

Examining Organizational Silence on Doctors with Structural Equation Modeling¹

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Abstract

For the organizational silence which is developed in the environment where the culture of injustice is lived, in the framework of sub-dimensions for organizational justice and causal and relational theory of participative climate perception; a structural equation model was generated in order to research the role of organizational silence in the perceptions of organizational justice on direct and indirect relations of participative climate perception. The relations between the dimensions of organizational justice perception, organizational silence, and perception of participative climate and the negative results of organizational silence were evaluated and suggestions were offered.

Keywords: Organizational Silence, Participative Climate Perception, Structural Equation Model

1. Introduction

Employees are regarded as the source of change, creativity, learning and improvement, all of which are critical factors for organizational success (Huang et al., 2005). New managerial techniques intend to constantly improve the knowledge, capability and skills of employees, and to benefit from such. Modern organizations implement some practices such as letting their employees participate in the decision-making process about the workplace, giving them power and authority (Cakici, 2008). However, some studies conducted (Such as; Milliken & Morrison, 2003; Morrison & Milliken, 2000; Huang et al., 2005) indicate that employees avoid expressing their opinions and concerns regarding organizations clearly, and rather keep their silence. Silence of employees due to organizational, managerial, individual and socio-cultural reasons gives birth to various organizational and individual outcomes. Preference of employees between openly talking and being silent, which is caused by their perception of unfairness, could also have an impact on participative climate perception. Due to the challenges they face, healthcare professionals could also face intensive stress and stress-based negative issues. Concerns due to nursing, establishing and keeping a good relation with a patient, following the latest developments in the field, workload, irregular and long working hours, empathizing with people in distress, taking responsibility in the face of ambiguity, inner-team conflicts, role ambiguity and racing against time are the daily challenges the physicians face (Sayil et al., 1997). Negative outcomes in such an environment such as stress developed due to organizational silence, dissatisfaction, lack of communication among staff, being neglected and lack of control, insecurity and low motivation (Tahmasebi et al., 2013) are of paramount importance for physicians with duties of vital importance. Organizational silence occurring within this period due to interdisciplinary team work and inner-organizational dynamics of healthcare services could lead to extreme, irrevocable ethical and conscientious obligations (Yalcin & Baykal, 2012).

¹This study, Trakya University, Institute of Social Sciences has been prepared for the doctoral thesis (Examining Organizational Silence on Doctors with Structural Equation Modeling).

2. Literature Review

2.1. Organizational Voice and Silence

Described as the two dialectical elements of effective communication, voice and silence are also important elements of social interaction. Not only being the opposite of voice, silence, whose every form does not represent passive behavior, generally could be deliberate, intentional or for a specific purpose (Dyne et al., 2003). Employees sometimes prefer to talk while sometimes they prefer silence. However, it is very important to explain why employees keep silent, their concerns and the issues they are not eager to talk about (Milliken et al., 2003a). There are different dynamics at play that cause organizational silence after "voice" concept has been studied as an organizational dissatisfaction by Hirschman (1970) who examined voice and silence first. Containing a large scale that covers lots of factors from individual behaviors to social structure, these dynamics could be classified as organizational, managerial, individual and socio-cultural factors. Two important organizational factors provide basis for the improvement of silence (Huang et al., 2005). These factors include organizational structures and policies and also the managerial practices and behaviors. Organizational silence is defined in the studies of Morrison and Milliken (2000) as "deliberate retention by employees of their ideas, knowledge and opinions for work and organizational improvement". "Employee silence" concept developed by Pinder and Harlos (2001) is defined by the same as "retention of actual thoughts about one's behavioral, cognitive or emotional assessments on organizational issues by individuals capable of carrying out changes or arrangements".

In literature, as the opposite of organizational silence, "voice" means "expressing oneself loudly regarding any issue or problem rather than remaining silent". Voice or speaking at an organizational level indicates a data entry and communication process. Voice of employees contains two elements such as expressing complaints to managers by employees and participation by employees in the decision-making process in companies (Ozgen & Surgevil, 2009). Hirschman's studies (1970) indicate that, when the participation of voice, which is a reaction of employees against perceived abuse and dissatisfaction, in decision-making process, is conceptualized; it has a significant impact on operational justice and organizational justice perceptions. However, voice differs from a participative behavior. Because, participative behavior conserves and improves relations while voice has a challenging structure and could ruin interactional relations (LePine & Dyne, 1998). While voice and silence seem to be at different ends in a behavioral sense, both behaviors naturally demonstrate a complex and multi-dimensional structure (Dyne et al., 2003). Pinder and Harlos (2001) defined employee silence as acquiescent and quiescent silences, and examined two structures defined by acquiescent-based submissive and biddable behaviors and fear-based self-defense behaviors. Dyne et al. (2003) described six different behaviors based on three employee motives. These are withdrawal, self-defense and three silence types identified within the frame of other three motives: acquiescent, defensive and pro Social silence. While these three types of silence basically demonstrate similar behaviors in terms of intentional retention of ideas, knowledge and opinions, they differ when employee motives lead to less or more proactive behaviors. Three types of silence are also recommended for voice due to the parallelism between voices and silence (Dyne et al., 2003, Ozden & Surgevil, 2009).

