INVESTIGATION OF THE RELATIONSHIP

BETWEEN TEACHERS'

READINESS FOR ORGANIZATIONAL CHANGE AND RESILIENCE

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INVESTIGATION OF THE RELATIONSHIP BETWEEN TEACHERS' READINESS FOR ORGANIZATIONAL CHANGE AND RESILIENCE

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ABSTRACT

INVESTIGATION OF THE RELATIONSHIP BETWEEN TEACHERS' READINESS FOR

ORGANIZATIONAL CHANGE AND RESILIENCE

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This study is designed to investigate the relationships between cognitive, emotional, and

intentional readiness of teachers towards organizational change and their resilience traits. The

main assumption of this study is that readiness of teachers towards organizational change

might be associated with their resilience traits. The study aimed at finding a correlation

between readiness for change and resilience traits. The sample for this study was composed of

691 teachers who were working at primary and secondary public schools in Ankara. To assess

the readiness of teachers, a new readiness scale was developed by the researchers and a

previously used resilience scale was conducted to examine the resiliency level of teachers.

The results of the multiple linear regressions between the variables of two scales indicated

that some of the factors of resiliency were found to be significant predictors of readiness of

teachers towards organizational change.

Keywords: Readiness for Organizational Change, Resilience.

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ÖZ

ÖĞRETMENLERİN ÖRGÜTSEL DEĞİŞİME HAZIR OLMALARI İLE YILMAZLIKLARI

ARASINDAKİ İLİŞKİNİN İNCELENMESİ

Calışkan, Ömer

Yüksek Lisans, Eğitim Yönetimi ve Planlaması Bölümü

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Bu çalışma, öğretmenlerin duygusal, bilişsel ve niyet açısından değişime hazır olmaları ile

yılmazlık özellikleri arasındaki ilişkiyi araştırmak için tasarlanmıştır. Bu çalışmanın temel

varsayımı, öğretmenlerin değişime hazır olmaları ile onların yılmazlık özelliklerinin ilişkili

olabileceğidir. Çalışma, değişime hazır olma ve yılmazlık arasında bir korelasyon bulmayı

hedeflemiştir. Bu çalışmanın katılımcıları, Ankara'daki ilköğretim ve ortaöğretim devlet

okullarında çalışan 691 öğretmenden oluşmaktadır. Öğretmenlerin, değişime hazır oluşlarını

ölçmek için, yeni bir değisime hazır olma ölçeği geliştirildi ve daha önce denenmiş bir

yılmazlık ölçeği, öğretmenlerin yılmazlık düzeylerini ölçmek için uygulandı. İki ölçeğin

değişkenlerinin çoklu doğrusal regresyon sonuçları, yılmazlığın bazı yordayıcı

değişkenlerinin, değişime hazır olmayı anlamlı bir şekilde yordadığını göstermiştir.

Anahtar Kelimeler: Örgütsel değisime hazır olma, Yılmazlık.

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To My Beloved Wife...

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LIST OF ABBREVIATIONS

MONE: Turkish Ministry of National Education

HSEC: METU Human Subjects Ethics Committee

PDE: Provincial Directorate of Education

RFOC: Readiness for Organizational Change

R: Resilience

EFA: Exploratory Factor Analysis

M: Mean

SD: Standard Deviation

CHAPTER I

INTRODUCTION

1.1. Background of the Study

Turbulent external and internal dynamics oblige the organizations to change aspects in their structural-functional characteristics. In many cases, these change interventions are very challenging but indispensable (Gordon, Stewart, Sweo, & Luker, 2000). In other words, organizations are forced to adapt to the environment in order to ensure long term survival (Burke, 2008). These constant changes do not only reshape the structures of the organizations but also affect their managerial practices.

Being a critical process for the survival of organizations, scholars and practitioners have invested heavily for understanding and practicing change successfully. Hence, a huge body of knowledge on theory and practice of organizational change have emerged (Van de Ven & Poole, 1995). However, the implementation of change is still problematic not only in educational administration but also in the broader field of organization science (Kondakçı, 2005). Several scholars have indicated several different reasons behind high failure rate in organizational change interventions. First, it is indicated that most organizational change initiatives pay most attention to the technical sides of change like new technologies, techniques and tools while missing the human side of change (Clegg & Walsh, 2004). Second reason for high failure rate is related to communication during change and managing culture construct. Burke (2008) pointed out that the lack of information about change interventions and the difficulty of changing organizational culture are two basic challenges in change

Interventions. Differently from previous ones, for failure rates at educational organizations, Töremen (2002) pointed out the inadequacy of feedback and assessment systems in school change programs, failure to involve organizational members in implementation and resistance of organizational members to change as three basic issues behind high failure rate of change interventions in educational organizations. Lastly, it is stated that most of the change interventions hold a macro-oriented approach that is including one part of change (organization) but organizational change involves multiple dimensions like individual, team, organization, industry levels (Bouckenooghe, 2009). More importantly, Tsoukas and Chia (2002) stated that capturing the essence of change requires understanding micro level dynamics in an organization. This understanding suggests the bottom up nature of change, which is embedded in daily practices of organizational members (Orlikowski, 1996). Hence, the scholars focusing on micro level have suggested focusing on different dimensions in change interventions. In each of these dimensions, change concept focuses on different aspects of the organization and so is understood differently (Caldwell, Herold, & Fedor, 2004).

The literature stated above is indicative of research needs on individual level or human factors to understand change issue along with the organization, team and industry levels. The criticisms stated above suggest developing a change approach considering different levels of the phenomenon that is a necessary measure to ensure successful change intervention because some scholars specifically relate change failures with human factors, namely the reasons why people resist or accept change with their cognitive, intentional and emotional attributes (Eby, Adams, Russell, & Gabby, 2000). Schneider, Brief and Guzzo (1996) indicated the importance of individual level in change practices by stating: "If people do not change, there is no organizational change" (p.7). Similarly, the research about individual attributes to

understand individual reactions for organizational change is required (Cunningham, et al., 2002) because the attitudes are thought to start with the individual's perceptions about the benefits of change at the very beginning (Prochaska et al., 1994). Therefore, personal attributes which shape individuals' attitudes towards the proposed changes should be taken into consideration for effective change implementations.

In the literature, some scholars highlighted different concepts that refer to people's attitudes toward change such as openness to change that is conceptualized as the willingness of people to support the change (e.g., Miller, Johnson, & Grau, 1994; Wanberg & Banas, 2000), readiness to change that is internal or cognitive orientation of people towards change (Armenakis, Harris, & Mossholder, 1993; Clarke et al., 1996), resistance to change that is external or behavioral orientation toward change (Clarke et al., 1996; Piderit, 2000), and cynicism about organizational change that is pessimistic position regarding the potential success of change efforts (Reichers, Wanous, & Austin, 1997). As an additional idea to the field of organizational change, there is limited research about psychological focus in the investigation of organizational change (Judge, Thoresen, Pucik, & Welbourne, 1999). Indeed, according to some scholars psychological moods of the individuals are determinant in shaping the cognitions that are consequently reflected by changes in attitudes (Bartunek, Rousseau, Rudolph, & DePalma, 2006). In other words, there is a relationship between the cognitive structures of people and their efforts for change in their organizations (Lau & Woodman, 1995). Along with cognitive aspect of people to understand change, some other researchers stated that the attitudes of people should be explained with multidimensional constructs (i.e., cognitive, intentional and emotional) instead of just focusing on behavioral or cognitive reactions (Bouckenooghe & Devos, 2007; Eby et al., 2000). Hence, it is vital to investigate the components of attitudes of individuals toward change plans/programs for successful change intervention in educational organizations.

Hence, it is suggested that both positive and negative attitudes toward change should be well understood for successful change interventions. Of these attitudes, it is argued that readiness of people toward change may lead to success or failure of organizational change efforts (Antoni, 2004; George & Jones, 2001). The need for successful change interventions makes readiness for change one of the critical constructs in understanding attitudes of employees toward change because it is located at the first step of change process that is unfreezing, moving and freezing sections (Lewin, 1951). Thus, readiness is "precursor for change" interventions (Armenakis et al., 1993, p. 681); change planners cannot ignore such a critical step for the continuation of change process. Accordingly, lack of readiness in a change intervention may increase the probability of occurring other attitudes like resistance (Clarke et al., 1996).

Besides that, a number of scholars investigated the relationships between individual characteristics and attitudes toward change (Armenakis et al., 1993; Conner, 1992; Cunnigham et al., 2002). For instance, some scholars (Larson, 2003; Wanberg & Banas, 2000) suggested resilience as one of the basic individual characteristics, which may affect attitudes toward change. Therefore, the significance of this individual characteristic in determining attitudes toward change makes the resilience important to understand the attitudes toward change as well. Resilience is defined as "the ability to rebound to the original condition after being stretched and twisted" by the Random House Dictionary (1968; p.1123). Newman (2005) advanced a slightly different definition, in which he defined resilience as "the human ability to adapt in the face of tragedy, trauma, adversity, hardship, and ongoing significant life

stressors" (p. 227). With another perspective, resilience is described as a personality characteristic that offers individuals the opportunity to show the adjusted behavior for the demands imposed by the environment (Yalin, 2007). Similarly, resilient is considered to be individuals who are well adjusted to the new conditions (Block & Block, 1980). All these definitions show that resilience is a kind of human adaptation system to make people ready for recently encountered difficulties, problems and conditions that may also be a newly proposed change plans. Accordingly, the existing literature about readiness for change and resilience inspired such a study by assuming that there is a relationship between resilience and readiness of individuals towards change in organizations.

1.2. Purpose of the Study

As indicated above, organizational change can be enjoying and favorable experience or alternatively it can be unfavorable, unfamiliar and undesirable experience for the employees, Hence, it can be argued that change attempts result in various attitudes like resistance, cynicism, commitment, readiness, etc. Consequently, exploring preliminary dynamics that strengthen positive attitudes and avoid negative attitudes of people may be beneficial for the continuation of change process as planned. On the other hand, resilience that is explained as the adaptation mechanism of people to the new environment (Masten, 2001), may reinforce the positive attitudes of people towards newly encountered changes, thereby readiness of individuals. By this way, resiliency of individual helps them to overcome difficulties, because resilient people can regulate their emotions in the face of adverse situation and adapt themselves to the new conditions (Werner, 1987). Additionally, the literature on readiness toward change suggests that readiness of individuals towards organizational change is correlated with a number of factors (e.g., self-efficacy, trust, communication types,

organizational culture, etc.,). In addition, Wanberg and Banas (2000) indicated the support of resilience for the openness of individuals towards change. Similarly, it is suggested that readiness of individuals for change attempts can be associated with their resiliency traits.

Owing to the concerns above, the main purpose of this study is to examine the relationship between readiness of teachers towards organizational change and resilience at public primary and secondary schools in Ankara. Within the study, the readiness attitudes of teachers towards the recent changes at schools are investigated and also teachers' resiliency level is understood.

Additionally, a new three-dimensional Readiness for Organizational Change Scale (RFOC) in Turkish is developed by the researchers since Piderit (2004) offers to measure the attitudes and responses of employees towards change with three dimensions at least: cognition, intention and emotion. As last, the existing resiliency literature demonstrated that the evaluation of resiliency of teachers towards change has not been studied in Turkey. Within the scope of the study, the resiliency concept is also investigated with teachers.

1.3. Significance of the Study

Failures in organizational change efforts and the vitality of readiness of people toward change indicate that change planners need to pay attention to the factors that enhance readiness of people. Likewise, education policy makers should consider the readiness level of teachers for the changes in their organizations. The readiness literature revealed that readiness is a multidimensional construct and is influenced by several variables like content, context, process and individual variables. Similarly, resiliency is a personal characteristic that lead the attitudes of people toward adverse situations. Therefore, the study implies that resilient people

with their capacity to overcome difficulties and adaptation skills to new conditions may reinforce the readiness of people toward newly encountered changes by avoiding their negative attitudes.

