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ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

Is Communication a Receipt for Doctors? The Relationship Between Communication Competence and Trust: A Research on Breast Patients

Doktorlar İçin İletişim Bir Reçete midir? İletişim Yeterliliği ve Güven Arasındaki İlişki: Meme Hastaları Üzerine Bir Araştırma

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Abstract

Although significant studies have been conducted in the field of health communication in terms of communication competence, its role on trust in the radiology department needs further exploration. The communication skills of radiologists are considered an important indicator of trust. Therefore, the study aims to research the effect of communication competence on trust. With this aim the current study seeks to contribute to health communication literature by researching the patients' perceived communication competence of doctors as a determining factor that develop trust in the radiology department. The research was carried out between December 2019 and March 2020 using a questionnaire form with 321 breast patients in the radiology department in a public health institution in Antalya, Turkey. The results of the study refer that communication competence as a whole concept has a strong positive and statistically significant effect on trust. When the dimensions of communication

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competence are investigated, it is found that socioemotional communication is the only dimension that has a strong effect on the formation of trust among communication competence.

Keywords: Health Communication, Communication Competence, Trust, Radiologist, Socioemotional Communication

Öz

Sağlık iletişimi alanında iletişim yeterliliği konusunda pek çok çalışma yapılmış olmasına rağmen, radyoloji departmanında iletişim yeterliliğinin güven oluşumu üzerindeki rolünün daha fazla araştırılması gerekmektedir. Radyologların iletişim becerileri önemli bir güven göstergesi olarak kabul edilmektedir. Bu nedenle bu çalışma iletişim yeterliliğinin güven üzerindeki etkisini araştırmayı amaçlamaktadır. Bu amaç doğrultusunda bu çalışma, radyoloji departmanında bulunan doktorların iletişim yeterliliğini hastaların algılarına bağlı araştırarak sağlık iletişimi literatürüne iletişim yeterliliğinin güven oluşumundaki belirleyici rolünü açıklayarak katkıda bulunmayı hedeflemektedir. Araştırma, Aralık 2019-Mart 2020 tarihleri arasında Antalya'da bir kamu hastanesinin radyoloji bölümünde 321 meme hastası ile anket formu kullanılarak gerçekleştirilmiştir. Çalışmanın sonuçları, bir bütün olarak iletişim yeterliliğinin güven üzerinde güçlü ve istatistiksel olarak anlamlı bir etkiye sahip olduğunu gösterirken, iletişim yeterliliği boyutları arasında güven oluşumunda güçlü etkiye sahip tek boyutun sosyo-duygusal iletişim olduğu tespit edilmiştir.

Anahtar kelimeler: Sağlık İletişimi, İletişim Yeterliliği, Güven, Radyolog, Sosyo-Duygusal İletişim

Introduction

Breast cancer is reported to the most frequent cancer suffered by women in Turkey (Cebeci, Balcı Yangın & Tekeli, 2012; Cabioğlu et al., 2020; Selçuk et al., 2020) as it accounts for approximately one in four cancers in the world (Karadeniz Çakmak et al., 2020). Breast cancer is also known as the leading cause of cancer death among women (Unger-Saldana, 2014) with nearly 656,000 deaths in 2020 in the world (WHO, 2020). Although the mortality rate is high especially in developing countries, early diagnosis is seen as the key to decrease mortality and to promote survival rate (Kapoor & Prasad, 2010, p. 564). Advances in treatment, early detection through screening, and awareness of breast cancer improve the survival rate. Early diagnosis can be regarded as the most influential factor both in the success of survival (Wang, 2017; Chougrad, Zouaki & Alheyane, 2020), and improving the quality of the patient's life (Çam & Babacan Gümüş, 2009). To make sure that the patients diagnosed or suspected of breast cancer realize the likelihood of the disease's recurrence and the effects of the treatment process, the radiologist needs to give the patient necessary information on follow-up care after primary treatment is over. However, it is seen that radiologists generally fail to appreciate the information needs of patients with breast cancer or suspected breast cancer (Royak-Schaler et al., 2008). The basic problem of these patients is that receiving less information regarding their treatment process, the risks and benefits of the treatment. Therefore, the patients feel themselves being excluded (Lerman et al., 1993). It should be noticed that women with breast cancer or suspected breast cancer generally face major psychological and emotional challenges (Yoo et al., 2014). Hence, the National Cancer

Institute considers efficient communication between doctors and patients as a prominent factor of a new model of care (Prades et al., 2014).