Thus, while acquiescent silence is defined as a passive behavior which could be described as holding oneself back by retention of knowledge, ideas or opinions (Dyne et al., 2003, Ozgen & Surgevil, 2009), acquiescent voice is regarded as an abstention behavior based on the instinct that no difference could be made, and contains the support of other people's ideas by saying "I'm fine with it" by those who are not willing to waste any time on developing an alternative or not willing to take any responsibility for correcting a problem. Defensive silence is defined by Schlenker and Weigold (1989) as a deliberate and proactive behavior carried out to protect oneself from external threats. On the other hand, employees could perform defensive voice by intentionally giving evasive, diverting answers, falsifying, exaggerating and lying techniques as well as controlling the knowledge in one's favor to protect them. While pro Social silence is defined as behavior of employees in collaboration and focused on others for protecting the private knowledge in organization's favor, pro Social voice, which is a deliberate, proactive behavior focused on others, is defined as collaborative expression of opinions, ideas and knowledge about the work (Dyne et al., 2003).

2.2. The Relationship between Organizational Voice & Silence and Organizational Justice Perceptions

Deemed effective in terms of comprehending organizational voice and silence concepts, organizational justice concept is the justice perception of individuals regarding practices within their organizations (Brinsfield et al., 2009).

Inspecting the development of silence concept and the organizational factors leading to organizational silence, it is seen that employees working at unjust workplaces tend to remain silent and that, as a result, silence culture develops. As a result of such, employees working at places where organizational silence climate is dominant develop dissatisfaction, lack of confidence, low motivation, stress and lots of other negative behaviors. Employees engage with a constant judging of whether organizational processes and procedures, attitudes toward them, task distribution or democratic decision-making rights are just or not, and, as a result of such, they develop an attitude toward the organization. This attitude based on individual perceptions has a significant impact on the determination of manners and behaviors toward the organization and other employees within such organization (Greenberg, 1990; Cetin et al., 2011). Examining the studies on organizational justice, it is seen that emphasis was generally on distributive justice, procedural justice and interactional justice along with explanations on various organizational justice types. For instance, Greenberg (1990) focused on distributive justice and procedural justice for the conceptualization of justice. Colquitt (2001) emphasized on four dimensions such as distributive justice, procedural justice, interactional justice and informational justice. Justice concept is generally examined in three dimensions as to contain distributive justice, procedural justice and interactional justice dimensions (Cetin et al., 2011).

Dyne et al. (2003) stated that pro-social silence forms an opinion in employees that they have a positive contribution to their organizations. Within this context, Tangilara and Ramanujam (2008) proved that employees working in an environment with positive procedural justice perception tend to speak openly. Vakola and Bouradas (2005) expressed in their studies that communication opportunities within an organization, attitudes of managers and colleagues have an impact on the silence of employees. According to Morrison and Milliken (2000), organizational silence that is utilized as a powerful pressure component is based on fear. In their study where they define defensive silences as remaining silent due to fear of possible outcomes of individually speaking, Pinder and Harlos (2001) emphasized that there is an inverse relationship between justice perception and silence behavior, and stated that where justice perception of employees falls, silence behavior rises. In a study by Milliken et al. (2003a), it is revealed that openly talking is not preferred due to fears such as "loss of confidence and respect", "loss of support and acceptance", "job loss" and "fear of not being promoted". Piderit and Ashford (2003) expressed that employees prefer to remain silent for fear of losing their image within the organization. Ellis and Dyne (2009) stated that "choosing voice" is a reaction developed by employees against being harassed in the workplace. Dyne (2003) emphasized that, for acquiescent silence behavior, individuals express the highly accepted idea rather than their own ideas, and, for defensive silence behavior, they develop defensive reactions such as creating distraction and accusing others by a self-defensive approach.

