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# Informational Justice, Cognitive Trust, and Satisfaction: Purchasers' Perspective of Healthcare Distribution Market

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## Abstract

**Purpose:** We examined informational justice, cognitive trust, and satisfaction in healthcare distribution market and their associations within the physician–patient (provider–purchaser) relationship. **Methodology:** 253 valid survey samples collected from patients and used structural equation modelling for analysis. **Findings:** We postulated that (1) physicians' informational justice has a positive impact on patients' cognitive trust, (2) patients' cognitive trust has a positive impact on satisfaction, and (3) patients' perceived informational justice has a positive impact on satisfaction. Participants were 253 people who had visited a hospital in South Korea in the past year. Results confirmed that the presence of informational justice has a positive impact on patients' cognitive trust and satisfaction in the physician–patient relationship. Additionally, once cognitive trust was built, it positively influenced patients' satisfaction. We discussed the concept and the impacts of informational justice in light of our analyses regarding patients' perceived cognitive trust and their satisfaction in the physician–patient relationship. **Implications:** These results emphasize the importance of ethics in healthcare, particularly physicians' frankness and honesty when providing information to patients. Further, these findings present implications for physician education, as part of their training must involve building their patients' cognitive trust as a prerequisite for developing patient satisfaction.

**Keywords :** Cognitive Trust, Healthcare Distribution Market, Healthcare Service, Informational Justice, Purchaser, Satisfaction

**JEL Classification Code :** I10, I19, M19, M39

## 1. Introduction

Owing to increased income and education levels, modern society is, in many ways, more relaxed than the past. Consequently, there is a growing number of healthcare facilities directly providing healthcare services to customers (Buchbinder et al., 2019). The healthcare industry has consistently grown and diversified since approximately 1965—rapidly generating occupations pertinent to

healthcare management. Consequently, competition among healthcare facilities is intensifying and consumers–purchasers have placed elevated importance on healthcare distribution market, including physicians' treatment and management of patients' disease. Healthcare service is divided into medical service—the medical practice itself—and additional services that patients experience during healthcare provision. Marley et al. (2004) defined “medical service” as the clinical quality related to care and “additional service” as the process quality.

Past studies on healthcare distribution market can be broadly classified into two categories: service quality suitable to healthcare distribution market (Dagger et al., 2007) and what factors are important in the healthcare distribution market environment (Jaakkola & Halinen, 2006). The present study was designed to include an examination of the role of justice—an ethical factor—in the

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healthcare distribution market environment. Ethical factors are increasingly relevant, as evidenced by the advent of the field of bioethics (Buchbinder et al., 2019).

Justice is explored in an array of social science disciplines, including medicine-related academic research, primarily owing to the growing importance of ethical management amid the beginning of a healthcare reform (Buchbinder et al., 2019). Holmvall et al. (2012) examined its importance in the relationship between healthcare providers and patients, and Jonas et al. (2013) demonstrated that perceived interpersonal justice can prolong the physician–patient relationship. Among several types of justice, we focused on informational justice, which refers to the act of providing accurate information with integrity (Kernan & Hanges, 2002). Colquitt et al. (2001) proposed that informational justice is important because it is created by other party while other justices are identified by organization. Being frank and honest when providing information to patients is one of the major elements of bioethics (Buchbinder et al., 2019).

Trust should also be examined in the physician–patient relationship (Dwyer et al., 1987). Schurr and Ozanne (1985) defined trust as the belief in the reliability of a party's words and the belief that a party will fulfill their obligations in an exchange relationship. Mohr and Spekman (1994) argued that trust is a major factor in building a successful companion relationship, and Barratt (2004) proposed trust as a predisposing factor of cooperation. Trust can be broadly divided into affective and cognitive trust (Erdem & Ozen, 2003), with the latter referring to one's confidence in another party's abilities based on rational reasoning (Lewis & Weigert, 1985). Chua et al. (2008) argued that having cognitive trust is more important than having affective trust in a business relationship, but not in personal relationships.

