



Key factors for building trust in the context of high technology pharmaceutical industries and its customers

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Abstract

Objective: This study aimed to understand the key factors in building trust between high-tech drug manufacturers and their business customers.

Method: In-depth interviews to obtain the perception of health professionals who work in oncology clinics regarding six key factors to build trust consistently found in the literature. Qualitative content analysis was used for data coding and interpretation.

Originality / Relevance: Present research innovates by offering a systematization of the antecedents of trust present in the previous literature that discusses the trust construct. It also offers a qualitative empirical study unprecedented in this thematic applied to the high technology pharmaceutical sector.

Results: Supplier competence emerged as a strength factor of confidence in building trust for all professional's categories interviewed. However, the others factors demonstrated variance in importance among the professional's categories.

Theoretical / methodological contributions: The research allowed to qualitatively evidence the causal relationship between the trust construct and its antecedents in the high technology pharmaceutical sector, as well as its variability according to the profiles of each professional category involved in the decision-making process for new suppliers.


Social / management contributions: Research findings allowed for consolidation of five key recommendations for relationship managers in the high-tech pharmaceutical industries.

Keywords: Confidence; Marketing of relationship; Business Marketing; Pharmaceutical industry.

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1 Introduction

There is a complex chain of relationships in the high-tech pharmaceutical industry, involving various actors, such as hospitals, clinics, private health plans and government agencies. Many are decision makers and influencers of the drug purchase process within clinics and hospitals, which adds challenges to the creation of long-term relationships deemed necessary in high-tech industries (Lindgreen, Antico, Palmer & Heesch, 2009; Polley & Shanklin, 1983). In this context, the present work seeks to understand what key factors for building trust between high-tech pharmaceutical industries and their clients are. As a secondary objective, we sought to investigate whether the key factors are perceived differently among professionals who participate in the decision-making process for the purchase of high technology drugs.

Regarding the traditional pharmaceutical industry (Figure 1), the distribution of primary care medicines occurs through more than 70,000 pharmacies in Brazil (Instituto Ims Health, 2015), and includes intermediaries, such as distributors and wholesalers. In this model, propagandists play a vital role in the relationship between industry and prescribers of recipes (medical specialists).

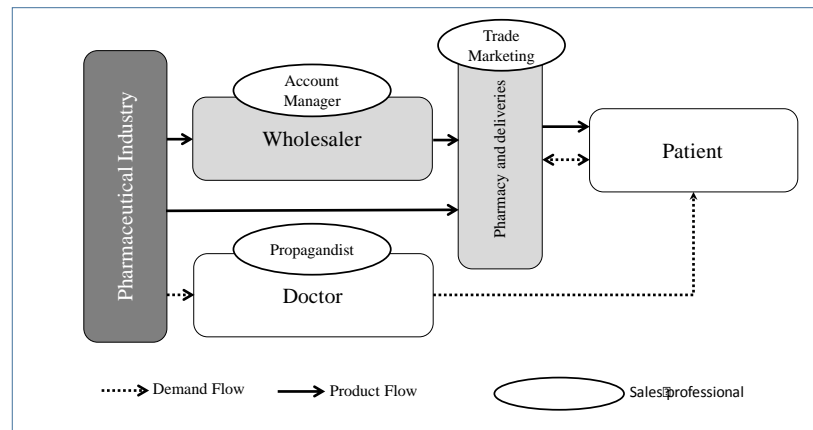


Figure 1 - Traditional commercial model of the pharmaceutical sector, focused on the distribution and promotion of primary care prescription drugs
Source: the authors

The high-tech pharmaceutical industry has a differentiated distribution chain (Figure 2), which comprises of 27 state secretariats, more than 6,000 hospitals, 4,000 National treatment clinics (CNES, 2016), and more than 800 health plan operators (Agência Nacional de Saúde Suplementar - National Supplementary Health Agency - ANS, 2016).

In this model, physicians are assisted by consultants and specialists (Medical Scientific Liaison - MSL) from laboratories for a scientific description of the application and expected effects of the high-tech medicine. Gleason, Alexander, Starner, Ritter, Van Houten, Gunderson, and Shah (2013), conceptualized the specialty market as one that encompasses drugs that are mostly intravenous or infusion-administered, requiring special administration, and are substantially more expensive than traditional pharmacy drugs. These specialized drugs are also termed as high cost, high complexity, or high pharmaceutical technology. Included in this classification are oncological and immunological drugs and those destined for treatment of complex diseases, which require hospital interventions.

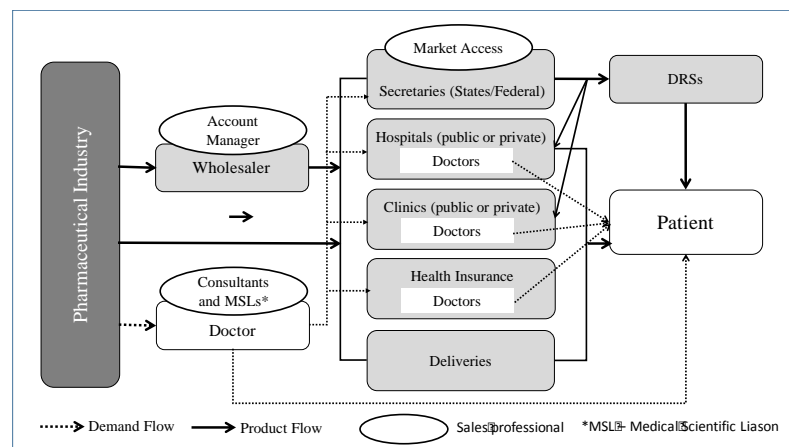


Figure 2 - Commercial model of the pharmaceutical sector, focused on the distribution and promotion of specialized drugs (high cost / high complexity)

Source: the authors

This market consists of the participation of agents other than the doctor, for decision making regarding the adoption of the high technology medicine; they are: a) payers, private health plans, or even the public system; b) dispensers, which are hospitals and clinics, that have their own processes of standardization of the medicines that they offer in their system; and c) legislators, which define the mandatory coverage of private health plans, regulated by the ANS (National Supplementary Health Agency), or the treatment protocols of the SUS (Sistema Único de Saúde - Unified Federal Health System).

