

## THE EFFECT OF ORGANIZATIONAL CHANGE ON TRUST AND AN APPLICATION

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### Abstract:

*The purpose of this study is to examine the effect of organizational change on organizational trust. The questionnaire of this study was given to 500 people who worked for a private company in the mining sector in Kütahya. 404 valid questionnaires were collected back and analyzed. First of all, exploratory factor analysis was conducted to the data to find out factor distribution. Then, confirmatory factor analyses and reliability analysis were conducted to determine the reliability and the scale validity of the questionnaires, respectively. Subsequently, the hypotheses of the model were tested with the structural equation modeling. According to the findings, planned change positively and significantly affects organizational trust.*

**Keywords:** Organizational change, Organizational trust, Mining sector

### JEL Codes:

## 1. Introduction

Nowadays, companies face change in local and global markets. Thus, they need to conduct change in their organizations. Change can be made in mission, vision, goals, strategies, processes, organizational culture, management and business functions in organizations. Change is required for surviving, transforming, gaining competitive advantages, and building core competencies. The only unchangeable thing is change in organizations. Organizational trust shows the trust of employees to the management and practices of the company. It has two dimensions namely cognitive trust and affective trust. Frequency of change, planning the change and uncertainty of change affect the acceptance and success of change in organizations. If companies conduct change with appropriate frequency, by planning and without uncertainty, the change process can increase organizational trust level of employees. The purpose of this study is to examine the effect of organizational change on organizational trust. To this end, the second section of this article addresses organizational change; the third section addresses organizational trust, the fourth section presents the research findings, and the fifth section reveals the conclusion and the discussion.

## 2. Organizational Change

Employees try to achieve organizational goals to succeed. They need to face organizational change due to SWOT analysis. Companies need to decide the frequency of the change, plan the change and get rid of uncertainties related to the change to succeed.

According to Carnall (1986), an organizational change is perceived as the process which changes the structure or the mission of an organization (Iqbal, 2011). An organizational change may be defined as the transition of an organization from one stage to another in a planned or unplanned manner and conducting transition in organizational culture, technology and structure (Saylı & Tüfekçi, 2008). Organizations conduct change as planned, unconventional or deliberate effort to achieve their goals more quickly and effectively.

Organizational change has been discussed from different perspectives in the literature. It may be defined as positive or negative, planned or unplanned, quantitative or qualitative changes which may occur in all subsystems, elements and their relationship systems in an organization (Peker, 1995).

According to Sabuncuoğlu and Tüz (1998), an organizational change is adaptation of organizational structures to their environments. Balcı (1995) defines an organizational change as changing structure, processes and behaviors of organizations. Dinçer (1992) points out that an organizational change which includes creativity, innovation, and growth is comprehensive (Töremen, 2002).

Jones (1998) defines organizational change as an organizational transition process from the current status to the desired status to increase productivity (Çapraz, 2009).

According to Huber et al. (1993), organizational change is differences in functions, members, leaders, forms or allocation of resources in organizations (Weick & Quinn, 1999).

## 2.1. Dimensions of Organizational Change

Dimensions of change are considered as frequency of change, planned change, and uncertainty of change in this study. Frequency of change and uncertainty of change are expected to have negative effects whereas planned change is expected to have a positive effect on organizational trust.

**Frequency of Change:** Frequency of change reveals how often change has occurred in an organization and is an important change characteristic which is salient to employees. According to Glick et al., if the change occurs more infrequently, it will be more likely perceived as a discrete event. On the other hand, if change occurs frequently, employees will likely feel that change is highly unpredictable and less likely perceive the change as discrete event. If change occurs very frequently, employees will likely feel fatigued and have more anxiety because of unpredictability of change (Rafferty & Griffin, 2006).

According to Boyne and Maier (2009), environmental changes may force organizations to conduct frequent changes. Employees who deal with a set of changes or multiple changes concurrently can strive to deal with time, complexity and energy. Wolfram Cox (1997) reported that changes in jobs, team structures, pay and staffing levels caused negative emotions in an organization. Woodward and Hendry (2004) showed that changes in structure, technology, staffing levels, and targets required problem and emotion focused handling skills. Kiefer (2005) revealed that change caused negative emotions which were mediated by perceptions of organizational trust, status, security, and working conditions (Smollan, Sayers, & Matheny, 2010).

