wholesaler X. Scale: 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree.	0.75	Grover and Malhotra (2003)

Table 6.1 (cont'd)		
Measure items	Internal consistency/ Reliability (α)	Items adapted from
Cooperation 1. The activities between us and Wholesaler X are well coordinated. 2. We have joint interests with Wholesaler X. (deleted item)* 3. There is respect between my pharmacy and Wholesaler X. 4. There is mutual confidence between my pharmacy and Wholesaler X. 5. Working with Wholesaler X allows us to pursue our own goals. Scale: 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree.	0.69 (before deletion) 0.78 after deletion	Doucette (1993)
Conflict resolution 1. Disagreements with Wholesaler X are solved by working together. 2. Wholesaler X often forces us to do what it wants. 3. We both cooperate to solve disagreements. 4. Wholesaler X shows concern for my pharmacy's welfare. 5. Wholesaler X does not compromise. 6. Wholesaler X compels us to meet its demands. Scale: 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree.	0.75	Doucette (1993)
Satisfaction 1. Wholesaler X is a good company with which to do business. 2. We would discontinue doing business with Wholesaler X if we could. 3. If we had to do it over again, we would do business with Wholesaler X. 4. We are satisfied with the products and services we get from Wholesaler X. 5. We are satisfied with our dealings with Wholesaler X. Scale: 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree.	0.83	Doucette (1993)
Risk Taking 1. I will make agreements with social insurance institutions that have the risk of defaulting on their payment as long as Wholesaler X is my primary wholesaler. 2. I will make agreements with military institutions as long as Wholesaler X is my primary wholesaler. 3. I buy the drugs Wholesaler X advises me to buy even if I do not need them at that moment. 4. I buy the drugs that Wholesaler X advises me to buy even if I have not sold those drugs before. 5. I enter campaigns offered by Wholesaler X even if I do not need to at that moment. Scale: 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree.	0.83	New items designed for this study

Table 6.1 (cont'd)		
Measure items	Internal consistency/ Reliability (α)	Items adapted from
Dependence 1. Wholesaler X is important for our future profitability. Scale: 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree. 2. How easy would it be for you to replace wholesaler X? (deleted item) * Scale: 1-very difficult, 2-slightly difficult, 3-neither difficult nor easy, 4-easy, 5-very easy. 3. Overall, how would you rate you pharmacy's dependence on Wholesaler X? 4. Overall, how would you rate Wholesaler X's dependence on your pharmacy? Scale: 1-not at all dependent, 2-quite independent, 3-neither dependent nor independent, 4-quite dependent, 5-totally dependent.	0.59 (before deletion) 0.69 (after deletion)	Doucette (1993); Svensson (2004)
Commitment 1. We strive to maintain a strong partnership with Wholesaler X. 2. Wholesaler X is deeply committed to its relationship with us. 3. Wholesaler X makes constant efforts to maintain a good relationship with us. Scale: 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree.	0.68	Möllering (2003); Svensson (2004)

* Pharmacists misunderstood the second item in the cooperation measure as joint partnership with the wholesaler. They also misunderstood the second item in the dependence measure as finding another wholesaler for ordering drugs for a particular order rather than finding another primary wholesaler.

In the next chapter, the results of quantitative analysis and test of hypotheses will be provided.

CHAPTER 7

RESULTS

7.1. Characteristics of the Sample

Sample characteristics were sought in questions 1-11 in the questionnaire. The percentages are shown on table 7.1 below. We see that 50% of the respondents have been working in the sector for less than 10 years, 25% between 10-20 years and the rest for more than 20 years. 48% of the respondents are male and 51% female. 65% are owner pharmacists, 27% are clerks, and others are 8%. Of the 360 pharmacies, 59% have contractual agreements with less that 5 institutions (i.e., private or public) and 86% have agreements with less than 10 institutions. 70% of the pharmacies work with less than 5 drug wholesalers and around 10% of them work with more than 7 wholesalers. Therefore, generally the sample is composed of small and medium sized pharmacies. 42% of the pharmacies have been working with their wholesalers for 6 years or less while 20% of them have been working for 10 years or more. A major percent of pharmacies (80%) did not have any interruption in their relationships with their primary drug wholesalers. Those that did generally had a problem with payment of debt and interest charges (52%). The next important problem is the service quality of the wholesaler and the phoneman (18%). Most pharmacists (around 30%), unfortunately, did not want to specify the reason for the interruption in their relationship with the primary wholesaler. Finally, of the 360 pharmacies, 86% have private drug wholesalers (i.e., not a pharmacy cooperative). This characteristic is important for the validity of the measures since the relationship between a cooperative and a pharmacy is generally not dependent on profit earning motives. Pharmacies buy drugs from cooperatives to support them and thereby create an alternative for profit seeking wholesalers.

Table 7.1: Characteristics of the quantitative sample

Sex	**%**	**Occupation**	**%**
Male	48	Owner pharmacist	65
Female	52	Clerk	27
		Other	8
Years in the sector	**%**	**# of wholesalers**	**%**
<10	50	<5	70
10-20	25	>5	30
>20	25		
Length of the relationship	**%**	**Type of wholesaler**	**%**
<6 years	42	Private	86
6-10	38	Cooperative	14
>10	20		
# of social security institutions worked with	**%**	**Type of primary wholesaler**	**%**
<5	59	Locally produced drugs*	27
5-10	27	Import drugs**	3
>10	14	Locally produced and import drugs***	70
Interruption in the relationship	**%**	**Reason for interruption in the relationship**	**%**
Yes	20	Payment of debt and interest	52
No	80	Service quality	7
		Phone man	11
		Other (not specified)	30

7.2. Missing Data

Data were analyzed according to both the amount and the pattern of missing data. The missing data per item is shown in Table 7.2 below. The largest missing data were observed for the 43rd item; there were 8 cases with missing data for this item. The amount of missing data was 8/360 = 0.02%. Later, the data were sorted to understand whether there was any pattern for the missing data in other variables. It was seen that missing data were not dependent on any variable and therefore was missing completely at random (MCAR) (Little and Rubin 2002). According to Roth (1994), if the data is MCAR and the amount of missing data is between 1-5%, one of the suggested missing data techniques to use is pairwise deletion and this technique was used in the rest of the analysis.

* Beşeri
** İthal
*** Beşeri ve ithal

Table 7.2: Missing values per variable

Variable number	Number of missing values	Variable number	Number of missing values	Variable number	Number of missing values
1	0	26	2	49	2
2	0	27	0	50	2
3	3	28	1	51	0
4	1	29	2	52	0
5	0	30	3	53	1
6	3	31	1	54	1
7	0	32	1	55	1
9	3	33	3	56	1
10	2	34	0	57	1
12	0	35	1	58	3
13	2	36	1	59	2
14	0	37	0	60	0
15	2	38	1	61	1
16	3	39	2	62	0
17	1	40	1	63	0
18	0	41	4	64	0
19	4	42	0	65	0
20	0	43	8	66	0
21	2	44	0	67	0
22	0	45	5		
23	3	46	0		
24	0	47	2		
25	6	48	1		

7.3. Normality

All the items were tested for normality as suggested in Hair et al. (1995). For this analysis, the normal probability plots of each item were visually analyzed and all items conformed to the requirements for normality. Since it is not possible to calculate multivariate normality, it was assumed that since all the variables were univariate normal, they would as well be multivariate normal (Hair et al. 1995).

7.4. Suitability for Factor Analysis

Before doing exploratory and confirmatory factor analysis, all the indicator variables for the TRUST, TRANSACTION COSTS, COOPERATION, CONFLICT

RESOLUTION, SATISFACTION, RISK TAKING, COMMITMENT and DEPENDENCE constructs were checked to understand whether they were suitable for factor analysis or not. For the indicators of a construct to be suitable for factor analysis, the anti-image matrix of the indicator variables should yield low correlations and the measure of sampling adequacies (MSAs) should be above 0.60 (Hair et al. 1995). All the indicator variables for the constructs conformed to these specifications and were deemed suitable for factor analysis.

7.5. Measure Validation

The mean values and standard deviations of the main constructs are provided in Table 1 in Appendix A. Main construct measures were initially examined for reliability by computing the Cronbach alpha coefficient for each construct. As shown in Tables 2-9 in Appendix A and Table 6.1 in Chapter Six, all measures have high levels of reliability and are above the recommended 0.7 level (or very near to that) (Nunnaly 1978) except for the DEPENDENCE construct which had a 0.59 alpha coefficient. When the items of this construct were analyzed individually it was seen that deletion of item number 65 would increase alpha to 0.69 which was an acceptable level. While entering the data, it was observed that some of the respondents misunderstood question 33 and 65 and wrote down on the question the way they understood it. The deletion of question 33 increased the Cronbach alpha of the COOPERATION construct from 0.69 to 0.78. Therefore, questions 33 and 65 were problematic both statistically and with respect to the content validity of the measures and were eliminated.

Convergent validity of the principal constructs were examined through partial correlations of construct items with their principal constructs and other constructs. Convergent validity is supported when a construct measure correlates appreciably with measures which theory suggests it should (Campbell and Fiske 1959). Discriminant validity is supported when a construct measure does not correlate significantly with measures the theory says it should not (Campbell and Fiske 1959). As shown in Table 7.5 below, the items of each construct have high partial correlations with their principal constructs, while they have low correlations with the other constructs. Discriminant validity among traits is achieved when the trait correlations differ significantly from 1.00 (Schmitt and Stults 1986). Generally,

constructs that have correlations over 0.9 are problematic (Bagozzi et al. 1991). As shown in Table 7.3 below, the Pearson correlations between the different components indicating different constructs (traits) are smaller than 0.9, indicating discriminant validity between main construct measures. Also, that the different constructs (i.e., trust, cooperation, conflict resolution, transaction cost, etc.) are highly correlated is indeed suggested in theory and therefore the significant correlations between them are not critical for the discriminant validity assessments of the measures as long as they are lower than 0.9.

Table 7.3: Correlation between main construct measures

	Trust	TC	Conflict	Cooperation	Satisfaction	Risk	Commitment	Depend
Trust	1							
Trans	-.594	1						
Conflict	.662	-.629	1					
Coop	.466	-.410	.445	1				
Satis	.624	-.550	.615	.622	1			
Risk	.192	-.136	.179	.182	.185	1		
Commit	.498	-.428	.502	.481	.469	.276	1	
Depend	.336	-.224	.311	.263	.266	.297	.540	1

However, the constructs did not provide support for Campbell and Fiske's (1959) multi-trait multi-method matrix (MTMM) assessment for convergent and discriminant validity. The multi method was thought of as the different key informants from whom the data was collected (Bagozzi et al. 1991). Since the data were generally collected from either owner pharmacists or clerks, these two groups represented the two different methods of data collection. From this perspective, it was hypothesized that the constructs that measured the same concept (i.e., trust, cooperation, etc.) should correlate highly, independent of the key informant from which they were collected (mono-trait multi-method matrix) and that these correlations would be higher than the correlations of constructs being measured with the same method (i.e., collected from the same informant), but measuring different constructs (mono-method multi-trait matrix). The MTMM matrix criteria were only partially met by the SATISFACTION measure that had a significant correlation between the measures calculated for different respondents (i.e., pharmacist vs. clerk) (r= -.227) (Table 7.4). However, the other construct correlations did not support the criteria. The correlations of data collected for the same constructs from different key informants were much lower than the correlations of data collected from same

informants yet measuring different constructs. This can be explained as the difference in the way a clerk and an owner pharmacist thinks about the items of interest. Since these two types of key informants are very different from each other in terms of education, experience, and most importantly in their vulnerability to risk, it is not so surprising that they have differing concerns when thinking about their relationship with the wholesaler.

7.6. Factor Analysis

After determining the suitability of each construct for factor analysis, exploratory and confirmatory factor analysis of the construct measures were done (in Appendix B). The factor analysis of the trust, cooperation, conflict resolution, satisfaction, risk taking, commitment and dependence measures are examined below.

Table 7.4: Correlation between the SATISFACTION constructs measured by two different respondents (methods)

		Pharmacist	Clerk
Pharmacist	Pearson correlation	1	-.227*
	Sig.(2-tailed)	.	.022
	N	101	101
Clerk	Pearson correlation	-.227*	1
	Sig.(2-tailed)	.022	.
	N	101	101

* Correlation is significant at the 0.05 level

7.6.1. Trust Measure

Exploratory factor analysis (principal components extraction with varimax rotation) of the trust measure (14 items; questions 12-25 in the questionnaire) yielded 3 components. These components could be named as TRUST, DISTRUST and CONTRACTUAL TRUST respectively (see Table 7.6 below). The components were measuring different aspects of trust and therefore could be correlated. Correlation analysis between the components showed high correlation between components as expected (Table 3 in Appendix B). Since varimax rotation is suitable for analyzing the loadings of components which are orthogonal, and oblique rotations are suitable for component factors that are correlated with each other (Hair et al. 1995), the analysis was repeated using oblimin and promax rotations. The results were the same. Also, since principal component analysis assumes that the unique variance of

each item is small, that the common variance is high, and distributes both unique and common variance across items, it might not be suitable for a construct with items having communalities less that 0.60 in general (Hair et al. 1995) (see Table 1 in Appendix B).

Table 7.5: Partial correlations of construct items with their main constructs

	Trust	Cooperation	Conflict	TC	Satisfaction	Risk
Trust1	**.606**	-.015	-.073	.030	.156	.015
Trust2	**.306**	-.236	-.097	.090	-.223	-.050
Trust3	**.706**	.000	-.053	.036	-.029	.011
Trust4	**.631**	-.060	-.174	.155	-.081	-.055
Trust5	**.766**	-.006	-.103	.085	-.092	.135
Trust6	**.508**	-.119	.078	-.045	-.014	-.017
Trust7	**.688**	.153	.029	.118	.083	.049
Trust8	**.639**	.113	-.002	.059	.020	.006
Trust9	**.714**	.107	-.092	-.013	.196	.040
Trust10	**.670**	.134	.036	.061	-.018	.129
Trust11	**.543**	-.096	.193	-.143	-.191	-.093
Trust12	**.506**	-.126	-.045	-.088	-.141	-.005
Trust13	**.423**	.244	.065	-.081	.294	.005
Trust14	**.406**	.212	.15	-.139	.238	-.025
Cooperation1	-.022	**.698**	-.026	.041	-.225	.000
Cooperation2	-.093	**.262**	-.191	.051	-.095	-.001
Cooperation3	-.080	**.799**	-.057	.040	.042	-.129
Cooperation4	.206	**.855**	.197	-.194	.302	.060
Cooperation5	-.057	**.782**	-.083	.080	-.005	.085
Conflict1	-.079	.102	**.647**	-.034	.135	.073
Conflict2	-.048	-.221	**.618**	.012	-.247	-.105
Conflict3	.011	.291	**.687**	-.058	.183	.058
Conflict4	.215	.174	**.653**	.074	.155	.182
Conflict5	.004	-.154	**.724**	-.009	-.024	-.024
Conflict6	-.052	-.171	**.686**	.002	-.176	-.139
Transaction1	.087	.202	.077	**.581**	.251	.032
Transaction2	.098	.153	.044	**.669**	.011	.204
Transaction3	.081	.041	-.009	**.614**	.047	.143
Transaction4	-.110	-.259	-.052	**.538**	-.147	-.148
Transaction5	.216	.205	.215	**.658**	.134	.020
Transaction6	-.132	-.151	-.092	**.561**	-.076	-.121
Transaction7	-.170	-.248	-.106	**.550**	-.219	-.134
Transaction8	-.106	.046	-.130	**.668**	-.059	.009
Satisfaction1	-.019	.319	-.065	.066	**.777**	.090
Satisfaction2	.056	-.017	.235	-.060	**.716**	-.132
Satisfaction3	-.059	.305	-.116	.089	**.796**	-.059
Satisfaction4	-.004	.058	-.064	-.031	**.789**	-.099
Satisfaction5	.040	-.012	-.007	-.112	**.836**	.074
Risk taking1	.273	.259	.308	-.232	.259	**.669**
Risk taking2	.192	.198	.283	-.280	.260	**.665**
Risk taking3	-.071	-.099	-.200	.189	-.048	**.739**
Risk taking4	-.196	.244	-.246	.200	-.300	**.701**
Risk taking5	-.278	-.205	-.271	.221	-.257	**.624**

Therefore, common factor analysis (principal axis factoring) was done with promax and oblimin rotations for the TRUST measure. This analysis yielded the same three-factor solution (Table 4 in Appendix B). This three-factor solution was then tested using LISREL 8.3 through confirmatory factor analysis (Table 6 in Appendix B). The results (Table 7 in Appendix B) showed relatively good fit of the three-factor model to the data (RMR= 0.05, GFI = 0.89, NFI = 0.87, CFI = 0.90, IFI= 0.90). A second factor analysis was run to test the fit of the data to a four-factor model that incorporates four dimensions of trust. The results for this four-factor model were better compared to the three-factor model indicated in exploratory factor analysis (Table 7.7 below). The chi-square statistic was lower than that of the three-factor model and the fix indices showed a better fit of the four-factor model to the data (RMR = 0,049, GFI = 0.9, NFI = 0.88, CFI = 0.91, IFI= 0.91). Therefore, the ultimate components of the TRUST measure could be named as: goodwill trust, competence trust, contractual trust, and distrust.