In addition to greater complexity in the distribution and use of drugs considered high pharmaceutical technology, clinics and hospitals have a group of multidisciplinary health professionals who participate in the purchasing process. Polley and Shanklin (1983), mapped six agents involved in the process, later grouped into three large groups by Lindgreen et al. (2009), being: a) business professionals: managers and commercial managers; b) operational professionals: technicians and pharmacists; and c) clinical users: doctors and nurses.

The health sector has been under increasing pressure, due to aging of the population and increased costs in the treatment of more complex diseases. Hospitals and clinics seek a better value for their investments, while demanding better equipment technologies and procedures, so they are more productive and less invasive in the treatment of their patients (Friedman & Goes, 2000).

In the revised literature, which discusses relations between high-tech companies and their clients, the texts found an emphasis on the discussion of aspects related to the customization of the offer from the customer perspective (Mohr, Sengupta & Slater, 2010; Lindgreen & Wynstra, 2005), and the identification of multiple relevant agents in the acquisition of high technology drugs (Polley & Shanklin, 1983; Lindgreen et al., 2009). However, no studies were found discussing the construction of trust as an antecedent of the relationship building between sellers and buyers in the pharmaceutical segment. In addition, a bibliographical review was conducted on the antecedents of trust to find the key factors discussed and recommended in the previous literature.

Crosby, Evans and Cowles (1990), describe that in markets for complex products and services, each vendor needs to understand and act as a relationship manager with their customers. The quality of the relationship between sellers and buyers in such cases is an important precursor to future business. Particularly in markets where negotiated technologies are high-end and the existence of trust among trading partners is critical to establishing strategic relationships (Herzig,

Lorini, Hübner & Vercourter, 2010; Monczka, Petersen, Handfield & Ragatz, 1998). Swan and Nolan (1985), describe trust as a crucial element in industrial sales because it facilitates the exchange relationship while preventing mistrust. This article seeks to add reflections on factors that would explain the formation of long lasting relationships in this market by building trust between buyers and sellers.

The manuscript is structured in five sessions including this introduction. Session two presents the theoretical apparatus focusing on the key factors for confidence building. Session three provides the methodological approach adopted for data collection and analysis. In session four, the main results of the surveys are presented and discussed. Finally, in session five, we present the conclusions, contributions of the work and recommendations for future studies, and also managerial implications.

2 Theoretical framework

The study of trust in inter-organizational relationships has already been the subject of analysis by many scholars from different perspectives. In their seminal work, Morgan and Hunt (1994), discussed the importance of trust and commitment as drivers for cooperative behaviors that can lead to successful relationship marketing. In the view of these authors, constructs commitment and trust, are key elements and mediators of five essential antecedents (costs of terminating a business relationship, relationship benefits, shared values, communication, and opportunistic behavior) and five important outcomes (compliance, propensity to leave, cooperation, functional conflict, and uncertainty).

Delbufalo (2012), sought to systematize the results of interorganizational trust and listed 33 constructs further divided into 3 categories: direct economic impacts, indirect impacts, and relational impacts. However, no studies in the literature were found to systematize the antecedents of trust formation among commercial partners.

To organize what has been published on trust antecedents, a bibliographic review was performed with searches in the Ebsco Discovery database for the period from 1980 to 2017 using the words 'trust relationship.' After the identification of scientific articles on this topic, a selection

was made of those that addressed factors that are determinants of trust generation among companies, as well as their references on the subject. The volume of citations from the resulting selection was consulted to validate the most widely referenced ones. In addition, the most recent articles found with such an approach were added to guarantee a more current perspective, however with slight difference from the seminal manuscripts.

Through the research, it was possible to identify six key factors in the construction of inter-organizational trust (Table 1). The factors in descending order of citations are: 1) personal factors; 2) relationship time; 3) competence and quality; 4) vulnerability and uncertainty; 5) shared values; and 6) goal and reward.

2.1 Personal factors

Nine of the 25 articles researched mention personal factors as determinant to generate confidence among commercial partners. This factor consists of the personal aspect of those involved in the routine of the business relationship, most notably the salespeople who interact with customers.

Table 1 - The six key factors found in the systematic literature review

		Personal factors	Relationship time	Competence and Quality	Vulnerability and Uncertainty	Shared values	Goal and reward
	Authors cited chronologically	9	8	8	5	5	3
1	SWAN et al., 1985	X					
2	SCHURR; OZANNE, 1985			X			
3	DWYER et al., 1987			X		X	
4	GAMBETTA, 1988		X				X
5	HEIDE; JOHN, 1988					X	
6	MOORMAN; ZALTMAN, 1988	X					
7	COLEMAN, 1990				X		
8	ANDERSON; WEITZ, 1990		X	X			
9	CROSBY; EVANS; COWLES, 1990	X					
10	BERRY; PARASURAMAN; ZEITHAML, 1990	X					
11	DOYLE; ROTH, 1992	X					
12	MOORMAN et al., 1992	X			X		
13	MOORMAN et al., 1993	X			X		
14	MORGAN; HUNT, 1994			X		X	
15	RING; VAN de VEM, 1994		X				
16	WILSON, 1995	X	X	X			
17	ROUSSEAU, 1998				X		
18	CASTELFRANCHI; FALCONE, 2001						X
19	DONEY et al., 2007	X		X	X		
20	CHUA; INGRAM; MORRIS, 2008		X				
21	GULATI; SYTCH, 2008		X				
22	LINDGREEN et al., 2009			X		X	X
23	PURANAM; VANNESTE, 2009			X		X	
24	HERZIG et al., 2010		X				
25	GREVE et al., 2010		X				

Source: the authors

Doney, Barry, and Abratt (2007), suggest that open communication with information sharing helps create a bond of trust between commercial agents. In addition, companies whose employees present clear customer orientation, which they evaluate as the demonstration of understanding and concern with the needs of the buyer, gain more credibility and tend to generate confidence.