**Planned Change:** Several authors have revealed that employees are concerned whether planning is made before change or not (Levy, 1986; Porras & Robertson, 1992; Weingart, 1992; Orlikowski & Hofman, 1997; Armenakis, Harris, & Field, 1999; French & Bell, 1999; Eby, Adams, Russell, & Gaby, 2000; Korsgaard, Sapienza, & Schweiger, 2002). Planned change is the perception of employees that preparation and deliberation have taken place before change implementation. When there is an effort to plan change beforehand, change seems more predictable because employees gather information about imminence and possible duration of change. Also, when planning is made before implementation of change, the novelty of change decreases. Korsgaard et al. (2002) reveal that when planning is done before organizational change, the well being of employees can be improved (Rafferty & Griffin, 2006). Planned change requires sharing information about the process and impacts of change.

According to Miller and Monge (1985) and Schweiger and DeNisi (1991), information provided regarding organizational change reduces anxiety and uncertainty of employees. Schweiger and DeNisi (1991) examined two groups of employees. One group of employees was given planned program of information about the merger of their company with another company whereas another group of employees was given limited information about that merger. Employees in the first group had less uncertainty and perceived the organization as more caring, honest, and trustworthy than did employees in the other group (Wanberg & Banas, 2000).

**The Uncertainty of Change:** Organizational change causes uncertainty for employees. Decreasing uncertainty can increase desired outcome.

DiFonzo et al. (1994) describe uncertainty as a psychological doubt state about what an occurrence signifies or portends (DiFonzo & Bordia, 1998). The uncertainty of change was addressed as a situation arising from change itself in this study. Schweiger and Walsh (1990) found that uncertainty about the future was the organizational change's characteristic. Wanberg and Banas (2000) revealed that giving information about change increased acceptance of change (Chawla & Kelloway, 2004). Planning before the change and information dissemination during the change process are accepted to reduce uncertainty.

### 3. Organizational Trust

Organizational trust shows the trust of employees to their organizations. The organization should provide appropriate infrastructure, systems, processes, mechanisms to initiate and increase the trust levels of employees. There are several trust definitions in the literature. Some of them are as follows:

**Table 1.** Trust Definitions

Author	Year	Definition
Rotter	1967	Interpersonal trust is the expectation of a person that the another person will respect their oral and written assurance.
Zand	1972	The decision of a person based on pragmatic expectation as a result of uncertain occurrences which cause weakness and lack of control of another party.
Golembiewski and McKonkie	1975	Subjective and pragmatic belief regarding the desired results of occurrences based on individual perception and experience.
Meeker	1983	The expectation of cooperative behavior from another person.
Butler and Cantrell	1984	The expectation of right, sufficient, consistent, reliable and open behaviors from another person.
Coleman	1984	The relationship between two parties. The trust of one party to another changes according to the state of being included.
Lewis and Weigert	1985	Trust is a concept motivated by strong emotions (emotional trust), logical reasons (cognitive trust) or both toward an object.
Rempel and Holmes	1986	Predictability, reliability, and acceptability are equally important.
Butler	1991	The explicit promise of one person not to try to harm another person.
Bromiley and Cummings	1992	The belief of a person that another person will act in accordance with his promise, be honest in negotiations and not behave pragmatically even when the opportunity arises.
Mayer, Davis and Schoorman	1995	A person's desire to be vulnerable to actions of another person.
McAllister	1996	The person's belief that actions and decisions of another person are accurate.
Rousseau, Siktin, Burt and Camerer	1998	Positive expectations of a person regarding intentions or behaviors of another person.
Zaheer, McEvily and Perrone	1998	The expectation that a person will fulfill his obligations, act as he promised and negotiate fairly without being pragmatic.
Shockley-Zalabak, Ellis and Winograd	2000	Another person's being sufficient, open, considerate, reliable and identified with his goals, values, norms and beliefs.

**Source:** İ.K. Tüzün (2006). Örgütsel Güven, Örgütsel Kimlik ve Örgütsel Özdeşleşme İlişkisi; Uygulamalı Bir Çalışma. Unpublished Doctoral Dissertation, Gazi Üniversitesi Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı. Ankara.

Luman (1989) believes that organizational trust is based on trust of employees to the company. Nyhan and Marlowe (1997) points out that organizational trust differs depending upon organizations and leaders. According to Mishra and Morrisey (1990), organizational trust is defined as the perception of an employee related to the organizational support, beliefs of an employee that the leader will tell the truth and keep his promises and principal of all organizational relations. According to Matthai (1989), the organizational trust shows employees believe that organizational commitments and behaviors are consistent when they face uncertain and risky situations (Demircan & Ceylan, 2003).