In addition, it is known that Ministry of National Education (MONE) and policymakers always plan to make a variety of alterations to reach better education standards at schools. However, teachers play important role in the application of these changes. Their motivation and willingness may determine the success of the changes; therefore creating positive attitudes toward the offered changes at schools avoid unwillingness and reinforce the enthusiasm of teachers. For that reason, promoting readiness can be attained by improving readiness enhancing variables, some of which are self-efficacy, communication and cooperation skills that are also the characteristics of resilient individual. Accordingly, a relationship between resilience and readiness may ease the application of change plans at schools and decrease the negative attitudes of teachers towards changes. By this way, resilience development of teachers can be inevitable source for educational policy makers to reach to the intended goals. Especially, in recent years, MONE has done several changes at primary and secondary levels and the outcome or success of these changes will determine how the MONE is successful. Therefore, ignoring readiness of teachers towards changes does not contribute to the success but failures at schools. Within such an idea, the role of resilience on readiness may help the policy makers for their plans at schools. Lastly, the study is also noteworthy because of a newly developed Readiness for Change scale in Turkish and the resiliency of teachers are firstly studied in Turkey while such a resilience study has been much done outside of Turkey.

1.4. Definitions of Terms

In this study, the discussion is made around two basic concepts. The first one is readiness for organizational change and the second is resilience. The definitions of two terms are presented below.

Readiness for Change

The most cited definition related with people's readiness for change is from Armenakis et al. (1993): "Readiness is reflected in organizational members' beliefs; attitudes and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes in the environment" (p. 681). In this study, readiness is measured with a scale which yields three sub-dimensions of readiness toward organizational change.

Resilience

Resilience is a collection of personal qualities that makes individuals qualified to grow and thrive in the face of adversity (Connor & Davidson, 2003). In this study, resilience is measured with a scale which yields four sub-dimensions of readiness toward change.

CHAPTER II

REVIEW OF LITERATURE

2.1. Organizational Change (OC)

According to Burke (2008), organizational change refers to leading a different way for the organization, transformation of regular ways and establishing a new decision-making and responsibility process by giving a vision for the employees or it is defined as the adoption of a new idea or behavior by an organization (Daft, 1997). Differently, change means: "The difference in how an organization functions, who its members and leaders are, what form it takes, or how it allocates its resources" (Huber, Sutchliffe, Miller, & Glick, 1993, p. 216). Organizational change can be considered as old as the history of organizations (Burke, 2008), however the studies of Lewin (1951) on change were a starting point for preoccupation of scholars in organizational change. Since then, several scholars have defined change from different perspectives and suggested new approaches of studying organizational change (Armenakis & Bedeian, 1999; Beer & Nohria, 2000; Sashkin & Burke, 1987; Van de Ven & Poole, 1995; Weick & Quinn, 1999). Owing to such theoretical approaches to change, the definitions of change have shown pluralities. Sashkin and Burke (1987) also confirm that finding a common change definition is difficult in OC literature. Organizational change field is considered to be robust to search and these difficulties come from complicated variables of OC like process, content, context and outcome that are overlapping each other (Armenakis & Bedeian, 1999). In addition to these, various lenses of change is also studied by several researchers.

2.1.1. Major Lenses of Change

In the OC literature, some scholars (Kezar, 2001; Porras & Robertson, 1992) talk about nature of change, order of change, forces of change, level of change and intentionality of change that are some of the suggestions in which each one has different approaches for understanding change (Burke, 2008; Caldwell et al., 2004).

2.1.1.1. Nature of Change: Evolutionary or Revolutionary Change

In the field of OC, one of the major arguments among scholars is the emergence of change or the nature of change (Porras & Silvers, 1991). Because the drive of each change is different, such a classification is established (Burke, 2008). Evolutionary (transactional) change aims to alter some aspects of organization like reward system, information technology, workflow processes or management practices instead of fundamental structures and also it represents the characteristics of most organizational changes, but revolutionary (transformational) change is identified with occurrence of actions in leap, spurts and disruptions and not in regular trend; the focus is mostly related with mission, goals ,culture and strategy issues (Burke, 2008). Similarly, Kondakçı (2005) also explained the division of revolutionary and evolutionary change in terms of the purpose of the changes whether it would affect some parts of organization or formulate a different way for the organization.

2.1.1.2 Orders of Change: First Order or Second Order

First order change is developmental (planned) and evolutionary (unplanned) (Porras, Robertson, 1992) and refers to some changes in the form of modification or improvement

without focusing on the core elements (Burke, 2008) and therefore the resistance is not expected, it has the characteristics of adaptation, renovation, adjustments or incremental change strategies (Kondakçı, 2005).

Second order change is transformational (planned) and revolutionary (unplanned) (Porras & Robertson, 1992) and described as radical and fundamental changes (Burke, 2008). Accordingly, the core aspects of organization like attitudes, norms or mission is subject to change in second order change (Kondakçı, 2005).

2.1.1.3. Forces of Change: External or Internal

Forces of change terminology have also been used by the scholars to elaborate on organizational change. Forces of change refer to dynamics that lead the organization to change over time. The direction of the dynamics are defined as external (coming from outside) or internal (coming from inner side) environment (Haveman, 1992) and the forces of change are identified with obligation, energy, and vigor for changing organization (Kondakçı, 2005).

Internal forces of change are defined as degrees of specialization, level of organizational slack and previous change experiences (Armenakis & Bedeian, 1999). In addition to these, Damanpour (1991) added specialization, professionalism, strategic orientation, slack sources, inertia, and management attitude toward change and technical knowledge sources. On the other hand, external conditions are described with technological changes, legislation, and force that effect marketplace competition (Kezar, 2001).

2.1.1.4. Intentionality of Change: Planned or Unplanned

Planned change is described as purposeful intervention method of making change in the organization (Weick & Quinn, 1999) and is also classified both developmental (first-order change) and transformational (second-order change) (Porras & Robertson, 1992). On the other hand, according to Tenkasi and Chesmore (2003), the other characteristics of planned change are explained as deliberate, systemic, intentional and complex nature. Unplanned change is considered as the opposite of planned change owing to its dynamic and unpredictable nature (Smith, 2004). For instance, Porras and Robertson (1992, p.721) stated that unplanned change is initiated by "something outside the organization that forces a coping response from within." Similarly, Orlikowski (1996) defined unplanned change with the realization of actions that cannot be predicted.

2.1.1.5. Levels of Change

According to Burke (2008), change must start somewhere and determining how it starts, helps us understand how to plan and lead the change issues. The examination of various units in change is suggested to understand it truly (Burke, 2008). Accordingly; individual, team, organization and industry levels of change are studied in the literature.

Organizational level or larger- system level analysis of change has been so widespread in OC analysis (Kondakçı, 2005). Organizational level change is related with the restructuring of whole organization (Mills, Dye, & Mills, 2009). Likewise, Burke (2008) stated that change at organizational level occurs at larger systems, so the complexity of it may require considering some other elements to comprehend it better. These are; a) the order of change: first, second

or third order change; b) the phases of change (e.g., Lewin's (1951) unfreeze, freeze, and defreeze); c) the focus of change like mission, purpose, culture, organizational design and structure, etc., d) the process of change that is overall change effort like communication systems, training programs, certain interventions, etc., and e) change at inter organizational systems for sharing resources and improving cost-effectiveness.

For individual level, Burke (2008) says that organizations consist of various pieces and parts so affect each other. Therefore, the behaviors of each person in organizations are resembled as "networks within networks" (Capra, 1996, as cited in Burke, 2008). Especially, involvement of people to a new change should also be analyzed in one of smaller frameworks, which is individual level, in order to affect the whole. Individual level change is associated with the alterations about individuals' behaviors, attitudes and perceptions within the organization (Mills et al., 2009). Some authors (Beer & Nohria, 2000; Clegg & Walsh, 2004) previously supported the view that emphasize on individual level of change is fundamental to hinder failures and difficulty in implementation efforts. Therefore, at individual level, the main interests of activities are about the issues such as recruitment, replacement, displacement, training and development; and on coaching and counseling (Burke, 2008).

Change at group level is realized with teams or groups in the organization that is defined the most important subsystem and the quality of cooperative work and interaction between members of groups in the organization is essential for the overall effectiveness of the organization (Burke, 2008). In previous studies, as well, the overall energy or capability of team is described as a source of innovation in organizations (West, Hirst, Richter, & Shipton, 2004). According to Mills et al. (2009), group level change means changing the process. At

this level, the emphasis is on team building, self-directed work units and intergroup (Burke, 2008).

Industry level of change is described with some evolutionary change theories such as population ecology (Hannan & Freeman, 1977) and institutionalization (DiMaggio & Powell, 1983) which explain the argumentation with population level. About the vitality of the industry level for organizations, Meyer, Brooks, and Goes (1990) proposed that development patterns of industries may overwhelm the adaptation mechanism of organizations, so the speeds of changes occurring in the organization and outside environment should be highly interrelated for the future of organizations. Bearing this in mind, change at industry level is thought to be crucial to measure and compare the change rates of organizations for healthy growth.

2.1.1.6. Content, Context, Process, and Outcome Models of Change

A comprehensive framework offered by Armenakis and Bedeian (1999) is about the process, content, context, and outcome dimensions of organizational change. These are defined as the multiple facets of change: what, why, how and outcomes of change.

The content of change refers to purpose, mission, strategy, values and what the organization is all about (Burke, 2008). On the other hand, a framework for the content of organizational change which is structure, people, technology and task is presented by Dainty and Kakabadse (1990). With a different perspective, Damanpour (1991) listed five content variables functional differentiation, formalization, centralization, administrative intensity, and vertical differentiation.

Contextual factors are the conditions in the internal and external environment (Armenakis & Bedian, 1999). For contextual factors, Damanpour (1991) stated specialization, professionalism, strategic orientation, slack sources, inertia, and management attitude toward change and technical knowledge sources.

Change process is also discussed in multiple manners. For example, Lewin (1951) offered three-step model (unfreeze-move-freeze) for organizational change process. According to Lewin, change starts with unfreezing which is done for delivering a message to organizational members about the current state and desired state of the organization. Later, moving which involves changing the behaviors of the members and the last step is freezing that is preserving the desired state of the organization. Similarly, Bridges (1991) suggested three-step model for change process as endings, transitions and new beginnings. Armenakis, Harris, and Feild (1999) proposed a different model for successful change process; the model involves readiness that aims enhancing readiness of people towards change, adoption which aims adoption of new behaviors and institutionalization which aims making the change a norm for the organization.

According to Van de Ven and Poole (1995), process of change can be constructed on four basic theories. These are life cycle, teleology, dialectics and evolution. Life-cycle theory, being the most common explanation of the development in the management literature, explains change with successive actions that complete the later ones because of the prescribed sequence like in biological developments. Each stage of action is precursor for the following one. However, teleological theory does not follow a prearranged and necessary cycle of actions, but puts an end-state vision and the interaction of adaptive entities construct the end state by progressing. Dialectical theory explains the change with the balance of opposing

events, ideas in which one is replaced with another or the replacement can be synthesis for the better or worse that represents a change. The last one, evolutionary change refers to accumulation of small changes throughout a long period of time. Hence, through time entities go through a process of variation, selection and retention among several organizational entities.

