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# Digital Literacy (Competency) And Readiness for Organizational Change: The Mediator Role of Resistance to Change

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**ABSTRACT**

**Purpose –** The study aims to investigate how employees' Digital Literacy (DL) levels impact on Readiness for Organizational Change (RFOC). In addition, the study seeks to determine the mediating role of employee Resistance to Change (RTC). An analysis of the outcome of organizational change and digitization trends on employees' RFOC and RTC was conducted in this study. Employee attitudes toward digital technologies in the workplace, their RFOC, and their RTC are significant factors as a result of digitization trends in organizations.

**Design/methodology/approach –** Although DL is discussed in detail in the literature, employee attitudes toward DL and digital technology, and their willingness to embrace organizational change, have not been explored much in light of RTC. First, the correlation between the research paradigm and the constructs that comprise the paradigm was tested in order to achieve the specified goal. Randomly, 317 white-collar employees of a Turkish retail company in the retail sector were selected for the accessible sample. The collected data was tested using IBM SPSS AMOS version 24 and the Structural Equation Model (SEM). All hypotheses were examined simultaneously with pathway analysis. For SEM, the assumptions were met and a maximum-likelihood estimation was performed.

**Findings –** It has been determined that the level of DL of employees has a positive and significant impact on their RFOC with digitalization trends. In addition, RTC, which is included as a mediating variable in the relationship between the level of DL and RFOC, is assumed to have a mediating role in the research paradigm.

**Discussion –** The findings show that the relation between DL skills and RFOC has been found to be fully mediated by attitudes of RTC.

## 1. Introduction

The widespread use of digital technology in all disciplines has increased the importance and value of the concept of digital competence. The increasing global competition calls for digital competence, which includes strategic opportunities and solutions (OECD, 2010). Various concepts such as information and communication technology (ICT) skills, technology skills, information technology skills, information literacy, and digital skills have been used to describe the skills and competence to use digital technologies. The concept of digital competence, also called DL in various disciplines, includes technology-related abilities and skills. In addition to digital skills, DL also involves social and emotional cognitive abilities related to using and understanding digital devices. As well as business, entertainment, and communication, DL also encompasses the critical use of digital technology and information. Therefore, DL is a concept related to the use of digital technologies such as computers to receive, evaluate, store, produce, present, and exchange information in ICT, communicate via the Internet and participate in collaborative networks (Bogdanowicz, Cabrera, Punie, 2005). Depending on the development of technology, change takes place in all areas, including organizational structures. The goals expected from organizational change are listed as progress, employee performance, adaptation to the environment, and survival (Leana & Barry, 2000). Change, defined as a process, is an important element that determines the direction of development in organizations or increases the functionality of the system (Abraham, 2000). However, it is inevitable to encounter a resistance exhibited by the employees in the changes that will take place in the organizational structures. The success of the planned changes depends on the extent to which employees accept the change (Balogun et al., 2003). In the modern age, it is inevitable to experience

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change in all individual or social formations, including organizations. Especially today, it has become necessary to make various changes within the organization in order to increase organizational progress and employee performance and to adapt to the environment and developments in terms of staying dynamic and continuity of an organization (Leana & Barry, 2000). In this context, change is expressed as a chain of processes that change the direction of development and affect the system or functionality of an organization (Abraham, 2000). Although these changes planned in organizations are not always successful, these changes are not adopted by the employees. This situation causes the change to fail (Balogun et al., 2003). In other words, success in a change in organizations is closely related to how employees respond to these changes. (Lines, 2004). Employees give different reactions to change according to the different perspectives they have, and negative reactions are characterized as RTC (Piderit, 2000). The concept of RFOC stands out as the most researched individual attitude in the literature (Bouckenooghe, 2010). RFOC; It is defined as the belief, attitude and intention levels of organizational members associated with the organization's capacity to make changes successfully (Holt et al., 2007a). In addition, researchers evaluated the concept of "thaw", which is the first stage of the change process, and RFOC (Bernerth, 2004). According to this evaluation, it is understood that it is important to make the organizational staff's readiness for change appropriate before change studies in organizations begin.

In this study, the effect of the DL levels of the employees on the RFOC and the mediating role of the attitude in the relationship between the resistance attitudes of the employees to the change and the DL and organizational change readiness are examined.

## 2. Conceptual Framework

*DL:* DL is often synonymous with digital competence, which is the ability to understand and use current applications that have become commonplace within the scope of technological developments (Erstad, 2010). The concept of media literacy, in general, has a longer tradition than digital competence due to its wide application (Sefton-Green et al., 2009) and extensive study, especially in education. DL represents a person's ability to effectively perform tasks in a digital environment (Jones-Kavalier & Flannigan, 2008). DL is the ability to recreate data and images represented in digital form and assess and exert new information obtained from digital environments. According to Sefton-Green et al., (2009), the concept describes our relationships with digital technologies, which mediate most of our social interactions. Researchers emphasize that the concept of DL is fundamentally useful, but needs to be analyzed much more as a combination of cognitive and emotional-social skills (Aviram & Eshet-Alkalai, 2010).