Another aspect found in the literature, regarding the personal factor, were the characteristics related to the technical experience of the commercial partner, or the preparation of the salespeople to understand and serve their customers. Moorman, Zaltman and Deshpandé (1993), add this variable to the source of trust in a relationship, given the influence that technical knowledge can exert on the credibility of a given supplier.

The authors found in their study that customer trust was high when: a) the seller's experience was large, or b) when the contractor's expertise regarding the partnership area was low. The research done by Crosby et al. (1990), supports this view, showing that perceived vendor expertise is a significant predictor of trust, especially in complex markets.

2.2 Relationship time

Time factor is often indicated as a cause of trust. Some studies refer to the accumulation of interactions over time, and how they affect trust in a trading partner (Ring & Van de Ven, 1994). These empirical studies have identified the growth of trust with the development of a relationship (Anderson & Weitz, 1990; Gulati & Sytch, 2008; Wang, Tomlinson & Noe, 2010). Others assume that trust increases over time by examining the effects of the relationship duration (Greve, Baum, Mitsuhashi & Rowley, 2010; Puranam & Vanneste, 2009).

Gambetta (2000), argues that the reliability that seriously matters in a relationship is the experience that companies gain in their relationships with one another over time. By accumulating a frequency of interactions, with several different episodes, over a prolonged period, partners get a perspective on their performance in their relationship, and even tolerate failures in the face of past positive experiences, as evidence of their confidence in the time. The longer a seller is kept in position, serving the same client portfolio, the more proximity he or she will have, and the more

likely to build trust in their relationships (Shapiro, Sheppard & Cheraskin 1992, Doyle & Roth 1992).

For Wilson (1995), however, pressure on business results has reduced the time to carefully explore a trading partner, making the development of a satisfactory relationship more difficult.

2.3 Competence and quality

Additional variables that also impact the perception of trust for the client are correlated with the company's reputation, the quality of the product or service offered, as well as its business tactics, which can promote the development of commitment in relational exchanges (Morgan & Hunt, 1994). In cross-business deals, buyers tend to reduce the risk perception around their purchase by selecting companies they can rely on, being able to deliver reliably contracted product or service and demonstrating interest in the buyer's well-being (Doney et al., 2007).

Product quality, service delivery, and routine action tactics are tangible ways to conceptualize a partner's competence, crucial when hoping to develop relationships and building trust. For Lindgreen et al. (2009), in the high technology and innovation market, to adapt to the customer's value model, identifying elements that are relevant to it throughout the purchasing process, and aligning with its expectations, is a crucial premise to generate consistent and trustful relationships.

Morgan and Hunt (1994), reinforce, along with quality of the product, the tactics of promotion, or the service provided to the client, as factors capable of promoting the development of commitment and trust in relational exchanges. They would be reminiscent of factors extended to the product delivered - that is, to establish a relationship of trust, it does not only matter what is delivered, but also how it is delivered.

Another aspect referenced as a sign of competence of a supplier, it is the agility offered. Zeithaml, Parasuraman, and Berry (1990), describe responsiveness as a factor affecting customer perception of quality. In this case, it is reinforced once again that the form of delivery - with promptness and agility - is central in the quality assessment of a supplier, and consequent feeling of trust.

2.4 Vulnerability and uncertainty

The key factor termed “market vulnerability and uncertainty,” has been described in similar ways by several authors. In general, the literature addressing this topic points out that trust is unnecessary when a company can control the actions of an exchange partner, or has complete knowledge of its decisions, or when it has not transferred critical resources to it. That is, the non-dependence of a commercial partner makes the emergence of trust not necessary or stimulated (Coleman, 1990; Moorman et al., 1992).

The literature on trust also suggests that trusting parties must be vulnerable, to some extent, for trust to become operational. In other words, the results on their decisions must be uncertain, but important to be reached to suggest a strategic partnership (Moorman; Deshpandé & Zaltman, 1993; Doney et al., 2007). Vulnerability, uncertainty and dependence would thus be fundamental to search for reliable partners (Moorman et al., 1993).

2.5 Shared values

Sharing values is another premise attested by previous literature (Dwyer, Schurr & Oh, 1987; Heide & John, 1988; Morgan & Hunt, 1994; Puranam and Vanneste, 2009), as a contributory factor to trust. The literature distinguishes between two different concepts of values that can generate compromise between companies: the one provoked by the identification of common organizational values and the one provoked by the values of financial gain the relationship can generate.

Morgan and Hunt (1994), postulated that the previous existence of shared values, among other factors, is the base to trust be established between two commercial partners. According to the authors, shared values would be the only key factor to be a direct precursor of both commitment and trust in the relationship.

Within the context of value, scholars have also described the common organizational culture of partners as forming the sense of shared values. Organizational culture was defined by Deshpandé and Webster (1989), as the standard of values and beliefs that help people understand organizational functioning and provide standards of behavior in the company. The more similar the organizational cultures between business partners, the greater the sharing of values and, according to the literature, the greater the propensity for a trust relationship (Morgan & Hunt, 1994).

For Lindgreen et al. (2009), in a commercial relationship, especially in the high technology market, it is imperative to identify elements that demonstrate what the customer values, what dictates their behavior and corporate culture, to better know them and, thus, to structure their service. In other words, for the authors there is an intentionality to align values in order to retain clients.

2.6 Goal and reward

There appears to be a consensus in the literature that only partners that seems to be able to reach common goals are targets of a long-term relationship, in which there is the willingness to trust. Along with these partners, there is intention to set goals together, which can be short or long term to guide the relationship.