2.3. The Relationship between Organizational Voice & Silence and Perceived Participative Climate

Based on various studies on human resources, employees might create unclear, inconsistent and confusing messages. An official participative system could be used to encourage employees to share their own ideas rather than creating such messages. However, due to the common perception that, although this is a formal participative system, informal communication-based participation of employees is not welcome, the formal participative system might not be sufficient to break silence. That's why structural (formal participation) and social (participative climate) voice mechanisms empower and reinforce each other's influences on employee voice. It is seen that employees' opinions are not welcome unless encouraged by the management despite the rules of decision-makers, which also cover the employees. Johnson et al. (2001) expressed that, when included in the formal feedback system, employees demonstrate more innovative behaviors and tend to take part in decision-making processes by speaking their opinions out loud. Possibilities of opinion sharing by employees increase when managers create an information sharing climate. Spencer (1986) stated that the above mentioned informal participative climate empowers and sustains the formal participative activities that create a suitable environment for employees to share their opinions. According to Huang et al. (2005), active managerial intervention to organizational hierarchy to create a sense of confidence and talking climate failed to enable employees to speak more of their opinions and concerns. That's why a strong participative climate supports the impact of employees' participation. However, the joint effect of structural and social voice mechanisms might differ by country. It is proved in the study that the perceived participative climate has a moderator influence between formal participative mechanisms and employees' opinion sharing in countries with low and high power distances. Dyne et al. (2003) described pro-social voice as the expression of ideas, knowledge and opinions regarding their work based on collaborative motivation.

Huang et al. (2005) stated that the attitude of managers toward creating knowledge-sharing in their communications with other employees increases the possibility of employees to share their opinions. Johnson et al. (2001) said that employees are more willing to express their opinions when they are included in formal feedback systems to be created by managers.

3. Method

3.1. The Aim, Design, Sample and Measures

Aim of the Study: The aim of this study, which was conducted in order to examine the relationship between organizational silence, organizational justice perception and participative climate perception among physicians, was to identify, by YEM model, the causal relationships containing inter-variable direct and indirect impacts and the underlying processes encircled by latent structures.

Statistical Design: The unjust culture-based injustice level perceived by employees within the organizational structure leads to non-sharing of opinions, ideas and concerns, keeping silent on organizational problems or, quite the opposite, talking openly. While justice perception is the most important reason why employees keep silent or not, participative climate perception is related as some kind of social voice mechanism developed on the basis of justice perception. These relationships could be presented in the conceptual model shown in Figure 1.

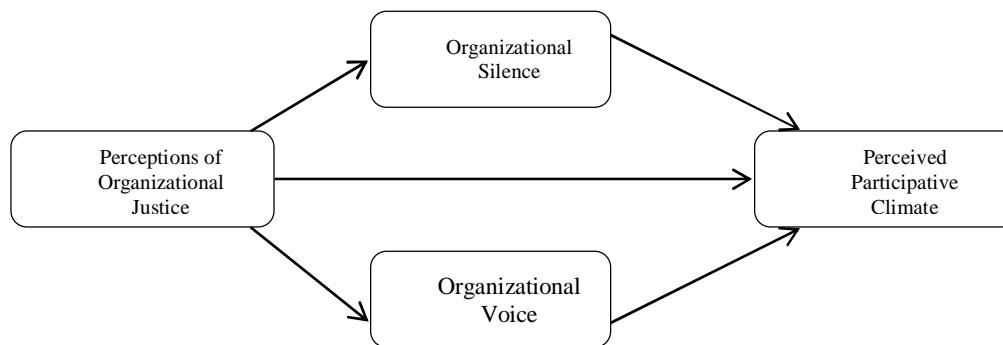


Figure 1: Conceptual Model

Concepts covered by this theoretical model are classified as theoretical structures, latent variables or factors, which are deemed to exist theoretically in social sciences due to their nature not directly measured, but which have a measure unit and deemed to be measured by various indicators (Byrne, 2010). Joreskog and Sorbom (1982) expressed that structural equation modeling (SEM) is used to describe the fact in studies conducted to review ambiguous cause and effect relation and various causal effects. It combines structural model formed by relationships among latent variables and the measurement model to which variables observed with latent variables are associated (Werner & Schermelleh-Engel, 2009), and allows structural relationships within the scope of theory to be conceptualized more clearly (Byrne, 2010). Correlation analysis is used for the determination of relationship level among variables while regression analysis is used for functional explanations of such relationships. However, correlation coefficient fails to explain the relationship in case the correlation coefficient computed between two variables is affected by a single variable or multiple variables, or cause and effect relation between two variables is dependent on the effect of a third variable. In such cases where correlation and regression analyses are not sufficient, SEM is used, which estimates the significance and importance of causal relationships among variable groups (Tatlidil, 2009). SEM, as in other multi-variable analysis methods, has certain assumptions. Multi-variable normal distribution nature of observed and unobserved variables, linearity, lack of outliers, indirect measurement, multiple indicators, presence of uncorrelated error phrases, lack of multiple linear relationships and sufficient sample volume are assumptions commonly used in SEM analysis.