*RTC:* Resistance to change is a multidimensional concept (Rafferty & Jimmieson, 2017), so we can see manifestations of individuals' RTC in different ways. For instance, Oreg, (2006) mentions three different dimensions in explaining RTC. These are the affective, behavioral, and cognitive aspects. The affective dimension refers to the negative feelings that individuals have about the proposed change. As opposed to this, the attitude dimension represents the negativity that individuals adopt to change their behavior. The cognitive dimension refers to employees' negative beliefs about change. Whenever there is a change in the existing order or an end to the status quo, it is completely normal for employees to develop resistance to the new chain of command. What needs to be done here is to identify the potential factors that cause RTC. When reviewing the literature, the formation of RTC among employees for various reasons is described. These are: 1) The proposed change poses a threat to the current situation (economically, socially, psychologically, etc.) of the employees. 2) negative perception of change among employees; 3) habits; 4) The change will negatively affect the comfort of individuals; 5) fear of not knowing what the change will bring; 6) Inadequate knowledge and skills of the radically different environment the change will introduce. 7) The organizational structure (departments, administrative structure) in such a way as to prevent change from occurring. 8) Limited resources (Lunenburg & Ornstein, 2008; Mullins, 2005; Yılmaz & Kilicoglu, 2013).

*RFOC:* According to research by (Holt et al., 2007), RFOC is a four-dimensional concept. The first dimension is the concept of "change-efficacy", which expresses whether individuals have the ability to successfully implement the change they encounter. The concept of adaptive capacity is derived from the concept of self-efficacy introduced by (Boone et al., 1977). As an example of changeability, we can move on to the use of technology-based tools in organizations. To ensure the success of planned change in an organization, employees need the knowledge and skills to use updated technological tools. If employees do not feel

proficient at using technological tools and equipment, they will have a negative attitude toward change. Because they will see the proposed change as one that is beyond their ability and difficult to make. As a result, before any proposed changes, employees should be asked whether they have the knowledge and skills to manage the change. If not, support and training should be provided. The second dimension is the concept of "personal benefit", which expresses whether people in the organization can derive an individual benefit from the proposed change. It is normal for employees of an organization to resist change if the changes do not benefit them. For example, if employees request a change in the use of a technology or software tool, it must be adequately explained to employees how these technologies directly or indirectly benefit them. In general, when making proposals for change, a traditional approach such as "he must do his homework" can be adopted, but if we have high expectations of success in requests for organizational change, we need to consider the individual benefits for teachers. Change implementers should not be overlooked. Of course, the proposed changes are implemented in one way or another. However, getting the most out of the change depends on the approach taken by the employers who plan the change.

The third dimension is the concept of "management support", which expresses the belief that the organization's employees can get support from management regarding a proposed change. Managers' support of employees' change requests is crucial to the success of a challenging process like change. The fourth dimension is the concept of "Appropriateness", which expresses the belief of individuals in the organization that the proposed change will be beneficial to the organization. Change proposals must deliver benefits to individuals as well as to the organization. For example, employees wonder how a change will benefit the organization, as well as the individual. This is because a change that does not benefit the organization may threaten the future of the organization in various ways. Such a threat is in fact a threat to the interests of the individual (Boone et al., 1977).

## 3. Method

**Research Model:** An employee survey was used in the study, and data were collected using primary data collection techniques and questionnaires. The survey was given to 317 randomly selected employees. In order to answer the above arguments, a search paradigm was developed (Fig. 1). A major aim of the research paradigm was to explore the effects of employees' DL levels on their willingness to adopt organizational change. Additionally, the research examined the potential mediating effects of RTC. According to Figure 1, the stated goals and the research model developed to achieve them are hypothesized to be related.

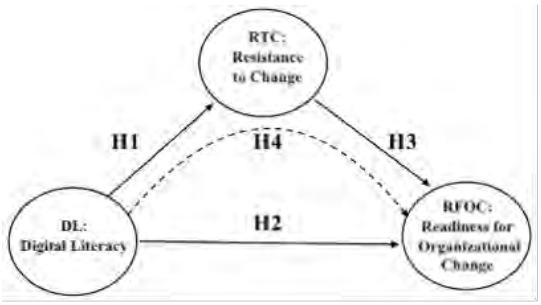


**Figure 1.** Research Model-1 and Assumed Relationships

(DL: Digital Literacy, RTC: Resistance to Change, RFOC: Readiness for Organizational Change)

According to the research model shown in Figure 1, the main hypotheses in this study are as follows:

**H1**: Employees' DL skills and their RTC are significantly correlated.

**H2**: A statistically significant relationship exists between employees' DL skills and organizational readiness.

**H3**: There is a statistically significant relationship between employees' RTC and their readiness for organizational change.

**H4**: The attitudes of RTC play a mediating role in the relationship between employees' DL competencies and their readiness for organizational change.

