



The Effect of Intra-Organizational Communication on Resistance to Change: A Research on Academics in Turkey

Biyikli F^{1,*} and Fidan M²

¹Assist. Prof. Dr. Afyon Kocatepe University, Turkey

²Science Expert, Turkey

*Corresponding author: Biyikli F, Assist. Prof. Dr. Afyon Kocatepe University, Turkey; E-mail: fbiyikli@aku.edu.tr

Abstract

Organizations are in a constant evolution due to environmental changes. Although this change process is inevitable and continuous, organizational employees generally view the change process negatively and resist change. Many management scientists have conducted important research to deal with resistance to change. Many of these studies have concluded that communication is important in reducing resistance to change and harmonizing change. This research examined the effect of intra-organizational communication on resistance to change. This research is conducted on academicians working in public universities in Turkey. The research model was designed by grouping intra-organizational communication into two subscales, horizontal and vertical communication, and resistance to change into three subscales: scepticism, anxiety and acceptance. The designed research model was tested with the Smart-PLS 4.0 structural equation model. As a result of the research, all proposed hypotheses were accepted, and it was determined that as organizational communication increased, resistance to change decreased. In addition, it was concluded that the relationships between horizontal and vertical communication styles with scepticism, acceptance and anxiety, which are the sub-factors of resistance to change, are significant. It has been concluded that, especially as vertical communication increases in organizations, the anxiety and scepticism of academics increase; as horizontal communication increases, anxiety and scepticism decrease and acceptance increases.

Keywords: Resistance to change; Intra-Organizational communication; Smart PLS 4.0; Structural equation modelling

Introduction

The constant change brought about by our age is significant for organizations. One of the most critical processes of this process is to adapt to change organizationally. This change must occur and be accepted in every department and unit of the organization to succeed. For this process to be carried out successfully, the flow of information within the organization must be ensured. Because people fear and resist what they do not know the most. In addition, there are routine work practices and habits of the employees before this planned change and a culture that has settled in the organization over time. One of the biggest obstacles to the process, especially regarding radical changes and transformations, is the resistance to change among employees. In this sense, realizing change is largely related to preventing this resistance. This change process needs to be planned well, and necessary preparations must

be made [1]. In order to prevent possible resistance, managers should explain to all employees that the current situation will be good for everyone and that the process should be transparent [2]. In addition, resistance can be reduced by using methods such as an effective and healthy communication environment, management support and reward systems. In this context, the research problem was determined as determining whether intra-organizational communication affects resistance to change based on the positive effects of communication. The research was carried out by taking academics working at state universities as a sample. The next section of the research includes concepts related to the determined variables and the studies carried out. Following this, information about the purpose and importance of the research, sample and data collection, and the scales used are included. Finally, the analysis and findings and the study results are presented.

Received date: 22 July 2023; Accepted date: 25 September 2023; Published date: 29 October 2023

Citation: Biyikli F, Fidan M (2023) The Effect of Intra-Organizational Communication on Resistance to Change: A Research on Academics in Turkey. SunText Rev Econ Bus 4(4): 194.

DOI: <https://doi.org/10.51737/2766-4775.2023.094>

Copyright: © 2023 Biyikli F, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.



Intra-Organizational Communication

The concept of communication is derived from the Latin word "communis" [3]. People have lived in society by communicating. For communication to occur, the process must occur synchronously and within a system. The basic elements required for this system to be successful are the sender, receiver and channel [4]. The criterion for successful communication is that the sent message is perceived the same for both the sender and the receiver. The sender and receiver need to consist of individuals or groups with similar characteristics and values to perceive the message and symbols and attribute the same meaning to the message and symbols [5]. The communication we use to maintain our relationships with our family and environment in social life is very important in organizations. Communication occurs by transferring information, emotions, thoughts, ideas and values between individuals and groups [6]. Communication is a powerful tool for persuading people working in organizations, ensuring cooperation, and directing business and other processes [7]. Organizations determine their goals and objectives within the framework of their organizational requirements. They include their stakeholders in the organization to achieve these goals. Although the organization must ensure the relationship, interaction and harmony between these stakeholders, they can only achieve this through communication [8]. Organizations represent and introduce themselves to their employees and other organizations through communication. They can also communicate the information they need to fulfil their responsibilities to their employees. In this context, organizations implement different policies to provide and optimize the organizational communication environment to achieve their goals [9]. In their study, defined organizational communication as exchanging information and ideas with the internal and external environment to carry out routine work and achieve organizational goals. The processes of receiving, understanding and directing any message sent by organizational members are defined as communication in organizations [10]. Strong and successful communication is extremely important for organizations. By using communication, members within the organization can be activated and directed. Organizational managers should manage their communication processes well. A well-organized communication network ensures that organizational managers and employees are better motivated [11]. In this context, the main purpose of communication is to establish interaction and relationships, to develop them, to ensure that the work is done and to help solve the problems that may arise harmoniously [12-14]. Communication is the primary purpose of creating an organization. Problems that arise in providing a communication environment and establishing communication will constitute an obstacle to the success of the process [15]. Communication benefits to organizations are as follows [16].