Analytic Procedure: Prior to statistical analysis, all questionnaire data were computer coded for use with the Statistical Package for the Social Sciences (SPSS) for Windows. In the first analysis variables were examined descriptive statistics for each questionnaire items descriptive statistics, outlier and missing value. After that, multiple normality, which is an important assumption of SEM, was examined by using Mardia test, as a result of which it is seen that multiple normality is not provided. That's why the analysis was conducted with Bootstrap Maximum Likelihood (ML) method. It was observed that other assumptions of SEM were provided.

Correlation analysis was used to determine the relationships among organizational justice perception, organizational voice, organizational silence and perceived participative climate for the main aim of the study. Finally, causal relationships among variables were examined with structural equation modeling (SEM) by using Analysis of Moment Structures (AMOS) 20 program.

Sample: The physicians working at Health Research and Application Center Hospital of Trakya University constituted the universe of this research. This research was conducted on all 528 physicians working at this institution. In the questionnaire conducted face-to-face with 230 physicians who accepted to answer it, a total of 10 questionnaires were excluded as a result of extreme value analysis due to reasons such as wrong or missing filling and not returning, thus resulting in a sample of 220 physicians. While there are different opinions on SEM model technique, it is generally accepted that any sample volume fewer than 100 is considered small-sized, any sample volume between 100 and 200 is considered medium-sized and any sample volume higher than 200 is considered large-sized (Bayram, 2010), thus making this sample volume of 220 units is sufficient for SEM.

3.2. Measures

The relevant pre-developed, validity- and credibility-tested measures were used for the determination of questionnaires to be used in the research. Three different measures were used to measure the dependent and independent variables included in the model developed in the research. Furthermore, demographic questions were included in the questionnaire in order to specify demographic characteristics of the participants. Findings regarding the validity and credibility of all measures are presented below.

Organizational Silence: This measure was developed by Dyne, Ang & Botero (2003). This measure includes six dimensions regarding voice and silence concepts. Silence measure includes five phrases for the measurement of each dimension that are acquiescent silence, defensive silence, pro-social silence, acquiescent voice, defensive voice and pro-social voice, in total thirty (30) phrases. In this study, confirmatory factor analysis was conducted for measure validity, and a 30-item structure was confirmed ($\chi^2/df=1.835$; RMSEA=0.061; GFI=0.916; CFI=0.974)². Cronbach Alfa coefficients of sub-dimensions computed for measure credibility were found 0.943 for acquiescent silence, 0.926 for defensive silence, and 0.905 for pro-social silence, 0.860 for acquiescent voice, 0.879 for defensive voice and 0.891 for pro-social voice.

Organizational Justice Perceptions: Organizational justice perception was measured by the measure that contains twenty (20) phrases, which was designed by Colquitt (2001) and adopted into Turkish by Ozmen et al. (2007). Colquitt's measure includes a total of four dimensions such as distributive justice, procedural justice, interactional justice and informational justice. However, the results of factor analysis conducted in Ozmen et al. (2007) specified justice perception as to include three dimensions such as distributive, procedural and interactional. In this study, confirmatory factor analysis was conducted for measure validity, and a 20-item structure was confirmed ($\chi^2/df=1.732$; RMSEA=0.058; GFI=0.887; CFI=0.955). Cronbach Alfa coefficients of sub-dimensions computed for measure credibility were found 0.908 for distributive justice, 0.814 for procedural justice and 0.826 for interactional justice.

Perceived Participative Climate: The measure developed by Huang et al. (2005) consists of a single dimension and four (4) phrases. In this study, confirmatory factor analysis was conducted for measure validity, and a four-(4)-item structure was confirmed ($\chi^2/df=3.003$; RMSEA=0.095; GFI=0.986; CFI=0.989). Cronbach Alfa coefficient of the single dimension computed for measure credibility was found 0.828.

Demographic Characteristics: Demographic characteristics were evaluated in the 220 valid questionnaire forms of participants in this research. 45.5% (98) of participants were female while 55.5% (122) were male with an age range between 22 and 65. Of the physicians working at Department of Surgical Medical Sciences (28.6% (63)), Department of Internal Medicine (47.3% (104)) and Department of Basic Medical Sciences (24.1% (53)), 16 were professors (7.3%), 29 were associate professors (13.2%), 36 were assistant professors (16.4%), 9.5% were specialist, 91 were research assistants (41.4%) and 27 held other titles (12.3%).

3.3. Confirmatory Factor Analysis

To ensure the construct validity of the study variables, confirmatory factor analysis (CFA) was conducted. Goodness of fit was ensured for all factors included in the model ($\chi^2/df=1.472$; RMSEA=0.046; CFI=0.920, RMR=0.063).