The research scale used in this study consists of a total of 69 statements to measure 3 main variables (DL, RTC, RFOC). Here, the research model presented in Figure 1 in the study is transformed into Figure 2 in the following section.

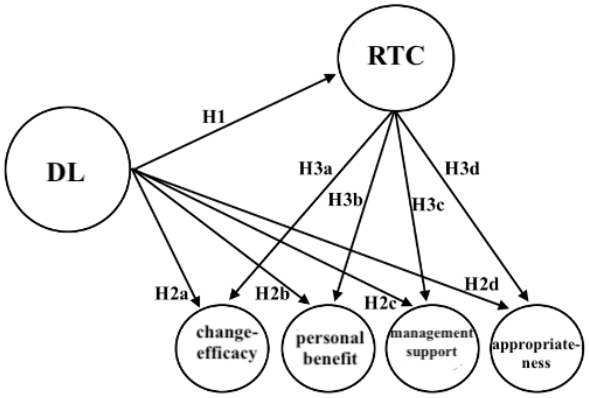


**Figure 2**. Research Model 2.

Figure 2, the hypotheses can be stated as follows:

H2abcd: There is a statistically significant relationship between employees' DL skills and change-efficacy, personal benefit, management support and appropriateness.

H3abcd: There is a statistically significant relationship between employees' resistance to changing attitudes, and change-efficacy, personal benefit, management support and appropriateness.

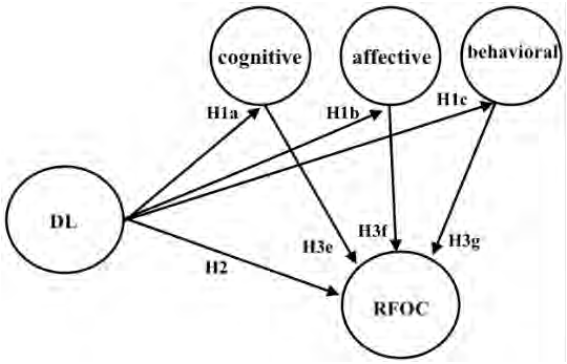


**Figure 3.** Research Model 3.

Figure 3, it is possible to state the hypotheses in this study as follows:

H1abc: Cognitive, affective, and behavioral responses to attitude changes are significantly influenced by the DL competencies of employees.

H3efg: Cognitive, affective, and behavioral responses to organizational change are significantly related to employees' readiness for change.

**Sample:** The accessible research sample consisted of 317 white-collar employees working in a retail company in the Turkish retail sector in a simple random manner.

**Data Collection Tools:** The (DL) scale consists of six dimensions: "Ethics and Responsibility", "Social Dimension", "Privacy and Security", "Professional Production", "Daily Use", "General Knowledge and Functional Skills". A 5-point Likert scale, one of the Likert-type scaling approaches, was used in the DL scale, which consists of six sub-dimensions and 29 items without the reverse-scored item (Bayrakçı, 2020).

The (RTC) Scale (Oreg, 2006) was adapted into Turkish by the three-dimensional RTC scale developed by me (Çalışkan, 2019). The original form of the scale was a 5-point Likert type and the sub-dimensions of the scale were determined as "Cognitive response", "Affective response" and "Behavioral response".

The (RFOC) Scale was developed by (Holt et al., 2007) to measure the readiness level of individuals for change initiatives initiated in their organizations. There are four dimensions of RFOC that are assessed on

the RFOC scale: Appropriateness (10 items), Management support (6 items), Personal benefit (3 items), and Change-efficacy (6 items). A 5-point Likert-type scaling tool was applied (Çalışkan, 2019).

**Research Method:** In the research model, the relationships between 3 basic variables are questioned. DL, RTC, and RFOC are the variables. Among these three variables, the DL variable was included in the research model with its net dimensions obtained from various previous studies in the literature. RTC and RFOC variables were subjected to factor analysis. There is different RFOC questionnaires in the literature, and the dimensions resulting from these scales vary. Therefore, it is not easy to talk about a strong and pervasive relationship between the scale dimensions, as in the DL. Therefore, this study applies Principal Component Factor Analysis to the scales that make up the variables of "RTC " and "RFOC " in order to determine which dimensions these variables contain, and to continue analyzing the research model with these dimensions taken into consideration. The most significant reason for factor analysis is to understand the similarities among a large number of expressions that try to measure the variable in question. This is done by expressing them in a smaller number of groups. At the same time, since the factor scores revealed here can be used in the Structural Equation Model analysis in the next stage, it will be understood more clearly at what level it can explain the main dependent variable (Jackson, 2003). IBM SPSS AMOS Version 24 and SEM were applied to test the collected data, and maximum likelihood estimation was performed by meeting the assumptions for the model. All of the hypotheses were evaluated simultaneously with path analysis.