Dyer and Nobeoka (2000) noted trust as the determinant of commitment, and that a trust-based relationship is likely to promote satisfaction. Taken together, patients' perceived informational justice and cognitive trust are vital in recognizing satisfaction in their relationships with physicians. By exploring the impact of informational justice on cognitive trust and satisfaction in a healthcare-related study, we hope to propose effective measures for healthcare facilities to implement in a growingly competitive market. As the importance of healthcare service quality is escalating, our findings provide practical implications for physicians. In sum, we 1) examined the impact of informational justice on cognitive trust and satisfaction, 2) proposed the need for informational justice in healthcare-related academic research, and 3) elucidated the importance of cognitive trust in the relationship between healthcare providers and patients.

## 2. Literature Review

The importance of ethical behavior has been highlighted in the healthcare distribution market (Holmvall et al., 2012). We examined the constructs of informational justice, cognitive trust, and satisfaction in the physician–patient relationship through a theoretical discussion.

### 2.1. Informational justice

Academic research on justice, which is also interpreted as fairness and equity, started with the equity theory proposed by Adams (1975). Adams explained equity as the difference in the proportion of input and output between two parties. Further, justice refers to the perceived fairness of this proportion. Based on this notion, James (1993) explained fairness perceived in society and organization as organizational justice.

Organizational justice is classified differently by various researchers. Blodgett et al. (1997) classified it into procedural and distributive justice; while Greenberg (1990) classified it as distributive justice, procedural justice, and interactional justice. However, researchers today divide interactional justice into interpersonal justice and informational justice; thus, they classify organizational justice into four types: procedural, distributive, interpersonal, and informational justice (Colquitt, 2001).

Beginning in the early 1980s, justice research was expanded to encompass the interpersonal aspect (Donovan et al., 1998)—interactional justice—which is perceived by the experience of how one party is treated by another. Greenberg (1993) first divided interactional justice into interpersonal justice and informational justice. Lee and Ha (2020) defined interpersonal justice as a construct that represents whether a party treated another party respectfully in decision-making processes. Lee et al. (2020) described informational justice as providing correct information with integrity. Furthermore, interactional justice is viewed as more important than the other types of justice in collectivist Eastern societies (Fields et al., 2000). While distributive justice and procedural justice are conceived by an organization, interactional justice is developed by the other party in an exchange (Ambrose & Schminke, 2003).

We thus explored the importance of informational justice in the physician–patient relationship because informational justice describes whether a process or explanation is correctly conveyed when delivering information; thus, it may have a crucial impact on decision-making processes (Ellis et al., 2009). Donabedian (1986) pinpointed the importance of interpersonal management for physicians and patients, convenience in the medical care environment, and ethical principles of healthcare facilities as the components of healthcare quality. Healthcare quality

can be expressed as “the degree to which service, care, and procedure have been accurately performed” (Buchbinder et al., 2019). Patients’ perceptions of informational justice are essential to boost healthcare quality, as physicians are responsible for telling the truth, providing accurate information, and protecting confidentiality (Buchbinder et al., 2019).

## 2.2. Cognitive trust

Trust is the determination to take the risk that the other party in an exchange relationship may not fulfill their promises (Mayer et al., 1995). It is also expressed as belief and conviction. Developing trust requires recognition of the possibilities of loss and mutual dependence (Aryee et al., 2002), suggesting that one can ensure their own benefits only by taking risks and depending on the other party. Trust is an important construct in the field of social sciences, primarily because trust enables sustained partnerships in an exchange relationship (Lee & Kim, 2020). Yang and Shim (2018) argued that trust is a requirement for successful relationships, and Pappas and Flaherty (2008) stated that a trust-based relationship exhibits a high level of shared values that prolong it. Thus, a seller–buyer or service provider–client relationship built on trust is likely to last.

Many previous studies viewed trust as a multidimensional construct and broadly classified it into cognitive and affective trust (McAllister, 1995). Moorman et al. (1992) defined affective trust as the goodwill one shows toward the other party in an interpersonal relationship. Affective trust requires commitment of one’s mind because it begins from solicitude from the other party (Remper et al., 1985). Nyaga et al. (2010) argued that one can emotionally trust someone only when one is confident that the person will provide benefits in an exchange relationship. In contrast to cognitive trust, affective trust is perceived through personal experiences with the other party (Rempel et al., 1985). The key aspect of affective trust is a psychological belief based on an emotional bond with the other party (Johnston et al., 2004).