Bromiley ve Cummings (1996) evaluate trust as common belief of a person or a group on another person or a group. Trust shows the effort for having a good belief for another person, being honest and not getting the advantage of another person. Trust has social, personal and optimistic characteristics in interorganizational and intraorganizational relations (Tüzün, 2006).

### 3.1. Dimensions of Organizational Trust

The dimensions of organizational trust are considered as cognitive trust and affective trust in this study.

**Cognitive Trust:** Cognitive trust means trustable behaviors should be consistent with personal desires (Tüzün, 2006).

According to Lewis and Wiegert (1985), trust has cognitive and affective dimensions. Lewis and Wiegert (1985) add that the person chooses whom to trust, in which respect and under what conditions he is going to trust in cognitive trust. The person decides on them based on good reasons which show the evidence of trust-worthiness. When According to Simmel (1964), the amount of information required for trust lies between total ignorance and knowledge. Luhman (1979) and Simmel (1964) acknowledge that when there is total ignorance there is no basis for rationally trust and when there is total knowledge there is no need to trust. On the other hand, good reasons and available knowledge are foundations for trust decisions which are based on faith (McAllister, 1995).

**Affective Trust:** Affective trust means behaving trustable or in an appropriate way to initiate commitment. (Tüzün, 2006).

According to Butler (1991) and Cook and Wall (1980), competence and responsibility are basic elements of organizational trust. Johnson-George and Swap (1982) and Rempel et al. (1985) believe that reliability and dependability are included as new elements for interpersonal trust. Lewis and Wiegert (1985) state that affective trust is composed of emotional bonds between people. Pennings and Woiceshyn (1987) and Rempel et al. (1985) acknowledge that people can make emotional investments in trust relations, express concern and care for other people, believe in the intrinsic virtue of these relations, and consider that these sentiments are reciprocated. Emotional ties which link people may provide the basis for trust (McAllister, 1995).

## 4. Measures and Sampling

The questionnaire of this study was given to 500 people who work for a private company in the mining sector in Kütahya. 404 valid questionnaires were collected back and analyzed. First of all, demographic questions were asked to the participants to collect information about their ages, genders, marital statuses, educational levels, positions in the company, work experiences in the company and in their careers. The Change Scale used in this study was developed by Rafferty and Griffin and consisted of 13 items and three dimensions to measure organizational change perceptions of employees. Three dimensions of the scale are as follows: The frequency of change dimension (3 items), the planned change dimension (3 items), the uncertainty of change dimension (4 items) (Rafferty & Griffin, 2006). This scale was used in Karakuş and Yardım's (2014) study. The Trust Scale which consists of 12 items and two dimensions is the short form of the organizational trust inventory developed by Cummings and Bromiley to measure organizational trust levels of employees (Cummings & Bromiley, 1996). Two dimensions of the scale are as follows: The cognitive trust dimension (7 items) and the affective trust dimension (5 items). The scale was translated into Turkish, tested for validity and reliability by Tüzün (2006). Both scales are designed as 5-point Likert scales and items are scored as follows: 1: Strongly Disagree, 2: Disagree, 3: Undecided, 4: Agree, 5: Strongly Agree. Most of the employees were between the ages of 30-39, males, had associate or bachelor degrees, total work experiences of 0-5 years in their careers and 0-5 years in the company.

## 5. Analysis Method

This is a cross-sectional study. The collected data were analyzed and the hypotheses were tested by "Structural Equation Modeling" which is a multi-variable statistical technique. This method has been widely used in social sciences.

Tabacnick and Fidell (2001) state that measuring direct and indirect relationships between variables within a single model is the advantage of this model (Meydan & Şen, 2011).