The authors distinguish between present trust and future trust, and how the role of the goal differs in these two cases. The first type is the trust in the occurrence of a current action of who is trusted. The latter type is the belief that a partner will have a future goal and, combined with certain market conditions, will execute it in an expected way. In this case, it means that the partner will always act predictably once some conditions are met. In future trust, the goal component is less relevant than in present trust. For the latter, the goal is a key variable once the partnership outcome needs to be achieved immediately (Castelfranchi & Falcone, 2001; Herzig et al., 2010).

In addition to the goal, the literature also references reward as an important predictor of a trust relationship. Telser (1980, p.28), argues that “a person is trustworthy, if and only if, it is more advantageous to him than to be unreliable.” The advantageous context in this concept means

gaining wealth. The challenge of the goal and reward effect is that if not well treated, it can be a trigger for opportunistic behavior, which is what a relationship of trust wants to avoid. In other words, if shared goals and rewards can be crucial factors in establishing trust between trading partners; if not achieved, they can make the relationship vulnerable (Gambetta, 2000).

2.7 Relationship and Trust in High-Tech Industries

The pharmaceutical market of high technology is composed of a complex chain of professionals that interact. The relationship management of these complex chain is a relevant business competence. Polley and Shanklin (1983), identified six major types of professionals in health management units, operating within clinics and hospitals, who are important purchasers of specialty medicine. They are: doctors, nurses, technicians, administrative, commercial, and pharmaceutical managers. However, the actual buyer often has minor influence over what is purchased, because in many cases, the procurement process involves a conjunction of the demands from different professionals inside the health unit.

Lindgreen et al (2009), sought to relate these groups of influencers to the stages of purchasing high-tech pharmaceuticals. In this process, the clinical agents are the ones who participate most directly in all the steps, demanding a heightened attention of information and relationship with the supplier. As a result, the sales representatives of the supplier companies have a fundamental role to play in managing the relationship with these and other decision-makers and influencers, since the perceived performance of the product, together with the quality of the relationship, will be important in the repurchasing decision (Lindgreen et al., 2009).

By analyzing trust in markets whose negotiated technologies are innovative, it is evident in the literature that existence of trust is critical to an increase in strategic relationships between companies (Herzig et al., 2010). Swan and Nolan (1985), describe trust as a fundamental element in industrial sales because it facilitates the exchange relationship while preventing mistrust.

Understanding the position that the high-tech supplier occupies in its competitive environment is also a relevant factor in understanding how interesting it is to invest in relationship marketing with his clients in the quest to be elected as the preferred partner. According to Stuart

(1998), technology manufacturers can be stratified into two dimensions: those that operate in crowded markets, in which several competitors actively innovate, and those that are perceived to be prestigious, with a history of developing seminal innovations. Companies that operate in crowded markets are more likely to foster partnerships and strategic alliances with their most relevant customers, while suppliers with technological prestige attracts greater customer interest in forming strategic alliances.

From this perspective, the high-tech pharmaceutical industry has specifications that make relationship marketing and building trust among business partners a more critical tool for success in its development.

3 Method

For the accomplishment of this study, we conducted a qualitative research, of exploratory character with a semi-structured approach, through the application of an open-question Script. It was sought to gain a detailed understanding of the agents' perceptions regarding trust building, as well as the six key factors identified in the literature.

The data collection was based on in-depth interviews, which, according to Seidman (2006), is a relevant technique for extracting perceptions of the individuals inserted in the studied phenomenon. The sample consisted of ten representatives of the high-tech pharmaceutical market, being health professionals working in private oncology clinics, since these are specialized in the adoption of high technology treatments. Five clinics were selected, which are benchmarks in the city of São Paulo, serving more than 100 patients monthly at its facilities: AC Camargo, CIP (Pacaembu Infusion Center), Hemomed, Hospital São José and Hospital Samaritano. From this sample, 10 professionals were interviewed: three business professionals, three operational professionals and four representatives of the clinical staff.

The semi-structured script was organized into two parts. The first sought to outline the profile of the respondent, exploring their position and their relationship with high-tech suppliers. The second part sought to explore the interviewee's perception of key factors in building trust between buyers and high technology labs. At this point, respondents freely described the factors.

Each factor mentioned by the interviewee was explored until the saturation of the response, that is, when no insight other than that already mentioned was added (Strauss & Corbin, 1998).

At the end of the interview, the list of key factors advocated in the literature was presented to the interviewee and they had the opportunity to comment on the factors that did not appear in their report or to add new factors to the list if considered relevant. The interviews were standardized in sixty minutes, all recorded, with prior consent of the interviewee. Interviews were conducted at the interviewees' workplace, at the beginning or at the end of business hours, without any compensation or incentive to the interviewee. The field period lasted from May to August 2016, culminating in ten hours of interviews, whose transcripts resulted in 143 pages.

Content analysis method was used according to Bardin (1994), by means of coding and categorization. The deductive analytical categories were based on the key factors discussed in the theoretical framework, being: a) personal factors; b) time of the relationship; c) competence and quality offered; d) market vulnerability and uncertainties; e) shared values; and f) setting goals and joint rewards.

The data treatment complied with the elaboration of tables that condensed the patterns extracted by each analytical category, allowing generating inferences and analytical interpretations. Each category, cited explicitly or implicitly by the interviewee was analyzed individually and all the summary content generated by each interview was consolidated in another table. This coding process made it possible to compare the perceptions and examples of each interviewee in a cross way, comparing them with the respective group of professionals to which they belong, generating a peculiar vision for each type of professional, by grouping the convergent points.

4 Results and discussion

In this session, it's first discussed the interviewees' perception regarding the key factors in building trust between buyers and high technology laboratories in the light of the theoretical framework. Next, it's presented a compilation of the differences that emerged from the health professionals' perspective concerning the decision-making process for the high technology drugs' procurement.

4.1 Building trust key-factors in the relationship with the high-tech supplier

The resulting compiled material from the interviews highlighted the quality factor as a pronounced and omnipresent category, distinguishing itself from the competence factor. Therefore, the both factors are presented herein separately. The following seven factors are listed in ascending order of importance from the interviewees' perspective: 1) quality; 2) competence; 3) personal factors; 4) shared values; 5) vulnerability; 6) relationship time; and 7) goal and reward.