The communication process between radiologists and breast cancer/suspected breast cancer patients consists of some general characteristics of standard doctor-patient interaction, however, it is followed by extra problems (Siminoff et al., 2000). The doctor and patient communication has a vital role in the radiology department especially for the patients with breast cancer/suspected breast cancer as they have a dynamic role in the decision-making process during their treatment (Lerman et al., 1993; Harvey, et al., 2007). As the nature of the radiology department necessitates, all the processes should be discussed with the patients like the need for biopsy, the biopsy results, and the following processes (Harvey, et al., 2007). The main responsibility of radiologists as explaining mammographic results, the need for a biopsy, and indicating a cancer diagnosis makes the nature of the decision-making process challenging. Moreover, radiologists have the task of explaining patients of malignant biopsy results as "bad news" which creates anxiety and stress on patients. As Siminoff et al., (2000) indicate, the fear associated with the cancer diagnosis process makes the radiologist-patient communication more problematic than the other doctor-patient communication. As radiologists join a stressful dialogue with patients while notifying bad news, patients' perceptions of this communication with radiologists can influence their psychological states, and thus radiologist-patient communication can be regarded as a unique factor contributing to anxiety (Miller et al., 2013). Although a radiologist will barely remember the conversation with the patient, the patient will probably recall the radiologist's words, even mimics, and gestures while receiving the bad news. Hence, the words chosen and how they are said while explaining bad news have a great effect on patients' perception. The right words and the style of the body language of the radiologist can assist patients feel closer to the treatment process. (Harvey et al., 2007).

Previous studies on communication have mostly dealt with the components affecting treatment decision-making behavior, patient participation in the care process, the judgment of the need of information (Bakker, 2001) and patient satisfaction (Cegala, Coleman & Turner, 1998). Also, a great number of studies focuses on both doctor and patients' communication competence (Cegala et al., 1998) which is defined as the perceived tendency to create deep relationships with others, show support, be comfortable, and respect other's state (Query, Parry & Flint, 1992). Communication competence comprises both information exchange and socioemotional communication; however, it does not evaluate other facets or dimensions of health communication. The patients with breast cancer/suspected breast cancer are generally positively engaged with their doctors when they are expert and competent the patients can trust, when they have a personal relationship with the patients, and when they respect the patients as an individual (Wright, Holcombe & Salmon, 2004, p. 3), thus it is important to research the concept of trust in terms of health communication. In health communication trust refers to both the belief that the doctor is competent, communicative, reliable, compassionate, trustworthy (Murray & McCrone, 2015) and the view that the doctor will behave for the benefit of the patient's interest. Showing technical competence, empathetic listening, privacy, honesty, and interest in a patient's

well-being are significant elements, which can be used by the doctors to create trust. Doctor's communication skills are considered an important indicator of patient trust. Furthermore, the perception of trust is affected by the communication style of doctors during the decision-making process (Gabay, 2015, pp. 1551-1552). Therefore, this study aims to research the effect of communication competence on trust. With this aim the current study seeks to contribute to health communication literature by researching the patients' perceived communication competence of doctors as a determining factor developing trust in the radiology department.

Communication Competence

As the kick-start of all the health care services, success in doctor-patient communication can be the most critical factor. Thus, health communication is considered as a prerequisite for proper health care and treatment process (Demir & Başaran, 2018). Health communication, as a multi-faceted concept, is based on the relationship between doctor and patient, treatment process and options, potential risks, and presenting information and education about health conditions of the patient (Roter & Hall 2006). Although all the health care providers such as nurses, medical assistance, medical officers, etc. are involved during the health care process, doctors are seen as the most distinguishable providers especially in terms of communication with the patient (Nørgaard et al. 2012). Thus, a great number of studies (Lohr, 1988; Waitzkin, 1990; Street, 1993; Ong, et al., 1995) have researched the doctor-patient communication and this literature focuses on two main objectives: information exchange and relational development (Ben-Sira, 1980; Roter, Hall, & Katz, 1988; Beisecker & Beisecker, 1990; Frederikson, 1993; Cegala, McGee, & McNeilis, 1996; Wright, et al., 2013), which can be conceptualized as communication competence.