- It conveys the information needed to make decisions to managers (decision makers),
- It supports organizational members in understanding the decisions taken by decision-makers and translating them into action,
- It helps to increase the commitment of organizational members to the organization,
- It helps to increase customer relations positively,
- Provides performance increase by directing the way organizational members do business,
- Supports sharing and emotional transfer among organizational members
- When problems may arise in the organization, conflict, etc. It helps reduce pressure and harmful sharing on issues.
- It supports cooperation within the organization and indirectly supports stability.
- It reduces resistance to change by creating an environment of trust within the organization,
- Increases information exchange within the organization and reduces errors
- Increases the profitability and efficiency of the organization.

Communication in organizations can take place formally or informally. While formal relationships include rules and procedures determined in the organization, informal relationships are a form of communication that occurs spontaneously between members without rules and can sometimes be destructive [17]. Organizational communication occurs horizontally, vertically and crosswise [18]. Vertical communication is two-way communication between those working at the upper levels of the organization and those working at the lower levels. While managers create a communication channel for their subordinates regarding task orders, procedures, and information needs regarding decision-making, they communicate with employees regarding feedback, requests, and improvement suggestions regarding the activities carried out [19]. On the other hand, horizontal communication takes place in a formal or informal form between employees working at the same level in the organization. Members share about solving problems and tasks. Cross-communication is the communication that takes place between subordinate and superior members operating in different units in the organization. With cross-communication, harmony and interaction between different units of the organization can be achieved [20]. For the organization to achieve its goals, it must enable these three forms of communication to be realized in the best possible way.

As in other organizations, communication is very important in organizations that carry out educational activities. When we evaluate universities, they have a more complex structure than other institutions, considering their management styles, organizational structures, missions, activities, employees and

hierarchical processes [21,22]. University communication occurs through a more comprehensive process that includes all stakeholders (students, academic and administrative staff, alumni, society, etc.). With so many stakeholders participating in communication, it becomes more complex regarding the operation and control of the process. Within the scope of our research, academicians were taken as samples to examine the relationship between intra-organizational communication and resistance to change. States that it is wrong to describe academic staff as only recipients of intra-organizational communication, as they have the most important role in achieving the goals of universities; on the contrary, they constitute the most crucial part of the process [23]. He states that academic staff, grouped according to their expertise, academic ways of doing business, and departments, create a unique communication environment. In his study, states that the academic environment has some factors that affect the communication situation positively and negatively. The researcher reveals that one of the most critical factors is disciplinary culture.

Resistance to Change

Change brings any situation or entity to a different level than its current level. It is also expressed as personal knowledge and skills becoming different from their current state [24]. Organizations may encounter many obstacles in these change processes. Achieving change is not a simple process and requires new responsibilities [25]. In addition, change can occur in organizations positively or negatively. While positive change refers to the growth and development of the organization, negative development can be defined as the failure of the organization or its moving away from its goals. Resistance to change is the feeling of distrust, doubt, obstruction, or trying to prevent change that occurs among employees in the face of change that is attempted to be carried out in organizations. Preventing and eliminating this resistance is very difficult [26]. According to Dublin and Ireland, there are three reasons for resistance to change. These include the concern of employees about not having enough income to satisfy their socioeconomic levels or that they need to work harder to earn income, secondly, people's fear of what they do not know, and finally, managers' remaining unresponsive or ignoring the problems that may arise with change [27]. It appears more challenging for public institutions to manage the change necessary to adapt to the times due to the different types of resistance and the issues resisted [28]. The bureaucratic culture consisting of common shares, habits and beliefs over time creates resistance in the public sector [29]. Bureaucratic culture is also one of the factors that create resistance to change. Stated that it would be beneficial to establish a change management team from outside the organization that knows the culture of the organization in order to realize the change [30]. They revealed that the team will play an important role in solving problems that may arise regarding change by

strengthening communication between senior management and employees. In a study where sampled employees in a manufacturing enterprise, he concluded that organizational communication would eliminate uncertainty in processes and reduce resistance [31]. In a different study, it is seen that as employees' trust in the organization and their manager's increases, the resistance to change will decrease [32]. It can be seen that it is important for employees to be supported with positive concepts during the change process. In this context, the effect of intra-organizational communication on resistance to change was investigated within the scope of the study. It is thought that working in universities will contribute to realizing the process in an age where change is inevitable.