## 4. Findings

Prior to analyzing the data collected as a result of the survey research, it is very important to identify from which group the data was collected. In order to determine what type of sample was collected before analysis began, the following statistics will be useful.

According to the study, 54.7% of participants were male, 78.9% were married, the average age was 42.27 0.37, 64.3% had a university degree, 25.2% had a master's degree, and 4.3% had a Ph.D. 27% of the participants remained employed at the same corporation between 24-29 years and had professional experience; 36.6% worked in at least three different corporations.

**Basic Components and Descriptive Statistics**

Table 1 presents the data obtained in the factor analysis for the variables RTC and RFOC. According to Table 1, the RTC variable should be examined in three different dimensions, and the RFOC variable should be examined by considering four different dimensions. Two questions (Q10, Q11) in the 15-item scale of the RTC variable and eleven questions (Q1, Q2, Q4, Q5, Q6R, Q8, Q9R, Q11, Q17, Q23, Q21R) in the 25-item scale of the RFOC variable were not included in the study because their factor loads were lower than 0.3. The variance values for both scales are given in Table 1.

**Table 1:** RTC: RTC and RFOC Scale Principal Components Factor Analysis

| **Factors**<br><br>**RTC** | **Factor Loads** | **% of Explained Variance** | **Cronbach Alfa** |
|---|---|---|---|
| **Factor 1 : Cognitive** | | **29.5** | **0.913** |
| I think that change will harm the processes of doing business in the organization. | 0,646 | | |
| I think making change is a negative thing. | 0,729 | | |
| I believe change will make my job harder. | 0,761 | | |
| I believe the change will benefit the organization. | 0,736 | | |
| I personally believe that I will benefit from the change. | 0,798 | | |
| **Factor 2: Affective** | | **16.8** | **0.902** |

| | | | |
|---|---|---|---|
| I am afraid of change. | 0,699 | | |
| I have negative feelings about change | 0,756 | | |
| Change really gets me excited | 0,605 | | |
| Change hurts me. | 0,691 | | |
| **Faktor 3: Behavioral** | | **17,67** | **0,838** |
| I protest the change | 0,647 | | |
| I forward my objections to the change made to my colleagues. | 0,563 | | |
| I forward my objections to the change made to the management. | 0,626 | | |
| I praise others for the change that has been made | 0,315 | | |
| **Total Variance Explained** | | **%63,97** | **0.923** |
| Kaiser – Meyer – Olkin (KMO) Value: 0.922 (varimax rotation) | | | |
| **RFOC** | | | |
| **Factor 4 : Change-Efficacy** | | **21.5** | **0.798** |
| My organization gives a clear message that change will happen | 0,624 | | |
| Senior officials making decisions support this change effort with all their might. | 0,734 | | |
| I think we spent too much time on this change, which our senior executives didn't even want to implement. | 0,663 | | |
| **Factor 5 : Appropriateness** | | **14,7** | **0,815** |
| Because of this change, my future in this business will be limited. | 0,782 | | |
| When this change is implemented, I do not believe that it will benefit me. | 0,753 | | |
| This change makes my job easier. | 0,801 | | |
| When we make the change, I don't think I can do some of the things that need to be done well. | 0,782 | | |
| **Factor 6 : Management Support** | | **12,5** | **0,794** |
| When we implement this change, I think I will easily overcome it. | 0,586 | | |
| My institution encourages us to embrace this change | 0,643 | | |
| If I put my mind to it, I can learn everything that will be necessary when this change is implemented. | 0,712 | | |
| All senior managers emphasize the importance of this change. | 0,713 | | |
| **Factor 7 : Personal Benefit** | | **11,8** | **0,801** |
| This change will increase the efficiency of the organization in general. | 0,756 | | |
| My past experiences give me confidence that I will perform successfully after this change is implemented. | 0,605 | | |
| Managers are committed to this change. | 0,691 | | |
| **Total Variance Explained** | 0,741 | **60.5** | |
| Kaiser – Meyer – Olkin (KMO) Value: 0.922 (varimax rotation) | | | **0,882** |

RTC: When the three dimensions of the RTC variable are considered together, the total explained variance level is 63.97%. Based on the alpha values, it can be concluded that both dimensions are reliable. RFOC: When the four dimensions of the RFOC variable are considered together, the total explained variance level is 60.5%. The ideal variance rates are determined to vary between 40–60% (Tavsancıl, 2003). The high rate of variance in factor analysis in the study proves that the factor structure of the scale is strong.

**Confirmatory Factor Analysis**

Within the model fit framework, some items of RTC were not included in the confirmation factor analysis because they could not provide validity and reliability. The quality of the fit results provides confirmation of the structural validity of the tool in the model. After Principal Component Factor Analysis, five questions (Q2, Q4, Q6, Q9, Q14) in the scale consisting of 13 items belonging to the variable of RTC were not included in the research model given in Figure 3 because they could not guarantee validity and reliability.