Communication competence has been defined as a multidimensional construct that consists several communication skills and behavior, like affiliation, empathy, empathetic listening, behavioral adaptability, verbal and nonverbal sensitivity, relaxation, efficiency, encoding, and decoding skills, conversational involvement, and interaction management (Query & Kreps, 1996; Wright et al.,2010; Wright et al., 2013; Yoo et al., 2014). To measure competence in health communication Cegala et al. (1998) developed a scale consisting of two main dimensions; information exchange and socioemotional communication which is called The Medical Communication Competence Scale (MCCS).

Information Exchange

Information exchange can be regarded as the center of the consultation. While doctors require information from patients to conclude diagnosis and appropriate treatment, patients require information about their situation and the treatment process. Doctor-patient communication is required to comprise information exchange such as symptoms, medical history, diagnosis, and treatment in order not to cause misunderstanding. However, doctors generally do not satisfy patients' information needs. The Information Exchange dimension involves 3 sub-dimensions

as information seeking, information giving, and information verifying (Cegala, 1997; Cegala et al., 1998).

Information seeking is based on doctor's and patient's use of questions and collecting of required information about health, risks, and illness. Information-seeking competence is regarded as a vital component because determining accurate diagnosis and effective treatment is dependent on doctors' ability to assess information about the patient's medical condition. Information-seeking is obtaining considerable information from the patient for reaching a proper diagnosis. Doctors acquire necessary information and perceptions about patients' matters or interests from the questions they asked. Doctors are more highly rated in terms of information-seeking competence in the literature as most of the patients lack technical skill and knowledge on their medical situation to assess the doctor's information-seeking performance. Also, doctor's use of questions is important for patients to enable them to talk about symptoms and their history openly. However, doctors should use closed questions to control the agenda by limiting patients' ability to tell their own whole story (Cegala, 1997; Cegala et al., 1998; McGee & Cegala, 1998; McNeilis, 2001).

Information-giving refers to evaluating a doctor's provision of information about the reason for the illness, the symptoms and the history, diagnosis, treatment process, needed tests, and medical prognosis. It is stated that doctors are rated lower in information giving competence than other communication competence dimensions, thus suggesting that patients' information needs are generally not fulfilled. Thus, doctors are expected to fulfill and answer the information need of the patient about their medical condition not broadly but more specific in an issue-relevant way (Cegala, 1997; Cegala et al., 1998; McNeilis, 2001).

Information verifying can be associated with the discussion on misunderstandings between doctors and patients. Restatement or repetition of a doctor's utterance has been regarded as a direct way to check on a patient's understanding. Information verifying can be considered as not involving the acquisition of new information, but involving making plain or clarifying information received. The doctor intends to see and find out the accuracy of information s/he has just offered to the patient. Information verifying reflects doctor's use of restatement and information checking to raise comprehension (Cegala, 1997; Cegala et al., 1998; McGee & Cegala, 1998; McNeilis, 2001).

Socioemotional Communication

Although the relationship between doctor and patient is not developed in traditional interpersonal communication, many studies underscore that the communication between doctor and patient has emotional components, which have a positive effect on the perception. Indeed, the patient demands messages regarding care and relationship to feel like a unique person (Hesse & Rauscher, 2019). Stating care, concern, tenderness, empathy, fondness, understanding, sensitivity, and trust are regarded as the relational aspect of communication in medical consultations and it is called socio-emotional communication (Cegala, 1997; Cegala et al., 1998). While scholars

prefer to use different terms to refer to the relational aspect of communication such as affective, relational, and socioemotional, we use the term socioemotional communication in this study.

The socioemotional aspect is based on communication which is designed to express concern and care for the patient and also it refers to messages which provide empathy and emotional support. Furthermore, socioemotional communication involves direct verbal behavior such as a statement of care or love; direct nonverbal behavior such as kisses or hugs; and indirect supportive behavior such as giving presents or active listening (Floyd & Morman, 1998). Also, socioemotional communication has been a significant factor that affects patient satisfaction. Giving feedback, sensitiveness of emotional needs, displaying empathy regarding the patient's input into the decision-making process of treatment are the core elements of socioemotional communication (Kreps, 1988). If the socioemotional aspect of communication is not met accurately by the doctor, the patient likely feels less secure and be more stressed (Hesse & Rauscher, 2019).