Methodology

Aim and importance

The role of universities in the development level of countries is quite significant. Rising international rankings and educating qualified, well-equipped international students contribute to the country and the relevant university. As in every sector, change is inevitable in the education sector. It is thought that understanding academics' attitudes towards change in this change process and revealing the impact of intra-organizational communication will contribute to both the literature and universities. In this context, the research aims to explain the relationship between resistance to change in academics and intra-organizational communication.

Scope and limitations

Within the scope of the research, academicians working at state universities were taken as a sample. The study can be carried out in the education sector at different levels (primary, high, and secondary). In addition, research can be conducted in which a sample of administrative personnel who support education and training and are available in considerable numbers in every university can be conducted. Again, comparisons can be made by carrying out the study on academics from private and state universities.

Sampling Data Collection and Scales

Based on the research problem created, the population consists of academicians working at universities in Turkey. The sample is academicians working at some state universities within the scope of the study. As a sampling technique, convenience sampling was preferred among non-probability sampling techniques. In convenience sampling, the researcher tries to obtain data from the most comfortable and easy participants until he reaches the sample size. While data was being obtained, the digitally created survey form was sent to 697 academics working at different universities via their e-mails. Participants' e-mail addresses were accessed from

the institution's websites. However, 238 survey forms were filled out and sent to the researchers. Within the framework of the research problem created, two scales (resistance to change intra-organizational communication) were used. The Resistance to Change Scale, developed and adapted into Turkish was used [33,34]. The scale consists of 3 dimensions: scepticism (10 items), anxiety (9 items), and acceptance (9 items). The intra-organizational communication scale is the scale used in his thesis study and created [35,36]. 12 of the questions in the scale were prepared in the vertical communication dimension (Vertical Communication), and 3 of them were prepared in the horizontal communication dimension (Horizontal Communication). Within the study's scope, the scales' sub-dimensions were also analyzed.

Method

In this study the effect of intra-organizational communication on resistance to change is measured through Smart-PLS SEM. Compared to other structural equation models (Amos, Lisrel, etc.), the Smart-PLS structural equation model is a structural equation model that has been frequently used recently due to its ease of user interface and the fact that it is a variance-based method [37]. The important advantage of this method that distinguishes it from other methods is that it does not require normal distribution and can work very well with small data. In addition, the fact that both formative and reflective models can be drawn and that it works very well with complex models are among the important advantages of the model. In this context, the research model in our study is presented in (Figure 1).

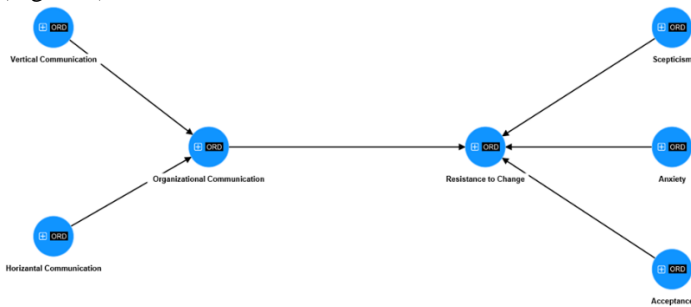


Figure 1: Research Model.

As it can be understood from the figure 1 above not only direct effect of intra-organizational communication on resistance to change is analyzed but also the effects of subscales were also analyzed. In order to see the effects the following hypothesis are created:

- H1: Horizontal Communication effects Acceptance positively
- H2: Horizontal Communication effects Anxiety negatively
- H3: Horizontal Communication effects Scepticism negatively
- H4: Horizontal Communication effects Resistance to change negatively

- H5: Intra-Organizational Communication effects acceptance positively
- H6: Intra-Organizational Communication effects Anxiety negatively
- H7: Intra-Organizational Communication effects Scepticism negatively
- H8: Intra-Organizational Communication effects Resistance to change negatively
- H9: Vertical Communication effects Acceptance negatively
- H10: Vertical Communication effects Anxiety positively
- H11: Vertical Communication effects Scepticism positively
- H12: Vertical Communication effects Resistance to Change positively

Analysis of the data

There are some prerequisites for constructing PLS-YEM. We can list these prerequisites as follows (Hair et al., 2017):

1. As a first condition, factor analysis should be performed and the factor loadings of each factor should be calculated and the factors with values below 0.60 should be removed from these loads and reported.
2. Secondly, reliability test results (Cronbach Alpha, rho_a, rho_c, AVE) should be calculated and reported.
3. Thirdly, validity-related test results (HTMT and Fornell Larker criterion) should be calculated and reported.
4. Fourthly, it should be tested whether there is a multicollinearity problem and VIF (Variance Increasing Factor) values should be reported.
5. Finally, model fit index values (SRMR, RMStheta, NFI) should be calculated and reported.