Cognitive trust is the belief that the other party will effectively perform their work based on their abilities and expertise, and it is built through accumulated experience or knowledge (Nyaga et al., 2010). Because cognitive trust is a way to minimize opportunistic behaviors, it lowers the risk for uncertainty (Johnston et al., 2004). Furthermore, cognitive trust is important in business relationships, as it is one’s decision to trust the other party based on rational reasons (Lewis & Weigert, 1985). Trust is also an indispensable factor in the healthcare distribution market; Dagger et al. (2007) argued that service values, uncertainty, and trust impact customers’ loyalty. Reidenbach and Sandifer-Smallwood (1990) confirmed that patients’

perceived confidence leads to satisfaction. Gwinner et al. (1998) stated that patients need to perceive consideration, understanding, and trust to continue their relationship with the hospital.

However, McAllister (1995) argued that cognitive trust can be an antecedent of affective trust. Chua et al. (2008) showed that perceiving cognitive trust is more important than perceiving affective trust in a business relationship. Therefore, since we focused on physician–patient relationship, we only explored cognitive trust and not affective trust.

## 2.3. Satisfaction

Ostrom and Lacobucci (1995) defined satisfaction as the emotional and cognitive state of perceiving that one has been appropriately rewarded for the cost paid. Oliver (1981) described it as the degree that prior expectation agrees with the outcome. Westbrook and Reilly (1983) emphasized the affective aspect of satisfaction, while Teas (1993) stressed its cognitive aspect by conceptualizing satisfaction as customers’ assessment of the expectation before consumption and perceived performance after consumption. Taken together, satisfaction is a cognitive and affective emotion felt by customers relating to the performance of a product and service (Yoo & Park, 2020). Oliver (1980) argued that satisfaction is felt if an outcome is equal or greater than a prior expectation, while dissatisfaction develops if outcome falls short of prior expectation.

The concept of patient satisfaction in healthcare distribution market has also been defined multifariously. John (1992) explained that satisfaction is the level of perceived expectation and attitude toward physicians’ treatment. Donabedian (1986) argued that patient satisfaction reflects patients’ thoughts in all aspects, including technical treatment process and treatment outcomes, in addition to the structural features of the treatment environment. Rama and Kanagaluru (2011) defined patient satisfaction as patients’ emotions and perceptions about healthcare service. Despite these inconsistencies, one common aspect of “patient satisfaction” is that it is a construct reflecting the degree of agreement between expectation before hospital visit and perception of actual care given.

With growing competition in the healthcare industry, healthcare providers must strive to achieve patient satisfaction by providing better services. Hence, examining the factors that influence patient satisfaction is crucial. While Marley et al. (2004) argued that factors such as treatment technology, physician–patient relationship, and moral dimension can be the antecedents of patient satisfaction, most studies have examined the correlation of patient satisfaction with demographic factors, such as age, health status, and sex (Al-Abri & Al-Balushi, 2014). Thus,

we explored ethical constructs such as justice and trust as potential predictors of patient satisfaction.

### 3. Hypothesis Development

We proposed informational justice as a predictor of patients' perceived cognitive trust in the physician–patient relationship. Moreover, we empirically examined its impact on patient satisfaction.

#### 3.1. Informational justice and cognitive trust

Interactional justice deals with fairness of interpersonal relationships in the execution of a procedure (Durrah, 2020); further, interactional justice is broadly divided into interpersonal justice and informational justice. Interpersonal justice develops from communication and interactions and reflects whether the other party is treated with respect (Kernan & Hanges, 2002). Informational justice refers to providing honest information with just reasons (Colquitt, 2001). Justice is an important topic of academic research today, as it influences multidimensional domains (Mikula, 1980).