Table 7.6: Rotated component matrix of the TRUST items

	Component		
	1	2	3
trust1	.603		
trust2		.640	
trust3	.693		
trust4	.745		
trust5	.724		
trust6		.639	
trust7	.762		
trust8	.705		
trust9	.731		
trust10	.717		
trust11		.668	
trust12		.592	
trust13			.793
trust14			.737

Extraction method: Principal component
Rotation method: Varimax

7.6.2. Transaction Cost Measure

Exploratory factor analysis with principal components extraction and varimax rotation of the transaction cost measure (8 items; questions 50-57 in the questionnaire) yielded two major components (Table 7.8 below). These factors could be named as POSITIVE TRANSACTION COST, which include items worded

negatively, and NEGATIVE TRANSACTION COST, which include items worded positively, respectively. The components could be explained as an increase in transaction costs - both 'search and contracting' and 'monitoring and enforcement costs' (including problem solving) - and a decrease in transaction costs respectively. Though a one-component result was expected that incorporates both search and contracting and monitoring and enforcement costs, the items in the two components could actually be measuring the same thing, but might have loaded to different components as a result of response set. Response set can be defined as "a general tendency to respond to interview or questionnaire items in a particular manner, irrespective of their content" (Carmines and Zeller 1979, p. 67). It can therefore be argued that since the items that loaded on the POSITIVE TRANSACTION COST factor were worded negatively and those that loaded on the NEGATIVE TRANSACTION COST factor were worded positively, these two factors might actually be measuring the same thing (Carmines and Zeller 1979). To understand this, the above-stated two empirical dimensions of the TRANSACTION COST (TC) measure were correlated with a set of theoretically relevant variables. Following the suggestions of the theory on transaction costs, the theoretically relevant variables were chosen to be trust and conflict resolution.

Table 7.7: Confirmatory factor analysis of the TRUST items - 4 factor solution

	Component			
	goodwill	competence	distrust	contractual
trust1		.669		
trust2			.307	
trust3		.793		
trust4		.734		
trust5		.861		
trust6			.601	
trust7	.821			
trust8	.733			
trust9		.807		
trust10	.764			
trust11			.659	
trust12			.584	
trust13				.677
trust14				.674

As can be seen in Table 7.9 below, the correlations of the two components of the transaction cost measure with a given external variable are almost identical in

strength, direction, and consistency and the differences between correlations are not significant. Therefore, it can be argued that these two components actually measure a single dimension of transaction costs. Further support for this argument comes from the unrotated component matrix of the TRANSACTION COST measure on Table 9 in Appendix B. In the unrotated matrix, it is seen that the items of the second component load highly (i.e., above 0.30) on the first component and have negative signs indicating that these items are worded positively and decrease transaction costs.

Another support for the unidimensionality of the transaction cost measure can be found by doing common factor analysis with oblimin rotation. Common factor analysis is done when the analyst does not want to include random error variance (i.e., response set) in the analysis (Carmines and Zeller 1979). Oblimin rotation is used when the components of the construct measure are assumed to be correlated rather than orthogonal (i.e., when using varimax rotation) (Hair et al. 1995). The common factor analysis with principal axis factoring extraction and oblimin rotation yielded similar results with principal components extraction and varimax rotation in terms of the loadings of items to components. However, the items load highly on the first component on the factor matrix and the total variance explained by the first component is two thirds of that explained by the second component (Tables 7.10 and 7.11 below). This provides further support for the argument that the second component can be ignored.

Table 7.8: Rotated component matrix for TRANSACTION COST items

	Component	
	1	2
trans1	.652	
trans2	.730	
trans3	.702	
trans4		.708
trans5	.745	
trans6		.756
trans7		.822
trans8	.658	

Extraction method: Principal component, rotation method: Varimax

Table 7.9: Correlations between positive and negative transaction cost scales with external variables

	Trust	Conflict
Positive TC	-.459*	-.520*
Negative TC	-.537*	-.514*

*Correlation is significant at the 0.05 level.

Table 7.10: Factor matrix of TRANSACTION COST items

	Component	
	1	2
trans1	.485	
trans2	.626	
trans3	.548	
trans4	-.424	.305
trans5	.592	
trans6	-.464	.377
trans7	-.546	
trans8	.638	.591

Extraction: Principal axis factoring
Rotation: Direct oblimin

7.6.3. Cooperation Measure

Exploratory factor analysis of the cooperation measure (4 items; questions 32, 34-36 in the questionnaire) yielded one major factor using principal component analysis with varimax rotation (Table 7.12 below). Since there was only one component and the communalities were generally higher than 0.60 (Table 11 and in Appendix B), no further extraction and rotation method was used.

Table 7.11: Total variance explained for TRANSACTION COST factors

	Extraction sum of squared loadings			Rotation
	Total	% of Variance	Cumulative %	Total
Factor				
1	2.337	29.718	29.718	2.156
2	.847	10.583	40.300	1.698

Extraction method: Principal axis factoring

7.6.4. Conflict Resolution Measure

Exploratory factor analysis with principal components extraction and varimax rotation of the conflict resolution measure (6 items; questions 26-31 in the questionnaire) yielded two major components (Table 7.13 below). These factors

could be named as POSITIVE CONFLICT RESOLUTION, which include items worded positively, and NEGATIVE CONFLICT RESOLUTION, which include items worded negatively, respectively. The components could be explained as composed of expressions reflecting better conflict resolution and worse conflict resolution, respectively. Though a one-component result was expected that incorporates both dimensions of conflict resolution, the items in the two components could actually be measuring the same thing, but might have loaded ondifferent components as a result of response set (i.e., as in the case of the transaction cost measure analyzed above). To understand this, the above stated two empirical dimensions of the CONFLICT RESOLUTION (CR) measure were correlated with a set of theoretically relevant variables. Following the suggestions of the theory on conflict resolution, the theoretically relevant variables were chosen to be trust and transaction costs.

Table 7.12: Component matrix for COOPERATION items

	Component
	1
coop1	.628
coop2	.841
coop3	.878
coop4	.780

Extraction method: Principal component
Rotation method: Varimax

As can be seen in Table 7.14 below, the correlations of the two components of the conflict resolution measure with a given external variable are almost identical in strength, direction, and consistency and the differences between correlations are not significant. Therefore, it can be argued that these two components actually measure a single dimension of conflict resolution. Further support for this argument comes from the unrotated component matrix of the CONFLICT RESOLUTION measure in Table 15 in Appendix B. In the unrotated matrix, it is seen that the items of the second component load highly (i.e., above 0.30) on the first component and have negative signs indicating that these items are worded negatively and decrease the incidence of conflict resolution.

Another support for the unidimensionality of the conflict resolution measure can be found by doing common factor analysis with oblimin rotation. Common

factor analysis is done when the analyst does not want to include random error variance (i.e., response set) in the analysis (Carmines and Zeller 1979). Oblimin rotation is used when the components of the construct measure are assumed to be correlated rather than orthogonal (i.e., when using varimax rotation) (Hair et al. 1995). The common factor analysis with principal axis factoring extraction and oblimin rotation yielded similar results with principal components extraction and varimax rotation in terms of the loadings of items to components. However, the items load highly on the first component on the factor matrix and the total variance explained by the first component is two-thirds of that explained by the second component (Tables 7.15 and 7.16 below). This provides further support for the argument that the second component can be ignored.

Table 7.13: Rotated component matrix of CONFLICT RESOLUTION items

	Component	
	1	2
conflict1	.752	
conflict2		.811
conflict3	.830	
conflict4	.759	
conflict5	-.428	.614
conflict6		.886

Extraction method: Principal component
Rotation method: Varimax

7.6.5. Satisfaction Measure

Exploratory factor analysis of the satisfaction measure (5 items; questions 37-41) revealed a one-factor solution (Table 7.17 below) using principal component analysis with varimax rotation. Since there was only one component and communalities were generally higher than 0.60 (Table 17 in Appendix B), no further extraction and rotation method was used.

7.6.6. Risk Taking Measure

Exploratory factor analysis of the risk taking measure (5 items; questions 42-46 in the questionnaire) revealed a two-factor solution with principal component analysis and varimax rotation (Table 7.18 below). Since communalities were higher

Table 7.14: Correlations between positive and negative conflict resolution scales with external variables

	Trust	Transaction costs
Positive CR	.571*	-.516*
Negative CR	.544*	-.542*

*Correlation is significant at 0.05 level.

than 0.60 in general (Table 19 in Appendix B) and the correlation between components were low (Table 21 in Appendix B) no further extraction and rotation method was used.

The components could be named as 'contract-based risk' (CONTRACT) and 'purchase-based risk' (PURCHASE). The component denoted CONTRACT reflects that part of risk that the pharmacist faces as a result of his/her contractual agreements with other institutions, whereas the PURCHASE component denotes the risk that arises as a result of the pharmacist's purchases from the wholesaler.

Table 7.15: Factor matrix of CONFLICT RESOLUTION items

	Component	
	1	2
conflict1	-.570	
conflict2	.513	
conflict3	-.570	.414
conflict4	-.637	.306
conflict5	.634	
conflict6	.690	.571

Extraction: Principal axis factoring
Rotation: Direct oblimin

Confirmatory factor analysis was further done using LISREL 8.3 (Table 7.19 below). The results of this analysis (Table 22 in Appendix B) indicated a good fit of the data to the two-factor model (RMR= 0.04, GFI= 0.97, NFI= 0.97, CFI= 0.97, IFI= 0.97). These results are important since the risk taking measure is a new measure developed for this study.

Table 7.16: Total variance explained for CONFLICT RESOLUTION factors

	Extraction sum of squared loadings			Rotation
	Total	% of Variance	Cumulative %	Total
Factor				
1	2.196	36.596	36.596	1.843
2	.768	12.802	49.398	1.761

Extraction method: Principal axis factoring

7.6.7. Commitment and Dependence Measures

Exploratory factor analysis of the dependence (3 items; questions 63, 66-67) and the commitment measures (3 items; questions 58-59, 64) revealed a one-factor solution (Tables 7.20 and 7.21 below) using principal component analysis with varimax rotation. Since there was only one component and communalities were generally higher than 0.60, no further extraction and rotation method was used (Tables 23 and 24 in Appendix B).

Table 7.17: Component matrix for SATISFACTION items

	Component
	1
satis1	.772
satis2	.681
satis3	.775
satis4	.823
satis5	.863

Extraction method: Principal component
Rotation method: Varimax

7.7. Regression

Before doing the regression analysis, the hypothesized measures were analyzed with respect to linearity and normality. In this respect, the mean values of the items indicating a certain measure were calculated. As a result of this calculation, the main measures TRUST, TRANSACTION COSTS, COOPERATION, CONFLICT RESOLUTION, SATISFACTION, and RISK TAKING and moderator measures COMMITMENT and DEPENDENCE were identified. Later, the linearity of the hypothesized relationships between measures was assessed visually through scatter plots. Trust-transaction costs, trust-cooperation relationships were all linear relationships. For trust-satisfaction and trust-risk taking, the scatter plots did not

indicate any non-linear relationship; only the points on the scatter plot were a bit dispersed (not converging on a line). The residual plots of these relationships, however, did not show any pattern. Therefore, no adjustment was done for these variables.

Table 7.18: Rotated component matrix for RISK TAKING items

	Component	
	1	2
risk1		.905
risk2		.908
risk3	.800	
risk4	.870	
risk5	.847	

Extraction method: Principal component
Rotation method: Varimax

Table 7.19: Confirmatory factor analysis for RISK TAKING items – 2 factors

	Component	
	contract	purchase
risk1	.813	
risk2	.894	
risk3		.776
risk4		.900
risk5		.773

To assess normality, the normal probability plots of the above-mentioned main measures were examined. Although the SATISFACTION and COOPERATION measures seemed a bit problematic in terms of normality, logarithmic transformations of these measures did not improve their outlook. Since regression is a technique that is robust to non-normality, no transformation was done for these measures.

Table 7.20: Component matrix – commitment

	Component
	1
commit1	.793
commit2	.830
commit3	.731

Extraction method: Principal component
Rotation method: Varimax

All the observations (cases) in the data were analyzed for influential and outlier effects. In order to do this examination, the z-scores of the main and moderator measures were calculated and cases for which these z-scores are higher than +(-) 2,5 were identified (Hair et al. 1995). As a result of this, the 77th case was eliminated from the regression analysis since this case produced z-scores over +(-) 2,5 for five variables (both main and moderator).

Table 7.21: Component matrix – dependence

	Component
	1
depen1	.665
depen2	.858
depen3	.805

Extraction method: Principal component
Rotation method: Varimax

7.8. Hypothesis Testing

In the next three sections firstly, the main effect of TRUST on TRANSACTION COSTS, COOPERATION, CONFLICT RESOLUTION, SATISFACTION, and RISK TAKING is assessed, then the moderator effect of COMMITMENT and DEPENDENCE on TRUST while predicting COOPERATION and SATISFACTION is sought. Finally, a further analysis is done to analyze the effect of components of TRUST (i.e., goodwill trust, competence trust, contractual trust and distrust) on TRANSACTION COSTS, COOPERATION, CONFLICT RESOLUTION, SATISFACTION, and RISK TAKING.

7.8.1. Main Effects

The regression analysis of the main effects was done with SPSS 11. The first hypothesis sought the relationship between TRUST and TRANSACTION COSTS and the expectation was a negative relationship between the two constructs. The results (Tables 7.22-7.24 below) show a significant negative relationship between trust and transaction costs (beta= -0.594, $p<0.01$, $R^2 = 0.353$) and H1 is supported.

Table 7.22: Trust – Transaction costs model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.594	.353	.351	.44

Predictors: (constant), trust
Dependent variable: trans

Table 7.23: Trust – Transaction costs ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	38.562	1	38.562	194.937	.000
	Residual	70.620	357	.198		
	Total	109.182	358			

Predictors: (constant), trust
Dependent variable: trans

Table 7.24: Trust – Transaction costs coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	4.688	.174		26.923	.000
	Trust	-.647	.046	-.594	-13.962	.000

Dependent variable: trans

The second hypothesis denoted a positive relationship between TRUST and COOPERATION. The results (Tables 7.25-7.27) of regression show that this hypothesis is also supported with significance (beta= 0.544, $p<0.01$, $R^2 = 0.296$).

Table 7.25: Trust – Cooperation model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.544	.296	.294	.46

Predictors: (constant), trust
Dependent variable: coop

Table 7.26: Trust – Cooperation ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	32.370	1	32.370	150.269	.000
	Residual	76.903	357	.215		
	Total	109.273	358			

Predictors: (constant), trust
Dependent variable: coop

Table 7.27: Trust – Cooperation coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	Constant	1.803	.182		9.925	.000
	Trust	.592	.048	.544	12.258	.000

Dependent variable: coop

The third hypothesis was a positive relationship between TRUST and CONFLICT RESOLUTION. This was also supported by the results of regression (beta= 0.662, $p<0.01$, $R^2 = 0.438$) (Tables 7.28-7.30 below).