A structural model cannot be constructed without these five prerequisites being met. Therefore, in this section, first the tests related to these prerequisites will be reported, and then the structural model (path analysis) will be constructed and the coefficients between the relationships will be reported.

PLS-SEM Factor Analysis

Factor analysis is the first and most important condition of PLS-SEM. Because the relevant factor of each variable expresses its explanatory power (outer loading). Although there are different opinions in the literature about what factor loadings should be, the generally accepted value is expected to be above 0.60. This value shows the percentage of each sub-variable explaining the relevant factor. It is recommended to remove each variable below 0.60 from the model. Because those variables are insufficient to explain the relevant factor and cause incompatibility in the model by negatively affecting important tests such as reliability and validity. The factor loading table resulting from the factor analysis conducted in this context is shown in (Table 1). As it can be seen in table 1, factors of R1C17, R1C20, R1C22, R1C23, R1C24, R1C25,

R_iC₂₆, R_iC₂₇, should be excluded from the model as they are below 0.60. Therefore the model is restructured after excluding these questions

Reliability and validity tests

Reliability and validity tests of the model were conducted based on the new model constructed as a result of factor analysis. At this

point, firstly, the reliability test findings are reported in (Table 2). When table 2 is examined, it can be seen that there are four different reliability test results. In order for the model to be reliable, Crobach Alpha, rho_a and rho_c values must be at least 0.70 and AVE value must be at least 0.50 [38].

Table 1: Factor Loadings.

	Acceptance	Anxiety	Horizontal Communication (HC)	Organizational Communication (OC)	Resistance to Change (RtC)	Scepticism	Vertical Communication (VC)
Sceptisizm1						0.708	
RtC1					0.624		
Sceptisizm2						0.692	
RtC2					0.646		
Sceptisizm3						0.706	
RtC3					0.650		
Sceptisizm4						0.806	
RtC4					0.666		
Sceptisizm5						0.617	
RtC5					0.780		
Sceptisizm6						0.772	
RtC6					0.617		
Sceptisizm7						0.608	
RtC7					0.772		
Sceptisizm8						0.688	
RtC8					0.740		
Sceptisizm9						0.689	
RtC9					0.732		
Sceptisizm10						0.622	
RtC10					0.710		
Anxiety1		0.656					
RtC11					0.678		
RtC12					0.649		
Anxiety2		0.743					
Anxiety3		0.771					



RtC13					0.670		
Anxiety4		0.632					
RtC14					0.672		
Anxiety5		0.650					
RtC15					0.656		
RtC16					0.605		
Anxiety6		0.575					
RtC17					0.487		
Anxiety7		0.500					
Anxiety8		0.688					
RtC18					0.648		
Anxiety9		0.698					
RtC19					0.614		
RtC20					0.036		
Acceptance1	0.033						
Acceptance2	0.619						
RtC21					0.410		
RtC22					-0.113		
Acceptance3	-0.225						
RtC23					0.303		
Acceptance4	0.484						
Acceptance5	-0.149						
RtC24					-0.031		
RtC25					-0.063		
Acceptance6	-0.171						
Acceptance7	0.439						
RtC26					0.373		
Acceptance8	0.634						
RtC27					0.642		
Acceptance9	0.733						
RtC28					0.601		
VC1							0.701
OC1				0.669			



SUNTEXT REVIEWS

OC2				0.666			
VC2							0.681
VC3							0.652
OC3				0.613			
OC4				0.857			
VC4							0.851
VC5							0.839
OC5				0.860			
OC6				0.697			
VC6							0.721
VC7							0.765
OC7				0.745			
OC8				0.736			
VC8							0.758
VC9							0.820
OC9				0.836			
VC10							0.808
OC10				0.813			
VC11							0.873
OC11				0.875			
VC12							0.795
OC12				0.808			
OC13				0.860			
HC1			0.925				
HC2			0.893				
OC14				0.838			
HC3			0.738				
OC15				0.680			

Therefore, as can be seen from the table, the reliability of the model was high for each factor. Another report that should be tested along with reliability is the validity of the model. There are two different validity tests for the PLS-SEM model. These are the HTMT (Heterotrait-monotrait) ratio and the Fornell Larcker Criterion. The HTMT ratio is reported first in (Table 3). Table 3 shows the HTMT results regarding the relationships of the variables with each other.