Trust is one's confidence in the other party's action based on the belief that the other party will not engage in opportunistic actions (Le & Hoang, 2020). Trust has been explored in multiple disciplines as a key factor in building a productive partnership (Wilson & Vlosky, 1998). Many studies examined trust as a multidimensional construct. Lewis and Weigert (1985) argued that trust can be divided into affective and cognitive trust. The former is a concept that reflects the goodwill and kindness one demonstrates toward the other party (Wang et al., 2014); while the latter refers to the belief, on the basis of rational reasoning, that the other party will effectively perform their work (Nyaga et al., 2010).

The relationship between justice and trust has been well examined. Cohen-Charash and Spector (2001) stated that fairness perceived from an organization or boss during a decision-making process forms one's trust in the organization, and De Cremer and Tyler (2007) explored the impact of procedural justice on organizational trust.

Konovsky and Pugh (1994) argued that interactional justice facilitates trust in an organization. We propose informational justice as a factor that improves healthcare quality. Past findings suggest that perceiving informational justice enables the patient to develop a higher level of cognitive trust. Conversely, if physicians engage in unethical behaviors to maximize their own benefits according to certain situations, patients will perceive a relatively low level of trust.

Hypothesis 1: Physicians' informational justice has a positive impact on patients' cognitive trust.

#### 3.2. Cognitive trust and satisfaction

Trust is an emotion required in forming a relationship and is analyzed as a measure of relationship quality (Morgan & Hunt, 1994). Multiple social psychological studies on interpersonal relationships and marketing studies on relationship management have shed light on the significance of trust (Dwyer et al., 1987). Gwinner et al. (1998) argued that psychological profits such as trust and faith are more important than social profits in the relationship between service providers and customers, and Morgan and Hunt (1994) stressed that trust is a key component of building a long-term relationship with clients.

Rowe and Calnan (2006) examined the role of trust in the healthcare industry, while Skirbekk et al. (2011) emphasized the importance of trust in the physician–patient relationship. Taken together, it is only natural that patients have more expectations for healthcare service than other types of services, as it is linked to their health. Therefore, patients' desire to trust in their physician, and perceiving trust is important.

Cyr et al. (2008) examined the impact of trust in a website on satisfaction and loyalty to the website, and Van Maele and Van Houtte (2012) observed that trust has a positive effect on satisfaction. In addition, Torres et al. (2009) proposed that trust is related to patients' loyalty to healthcare service. Benkert et al. (2009) found that trust is essential for patients to be satisfied with their healthcare providers. Therefore, when patients develop cognitive trust in their physicians, they may be more satisfied with the hospital and the physician.

Hypothesis 2: Patients' cognitive trust has a positive impact on satisfaction.

#### 3.3. Informational justice and satisfaction

Consumer-Purchaser satisfaction refers to consumers-purchasers' emotional, subjective, and favorable evaluation, and it develops from a psychological state related to their purchasing behaviors (Oliver, 1981). Consumer-Purchaser satisfaction is closely related to consumers-purchasers' attitudes and intentions and directly impacts their positive behavioral intentions, such as repurchase, revisit, and loyalty (Jung & Seock, 2017). Hence, the relationship between informational justice and satisfaction can be explained through the Social Exchange Theory, which was developed to describe various social relationships, including interpersonal relationships (Homans, 1958). Its core aspect is that when people benefit from someone, they feel obligated to repay them commensurately. Social exchange is broadly divided into economic and social exchange (Blau, 1964). Economic exchange refers to an exchange of goods, and it is objective and visible (Organ,

1990). Social exchange is one’s determination to repay someone’s favor. Blau (1964) stressed the principle of reciprocity, which states that the more a person exchanges rewards with another person, the more likely subsequent exchanges are to occur. In other words, receiving benefits from the other party leads to a greater sense of obligation to return the benefits. Together, engaging in social exchange in an exchange relationship leads to positive psychological states and behaviors.

The relationship between the two parameters has been documented in numerous studies. Campbell and Finch (2004) argued that clients’ perceptions of justice lead to their satisfaction, while Suliman (2007) identified justice as a predictor of satisfaction and observed that it ultimately impacts loyalty. According to Schröder and Mieg (2008), once customers perceive justice, they become willing to pay. Therefore, when customers perceive justice, they become satisfied to the point of being willing to pay a hefty price for a product or service, which is likely to lead to positive customer behaviors.