Trust

Trust, conceptualised as willingness to rely on another (Rousseau, Sitkin, Burt, & Camerer, 1998) is also defined as belief about other's reliability, dependability, and comprehension of the situation (McAllister, 1995). As a multifaceted concept, trust is an integral element of every satisfying relationship (Morgan & Hunt, 1994) because, it is regarded as a complexity reducing mechanism. Thus, it can be stated that it is a communication mechanism based on cognitive, emotional, and moral expectations which helps to reduce complexity (Luhmann, 1979).

Trust in medicine is of high important value (Gopichandran & Chetlapalli, 2015) because, medical system presents risk, complexity, and uncertainty for patients (Temkina & Zdravomyslova, 2008). Patients feel themselves weak due to their illness, and the asymmetrical knowledge of medicine (Calnan & Rowe, 2008). The doctor-patient relationship is seen asymmetrical in terms of vulnerability and power (Skirbekk, Middelthon, Hjortdahl & Finset, 2011). Patients need trust at each and every stage of building relationships with their doctors for effective and positive treatment outcomes (Krot & Rudawska, 2016). Especially in modern complex societies patients desire for power sharing as their expectations' of doctors have changed. Traditionally, asymmetrical power relations in doctor-patient relationships are questioned because, medical knowledge is spread through digital media. Thus, patients' expectations from the doctor's role as just being knowledgeable in modern medicine cannot be sufficient for the patients today (Skirbekk et al., 2011). Now, showing care and standing competent are the most influential factors that the patients demand from doctors. These factors rely on to a great degree on communication with the patient before trust can be gained (Brown, 2008). Showing interest in the patient's well-being, sensitivity, giving proper time, and building friendly relationship are the core elements of trust. In this context, communication skills help the doctors to build an effective relationship between doctors and patients. Trust is a significant quality of the doctor–patient communication (Fugelli, 2001) providing therapeutic benefits, raising satisfaction, increasing the results of the treatment (Calnan & Rowe, 2006) and developing a placebo effect (Gopichandran & Chetlapalli,

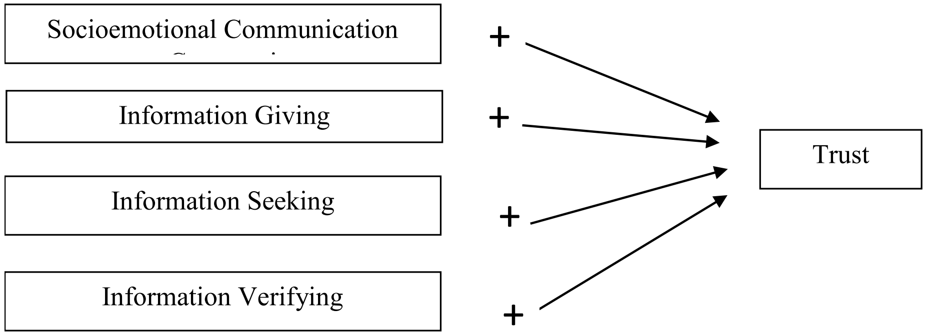
2015). Devoting time for the patient, giving the patient the opportunity to ask questions, listening the patient carefully, not interrupting the patient and informing the patient about her/his disease make relaxation and encourage the patient thus, increase the trust in the doctor (Weaver et al, 1993; Gezergün et al, 2006). The doctor's behaviors that will create trust in the patients will enable them to provide the personal information of the patient that can help the doctor in the diagnosis and treatment of their diseases, and ultimately, the diagnosis and treatment will be more effective.

Methodology

The paper aims to research the effect of communication competence on trust in the radiology department. In parallel to this purpose, the perceptions of patients towards doctor's communication competence and overall trust were investigated. The paper seeks to find out which dimensions of communication competence have the highest effect on trust. According to the aim of the study, we propose a model researching the effect of communication competence on the development of trust as shown in Figure I. As exhibited in the model, it is proposed that dimensions of communication competence positively affect trust.