For the relationships to be valid, these ratios must be below 0.90 [39]. When table 3 is examined, it is seen that the ratios for all relationships are below 0.90. Therefore, it can be said that HTMT ratios are valid. The second validity test that must be reported is the Fornell Larcker criterion. According to this criterion, each variable is expected to have the highest value in the relevant row and column [40]. Fornell Larcker test results for the model are

given in (Table 4). When Table 4 is examined, it is seen that each factor has the highest value in the relevant row and column.

Therefore, it seems that the model is also valid within the framework of the Fornell Larcker criterion.

Table 2: Reliability and validity test results.

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Acceptance	0.736	0.741	0.739	0.586
Anxiety	0.865	0.869	0.865	0.547
Horizontal Communication	0.886	0.900	0.891	0.732
Organizational Communication	0.956	0.961	0.957	0.600
Resistance to Change	0.910	0.920	0.915	0.544
Scepticism	0.920	0.923	0.921	0.540
Vertical Communication	0.947	0.950	0.947	0.600

Table 3: HTMT Test Results.

	Acceptance	Anxiety	Horizontal Communication	Organizational Communication	Resistance to Change	Scepticism	Vertical Communication
Acceptance							
Anxiety	0.207						
Horizontal Communication	0.629	0.402					
Organizational Communication	0.707	0.444	0.858				
Resistance to Change	0.500	0.877	0.441	0.466			
Scepticism	0.285	0.622	0.252	0.242	0.886		
Vertical Communication	0.710	0.444	0.885	0.894	0.461	0.232	

Table 4: Fornell-Larcker creterion results.

	Acceptance	Anxiety	Horizontal Communication	Organizational Communication	Resistance to Change	Scepticism	Vertical Communication
Acceptance	0.797						
Anxiety	0.162	0.668					
Horizontal Communication	0.618	0.401	0.856				
Organizational Communication	0.698	0.440	0.764	0.774			
Resistance to Change	0.396	0.615	0.408	0.409	0.687		
Scepticism	0.270	0.625	0.250	0.207	0.595	0.735	
Vertical Communication	0.702	0.438	0.768	0.635	0.395	0.186	0.775

Table 5: VIF Values.

Question	VIF	Question	VIF	Question	VIF
Sceptisizm1	2.081	Anxiety3	2.161	VC4	3.782
RtC1	2.553	RtC13	1.728	OC4	3.447
Sceptisizm2	3.371	Anxiety4	1.756	VC5	3.277
RtC2	2.901	RtC14	2.865	OC5	3.535
Sceptisizm3	3.596	Anxiety5	1.604	VC6	3.688
RtC3	2.969	RtC15	2.004	OC6	3.563

Sceptisizm4	3.545	Anxiety6	1.676	VC7	3.329
RtC4	3.300	RtC16	1.424	OC7	3.044
Sceptisizm5	2.260	Anxiety8	2.542	VC8	3.248
RtC5	3.033	RtC18	1.900	OC8	3.322
Sceptisizm6	2.652	Anxiety9	2.056	VC9	3.985
RtC6	2.481	RtC19	2.362	OC9	3.704
Sceptisizm7	3.115	Acceptance2	1.389	VC10	3.814
RtC7	3.690	RtC21	1.220	OC10	3.171
Sceptisizm8	3.033	Acceptance8	1.858	VC11	3.595
RtC8	2.712	RtC27	2.974	OC11	3.992
Sceptisizm9	2.761	Acceptance9	1.915	VC12	3.960
RtC9	3.110	RtC28	2.599	OC12	3.840
Sceptisizm10	2.503	VC1	3.837	HC1	3.699
RtC10	2.036	OC1	3.527	OC13	3.085
Anxiety1	2.732	VC2	3.626	HC2	3.967
RtC11	2.353	OC2	3.612	OC14	3.920
Anxiety2	2.552	VC3	3.292	HC3	2.180
RtC12	4.144	OC3	3.433	OC15	1.887

Table 6: Model Fit Indeces.

	Saturated model	Estimated model
SRMR	0.939	0.957
RMStheta	0.634	0.635
NFI	0.912	0.924

Table 7: Bootstrapping Test Results.