Criterion aspects are commonly assessed as outcomes of organizational change (Armenakis & Bedeian, 1999). Studies about criterion variables are mostly related with affective, cognitive and behavioral experiences of organizational members (Kondakçı, 2005). Accordingly, the outcome aspects deal with human factors that influence organizational change process. This is also an evidence for the essentiality of human factors to understand change attempts. Similarly, Clegg and Walsh (2004) criticize that the current practice of change is mostly related with the technical side of change and, the human aspect of change has been ignored. In the OC literature, negative or positive attitudes of people toward change are studied in terms of various ways such as resistance to change, commitment to change, readiness for change, etc. Hence, the various reflections of people toward change indicate that concentration on the attitudes of people can be beneficial for the questioning of failures in OC.

2.1.2 Organizational Change in Education

As living organizations, educational institutions also confront with forces of change, which causes alterations in their structures, policies, strategies, technologies. Aforementioned, internal (inside organization) and external forces (outside of organization) of change (Haveman, 1992) oblige the organizations to be competitive with the ever-changing environment (Burke, 2008), accordingly change is indispensable for educational

organizations, as well. For that purpose, educational organizations utilize some quality indicators to reach their planned changes in the future. For example, countries follow the scores about the mathematics, science, reading, information and communication technology (ICT) or monitor school education by focusing on infrastructure of schools, resources or training of their teachers. Likewise, Organization for Economic Co-operation and Development OECD publishes annual reports about the development of education with a comparison of all member countries. All these efforts are indicative of a proposition of changes for the better. Therefore, change in education seems inevitable because of everchanging conditions and competitive environment, which can be clearly observed with the benchmarking of nations in Programme for International Student Assessment (PISA) and Progress in International Reading Literacy Study (PIRLS) reports.

Besides the mentioned qualities, as members of schools, teachers' effectiveness is one of critical qualities for educational organizations, because their personal attitudes have an effect on change attempts and results, so the attitudes of teachers are also becoming fundamental for healthy growth of educational organizations.

Defining how change starts and goes on in educational institutions can be clearly understood with the change process in educational organizations, which has been investigated by several scholars (e.g., Ellsworth, 2000; Fullan & Stigelbauer, 1991; Goodson, 2001). With a broader context, organizational change process has such stages that are explained above; endings, transitions and new beginnings (Bridges, 19991), unfreezing, moving, and refreezing (Lewin, 1947) and readiness, adoption and institutionalization (Armenakis et al., 1999). Likewise, change process in educational organizations follows similar stages. For instance, Fullan's Educational Change Model (1991) defines the change process in four stages; initiation,

implementation, continuation and outcome. For each phase, he gives explanation which factors in or out of organization affect the phases. Especially, related with implementation efforts, Fullan and Stigelbauer (1991) emphasize three factors that lead the change implementation. These are characteristics of change that gives information on how and why the change is becoming, local characteristics that are comprised of internal agents at school and external factors that are outside factors of the organization like government and other agencies. Hence, it can be argued that organizational change process in educational organizations and other sectors have commonalities rather than differences.

In another study, Goodson (2001), considering its originating source, described three types of change for educational organizations that are internal, external and personal. Internal change is related with the change initiatives done at school by internal agents and with support of externals. External change is defined as the top-down changes (i.e., national curriculum). Personal change is linked with the beliefs, intentions and plans of people that direct change. The author also pointed out that these different types of change have been dominant at different time periods during last fifty years. In 1960s and 1970s, internally generated changes were in a high trend because of the central roles of teachers and educators in change involvement. Whereas, during 1980s and 90s external changes were more dominant in educational setting. The government and policy makers were more involved in changes regulating education. However, after 1990s, the trend was turned into balancing external and internal forces in educational changes. As a result, a new model of change, which was centered on personal change, was generated. The basic premise of this type is that change interventions will be more successful when beliefs and plans of organizational members are taken into consideration. In other words, teachers' and school administrator's ideas or enthusiasm about the changes are suggested as contributing factor in successful change

outcomes. This kind of personal change approach in educational organizations is also consistent with the popularity of individual level or human side of change (Judge et al., 1999; Lau & Woodman, 1995). In other words, human aspects of educational organizations also seem to play fundamental role for the healthy change interventions at schools.

2.1.3. Change Interventions in Turkish Education System

Change interventions at system and organization levels in Turkish Education System have gained popularity with the foundation of the Turkish Republic because education was regarded as the most essential priority to be a civilized nation (Grossman, Onkol, & Sands, 2007). For that purpose, since 1920s the governmental units have made changes in education such as the foundation of new type of schools like male, female vocational schools, teacher schools, village institutions, university reforms, and so forth (Akyüz, 1982). Along with national reforms conducted by the Ministry of Education, World Bank-Funded National Education Projects (NEDP) greatly changed several issues in education in 1990s (Grossman et al., 2007). In recent years, as well, the reforms in education continue; therefore, Grossman et al. (2007, p. 139) defined the process: "Turkey is seeking to improve its schools to better respond to higher social and economic expectations"; so, the compulsory schooling period in primary level is extended from five to eight years, the curriculum at primary and secondary levels has been changed into a more constructivist one. The content and context of the courses are up-dated with the needs of the era like foreign language education at primary school, computer and media literacy courses, etc. Moreover, the Information and Communication Technology (ICT) has been so much developed that computer and internet usage is much more in classrooms and school administration and teachers use software programs like eschool to note students' grades, academic progress or other documents. Along with these structural change attempts; however, OECD (2009) reports point out that Turkey has long way to reach the average level of the OECD countries in areas like the comparative success of students at different subjects, working hours of teachers, the number of students per teacher and the amount of salary for teachers, etc (OECD, 2009). Hence, it is likely that policy makers in Turkey will need to initiate variety of changes in order to improve the system.

All these changes stated above can be done with all stakeholders of educational organizations like, teacher, student, administrative personnel, parents, and governmental agents although the education system is so much centralized. These changes are planned to reach better outcomes in education. However, Karip (1996) stated that the outcomes of the planned changes have to be analyzed in order to identify background reasons, especially in failure situations. Aslan et al. (2008) pointed out that personality, personal development, and attitudes of individuals towards change play key roles for the success of educational reforms. Accordingly, as a stakeholder, teachers' attitudes towards the planned changes partly determine the progress and the results of the change efforts. As a result, their attitudes towards change should be taken into consideration. Of the attitudes towards change, readiness of members that is locating at the first stage of change process (Armenakis et al., 1993) becomes crucial for teachers' receptivity to the proposed change at the very beginning. For that reason, studying readiness of teachers towards educational changes and the factors that influence readiness for change seems to be indispensable for the change efforts in education.

2.2. Readiness for Organizational Change

As indicated above, "readiness is reflected in organizational members' beliefs, attitudes and intentions regarding the extent to which changes are needed and the organization's capacity to

successfully make those changes in the environment" (Armenakis et al., 1993, p. 681). In other words, it is cognitive originator to behaviors that either resist or support change. The idea of readiness to change is actually associated with resistance because decreasing resistance to change is thought to facilitate readiness for change in a certain extent (Armenakis et al., 1993). Therefore, the study of Coch and French (1948) about reducing resistance is thought as the inspiration study for the latter ones (Bernerth, 2004). The term "readiness" was firstly used by Jacobson (1957) in which readiness was thought as an essential component like resistance. Clarke et al. (2006) defined the readiness as an internal and cognitive reaction while resistance is explained with external and behavioral response towards change. In organizational change attempts, where or how the readiness state starts is also questioned. Bernerth (2004) linked the readiness with the first two steps of change model (Lewin, 1947) that are unfreeze, move and freeze steps. Similarly, while classifying the process of change, Armenakis et al., (1993) located it at the first stage, which is sequentially readiness, adoption, and institutionalization phases. More specifically, readiness idea has been widely studied by different authors in different manners (Armenakis et al., 1993; Armenakis & Harris, 2002; Eby et al., 2000 etc.,). The most comprehensive framework, Armenakis and Bedeian (1999) defined the readiness a multidimensional construct that is influenced by the process, the content, the context, and individual attributes in organizations. The process is about the implementation, the content is the thing that is changing, the context is the circumstances under which change is becoming and the individuals refer to the traits of people in the organization. With a different vein, Piderit (2000) criticized thinking reactions to change with in only behavioral terms and offered a multidimensional construct that is cognitive, emotional and intentional attitudes of people to explain reactions. Bouckenooghe and Devos (2007) also used the same triangular model while explaining readiness of individuals. Some other authors explain the readiness at organizational level that is a multifaceted construct in which members' shared resolve to implement a change (change comm itment) and the shared belief of members in their collective ability to achieve something (change efficacy) refer to the organizational readiness of people (Weiner, 2009). Shah (2009) classified the readiness factors with workplace and individual dynamics that are already studied by several authors with a different concept like content, context, process, and outcome factors (Holt et al., 2007). In summary, readiness towards organizational change is explained with several factors and studied in differing ways. The scholars do not always agree on certain factors that influence readiness, but varying ones. Because our research is a bit interrelated with individual side of readiness, the literature about the individual, contextual, process and dynamics Table 1.1. content that influence readiness are stated in

Table 1.1

Predictors of Readiness for Organizational Change

Individual Factors	Context Factors	Content Factors	Process Factors
Self-efficacy	Trust	Feedback	Communication
Personal Valence	Change History	Policies, Structures	Participation
Organizational Commitment	Discrepancy	Job types	Management Support
Adaptability	Organizational Culture		

2.2.1. Contextual Factors of Readiness for Organizational Change

Contextual factors are the conditions in the internal and external environment (Armenakis & Bedian, 1999). In other words, contextual factors are the conditions and the environment under which change is occurring and employees function. Context of change specifies the environment under which readiness of organizational members can be examined with their perceptions of organizational context (Holt, Armenakis, Field, & Harris, 2007). The contextual factors which are affecting readiness for change are studied by a number of authors (Eby et al., 2000; Bouckenooghe & Devos, 2007; Cunningham et al., 2002; Holt et al., 2007 etc.,). Some of the factors from the literature are listed below with different views of several scholars.

First, trust was investigated as an important variable in relation to organizational change. Trust refers to a psychological construct established between individuals and organizations based on the degree of confidence (Brockner, Siegel, Daily, Martin, & Tyler, 1997) and is a fundamental issue in organizations in spite of many failures to address it effectively among members (Nyhan, 2000). Trust in various forms (e.g., trust in peers, mutual trust and trust in top management) plays significant function to make employees ready for the change attempts. According to Bouckenooghe and Devos (2007), trust in top management is revealed as a psychological climate factor to build readiness among employees. More broadly, trust is seen as a fundamental element to reduce risk factors and negative feelings in the organizations (Mclain & Hackman, 1999) and originator for creating confidence between employees (Eby et al., 2000). On the other hand, mutual trust and respect are given as main foundations for readiness and effective team work (Susanto, 2008). In educational organizations, additionally; trust in school organization, trust in principal, and trust in colleagues are considered as the

aspects of school trust climate (Hoy, Smith, & Sweetland, 2002). On the other hand, a specific study on the relationship between trust and readiness constructs was conducted by Zayim (2010). The author reported a significant correlation at moderate level between these two sets of variables. All these indicate that trust in differing fashions has a role of avoiding resistance and making employees feel of readiness for the proposed change.

As another contextual factor, positively perceived change history or past experiences of individuals has been found to play essential role for building readiness in the organization (Bouckenooghe & Devos, 2007). In his case study, Susanto (2008) explained this condition with the perceptions of individuals about past events that shape attitudes, behaviors and intentions in present. Therefore, the perceptions of individuals towards the record of past change efforts in the organization will either increase or decrease the readiness level (Bernerth, 2004). With a different perspective, the logic of this factor can also be explained with the self-efficacy beliefs of people about their past experiences (Armenakis et al., 1993).