Figure I. The Relationship Between Communication Competence and Trust

The model



Data Collection and Measurement

The data was collected with convenience sampling between December 2019 and March 2020 using a questionnaire form with 380 breast patients in the radiology department in a public health institution in Antalya, Turkey. Due to missing values, 321 questionnaires were analyzed. To investigate the effects of communication competence on trust, the questionnaire form consists of demographics, the dimensions of communication competence as socioemotional communication, information giving, information seeking and information verifying (Cegala et al., 1998), and trust (Obermiller & Spangenberg, 1998).

Analysis and Findings

Reliability and Validity of Measurement Instrument

To test the reliability of the scales we calculated Cronbach's Alpha coefficient; for communication competence Cronbach's Alpha is 0.93, for trust Cronbach's Alpha is 0.95. It can be inferred that both scales were found to be reliable.

To test construct validity of the scale of communication competence we conducted factor analysis. The factor analysis results are given in Table 1. Furthermore, to measure sampling adequacy, we conducted KMO (0.936) and Bartlett's Test of Sphericity ($p<0.05$) and the total variance explained was calculated as 70.6.

Table 1. Factor Analysis of Communication Competence

Items	Socioemotional Communication	General Information Giving and Verifying	Elaborated Information Giving
The doctor did a good job of showing he or she cared about me.	,875		
The doctor did a good job of making me feel relaxed or comfortable.	,875		
The doctor did a good job of being warm and friendly.	,843		
The doctor did a good job of contributing to a trusting relationship.	,837		
The doctor did a good job of showing compassion.	,829		
The doctor did a good job of encouraging me to ask questions.	,709		
The doctor did a good job of using language I could understand.	,670		
The doctor did a good job of asking me questions related to my illness.	,600		
The doctor did a good job of asking me questions in a clear, understandable manner.	,581		
The doctor did a good job of repeating important information.	,550		
The doctor did a good job of asking questions that allowed me to elaborate on details.	,500		
The doctor did a good job of being open and honest	,351		
The doctor explained the diagnosis process of my medical problem.		,824	
The doctor explained what my medical problem was.		,820	
The doctor explained how my follow-up process and tests could be done.		,765	
The doctor did a good job of making sure I understood his or her explanations.		,598	
The doctor did a good job of checking his/her understanding of what I said.		,561	

The doctor did a good job of making sure I understood his or her directions.		,540	
The doctor explained the long-term consequences of my illness.			,790
The doctor explained how prescribed medicine would affect me in the radiological follow-up process.			,786
The doctor explained the benefits and disadvantages of the biopsy.			,724
The doctor explained the purpose of ancillary tests that were needed.			,712
The doctor explained which doctor I would go to the next level.			,625
The doctor explained the treatment process of other doctors to me.			,573
Variance	58,2	8,1	4,3
Cronbach alpha	,92	,93	,78

Although the original scale developed by Cegala et al. (1998) consists of 4 dimensions, in this study factor analysis of communication competence items (24 items) supported 3-dimensional structure. After inspecting items loaded under each factor, the factors were named according to the literature respectively as socioemotional communication, general information giving and verifying, and elaborated information giving. As expressed in the literature part, communication competence was divided into two main dimensions: socioemotional communication and information exchange. Also, information exchange involves three sub-dimensions: information giving, information seeking, and information verifying. It can be inferred that factor analysis results supported surprising findings for the socioemotional communication dimension, which compassed both the original socioemotional communication items and information-seeking items that is a sub-dimension of information exchange. The items of information seeking and items of socioemotional communication were perceived as homogeneous under the same factor named socioemotional communication in this study. In the literature, the items of information seeking are considered as a form of information gathering from the patient for reaching a proper diagnosis, however, the doctor's use of questions for patients to enable them to talk about symptoms and its story could cause the patients to feel a unique person in this study. It can be inferred that as the items of information seeking generally consists of "care", "encouraging" and "understandable", the items of information seeking were perceived as an affective aspect of communication, thus loading under the socioemotional communication factor in this study. The second factor compassed two dimensions of the original scale, which are information verifying items and some of the information giving items. Both information verifying and information giving dimensions are the sub-dimensions of information exchange, so it was likely perceived as homogeneous under the same factor. Furthermore, information giving dimension was also divided into two different factors in this study; while the items related to general information giving were collected under the second factor along with information verifying items, thus called general information giving and verifying, the items related to detailed information giving

were collected under the third factor named elaborated information giving. It can be suggested that information giving cannot be evaluated as a core unified concept, the patients regarded the difference between the general information and the detailed information related to their treatment process in this study.