	Original sample	Sample mean	Standard deviation	T statistics	P values
Horizontal Communication -> Acceptance	0.052	0.057	0.023	2.247	0.025
Horizontal Communication -> Anxiety	-0.093	0.086	0.026	3.628	0.000
Horizontal Communication -> Scepticism	-0.095	0.088	0.026	3.646	0.000
Horizontal Communication -> Resistance to Change	-0.340	0.014	2.251	3.662	0.000
Organizational Communication -> Acceptance	0.250	0.274	0.114	2.200	0.028
Organizational Communication -> Anxiety	-0.443	0.415	0.124	3.569	0.000
Organizational Communication -> Scepticism	-0.456	0.425	0.127	3.597	0.000
Organizational Communication -> Resistance to Change	-0.190	0.087	11.316	3.584	0.000
Vertical Communication -> Acceptance	-0.213	0.233	0.097	2.182	0.029
Vertical Communication -> Anxiety	0.376	0.353	0.106	3.531	0.000
Vertical Communication -> Scepticism	0.387	0.361	0.109	3.559	0.000
Vertical Communication -> Resistance to Change	0.403	0.379	0.114	3.544	0.000

Variance increasing factor (VIF) values

Another important issue to consider after reliability and validity tests is to test whether there is a multicollinearity problem among the variables. VIF values are checked to measure whether there is a multicollinearity problem in PLS-SEM. Although there are different opinions in the literature about what these VIF values should be, there is a consensus that this value should be at least 5.

However, ideally it is recommended not to exceed 3. (Table 5) shows the VIF (Variance Increasing Factor) values of the sub-variables. When Table 5 is examined, it is seen that there is no value above 3. Therefore, it can be said that there is no multicollinearity problem in the model constructed between the variables.

Model Fit Indeces

Another prerequisite for the constructed structural equation model is that it must be within the limits of the model fit indices. In this context, three critical values should be noted. These are SRMR (Standardized Root Mean Square Residual), RMSttheta (Root Mean Square Residual Covariance), and NFI (Normed Fit Index) values. When the literature is examined, the SRMR value is lower than 0.10, the RMSttheta value is higher than 0.12 and the NFI value is higher than 0.90 [41-43]. (Table 6) shows the ratios regarding the model fit index values of the structural equation model. When table 6 is examined, it is seen that all values are within the specified ranges. Therefore, it can be said that the constructed model is within the limits of fit indices. As a result of reporting all these prerequisites, path analysis can now be performed and reporting on the relationships between variables can be made.

Path Analysis

In our research model we seeked the effect of intra-organizational communication on resistance to change. Along with this main effect we also investigated the effect of subscales with each other. Therefore the constructed SEM can be seen in (Figure 2). In the model in figure 2, p values and path coefficients are given. While path coefficients provide information about the direction of the relationship, p values provide information about whether the relationship is significant or not. When the p values are examined, it is seen that all of the constructed relationships are significant. The bootstrapping table, where all direct and indirect relationships are shown, in [44-47] (Table 7). When table 7 is examined, it is seen that the p values and t statistics related to the hypotheses are within the expected limits. Interpretations regarding the hypotheses will be made in the findings section.

Findings

When table 2 and figure 2 is examined it can be seen that all hypothesis is found be significant. Path coefficients tells us the direction of relationship among variables. If it is positive in can be said that the relationship is positive as well. If it is negative then the relationship is also found to be negative from this perspective we can look at the hypothesis one by one. When we look at the horizontal communication subscale in table 7 there can be 4 different effects seen and these effects are H1, H2, H3 and H4. While horizontal communication is found to have negative effect on anxiety, scepticism and resistance to change, it has positive effect on acceptance. These findings also mean that when horizontal communication increases at universities the anxiety, scepticism and resistance to change of academicians decreases and vice versa. On the other hand when horizontal communication increases at universities the acceptance of academicians also increases and vice versa. Therefore it can be said that H1, H2, H3

and H4 are all confirmed. When we look at the vertical communication subscale in table 7 again there is also 4 effect can be seen and these effects are hypotheses as H9, H10, H11, and H12. While vertical communication is found to have positive effect on anxiety, scepticism and resistance to change, it has negative effect on acceptance. These findings also mean that when vertical communication increases at universities the anxiety, scepticism and resistance to change of academicians also increases and vice versa. However when vertical communication increases at universities acceptance of academicians decreases and vice versa. Therefore H9, H10, H11, and H12 are all confirmed as well. Finally when we look at the main intra-organizational scale in table 7, it can also be seen 4 effects as well and these effects are hyphothezed as H5, H6, H7, and H8. The findings of these effects show great similarities with horicantal communication. While intra-organizational communication is found to have negative effect on anxiety, scepticism and resistance to change, it has positive effect on acceptance. These findings also mean that when intra-organizational communication increases at universities the anxiety, scepticism and resistance to change of academicians decreases and vice versa. On the other hand when intra-organizational communication increases at universities the acceptance of academicians also increases and vice versa. Therefore it can be said that H5, H6, H7, and H8 are all confirmed.