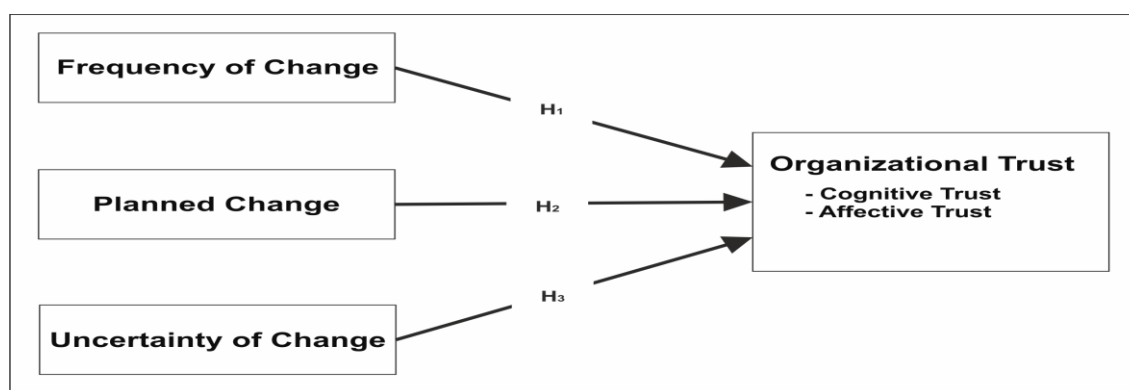
First of all, exploratory factor analysis was conducted to the data to find out factor purification. Then, confirmatory factor analysis and reliability analysis were conducted to determine the reliability and the scale validity of the questionnaires respectively. Finally, the hypotheses of the model were tested with the Structural Equation Modeling. SPSS and AMOS statistical softwares were used for analysis.

## 6. Hypotheses and Conceptual Model

The conceptual model of the study is shown in Figure 1. Table 2 shows the hypotheses of the study.

**Table 2.** Hypotheses

H <sub>1</sub>	The Frequency of Change affects Organizational Trust negatively.
H <sub>2</sub>	The Planned Change affects Organizational Trust positively.
H <sub>3</sub>	The Uncertainty of Change affects Organizational Trust negatively.



**Figure 1.** Conceptual Model

## 7. Validity and Reliability of the Scale

This section presents the results of validity and reliability tests. Scale validity was addressed separately as convergent validity and discriminant validity. Confirmatory Factor Analysis (CFA) was conducted to determine convergent validity. AVE (Average Variance Extracted) values were calculated for determining discriminant validity. The goodness of fit scales is used to determine the fitness of the CFA model. CMIN/DF, CFI, AGFI, GFI, and RMSEA are widely accepted scales in the literature (Çemberci, 2012). This goodness of fit scales are explained as follows:

CMIN is the likelihood ratio chi-square test. This test shows the fitness between suggested model and the actual model (Meydan & Şen, 2011). CFI is a fitness index which compares the independent model to be tested where dimensions of the model are not related with the saturated model. It can take values between 0 and 1. CFI values which are above 0.90 and close to 1 indicate good fitness (Schermelleh-Engel, Moosbrugger, & Müller, 2003).

GFI is a goodness of fit scale which shows the degree of variance and covariance explained by the model. The GFI value increases as the sample size increases. The GFI value varies between 0 and 1. A GFI value which is 0.90 or above indicates an acceptable model. It shows that the covariance between observed variables is calculated (MacCallum & Schee, 1997; Bryne, 2001; Mels, 2004; Blunch, 2008). AGFI goodness of fit scale is calculated using the degree of freedom and influenced by sample size. Higher sample sizes result higher AGFI values. The AGFI value varies between 0 and 1. An AGFI value which is close to 1 indicates good fitness (MacCallum & Sehee, 1997; Hayashi et al., 2008). RMSEA is a goodness of fit scale which compares the average difference of each degree of freedom which may possibly emerge in the population. This scale is influenced negatively by sample size as well. A RMSEA value which is 0.05 and below indicates good fitness whereas a RMSEA value between 0.05 and 0.08 indi-

cates acceptable fitness (Kline, 2005; Hayashi et al., 2008; Hooper et al., 2008; Blunch, 2008; Kenny, 2010) (Bayram, 2013).

**Table 3.** Goodness of Fit Statistics of Confirmatory Factor Analysis

Goodness of Fit Indices	Model Statistics
CMIN/DF	3.269
CFI	0.891
AGFI	0.843
GFI	0.879
RMSEA	0.075

Table 3 shows the goodness of fit statistics of the confirmatory factor analysis. These values indicate adequate fitness.