Hypothesis 3: Patients’ perceived informational justice has a positive impact on satisfaction.

To test the above hypotheses pertaining to the causal relationships among informational justice, cognitive trust, and satisfaction in the physician–patient relationship, a study model was established (Figure 1).

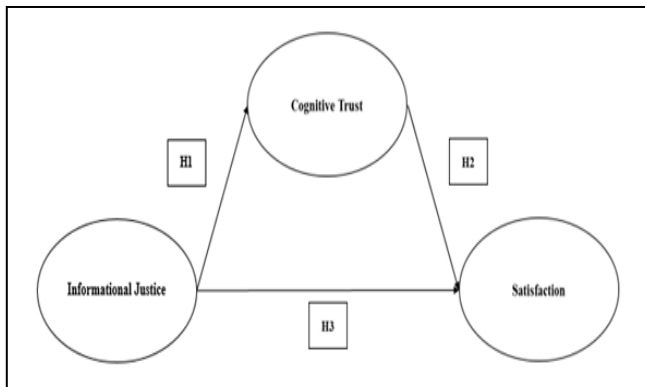


Figure 1: Study model

## 4. Methods

### 4.1. Data collection, sample characteristics, measurement of variables

This study aimed to examine the importance of informational justice and cognitive trust in the relationship between physicians—who are healthcare providers—and patients—who are consumers-purchasers of healthcare distribution market.

Table 1: Classification of sample characteristics

	Category	Frequency	Percentage
Age(years)	20–29	44	17.4
	30–39	53	20.9
	40–49	15	5.9
	≥ 50	141	55.8
Medical specialty	Internal medicine	111	43.9

A questionnaire comprising demographic factors and major variables based on past studies was created using Google. A total of 1,300 questionnaires were distributed to people who visited a hospital in South Korea in the past year and 260 copies were collected (20% response rate).

Table 2: Operational definitions of the variables

Construct	Item	Reference
(Patient's) Informational justice	Degree to which physicians communicate with honesty	Greenberg, 1990; Colquitt, 2001
	Degree to which physicians provide appropriate explanations regarding diagnoses	
	Degree to which physicians explain the diagnosis in detail	
Cognitive trust	Degree to which patients accept physicians’ professional opinion	Min and Mentzer, 2004; Rinehart et al., 2004
	Degree to which patients are satisfied with physicians’ expertise	
	Degree to which patients trust physicians’ job competence	
Satisfaction	Degree to which patients are satisfied with the hospital overall	Cronin et al., 2000; Martin et al., 2008
	Degree to which patients think hospitals are good places to receive treatment	
	Degree to which patients think the hospital is worth revisiting	

Then, after excluding seven questionnaires with missing responses, a total of 253 questionnaires were analyzed. Most participants were middle-aged adults with mild conditions who visited a local clinic, as opposed to a tertiary hospital, for a short-term hospitalization or treatment (Table 1).

The questionnaire consisted of demographic information to determine the characteristics of the sample

along with three sections on 'informational justice,' 'cognitive trust,' and 'satisfaction.' Each item was evaluated on a 7 point Likert scale to measure participants' recognition.

#### 4.2. Reliability and validity testing

Prior to testing the hypotheses, the reliability of the measurement variables was examined. The reliability test (Cronbach's alpha) decides whether the same measurement values can be gained when measurements are repeated for the same concept. In social science research, reliability is generally judged secured when Cronbach's alpha is larger than 0.7 (Hair et al., 1998). In this study, the reliability of the variables was tested using SPSS 18.0, and the reliability of informational justice (0.925), cognitive trust (0.854), and satisfaction (0.941) were established.

Concurrent validity of the measurement variables was tested using confirmatory factor analysis (AMOS 18.0). Model fit was assessed using fit indices—RMR, GFI, CFI, and TLI—that consider both model complexity and accuracy. The values satisfied the recommendations—CMIN/DF = 2.092, TLI = 0.980, RMR = 0.040, CFI = 0.988, GFI = 0.961, and RMSEA = 0.066—confirming that the model was suitable (Hair et al., 1998).