According to Armenakis et al. (1993), readiness of employees is also related with their beliefs about how much the proposed change is necessary for the organization's current performance and desired state in the future. This condition is defined with discrepancy term, the evidence of a need for a change in the mind of individuals. The study of Armenakis et al., (1993) indicates that such a state among employees is enhanced with the discrepancy messages that are motivating the employees to realize the urgency of change by creating a vision for change because of competitive environment (Kotter, 1995). In fact, a sense of discrepancy among employees encourages them to be ready for the further steps that carry the organization to the end state goal or the vision.

In addition to these variables stated above, organizations need to take culture into consideration in their change interventions (Sastry, 1997). At this point, culture is seen as an adaptation mechanism (Cameron & Quinn, 1999) for the attitudes of employees towards the changes and the environment. With a broader perspective, Schein (1990) explains the organizational culture with assumptions, values and artifacts elements. Assumptions are the taken for granted beliefs about people or the organization. Values are the shared beliefs or the rules of the social environment and artifacts are the symbols in the organization like attitudes, languages and behaviors of employees. All of these are indicatives of how culture can be determinant in organizational relationship. For example, an organizational culture that supports the innovation, risk-taking and learning was suggested as a facilitator of readiness (Chonko, Jones, Roberts, & Dubinsky, 2002; Jones, Jimmieson, & Griffiths, 2005). Similarly, the research of Alas (2007) revealed that change in organizational culture is a need in order to implement changes in transformational organizations. The findings above show that the multidimensional feature of organizational culture has significant impact on employee readiness. In addition to all, positive organizational climate is thought to promote organizational readiness (Eby, et al., 2000) based on the Theory of Planned Behavior (Ajzen, 1991), in conceptualization of decision-making process, individuals having positive views toward a behavior and feeling a support from the important persons or groups in or out of organization show strong intentions to perform the behavior. Hence, this shows how the organizational climate affects the direction of attitudes toward changes.

Along with the factors above, some other contextual determinants of organizational change, reviewed by Damanpour (1991) are specialization, professionalism, strategic orientation, slack sources, inertia, and management attitude toward change and technical knowledge sources.

2.2.2. Individual Factors of Readiness for Organizational Change

It is commonly believed that individual attributes or traits influence their beliefs, intentions and behaviors when they confront with change (Holt et al., 2007) and thus, employee attitudes towards change may depend on such traits in a certain extent. In the literature, a number of individual attributes related with readiness for change are studied by some researchers (Cunnignham et al., 2002; Holt et al., 2007; Madsen, Miller, & John, 2005).

According to Armenakis et al. (1993), "individuals will avoid activities believed to exceed their coping capabilities, but will undertake and perform those which they judge themselves to be capable of "(p.686). From the perspectives of Bandura (1986), the self-confidence of individuals about their abilities in achieving a goal is defined as self-efficacy. Specifically, about change related self-efficacy, Judge et al., (1999) emphasized the importance of self-confidence of individuals for achieving change attempts. Similarly, an effective change message conveyed to employees should carry efficacy element in order to create readiness in organization (Armenakis et al., 1993). Moreover, in a study of Holt et al. (2007), researchers found that readiness for change is influenced by employees' beliefs of self-efficacy. With a different perspective, Cunnignham et al., (2002) asserted that workers who have an active approach to solving job problems with higher job change self-efficacy are more ready for change and the findings of Rafferty and Simons (2006) also support the role of self-efficacy in readiness in order to be successful in corporate-transformation changes.

In organizations, some members may value the planned organizational change because of the perceived importance of the change. Armenakis et al. (1999) explains such a situation with the term, personal valence that is the interests of members about the change or the question of

"what is in it for me?" and if the intrinsic and extrinsic benefits of change for individuals are threatened, the resistance may come out (Clarke et al., 1996). However, the reasons why organizational members value a change show variety, it may be because of peers' support, leaders' support or convicting messages for solving problems of members. Here, the values represent the belief about social desirability of modes of conduct (Kabanoff, Waldersee, & Cohen, 1995). Therefore, the more organizational members value the change, the more they will believe and desire to implement the change (Weiner, 2009). According to Prochaska et al., (1994), if the perceived benefits of change are higher than the anticipated risks of change individuals are more willing for going into action.

Individuals' attitudes and feelings (perceptions) toward his or her organization are also assessed with their organizational commitment (Mathews & Shepherd, 2002) which is defined as "the act of pledging or promising to fulfill an obligation to someone or something at a future date" (Zangaro, 2001, p.14). The literature on change management reveals that organizational commitment is positively and significantly related to readiness for organizational change (Madsen et al., 2005). With a similar fashion, in the study of Cinite, Duxbury, and Higgins (2009) in Canada in a public sector, commitment of senior managers to the change are related with readiness. In sum, embracing the planned change with intentions, behaviors and cognition seem to lead effective and successful implementation of change in organizations (Armenakis et al., 1993). Thus, commitment to change can also reduce turnover intentions and resistance (Conner, 1992). Lastly, organizational change is, actually, an adaptation process for new ideas behaviors that is a kind of transformation of an organization between two points (Barnett & Carroll, 1995). Therefore, if staffs do not possess attributes necessary for change, such as adaptability and growth-orientation, the change process is less likely to proceed (Lehman, Greener, & Simpson, 2002).

2.2.3. Process Factors of Readiness for Organizational Change

Process factors refer to how the implementation of change goes on in an organization (Holt et al., 2007). In the study of many researchers (Armenakis & Harris, 2002; Bernerth, 2004; Miller et al., 1994), process factors of readiness for change are presented.

In change attempts, the readiness of employees is becoming important before starting. Therefore, Armenakis et al., (1993) emphasize persuasively communication of the change messages to the employees in an effective way to create readiness among employees. Supporting the idea, some other scholars (Bernerth, 2004; Miller et al., 1994; Vakola & Nikolaou, 2005) suggest that employees become more ready when they feel that they are well informed about the prospective changes, which can be done by making workers aware of the issues with the necessary informants. In addition to these, the delivery of the change message should carry some features like self-efficacy, principal support, discrepancy, appropriateness and personal valence (Armenakis et al., 1999). Self-efficacy in a change message gives confidence to the individuals about their ability to manage change, discrepancy shows the gap between the current and ideal state, appropriateness explains the reasons of change identified by the discrepancy, personal valence clarifies the benefits of the change and principal support encourages the employees to believe in the change. Todnem (2007) also adds another message conveying strategy to these which is implicit communication. As supporting variables, higher level of feedback to employees about the change process and the clarity of goals in the planned change lead the greater level of readiness among them (Weber & Weber, 2001).

In the study of Coch and French (1948), overcoming resistance to change was maintained by allowing the employees to participate into change. Involvement in decision making process

makes people feel part of the plan (Dirks, Cummings, & Pierce, 1996). Consistent with these ideas, active participation to decision- making is suggested to shape the attitudes of employees before the change attempts are launched and so their readiness levels (Bouckenooghe & Devos, 2007; Vakola & Nikolaou, 2005). With a different perspective, according to Armenakis et al. (1993), for transmitting the change messages to employees, active participation is offered as an important strategy to communicate the change message and maintain readiness. Such an active participation obtains enactive mastery that gives a sense of self-efficacy, vicarious learning that create the opportunity of learning from others and participation in decision making. Thus, the self-discovery of members gives the feeling of partnership. Moreover, Smith (2005) suggests that employee's perceptions how they can actively and genuinely participate in the process have an effect on the success of the change. The findings of Weber and Weber (2001) also suggest that autonomy, the degree to which employees experience freedom and independence in decision-making will also contribute to their perceptions of organizational readiness.

Management support for change efforts is also essential to create readiness among employees, which could be done with an effective change leadership (Susanto, 2008). In consistent with the idea, Armenakis et al. (1993) suggest that the degree of how policies and practices are supportive of change may influence the perceptions of members about the organization readiness. With a broader framework, perceived organizational support has been found to be strongly associated with affective commitment, satisfaction, positive mood, desire to remain in the organization, and turnover intentions (Rhoades & Eisenberger, 2002). Eby et al. (2000) similarly stress that in an organization undergoing a move to a team-based structure, perceived organizational support was positively associated with readiness for change. Rafferty and Simons (2006) perceived organizational support was uniquely positively associated with

readiness for corporate transformation changes that are corporation-wide, characterized by radical shifts in business strategy, and revolutionary changes throughout the whole company. Weber and Weber's research (2001) revealed that workplace improvement in support is related to organizational readiness for change.

2.2.4. Content Factors of Readiness for Organizational Change

Content factors are associated with administrative, procedural, technological or structural features of organizations (Holt et al., 2007). With a similar perspective, content issues are explained with the substance of contemporary organizational changes (Armenakis & Bedeian). The number of research about content factors of readiness is limited (Eby et al., 2000; Cunnigham et al., 2002; Susanto, 2008).

First of all, organizations with their structural features, policies and other elements may show variety in accordance with the needs, purpose and the vision. Armenakis et al. (1993) suggest that energy, inspiration and support for creating readiness must come from within organization. Parallel to this understanding, Eby et al. (2000) pointed out the importance of flexible organizational policies and procedures that ease the occurrence of organizational readiness. With the same perspective, Susanto (2008) stressed the employees' perceptions toward company's flexibility in facing the change for the sake of successful change implementations and their readiness level. It seems that organization of policies and procedures in the system has a role of creating certain attitudes.

Secondly, the quantity of feedback conveyed to the employees is stated as readiness creating factor (Weber & Weber, 2001) actually feedback mechanism supports other readiness factors

like communication of message and awareness of people about the change to feel discrepancy and self-confidence (Armenakis et al., 1999).

Lastly, organizations offer a range of jobs and positions for their members, but the kind of jobs also have an impact on organizational change because active jobs are thought to contribute to the readiness of individuals by affecting some other readiness enhancing factors like active participation, personal empowerment, high initiative (Cunnigham et al., 2002). In particular, organizations with their systems should also be well organized to prepare the whole organization before launching any change plan.

2.2.5. Studies on Readiness for Organizational Change in Turkey

In Turkey, studies about organizational readiness at schools towards changes are limited. Erçetin and Demirbulak (2002) studied the views of school administrators about the readiness level of schools to the change in the fourth year of the eight year compulsory education. According to the results of the study, the planned change seems support from the senior staff, but there is a lack of well-defined vision about the change. Problems regarding the structure and functioning of the school, reward system for the staff, effective communication and the development of scales are listed. In another research by Helvacı and Kıcıroğlu (2010), four dimensions of readiness at schools are assessed from the perceptions of teachers. The dimensions are how teachers, principals and parents of students seem ready and also how physical and technological infrastructures of the schools are ready enough towards changes. All four dimensions resulted in average readiness level. Differently, Zayim (2010) investigated the relationship between teachers' intentional, emotional, and cognitive readiness for change and perceived faculty trust in principal, in colleagues and in clients (students and

parents). The results of the study positively supported the previous researches about the readiness and trust relationship. In addition to this, Kondakçı, Zayim, and Çalışkan (2010) studied school administrators' readiness to change in relation to teaching level of the school, experiences of the administrators, and the size of the school. The study suggest that participative organizational change practices and giving the opportunity both to teachers and school administrators to actively participate in change processes enhance higher readiness to change.