**Table 4.** Confirmatory Factor Analysis Results

Items	Factors	Standardized Regression Weights	Unstandardized Regression Weights	Standard Errors	t-value (Critical Ratio)
OGB15.2	Cognitive Trust	0.660	1		
OGB14.1		0.669	1.118	0.094	11.890
OGB20.7		0.757	1.190	0.090	13.207
OGB18.5		0.834	1.390	0.098	14.259
OGB19.6		0.783	1.194	0.088	13.578
OGB16.3		0.652	1.045	0.090	11.631
OGB17.4		0.729	1.159	0.091	12.801
OGD22.1	Affective Trust	0.560	1		
OGD24.3		0.689	1.204	0.124	9.713
OGD23.2		0.740	1.369	0.136	10.083
OGD25.4		0.775	1.473	0.143	10.285
DB10.1	Uncertainty of Change	0.537	1		
DB13.4		0.670	1.129	0.119	9.522
DB11.2		0.764	1.340	0.131	10.200
DB12.3		0.877	1.485	0.141	10.551
DS2.2	Frequency of Change	0.639	1		
DS3.3		0.765	1.147	0.099	11.570
DS1.1		0.840	1.315	0.115	11.470
PD6.3	Planned Change	0.728	1		
PD5.2		0.838	1.292	0.092	14.060
PD4.1		0.734	1.094	0.083	13.141

Note: For all values  $P < 0.01$

The values in Table 3 show that goodness of fit statistics of the confirmatory factor model are valid. Table 4 shows standard factor loads of the confirmatory factor model which are above 0.50. These results indicate convergent validity. The value which shows discriminant validity for each dimension is the AVE (Average Variance Extracted) value. As shown in Table 5, the extracted AVE value is greater than the values in the same column. This result points out the discriminant validity. After testing dimensions for scale validity via the confirmatory factor analysis, a reliability analysis was performed for items of each dimension. The Cronbach's Alpha coefficient was found to be above 0.7 for each dimension. A Cronbach's Alpha value which is above 0.7 indicates that internal reliability of the scale is acceptable. As a result of the reliability analysis, removing any item was unnecessary. Table 5 shows the Cronbach's Alpha coefficients and AVE values calculated for each dimension and correlation values between research variables.

**Table 5.** Descriptive Statistics, Correlation Coefficients and Reliability Results

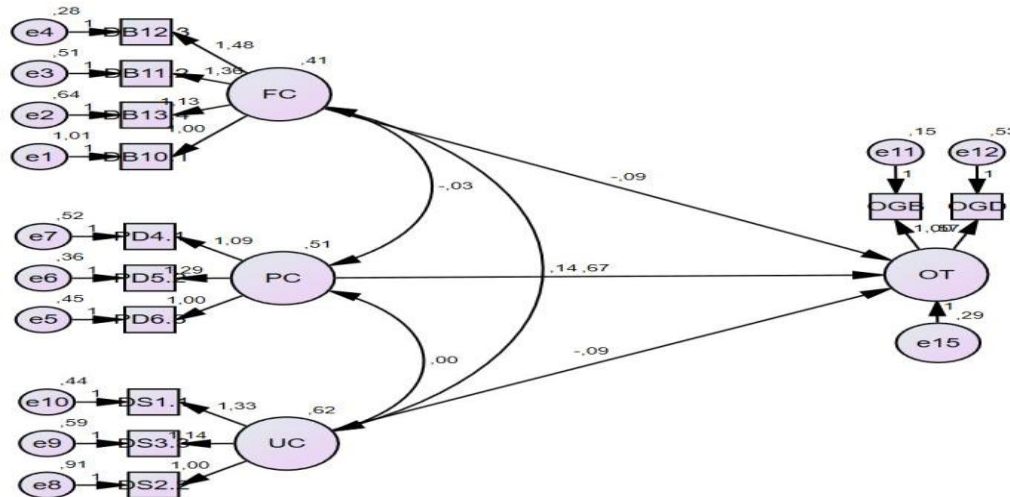
	Avg.	Std. Dev.	1	2	3	4	5
<b>1. Cognitive Trust</b>	3.43	0.82	(0.729)				
<b>2. Affective Trust</b>	3.32	0.83	0.440**	(0.695)			
<b>3. Uncertainty of Change</b>	2.79	0.88	-0.123*	-0.323**	(0.723)		
<b>4. Frequency of Change</b>	2.87	1.02	-0.097	-0.207**	-0.302**	(0.752)	
<b>5. Planned Change</b>	3.24	0.89	0.545**	0.250**	-0.095	-0.026	(0.768)
<b>Cronbach's Alpha Reliability Coefficient</b>			0.888	0.785	0.797	0.787	0.807
<b>Average Variance Extracted (AVE)</b>			0.532	0.484	0.523	0.566	0.590

\* P<0.05, \*\* P<0.01

Note: Values in parentheses indicate the square root of the AVE value.