In the analyses of the scales, the data that reduced the validity of the scale were removed and the analyses were re-run and better results were obtained in the fit statistics. The CR and AVE values given in Table 3

appear to be satisfactory. The square of the AVE values of the scales was found to be higher than the correlation values, which is accepted as an indication that the relevant scale has discriminant validity. The CR values obtained were between 0.840 and 0.712; AVE values were found between 0.555 and 0.669. Therefore, the assumptions that CR values are greater than 0.70 and AVE values greater than 0.50 are provided (Hall et al., 1999). It is understood from this situation that the dimensions obtained in the proposed model can be combined reflectively.

**Table 3.** AVE and CR Values

| **RTC: Sub-dimensions** | **CR** | **AVE** |
|---|---|---|
| F1: Cognitive | 0,745 | 0,594 |
| F2: Affective | 0,793 | 0,657 |
| F3: Behavioral | 0,840 | 0,637 |
| **RFOC: Sub-Dimensions** | **CR** | **AVE** |
| F4: Change-Efficacy | 0,821 | 0,608 |
| F5: Appropriateness | 0,840 | 0,669 |
| F6: Management Support | 0,798 | 0,597 |
| F7: Personal Benefit | 0,712 | 0,555 |

Source: (Hu & Bentler, 1999)

In assessing the suitability of fixtures on the basis of theoretical building measures, the fit index obtained as a result of a confirmed factor analysis (CFA) should be examined. According to the data found by CFA, the values showing the fit of the metrics to the theoretical model are given in Table 4.

**Table 4.** Fit Index Values

| **Fit Criteria** | **Good** | **Acceptable** | **RTC Scale Fit Values** | **RFOC Scale Fit Values** |
|---|---|---|---|---|
| CMIN/DF | 1 – 3 | <5 | 4,52 | 3,89 |
| CFI | 0,97≤ CFI ≤ 1 | 0,95≤ CFI ≤ 0,97 | 0,95 | 0,97 |
| SRMR | 0 ≤ SRMR ≤ 0,05 | 0,05≤ SRMR ≤ 0,08 | 0,04 | 0,05 |
| RMSEA | 0≤ RMSEA ≤ 0,05 | 0,05≤ RMSEA ≤ 0,08 | 0,06 | 0,07 |

Source: (Hair et al., 2014)

Based on the proposed structure of the scale variables (EFA), it was subjected to CFA analysis using the maximum likelihood method. When considered together with the items constituting the scale variables, the CFA with acceptable fit indicators is shown in Figure 3-4.

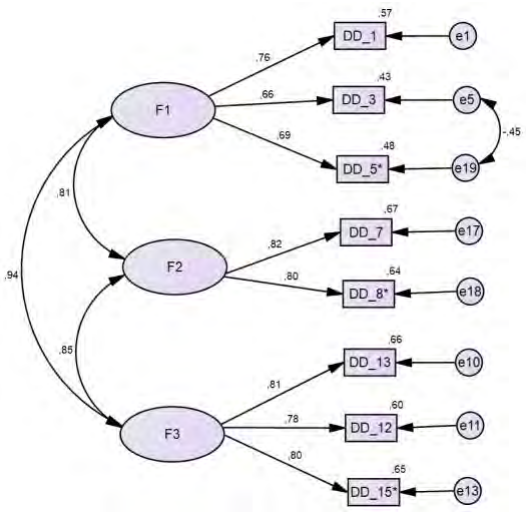


**Figure 3.** RTC CFA
(F1: Cognitive; F2: Affective; F3: Behavioral)

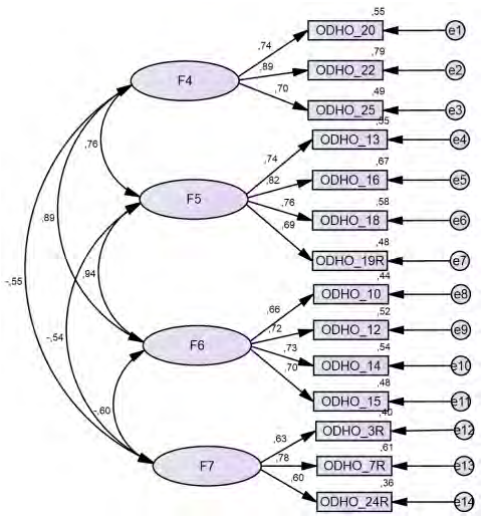


**Figure 4.** RFOC CFA
(F4: Change-Efficacy; F5: Appropriateness; F6: Management Support; F7: Personal Benefit)

**Model-1**

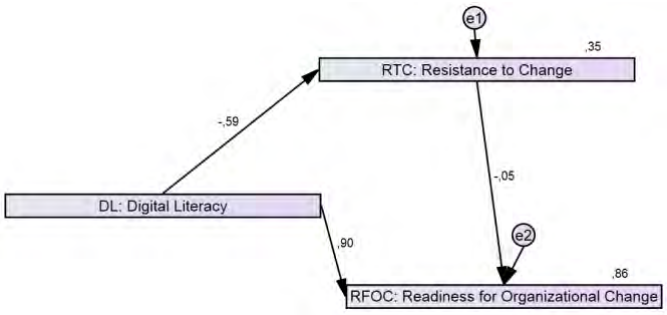


**Figure 4.** Model-1

A structural equation model was used in conjunction with the maximum-likelihood estimation method to assess the hypotheses predicted by the researcher under the first research model. According to Model 1, direct effect and indirect effect relationships were examined (Fig. 4). In Table 5, the results of the path analysis and the coefficients of the hypotheses predicted by the researcher and their statistical significance ($p < .05$; $p < .01$) are given.