² χ^2 =Chi-Square; df=Degree of Freedom; CFI=Comparative Fit Index; RMSEA=The Root Mean Square Error; GFI=Goodness Of Fit Index, RMR=Root Mean Square Residual.

4. Hypotheses (Appendix A)

The aim of the study is to search the causal relationships between organizational justice perception, organizational silence behavior, organizational voice behavior and participative climate perception. Within this context, sub-dimensions of organizational justice perception were considered to be independent variables while participative climate perception and the sub-dimensions of organizational silence and organizational voice were considered to be dependent variables. Basic hypotheses in this study are as follows:

- H1: Organizational justice dimensions perceived by physicians have a significant effect on the dimensions of organizational silence behaviors.
- H2: Organizational justice dimensions perceived by physicians have a significant effect on the dimensions of organizational voice behaviors.
- H3: Organizational justice dimensions perceived by physicians have a significant effect on participative climate perception.
- H4: Organizational silence dimensions perceived by physicians have a significant effect on participative climate perception.
- H5: Organizational voice dimensions perceived by physicians have a significant effect on participative climate perception.

5. Findings of the Study

5.1. Means, Standard Deviations, and Intercorrelations among Variables

Table 1 presents the means, standard deviations, and zero-order correlations among all the study variables. Accordingly, it is observed that there are direct and indirect relationships among sub-dimensions of organizational silence. Similarly, direct relationships were observed among sub-dimensions of organizational justice measure. Direct relationships were observed among the perceived participative climate perception and sub-dimensions of organizational justice measure.

Table 1: Intercorrelations among Variables

	Variables	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10
1	Acquiescent Voice (KSS)	2.09	.78	1									
2	Defensive Voice (DSS)	2.12	.88	.32**	1								
3	Pro Social Voice (PSS)	3.68	.84	-.21*	-.07	1							
4	Procedural Justice (SA)	3.49	.80	-.08	-.02	.25**	1						
5	Distributive Justice (DA)	3.04	1.07	.06	-.20**	.16*	.34**	1					
6	Interactional Justice (EA)	3.49	.85	-.12	-.30**	.22**	.21**	.05	1				
7	Acquiescent Silence (KS)	2.64	1.01	.25**	-.41**	-.02	.14*	.13*	-.23**	1			
8	Defensive Silence (DS)	2.22	1.02	.37**	.47**	-.10	-.09	.18**	-.27**	.37**	1		
9	ProSocial Silence (PS)	3.38	.99	-.08	-.21**	.16*	.16*	-.08	.27**	.02	-.16*	1	
10	Perceived Participative Climate (KIA)	2.98	.97	.03	-.03	.20**	.29**	.27**	.33**	.09	.08	.12	1

**p<.01, *p<.05

5.2. Structural Model Validity

Figure 2 shows the SEM model created to determine the causal relationships among organizational justice perception, organizational silence and the perceived participative climate within the frame of specified relationships. Goodness of fit values of the model shown in Figure 2 demonstrate the goodness of fit of the model and verify the structural equation ($\chi^2/df=1.451$, RMSEA=0.045, CFI=0.923, IFI=0.924).

Table 2: Goodness of Fit Indices of the Structural Model (Meydan and Sesen, 2011)

Fit Indices	Good Fit	Acceptable Fit	Results
χ^2 (CMIN)	$0 \leq \chi^2 \leq 2df$	$2df \leq \chi^2 \leq 3df$	1958.992
χ^2/df (CMIN/df)	≤ 3	$\leq 4-5$	1.451
CFI	$\geq .97$	$\geq .95$.923
RMSEA	$\leq .05$	0.06-0.08	.045
IFI	$\geq .95$	0.94-0.90	.924
AIC – Model	2228.992 < 2970.000*	Accepted	
CAIC –Model	2822.132 < 9494.537*	Accepted	
ECVI	10.178 < 13.562*	Accepted	
Structural Equation			KIA=0,434DA+0,263EA+0,142PS

Goodness of fit of the model was evaluated with χ^2 (Chi square), df (Degrees of freedom) and χ^2/df ratio, RMSEA (Root mean square error of approximation), CFI (Comparative Fit Index) and IFI (Incremental Fit Index) indices and presented in Table 2. According to Meydan and Sesen (2011), it is observed that all goodness of fit indices is within the acceptable limits. Thus, the relationships between the variables in the model and the structures are verified. According to the results obtained, it is statistically proven that the research model is a more appropriate model and has more goodness of fit nature than the saturated model. The results of Akaike Information Criterion AIC (2228.992), Consistent Akaike Information Criterion CAIC (2822.132) and Expected Cross Validation Index ECVI (10.178) used in the consistency of the model in order to choose the most real-like model by inter-model comparison show that the most real-like model was chosen for the data obtained. These fit measures show that comparison values obtained from independent and saturated models are higher than the research model values.