### 8. Analysis Result

This section involves testing of hypotheses in the conceptual model of the research. The path analysis results of the structural model are shown in Figure 2 whereas Hypothesis Testing Results are shown in Table 6. Fitness statistics of the structural model can be seen in Table 7.



**Figure 2.** Path Analysis Results

H<sub>1</sub> hypothesis assumed that the frequency of change affected the organizational trust negatively. The hypothesis was rejected at 0.05 level of significance with the standard  $\beta$  coefficient of -0.097. H<sub>2</sub> hypothesis assumed that the planned change affected the organizational trust positively. The hypothesis was accepted at 0.05 level of significance with the standard  $\beta$  coefficient of 0.655.

**Table 6.** Hypothesis Testing Results

Relationship	Standard $\beta$	P	Accepted/Rejected
H <sub>1</sub> : Frequency of Change → Organizational Trust	-0.097	0.079	Not supported
H <sub>2</sub> : Planned Change → Organizational Trust	0.655	0.000	Supported
H <sub>3</sub> : Uncertainty of Change → Organizational Trust	-0.081	0.138	Not supported

H<sub>3</sub> hypothesis assumed that the uncertainty of change affected the organizational trust negatively. The hypothesis was rejected at 0.05 level of significance with the standard  $\beta$  coefficient of -0.081 found as a result of the path analysis. Table 7 shows goodness of fit statistics of the structural model.

**Table 7.** Fitness Statistics of Structural Model

Goodness of Fit Indices	Model Statistics
CMIN/DF	3.678
CFI	0.924
AGFI	0.891
GFI	0.933
RMSEA	0.082

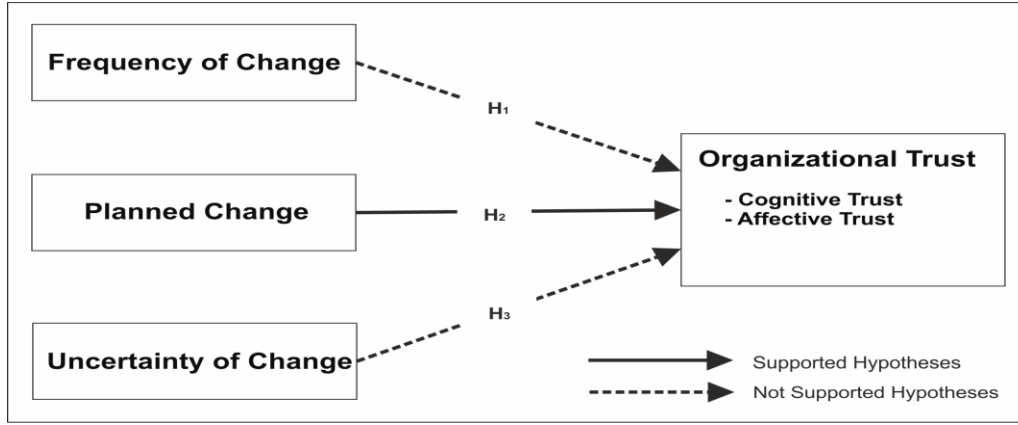
**Figure 3.** The Final Model

Figure 3 shows that final form of the conceptual model of the research after validity analysis and hypothesis test. Accordingly, the second hypothesis was supported, whereas the first and the third hypotheses were not supported.

## 8. Conclusion and Discussion

The purpose of this study is to examine the effect of organizational change on organizational trust. Nowadays, communication has improved, environmental and technological developments have accelerated, and organizations engage in change efforts due to ease of access to information. The frequency of change, planned change and uncertainty of change were considered as dimensions of change in this study. Each dimension of change may have different effects on organizational trust levels of employees. If the trust of employees is not lost during the change process, change will succeed. Organizational change and its dimensions are important to maintain an optimum level of organizational trust. The effects of frequency of change, planned change and uncertainty of change on organizational trust were examined in this study. As a conclusion, H<sub>1</sub> was rejected. The effect of frequency of change on organizational trust has been found insignificant. H<sub>2</sub> was accepted in the study. Planned change had significant and positive effect on organizational trust. According to this finding, including employees to planning process of the change can increase their organizational trust level. On the other hand, H<sub>3</sub> was rejected. The effect of uncertainty of change on organizational trust has been found insignificant. If the research model is implemented to larger samples in future studies, H<sub>1</sub> and H<sub>3</sub> may be accepted. This study is a unique study conducted to find out the effects of organizational change on organizational trust in the mining sector. Thus, it is expected to encourage scholars to conduct further studies in this field in the mining sector and other sectors.

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