**Table 5**. Model-1 Total Impact Decomposition

| **Model-1** | | **Standardized *β*** | | | | |
|---|---|---|---|---|---|---|
| **Independent Variables** | **Dependent Variables** | **Total Impact** | **Direct Impact** | **Indirect Impact** | **Standard Deviation** | **Critical t Values** |
| Digital Literacy | Resistance to Change | -0,592** | -0,592** | - | ,017 | -13,15 |
| Digital Literacy | Readiness For Organizational Change | 0,925** | 0,885** | 0,040** | ,054 | -2,594 |
| Resistance to Change | Readiness For Organizational Change | -0,068* | - 0,068* | - | ,020 | 33,989 |
| *** p<.01, *p <.05* | | | | | | |

Statistical significance has been determined in Table 5 for all p values related to the total effect load as $p < 0.05$. The model 1 hypotheses H1, H2, H3, and H4 were statistically confirmed.

The results obtained from the structural equation model support the hypothesis that attitudes of RTC play a mediating role in the relationship between the DL competencies of employees and their RFOC ($\beta$=0.925; $p<0.01$). According to the study, increasing DL levels contribute significantly to the level of readiness for organizational change. RTC also contributes to that effect, albeit slightly. Considering the mediating role of resistance attitudes towards change, it was determined that the DL levels of the employees had a statistically significant effect on their RFOC ($\beta$=0.040; $p<0.01$).

When the RTC variable is included as a mediator in the research paradigm, the relationship between the mediator variable and the dependent variable (readiness for organizational change) ($\beta$ = -0.068; $p < 0.05$) and the relationship between the independent variable (employees' DL level) ($\beta$ = -0.592; $p < 0.01$) was statistically significant. Based on this result, the fourth hypothesis of the study was supported.

Therefore, it is established that RTC fully mediates the relationship between DL competence and readiness for organizational change.

**Model-2**

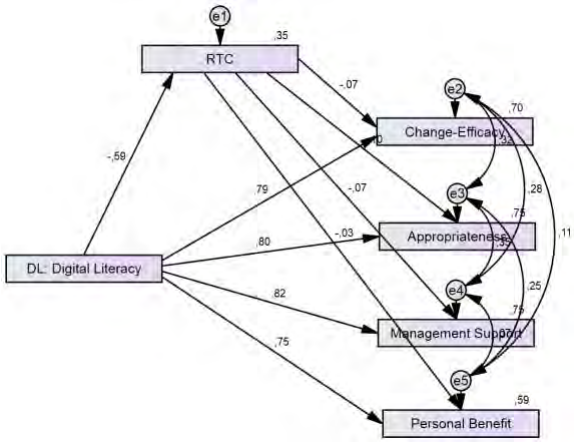


**Figure 5.** Model-2

Model 2, consists of six latent variables, including two extrinsic variables (digital literacy, and resistance to change) and four intrinsic variables (Change-Efficacy, Appropriateness, Management Support, and Personal Benefit). When modeling indicators, one can choose to use single-item indicators or indices that include several separate elements (Hall et al., 1999).

**Table 6**. Model-2 Total Impact Decomposition

| **Model-2** | | | | | | |
|---|---|---|---|---|---|---|
| **Independent Variables** | **Dependent Variables** | **Standardized ($\beta_0$)** | **Beta ($\beta$)** | **Standard Deviation** | **Critical t Values** | **Hypothesis Test** |
| Digital Literacy | Resistance to Change | -,592** | -,222 | ,017 | -13,157 | H1: Confirmed |
| Resistance to Change | Change-Efficacy | -, 071n.s | -,038 | ,020 | -1,870 | H3a: Not Confirmed |
| Resistance to Change | Appropriateness | -,100* | -,064 | ,022 | -2,882 | H3b: Confirmed |
| Resistance to Change | Management Support | -,075* | -,030 | ,014 | -2,142 | H3c: Confirmed |
| Resistance to Change | Personal Benefit | -, 028n.s | -,008 | ,012 | -,619 | H3d: Not Confirmed |
| Digital Literacy | Change-Efficacy | ,793** | ,158 | ,008 | 20,902 | H2a: Confirmed |
| Digital Literacy | Appropriateness | ,803** | ,192 | ,008 | 23,141 | H2b: Confirmed |
| Digital Literacy | Management Support | ,817** | ,121 | ,005 | 23,369 | H2c: Confirmed |
| Digital Literacy | Personal Benefit | ,748** | ,078 | ,005 | 16,783 | H2d: Confirmed |
| *** p<.01, *p <.05, not significant n.s:p>0 05* | | | | | | |

According to Table 6, in the model that includes organizational change readiness variable sub-dimensions, the regression loads for the total effect of the variables are statistically significant as the p-values are less than 0.05. As a result, the H2a, H2b, H2c, H2d, H3b, and H3c hypotheses identified in Model 2 were confirmed statistically.