2.3. Resilience

Etymologically, the word resilience comes from the Latin 'salire' (to spring, spring up) and 'resilire' (spring back) which refers to the power to recover or spring back from adverse conditions (Davidson et al., 2005). Resilience is also seen as the basic human adaptation system that influences the individual's attitudes towards developments, orders or changes in their life (Masten, 2001). With another perspective, resilience is a dynamic process because of the ongoing interaction between the individual, the event and the environment (Schaap, Galen, Ruijter, & Smeeths, 2008). While resiliency is considered both state-like and trait-like, the developmental nature of it makes it as state-like rather than trait-like (Larson, 2003); because several authors (Egeland, Carlson, & Stroufe, 1993; Larson, 2003; Stroufe & Rutter, 1984) imply that resilience can be improved with some supportive programs to make an individual adaptable for upcoming situation. On the other hand, Gu and Day (2007) discussed two trends in defining resilience. Firstly, resilience is a psychological construct that involves the study of personal factors like self-esteem, self-efficacy, motivation, resourcefulness and health, which are believed to strengthen the resiliency of individuals in the face of adversity. Secondly, resilience is viewed as a multidimensional and complex process, "a dynamic within

a social system of interrelationships" (Gu & Day, 2007, p.1035). In this relationship, protective factors which hinder the impact of adverse situation (Kumfer, 1999), personal factors, external support systems such as friends and community resources are incorporated.

Moreover, the terms ego-resilience and resilience are also discussed with some differences. The former one is personality characteristic, but the latter one is dynamic and developmental process (Luthar, 1996). Therefore, resilience is not just an inherent quality, but also developmental nature. All these show that resilience is rather composite and involves a number of dynamics that determine the resiliency of individuals. Namely, some resilience enhancing factors (e.g., self-efficacy, motivation, resourcefulness, health, etc.,) increase the adaptability of people for adverse situations or changes in their lives.

Originally, the concept of resilience has taken attention from many disciplines such as psychiatry, developmental and clinical psychology (Masten & Powell, 2003). On the other hand, most of the studies associated with resilience are done with children's vulnerability towards bad environments (Larson, 2003). Therefore, the phenomenon of resilience was firstly studied during the 1970s about the disadvantaged children who are at risk for psychopathology and problems in development (Masten, 2001). However, the most extensive study on resilience was done by Werner and Smith (1982) about the lives of 505 children in poverty in Kauai Islands, Hawaii. In the study, how children who come from bad environments can rebound and become productive adults is discussed. They compared successful adults with unsuccessful ones and looked for the differences between children from the same group.

At first, the fashion of studies were mostly about negative aspects of life conditions, but the research trend in resilience has also changed by more focusing on how the resilience factors contribute to the positive outcomes in life in the last two decades (Luthar, Cicchetti, & Backer, 2000). For instance, as said by Benard (1995, p. 1): "we are all born with an innate capacity for resilience, by which we are able to develop social competence, problem-solving skills, a critical consciousness, autonomy, and a sense of purpose", which is evidence for how an individual can improve the innate capacity with several means. Along with such a trend, some authors (Masten, 1994, Werner and Jonson, 1999) expressed about the lack of empirical research about the resiliency of adults. For that reason, there are also some researches about teacher and employee resiliency in recent decades (Bobek, 2002, Larson, 2003). Thus, the resilience concept is being investigated not only for children at risk but also for adults at adverse, unfavorable conditions. Last of all, the varying definitions (Wolkow & Ferguson, 2001) and applications of resilience literature make it difficult to interpret the research into resilience (Schaap et al., 2008). Hence, a number of approaches to resilience indicate that it can be explained with different means, so the resilience literature explains the resilient and non-resilient attitudes of people in several manners as stated below.

2.3.1. Resilient and Non-Resilient Attitudes

The large amount of literature about resilience results in various forms of definitions about resilient and non-resilient behaviors. Resilience is a development process that happens in the context of person-environment interactions (Egeland et al., 1993). Therefore, the results of the interactions result in different manners. For example, according to Larson (2003), resilient individuals can regulate their emotions and interact more effectively in social environment. Bernard (1991; 1993) summarized that resilient individuals usually have four attributes in

common: a) social competence, problem solving-skills, autonomy and a sense of purpose and future. On the other hand, resilient individuals can develop such abilities; planning ahead and solving problems, persistence in the face of adversity and maintaining a positive vision for life (Werner, 1987) and the biggest difference of resilient and non-resilient ones is the goals that they had set for themselves (Werner, 1983). Children who reach positive outcomes despite vulnerability and risk factors are also called resilient (Karaırmak, 2007).

With a different view, Neenan (2009) explained the resilient attitudes as changeable in nature while adapting to new conditions and defines the attitudes in three components (p.19). 1) Thoughts – what you think about something, 2) Emotions – how you feel about something, 3) Behavior - how you act towards something. In order to make the term clearer, Reivich and Shatte (2003, as cited in Neenan, 2009) stated:

Our research has demonstrated that the number one –road-block to resilience is not genetics, not childhood experiences, not a lack of opportunity or wealth. The principal obstacle to tapping our inner strength lies with our cognitive (thinking) style-ways of looking at the world and interpreting events that every one of us develops from childhood. (p.11)

To sum, resilience can be described with several variables that influences emotions, attitudes and behaviors of people. Moreover, the attitudes of people can be shaped with not only one factor but a combination of different ones. Therefore, the variables should be well identified to understand resilience and its improving dynamics. In the literature, a number of factors are stated under some headings below.

2.3.2. Factors of Resilience

In the literature, resiliency is studied under the risk, protective and outcome factors. These factors are also interrelated with each other, because the presence of protective factors sometimes moderates the risk factors (Rutter, 1987) or protective factors may help children respond to adversity constructively in spite of existing risk factors (Kaarırmak, 2007). Hence, understanding three dynamics of resilience is fundamental to properly observe the nature of resilience.

2.3.2.1. Risk Factors

Risk factors are defined as the dynamics that increase the likelihood of becoming a negative condition (Kirby & Fraser, 1997). In other words, these factors are indicators of negative experiences in upcoming times. According to Gizir (2004), risk factors are the vulnerability dynamics that are explained with genetic, biological, behavioral, socio-cultural, and demographic features. On the other hand, risk factors were also associated with chronic poverty, low maternal education, parental psychopathology, the presence of genetic abnormalities, and prenatal health complications (Werner, 1989). For that reason, risk factors are varying at different ages and stages of development (Fraser, Richman, & Galinsky, 1999). In the resilience literature, the risk factors are grouped into three; individual characteristics, familial conditions and environmental conditions (Kirby & Fraser, 1997). Individual characteristics are listed as a) biomedical problems like impaired cognitive abilities, emotional lability (Masten et al., 1990, as cited in Kirby & Fraser, 1997), b) gender that refer to females' more vulnerability against harsh conditions than males (Kirby & Faser, 1997). Familial conditions are; a) child maltreatment like sexual, physical, psychological abuses, b) interparental conflict in the family, c) parental psychopathology such as mental illness, depression, substance abuse and d) poor parenting (Kirby & Faser, 1997). Environmental conditions are a) lack of opportunities, b) racial discrimination and justice, and c) poverty (Kirby & Faser, 1997).

2.3.2.2. Protective Factors

In the literature, some scholars (Friborg, Hjemdal, Rosenvinge, & Martinussen, 2000; Masten, 2000) discussed about a mechanism that avoids adverse effects of difficult conditions for making people more resilient. These are protective factors that are thought to ease the adaptation of people to the conditions and decrease the unpleasant effects of risks factors (Rutter, 1987). With a similar perspective, protective factors are defined as "quality of a person or context or their interaction that predicts better outcomes, particularly in situations of risk or adversity" (Wright & Masten, 2005, p.19) and becomes a defensive mechanism for the coming attacks of events (Masten, 2000). Therefore, the characteristics of individuals and their environments should be examined for understanding the successful adaptation of some people better than others against risk (Masten & Reed, 2002, as cited in Gizir, 2004). The protective factors are investigated within psychological/internal characteristics, support from family and friends, and external support systems (Friborg et al.,, 2003). With a similar perspective, Werner (1995) says that individual, familial and environmental resources avoid the negative effect of life stressors. Accordingly, protective factors can be classified into individual (internal) and environmental (external) dynamics.

2.3.2.2.1. Individual Protective Factors

Individual protective factors refer to positive personality traits (Karaırımak, 2007) and they are presented in different forms by various studies. For example, Bonano (2004) describes

resilience as the capability of sustaining a stable equilibrium and to enhance resilience, he offered developing four protective traits of people; a) hardiness (Kobasa, Maddi, & Kahn, 1982) that helps to buffer to extreme stress, because hardy individuals are considered as more confident and better able to use active coping ability and social support, self- enhancement that means adaptive and well- being traits of people (Greenwald, 1980; Taylor & Brown, 1988) to the stressful events. Hardiness and self-enhancement are cognitive processes while repressive coping is the result of emotion-oriented mechanism, c) repressive coping is considered as the decrease of distress in stressful situations, d) positive emotion and humor that cancel the negative emotion of individual and aspects of the event.

In addition to these, higher intellectual ability of individuals is suggested as individual protective factor to enhance resilience among children and the studies also indicated that resilient ones are better than non-resilient ones in academic success. The underlying reason for such a difference is higher problem solving ability of these people in the context of the problems or adverse situations (Kandel, Mednick, Kirkegaard-Sorensen, Hutchings,

Knop, Rosenberg, & Schulsinger, 1988; Masten, Garmezy, Tellegen, Pellegrini, Larkin, & Larsen, 1988). According to Masten (1994), self-efficacy is a protective factor for children, which positively influences their motivations for dealing with life challenges and personal matters in the future. In a similar fashion, self- efficacy term of Bandura (1982) is conceptualized as a process in which the confidence of individuals about their skills to do some tasks turns into a success and so a protective factor for adverse and difficult tasks. Self-efficacy actually shapes our expectations and choice of activities that directly influence how hard we deal and what we do at the time of challenges (Joseph, 1994).

Lastly, optimism is associated with successful adaptation following a variety of events involving both stress and personal change (Cozarelli, 1993, Murray, 2003). Activeness and responsiveness in their relationship with peers and others are also suggested among resiliency characteristics (Rutter, 1990) because this condition positively affects the relationships with other people and makes the work environment more positive by building a trustful climate (Bobek, 2002).

2.3.2.2. External Protective Factors

External protective factors are defined with family, school and community that surround the individuals (Bernard, 1991). Kirby and Fraser (1997) provided some external protective factors for children at risk; a) opportunities which are assessed one of the vital sources for achieving hopes and aspirations, b) social support of family, school and other organizations against the stressors that are becoming a reinforcement to build resiliency traits, c) presence of caring, supportive adults like grandparents or elder brothers against environmental stressors, such a support and caring promote the children at risk to construct resilience, d) positive parent-child relationship which help children feel secure, e) effective parenting that provides a role model for effective action and provide opportunities for children to experience mastery and persuade children about their effectiveness and self-efficacy beliefs (Bandura, 1982).