Table 7.28: Trust – Conflict resolution model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.662	.438	.437	.41

Predictors: (constant), trust
Dependent variable: conflict

Table 7.29: Trust – Conflict resolution ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	47.146	1	47.146	278.603	.000
	Residual	60.413	357	.169		
	Total	107.559	358			

Predictors: (constant), trust
Dependent variable: conflict

Table 7.30: Trust – Conflict resolution coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.267	.161		7.867	.000
	Trust	.715	.043	.662	16.691	.000

Dependent variable: conflict

The fourth hypothesis was a positive relationship between TRUST and SATISFACTION. This was also supported by the results of regression (beta= 0.624, $p<0.01$, $R^2 = 0.390$) (Tables 7.31-7.33 below).

Table 7.31: Trust – Satisfaction model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.624	.390	.388	.44

Predictors: (constant), trust
Dependent variable: satis

Table 7.32: Trust – Satisfaction ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	45.708	1	45.708	228.072	.000
	Residual	71.546	357	.200		
	Total	117.254	358			

Predictors: (constant), trust
Dependent variable: satis

Table 7.33: Trust – Satisfaction coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.551	.175		8.905	.000
	Trust	.704	.047	.624	15.102	.000

Dependent variable: satis

Finally, the fifth hypothesis predicted a positive relationship between TRUST and RISK TAKING. This relationship has not been tested in previous literature. The results (Tables 7.34-7.36 below) of the regression show a significant positive relationship between the two constructs (beta= 0.192, $p<0.01$, $R^2 = 0.034$).

Table 7.34: Trust – Risk taking model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.192	.037	.034	.68

Predictors: (constant), trust
Dependent variable: risk

Table 7.35: Trust – Risk taking ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	6.449	1	6.449	13.713	.000
	Residual	167.899	357	.470		
	Total	174.348	358			

Predictors: (constant), trust
Dependent variable: risk

Table 7.36: Trust – Risk taking coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.559	.268		5.809	.000
	Trust	.264	.071	.192	3.703	.000

Dependent variable: risk

7.8.2. Moderator Effects

The regression analysis of moderator effects was done with SPSS 11 and the results are shown in Appendix C. It was hypothesized that (Mutual) COMMITMENT and (Mutual) DEPENDENCE would have a moderator effect on trust, thereby affecting its prediction effect on cooperation and satisfaction. Before analyzing the significance of the moderator (interaction) effect of 'dependence' on 'trust', the variables TRUST and DEPENDENCE were centered (i.e, their mean values were deducted from individual observations) (Aiken and West 1991) to reach CTRUST and CDEPEN. These two variables were then multiplied to reach the moderator (interaction) effect of dependence on trust CMODERDEP. These three variables were the independent variables of the regression analysis. Hierarchical regression was done first with two variables (CTRUST and CDEPEN) and then including the third variable (CMODERDEP) in the analysis. This way, the change in R^2 as a result of the addition of the third interaction variable would be more obvious.

Then, first COOPERATION and then SATISFACTION was entered as the dependent variable in the equation.

Table 7.37: Coefficients – Dependent Variable: Satisfaction, Independent Variables: Dependence, Trust

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	constant	4.166	.024		176.349	.000
	ctrust	.680	.049	.603	13.759	.000
	cdepen	5.020E-02	.035	.064	1.449	.148
2	constant	4.180	.025		169.182	.000
	ctrust	.681	.049	.604	13.818	.000
	cdepen	4.803E-02	.035	.061	1.390	.165
	cmoderdep	-.108	.061	-.703	-1.781	.076

It can be observed from the parts of the Table 7.38 below depicting 'Model 1' that dependence (CDEPEN) has a main effect on 'cooperation' (beta=0.128, t=2.735, p< 0.1), but not on 'satisfaction' (Table 7.37) (beta=0.064, t=1.44, p=0.148). However, the interaction effect of dependence on trust (CMODERDEP) while predicting 'satisfaction' was significant (p < 0.1) (Table 7.37). The same coefficient for 'cooperation', however, was not significant (Table 7.38 below) (beta= -0.034, t= - 0.771, p= 0.441). Therefore Hypothesis 2a and 2b is not supported. Since dependence has an interaction effect on 'trust' while predicting 'satisfaction', further analysis of this effect when dependence is high (i.e., one standard deviation above) and dependence is low (i.e., one standard deviation below) was also done to confirm the interaction effect (Appendix D). In both of the conditions, the interaction effect of dependence on trust (CINTBEL and CINTABO) is significant at the 0.1 level (p= 0.076) and trust (CTRUST) has a significant effect on satisfaction (p<0.01), but the slope is slightly steeper when dependence is low than when it is high (beta= .759 vs. beta= .603) (Tables 7.39 and 7.40 below). Therefore hypothesis 4a is not supported, but hypothesis 4b is supported. The chart showing the relationship between trust and satisfaction when dependence is high and when dependence is low is provided in Figure 1 in Appendix D.

Table 7.38: Coefficients – Dependent Variable: Cooperation, Independent Variables: Dependence, Trust

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	constant	3.997	.024		164 .399	.000
	ctrust	.546	.051	.501	10.731	.000
	cdepen	9.75E-02	.036	.128	2.735	.007
2	constant	4.003	.026		156.883	.000
	ctrust	.546	.051	.502	10.732	.000
	cdepen	9.165E-02	.036	.127	2.705	.007
	cmoderdep	-4.8E-02	.063	-.034	-0.771	.441

The same procedure was applied to examine the moderator effect of commitment on trust while predicting 'cooperation' and 'satisfaction'. It can be observed from the parts of the Tables 7.41 and 7.42 below depicting 'Model 1' that commitment (CCOMMIT) has a main effect on both 'satisfaction' (beta= 0.21, t= 4.519, p< 0.01) and 'cooperation' (beta=0.276, t=5.625, p< 0.01). However, as can be observed from the 'Model 2' parts of Tables 7.41 and 7.42, the coefficient of the interaction effect CMODERCOM is not significant for either of the dependent variables (p= .412 and p= .144 for cooperation and satisfaction, respectively). Therefore, commitment does not have a moderating effect on trust while predicting 'cooperation' and 'satisfaction'. These findings do not provide support for Hypotheses 2c, 2d, 4c and 4d. The collinearity diagnostics of all the regressions showed acceptable rates (VIFs < 10, condition indices < 15) (Tables 3, 6, 9, 12 in Appendix C and 3 and 6 in Appendix D). The findings in this section therefore reveal that only Hypothesis 4b is supported while all the other moderating hypotheses are rejected.

Table 7.39: Coefficients – Dependence low

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	constant	4.145	.035		118 .822	.000
	ctrust	.759	.066	.673	11.464	.000
	cdepbel	4.803E-02	.035	.061	1.390	.165
	cintbel	-.108	.061	-.101	-1.781	.076

1. Dependent variable: satisfaction

Table 7.40: Coefficients – Dependence high

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	constant	4.214	.035		119 .608	.000
	ctrust	.603	.066	.535	9.202	.000
	cdepabo	4.803E-02	.035	.061	1.390	.165
	cintabo	-.108	.061	-.101	-1.781	.076

1. Dependent variable: satisfaction

7.8.3. Further Exploratory Analysis

To analyze the relationship between the four components of TRUST (i.e., goodwill trust, competence trust, contractual trust and distrust) and TRANSACTION COSTS, COOPERATION, CONFLICT RESOLUTION, SATISFACTION, and RISK TAKING, another regression analysis was done with SPSS 11 (refer to Appendix E for the results of the regression analysis).

Table 7.41: Coefficients – Dependent Variable: Satisfaction, Independent Variables: Commitment, Trust

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	constant	4.157	.023		179.782	.000
	ctrust	.586	.052	.520	11.194	.000
	ccommit	.164	.036	.210	4.519	.000
2	constant	4.171	.025		166.940	.000
	ctrust	.594	.053	.527	11.302	.000
	ccommit	.164	.036	.210	4.519	.000
	cmodercom	-7.615E-02	.052	-.059	-1.464	.144

The results (Tables 7 and 10 in Appendix E) show that GOODWILL, COMPETENCE and CONTRACTUAL has a significant effect on SATISFACTION (beta= 0.188, 0.276, and 0.367 respectively and $p<0.01$, $R^2 = 0.472$) and COOPERATION (beta= 0.340, 0.328 $p<0.01$ for GOODWILL and CONTRACTUAL, beta= 0.116, $p<0.1$ for COMPETENCE, $R^2 = 0.389$) while DISTRUST does not have a significant effect on these variables (beta= -0.062, t= -

1.445, p= 0.149, beta= -0.002, t= -0.053, p= 0.958 for SATISFACTION and COOPERATION respectively).

Table 7.42: Coefficients – Dependent Variable: Cooperation, Independent Variables: Commitment, Trust

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		Sig.
1	constant	3.984	.024		168.666	.000
	ctrust	.443	.053	.407	8.273	.000
	ccommit	.209	.037	.276	5.625	.000
2	constant	3.992	.026		156.086	.000
	ctrust	.447	.054	.411	8.309	.000
	ccommit	.209	.037	.276	5.618	.000
	cmodercom	-4.4E-02	.053	-.035	-.821	.412

On the other hand, it was found that among other components of trust, only GOODWILL had a significant effect on RISK TAKING (Table 7.43) (beta= 0.149, $p<0.05$). COMPETENCE did not have a significant effect on CONFLICT RESOLUTION (Table 7.44 below) (beta= 0.086, p=0.137) and GOODWILL did not have a significant effect on TRANSACTION COSTS (Table 7.45 below) (beta= -0.094, p=0.113).

Table 7.43: Trust components – Risk taking coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 Constant	1.538	.370		4.160	.000
Goodwill	.150	.074	.149	2.038	.042
Competence	.102	.086	.092	1.190	.235
Contractual	4.55E-03	.056	.005	.081	.936
Distrust	8.49E-03	.057	.009	.150	.881

Table 7.44: Trust components – Conflict resolution coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	2.618	.218		12.034	.000
	Goodwill	.223	.043	.280	5.129	.000
	Competence	7.55E-02	.051	.086	1.491	.137
	Contractual	.209	.033	.266	6.303	.000
	Distrust	-.249	.033	-.320	-7.462	.000

Table 7.45: Trust components – Transaction costs coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	3.345	.236		14.146	.000
	Goodwill	-7.5E-02	.047	-.094	-1.588	.113
	Competence	-.163	.055	-.184	-2.964	.003
	Contractual	-.204	.036	-.257	-5.645	.000
	Distrust	-.251	.036	.21	6.924	.000

The next two sections provide a brief discussion of the results and the conclusions drawn from the study including limitations of the study and directions for future research.

CHAPTER 8

DISCUSSION

In this study, the performance outcomes of interorganizational trust in the Turkish drug distribution system were examined. The unit of analysis was the drug wholesaler-pharmacy relationship. The results of the study are decomposed into qualitative and quantitative parts.

The qualitative findings of the study comply with the findings in the literature with respect to the fact that trust is composed of different components (Ganesan 1994; Ring and Van de Ven 1992; Sako and Helper 1998; Zaheer et al. 1998). These findings revealed the following components which conform to those reported in the literature: Goodwill (Ganesan 1994; Larson 1992; Ring and Van de Ven 1992), reliability (Sahay 2003; So and Sculli 2002; Zaheer et al. 1998), calculation (Lindskold 1978; Williamson 1993), competence (Handfield and Nichols 1999; Sako and Helper 1998), reputation (Ganesan 1994; Doney and Cannon 1997; Sahay 2003) and distrust (Sako and Helper 1998).

Another important finding of the qualitative analysis of the drug wholesaler – pharmacy dyadic relationship was that the tendency toward risk taking was found to be an outcome of trust. Previous literature found empirical support for the relationship between trust and reduced perceived risk (Corbitt et al. 2003; Doney and Cannon 1997; Siegrist 2000; Yousafzai et al. 2003), but did not verify whether this reduction leads to an increase in the tendency towards risk taking or not. This finding was an important contribution to literature and was further tested in the quantitative part of this study.

Results of the quantitative analysis suggest the following components for the interfirm trust measure: *goodwill trust*, *competence trust*, *distrust,* and *contractual trust*. The reliability and competence components found in qualitative analysis were reflected as one factor denoting competence in the quantitative factor analysis.

Calculation component does not appear as a result of quantitative factor analysis since it was not measured in the questionnaire. Contractual trust and goodwill trust are thought of as two successive layers in a hierarchy of trust (Sako and Helper 1998). Contractual trust can be defined as 'fulfilling a minimal set of obligations' or fulfilling the letter, but not the spirit of the contract while goodwill trust is associated with 'honoring a broader set of obligations' (Sako and Helper 1998) and an intention to perform according to the best of one's ability and not engage in opportunistic behavior (Das and Teng 2001; Woolthuis et al. 2002). Competence trust defines the expectation that an actor can be relied on and is able to fulfill obligations (Anderson and Weitz 1989; Woolthuis et al. 2002). Distrust is associated with an expectation of opportunistic behavior by the trustor on the side of the trustee whenever the trustee has the chance to do so (Sako and Helper 1998).

The qualitative and quantitative findings together verify that trust is both a relational and a rational choice. Pharmacists rely on rational calculation of pros and cons of the other party violating their trust or not. In this calculation they consider the competence, reliability, and reputation of their primary wholesalers and the loss of reputation that they will encounter as a result of betraying them.

That distrust is found to be a distinct component and not a mere opposite of other trust types (i.e., having a reverse factor loading on the other components of trust) is in accord with Sako (1992). According to her, a lack of opportunism (or distrust) is not a sufficient condition for goodwill trust. For example, a seller that withholds a vital piece of information is acting opportunistically according to the goodwill trust definition, but not in the strict contractual sense. Therefore, some conditions that prevent opportunism may not necessarily foster trust, while other factors that enhance trust do not necessarily constitute a safeguard against opportunism.

The results of the quantitative part of the study generally support our hypotheses. Interorganizational trust is found to be affecting exchange performance by decreasing transaction costs, increasing cooperation, satisfaction, the tendency towards risk taking, and leading to better resolution of conflict. These findings confirm the previous studies that found a positive relationship between interfirm trust and performance outcomes (Dyer and Chu 2003; Zaheer et al. 1998). The difference of this study from the earlier studies on performance outcomes of interfirm trust lies

in its context, which is the service sector of a developing country where competition is not allowed and the sector is regulated by higher governmental authorities (i.e., Ministry of Health). In this sector, one of the most important ways a pharmacy can gain competitive advantage over the other pharmacies is through the reduction of transaction costs. Keeping in mind the importance of the welfare of pharmacies for the welfare of the sector as a whole, it might not be wrong to conclude that the decrease in transaction costs as a result of a trusting relationship between a pharmacy and its drug wholesaler is important for the economic prosperity of the sector in general. The findings also reveal that the Williamsonian (1993) view of trust in economic relationships provides an under-socialized view. Williamson (1993) suggests that if trust goes beyond calculative self-interest, it yields blind, unconditional trust which is not wise and will not survive in markets. According to this view, rational actors should not rely on trust when managing interdependencies and the allocation of scarce resources. However, our findings support the view that trust expands the opportunity set for the coordination of work outside the organization (Barney and Hansen 1994). According to these findings, trust can generate efficiencies by lowering the costs of transacting which include search and contracting costs that arise when developing a relationship. Trust is also found to decrease monitoring and enforcement costs that arise while solving problems and controlling for opportunism in a relational exchange.