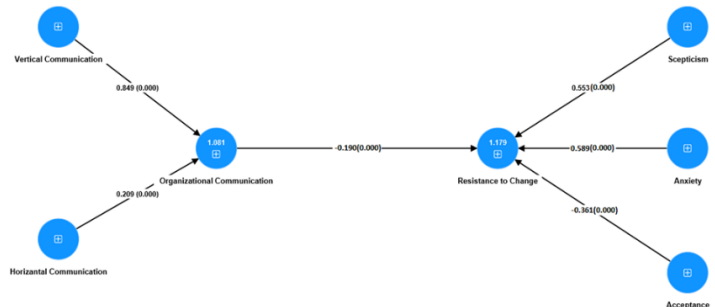


Figure 2: Structural Path Model.

Conclusion

In this study, the effects of intra-organizational communication styles (horizontal and vertical) in public universities in Turkey on academics' resistance to change (acceptance, anxiety and skepticism) were measured through the structural equation model. It has been observed that as the form of communication in universities moves from horizontal to vertical, academicians' resistance to change increases. At the same time, it was concluded that their anxiety and skepticism, which are the sub-factors of resistance to change, increased and their acceptance decreased. These results reveal that academics are more accommodating in horizontal hierarchies and that they welcome the change process more positively in horizontal hierarchical structures. On the contrary, it has been observed that vertical hierarchical structures

increase the resistance level of academicians to change. When all these situations are evaluated, making the hierarchies in public universities more horizontal becomes a very important tool to accelerate the change efforts in these universities. In further studies, the intra-organizational communication styles of academics at private and state universities and the effects of these styles on resistance to change can be revealed.