1) Quality

In line with Wilson (1995), the quality of the product offered is the basis of trust, especially in highly specialized markets. In all interviews, the quality aspect was the expected premise of a high technology supplier and the predominant factor in a relationship of trust. Since the health sector is concerned, the interest that has arisen in discussions about quality is that the clinic, particularly the physician, are considered by their patients as responsible for the success of the treatment. According to one medical interviewee: "the quality of a product is 90% of the doorway."

For operational professionals, quality is also connected with investment in research and development of high-tech suppliers and the entire process of regulatory approval of the drugs they use. Another specific aspect for this group of professionals is the quality of delivery of the products, since many medicines require cold chain and rigid temperature control, otherwise they lose their basic characteristics and thus their effectiveness.

The most direct professionals on trust based on the quality of technology provided were the clinicians. For these, the quality of the product begins with the clinical studies performed by the supplier to prove their effectiveness. Aspects such as the study design, number of patients tested, ethnic profile of the population evaluated, and the stage of the disease in which they were found, determine how credible the clinical research and its results will be for clinical professionals.

In other words, the interviewed doctors reinforce the concept that the customer relies on suppliers who can reduce the risk of their purchases by delivering the product that was contracted based on the scientific evidence presented (Doney et al., 2007).

2) Competence

For all types of health professionals surveyed, competence is a key factor in generating trust in their suppliers, although the concepts and examples are distinct.

For business professionals, competence is intrinsically correlated with their availability, agility, and flexibility. An example, according to one respondent, is the agility of the vendor in solving problems: “They quickly solved the problems I had from one day to the next.” This relevance of agility in the relationship reinforces the concept previously discussed by Zeithaml et al. (1990), on the influence of supplier responsiveness on customer perception of quality. Another factor mentioned by these professionals was the flexibility of commercial negotiation, that is, they value the supply economy. As described by Doney et al. (2007), competence for these business professionals is related to the partner’s business condition or investments in the client’s business.

For operational professionals, competence is correlated with the support given to the clinic, to them and patients, as well as to cite the agility of care as a valued competence. By describing it as competence of the supplier, this professional would be equivalent to the dimension of functional competence, presented by Doney et al. (2007), as the level of delivery and aggregate service that the supplier offers.

Among the considerations described by the clinical professional, one can find aspects of the dimension of technical competence, defined by Doney et al. (2007), as the quality itself and delivery of the product, its effectiveness and benefits perceived by the buyer. For this professional, competence is connected with various efforts of the high-tech supplier to allow, for example, patient access to the medication prescribed by the physician, or prior negotiation of the manufacturers with the health care providers, to cover the prescribed treatment. This group also values the presence of the laboratory in events of immense size and notoriety, as national and international congresses, as well as the endorsement of the treatment by known professionals and reference in the researched area. Therefore, once again, the promotional tactics, mentioned by Morgan and Hunt (1994), appear as an important source of security for clients. Another way of understanding this perspective of the clinical professional is in the

view of Stahl, Barnes, Gardial, Parr and Woodruff (1999), who advocate that the consequences of using a product are more valuable than the product itself.

3) Personal factors

The third key factor most frequently mentioned by the different health professionals interviewed was the level of service provided by the laboratory staff that is routinely evolved with the clinic. For the three types of professionals, the common denominator regarding the points of contact with the high-tech pharmaceutical industry refers to the posture and preparation of these interlocutors, who impart identity and personify the manufacturer.

According to one medical interviewee: “What makes you gain trust, is the person listening to you, understanding your needs and showing you they are doing some work to meet your needs. A laboratory gives you no opening; you cannot see anything.”

The testimonials are in line with Swan, Trawick and Silva (1985), which indicate the humbleness, frankness, warmth, and real empathy from the pharmaceutical industry towards the needs and challenges of their customers as key factors in their long-lasting relationship. When sale representatives do not have such characteristics, some interviewees expressed that they conditioned the commercial relationship continuity to sales representative change.

Both business and operational professionals give greater relevance to the personal factor. They also expressed that qualified care and what they call “proactive” attitude - or problem solving - are fundamental to build trust in the relationship with a pharmaceutical supplier, in line with that proposed by Berry and Parasuraman (1991), who reinforced the importance of agility and readiness for trust building. For the interviewees, training and decision-making power are crucial concerning the laboratory staff in such mode that this might be a decisive factor for a supplier has a priority status.

Also, for these two clinic professionals (business and operational) the constant and available presence of the industry professionals are relevant, but without what they call “opportunistic” behavior. They value the qualified information they receive from the industry via their vendors but reject the idea of being approached to provide clinic or competitor information. Such behavior is aligned with the premise of the collective rather than the individualistic orientation identified in the trust literature (Moorman et al., 1992).

For the clinical staff, they are more concerned with the technical qualification of the industry team with whom they have direct contact. They pointed out as critical situations when the industry professional does not present a high-level knowledge regarding the treatment that is being promoted, or related to the clinical field. In this sense, the technical competence is a premise expected by the clinical staff as a reliable source of information. This factor has been asserted by Crosby et al. (1990), that showed the perceived expertise of the seller as an important source of trust.

4) Shared values

The key factor shared values emerged spontaneously in interviews with operational professional and clinical staff, however, the business representatives did not mention this factor.

Operational professionals, who are closer to the patient's routine, mentioned what they call "principles" of pharmaceutical suppliers, which are considered crucial for the bond establishment between the clinic and the industry. They argue that because they work in the health sector, they expect the manufacturers' commitment to genuinely support cancer patients. For clinical professionals, the main value to generate trust must be based on industry transparency and exemption when promoting the data that support the medicines protocols. Additionally, exposing the treatment weaknesses, such as its side effects and toxicity, should reinforce trust in the industry.