2.3.2.3. Positive Outcomes

Resilience is not just comprised of risks but also positive outcomes that refer to competence in academic and social area (Gizir, 2004). Related with children's social competence in preschool period, Diener and Kim (2004) stated that child temperament, self-regulation,

maternal characteristics, as well as the presence of a familiar classmate support the social competence. Moreover, some most studied positive outcome variables are: academic achievement (e.g., grades and test scores, staying in school, graduating from high school); behavioral conduct (rule-abiding behavior vs. antisocial behavior); peer acceptance and close friendship; normative mental health (few symptoms of internalizing or externalizing behavior problems); and engagement in age-appropriate activities such as extracurricular activities, sports, and community service (Masten & Reed 2002, as cited in Gizir, 2004)

2.3.3. Resilience Research at Schools

The application of resilience research to educational setting is relatively recent (Ford, 1994). The notion of teachers' resilience is studied in relation to the high proportion of teachers who leave the profession in the first three to five years of teaching (Cornu, 2009). Especially, in the Western world, one third of turnover is seen in this teaching period (Ewing & Smith, 2003). Therefore, some scholars (Bobek, 2002; Gu & Day, 2007; Howard & Johnson, 2004) state that resilience of teachers is not only essential for beginning teachers but also for all teachers in order to increase teaching effectiveness, career satisfaction and better adjustment to education's ever changing conditions. On the other hand, Gu and Day (2007, p.1302) stated the importance of resilience in teaching for three reasons. Firstly, they cited the work of Henderson and Milstein (2003) who pointed that '' it is unrealistic to expect pupils to be resilient if their teachers, who constitute a primary source of their role models, do not demonstrate resilient qualities". Secondly, it is thought that resilience creates a perspective to understand the ways of managing and sustaining motivation and commitment in times of change. Thirdly, resilience is considered as having a big role to strengthen the sense of vocation, self-efficacy and motivation to teach, which are inevitable conditions for the success

of students in their lives. Similarly, Bernshausen and Cunningham (2001) expressed that programs improving resiliency of teachers in the profession is crucial step for avoiding turnover and they also added that organizational culture of educational settings should support the resiliency of educators. For the resiliency programs at schools, they offered to develop some attributes of teacher resiliency like competency, belonging, usefulness, potency, optimism (Sagor, 1996). The existing literature demonstrate that the resiliency of teachers in educational institutions has a enormous affect for the success of educational institutions and researchers are offering to improve teachers' resilience with some programs in order not to experience unfavorable situations at schools in the future.

2.3.4. Resilience Studies in Turkey

Resilience is a popular concept in EU and USA for decades, but the resilience studies started after 2000 in Turkey (Kaya, 2007). Actually, before that time, there are some studies about academic and social components of resilience like emotional and behavioral disorders (Taşdelen, 1995), parental attitudes on academic achievement (Beler, 1993) and social competence (Micazkadıoğlu, 2000). However, the unique resiliency research is so recent. For example, Gizir (2004) studied how the protective factors contribute to the academic resilience of eight grade students. Özcan (2005) compared the resiliency of two groups of children in terms of protective factors. Additionally, Gürgan (2006) conducted an experimental study to enhance resilience among teacher candidates at Ankara and Hacettepe universities. Kaya (2007) investigated the role of self-esteem, hope and external factors in predicting resilience of students in Regional Boarding Elementary Schools. Some authors (e.g., Gizir, 2004; Gürgan, 2004; Terzi, 2006) also developed Turkish Resiliency Scales within their studies.

However, this study is different from the previous ones because the focus is teachers' resiliency in educational organizations.

2.3.5. Readiness and Resilience Relationship

The literature about readiness for change and resilience greatly contributes to the probable relationship of two variables. Firstly, Backer (1995) suggested that readiness is psychological state of mind that fluctuates due to changing internal or external circumstances. It is a dynamic force and its presence and absence determines the success or failure of efforts (Jansen, 2000). Similarly, resilience has been considered as a dynamic developmental process (Luthar et al., 2000) which occurs with an interaction between environment and individuals in the developmental process (Benard, 2004; Schoon 2006).

Secondly, in readiness for change literature, a number of individual factors (trust, self-efficacy, adaptability, etc) are listed that may contribute to the readiness positively or negatively. On the other hand, in resilience literature, the components of resilience also contain similar individual attributes like adaptability and self-efficacy that reinforce the resiliency of people. Therefore, resilience can be another individual factor that positively leads the attitudes of individuals towards change, thereby, readiness of individuals towards change. Thirdly, resilience and organizational change relationship is studied in different manners. According to Taylor and Brown (1988), self-esteem, optimism and perceived control can be associated with openness of people towards change. Similarly, Wanberg & Banas (2000) stated that personal resilience (a combination of self-esteem, optimism and perceived control) were related to higher levels of change acceptance. With a broader context, Judge, Locke, and Durham (1997) linked the employee perceptions of work characteristics and job

satisfaction with self-esteem, neuroticism, and locus of control and generalized self-efficacy. Moreover, Armenakis et al. (1993) says: "individuals will avoid activities believed to exceed their coping capabilities, but will undertake and perform those which they judge themselves to be capable of "(p. 686). This definition is also consistent with the role of self-efficacy for improving resilience and so coping ability of people against adverse situations.

Lastly, Larson (2003) says that today's workplace environment is changing so continuously that employees, leaders of organizations can experience setbacks during this hasty process, so the perseveration of skills can be enhanced by developing resiliency of individuals. Additionally, Larson (2003) see the resiliency of employees a vital issue for the survival of the organizations in the 21st century. The competitive environment force the organizations to be one step ahead of the nearest competitor, but the employees as the figures of the change should survive in the midst of constant changes without wasting time. Therefore, the skills or attributes of employees are becoming decisive for the long-run races in the organizations. For educational organizations, Bobek (2002) identified that significant relationship, sense of competence, personal ownership, accomplishment and humor are necessary resources to develop teacher resiliency at schools. The promotion of teacher resiliency prepares teachers to adjust to education's ever-changing conditions.

As a result, some of readiness enhancing variables has some similarities with resilience variables, therefore, this similarity seem to support each other at least in some points. Likewise some studies stated below show that the resiliency of people is associated with the survival of organizations and successful change process. Hence, the nature of change seems to emphasize both resiliency and readiness of people for change activities.

2.4. Summary of the Literature Review

The main purpose of the study was to investigate the relationship between readiness of teachers towards organizational change and their resilience. The OC literature indicates that change is indispensable part of organizations in a competitive world. However, this does not mean that all change intentions reach at the expected states because high failure rates in the organizations postpone or cancel the expectations about the planned changes. The reasons about the failures are investigated in terms of a number of ways. One of the reasons are expressed as negative and positive attitudes of people toward change, of these attitudes, readiness of individual toward change is broadly explained with the readiness creating factors. In addition to existing readiness factors, resilience as a personal characteristic is thought to be another related factor to readiness and resilience literature already supports that some resilience factors (self-efficacy, optimism) have significant role on the attitudes of people towards change.

To sum, it is assumed that the relationship between resilience and readiness may contribute to the field of readiness for organizational change since the resiliency of people can be developed in a number of ways, accordingly help the employers to make their employee ready for the planned changes. Particularly at schools, policy makers and administrators may easily handle with the negative attitudes of teachers towards change by strengthening their resilience traits. With the concerns above, the study tries to examine the relationship of two variables.

CHAPTER III

METHOD

In this chapter, methodological procedures are presented. The major topics are overall design of the study, research question, description of variables, participants, instruments used in the study, data collection procedure, and data analysis respectively. The last section introduces the limitation of this study.

3.1. Design of the Study

This study was designed as an associational research since the relationship between teachers' readiness for organizational change and resilience was examined. In associational research, the relationships among two or more variables are investigated without manipulating variables. Additionally, numerical representation can be made to present the relationship between variables (Fraenkel & Wallen, 2008). Correlational research was an appropriate design for this study since the focus of the investigation is to display the probable relationship of two sets of variables that are emotional, cognitive, and intentional readiness of teachers towards change and their four resilience traits. The variables are not controlled in any way and independent from each other. Hence, correlational research is the most suitable design choice to answer the research question stated in the following section.

3.2. Research Question

This study was carried out to address the following research question:

- How well can readiness for organizational change (emotional, intentional, and cognitive readiness for organizational change) be predicted from resilience factors (internal locus of control, self-esteem, pessimism, and lack of social competence)?

3.3. Description of Variables

The operational definitions of the variables investigated in this study:

Readiness for Organizational Change: This was a dependent variable assessing emotional, cognitive, and intentional readiness of the participants on a 5- point rating scale (1 referred to "totally disagree" and 5 referred to "totally agree"). Emotional readiness for change part includes 3 items, intentional readiness for change has 5 items, and cognitive readiness for change section contains 4 items. Some items of the readiness for organizational change scale are so: "I find change refreshing", "In general, I don't like change", and "I want to devote myself to the change process".

Resilience: The independent variable assessed the resiliency of the participants with 4 factors and was measured on a 5-point rating scale ranging from "totally unrelated" (1) to "totally related" (5). The factors of the variable are listed as: internal locus of control with 22 items, pessimism with 11 items, self-esteem with 5 items, and lack of social competence with 11 items. Some items of the resiliency scale are so: " I find my life meaningless", "I am vulnerable against the diffuculties", "I always trust myself", and "I am not assertive".

3.4. Participants

This study was conducted in Ankara. Population of the study was all of the primary and secondary public school teachers in Ankara. The teachers working at all primary and secondary schools in Ankara were the accessible population of the study. In Ankara province, there are more than 500 public primary schools and approximately 200 public secondary schools (MONE, 2011). To reach and administer the instruments to all of the samples in the population was not feasible. Hence, cluster sampling procedure was followed in identifying the schools of the participants. 31 schools were randomly selected from eight different districts of Ankara to make the samples representative enough. These districts are Yenimahalle, Çankaya, Sincan, Altındağ, Mamak, Etimesgut, Polatlı, and Keçiören. The instruments were conducted at schools in accordance with the official permission of MONE (APPENDIX E) and teachers independently answered the items.

In the study, data were collected from 31 primary (59.6%) and secondary (40.4 %) public schools in Ankara. Table 3.1 displays the participating teacher's background data on gender, age, experience, taking in-service training and joining organizational change project. 691 teachers participated in the study and these were from public primary and secondary schools. 67.3 % of the participants were female and 32.7 % of them are male. Participants' ages ranged from 21 to 62 and with the mean of 40.5. Experience (years in teaching) ranged from 1 to 43 and had a mean of 15.4. Among teachers, 90.6 % of participants took an in-service training program while 9.3 % of the teachers did not take such a training program. Approximately, (81.9 %) of the teachers did not join any organizational change project, whereas the rest (16.6 %) joined any kind of such a project (Table 3.1).

Table 3.1

Demographic Information of the Participants

		Percentage	
Variables		%	N
Gender			
	Female	67.3	465
	Male	32.7	226
Age			
	20-30	13.1	90
	31-40	36.8	252
	41 and over	49.9	341
Teaching Leve	el		
	Primary School	59.6	412
	Secondary School	40.4	279
Experience			
	Less than 5 years	6.3	44
	5-15 years	37.3	257
	More than 15 years	56.2	387
In-service Tra	ining		
	Yes	90.6	626
	No	9.3	64
Organizationa	l Change Project		
	Yes	16.6	115
	No	81.9	556

Descriptive statistics suggest that different charcateristics of the population are reflected on the sample of the study. Teachers of two different gender groups, in different age levels, with different levels of experience are represented in the sample.

3.5. Data Collection Instruments

Data were collected with an instrument composing of three sections: Demographic information, readiness for organizational change scale, and resiliency scale. Of these scales, readiness for organizational change and resiliency scales are pre-developed scales. The following sections cover a detailed explanation about instrumentation of the study.

3.5.1. Demographic Information

This part consisted of thirteen questions to determine the characteristics of the participating teachers in detail. In this part, the categorical variables were gender, teaching level (primary or secondary level), marital status (married or single), spouses' working status (working or not), job type (permanent, contractual, deputy, and others), whether they have child, whether they have taken any in-service training, whether they have done administrative positions and the type of administrative position (director, vice-director, deputy-director, and others), and whether they have participated in any organizational change project. The continuous variables were age, year in teaching, and number of students at school.

3.5.2. Readiness for Organizational Change-Cognitive Emotional Intentional (RFOC-CEI)

As indicated in the previous two sections, readiness for organizational change was conceptionalized as a three dimensional construct, namely cognitive, emotional, and intentional (Piderit, 2004; Bouckenooghe, Devos, & Van den Broeck, 2009). In order to examine teachers' emotional, cognitive, and intentional readiness for organizational change, a new readiness scale in Turkish was developed. Parallel to the existing theory, readiness for organizational change scale was developed with three sub-dimensions. The following sections describe the scale development process in details.