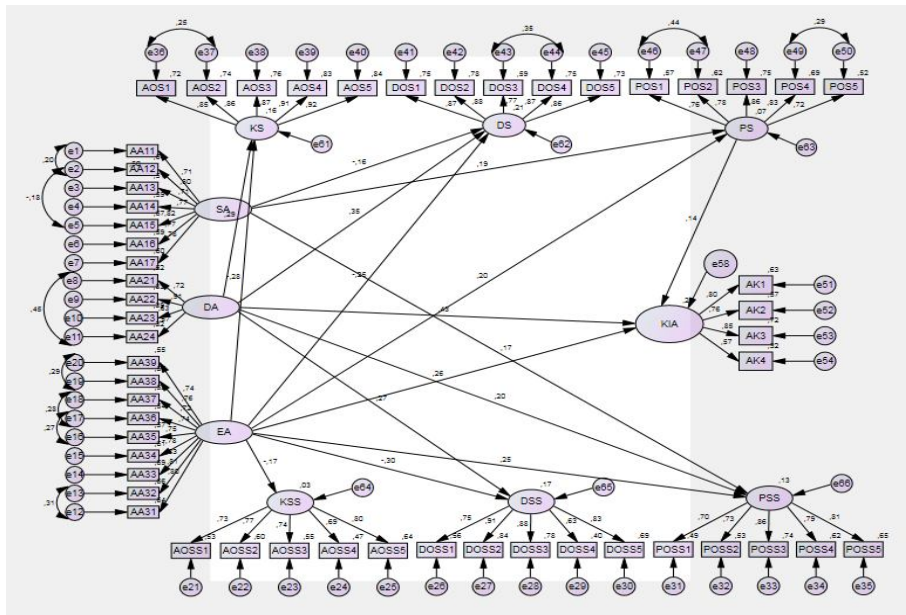


Figure 2: Path Diagram of Structural Model

Table 3 shows the SEM results for the research model, standardized regression coefficients for structural relationships (β), regression coefficients, critical ratio and significance level p values.

Table 3: SEM Results of Research Model

Structural Relationships			Standardized Regression Weights	Regression Weights	C.R.	P value
PS	<	SA	.19	.24	2.55	.011
PS	<	EA	.20	.24	2.64	.008
DS	<	SA	-.16	-.24	-2.41	.016
KS	<	DA	.29	.45	3.80	***
DS	<	EA	-.25	-.36	-3.69	***
DS	<	DA	.35	.52	4.47	***
KS	<	EA	-.28	-.41	-4.01	***
PSS	<	SA	.17	.18	2.32	.021
KSS	<	EA	-.17	-.18	-2.25	.024
DSS	<	DA	.27	.36	3.55	***
DSS	<	EA	-.31	-.38	-4.25	***
PSS	<	DA	.20	.22	2.60	.009
PSS	<	EA	.25	.26	3.37	***
KIA	<	DA	.43	.62	5.09	***
KIA	<	EA	.26	.35	3.67	***
KIA	<	PS	.14	.16	2.00	.045

According to the results, it was determined that there are significant relationships between procedural justice perception, which is a sub-dimension of organizational justice perception, and pro-social silence ($\beta=.19$, $p<.05$), defensive silence ($\beta=-.16$, $p<.05$) and pro-social voice ($\beta=.17$, $p<.05$), which are sub-dimensions of organizational silence. According to these results, with the rise of procedural justice perception, defensive silence behavior falls while tendency toward pro-social silence and pro-social voice behaviors increase. It was observed that there are significant relationships between distributive justice perception, which is another sub-dimension of organizational justice perception, and acquiescent silence ($\beta=.29$, $p<.01$), defensive silence ($\beta=.35$, $p<.01$), defensive voice ($\beta=.27$, $p<.01$) behaviors and perceived participative climate ($\beta=.43$, $p<.01$), which are sub-dimensions of organizational silence. The increase in distributive justice perception leads to increase in acquiescent silence, defensive silence, defensive voice and perceived participative climate. Similarly, it was observed that there are significant relationships between interactional justice perception of organizational justice perception and pro-social silence ($\beta=.20$, $p<.01$), defensive silence ($\beta=-.25$, $p<.01$), acquiescent silence ($\beta=-.28$, $p<.01$), acquiescent voice ($\beta=-.17$, $p<.05$), defensive voice ($\beta=-.31$, $p<.01$), pro-social voice ($\beta=.25$, $p<.01$) and participative climate perception ($\beta=.26$, $p<.01$), which are sub-dimensions of organizational silence. According to these results, it is seen that while there is an increase in interactional justice perception, there is also an increase in participative climate perception, pro-social silence and pro-social voice behaviors while there is a decrease in defensive silence, acquiescent silence, defensive voice and acquiescent voice behaviors. Furthermore, a significant causal relationship was observed between pro-social silence, which is a sub-dimension of organizational silence, and perceived participative climate ($\beta=.14$, $p<.05$).