One aspect of trust is the expectation that the trustee will not exploit the vulnerabilities of the trustor (Barney and Hansen 1994; Ring and Van de Ven 1992). This means that a drug wholesaler will, at times, put the needs of the pharmacy before its own. Such actions make it more likely that the partners will behave cooperatively. Increased cooperation brings goal congruence and better coordination in a relational exchange. Coordination is important for the harmonization of operations when transactions are repetitive (i.e. pharmacy –drug wholesaler relationship). Goal congruence helps clarify objectives that facilitate the establishment of rules and regulations (Das and Teng 1998). This is important for the effectiveness of formal (i.e., behavioral and output) and social control (i.e., norms, reputation, etc.) mechanisms used in an exchange relationship.

The positive relationship between trust and satisfaction implies the anticipation of future interaction between the exchange partners (Armstrong and Yee 2001; Chiou

et al. 2004). Satisfaction is considered as a direct performance measure in some studies (Artz 1999; Claro et al. 2003; Zaheer et al. 1998). Therefore, the positive link between trust and satisfaction implies a positive link between trust and increased performance as well.

Better resolution of conflict as a result of trust lessens the time and effort required for solving problems that arise during the course of interaction which, in turn, leads to higher levels of interorganizational trust (Zaheer et al. 1998). It also increases the chances of functional conflict that might 'clear the air' so that conflict has productive consequences (Andersen and Narus 1990).

Previous studies have acknowledged that trust can be accompanied by reduction in expectations of opportunistic behavior (Sako and Helper 1998) and thereby a reduction in perceptions of risk especially of being taken advantage of by the other party (Ganesan 1994; Anderson and Weitz 1989). Risk, risk perception and risk management are critical topics for management and strategy research (Das and Teng 2001). The positive relationship between trust and risk taking found in this study is particularly important for alliance management since strategic alliances are an inherently risky strategy (Das and Teng 1998).

Mutual dependence was found to have a main effect on cooperation suggesting that higher levels of dependence are associated with higher levels of cooperation. This finding confirms the arguments that cooperation might be coerced through dependence (Young and Wilkinson 1989). It is also in line with the argument that dependence is more pervasive in channel relationships than in other industrial segments (Doney and Cannon 1997). Here, mutual dependence might be considered as the primary wholesaler's influence on the pharmacy and the pharmacy's influence on the drug wholesaler. Though pharmacists have other alternative drug wholesalers (i.e., secondary wholesalers), the primary wholesaler is much more important for the pharmacy since the pharmacist makes more purchases from that wholesaler and is therefore more dependent on it. Wholesalers are also dependent on pharmacies since the good relationship they have with a pharmacy is very important for the reputation of the wholesaler in the market. Also, wholesalers do not want to lose a pharmacy that acts in good faith and pays its debt regularly and on time.

Though dependence does not have the same main effect for satisfaction, it has a moderating (interaction) effect on trust while predicting satisfaction. Therefore, the

relationship between interfirm trust and satisfaction is mediated through the mutual dependence of the pharmacy and its primary drug wholesaler on each other. There is a positive relationship between trust and satisfaction when dependence is high. The same relationship is also positive when dependence is low. However, trust leads to slightly higher satisfaction when dependence low than when it is high. This finding is contrary to some authors who argue that if dependencies are high enough to pose a threat to organizational survival, they can lead to dissatisfaction (Andersen and Narus 1990; Kotter 1979). However, it confirms the argument that satisfaction with the other party in the exchange relationship depends on the perceived contribution of the other party on the to the focal party's performance outcomes. Thus, a dependent focal party is likely to attribute its outcomes to the party on which it depends and hence be more satisfied with the other party (Lewis and Lambert 1985). It can therefore be argued that pharmacists attribute their performance outcomes, to a great extent, on their primary wholesalers. However, the results suggest that the relationship between trust and satisfaction is slightly stronger when dependencies are low than when it is high. It can therefore be argued that pharmacists feel a bit more satisfied with the relationship when their dependence on their primary wholesalers is low than when it is high.

Mutual commitment, on the other hand, was found to have a positive main effect on both cooperation and satisfaction, suggesting that higher levels of mutual commitment are associated with higher levels of cooperation and satisfaction between firms. However, it does not have a moderating effect on trust while predicting cooperation and satisfaction. Therefore, the commitment of both the wholesaler and the pharmacist does not affect trust while predicting cooperation and satisfaction. In other words, the commitment of the primary wholesaler and the pharmacist is not enough for the parties to grant trust to each other. This is contrary to the findings that suggest a positive link between trust and commitment (Miyamoto and Rexha 2004; Morgan and Hunt 1994). The reason for such a finding may be the weak nature of commitment between a pharmacist and a drug wholesaler. In other sectors (i.e. manufacturing), commitment might be inferred through specific investments in the form of asset specificity (Barney and Hansen 1994) which is not the case in the pharmacy-drug wholesaler relationship. This might therefore decrease the effect of commitment on trust. Higher levels of mutual commitment lead to

higher levels of satisfaction and cooperation between the parties. This finding is in accord with the suggestion that commitment leads to cooperative behavior (Morgan and Hunt 1994) and satisfaction (Selnes 1998).

As an exploratory study, we further tested the effect of the individual components of trust found in the factor analysis –*goodwill trust, competence trust, contractual trust, distrust*- on transaction costs, cooperation, conflict resolution, satisfaction and risk taking. The results suggest that distrust does not have any significant effect on cooperation and satisfaction. This finding provides extra support for the argument that distrust is not a mere opposite of trust. If it were, it would significantly and negatively predict cooperation and satisfaction. Except for goodwill trust, all other trust components have a significant effect on the reduction of transaction costs. Therefore, trust in the wholesaler's goodwill, by itself, is not enough for the reduction in search and contracting and monitoring and enforcement costs; it must be supplemented by the wholesaler's ability and reliability in fulfilling obligations and behaving according to prior commitments. This finding is contrary to the argument in literature that goodwill trust reduces the likelihood of opportunistic behavior occurring, which in turn contributes to low transaction costs (Nooteboom 1996). The reason for this result might be the low cost of controls in the drug distribution sector. The time and effort necessary to implement behavioral and output controls is lower in the drug distribution sector compared to those needed for a strategic alliance in the manufacturing sector. If it were not, then goodwill trust would be enough to refrain from implementing such control mechanisms. Further, the findings suggest that competence trust does not significantly affect conflict resolution. That is, trust in the ability of the wholesaler to perform according to expectations is not, by itself, enough for better resolution of conflict between him/her and the pharmacist. This can be explained in terms of the expectations of the pharmacist from the wholesaler. Since competence trust implies the ability of the wholesaler to behave according to expectations, a mismatch between the expectations of the pharmacist from the wholesaler and the performance of the wholesaler might bring conflict between the parties. For this conflict to be functional and resolved easily, the pharmacist must believe in the goodwill of the wholesaler and rely on him/her to fulfill at least a minimum set of requirements.

Finally, goodwill trust was found to be the only factor that affects the tendency toward risk taking. When the items in the risk scale of this study are viewed from the perspective of the risk categories provided by Das and Teng (2001), it can be seen that all the items conform to what is named as 'relational risk'. Relational risk is defined as the probability and consequences of not having satisfactory cooperation and arises due to the potential for opportunistic behavior (i.e., shirking, cheating, withholding/distorting information etc.) on the part of both firms (Das and Teng 2001). According to Das and Teng (2001), only goodwill trust will reduce perceived relational risk. Our findings confirm this finding and take it one step further suggesting that among other trust components, only goodwill trust will lead to a tendency toward risk taking in the particular buyer-seller relationship. This finding is an important contribution for management and strategy research.

8.1.Generalizability of the findings

The results of the study should be approached cautiously with respect to generalization to other research contexts. The relationship between a pharmacy and its primary drug-wholesaler in Turkey conforms to a long-term supply (purchase) agreement relationship (Das and Teng 2001). Unless there is an extraordinary occurrence (i.e., when a major dispute that might render the continuation of the relationship impossible occurs, or when the drug wholesaler closes down, etc.), the relationship continues indefinitely. Partners to the exchange are independent business units that have no equity claims on each other, the primary economic transaction is the transfer of a drug, and the frequency of contact is daily. Pharmacies are generally owned by pharmacists and considered as SMEs (small or medium-sized enterprises). In such a relationship interorganizational trust may have strong interpersonal connotations. Interpersonal and interorganizational trusts are highly associated constructs (Zaheer et al. 1998). The finding that the phone-man acts as an important boundary-spanner in the trust-based exchange relationship strengthens this argument. Therefore, we should be cautious about labeling the trusting relationship in this study as 'interorganizational' and project relevant research results to other contexts of study. Besides, the current interfirm relationship takes place in the service supply chain of a developing country with a collectivist culture (Wasti 1998), which may impact the workings of the interactions between trust and its performance outcomes.

8.2.Potential dangers of trust

Having explained the positive outcomes of trust throughout the study, it is time to touch some of the potential dangers of it. One potential danger of trust is the possibility that it may lead to corruption if the parties involved gain at the expense of those outside it (Gilson 2003). For example, if a pharmacist and a drug wholesaler agree upon a higher percentage of discount on the price of drugs and the wholesaler charges a lesser discount for other pharmacists, this means that the parties involved in the trusting relationship gain at the expense of those outside it. Although the law forbids such collusion, a trust-based relationship may act as a façade for that secrecy. This is an unwanted outcome considering the fact that one of the most important problems in Turkey is corruption, especially among public institutions.

Another problem may be a power relationship between the trustor and the trustee which may force the trustor to act in the interests of the trustee because the trustee holds some scarce resources the trustor needs (Gilson 2003). Such a power relationship may lead to the emergence of mafia and/or usurers. In our case, some wholesalers may be more powerful because they hold scarce drugs[8] in their hands. Here, the wholesaler may force the pharmacist to buy a certain threshold of drugs so that he/she continues to supply those scarce drugs to the pharmacist. In such a case, the pharmacist may face a financial bottleneck that may even lead to bankruptcy.

Thirdly, impersonal trust rooted in social norms of a group that identifies itself in opposition to other groups may form particularized type of trust which means 'to trust only of your kind' (Hartog 2003). Such type of trust may promote conflict between groups in a society. Fukuyama (1995) refers to societies having such type of trust as 'low-trust' societies. According to him, when institutional mechanisms are not in effect in a given society, such in-group type of trust will form. The production of generalized trust is most important for developing countries that lack strong legal regimes which compounds the problem of creating trust between parties in an economic relationship (Humphrey and Schmitz 1998). Therefore, a particularistic in-group trust development may be detrimental for the functioning of economic exchanges in general.

[8] Tevzi ilaç

Finally, although the decrease in investment for bureaucratic and legal controls is a desirable outcome of trust that leads to lesser transaction costs, it may be problematic in developing countries such as Turkey. The decrease in documentation as a result of trust may hamper the collection of tax and increase the unaccounted part of the economy which is one of the most important problems of Turkey.

The next chapter provides conclusions addressing limitations of the research, future research directions, and managerial implications derived from the results of the study.

CHAPTER 9

CONCLUSIONS

9.1. Implications for managers

This study has important implications for both managers in drug distribution sector and the pharmaceutical industry in particular and in the other industries in general. Trust was found to be strongly associated with positive performance outcomes such as higher cooperation, satisfaction, risk taking, better resolution of conflict, and lower transaction costs. These findings indicate the importance of maintaining positive trust-based relationships between buyers and sellers. The lower transaction costs are particularly important for pharmacists since these costs are an important item in the costs of a pharmacy, and lowering such costs might provide the pharmacy a competitive advantage among other pharmacies. From a transaction cost analysis perspective, the negative relationship between trust and transaction costs might allow for the loosening of governance mechanisms between firms in a relational exchange. This, in turn, might lead to fewer investments in bureaucratic and legal control mechanisms. This has potential application to buyer-seller relationships in all of the industrial sectors in Turkey as well as the pharmaceutical industry. However, only trust in the goodwill of the primary wholesaler is not enough for transaction costs to decrease. Other trust types are necessary for the ease in the running of operations and lesser controls.

Coordination and goal congruence resulting from cooperation is important in a number of respects. Coordination is important for the performance of a drug distribution channel relationship where transactions are repetitive. Goal congruence, on the other hand, facilitates the effectiveness of control mechanisms. Mutual dependence between the primary drug wholesaler and the pharmacist facilitates the cooperation between them. Satisfaction implies the continuity of the relationship and

an anticipation of future interaction between buyers and sellers. The relationship between satisfaction and trust is mediated through mutual dependence of both the pharmacist and the primary drug wholesaler. Mutual commitment of the drug wholesaler and the pharmacist increases both cooperation and satisfaction between the exchange partners. Better resolution of conflict increases the chances of functional conflict that might 'clear the air' so that conflict has productive consequences. However, only trust in the competence of the drug wholesaler is not enough for conflict to take a functional stance. The pharmacist and the wholesaler might have different expectations from the exchange relationship due to the different roles they assume (i.e., pharmacist being both a professional and a tradesman and the wholesaler only a tradesman). Therefore, the pharmacist has to rely on the goodwill of the wholesaler and believe that he will meet at least a minimum set of obligations for better resolution of the conflicts that arise. The increase in the tendency towards risk taking (i.e., relational risk) as a result of goodwill trust has important strategy and managerial implications. Since goodwill trust represents a higher level in a hierarchy of trust and implies the fulfillment of a broader set of obligations (Sako and Helper 1998) on the side of the wholesaler, it reduces the risk perception of the pharmacist and makes him/her consider it safer to engage in risky action.

9.2. Limitations and implications for future research

In the qualitative part of this study the informants were generally from the Ayrancı and Kavaklıdere region. Alternatively, informants from other regions of Ankara could be selected to increase the transferability of the qualitative findings. Pharmacists responded to the questionnaire considering their primary wholesalers. The idea behind this choice was the assumption that the relationship between a pharmacy and its primary wholesaler would be of a more relational type, while that between a pharmacy and a secondary or lower share wholesaler would be of a more arms' length market transaction type. An alternative to this choice would be to compare the responses of pharmacists for primary wholesalers to their responses for secondary wholesalers, thereby reducing the confounding effects caused by importance of the seller and the social desirability bias of the respondent pharmacist.

The responses can further be clustered with respect to key informant type, length of the relationship, pharmacist's (or other key informant's) experience in the

sector, whether there has been an interruption in the relationship or not, etc. Additionally, the role of the phone-man, who appeared to be an important boundary spanner in the qualitative analysis, can be examined with respect to its importance for interorganizational trust and mediating role for the various outcomes of trust.

The relationship between different trust components and risk taking tendency should be elaborated further adding commitment and dependence into the analysis. For example earlier studies labeled the Turkish culture as 'risk averse' with respect to Hofstede's dimensions (Wasti 1998). A recent study, on the other hand, suggests that people are more averse to the risk of being betrayed by a trustee than to the risk of losing due to chance (Bohnet and Zeckhauser 2004). Then the question may be: What was the impetus behind the risk taking tendency by exchange partners within this dyadic relationship? Was a particular type of trust responsible from the increased tendency toward risk taking or should the types of risk that they tend to take be investigated? In this respect, the interaction between different types of trust, control and risk needs to be investigated as well. In a recent article Das and Teng (2001) conceptually demonstrate the complex relationship between different trust, control, and risk types. The types of control and risk encountered by pharmacists should be identified and be interrelated with the types of trust to reach a richer picture of the dynamic relationship between the three variables.

Similarly, the interrelation between components of trust and other outcomes of trust (i.e., cooperation, satisfaction, etc.) need further investigation as well with respect to relevant theory and empirical testing in other sectors. In addition, the positive association between trust and conflict resolution should be investigated from a cultural standpoint. Is it the functional conflict resolution a result of culture or can it be totally accounted to trust between the exchange partners? This can be an interesting field of investigation for future research.