A negative and weak effect was identified between the attitudes of employee RTC and personal benefit, and this relation was significant ($\beta$ = -0.100; P < 0.05). As a result, the change proposals or practices made by the company are considered a substantial benefit to the employees, and the employees do not exhibit RTC (H3b).

There was a statistically significant negative and weak relation between employees' RTC and management support (β=-0.07; p<0.05). Employees at the company decrease their RTC as they receive more support from management regarding the proposed change. However, this effect is observed to be quite low (H3c).

It was determined that there was a positive and very strong effect between the DL competencies of the employees and the change competencies, and this relation was significant (β=0.793; p<0.01). Accordingly, it is understood that employees have the competence to successfully implement the change they encounter, they do not have any problems transitioning to the use of technology-based devices in the organization, and they have the knowledge and skills to use the latest technological devices (H2a).

A very strong and positive effect was identified between employees' DL skills and personal benefit, and this relation was significant (β = 0.803 p < 0.01). According to this result, it is considered that the DL skills of employees of the organization contribute significantly to their work environment (H2b).

It was determined that there was a positive and very strong effect between the DL competencies of the employees and the management support, and this relation was significant (β=0.817 p<0.01). A very strong effect is observed between the increase in the DL competencies of its employees and the increase in their support from the management. Accordingly, it is understood that the increasing support of organizations for digitalization and the use of new technology is directly dependent on the DL competencies of their employees (H2c).

A very strong and positive effect was identified between staff DL skills and organizational interest, and this relationship was statistically significant (β = 0.748 p < 0.01). It is noted that change proposals are strongly perceived by employees as providing benefits to the organization as well as to employees (H2d).

**Model-3**

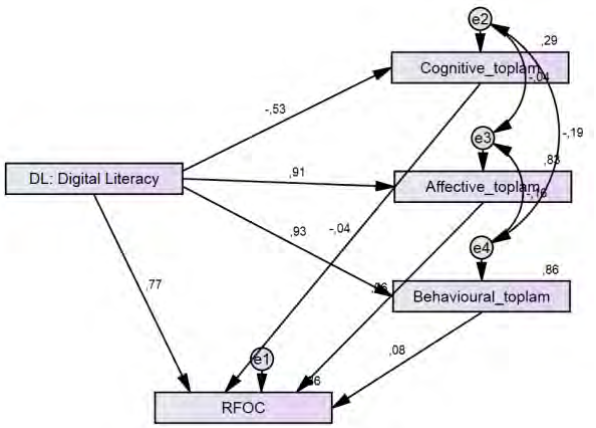


**Figure 6**. Model-3

**Table 7**. Model-3 Total Impact Decomposition

| **Model-3** | | | | | | |
|---|---|---|---|---|---|---|
| **Independent Variables** | **Dependent Variables** | **Standardized ($\beta_0$)** | **Beta (β)** | **Standard Deviation** | **Critical t Values** | **Hypothesis Test** |
| Digital Literacy | Cognitive | -,535** | -,072 | ,006 | -11,335 | H1a: Confirmed |
| Digital Literacy | Affective | ,909** | ,162 | ,004 | 39,154 | H1b: Confirmed |
| Digital Literacy | Behavioral | ,930** | ,162 | ,004 | 45,161 | H1c: Confirmed |
| Digital Literacy | Readiness For Organizational Change | ,774** | ,595 | ,060 | 9,847 | H2: Confirmed |

| | | | | | | |
|---|---|---|---|---|---|---|
| Cognitive | Readiness For Organizational Change | -,037 n.s | -,214 | ,145 | -1,479 | H3e: Not Confirmed |
| Affective | Readiness For Organizational Change | ,064 n.s | ,276 | ,220 | 1,253 | H3f: Not Confirmed |
| Behavioral | Readiness For Organizational Change | ,080 n.s | ,354 | ,258 | 1,371 | H3g: Not Confirmed |
| *** p<.01, *p <.05, not significant n.s:p>0 05* | | | | | | |

As can be seen from Table 7, no significant relationship was found as the p-values of the sub-dimensions of employee resistance behaviors and the variables of RFOC were greater than 0.05. Hypotheses H3e, H3f, and H3g were confirmed in Model 3 statistically.

It was determined that there was a negative and moderate effect between the DL competencies of the employees and their cognitive reactions, and this correlation was significant ($\beta$=-0.535; $p<0.01$). It has been determined that the change proposed by the organization does not threaten the current status of the employees (economic, social, psychological, etc.) (H1a).