For both operational professionals and clinical ones, the greater the organizational cultures similarity between business partners, - which involves the commitment and transparency of the pharmaceutical supplier -, the greater the likelihood for a relationship of trust to stand out. This perception is aligned with proposed by Morgan and Hunt (1994).

5) Vulnerability

Vulnerability is another factor less explicitly mentioned, but that subjectively appears in the discourse of business professionals and clinicians and it is a missing factor in interviews with operational professionals. For those who operate in business management, the issue of vulnerability is related to the clinics' financial sustainability. Competition is one of the issues addressed by the literature on vulnerability. However, in the business professionals'

perception the major vulnerability relies on the treatments reimbursements from the health insurance plans. In this regard, they value laboratories who, in addition to promoting their innovations, also care about working with health insurers to guarantee the coverage of their new treatments.

For clinical professionals, vulnerability is a more sensitive factor since it is associated with the perception of their professional competence. These professionals feel the pressure and responsibility concerning their patients' successful treatment, particularly in a challenging field, such as oncology. The perception of the patients and their relatives that the treatment decision belongs to this professional, strengthens their responsibility in managing all the inherent implications related to the medicines prescribed in the course of the disease.

According to the literature on uncertainty and vulnerability, the discussed elements above would be relevant for the active search of trustful partners (Moorman et al., 1993; Doney et al., 2007). The fragility of business professionals and clinicians, facing negotiations and interactions with health plans and patients, is a relevant factor for the pharmaceutical industry to support and engage in a differentiated relationship with oncology clinics.

6) Relationship time

Time factor was spontaneously cited by the business professionals. For them, the repetition of transactions is an important condition to grant trust to a supplier. A common point for business professionals from cancer clinics that are not within a hospital structure, such as CIP and Hemomed, and which, therefore, do not have the support of a robust institution, was the relevance of the suppliers' support throughout the business development. Also, they argued that time is a distinguished factor since they refer to those who have consistently supported them since the business foundation as trustful suppliers. They appear to be more tolerant to managing problems with these trustful suppliers than with others. These statements are in line with Ring and Van de Ven (1994), who attest that the accumulation of interactions over time can affect trusting on a commercial partner, mainly for business professionals when compared with others professionals inside the buyer.

7) Goal and reward

Among all respondents, the goal and reward factor were not explicitly mentioned. Subjectively, this factor appears in interviews with business professionals and clinicians but does not appear in the context of operational professionals.

From the perspective of business professionals, the reward theme comes from the discourse that trusted partners are sensitive to customer sustainability and show an interest in sharing the gains from their portfolio. Some respondents, not included in a hospital structure, also expressed approval and favoritism to suppliers who are open about their goals, allowing clinics to engage in their business plans. The converging point noted between the interviews and the literature on these factors is the importance of establishing an intentionality of both parties in the relationship, whether financial or otherwise, to guide a long-term relationship.

4.2 The relevance of the health professional's groups in decision making

All respondents were hired employees or shareholders of the clinics where they had been working for more than five years and had experience in similar positions in other organizations. Such professionals interacted regularly with several high-tech pharmaceutical industries, albeit with distinct interests and contacts depending on the scope of their function or the structure of the pharmaceutical supplier.

The interaction between the professionals within each clinic took place as part of their daily routine and was mainly structured through monthly or bi-weekly management meetings. Common to all clinics that participated in this study, there is an internal group dedicated to analyze the new treatments standardization as an addition to or replacement to others available in the clinic. In this sense, each professional assumes distinct roles, and as mentioned by all interviewee, the decision to acquire a new therapy is taken by collective consensus by means of the group discussion regarding the alternative evaluations.

In this perspective, we sought to systematize the factors that would be most prevalent for each group of professionals in the decision-making process to choose new suppliers (Table 2). The denominations "high, low and moderate" indicate the number of mentions of the factor by the interviewees in each group. When everyone mentions it, this factor is considered to have a high

impact on the professional’s decisions. This factor is considered moderate when mentioned by half the respondents. When mentioned by less than half of the interviewees, the factor is considered of low relevance for this professional. There are also cases in which the interviewees did not mention the factors and, therefore, these are considered absent in the analysis of these professionals in relation to the suppliers.

The competence factor is prominent for all respondents, which is a contrast to the goal and reward factor. Quality and personal factors also show importance for the majority of respondents, but quality has little implication for business professionals; and personal factors, in a similar way for physicians (clinical staff).

Inversely from what has been advocated in the revised general literature, in this sector there is a central concern with quality and competence that surpass other factors commonly indicated as predictors of trust, such as relationship time and interpersonal aspects. This is explained by the high complexity of the treatments, which demands high technological specifications in the medicines used. Although interpersonal relationships and relationship time are important, the decisive factor in maintaining a lasting relationship with the pharmaceutical industry is to offer effective solutions to the clinical problems faced by clinics, hospitals, and their patients.

Table 2 - Relative importance of the relationship building key-factors among professional group

	Business	Operational	Clinical Staff
1 - Competence	High	High	High
2 - Quality	Low	High	High
3 - Personal factors	High	High	Low
4 - Shared values	Absent	Moderate	Moderate
5 - Vulnerability	Moderate	Absent	Moderate
6 - Relationship time	Moderate	Low	Low
7 - Goal and reward	Low	Absent	Low

Source: the authors

5 Conclusions

The objective of this study was to analyze the phenomenon of inter-organizational trust, more specifically in the high technology pharmaceutical market, aiming to understand what would be the key factors for trust building. Such factors would contribute to establishing long-term relationships between companies, and would influence the client's perception of suppliers, differentiating the later to a certain extent, from the competition.

The results of the qualitative research with clinics and hospitals participating in cancer treatment, demonstrated the strength of three key factors in building inter-organizational trust: product quality offered, supplier competence, and personal factors.