The observed relationships or causal relationships among latent variables might occur in two different forms in SEM: direct and indirect. The sum of direct and indirect relationships point to the total effect. Examining their standardized indirect effects and total effects on independent latent variables and dependent latent variables, it is seen that interactional justice variable has an indirect effect of around .03 on perceived participative climate. Studying the total effects including the direct and indirect effects, it is seen that the total effect of interactional justice perception on perceived participative climate is .29, .03 of which is caused by indirect effect and .26 of which by direct effect. According to these results, it could be said that pro-social silence behavior acts as a partial mediator between perceptions of organizational justice and perceived participative climate.

6. Conclusion and Discussion

This study proved that there are significant relationships between organizational silence, organizational justice and participative climate perception. It was determined that organizational justice perception has a direct effect on organizational silence and organizational voice dimensions and participative climate perception.

It was also determined that pro-social silence has the power to increase the relationship between interactional justice and participative climate perception. It was seen that distributive justice empowers the reaction type (silence or voice) against unjust practices. Within this context, it could be expressed that pro-social silence, which increases depending on the development of behaviors and attitudes of physicians toward increasing their perception of interactional justice, increases informal participative climate perception. Differently from acquiescent silence and defensive silence, pro-social silence, which intentionally develops and occurs as a result of organizational citizenship drive by keeping important knowledge in favor of the organization, increases when the procedural justice and interactional justice perceptions of physicians also increase? It is considered that the just perception of physicians toward the process where outcomes such as their salaries, promotions, benefits, work conditions and performance are determined, and their just perception of interactional communications by their managers would increase pro-social silence behavior.

Defensive silence behavior of individuals which occur as a result of self-defense instinct decreases when procedural justice and interactional justice perceptions of physicians fall. Because sense of trust would build up in case individuals sense the presence of an equal and just organizational culture in a work environment, they will give up on their defensive behaviors. It was observed that when justice perception of employees toward salaries, promotions and awards increases, there would also be an increase in defensive and acquiescent silence behaviors. It is understood that although physicians perceive salaries, promotions and awards as just on an individual scale, they keep on their defensive and acquiescent silence behaviors increasingly due to fear of loss. Within this scope, it could be considered that while their distributive justice perception increases, physicians keep their silence for their individual interests due to fear of loss of what they already gained. Another finding is the direct and indirect effect of interactional justice perception on acquiescent silence and defensive silence. The fall in interactional justice perception gives birth to this dual voice form. Accordingly, the rise in the interactional justice perception by physicians toward communications with them by their managers causes a fall in the reactive acquiescent silence and defensive silence of physicians.

As the distributive justice perception of physicians toward inner organizational gains increases, defensive voice, pro-social voice and participative climate perception also increase. It is seen that pro-social voice behavior would make individuals create alternative solutions for problems and ideas for change in collaboration by intentional behaviors in favor of their organizations as a result of perceiving a just environment regarding their gains. However, physicians' self-defensive attitude due to fear of loss of their gains also plays an active role, which is considered to increase the defensive voice behavior. Just perception of inner organizational gains significantly affects participative climate perception. It is observed that the response to their contributions to the organization empowers the employees' perception of an environment where they can express their ideas and opinions. It is seen that interactional justice that focuses on interpersonal relationships in an organization has a positive effect on pro-social voice behavior. Similar to pro-social voice, participative climate perception is closely correlated with the increase in interactional justice perception. It is possible to say that physicians sense an environment where they can express their own opinions when they perceive a just attitude in interpersonal interactions and communication with managers within their organizations.

As Dyne et al. (2003) described and within the frame of the above mentioned explanations, pro-social silence gives employees the impression that they make positive contribution to their organizations. It is seen that physicians perceive the organizational climate as participative due to their positive contribution to their organization in this way. However, according to analysis results, it could be said that the effect of interactional justice perception on participative climate is actualized via pro-social silence. It would not be wrong to say that pro-social silence creates an informal participation system and increases participative climate perception which is seen as a social voice type. Findings of the research bear a resemblance to other findings in literature. According to this; it is similar to studies of Karacaoğlu and Cingoz (2009) where they proved that just practices within an organization decrease silence, of Tangirala and Ramanujam (2008) where they proved that procedural justice perception decreases employees' silence, and of Pinder and Harlos (2001) where they proved that while perception of employees on injustice practices decreases, they tend to be silent. Organizational silence concept, which has an important structure to be examined for employees and organizations, is considered to be at a level that requires more research despite various studies on this matter.