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APPENDICES

APPENDIX A: Descriptive statistics and reliability of main constructs

Table 1: Descriptives of the main constructs

	N	Minimum	Maximum	Mean	Std. Deviation
TRUST	359	1.85	5.00	3.72	0.507
TRANS	359	1.00	3.63	2.27	0.552
COOP	359	1.50	5.00	4.01	0.552
CONFLICT	359	2.00	5.00	3.93	0.548
SATIS	359	2.20	5.00	4.18	0.572
RISK	359	1.00	5.00	2.54	0.697
DEPEN	359	1.00	5.00	3.39	0.724
COMMIT	359	1.00	5.00	3.57	0.730
Valid N (listwise)	359				

Table 2: Reliability of the trust scale (14 items, questions 12-25)

Item name	Alpha if item deleted
trust1	0.82
trust2	0.85
trust3	0.81
trust4	0.82
trust5	0.81
trust6	0.83
trust7	0.81
trust8	0.82
trust9	0.81
trust10	0.81
trust11	0.82
trust12	0.83
trust13	0.83
trust14	0.83
Alpha	0.83

Table 3: Reliability of the transaction cost scale (8 items, questions 50-57)

Item name	Alpha if item deleted
trans1	0.73
trans2	0.70
trans3	0.72
trans4	0.74
trans5	0.71
trans6	0.73
trans7	0.72
trans8	0.70
Alpha	0.75

Table 4: Reliability of the cooperation scale (4 items, questions 32, 34-36)

Item name	Alpha if item deleted
coop1	0.81
coop2	0.70
coop3	0.66
coop4	0.72
Alpha	0.78

Table 5: Reliability of the conflict resolution scale (6 items, questions 26-31)

Item name	Alpha if item deleted
conflict1	0.71
conflict2	0.73
conflict3	0.72
conflict4	0.70
conflict5	0.69
conflict6	0.71
Alpha	0.75

Table 6: Reliability of the satisfaction scale (5 items, questions 37-41)

Item name	Alpha if item deleted
satis1	0.82
satis2	0.80
satis3	0.80
satis4	0.79
satis5	0.77
Alpha	0.83

Table 7: Reliability of the risk taking scale (5 items, questions 42-46)

Item name	Alpha if item deleted
risk1	0.82
risk2	0.85
risk3	0.81
risk4	0.82
risk5	0.81
Alpha	0.83

Table 8: Reliability of the commitment scale (3 items, questions 58, 59, 64)

Item name	Alpha if item deleted
commit1	0.57
commit2	0.49
commit3	0.67
Alpha	0.68

Table 9: Reliability of the dependence scale (3 items, questions 63, 66-67, item no.65 deleted)

Item name	Alpha if item deleted
depen1	0.75
depen2	0.49
depen3	0.53
Alpha	0.69

APPENDIX B: Factor analysis of the construct measures

Table 1: Communalities - trust

	Initial	Extraction
trust1	1.000	.405
trust2	1.000	.472
trust3	1.000	.580
trust4	1.000	.574
trust5	1.000	.646
trust6	1.000	.454
trust7	1.000	.614
trust8	1.000	.528
trust9	1.000	.607
trust10	1.000	.563
trust11	1.000	.511
trust12	1.000	.433
trust13	1.000	.667
trust14	1.000	.578

Extraction method: Principal component

Table 2: Total variance explained - trust

	Rotation sum of squared loadings		
Component	Total	% of variance	Cumulative %
1	4.236	30.257	30.257
2	1.889	13.492	43.750
3	1.508	10.770	54.520

Extraction method: Principal component

Table 3: Factor correlation matrix - trust

Factor	1	2	3
1	1.000		
2	.508	1.000	
3	.485	.120	1.000

Table 4: Pattern matrix - trust

	Factor		
	1	2	3
trust1	.492		
trust2		.420	
trust3	.586		
trust4	.723		
trust5	.625		
trust6		.476	
trust7	.772		
trust8	.699		
trust9	.699		
trust10	.704		
trust11		.580	
trust12		.435	
trust13			.695
trust14			.407

Extraction method: Principal axis factoring
Rotation method: Oblimin

Table 5: Total variance explained - trust

	Rotation sum of squared loadings		
Factor	Total	% of variance	Cumulative %
1	4.646	33.188	33.188
2	.708	5.059	38.247
3	.464	3.311	41.558

Extraction method: Principal axis factoring

Table 6: Confirmatory factor analysis - 3 factor solution

	Component		
	trust	distrust	contractual
trust1	.663		
trust2		.305	
trust3	.777		
trust4	.726		
trust5	.847		
trust6		.600	
trust7	.790		
trust8	.687		
trust9	.817		
trust10	.735		
trust11		.663	
trust12		.581	
trust13			.670
trust14			.682

Table 7: Comparison of confirmatory factor analysis results - trust

Model	chi-square	df	Δ chi-square	NFI	GFI	CFI	IFI	RMR
3-factor	298.01	74	-	0.874	0.892	0.901	0.902	0.05
4-factor	275.07	71	23	0.884	0.900	0.910	0.911	0.04

Note: NFI: Normed fit index; GFI: Goodness of fit index; CFI: Comparative fit index; IFI: Incremental fit index; RMR: Root mean square residual.

Table 8: Communalities – transaction cost

	Initial	Extraction
trans1	1.000	.429
trans2	1.000	.557
trans3	1.000	.498
trans4	1.000	.517
trans5	1.000	.560
trans6	1.000	.588
trans7	1.000	.687
trans8	1.000	.520

Extraction method: Principal component

Table 9: Unrotated component matrix – transaction cost

	Component	
	1	2
trans1	.576	.312
trans2	.694	
trans3	.626	.327
trans4	-.497	.520
trans5	.660	.353
trans6	-.523	.561
trans7	-.547	.623
trans8	.711	

Table 10: Total variance explained - transaction cost

	Rotation sum of squared loadings		
Component	Total	% of variance	Cumulative %
1	2.964	37.056	37.056
2	1.392	17.398	54.454

Extraction method: Principal component

Table 11: Communalities - cooperation

	Initial	Extraction
coop1	1.000	.394
coop2	1.000	.707
coop3	1.000	.771
coop4	1.000	.608

Extraction method: Principal component

Table 12: Total variance explained - cooperation

Component	Rotation sum of squared loadings		
	Total	% of variance	Cumulative %
1	2.481	62.032	62.032

Extraction method: Principal component

Table 13: Component matrix – cooperation

	Component
	1
coop1	.628
coop2	.841
coop3	.878
coop4	.780

Extraction method: Principal component
Rotation: Varimax

Table 14: Communalities – conflict resolution

	Initial	Extraction
conflict1	1.000	.591
conflict2	1.000	.664
conflict3	1.000	.690
conflict4	1.000	.627
conflict5	1.000	.561
conflict6	1.000	.761

Table 15: Unrotated component matrix – conflict resolution

	Component	
	1	2
conflict1	.668	.380
conflict2	-.598	.553
conflict3	.643	.526
conflict4	.716	.337
conflict5	-.728	
conflict6	-.656	.575

Table 16: Total variance explained - conflict resolution

Component	Rotation sum of squared loadings		
	Total	% of variance	Cumulative %
1	2.691	44.856	44.856
2	1.202	20.030	64.886

Extraction method: Principal component

Table 17: Communalities - satisfaction

	Initial	Extraction
satis1	1.000	.596
satis2	1.000	.600
satis3	1.000	.678
satis4	1.000	.744
satis5	1.000	.464

Extraction method: Principal component

Table 18: Total variance explained - satisfaction

	Rotation sum of squared loadings		
Component	Total	% of variance	Cumulative %
1	3.083	61.654	61.654

Extraction method: Principal component

Table 19: Communalities – risk taking

	Initial	Extraction
risk1	1.000	.827
risk2	1.000	.832
risk3	1.000	.694
risk4	1.000	.765
risk5	1.000	.721

Extraction method: Principal component

Table 20: Total variance explained - risk taking

	Rotation sum of squared loadings		
Component	Total	% of variance	Cumulative %
1	2.130	42.600	42.600
2	1.780	34.168	76.769

Extraction method: Principal component

Table 21: Factor correlation matrix - risk taking

Factor	1	2
1	1.000	
2	.179	1.000

Table 22: Confirmatory factor analysis results - risk taking

Model	chi-square	df	NFI	GFI	CFI	IFI	RMR
1	22.316	4	0.972	0.976	0.977	0.977	0.049

Note: NFI: Normed fit index; GFI: Goodness of fit index; CFI: Comparative fit index; IFI: Incremental fit index; RMR: Root mean square residual.

Table 23: Communalities – commitment

	Initial	Extraction
commit1	1.000	.629
commit2	1.000	.690
commit3	1.000	.534

Extraction method: Principal component

Table 24: Communalities – dependence

	Initial	Extraction
depen1	1.000	.443
depen2	1.000	.737
depen3	1.000	.648

Extraction method: Principal component

Table 25: Total variance explained – commitment

	Rotation sum of squared loadings		
Component	Total	% of variance	Cumulative %
1	1.853	61.759	61.759

Extraction method: Principal component

Table 26: Total variance explained - dependence

	Rotation sum of squared loadings		
Component	Total	% of variance	Cumulative %
1	1.936	48.391	48.391

Extraction method: Principal component

APPENDIX C: Regression Analysis – Moderator effect of dependence and commitment on trust

Table 1: Model summary – DV: Satisfaction, IV: Dependence, Trust

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.627	.393	.390	.44
2	.631	.399	.394	.44

Model summary (cont'd) - DV: Satisfaction, IV: Dependence, Trust

Model	Change Statistics				
	R square change	F change	df1	df2	Sig.F Change
1	.393	115.438	2	356	.000
2	.005	3.171	1	355	.076

1. Predictors: (constant), cdepen, ctrust
2. Predictors: (constant), cdepen, ctrust, cmoderdep

Table 2: ANOVA - DV: Satisfaction, IV: Dependence, Trust

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	46.127	2	23.064	115.438	.000
	Residual	71.126	356	.200		
	Total	117.254	358			
Model		Sum of squares	df	Mean square	F	Sig.
2	Regression	46.757	3	15.586	78.485	.000
	Residual	70.497	355	.199		
	Total	117.254	358			

1. Predictors: (constant), cdepen, ctrust
2. Predictors: (constant), cdepen, ctrust, cmoderdep

Dependent variable: satis

Table 3: Collinearity diagnostics - DV: Satisfaction, IV: Dependence, Trust

Model		Collinearity statistics	
		Tolerance	VIF
1	constant		
	ctrust	.887	1.127
	cdepen	.887	1.127
2	constant		
	ctrust	.887	1.127
	cdepen	.886	1.129
	cmoderdep	.999	1.001

Table 4: Model summary – DV: Satisfaction, IVs: Commitment, Trust

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.650	.423	.420	.43
2	.653	.426	.422	.43

Model summary (cont'd) - DV: Satisfaction, IVs: Commitment, Trust

Model	Change Statistics				
	R square change	F change	df1	df2	Sig.F Change
1	.423	130.453	2	356	.000
2	.003	2.143	1	355	.144

1. Predictors: (constant), ccommit, ctrust
2. Predictors: (constant), ccommit, ctrust, cmodercom

Table 5: ANOVA - DV: Satisfaction, IVs: Commitment, Trust

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	49.590	2	24.795	130.453	.000
	Residual	67.664	356	.190		
	Total	117.254	358			
Model		Sum of squares	df	Mean square	F	Sig.
2	Regression	49.996	3	16.665	87.962	.000
	Residual	67.258	355	.189		
	Total	117.254	358			

1. Predictors: (constant), ccommit, ctrust
2. Predictors: (constant), ccommit, ctrust, cmodercom
Dependent variable: satis

Table 6: Collinearity diagnostics - DV: Satisfaction, IVs: Commitment, Trust

Model		Collinearity statistics	
		Tolerance	VIF
1	constant		
	ctrust	.752	1.330
	ccommit	.752	1.330
2	constant		
	ctrust	.744	1.344
	ccommit	.752	1.330
	cmodercom	.987	1.001

Table 7: Model summary – DV: Cooperation, IVs: Commitment, Trust

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.595	.354	.350	.44
2	.596	.355	.349	.44

Model summary (cont'd) - DV: Cooperation, IVs: Commitment, Trust

Model	Change Statistics				
	R square change	F change	df1	df2	Sig.F Change
1	.354	97.402	2	356	.000
2	.001	.674	1	355	.412

1. Predictors: (constant), ccommit, ctrust
2. Predictors: (constant), ccommit, ctrust, cmodercom

Table 8: ANOVA - DV: Cooperation, IVs: Commitment, Trust

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	38.647	2	19.324	97.402	.000
	Residual	70.626	356	.198		
	Total	109.273	358			
Model		Sum of squares	df	Mean square	F	Sig.
2	Regression	38.781	3	12.927	65.100	.000
	Residual	76.492	355	.199		
	Total	109.273	358			

1. Predictors: (constant), ccommit, ctrust
2. Predictors: (constant), ccommit, ctrust, cmodercom
Dependent variable: coop

Table 9: Collinearity diagnostics - DV: Cooperation, IVs: Commitment, Trust

Model		Collinearity statistics	
		Tolerance	VIF
1	constant		
	ctrust	.752	1.330
	ccommit	.752	1.330
2	constant		
	ctrust	.744	1.344
	ccommit	.752	1.330
	cmodercom	.987	1.013

Table 10: Model summary – DV: Cooperation, IVs: Dependence, Trust

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.557	.311	.307	.45
2	.558	.312	.306	.46

Model summary (cont'd) - DV: Cooperation, IVs: Dependence, Trust

Model	Change Statistics				
	R square change	F change	df1	df2	Sig.F Change
1	.311	80.239	2	356	.000
2	.001	0.594	1	355	.441

1. Predictors: (constant), cdepen, ctrust
2. Predictors: (constant), cdepen, ctrust, cmoderdep

Table 11: ANOVA - DV: Cooperation, IVs: Dependence, Trust

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	33.953	2	16.977	80.239	.000
	Residual	75.320	356	.212		
	Total	109.273	358			
Model		Sum of squares	df	Mean square	F	Sig.
2	Regression	34.079	3	11.360	53.630	.000
	Residual	75.194	355	.212		
	Total	109.273	358			

1. Predictors: (constant), cdepen, ctrust
2. Predictors: (constant), cdepen, ctrust, cmoderdep
Dependent variable: coop

Table 12: Collinearity diagnostics - DV: Cooperation, IVs: Dependence, Trust

Model		Collinearity statistics	
		Tolerance	VIF
1	constant		
	ctrust	.887	1.127
	cdepen	.887	1.127
2	constant		
	ctrust	.887	1.127
	cdepen	.886	1.129
	cmoderdep	.999	1.001

APPENDIX D: Interaction effect of dependence on trust (IV) and satisfaction (DV) when dependence is high and low

Table 1: Model summary – Dependence low

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.631	.399	.394	.44

Model summary (cont'd) – Dependence low

Model	Change Statistics				
	R square change	F change	df1	df2	Sig.F Change
1	.399	78.485	3	355	.000

1. Predictors: (constant), cdepbel, ctrust, cintbel

Table 2: ANOVA – Dependence low

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	46.757	3	15.586	78.485	.000
	Residual	70.497	355	.199		
	Total	117.254	358			

1. Predictors: (constant), cdepbel, ctrust, cintbel
Dependent variable: satis

Table 3: Collinearity diagnostics – Dependence low

Model		Collinearity statistics	
		Tolerance	VIF
1	constant		
	ctrust	.492	2.034
	cdepbel	.886	1.129
	cintbel	.531	1.884

1. Dependent variable: satis

Table 4: Model summary – Dependence high

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.631	.399	.394	.44

Model summary (cont'd) – Dependence high

Model	Change Statistics				
	R square change	F change	df1	df2	Sig.F Change
1	.399	78.485	3	355	.000

1. Predictors: (constant), cdepabo, ctrust, cintabo

Table 5: ANOVA – Dependence high

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	46.757	3	15.586	78.485	.000
	Residual	70.497	355	.199		
	Total	117.254	358			