As trust is a one-dimensional construct, we conducted only KMO and Bartlett's Test of Sphericity in order to measure sampling adequacy. KMO (0.914) and Bartlett's Test of Sphericity ($p<0.05$) were calculated for trust. The totol variance explained was calculated as 73.5.

Demographics

In terms of demographics, the patients were between 16 and 84 years old and the mean was calculated as 52 years old. While 82% were married, 18% were single. The educational status of the patients was; 36% university, 36% primary school and 28% high school. The monthly household income of the patients was calculated between 1000 TL and 20.000 TL. The mean of the household income was found as 4.300 TL. 82% of the patients were found to live in urban areas while 18% live in the country. The number of visiting the radiology department was calculated between 1 and 25, and the mean was found as 5. The reason for visiting the radiology department was: 50% for follow-up care, 40% for general control, %7 for diagnosis and %3 for treatment.

Testing Research Question

In order to test the proposed research question, regression analysis was used as it supports evidence for the direction and power of the relationship. The sign coefficients calculated in the regression equation are used to determine the direction of the relationship and the quantity of the coefficient to determine the power of the relationship. The coefficient of the determinant (R^2) provides the proportion of the variance of the dependent variable that can be explained by variation in the independent variable (Gürbüz & Şahin, 2016). In this paper, we calculated a regression equation for the proposed model.

Regression Equation

In the model it is proposed that dimensions of communication competence affect trust, that's why in the regression equation trust, is considered as the dependent variable, and socioemotional communication, general information giving and verifying, and elaborated information giving are considered as the independent variables. Regression equation was calculated by enter method as shown in Table 2.

Table 2. Model Summary of Communication Competence on Trust

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,816[a]	,666	,658	,55527
a. Predictors: (Constant), elaborated information giving, socioemotional communication, general information giving and verifying				

The coefficient of determination R^2 was calculated as 0,66 which means 66% of the variation in trust can be explained by differences in socioemotional communication, general information giving and verifying, and elaborated information giving (Table 2). It can be concluded that other factors contribute to generating trust in terms of health communication as Karakaya Şatır & Gök Demir (2016) indicate. Also, ANOVA results of communication competence on trust are given in Table 3.

Table 3. ANOVA Results of Communication Competence on Trust

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	76,384	3	25,461	82,580	,000[b]
	Residual	38,232	124	,308		
	Total	114,616	127			
a. Dependent Variable: Trust						
b. Predictors: (Constant), elaborated information giving, socioemotional communication, general information giving and verifying						

ANOVA results of regression analysis supported statistically significant regression equation at $p<0,001$ level (F=82.580) which means the proposed model as a whole is statistically significant. In order to find out the coefficients of dimensions, coefficients of the model are given below in Table 4.

Table 4. Coefficients of the Model

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,378	,186		7,398	,000
	Socioemotional Communication	,646	,081	,748	7,970	,000
	General Information Giving and Verifying	,097	,085	,117	1,143	,255
	Elaborated Information Giving	,031	,044	,051	,701	,485
a. Dependent Variable: Trust						

According to coefficients of the model, trust was positively related not to all the dimensions of communication competence, but only socioemotional communication. It was found that the effect of the socioemotional communication dimension of communication competence on trust was statistically significant at $p<0.001$ level (Beta=,646). We can infer from the analysis that socioemotional communication contributes to the development of trust.

Moreover, in order to determine how the communication competence of doctors and the overall trust are perceived by the breast patients of the radiology department, descriptive statistics were performed (Table 5).

Table 5. Descriptive Statistics of Communication Competence and Trust

	Socioemotional Communication	General Information Giving and Verifying	Elaborated Information Giving	Trust
Mean	3.9	3.7	3.4	4.1
Median	4.0	3.8	3.0	4.4
Mode	5.0	5.0	3.0	5.0
Std. Deviation	1.0	1.1	1.5	0.9

Table 5 shows that socioemotional communication of doctors was the highest dimension among communication competence perceived by the breast patients as 3.9 mean (min1 & max 5). Also the other 2 dimensions were perceived as respectively 3.7 and 3.4 mean which suggest neither weak nor strong competence. When their perception of trust is measured as 4.1 mean, it indicates that trust was the highest variable that patients perceived towards the radiologist.