It is possible to say that today, where organizational and individual performance and efficacy gains importance, a research area is available which could be enriched with empirical studies on the outcomes caused by silence in organizations where organizational silence culture reigns. Among others that considered to have an effect on silence, the following items might be considered to be the topics of prospective researches; managerial structure, leadership, award management, personal traits, national and cultural reasons and power distance as well as examination of the relationships between organizational silence and low job satisfaction and burnout, both of which develop based on the negative outcomes of silence.

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Appendix A. Hypotheses

H₁: Organizational justice dimensions perceived by physicians have a significant effect on the dimensions of organizational silence behaviors.	
H ₁ ^{SA-KS} : The procedural justice as perceived by physicians has a significant effect on the acquiescent silence.	Rejected
H ₁ ^{SA-DS} : The procedural justice as perceived by physicians has a significant effect on the defensive silence.	Accepted
H ₁ ^{SA-PS} : The procedural justice as perceived by physicians has a significant effect on the proSocial silence.	Accepted
H ₁ ^{DA-KS} : The distributive justice as perceived by physicians has a significant effect on the acquiescent silence.	Accepted
H ₁ ^{DA-DS} : The distributive justice as perceived by physicians has a significant effect on the defensive silence.	Accepted
H ₁ ^{DA-PS} : The distributive justice as perceived by physicians has a significant effect on the proSocial silence.	Rejected
H ₁ ^{EA-KS} : The interactional justice as perceived by physicians has a significant effect on the acquiescent silence.	Accepted
H ₁ ^{EA-DS} : The interactional justice as perceived by physicians has a significant effect on the defensive silence.	Accepted
H ₁ ^{EA-PS} : The interactional justice as perceived by physicians has a significant effect on the proSocial silence.	Accepted
H₂: Organizational justice dimensions perceived by physicians have a significant effect on the dimensions of organizational voice behaviors.	
H ₂ ^{SA-KSS} : The procedural justice as perceived by physicians has a significant effect on the acquiescent voice.	Rejected
H ₂ ^{SA-DSS} : The procedural justice as perceived by physicians has a significant effect on the defensive voice.	Rejected
H ₂ ^{SA-PSS} : The procedural justice as perceived by physicians has a significant effect on the proSocial voice.	Accepted
H ₂ ^{DA-KSS} : The distributive justice as perceived by physicians has a significant effect on the acquiescent voice.	Rejected
H ₂ ^{DA-DSS} : The distributive justice as perceived by physicians has a significant effect on the defensive voice.	Accepted
H ₂ ^{DA-PSS} : The distributive justice as perceived by physicians has a significant effect on the proSocial voice.	Accepted
H ₂ ^{EA-KSS} : The interactional justice as perceived by physicians has a significant effect on the acquiescent voice.	Accepted
H ₂ ^{EA-DSS} : The interactional justice as perceived by physicians has a significant effect on the defensive voice.	Accepted
H ₂ ^{EA-PSS} : The interactional justice as perceived by physicians has a significant effect on the proSocial voice.	Accepted
H₃: Organizational justice dimensions perceived by physicians have a significant effect on participative climate perception.	
H ₃ ^{SA-KIA} : The procedural justice as perceived by physicians has a significant effect on the climate perception.	Rejected
H ₃ ^{DA-KIA} : The distributive justice as perceived by physicians has a significant effect on the climate perception.	Accepted
H ₃ ^{EA-KIA} : The interactional justice as perceived by physicians has a significant effect on the climate perception.	Accepted

H₄: Organizational silence dimensions perceived by physicians have a significant effect on participative climate perception.	
H₄^{KS-KIA} : Acquiescent silence behavior of physicians has a significant effect on participative climate perception.	Rejected
H₄^{DS-KIA} : Defensive silence behavior of physicians has a significant effect on participative climate perception.	Rejected
H₄^{PSS-KIA} : Pro Social silence behavior of physicians has a significant effect on participative climate perception.	Accepted
H₅: Organizational voice dimensions perceived by physicians have a significant effect on participative climate perception.	
H₅^{KSS-KIA} : Acquiescent voice behavior of physicians has a significant effect on participative climate perception.	Rejected
H₅^{DSS-KIA} : Defensive voice behavior of physicians has a significant effect on participative climate perception.	Rejected
H₅^{PSS-KIA} : Pro Social voice behavior of physicians has a significant effect on participative climate perception.	Rejected

Appendix: Notes

* This study was funded by a research grant from the TÜBAP (Trakya University Scientific Research Projects Unit).