To test for convergent validity, construct reliability (CR) and average variance extracted (AVE) were computed for each variable. Concurrent validity is considered high with a CR of 0.7 or higher and an AVE of 0.5 or higher (Hair et al., 1998). In this study, the values were: informational justice (CR = 0.877, AVE = 0.704), cognitive trust (CR = 0.859, AVE = 0.672), and satisfaction (CR = 0.913, AVE = 0.790).

**Table 3:** Correlational analysis of variables

	Informational justice	Cognitive trust	Satisfaction
Informational justice	0.839*	-	-
Cognitive trust	0.623	0.819*	-
Satisfaction	0.812	0.695	0.889*

Finally, the independence of the latent variables that comprise the study model was tested by computing the AVE and correlations among the variables. Discriminant validity is said to be established if the square root of AVE of each variable is greater than the inter-variable correlation. Table 3 compares the coefficient of determination between different variables with the diagonal showing the square root of AVE of the corresponding latent variable. The correlation between variables was smaller than the AVE square root of each variable, which generally confirmed the discriminant validity of the variables.

#### 4.3. Empirical analysis

The hypothesis pertaining to the impact of informational justice on satisfaction through cognitive trust was tested. First, maximum likelihood estimation of the structural equation model showed model fit indices of CMIN/DF = 2.092, TLI = 0.980, RMR = 0.040, CFI = 0.988, GFI 0.961, and RMSEA = 0.066, which generally satisfy the key criteria (Hair et al., 1998). The theoretical correlations among the variables were thus appropriately described in the questionnaire; therefore, hypothesis testing was performed (Table 4).

**Table 4:** Results of the hypothesis testing

Hypothesis	Estimate	SE	CR	p
Hypothesis 1	316	0.037	8.562	< .001
Hypothesis 2	0.497	0.097	5.126	< .001
Hypothesis 3	0.505	0.048	10.484	< .001

Hypotheses were tested using path analysis models, and all hypotheses were accepted. Informational justice had a positive impact on cognitive trust, and cognitive trust had a significant impact on satisfaction. This suggests that, with an ethical informational exchange, the customer can trust the other party—the service provider—and ultimately achieve satisfaction. Further, informational justice had a positive impact on satisfaction, which suggests that when the customer detects unethical behaviors by the other party, their interpersonal relationship are damaged.

#### 5. Discussion

Law and ethics are similar in that their fundamentals lie in ethical principles; these are approached differently in the healthcare industry. Whereas the law is a standard enforced by governmental authority and produced by the congress or an administrative agency, ethics originate from a community or religious tradition (Buchbinder et al., 2019). One important aspect here is that the people who make and enforce laws abide by ethical beliefs in their official decision-making (Buchbinder et al., 2019). Thus, laws are formulated based upon ethics.

Therefore, ethics is highly crucial in all industries, including the healthcare industry. The ethical principles that apply to healthcare can be explained with the construct of "justice," which refers to the degree of fairness of decisions made (Colquitt, 2001). Based on Schultz's (2014) argument that honesty and provision of comprehensible information would have a crucial impact on hospital performance, we examined informational justice—the provision of fair information with integrity (Kernan & Hanges, 2002).

Moreover, we explored the impact of physicians' informational justice on other ethical components: patients' cognitive trust and satisfaction.

Informational justice had a positive effect on cognitive trust, clarifying that physicians' informational justice is important in maintaining their relationship with patients and that patients can develop cognitive trust based on informational justice. This finding indicates that physicians' delivery of appropriate explanations and honest communication with patients are important in building patients' cognitive trust. Therefore, it is important for patients to have cognitive trust in the healthcare service delivered by the physician to perceive satisfaction with the physician. In other words, if the patient is unsatisfied with physicians' expertise and mistrust their work competence, it may ultimately affect the hospital's management performance negatively. Finally, physicians' informational justice had a positive impact on patients' satisfaction, suggesting that physicians can form long-term relationships with their patients only when they tell the truth and practice honesty. Hence, these results signify that hospital performance can be enhanced only with physicians' effort to adhere to ethical principles.