3.5.2.1. Instrument Development

The first step in the instrument development process was conducting an extensive literature review on organizational change and readiness for organizational change. The literature review helped to (1) identify the conceptual boundaries of the readiness concept, (2) understand the position of readiness within the broader change litature, (3) identify other related measures, and (4) construct items for RFOC-CEI. Among the other previously developed measures, the readiness dimension of Organizational Change Questionnaire-Climate of Change, Processes, and Readiness; OCQ-C, P, R that was developed by Bouckenooghe, Devos, and Van den Broeck (2009) was used as the primary reference point in item construction. Since the OCQ-CPR was taken as a reference point, some of the items were translated form English into Turkish. Three different experts contributed to the translation process. The experts were asked to conduct the back translation, as well. As the results of these initial efforts, an item pool with 18 items representing different dimensions of the readiness construct was generated. Once the item pool was constructed, necessary expert opinions from scholars working at the Department of Educational Sciences, Middle East Technical University were taken. The experts made necessary revisions related with the

wording of the items to make the scale clearer and more understandable. In the questionnaire, the rating scale was decided as a 5 –point ranging from 1 (totally disagree) to 5 (totally agree) with 18 items. After finalizing the initial version of the RFOC-CEI, the scale was administered in the piloting phase.

3.5.2.2. Pilot Study

With the construction of the items, the pilot study was conducted by administering the instrument to 691 public primary and secondary school teachers in Ankara. To examine the factor structure of RFOC, Exploratory Factor Analysis (EFA) was performed through PASW 18.0. First of all, the required assumptions of EFA, which were proof of metric variables like correlations above .30, Barlett's Test of Sphericity, KMO (Kaiser-Mayer Olkin) value >.60, multivariate normality, and absence of outliers were checked (Hair, Anderson, Tatham, & Black, 2006). According to the results of KMO and Barlett's Test of Sphericity, KMO value.93, exceeding the criterion value of .60, and there was no correlation coefficient which was less than .30. Barlett Test resulted in a significant value which meant that correlation matrix was significantly different than identity matrix (Tabachnick & Fidell, 2007).

Existence of multivariate normality was tested by running norm test macro in PASW 18.0. This analysis yielded Small's Test with a significant result indicating the violation of multivariate normality, but this test was a kind of Chi-Square Test and it was sensitive to sample size (Tabachnick & Fidell, 2007). Cases which have Mahalonobis Distance values larger than the critical value (42.84 for $\alpha = .05$ and df = 12) were checked to detect multivariate outliers. Five out of 691 items were detected as outliers. These results showed that it is possible to continue factor analysis with principal axis factoring. In the factor

analysis, the numbers of factors are fixed into three because the literature suggests that attitudes towards change scales are evaluated in terms of three domains; cognitive, intentional, and emotional (Piderit, 2004; Bouckenooghe & Devos, 2007). Therefore, the scatter plot and pattern matrix resulted in three factors. Factor analysis indicated that the new instrument had three factors. The first factor explains the total variance of 50.025 %, the first and second factors explain the total variance by 54.438 % and three factors explains 57.295% of the total variance. Based on the pilot study, 6 items that were not supporting the factors were excluded and the number of items became 12 in the last version of the scale. Factor analysis resulted in that new instrument had three factors which were: Cognitive Readiness for Organizational Change, Emotional Readiness for Organizational Change, and Intentional Readiness for Organizational Change as presented in pattern matrix in Table 3.2. The Cronbach's Alpha calculated for dimensions are .87 for cognitive, .67 for emotional, and .87 for intentional, presented in Table 3.3 below. Although the lower limit of Cronbach's Alpha is suggested to be .70 at least; the lower limit may decrease to .60 for exploratory research (Hair, Black, Babin, & Anderson, 2010).

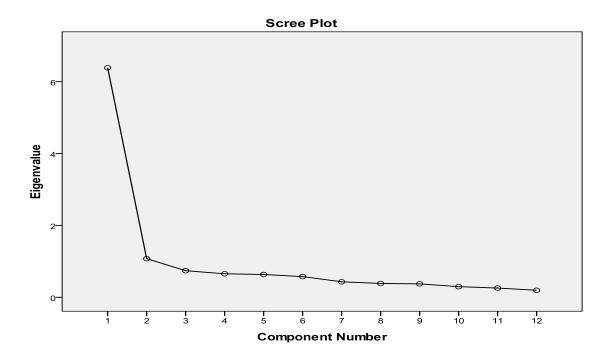


Figure 3.1. Scree Plot of Eigenvalue about Readiness for Organizational Change

Table 3.2

Pattern Matrix for Readiness for Organizational Change Factors

		Factors	S	
Item No	1	2	3	
9	,903	,094	,120	
8	,825	-,061	-,053	
12	,725	-,085	-,140	
11	,699	,135	-,033	
6	,473	,055	-,072	
7	-,021	,663	,044	
10	-,007	,644	-,016	
3	,066	,514	-,105	
1	-,050	,025	-,791	
2	,089	,050	-,734	
4	,122	,160	-,606	
5	,296	,001	-,528	

Rotation Method: Oblimin with Kaiser Normalization.

Table 3. 3

Cronbach's Alpha Results for the Readiness for Organizational Change Scale Factors

Factors of Readiness for Change	Cronbach's Alpha	Number of Items
Emotional Readiness for Change	.87	3
Cognitive Readiness for Change	.67	4
Intentional Readiness for Change	.87	5

3.5.3. Resiliency Scale (RS)

The Resiliency Scale was originally developed and used by Gürgan (2006), but the factor

structure of the scale in this study yielded differently and one item is excluded from the original scale. The difference in the factor structure may be due to the difference of the target samples of each study. While the participants in the previous study were the teacher candidates, the present study focuses on teachers working at state schools. For these reasons, and the scatter plot of the scale resulted in four factors, an exploratory factor analysis was needed to do.

To examine the factor structure of Resiliency Scale, Exploratory Factor Analysis (EFA) was conducted through PASW 18.0 for the data collected from the sample. First of all, the required assumptions of EFA were done, which were proof of metric variables like correlations above.30, Barlett's Test of Sphericity, KMO (Kaiser-Mayer Olkin) value (>.60), multivariate normality, and absence of outliers (Hair et al., 2006). According to the results of KMO and Barlett's Test of Sphericity, KMO value (.95) was exceeding the criterion value of .60, and there was no item correlation coefficient which was less than .30. except from one item that was excluded from the items. Barlett Test resulted in significant value which meant that correlation matrix was significantly different than identity matrix (Tabachnick & Fidell, 2007).

Existence of multivariate normality was tested by running norm test macro in PASW 18.0. This analysis yielded Small's Test with a significant result indicating the violation of multivariate normality, but this test was a kind of Chi-Square Test and it was sensitive to sample size (Tabachnick & Fidell, 2007). Mardia's test resulted in significant and violated the assumption. Cases which have Mahalonobis Distance values larger than the critical value (92.70 for $\alpha = .05$ and df = 50) were checked to detect multivariate outliers. Five out of 531 items were detected as outliers. Accordingly, in factor analysis, Principal Axis Factoring was

preferred as the extraction method. As it is also presented in the pattern matrix of the factors in table 3.4, the factor analysis indicated that the new instrument had four factors which were named as: Internal Locus of Control, Pessimism, Self-esteem, and Lack of Social Competence. Additionally, of the original scale used by Gürgan (2006), only one item was excluded from the new scale in accordance with the pattern matrix results. Consequently, the scale included 49 items, it has 4 dimensions and the Cronbach's Alpha calculated for all dimensions are presented in Table 3.4.

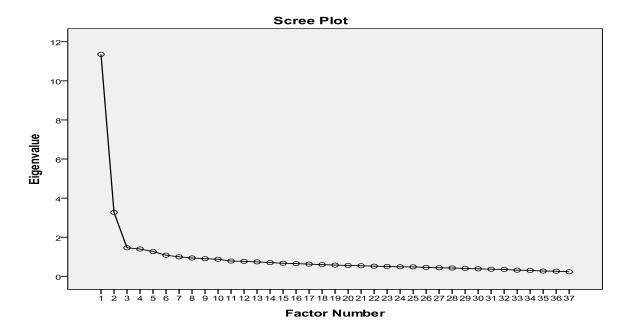


Figure 3.2. Scree Plot of Eigenvalue about Resiliency Scale

Table 3.4

Pattern Matrix for Resiliency Scale Factors

		Factors		
Item No	1	2	3	4
22	,812	-,075	-,054	,095
24	,689	,155	-,017	-,112
21	,687	-,099	,010	,013
18	,674	,060	-,057	-,055
44	,674	-,053	-,013	-,030
47	,655	-,036	-,119	-,027
29	,644	,084	,160	-,115
37	,614	-,021	,023	,012
20	,607	-,099	,029	,035
48	,593	-,066	,036	,063
25	,592	,113	,089	-,105
39	,582	-,171	-,027	,050
49	,581	-,318	-,071	,063
30	,578	-,030	,174	,013
32	,564	-,100	,074	-,026
28	,524	,007	,140	-,147
31	,469	-,073	,001	-,027
34	,460	,045	,128	-,023
15	,418	,078	,116	-,219
11	,398	-,089	,198	,061
13	,360	,031	,218	-,101
2	,311	-,039	,214	-,093
38	,004	,651	-,048	,022
46	-,059	,619	-,063	,006
42	-,049	,563	-,048	-,043

Rotation Method: Oblimin with Kaiser Normalization

Table 3.4 (continued).

Pattern Matrix for Resiliency Scale Factors

Factors				
Item No	1	2	3	4
45	-,099	,547	-,061	,048
40	-,120	,521	-,048	,069
41	-,062	,495	-,083	,047
14	-,010	,454	,039	,195
50	-,200	,413	,037	,132
43	-,027	,388	-,111	,220
23	-,008	,358	-,003	,343
27	-,051	,329	,031	,279
26	-,006	,304	,035	,066
6	,010	-,159	,772	,040
5	,064	-,129	,679	,023
7	,294	,113	,556	-,093
8	,348	,065	,413	-,078
4	,316	,028	,318	,018
3	-,109	-,136	,062	,563
33	,012	,106	-,087	,531
35	-,049	,139	,049	,509
12	-,034	,031	-,037	,464
19	-,039	,188	-,016	,439
17	,113	,147	-,164	,428
16	-,159	,264	,092	,412
9	-,014	,170	-,038	,402
10	,081	,297	-,148	,311
36	-,091	,237	,043	,304
1	-,155	,138	,042	,225

Rotation Method: Oblimin with Kaiser Normalization

Table 3.5

Cronbach's Alpha Results of Resilience Factors of Resiliency Scale

Factors of Resilience	Cronbach's Alpha	Number of Items	
Internal Locus of Control	.89	22	
Pessimism	.80	11	
Self-Esteem	.82	5	
Lack of Social Competence	.77	11	

3.6. Data Collection Procedure

With the development of the scale, necessary permissions to use the scales in the research were obtained from the METU Human Ethics Committee (HSEC). Then, the scales and the proposal of the study were submitted to the Provincial Directorate of Education (PDE) for the permission to administer the scales at the selected schools from the districts (Çankaya, Yenimahalle, Mamak, Altındağ, Keçiören, Sincan, Etimesgut, and Polatlı) of Ankara. After the approval, the instruments consisting of a demographic data form and two scales (RFOC and Resilience Scales) were administered to the subjects with a written consent to participate into the study. During the data collection process, the researcher observed the participants to see whether they responded the instrument independently and the researcher answered the questions of the participants to prevent missing data.