The findings are in line with previous studies that emerged from the literature review on trust antecedents, which indicated personal factors and quality-competence as the strongest antecedents. The distinction is based on the time factor, which in the literature review appears equally important, but for the interviewees it was not shown to be a relevant factor. Shared values, vulnerability and reward are the least cited, and little was added by some respondents. They can contribute to the formation of trust with some professionals, but they are not a consensus as the other factors mapped.

Because of the advanced nature of the segment being studied, and the fact that it is within the health area, which is sensitive to the image of any company, the quality of the product has proven to be a basic condition for starting a relationship. Therefore, the demonstration of the drug's efficiency in the interviewees' perception is an element that determines the formation of commercial relationship in this segment.

Also, no other factor emerged and was unison among health professionals, capable of influencing the formation of trust among commercial partners in this segment. However, a common theme presented by everyone as relevant to a trust relationship is what they called the "interest" of the supplier in the client's business. That is, companies with a strong focus on their clients and structured to better serve them are recognized as reliable.

Study contributions and future studies

The present research innovates by offering a systematization of the antecedents of trust present in the previous literature that discusses the trust construct, but also offers a qualitative empirical study unprecedented in this thematic applied to the pharmaceutical sector of high technology.

The qualitative investigation of the phenomenon allowed to highlight the causal relationship between the trust construct and its antecedents in the high technology pharmaceutical sector, as well as the distinct strength they exert in the constitution of the phenomenon and its variability according to the profiles and interests of each category involved in the decision-making process of choosing suppliers. Thus, we propose the following hypotheses be tested in future studies:

- 1) Building inter-organizational trust in high-tech industries is determined more strongly by the competence demonstrated by the supplier.
- 2) The strength of trust antecedents is distinct among professional categories in the decision-making process of choosing high-tech drug suppliers.

Management Implications

The results of the research allow, from the point of view of organizational practice, to generate insights for managers of pharmaceutical industries of high technology, which should be prioritized in a strategy of relationship with their clients, which are listed below:

- 1) Consider the relative importance of each key factor in the professional category decision making. For example, generating consistent academic and technical materials that demonstrate the quality and efficiency of the drug for the clinical staff and operational professionals and establish economic viability and strategic partnerships with health plans for business professionals.
- 2) Adapt the communication of the different points of contact (website, information material, bulletins, newsletter, etc.) of each category of professionals to their specific needs and profiles.

3) In addition to discounts, business professionals must be offered flexibility in negotiation, proximity, and agility in logistics. It is important to ensure constant readiness to solve the problems inherent in commercial transactions over time, and preferably without intermediaries. For these professionals, as important as solving the problem, is the dedication of the partner in trying to solve it.

4) For operational professionals, it is necessary to provide constant support through training and logistics, to ensure the effectiveness of the product, with low toxicity, associated with constant patient support. The proactive stance, coupled with the vendors' technical knowledge, is also highly valued.

5) For clinical professionals, it is necessary to provide quality scientific evidence, backed by well-structured studies conducted by referral centers, and medical researchers widely recognized in their respective fields. They require the assurance that they will be able to replicate the efficacy and safety standards of the studies in their clinical practice, since they will always be predominantly responsible for the success of their patients' treatment.

As we have seen, building trust is a complex exercise that many agents of organizations must devote themselves to, no matter if they are buyers or sellers. Commitment and seriousness are essential, which are recognized through the technical competence of the negotiated molecules as demonstrated in this study, increasing the certainty that in the end of the day, these drugs will allow to save lives.

References

- ANS, 2016. Dados e indicadores do setor. Recuperado em 15 fevereiro, 2018, de <http://www.ans.gov.br/perfil-do-setor/dados-e-indicadores-do-setor>.
- Anderson, E. & Weitz, B. (1990). Determinants of Continuity in Conventional Industrial Channel Dyads. *Marketing Science*, 8, pp. 310–323.
- Bardin, I. (1994). *Análise de conteúdo*. Lisboa: Edições Setenta.
- Berry, L. & Parasuraman, A. (1991). *Marketing Services*. New York: The Free Press.
- Castelfranchi, C. & Falcone, R. (2001). *Social Trust: A Cognitive Approach*. Springer Netherlands: Kluwer.
- Chua, R.; Ingram, P. & Morris, M. (2008). From the head and the heart: locating cognition-and affect-based trust in managers' professional networks. *Academy of Management Journal*, 51 (3), 436-452.