### 5.1. Implications and limitations

Although research has been conducted on justice in the relationship between organization and employees and inter-organizational relations, research on informational justice among individuals is relatively scarce, despite social interest in the topic and the importance of information accuracy as a component of healthcare service (Buchninder et al., 2019). Daniels (1983) explored the importance of distributive justice in the healthcare industry; further, in his subsequent study, Daniels (2001) examined the relationship between justice and healthcare service. Gostin and Powers (2006) also examined the significance of justice in public health. However, few studies have probed the importance of informational justice in healthcare. As Schultz (2014) emphasized the importance of providing comprehensible information in healthcare management, this study is significant in examining physicians' informational justice in healthcare distribution market.

We attempted to advance the research on trust in healthcare by understanding the relationship in which cognitive trust leads to satisfactory performance. Numerous studies on trust divided trust into affective and cognitive trust and explored them with equal emphasis. However, McAllister (1995) argued that cognitive trust is first formed to build affective trust in someone. Further, Chua et al. (2008) shed light on the fact that cognitive trust plays a greater role than affective trust in business relationships, which highlights that while trust is a multidimensional construct, it can be studied from various perspectives

depending on the study aim. Hence, we examined cognitive trust in the physician–patient relationship—a business relationship as opposed to a personal one. The significance is that we empirically investigated the relationship between cognitive trust and satisfaction in consideration of the physician–patient relationship.

Our results shed light on the relationship structure that leads from justice to trust to satisfaction and, thus, may help physicians and hospital managers understand the importance of ethics. Informational justice was examined as an antecedent of cognitive trust, and the effects of both on the dependent variable—satisfaction—were empirically analyzed. In conclusion, physicians must be honest and frank when providing information to patients by striving to build cognitive trust. If patients develop cognitive trust in physicians, the physician–patient relationship will become a favorable one and ultimately improve hospital performance. Therefore, hospitals should actively manage and monitor physicians' unethical practices. Finally, by confirming that informational justice influence satisfaction, the study highlights the importance of informational justice among medical personnel. Many patients have a lot of concerns compared to other service areas because it is directly related to their health (Zeithaml & Bitner, 1997). Therefore, doctors need to reduce perceived risks, in which great informational justice plays a crucial role. Overall, this study found that patients are more satisfied if the doctor's informational justice is properly exercised.

Despite such scholarly and practical contributions, this study has a few limitations that speak to the direction of necessary future research. First, we only examined informational justice in the physician–patient relationship. However, many past studies divide interactional justice into interpersonal and informational justice (Colquitt, 2001). Therefore, subsequent studies should probe the need for justice in healthcare from a more macroscopic view by also including interpersonal justice in their analysis. Second, past studies classified trust into two categories: affective and cognitive trust (Johnston et al., 2004). As we only examined patients' cognitive trust, subsequent studies should also explore affective trust to determine the role of trust in healthcare distribution market. Also, this study was conducted in South Korea; because healthcare service environments can differ across countries, future studies should examine the roles of ethical factors in healthcare service by expanding the scope of their study samples. Lastly, this study did not take into account control variables that could affect the study model, such as hospital size, gender, etc. Therefore, future studies need to complement this and look at it from a more macro perspective.

### 5.2. Conclusion

Many people are interested in healthcare distribution

market, partly because their lives have become more enriched than people's lives in the past. Consequently, the number of direct-care settings that provide service to patients and non-direct-care settings that supply the products needed for providing care are consistently on the rise (Buchbinder et al., 2019). Moreover, the importance of healthcare quality is continuing to grow for healthcare facilities because of the growth and diversification of the healthcare industry. In particular, ethical practices are essential for hospitals to improve their performance amid fierce competition within the healthcare industry (Schultz, 2014). This study presented and examined informational justice as an ethical factor that influences cognitive trust in the physician-patient relationship and discussed the ultimate impact of these dimensions on patient satisfaction. The findings empirically confirm that informational justice and cognitive trust can serve as the basis of perceived satisfaction. Therefore, health professionals, including physicians, must be mindful of the fact that unethical behaviors can trigger distrust in their relationship with patients and they should continuously and actively engage in ethical practice.

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