A positive and very strong effect was identified between employees' DL skills and their affective reactions, and this correlation was significant ($\beta = 0.909$; $p < 0.01$). According to this finding, it is hypothesized that as DL skills increase, there will be a negative impact on employees' current job comfort and fear of the unknown about the increase of this change (H1b).

It was determined that there was a positive and very strong effect between the DL competencies of the employees and their behavioral responses, and this correlation was significant ($\beta$=0.930; $p<0.01$). As the DL competencies of the employees increase, it is understood that the employees feel inadequate in terms of knowledge and skills for the new environment that the change will create (H1c).

## 5. Discussion

It has been stated that employee readiness in an organizational structure depends on the employee's perceptions of the organization, mainly what the employee personally benefits from the change and what risks the change presents (Armenakis et al., 1993). However, employees' influence on change depends primarily on personal competence, and employees' perceptions of opportunities for organizational improvement are crucial to adapting to change (Pettigrew, 1987). It is argued that the restructuring of job descriptions within the organization and their perceptions of the risks of change also influence their RFOC (Prochaska et al., 1994). Perceptions of occupational insecurity reduce the level of RFOC because employees worry about changing or losing jobs during restructuring. Therefore, stakeholder participation in organizational restructuring activities is reduced (Prochaska et al., 2015). Because organizational change itself is such a significant source of stress, it can pose certain risks for employees experiencing psychological distress. It has been reported that emotional exhaustion and depression among organizational stakeholders reduce their willingness to participate in organizational change and redesign activities (Woodward et al., 1999). Digital competence among employees plays significant role in the successful management of organizational change that will accompany digitization (Prochaska et al., 2015). Employees who are confident in their ability to handle technological change are more likely to contribute to their organizational structure. However, employees may resist changes that they believe are beyond their DL capabilities. Therefore, individuals who are confident in their ability to handle digitization and adopt a proactive approach to DL skills in solving business problems are said to have a high level of readiness for change, and will engage in more organizational change activities (Armenakis et al., 1993). DL is one of today's modern concepts that includes an individual's ability to access, organize, analyze, interpret, evaluate, transmit, and produce information. DL is the ability of an organization's employees to read and write digital texts, to understand how information and communication technologies affect the world, and to use these technologies for this purpose (Baron, 2019). In the process of organizational change, particularly in the context of digital transformation, DL and digital learning capabilities of employees play an important role in making business sustainable. In simpler terms, an individual's tendency to learn can be expressed as a person's

sense of inferiority and taking steps to improve his or her abilities. However, directing a person's digital learning indicates their interest in and commitment to developing DL skills. Innovative entrepreneurial behavior is defined as the deliberate design, introduction, and implementation of new ideas that will benefit the performance of an individual, group, or organization (Janssen & van Yperen, 2004). Digital transformation and technological changes in institutions contribute to increasing efficiency in business sustainability and influencing the sustainable development goals of society. Therefore, it is important for all business stakeholders to have a deeper understanding of the factors that will increase innovative behavior, adoption, and willingness to change (Henderson et al., 2017). Technological innovations and corporate digitalization processes are shaped to a large extent by employees' willingness or attitude to change. Organizational factors such as job characteristics and organizational culture influence employees' willingness to change. In this study, the DL skills of employees in the flooring sector were considered to have a significant impact on the readiness for organizational change, particularly given their readiness for change.

## 6. Results

Increasing employees' DL skills directly impacts their readiness for organizational change, with higher levels of DL and higher levels of organizational change readiness contributing positively to this effect, along with change-mediated resistance. The relation between DL skills and RFOC has been found to be fully mediated by attitudes of RTC. According to research, there is a negative and weak relationship between the resistance attitudes of employees and their personal benefit. Although the company's change proposals provide significant benefits to its employees, they do not show resistance. Management's support for a proposed change causes employees' RTC to decrease, and this effect is considered very low. Employees have the capacity to successfully implement changes they encounter, they have no trouble transitioning to the use of technology-based devices in the organization, and they have the knowledge and skills needed to use such technological devices. There is a significant and very strong correlation between DL skills and change-efficacy. DL skills and management support are understood to have a positive and very strong relationship. Increasing the organization's support for digitalization and utilizing the latest technology is directly related to its employees' DL skills. It is evident that there is a significant and very strong relationship between DL skills and appropriateness. In addition, employees strongly perceive the proposals as providing benefits to the organization as well as to the employees themselves. DL skills have a very strong positive relationship with affective reactions. In turn, this will increase their anxiety about the changes ahead, which in turn will negatively affect their present working comfort of employees will be negatively affected by the increase in DL competency, which will, in turn, increase their anxiety about the changes to come. Behavioral responses and DL skills have a very strong relationship, and as DL skills increase, employees feel inadequate in terms of knowledge and skills in the new environment that will be created by the change.

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