References

1. Tuncer P. Resistance to change during the change management process. *Ondokuz Mayıs University J Edu Faculty*. 2013; 32.
2. Tutar H, Yılmaz MK. *General communications*, Nobel publishing distribution 3rd Edition. Ankara. 2003.
3. Kavak B, Vatanser N. Internal communication components in the service sector and their effects on employee productivity: Thoughts of five-star hotel employees in Ankara. *Gazi University Faculty Commerce Tourism Edu J*. 2007; 2: 120-140.
4. Can H. *Organization and management*, Ankara: Adim Publications. 1992.
5. Hicks HG, Ray GC. *Management*. 1981.
6. Sabuncuoğlu Z, Gumus M. *Organizational communication*. Bursa: Alfa Current Publications. 2016.
7. Cardoso OO. Business communication versus organizational communication: new theoretical challenges. *Rev. Public Administration, Rio de Janeiro*. 2006; 40: 1123-1144.
8. Oktay M. *Introduction to behavioural sciences for communicators*. Der Publications, Istanbul. 2000.
9. Eryılmaz FA. A research addressing the relationship between the level of institutionalization and perceived organizational culture in private hospitals. Istanbul University, Institute Soc Sci, Unpublished Master's Thesis, Istanbul. 2002.
10. Tuncer A, ve Tuncer M. Analysis of dimensions affecting job satisfaction in intra-organizational communication: A comparative evaluation over multinational and national scale organizations. *Yaşar University E-Journal*. 2015; 10: 6488-6498.
11. Gizir S, Simsek H. Communication in an academic context. *Higher Education*. 2005; 50: 197-221.
12. Kirmizi H. *General and Technical Communication*, Dilara Publishing House, Trabzon. 2003.
13. Tinaztepe C. The effect of effective communication within the organization on organizational cynicism. *J Organization Manage Sci*. 2012; 4: 53-63.
14. Weick KE. *The social psychology of organizing*. Reading, MA: Addison-Wesley. 1979.
15. Turk MS. *Internal communication and crisis management*. Access address. 2019.
16. Bakan I, BUYUKBESE AGT. The relationship between employees' job security and general work behaviour: A field study. *J Eriçyes University Faculty Eco Admin Sci*. 2004; 23.
17. Oksuz E, Ulaglı S. The effect of intra-organizational communication on organizational commitment: A research on the banking sector in Turkey. *Troyacademy*. 2021; 6: 311-330.
18. Unuvar S, Bilge A. The effectiveness of intra-organizational communication, an element of organizational communication, in accommodation businesses: A sample field study, *J Azerbaijani Studies*. 2009; 12: 55-72.
19. John W, Egglund SA. *Communication in Organizations*, Trans: Yılmaz Büyükerşen, San Ozalp, Hikmet Cozum, Ali Atif Bir. Anadolu University Publications. 1991; 628.
20. Gecikli F, Serceoğlu N, Ust Can C. *Communication within the organization and communication satisfaction accommodation*. 2011.
21. Gizir S. *Communication in an academic context: The case of the five largest departments in the Middle East technical university*. Unpublished master's thesis, Middle East Technical University, Ankara. An application in businesses. *J Communication Theory Res*. 1999; 33: 163-184.
22. Baldrige JV, Curtis DV, Ecker GP, Riley GL. *Alternative models of governance in higher education*. In Brown II, M. C. (Ed.). *Organization and governance in higher education (5. Baskı)*. ASHE reader series. Boston: Pearson custom publishing. 2000.
23. Rowley J. *Motivation and academic staff in higher education*. *Quality assurance in education*. 1996; 4: 11-16.
24. Tasliyan M, Karayilan D. *Change and management in organizations*, (Ed. Ismail Bakan), in *contemporary management approaches*. 2nd Edition. Istanbul: Beta Publications. 2011.
25. Dolasir S. *Change management and sports organizations*. *Sportmetre J Physical Edu Sports Sci*. 2005; 3: 11-15.
26. Gurbuz S, ve Sahin F. *Research methods in social sciences*. Ankara, Turkey: Seckin Publishing. 2018; 131-137.
27. Dent EB, Goldberg SG. *Challenging Resistance to Change*. *J Applied Behavioural Sci*. 1999; 31: 25-41.
28. Solak SG, Oktay E, Pekkuçuksen S. *Resistance to change in public administration: the example of internal audit*. *Strategic Pub Manage J*. 2017; 3: 1-15.
29. Demir F. *Bureaucratic Culture*. Suleyman demirel university faculty eco administrative Sci J. 2011; 16: 153-178.
30. Kerman U, Oztop S. *Practice's affecting public employees' resistance to organizational change*. Mehmet Akif Ersoy University Soc Sci Institute J. 2014; 6: 1-20.
31. Yener S. *The mediating role of organizational communication in the effect of regulatory focus on resistance to change*. *Int J Eco Administrative Studies*. 2021; 30: 197-210.
32. Kucuk, Ba ve Gunaydin C. *The effect of leader and organizational level trust on innovative work behaviour: the role of resistance to change*. *Int J Management Eco Bus*. 2021; 17: 540-576.
33. Neiva ER, Ros M, Paz MGT. *Attitudes towards organizational change: validation of a scale*. *Psychol Spain*. 2005; 9: 81-90.
34. Balaman F, Muhammet BAS. *Adaptation of the Resistance to Organizational Change Scale into Turkish: Validity-Reliability Study*. *Cumhuriyet Int Edu J*. 2021; 10: 676-697.
35. Melikoglu M. *The distinctive role of prestige, communication and trust: organizational identification versus affective commitment*. Doctoral dissertation, Marmara Universitesi Turkey. 2009.
36. Postmes T, Tanis M, DeWit B. *Communication and commitment in organizations: a social identity approach*. *Group Processes Intergroup Relations*. 2001; 227: 229.
37. Hair JF, Hult GTM, Ringle CM, ve Sarstedt M. *A primer on partial least squares structural equation modeling (PLS-SEM) (2. Baskı)*. Los Angeles: Sage. 2017.



38. Henseler J, Dijkstra TK, Sarstedt M, Ringle CM, Diamantopoulos A, Straub DW, et al. Common beliefs and reality about PLS: comments on Ronkko and Evermann. *Organizational Res Methods*. 2014; 17: 182.
39. Ringle CM, Sarstedt M, Sinkovics N, Sinkovics RR. A perspective on using partial least squares structural equation modelling in data articles. *Data in brief*. 2023; 48: 109074.
40. Richter NF, Hauff S, Ringle CM, Gudergan SP. The use of partial least squares structural equation modeling and complementary methods in international management research. *Manage Int Rev*. 2022; 62: 449-470.
41. Hu Lt, ve Bentler PM. Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*. 1998; 3: 424-453.
42. Henseler J, Hubona G, ve Ray P. Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management Data Systems*. 2016; 116: 2-20.
43. Byrne BM. *Structural equation modelling with EQS: Basic concepts, applications, and programming*. New York, NY. Psychol Press. 2008.
44. Dogan I. Quality and accreditation problem in education: An essay on education faculties. *Edu Management Theory Practice*. 1999; 20: 503-519.
45. Gary LK. *Organizational Communication*. London: Northern Illinois University, Second Edition. 1990.
46. Sahin A. Change management and innovation, (Ed. Tuncay T. Turaboglu), in *current issues in business administration*. 2011; 305-330.
47. Simsek S, ve Adnan CTA. *Introduction to behavioural sciences and behaviour in organizations*. Ankara: Nobel Publishing Distribution. 1998.