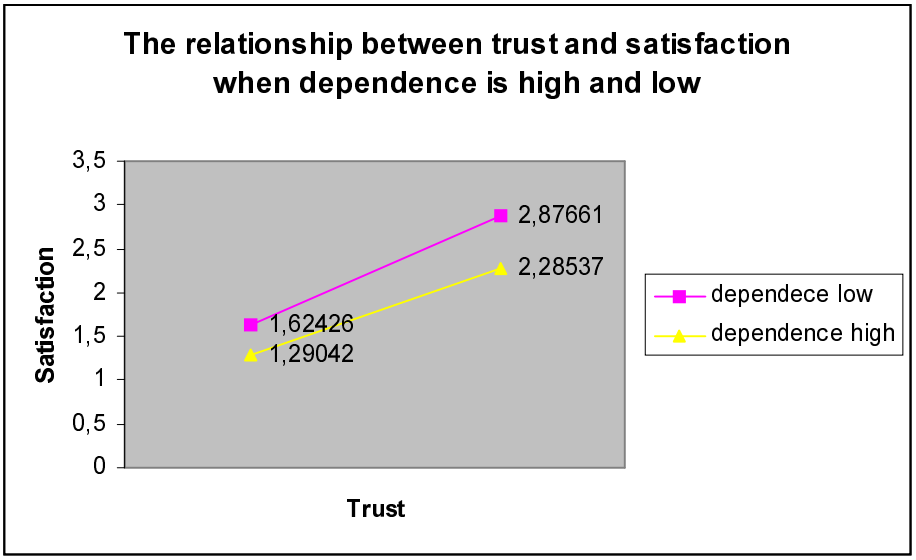
1. Predictors: (constant), cdepabo, ctrust, cintabo
Dependent variable: satis

Table 6: Collinearity diagnostics – Dependence high

Model		Collinearity statistics	
		Tolerance	VIF
2	constant		
	ctrust	.501	1.994
	cdepabo	.886	1.129
	cintabo	.529	1.892

1. Dependent variable: satis

Figure 1: Chart of the moderation effect of dependence on trust while predicting satisfaction



APPENDIX E: Effect of trust components on trust outcomes

Table 1: Trust components – Transaction costs model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.615	.279	.372	.44

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: transaction cost

Table 2: Trust components – Transaction costs ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	41.331	4	10.333	53.909	.000
	Residual	67.851	354	.192		
	Total	109.182	358			

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: transaction cost

Table 3: Trust components – Conflict resolution model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.683	.466	.460	.40

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: conflict resolution

Table 4: Trust components – Conflict resolution ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	50.116	4	12.529	77.214	.000
	Residual	57.442	354	.162		
	Total	107.559	358			

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: conflict resolution

Table 5: Trust components – Cooperation model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.624	.389	.382	.43

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: cooperation

Table 6: Trust components – Cooperation ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	42.500	4	10.625	56.329	.000
	Residual	66.773	354	.189		
	Total	109.273	358			

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: cooperation

Table 7: Trust – Cooperation coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.546	.235		6.590	.000
	Goodwill	.273	.047	.340	5.823	.000
	Competence	.103	.055	.116	1.879	.061
	Contractual	.259	.036	.328	7.254	.000
	Distrust	-1.9E-03	.036	-.002	-.053	.958

Dependent variable: cooperation

Table 8: Trust components – Satisfaction model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.687	.472	.466	.42

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: satisfaction

Table 9: Trust components – Satisfaction ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	55.331	4	13.833	79.079	.000
	Residual	61.923	354	.175		
	Total	117.254	358			

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: satisfaction

Table 10: Trust components – Satisfaction coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.531	.226		6.779	.000
	Goodwill	.156	.045	.188	3.467	.001
	Competence	.254	.053	.276	4.826	.000
	Contractual	.301	.034	.367	8.750	.000
	Distrust	-5E-02	.035	-.062	-1.445	.149

Dependent variable: satisfaction

Table 11: Trust components – Risk taking model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.220	.049	.038	.68

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: risk taking

Table 12: Trust components – Risk taking ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	8.477	4	2.119	4.523	.001
	Residual	165.872	354	.469		
	Total	174.348	358			

Predictors: (constant), goodwill, competence, contractual, distrust
Dependent variable: risk taking

APPENDIX F: Quotations in Turkish

Table1: Quotations from interviews, focus group and collage

Quotation	Component or consequence of trust	Data source	Informant
"Depo ilacımı verir, telefon eder, abla ne gün müsaitsin, ben ölümüne kalımına parasını vermeye gelirim o deponun. Ama ödeme tarihi Çarşambaysa, abla acaba geciktirmesek olmaz mı deyince, çocuklar yok siz onu iki gün atın... çünkü ben yok diyemem geldiğinde...deponuzla sıkı çalıştığınız, sağlam olduğunuzu bildikleri zaman bir ricam olduğu zaman o da tabii ricamı kabul ediyor. Kötü örnek olarak birbirini istismar edenler de var, bir gecede pılısını pırtısını toplayıp başka şehre gidenler var." "Maddi güvensizlik diye bir şey, yani bizim aldatılmamız diye bir ne bileyim yanlışlık olmuşsa, şimdiye kadar karşılaşmadım. Onu da depo olarak koca deponun böyle ismini kirleteceğini hiç zannetmiyorum."	Calculation	2nd interview	2
"Diyelim ki çok sıkıştığı bir anda ödeme kolaylığı göstermeyebilir depo. Eczacıyı çok yaralar bu. Yani senelere dayanan bu dost ilişkide bir seferlik bir olaydan yapılmaz da...çünkü bir yerde ticari bir konuda yani bir eczaneyi gözden çıkarmak gönülden çıkarmak yanlış iştir...depo eczane tam bir aile pratiği içinde yaşar...benim başka türlü itibarım kırılmış değilse, veya kredim bozuk bir sicilim yoksa, depo beni kaybetmekle hakikaten kayba uğruyordur bence."	Calculation and length of the relationship	2nd interview	2
"Mesela çok acil ilaçlar olabiliyor, mesela bir saatte getiriyor yarım saatte getirmesi gerekirken...Ama bir, iki, üç olursa anlıyorsunuz ki sistem bozuk...ben o zaman depoyu bırakıyorum...(Hasta) bana soruyor ne zaman gelecek diye, ben depoyla konuşuyorum, mesela kırk dakika diyor, ben hastaya yarım saatte gelecek diyorum. Benim orda ona bir sözüm var, hastayı ne kadar oyalayabilirim?" "Bir kere oldu. 11.00 gibi aradım, zaten servisim çıkmak üzere dedi, peki dedim. Benim 13.00'te ilaç yetiştirmem lazım, gelmedi. Sonra ikinci şeyde, tekrar aradım, dedim servise vermeyin yetişmiyor. Tamam dedi, fakat yine servise vermişler. Bundan sonra nöbetlerde siz çıktınız dedim."	Competence	Focus group	3 1

Table 1 (cont'd)

Quotation	Component or consequence of trust	Data source	Informant
"Ev almıştım, dedim ki siz yasal faizi uygulayın, ben sonra ödeyeceğim dedim. Önümüzdeki ay geldiğinde faiz uygulamamış, çok hoşuma gitti, teşekkür ettim." "Yani bazen acil ilaç lazım oluyor. Kırıkkale'deki eczaneden Elmadağ'daki eczaneden bulup getiriyor. Başka yerde olmadığını bilyor. Bir feryat gibi birşey bu yani. Bulup getiriyor." "Mesela geçen gün telefoncu duymuş şeyi, KDV'nin ineceğini, abla bu ara ilaç almasan iyi olur dedi bana."	Goodwill	Focus group 1st interview	1
"Bir depoyla çalışmaya başlarsanız size bir telefoncu veriliyor. Sizin eğer o telefoncuyla frekanslarınız uyuşmuyorsa siz onu hemen değiştiriyorsunuz. Telefoncuyla bir yakınlık kurabilmem lazım...bu yakınlık küçük bir espride olabilir, bir kelimenin söyleyişinde olabilir, bir 'günaydın' da olabilir." "Benim telefoncum benim beynimi okumalı...yani ben hangi ilaca kayıyorum, hangi ilaçları alıyorum...mesela eczacıların aldığı bazı ilaçlar hep aynıdır. Yani telefoncu çok iyi bilir. Eğer aptalsa zaten, satamaz da. O bilir ve anında malları size söyler. Bunu söyleyemeyen benim tarzım değildir. Yani çok düşünmeli telefoncu, çok yaratmalı, çok düşünmeli."	Competence	Focus group	3
"Valla eczacılar arası iletişim çok kuvvetlidir. Duyuyorsunuz bir eczaneye kötü davranmaları onlara 10 eczaneye mal olur." "Mesela Belendirde açılan depo burdaki bir mağazada ilaç satmaya çalıştı...depo direkt müşteriye ilaç satamaz...iki oldu söyledim, çevredeki arkadaşlardan da duyan olmuş, sonra kestik siparişi."	Reputation / Contractual trust	1st interview	1
"Mesela ben çek veririm, tahsilatçı der ki fatura yok, çek de yok o zaman. İşte abla sen beni tanıyorsun, sen de beni tanıyorsun, ben hiçbir yere gitmiyorum. Çocuğun başına birşey gelebilir, bir kaza olabilir. Yani çocuk iyiniyetli. Unutulabilir ve makbuz bana gelmezse ne olacak?" "Mesela ben bir defa depoları denerim. 4-5 depomu denedim o yüzden kafam rahat yani. Param olmasına rağmen param yok dedim, bilmiyorum ne zaman gelecek dedim. Tamam eczacı hanım haftaya gelelim dediler."	Distrust	Focus group	3

Table 1 (cont'd)

Quotation	Component or consequence of trust	Data source	Informant
"Ödeme durumunda risk oluyor. Ödeyemediğin kadar ilaç almayacaksın. Mesela bir depo bana 150 tane ilaç göndereyim dedi, bir eczacı arkadaşla 75-75 paylaştık, risk azaldı."	Risk taking	1st interview	1
"Mesela askeriye çok katıdır, tam zamanında ilaç hazır olsun ister. Eğer değilse belli bir puan kaybediyorsunuz, hatta tekrar çalışmaktan da vazgeçebilirler."		2nd interview	2
"Özellikle şu son krizde çok yakın arkadaşım battı. Alo ben şunu ödeyemeyeceğim deyince zaten iş değişiyor. İkinci aya girdiğiniz zaman zaten derhal faiz işliyor. Ondan sonra da haciz olabiliyor. Tabii artık kasaya oturuyorlar bırakın hacizi. Sen bunu çeviremeyeceksin, eczaneni alıyorum, şu kadar maaş verelim…Bir arkadaşım 3 daire sattı. O olaydan sonra ben o depoyla ilişkimi kestim. Vermişler vermişler…yani bu soygun, Ayrancıdaki eczanenin kapasitesi nedir?		Focus group	1
Informant 4: "Mesela benim bir eczacı arkadaşım var, bu arkadaşım çok anormal mal alıyor ve uzun vadeli alıyor ve Bağ-Kura ilaç veriyor. Bağ-Kur da tabii aksayacağını herkes biliyor…büyük riskin altına giriyor. Depo niye senden para istemesin? Sen deponun parasını Bağ-Kur'a yedirdin." Informant 3: "Ama bunun arkasında başka şeyler var bunu bilmiyorsunuz. Depo şöyle diyor: 'Arkandayım'. Sen orayı atlıyorsun."			3 and 4
[Siyah gözlük takmış, elinde saksı olan bir adamın resmini anlatıyor; adam saksılardan birini diğerinden daha yıkarıda tutmuş]: "Bu depo. İki tane aynı seçeneği sana farklı seçeneklermiş gibi gösterip seni etkilemeye çalışıyor. Sonuçta aynı mallar, bu daha iyi bu daha kötü gibi gösteriyor sana. Siyah gözlükler aslında kafasındaki düşüncenin farklı olduğunu gösteriyor. Aldanmak ya da aldanmamak sana bağlı."		Collage	4
[Yere düşüp patlamış bir domatesin resmini anlatıyor]: "Kampanya kafana patlamış. Bir mala girmişsin, yüklü miktarda, ama satacağını düşündüğün kurum o ilacın ödemesini kaldırmış."			
[Bir Paskalya yumurtası resmi anlatıyor]: "Depo sana güzel bir kampanya paketi sunmuş, girip girmemekte kararsızsın. Görüntü güzel ama naïf, kırılgan, çat diye elinde kalabilir."			

APPENDIX G: Turkish version of the questionnaire

1. Kaç yıldır bu sektörde çalışıyorsunuz? _____yıl.

2. Bu eczanede kaç yıldır çalışıyorsunuz? _____yıl.

3. Cinsiyetiniz Erkek Kadın

4. Lütfen eczanedeki görevinizi aşağıdakilerden birini işaretleyerek belirtiniz.
___Eczane sahibi eczacı
___Eczane sahibi
___Mesul müdür
___Stajyer eczacı
___Kalfa
___Diğer (lütfen belirtiniz)_____

5. Eczanenizin toplam kaç kurumla anlaşması var? _____

6. Eczaneniz devlet hastaneleri için yatan hasta ilaç tedarik sırasında mı? Evet Hayır

7. Toplam kaç ecza deposu ile çalışıyorsunuz? _____

8. Lütfen depolarınızı aşağıda istenen bilgiler çerçevesinde sıralayınız. İlgili depodan satın aldığınız malların tüm depolardan (ve eczacı kooperatiflerinden) satın aldığınız mallar toplamı içindeki yüzdesini miktar (birim) olarak belirtiniz.

Birinci Depo	Ecza kooperatifi	Ecza kooperatifi değil
Tüm depolardan toplam satın aldığınız miktar içindeki yüzdesi	Beşeri İthal Beşeri ve ithal	%_____ %_____ %_____
İkinci Depo	Ecza kooperatifi	Ecza kooperatifi değil
Tüm depolardan toplam satın aldığınız miktar içindeki yüzdesi	Beşeri İthal Beşeri ve ithal	%_____ %_____ %_____
Üçüncü Depo	Ecza kooperatifi	Ecza kooperatifi değil
Tüm depolardan toplam satın aldığınız miktar içindeki yüzdesi	Beşeri İthal Beşeri ve ithal	%_____ %_____ %_____

AŞAĞIDAKİ SORULARI <u>BİRİNCİ DEPONUZU (X DEPOSU)</u> DÜŞÜNEREK CEVAPLAYINIZ.

9. X deposu ile ne zamandır çalışıyorsunuz? _____yıl_____ay.

10. Bu zaman sürecinde ilişkinizde bir kesinti oldu mu?
Evet
Hayır

11. **İlişkinizde kesinti olduysa** lütfen bu kesintinin neden kaynaklandığını ve hangi dönemlerde olduğunu kısaca belirtiniz.
_____
_____
_____

Lütfen 12-64 no.lu ifadelere ne derece katıldığınızı ilgili sayıyı daire içine alarak belirtiniz.

Hiç katılmıyorum 1	**Katılmıyorum** 2	**Ne katılıyorum ne katılmıyorum** 3	**Katılıyorum** 4	**Tamamen katılıyorum** 5				
12. X deposu eczaneme her zaman tam doğru bilgi verir.				1	2	3	4	5
13. Sıkışık bir durumda X deposu kendi çıkarlarını eczanemin çıkarlarının önüne alır.				1	2	3	4	5
14. X deposunu çok güvenilir bulurum.				1	2	3	4	5
15. X deposunun çalışanları işlerini iyi yaparlar.				1	2	3	4	5
16. X deposu çok dürüsttür.				1	2	3	4	5
17. X deposu eczanem için bir şey yapmaya söz verdiğinde bu sözünü tutmayabilir.				1	2	3	4	5
18. X deposu eczanemin amaçlarına ulaşmasına yardımcı olmaya çalışır.				1	2	3	4	5
19. X deposu hizmetlerinin hem avantajlarını hem dezavantajlarını söyler.				1	2	3	4	5
20. X deposu uygulamalarında tutarlıdır.				1	2	3	4	5
21. X deposu bizimle pazarlıklarında hep adil olmuştur.				1	2	3	4	5

AŞAĞIDAKİ SORULARI <u>BİRİNCİ DEPONUZU (X DEPOSU)</u> DÜŞÜNEREK CEVAPLAYINIZ.