Furthermore, in this paper it was researched whether the demographics such as age, income, marital status, educational level, residential area, the reason and the number of the visit have statistically effect on communication competence and trust by performing independent samples t-test and one-way ANOVA. However, the results showed that there was no statistical difference.

Conclusion and Discussion

The paper focuses on the perceptions of the breast patients in radiology department by researching the effect of communication competence on trust. The findings can be taken into account in terms of health communication in the radiology department because of the distinguishable features of radiologists who have the task of giving bad news to the patients. Thus, communication competence can be regarded as more vital for radiologists than the doctors in other departments. Besides, if the patients do not trust radiologists, probably they do not cooperate with them, not follow their advice, deny the diagnosis, stop the treatment process or change the doctor, or the hospital (Karsavuran, Kaya, & Akturan, 2011; Gülcemal & Keklik, 2016). Patients who trust the radiologist, generally have positive health outcomes as they can easily express symptoms and follow the treatment process in a comfortable way (Chandra, Mohammadnezhad, & Ward, 2018). Indeed, the positive communication style of doctors increases the perception of trust (Gabay, 2015). From this point of view, it is important to determine the relationship between communication competence and trust.

In this context, we proposed a model referring that all the dimensions of communication competence affect trust positively. In other words, socioemotional communication, information giving, information verifying and information seeking are considered factors creating trust. However, the results of our study supported the proposed model partially. Firstly, the original 4

dimensions of communication competence in the model were structured under 3 factors in our study; socioemotional communication, general information giving and verifying, and elaborated information giving. The main reason for this structure can be derived from the fact that the concept of communication is across cultural and has social contexts. As expressed in the factor analysis results, the fact that the socioemotional communication dimension which compassed both the original socioemotional communication items and information-seeking items which is a sub-dimension of information exchange, suggests that the patients in the radiology department recognized the use of questions asked by doctors not for information seeking in order to diagnose but for affective communication. Questions for information seeking could be perceived by the patients to feel like a unique person in this study as Wright et al., (2004) indicate. Furthermore, this finding can be related to the features of Turkish culture as having emotional, contextual, indirect and effortful communication styles (Sargut, 2001). Also, it can be said that the notion of health can be shaped by society's lifestyle and values (Okay, 2012).

Secondly, the study concluded that communication competence had a strong positive and statistically significant effect on trust which can be said that the proposed model was supported. It was found that 66% of the variation in trust can be explained by communication competence. It can be inferred that communication competence greatly contributes to the formation of trust, suggesting that communication can be regarded as a receipt for doctors to be perceived as trustworthy. The study also indicated that socioemotional communication contributed to the formation of trust. It can be stated that other two dimensions of communication competence statistically had no effect on the formation of trust, which shows that the proposed model was rejected in terms of these dimensions. Thus, it is recommended as a receipt for radiologists to focus mostly on the socioemotional aspect of communication to contribute to creating trust. The radiologists should design their messages consisting of care, empathy, and concern even while giving information or seeking information. The radiologists can display different communication styles to be perceived by the patient as being close. Being frank, devoting time, empathetic response, stating care or love, active listening, affective nonverbal behavior, the manner of presentation of information can be regarded as initial steps in being competent in socioemotional communication (Floyd & Morman, 1998; Wright et al., 2004; Harvey et al., 2007). Moreover, socioemotional communication can be seen as a remedial factor in traditional societies in which the doctors are sacralised as in Turkey. When the doctors approach the patients in a positive and encouraging way, this remedial factor increases (Yılmaz, 2015).

To sum up, it was found that socioemotional communication had a strong effect on the formation of trust among communication competence in this research. However, the effect of socioemotional communication should be researched in other departments of health care as well. It is foreseen that other departments in health care can require different aspects of communication competence to contribute to trust. Therefore, we suggest that the effect of communication competence on trust can be researched in different departments, by the perceptions of different health care providers such as nurses, medical assistance, and medical officers, and also with other research methodology especially using qualitative methods.

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