- Coleman, J. S. (1990). *Foundations of Social Theory*. Cambridge, MA: The Belknap Press.
- Crosby, L. A., Evans, K. R. & Cowles, D. (1990, julho). Relationship Quality in Services Selling: An Interpersonal Influence Perspective. *Journal of Marketing*, 54, pp. 68–81.
- CNES. (2016). *Cadastro Nacional de estabelecimentos de saúde*. Recuperado em 15 fevereiro, 2018, de <http://cnes.datasus.gov.br/>.
- Delbufalo, E. (2012). Outcomes of inter-organizational trust in supply chain relationships: a systematic literature review and a meta-analysis of the empirical evidence. *Supply Chain Management: An International Journal*, 17(4), pp. 377–402
- Deshpandé, R. & Webster, F. E. (1989, janeiro). Organizational culture and marketing: defining the research agenda. *Journal of Marketing*, 53, pp. 3–15.
- Doney, P. M., Barry, J. M. & Abratt, R. (2007). Trust determinants and outcomes in global B2B services. *European Journal of Marketing*, 41 (9/10), pp. 1096–1116.
- Doyle, S. & Roth, G. T. (1992, inverno). Selling and Sales Management in Action: the use of insight coaching to improve relationship selling. *Journal of Personal Selling and Sales Management*, 12, pp. 59–64.
- Dwyer, R. F.; Schurr, P. H. & Oh, S. (1987). Developing Buyer-Seller relationships. *Journal of Marketing*, 51, pp. 11–27.
- Friedman, L. H., & Goes, J. B. (2000). The timing of medical technology acquisition: strategic decision making in turbulent environments. *Journal of Healthcare management*, 45(5), p. 317–330.
- Gambetta, D. (2000). Can we trust trust? In D. Gambetta (Ed.). *Trust: making and breaking cooperative relations* (Chap. 13, pp. 213–237). Oxford: Department of Sociology, University of Oxford.
- Gleason, P. P., Alexander, G. C., Starner, C. I., Ritter, S. T., Van Houten, H. K., Gunderson, B. W., & Shah, N. D. (2013). Health plan utilization and costs of specialty drugs within 4 chronic conditions. *Journal of Managed Care Pharmacy*, 19(7), pp. 542–548.
- Greve, H.; Baum, J.A.C.; Mitsuhashi, H. & Rowley, T. J. (2010). Built to last but falling apart: cohesion, friction, and withdrawal from interfirm alliances. *Academy of Management Journal*, 53(2), pp. 302–322.
- Gulati, R. & Sytch, M. (2008) Does familiarity breed trust? Revisiting the antecedents of trust. *Managerial and Decision Economics*, 29, pp. 165–190.
- Heide, J. B. & John, G. (1988, janeiro) The Role of dependence balancing in safeguarding transaction - Specific Assets in Conventional Channels. *Journal of Marketing*, 52, pp. 20–35.
- Herzig, A., Lorini, E., Hübner, J. F., & Vercouter, L. (2010). A logic of trust and reputation. *Logic Journal of the IGPL*, 18(1), pp. 214–244.
- Instituto Ims Health. (2015). Recuperado em 15 fevereiro, 2017, de http://www.imshealth.com.br/pt_BR.
- Lindgreen, A., Antioco, M., Palmer, R. & Heesch, T. (2009). High-tech, innovative products: identifying and meeting business customers' value needs. *Journal of Business and Industrial Marketing*, 24(34), pp. 182–197.
- Lindgreen, A., & Wynstra, F. (2005). Value in business markets: What do we know? Where are we going?. *Industrial Marketing Management*, 34(7), pp. 732–748.
- Mohr, J. J., Sengupta, S., & Slater, S. F. (2010). *Marketing of high-technology products and innovations*. Pearson Prentice Hall.

- Monczka, R. M., Petersen, K. J., Handfield, R. B., & Ragatz, G. L. (1998). Success factors in strategic supplier alliances: the buying company perspective. *Decision sciences*, 29(3), pp. 553–577.
- Moorman, C. & Zaltman, G. (1988, outubro/novembro). The Role of Personal Trust in the Use of Research. *Journal of Advertising Research*, 28, pp. 16–24.
- Moorman, C., Zaltman, G. & Deshpandé, R. (1992). Relationship between providers and users of market research: the dynamics of trust within and between organizations. *Journal of Marketing Research*, 29, pp. 314–328.
- Moorman, C., Deshpandé, R. & Zaltman, G. (1993, janeiro.). Factors affecting trust in marketing research relationships. *Journal of Marketing*, 57, pp. 81–101.
- Morgan, R. M. & Hunt, S. D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58(3), pp. 20–38.
- Pauly, M. V. (2005). Competition and new technology. *Health Affairs*, 24(6), pp. 1523–1535.
- Polley, P. J. & Shanklin, W. L. (1983). Marketing high technology medical equipment to hospitals. *Journal of Business & Industrial Marketing*, 8(4), pp. 32–42.
- Puranam, P. & Vanneste, B. S. (2009). Trust and governance: untangling a tangled web. *Academy of Management Review*, 34(1), pp. 11–31.
- Ring, P. S. & Van de Ven, A. H. (1994). Developmental process of cooperative inter-organizational relationships. *Academy of Management Review*, 19(1), pp. 90–118.
- Rousseau, D., Sitkin, S. B., Burt, R.S. & Camerer, C. F (1998, julho). Not so different after all: a cross-discipline view of trust. *Academy of Management Review*, 23, 393-404.
- Schurr, P.H.; Ozanne, J.L. (1985). Influence on exchange processes: buyers' preconceptions of a seller's trustworthiness and bargaining toughness. *Journal of Consumer Research*. 11 (4), 939 – 953.
- Seidman, I. (2006). *Interviewing as qualitative research: a guide for researchers in education and the social sciences*. New York: Teachers College Press.
- Shapiro, D., Sheppard, B. H. & Cheraskin, L. (1992). Business on a handshake. *Negotiation Journal*, 8(4), pp. 365–377.
- Stahl, M. J., Barnes, W. K., Gardial, S. F., Parr, W. C. & Woodruff, R. B. (1999). Customer-value analysis helps hone strategy. *Quality Progress*, 32(4), pp. 53–58.
- Strauss, A. & Corbin, J. (1998). *Basics of Qualitative Research* (2. Ed). Newbury Park, CT: Sage.
- Stuart, T. E. (1998). Network positions and propensities to collaborate: An investigation of strategic alliance formation in a high-technology industry. *Administrative science quarterly*, pp. 668–698.
- Swan, J. E. & Nolan, J. J. (1985). Gaining customer trust: a conceptual guide for the salesperson. *Journal of Personal Selling & Sales Management*, 5(2), pp. 39–48.
- Swan, J. E., Trawick, I. F. & Silva, D. W. (1985). How industrial salespeople gain customer trust. *Industrial marketing management*, 14(3), pp. 203–211.
- Telser, L. G. (1980). A theory of self-enforcing agreements. *Journal of business*, pp. 27–44.
- Veloutsou, C., Saren, M. & Tzokas, N. (2002). Relationship marketing: what if...?. *European Journal of Marketing*, 36(4), pp. 433–449.
- Wang, S., Tomlinson, E. C. & Noe, R. A. (2010). The role of mentor trust and protege internal locus of control in formal mentoring relationships. *Journal of Applied Psychology*, 95(2), p. 358.

- Wilson, D. T. (1995). An integrated model of buyer-seller relationships. *Journal of the academy of marketing science*, 23(4), pp. 335–345.
- Zeithaml, V. A., Parasuraman, A. & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*.