Lütfen 12-64 no.lu ifadelere ne derece katıldığınızı ilgili sayıyı daire içine alarak belirtiniz.

Hiç katılmıyorum 1	Katılmıyorum 2	Ne katılıyorum ne katılmıyorum 3	Katılıyorum 4	Tamamen katılıyorum 5				
22. X deposu karşısına çıkan fırsatları eczanemin aleyhine de olsa kendi yararına kullanır.				1	2	3	4	5
23. X deposu ile bütün şartları önceden belirlemeden iş yapmakta tereddüt yaşarım.				1	2	3	4	5
24. X deposu bu piyasada iyi bir şöhrete sahiptir.				1	2	3	4	5
25. X deposu ile yasal sorunlar yaşamamız pek olası değildir.				1	2	3	4	5
26. X deposu ile aramızdaki görüş ayrılıkları birlikte çaba sarfederek çözülür.				1	2	3	4	5
27. X deposu sıkça bize kendi istediğini yaptırmaya çalışır.				1	2	3	4	5
28. X deposuyla aramızdaki anlaşmazlıkları çözerken her iki taraf da işbirliği yapar.				1	2	3	4	5
29. X deposu eczanemin iyiliğini düşünür.				1	2	3	4	5
30. X deposu eczanemle ilişkilerinde uzlaşmacı değildir.				1	2	3	4	5
31. X deposu eczanemle ilişkilerinde istediği olsun diye dayatır.				1	2	3	4	5
32. Eczanemle X deposunun faaliyetleri arasında koordinasyon vardır.				1	2	3	4	5
33. Eczanemle X deposunun ortak çıkarları vardır.				1	2	3	4	5
34. Eczanemle X deposu arasında karşılıklı saygı vardır.				1	2	3	4	5
35. Eczanemle X deposu arasında karşılıklı güven vardır.				1	2	3	4	5
36. X deposu ile çalışmak kendi amaçlarımıza ulaşmamızı sağlar.				1	2	3	4	5

37. X deposu iş yapmak için iyi bir firmadır.	1	2	3	4	5
38. Elimde olsa X deposu ile iş ilişkimi bitirirdim.	1	2	3	4	5

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Lütfen 12-64 no.lu ifadelere ne derece katıldığınızı ilgili sayıyı daire içine alarak belirtiniz.

Hiç katılmıyorum 1	**Katılmıyorum 2**	**Ne katılıyorum ne katılmıyorum 3**	**Katılıyorum 4**	**Tamamen katılıyorum 5**

39. Herşeye baştan başlayacak olsam yine X deposu ile çalışırdım.	1	2	3	4	5
40. X deposundan aldığım hizmet ve mallardan memnunum.	1	2	3	4	5
41. X deposu ile aramızdaki temaslardan memnunum.	1	2	3	4	5
42. X deposu ana depom olduğu sürece ödemeleri gecikebilecek sosyal sigorta kurumlarıyla anlaşma yapmaya çekinmem.	1	2	3	4	5
43. X deposu ana depom olduğu sürece askeri kurumlarla anlaşma yapmaya çekinmem.	1	2	3	4	5
44. X deposunun önerdiği malları o an ihtiyacım olmasa bile alırım.	1	2	3	4	5
45. X deposunun önerdiği malları daha önce hiç satmamış olsam bile alırım.	1	2	3	4	5
46. X deposunun yaptığı ilaç kampanyalarına o an ihtiyacım olmasa bile girerim.	1	2	3	4	5
47. X deposu ile pazarlıklarımız kolay olur.	1	2	3	4	5
48. X deposu ile anlaşmazlıklarımız çabuk çözümlenir.	1	2	3	4	5
49. X deposu işimizin gereklerini ve çalışma şeklimizi bilir.	1	2	3	4	5
50. X deposu ile ilişkimizin esaslarını belirlemek yoğun çaba gerektirdi.	1	2	3	4	5
51. X deposu ile ilişkimiz geliştikçe sonradan çözülmesi gereken pek çok mesele ortaya çıktı.	1	2	3	4	5

52. X deposunun önceden belirlediğimiz şartlara uyup uymadığının takibi zordur.	1	2	3	4	5
53. X deposunun bize ne derece adil davranıp davranmadığını değerlendirebilecek durumdayız.	1	2	3	4	5

AŞAĞIDAKİ SORULARI <u>BİRİNCİ DEPONUZU (X DEPOSU)</u> DÜŞÜNEREK CEVAPLAYINIZ.

Lütfen 12-64 no.lu ifadelere ne derece katıldığınızı ilgili sayıyı daire içine alarak belirtiniz.

54. X deposunu doğru şekilde değerlendirebilmemiz yoğun çaba gerektirir.	1	2	3	4	5
55. X deposunun bu ilişkide fırsatçılık yapacağını düşünmem.	1	2	3	4	5
56. X deposu ile ilişkimizde ortaya çıkabilecek sorunların nasıl çözüleceği bellidir.	1	2	3	4	5
57. X deposu ile aramızdaki sorunları çözmek zahmetlidir.	1	2	3	4	5
58. X deposu ile güçlü bir ortaklık sürdürmeye çabalıyoruz.	1	2	3	4	5
59. X deposu ilişkimize derinden bağlıdır.	1	2	3	4	5
60. X deposuna verdiğimiz her siparişin ayrıntılı kaydını tutarız.	1	2	3	4	5
61. X deposunun yapması gerekenler dışında bize fazladan hizmet (ör. borç vadesini ertelemek, piyasada bulunmayan bir malı bulup getirmek, vb.) sunmasını beklemeyiz.	1	2	3	4	5
62. X deposunun siparişleri vaktinde ve istenen miktarda göndermede geçici sorunları olduğunda müsamaha göstermemiz zordur.	1	2	3	4	5

63. X deposu gelecekteki karlılığımız için önemlidir.	1	2	3	4	5
64. X deposu eczanemle iyi bir ilişki sürdürmek için sürekli gayret gösterir.	1	2	3	4	5

Lütfen cevaplamaya bir sonraki sayfadan devam ediniz.

Aşağıda birinci deponuza (X Deposu) bağımlılığınıza ilişkin görüşleriniz sorulmaktadır (65-67). Lütfen soruları dikkatle okuyarak cevabınızı sayılardan birini daire içine alarak belirtiniz.

65. Eczanenizin X deposununun yerine başka bir depo bulması ne kadar kolaydır?

Çok zor	Biraz zor	Ne kolay, ne zor	Kolay	Çok kolay
1	2	3	4	5

66. Genel olarak **eczanenizin X deposuna bağımlılığını** nasıl değerlendirirsiniz?

Hiç bağımlı değil	Oldukça bağımsız	Ne bağımlı, ne bağımsız	Oldukça bağımlı	Tamamen bağımlı
1	2	3	4	5

67. Genel olarak **X deposunun eczanenize bağımlılığını** nasıl değerlendirirsiniz?

Hiç bağımlı değil	Oldukça bağımsız	Ne bağımlı, ne bağımsız	Oldukça bağımlı	Tamamen bağımlı
1	2	3	4	5

Lütfen eczanenizin bulunduğu semti işaretleyiniz.

	1. Bölge	Bahçelievler, Beşevler, Tandoğan, Emek Mah., Balgat, Beştepe, Gazi Mah.
	2. Bölge	Yenimahalle, Karşıyaka, Demetevler, Şentepe, Batıkent, Ostim
	3. Bölge	Cebeci, Türközü, Akdere, Abidinpaşa, Tuzluçayır, Mamak, Kayaş, Gülveren
	4. Bölge	Seyranbağları-Küçükesat, GOP, Büyükesat, Kavaklıdere, Çukurca
	5. Bölge	Sıhhıye, Kızılay, Maltepe, Anıttepe, İncesu, Bakanlıklar, Kocatepe, Kurtuluş
	6. Bölge	Ulus, Anafartalar Cad., Samanpazarı, İskitler
	7. Bölge	Etlik, A. Eğlence, İncirli, Esertepe, Ayvalı, Yükseltepe, Basınevleri, Kalaba
	8. Bölge	Aydınlıkevler, Hasköy, Ziraat Mah., Telsizler, Altındağ, Uluğbey, Önder Mah.
	9. Bölge	Keçiören, Sanatoryum, Kuşcağız, Atapark Ufuktepe, Bademlik, Aktepe
	10. Bölge	A.Ayrancı, Y.Ayrancı, Yıldız, Oran, Dikmen, İlker, Sokullu, K.pınarı, Öveçler
	Batı Bölgesi	Bilkent, ODTÜ, Beysukent, Beytepe, Ümitköy, Çayyolu, Konutkent
	Etimesgut	Eryaman, Etimesgut, Elvankent
	Gölbaşı	
	Diğer	Lütfen Belirtiniz:

Anketle ilgili görüşleriniz:

_____
_____
_____
_____
_____
_____
_____

Araştırma sonunda çıkacak rapordan bir kopya istiyorsanız yandaki kutuyu işaretleyiniz. Evet

Anketi bitirdiniz. Çok teşekkür ederiz.

APPENDIX H: Özet

Bu çalışmanın amacı, son zamanlarda akademik yazında ve popüler basında sıkça rastlanan, insanlararası bir olgu konumundan firmalararası bir olgu konumuna gelen, dolayısıyla geniş bir yelpazeye yayılan ***"güven"*** konusunu Türkiye ortamında ele almak ve değerlendirmektir.

İşletmeler arası ilişkilerde güven değerli bir varlık olarak düşünülmektedir. Bunun sebebi güvenin:

1) İşlem maliyetini düşürdüğü yönünde bilimsel verilerin olması,
2) Değişen piyasa koşullarına karşılık verecek şekilde esneklik sağladığına inanılması, ve
3) İşletmelerin etkinliğini ve verimliğini artıracak şekilde bilgi alışverişine, eşgüdüme ve karşılıklı çaba sarf edilmesine olanak tanımasıdır.

Bazı akademisyenlere göre bir ülke ekonomisinin etkinliği o ülkede yüksek ölçüde güvene dayalı bir kurumsal çevrenin bulunmasıyla doğrudan orantılıdır. Örneğin, zamanımızın ünlü filozofu Fukuyama'ya (1995) göre bir ülkenin ekonomik açıdan başarısı olduğu kadar o ülkenin rekabet edebilirliği de sözkonusu toplumdaki güven seviyesine bağlıdır. Tüm bu iddialar, güvenin ekonomik ilişkilerdeki önemli rolüne karşı ilgimizi artırmıştır.

Örgütsel ekonomi yazınında güvenin fırsatçı davranışları azalttığı ve böylece işlem maliyetlerini azaltarak firmaların daha etkin ve verimli yönetilmelerine yol açtığı kuramsal olarak ortaya atılmıştır. Ancak ekonomik ilişkilerde güven ve performans arasındaki ilişki görgül anlamda halen net değildir. Bu çalışmanın birinci amacı, ekonomik ilişkilerde güvenin performansa yönelik sonuçlarını görgül bir biçimde araştırmak ve ortaya koymaktır.

Güvenin işlem maliyetini düşürmekten başka işletmeler arası ilişkilerde ekonomik değeri etkileyecek bir diğer sonucu da 'risk almak'tır. Risk, zor tanımlanan bir kavram olduğu için şimdiye kadar yazında 'algılanan risk' olarak ele

alınmıştır. Bu araştırmanın bir diğer amacı da 'risk alma eğilimi' ni güvenin bir sonucu olarak ölçmek ve bu alandaki akademik yazına katkıda bulunmaktır.

Araştırma ortamı, şimdiye kadar akademik yazında güven-performans ilişkisi üzerine yapılan çalışmalara temel teşkil eden ortamlardan birkaç açıdan farklılık göstermektedir. Öncelikle, şimdiye kadar güven ile perfromans sonuçları arasındaki ilişki gelişmiş ülkelerin imalat sektörlerinde incelenmiştir. Ancak, sosyal, ekonomik, hukuksal ve kültürel farklardan dolayı gelişmiş ülkelerde yapılan bir çalışmanın sonuçları Türkiye gibi gelişmekte olan bir ülkeye tam olarak uymayabilir. Ayrıca, bu çalışmanın araştırma ortamı hizmet sektöründeki bir tedarik zinciridir. Bu ortamın yazında incelenen diğer ortamlardan farklı bir özelliği de alınan hizmetin uygunluğunun daha zor ölçülebilmesi nedeniyle işlem maliyetlerinin daha önemli olmasıdır.

İkinci olarak, bu çalışmada güven ve performans sonuçları arasındaki ilişki geniş bir alıcı-satıcı örneği içinde Ankara'daki eczaneler ve ecza depoları arasında incelenmektedir. Bu araştırma ortamında satılan ürün (ilaç) ve fiyatının sabit olması (Sağlık Bakanlığı tarafından belirlenmesi) nedeniyle fiyat rekabetine dayalı anlık alışverişlerin mümkün olmayacağı ve her türlü alışverişin ilişkisel sözleşmelere dayalı olarak yapılacağı söylenebilir. Sektörün bu özelliğinin güven-performans sonuçları ilişkisi açısından önemli yansımaları olacağı düşünülmektedir.

Üçüncü olarak, ürün ve fiyatı sabit olduğu için, bu tür bir sektörde firmaların maliyet açısından göreceli üstünlük kazanabilmelerinin en önemli yolu işlem maliyetlerini asgariye indirmektir. Dolayısıyla, eğer yazında kuramsal olarak ifade edildiği gibi güven işlem maliyetini düşürüyorsa ve dolayısıyla da toplam maliyette azalmaya sebep oluyorsa, bu kuramsal ilişkinin en fazla önem arzedeceği ortamlardan biri eczane-ecza deposu ilişkisidir.

Özetle, bu çalışmada yanıtlamaya çalıştığımız sorular şunlardır: Bir alıcı (eczane) ile bir satıcı (eczane deposu) arasında yüksek seviyede güvene dayalı bir ilişki olduğunda, bu durum:

1) İşletmeler arasında daha düşük bir işlem maliyetine yol açmakta mıdır?
2) İşletmeler arasında daha fazla işbirliğine yol açmakta mıdır?
3) İşletmeler arasındaki anlaşmazlıkların daha kolay çözülebilmesine yol açmakta mıdır?
4) İşletmelerin ilişkiden daha fazla memnuniyet duymasına yol açmakta mıdır?

5) İşletmeler açısında daha fazla risk alma eğilimine yol açmakta mıdır?

Ayrıca, karşılıklı bağımlılık ve karşılıklı bağlılığın da güven, işbirliği ve memnuniyet üzerinde etkileri olduğu yazında belirtilmesine karşılık bu etkinin dolaylı mı dolaysız mı ve/veya olumlu mu olumsuz mu olduğu akademik yazında kesin netlik kazanmamıştır. Dolayısıyla bu çalışmada bağımlılık ve bağlılığın güven, işbirliği ve memnuniyet üzerindeki dolaysız ve/veya dolaylı etkileri de incelenmektedir.

Psikoloji ve sosyoloji alanında pek çok çalışmanın güveni kişiler arası ve gruplar arası bir olgu olarak incelemesine rağmen örgütsel ve örgütler arası ortamda güven kavramı yakın zamanda araştırılmaya başlanmıştır. Örgütlerarası güven kavramının oluşmasına güvenin örgüt ortamında da görülen bir olgu olması ve kişilerarası güven kavramından farklılık göstermesi yol açmıştır.

Bu çalışmada temel aldığımız güven tanımı akademik yazında sıkça kullanılan, "bir tarafın, ilişkideki diğer taraf tarafından zayıf yanlarının istismar edilmeyeceğine dair inancı" olarak belirlenmiştir (Barney ve Hansen 1994; Ring ve Van de Ven 1992). Ayrıca örgütlerarası güven yazınında kullanılan iki genel güven tanımı da temel aldığımız tanımlar arasındadır (Zaheer ve diğerleri 1998). Bu tanımlar:

1. Bir tarafın diğer tarafın davranışı hakkındaki beklentilerine olan itimadı ve bu beklentilerin tahmin edilebilir olması.
2. Bir tarafın diğer tarafın iyi niyetine olan inancı

olarak belirtilebilir.

Bu inancın ilişkideki güvenilen tarafın,

1. Önceden belirlenmiş taahhütlere uygun davranmak üzere iyi niyetle çaba harcaması,
2. İlişkideki diğer taraf tarafından 'adil' olarak algılanan düzenlemeler (piyasa koşulları değiştikçe) yapması, ve
3. Elverişli fırsat olması durumunda dahi ilişkideki diğer taraftan çok fazla faydalanmaması durumlarında ortaya çıkması beklenebilir.

Bu çalışma kapsamında eczacı-ecza deposu ilişkisi ortamında yapılan araştırma sonucunda nitel ve görgül bir dizi sonuca ulaşılmıştır. Nitel analiz dört eczacı ile yapılan gözlem, odak grubu, mülakat ve tasarım çalışmasından oluşmaktadır. Yine nitel analiz kapsamında eczacılık sektörünün tarihsel analiz çalışmaları da yapılmıştır. Görgül analizde ise bağımsız bir araştırma firması tarafından Ankara

Eczacı Odasının belirlediği on bölgeden toplam 360 eczaneye 67 sorudan oluşan bir anket uygulanmış ve anket sonuçları bir veri tabanı oluşturularak incelenmiştir. Bölgelerden alınacak örneklem sayısı bölgedeki eczane yoğunluğuna göre önceden belirlenmiş ancak anketörler eczaneleri uygunluk (convenience) kriteri uyarınca ziyaret etmişlerdir. Elde edilen veriler faktör analizi (SPSS ve LISREL programları kullanılarak), korelasyon ve regresyon analizi metodları kullanılarak incelenmiştir.

Nitel sonuçlardan en önemlisi, daha önce yapılan çalışmalarda varılan sonuçların paralelinde, güvenin bazı bileşenlerden oluşan bir olgu olduğunun ortaya çıkarılmasıdır. Bu bileşenler; hesaplama, ehliyet, iyi niyet, şöhret (veya sözleşme güveni) olarak belirlenmiştir. Bu bileşenlerden de anlaşılacağı üzere güven hem bir hesaplamaya dayalı hem de ilişkisel bir seçimdir. Ayrıca, güvensizlik öğesinin de güvenin tersi olmayıp, güvenin içinde farklı bir bileşen olduğu ortaya konmuştur. Bu sonuç yazında daha önce yapılan çalışmaların bulgularını doğrular niteliktedir.

Görgül analiz kapsamında yapılan faktör analizi sonucunda ise güvenin iyi niyet, ehliyet, sözleşme güveni ve güvensizlik olarak adlandırılan bileşenlere ayrıldığı saptanmıştır. Bu bileşenler daha önce yazında yapılan çalışmalar ve bu çalışmanın nitel kısmında varılan sonuçlarla örtüşmektedir. Ayrıca, yapılan regresyon analizi sonucunda güvenin işlem maliyetini azaltttığı, işbirliği, memnuniyet ve risk alma eğilimini artırdığı ve işletmeler arasında çıkabilecek anlaşmazlıkların çözümünü kolaylaştırdığı sonuçlarına varılmıştır. Daha önceki çalışmalarda güvenin algılanan riski azalttığına ilişkin bulgular olmasına karşın risk alma eğiliminde bir artışa yol açıp açmadığı araştırılmamıştır. Dolayısıyla, bu çalışma ile elde edilen güvenin risk alma eğilimindeki artışa yol açtığına ilişkin sonucun akademik yazına önemli bir katkı sağladığı düşünülmektedir.

Bunun yanısıra, işletmeler arasındaki karşılıklı bağlılığın işbirliği ve memnuniyet üzerinde olumlu etki yaptığı varılan sonuçlar arasındadır. Ancak bağlılığın güven üzerinde bir dolaylı etkisi bulunamamıştır. Bu, daha önce yazında güven ve bağlılık arasında olumlu bir ilişki bulan çalışmaların aksine bir sonuçtur. Ancak ecza deposuyla eczane arasında diğer imalat sektörlerine nazaran (ör. otomotiv sektörü) daha az bağımlılığın olabileceği düşünülürse, bu sonucun neden farklı çıktığı daha iyi anlaşılacaktır. Karşılıklı bağımlılığın ise işbirliği üzerinde olumlu etkisi olup memnuniyeti dolaylı olarak etkilediği ortaya çıkarılmıştır. Bu sonuca göre karşılıklı bağımlılık yüksekken işletmelerarası güvenle memnuniyet

arasında olumlu bir ilişki vardır. Karşılıklı bağımlılık düşükken de güvenle memnuniyet arasında olumlu ve daha güçlü bir ilişki bulunmuştur. Bu sonuç bağımlılığın yüksek olduğu durumlarda memnuniyetin azalacağı yönündeki bulgulara ters bir sonuçtur. Ancak ekonomik bir ilişkide memnuniyetin bir tarafın diğer tarafın performansı üzerindeki etkisini nasıl algıladığına göre değişebileceği görüşünü desteklemektedir. Buna göre ekonomik bir ilişkide bağımlı olan taraf, performans sonuçlarını bağımlı olduğu tarafa atfedecek ve bu tarafla olan ilişkisinden memnun olacaktır.

Yukarıdaki analizlerin yanısıra, ek analiz olarak güven bileşenleri ile güvenin performansa ilişkin sonuçları arasındaki ilişkiler de araştırılmıştır. Buna göre, güvensizlik bileşeninin memnuniyet ve işbirliği üzerinde herhangi bir anlamlı etkisi bulunamamıştır. Ayrıca, tek başına iyi niyete güvenin işlem maliyetleri üzerinde ve tek başına ehliyete güvenin anlaşmazlıkların çözümlenlesi üzerinde anlamlı bir etkisi bulunamamıştır. Bu sonuç önceki çalışmalarda bulunan iyi niyete güvenin işlem maliyetini azaltıcı etkisi ile çelişmektedir. Tek başına iyi niyetin işlem maliyetleri üzerinde bir etki yaratmamasının bir açıklaması ilaç dağıtım sektöründe kontrol maliyetlerinin diğer sektörlere göre (ör. imalat sektörü) düşük olmasına bağlanabilir. Sadece ehliyetin anlaşmazlıkların çözümü üzerinde bir etkisi olmaması ise ehliyete güven tanımından yola çıkarak açıklanabilir. Buna göre eczacının deponun ehliyetine güvenmesi ecza deposunun eczacının beklentilerine göre hareket etmesini belirtir. Nitel analiz sonuçların göre eczacılarla depocular arasında, üstlendikleri farklı roller (ör. profesyonel meslek sahibi eczacı ve esnaf depocu ayırımı) nedeniyle farklı beklentiler olabilir. Dolayısıyla depocu ve eczacı arasındaki beklentilerin farklı olması durumunda bu iki taraf arasında anlaşmazlık kaçınılmaz olacaktır. Son olarak, risk alma eğilimini belirleyen tek güven bileşeni ise iyi niyete güven olarak belirlenmiştir. Bu sonuç önceki çalışmalarda belirlenen iyi niyete güvenin algılanan risk düzeyini düşürdüğü bulgusuyla örtüşmektedir.

Çalışma sonuçlarının farklı alanlara genellenmesinde dikkatli davranmak gerekmektedir. Türkiye'de bir eczane ile ecza deposu arasındaki ilişki uzun-vadeli tedarik sözleşmesi olarak tanımlanabilir. Bu ilişkide taraflar bağımsız işletmelerdir ve birbirleri üzerinde sermaye hakkı iddia edemezler. Temel ekonomik işlem ilaç tedarikidir ve temas sıklığı günlüktür. Eczane sahipleri genellikle eczacılardır ve KOBİ (Küçük ve Orta Ölçekli İşletme) olarak sınıflandırılırlar. Bu tür bir ilişkide

güvenin örgütsel yansımalarından çok kişisel yansımaları olması beklenebilir. Telefoncunun eczane ile ecza deposu arayüzündeki önemli bir kişi olması da bu beklentiyi güçlendirmektedir. Dolayısıyla bu iki firma arasındaki güveni 'firmalar arası güven' olarak nitelemek konusunda temkinli davranmak gerekmektedir.

Bu çalışmanın işletme yöneticileri açısından önemli sonuçları vardır. Güvenin işlem maliyetlerini azaltıcı, işbirliği, memnuniyet, risk alma eğilimini artırıcı ve anlaşmazlıkların çözümünü kolaylaştırıcı etkisi, işletmeler arasında güvene dayalı ilişkiler kurulmasının önemini ortaya koymaktadır. Alıcı-satıcı ilişkilerinde güvenin işlem maliyetlerini azaltması, daha az bürokratik ve yasal kontrol mekanizmaları uygulanmasına yol açarak ekonomiye önemli faydalar sağlayacaktır. Ayrıca işbirliğinin koordinasyon ve amaç-birlikteliğini artırıcı etkisi düşünüldüğünde, güvene dayalı alıcı-satıcı ilişkilerinin daha etkin ve verimli olacağı düşünülebilir. Bunun yanısıra, güvene dayalı bir ilişkide iki tarafın da ilişkiden memnun olması ilişkinin devamlılığını olumlu yönde etkileyeceğinden tarafların daha uzun vadeli yatırımlar ve bağlantılara girecek, bu da her iki tarafın amaçlarını daha etkili bir biçimde gerçekleştirmesine yolaçacaktır. Anlaşmazlıkların daha kolay çözümlenmesi zaman ve çaba açısından tasarruf sağlayacaktır ve işletmeler arasında yapıcı tartışmaların yolunu açacaktır. Güven sonucu risk alma eğiliminde bir artış ise stratejik açıdan işletmelerin farklı seçimler yapabilmesine yolaçacaktır.

Bu çalışmada güvenin olumlu sonuçları ele alınmıştır. Ancak güvenin olumsuz sonuçları da olabilir. Bunlardan bir tanesi karşılıklı güvenin taraflar arasında yozlaşma ve yolsuzluklara yol açabilmesidir. Bu olasılık, ekonomik bir ilişkideki iki tarafın, ilişkinin dışında olan üçüncü bir taraf aleyhine kazanç sağlaması durumunda ortaya çıkar. Örneğin bir depo bir eczacıya aralarındaki güvene bağlı olarak daha yüksek fiyat iskontosu sağlar, aynı durumdaki diğer eczanelere sağlamazsa ilişki dışındaki üçüncü taraflar aleyhine bir kazanç sağlama durumu sözkonusu olur. Hernekadar yasa bu tür kazançları yasaklasa da güven ilişkisi taraflar arasındaki gizlilik için paravan olarak kullanılabilir. Türkiye'de en önemli sorunlardan birinin yolsuzluklar olduğu düşünüldüğünde, bu tür bir güven ilişkisi istenmeyen bir durum olarak karşımıza çıkmaktadır.

Bir diğer sorun, güvenen ile güvenilen arasındaki güç ilişkisidir. Güvenilen kişi güvenen kişinin ihtiyacı olan kısıtlı kaynakları elinde tutmanın verdiği güçle güveneni kendi çıkarlaı çerçevesinde hareket etmeye zorlayabilir. Örneğin bir depo

bir eczanenin çok ihtiyacı olan ve piyasada zor bulunan tevzi ilaçları elinde tutuyorsa, ilaç tedarikini sürdürmeye koşut olarak eczaneyi belli bir sınırın üstünde ilaç alımı yapmaya zorlayabilir. Bu durum finansal açıdan zayıf olan eczaneleri olumsuz yönde etkileyecektir.

Üçüncü olarak, kendisini toplumdaki diğer sosyal gruplara karşıt olarak değerlendiren bir grubun sosyal normlarına bağlı olarak gelişen güven, 'sadece kendinden olana güvenme' olgusuna yol açabilir. Bu tür güven toplumsal gruplar arasında çatışmayı artırıcı bir etki yaratır. Fukuyama (1995) bu tür güvene sahip toplumları 'düşük-güvenli' toplumlar olarak adlandırmaktadır. Bu görüşe göre eğer bir toplumda kurumsal mekanizmalar etkin değilse bu tür grup içi güven tipleri gelişebilir. Genelleşmiş bir güven olgusunun yaratılması özellikle de Türkiye gibi gelişmekte olan ülkeler açısından önem taşımaktadır. Bu tür ülkelerin en büyük sorunu güçlü bir hukuksal altyapıya sahip olmamaları ve buna bağlı olarak da ekonomik ilişkilerde taraflar arasında güvenin tesis edilememesidir.

Son olarak, hernekadar bürokratik ve yasal kontrol mekanizmalarına yapılan yatırımlardaki azalma işlem maliyetlerinin azalmasını sağlayarak güvenin olumlu bir sonucu olarak değerlendirilse de, bu tür bir durum Türkiye gibi kayıt dışı ekonominin önemli bir sorun olduğu ülkelerde kayıt dışılığın artmasına ve dolayısıyla da vergi kaçaklarına neden olabilir.

Bu çalışmanın nitel analiz kısmı birbirine yakın semtlerde eczanesi olan dört eczacının katılımıyla gerçekleştirilmiştir. Farklı semtlerden daha fazla sayıda eczacı ve depocu ile görüşülmesi nitel analiz sonuçlarının genellenebilirliğini artırıcı etki sağlayabilirdi. Bunun yanısıra, eczacılar ankete birinci depolarını düşünerek cevap vermişlerdir. Alternatif bir inceleme olarak, eczacıların birinci ve ikinci depolarını düşünerek verdiği cevaplar karşılaştırılıp satıcının önemi ve sosyal beğeni eğilimi gibi araştırma sonuçlarını saptıran yönelimler ortadan kaldırılabilir. Ayrıca, verilen cevaplar ilişkinin süresi, eczacının sektördeki tecrübesi, ilişkide kesinti olup olmaması gibi değişkenlere göre yığışım analizine tabi tutulabilir. Bunun yanısıra, deponun telefoncusunun iki işletme arasındaki güven üzerindeki rolünün de incelemeye katılması kişiler arası güvenle örgütlerarası güvenin arasındaki ilişkiyi ortaya koyacaktır. Benzer şekilde, güven bileşenleri ve sonuçları arasındaki ilişki daha da geliştirilmeli, özellikle iyi niyete güvenle risk alma eğilimi arasındaki ilişki daha ayrıntılı incelenmelidir.

Farklı güven bileşenleriyle risk alma eğilimi arasındaki ilişki, bağlılık ve bağımlılık değişkenleri de dahil edilerek geliştirilebilir. Önceki çalışmalarda Türk kültürünün riskten kaçınan bir yapı sergilediği ortaya konmuştur. Bir diğer çalışmaya göre ise insanlar güvendikleri bir kişi tarafından aldatılma riskine karşı, bir şans oyununda kaybetme riskine karşı olduğundan daha fazla riskten kaçınan bir davranış sergilerler. Bu sonuçların ışığında aşağıdaki şu sorular gelecekteki çalışmalara ışık tutabilir: Ecza deposu-eczane ilişkisinde tarafların risk alma eğilimini artıran faktör(ler) ne(ler)dir? Risk alma eğilimindeki artıştan bir güven çeşidi mi sorumludur, yoksa tarafların hangi tür riskleri aldıkları mı incelenmelidir? Bu açıdan, farklı güven ve risk tipleri arasındaki etkileşim de incelenmesi gereken konulardan birisidir. Bunun yanısıra güvenle anlaşmazlık çözümü arasındaki olumlu ilişki kültürel bir açıdan incelenebilir. Bu olumlu ilişki tamamen güvene atfedilebilecek bir durum mudur yoksa kültürel bir olgu mudur? Bu konu ileride yapılacak araştırmalar için ilginç bir zemin oluşturabilecek niteliktedir.

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PUBLICATIONS

1. Şengün, A. E., "Performance outcomes of interfirm trust in buyer-seller relationships: The case of the relationship between a drug wholesaler and a pharmacy", paper presented at the 20th EGOS (European Group for Organization Studies) Colloquium Ph.D. Workshop June 29-30, Ljubljana, Slovenia.

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