3.7. Data Analysis

Before the data analysis, data were checked for missing and incorrect values. No incorrect

entry was detected, but in the demographic variables and scales items, there were some missing values not exceeding 5% percent, except for one factor of the Resiliency Scale that is slightly exceeding 5%, but does not significantly affect the results. Moreover, it was found that missing values followed a random pattern by running *Little's MCAR Test* (Little & Rubin, 1987). In the study, three separate multiple regression analysis was preferred in order to analyze how three dependent variables (emotional readiness for change, cognitive readiness for change, and intentional readiness for change) can be predicted by four independent variables (internal locus of control, pessimism, self-esteem, and lack of social competence). Therefore, the level of significance was set as (α) .017 in order to control Type I error rate that is crucial by dividing the alpha level with three (.05/3 = .017) that is new criterion level for significance (Field, 2005).

3.8. Limitations of the Study

The following limitations are associated with this study: First of all, the study was limited to the teachers of selected schools from the districts (Çankaya, Yenimahalle, Mamak, Altındağ, Keçiören, Sincan, Etimesgut, and Polatlı) in Ankara. Therefore, the results do not represent all the teachers in Turkey.

Secondly, the data were collected from different schools in 8 districts, so the location can be an internal validity threat for the study. On the other hand, the absence of qualitative data might be another limitation because supporting results with qualitative findings would be supplementary. However, only quantitative methods are used in the scope of the present study. Especially, resilience is a concept that is explained with several factors in the literature, therefore using alternative measures; particularly qualitative methods could bring stronger

evidence to the study. As last, the subject characteristics can be another internal validity threat because the years of experience between teachers ranged from 1 to 23 years and the varying ages of participants, as well. Such differences among the participants might be a limitation for the study.

CHAPTER IV

RESULTS

This chapter is presented under the following headings: descriptive statistics of Readiness for Organizational Change Scale and Resiliency Scale, and multiple linear regression analyses with the necessary assumptions.

4.1. Descriptive Statistics Results of Readiness for Organizational Change and Resiliency Scale

In order to understand the relationship between teachers' cognitive, emotional, and intentional readiness for organizational change and their resilience, the RFOC-CEI and Resiliency Scales were administered to 691 teachers working at primary and secondary level public schools in Ankara. In the scales, the response types were arranged with a five Likert-type scale ranging from strongly disagree (1) to strongly agree (5) for readiness for organizational change scale and totally unrelated (1) to totally related (5) for resiliency scale. The scores closer to (5) indicate higher level of readiness and resilience among teachers while the scores closer to (1) mean lower level of readiness and resilience.

In Table 4.1, the descriptive statistics of variables indicated that the mean scores of teachers' cognitive readiness for organizational change (*M cognitive*= 4.01, *SD cognitive*=1.0) and teachers' emotional readiness for organizational change (*M emotional*= 4.09, *SD emotional*=1.0) are approximate to each other. Moreover, the mean score of intentional readiness for organizational change (*M intentional*= 3.83, *SD intentional*=.88) is slightly lower than the

former ones. In Resiliency Scale, the descriptive statistics of variables demonstrated that the mean score of self-esteem (*M self-esteem* =3.94, *SD self-esteem* =.66) is the lowest of all scores. Furthermore, internal locus of control (*M internal locus of control*=3.96, *SD internal locus of control*=.60) is also approximate to each other. On the other hand, the mean score of lack of social competence (*M lack of social competence* = 4.07, *SD lack of social competence* =.69) is slightly higher than the former ones, and the mean score of pessimism (*M pessimism*=4.24, *SD pessimism*=.68) is the highest of all.

Table 4.1

Descriptive Statistics Results of Readiness for Change and Resiliency Scale

Variables	Dimensions	Mean	Std. Deviation
Readiness	for Change		
	Cognitive Readiness for Change	4.01	1.0
	Emotional Readiness for Change	4.09	.94
	Intentional Readiness for Change	3.83	.87
Resiliency	y Scale		
	Internal Locus of Control	3.96	.60
	Pessimism	4.24	.68
	Self-Esteem	3.94	.66
	Lack of Social Competence	4.07	.69

4.2. Pearson Product-Moment Correlation Coefficients among Predictor Variables and Criterion Variables.

The multicollinearity was checked through bivariate correlations, it was found that there was

no multicollinearity between the factors of resilience (self-esteem, internal locus of control, pessimism, and lack of social competence) and the factors of readiness for organizational change (intentional readiness for change, emotional readiness for change, and cognitive readiness for change), as displayed in Table 4.2, since the correlation coefficients did not exceed the critical value of .90 (Field, 2005), and tolerance values were all above .20 with the VIF values that were less than 4. Accordingly, the linear regression analysis is appropriate to examine.

Table 4.2

Pearson Product-Moment Correlation Coefficients among Predictor Variables and Criterion Variables.

	1	2	3	4	5	6	7
Lack of Social Competence	1						
Self-esteem	.37**	1					
Pessimism	.70**	.37**	1				
Internal Locus of Control	.52**	.68**	.52**	1			
Cognitive Readiness For Change	.16**	.26**	.18**	.20**	1		
Emotional Readiness For Change	.33**	.19**	.30**	.26**	.57**	1	
Intentional Readiness For Change	.19**	.31**	.19**	.31**	.78**	.54**	1

^{**}p<.01

4.3. Multiple Linear Regression Analysis about Emotional Readiness for Organizational Change and Resiliency Factors

A simultaneous multiple linear regression analysis was conducted to indicate how well

resilience factors (internal locus of control, pessimism, self-esteem, and lack of social competence) predicted emotional readiness for change. In multiple regression analysis, an outcome variable is predicted by several predictors, and simultaneous regression was preferred since there was no theoretically any kind of order in the effects of the independent variables (Field, 2005).

4.3.1. Assumptions of Multiple Linear Regression

Prior to the data analysis, the assumptions that are normality, absence of outliers, homoscedasticity, linearity, and independent errors were checked. First of all, as displayed in Normal P-P plot (Figure 4.1.), and histogram (Figure 4.2.), the normality assumption was checked and small violation was observed considering the related analysis. Besides that, for outliers, there seems to be a small violation, but this analysis is robust against them because of large sample size (Field, 2005).

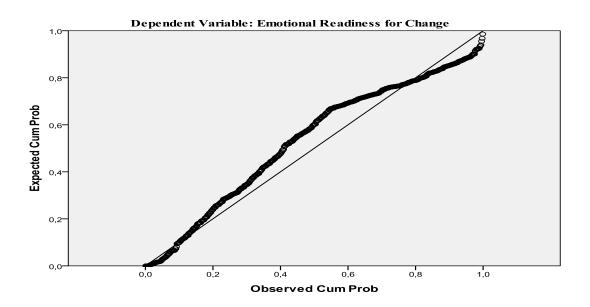


Figure 4.1. Normal P-P plot for Outliers and Normality about Emotional Readiness for Change

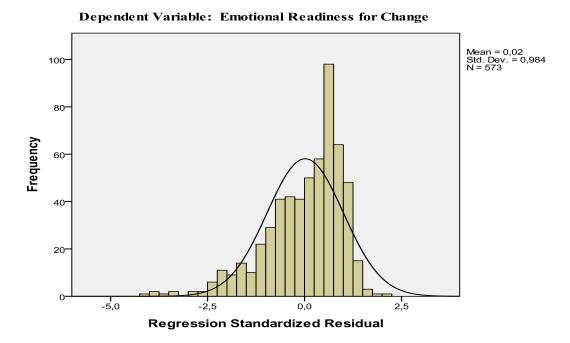


Figure 4.2. Histogram for Normality about Emotional Readiness for Change

To validate the homoscedasticity and linearity, scatter plots were checked to control the patterns and differences in the spread of each scatter and linear relationship between variables. As displayed in Figure 4.3., the variables are scattered randomly without creating a certain shape (Field, 2005). Hence, it can be argued that the assumption is met.

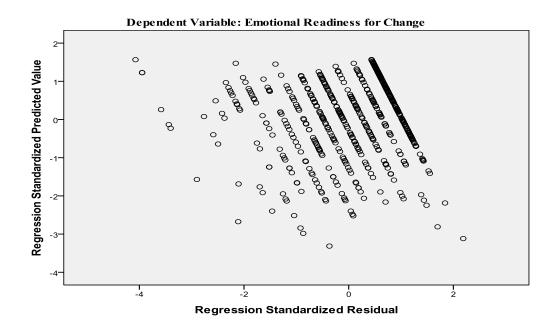


Figure 4.3 Scatter Plots for Homoscedasticity and Linearity Assumptions for Emotional Readiness for Change

Lastly, the assumption of independence of residuals was checked and it was observed that Durbin-Watson value (1.953) was between 1.5 to 2.5. Therefore, it can be argued that this assumption was also satisfied.

4.3.2. Results of Multiple Linear Regression Analysis about Emotional Readiness for Organizational Change

A simultaneous multiple linear regression analysis was conducted to determine the best linear combination of internal locus of control, pessimism, self-esteem, and lack of social competence. The combination of variables partially contributed to emotional readiness for change, F(4,602) = 21, 207, p < .017 and the adjusted R squared value was .12. This indicates

that 12% of the variance in emotional readiness for change was explained by the model. However, in this model, of the combination, only lack of social competence factor significantly predicts the emotional readiness for change as displayed in Table 4.3.

Table 4.3

Simultaneous Multiple Linear Regression Analysis Summary for Internal Locus of Control,

Pessimism, Self-esteem, and Lack of Social Competence (N=606)

Variable	В	SEB	β	
Internal Locus of Control	,092	,092	,059	
Pessimism	,148	,078	,107	
Self-esteem	,037	,076	,026	
Lack of Social Competence	,297	,077	,217*	
(Constant)	1,745	,279		

Note. $R^2 = .12$; F(4,602) = 21,207, p < .017

4.4. Multiple Linear Regression Analysis about Cognitive Readiness for Organizational Change and Resiliency Factors

The necessary assumptions that are normality, absence of outliers, homoscedasticity, linearity, and independent errors were checked. Firstly, the normality assumption was controlled and a small violation was observed considering the related analysis, and for outliers, there also seems to be a small violation as displayed in Normal P-P plot (Figure 4.4.), and histogram (Figure 4.5.), but this analysis is robust against them because of large sample size (Field, 2005).

^{*}*p* < .017.

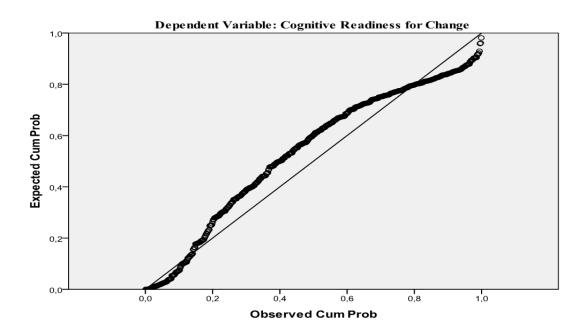


Figure 4.4. Normal P-P plot for Outliers and Normality about Cognitive Readiness for Change

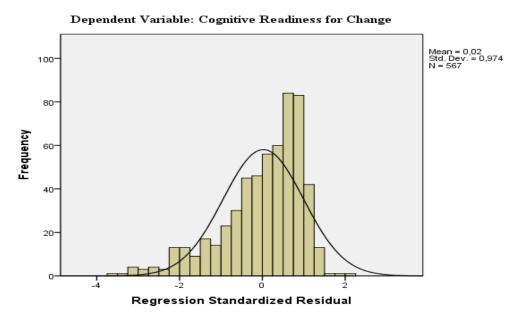


Figure 4.5. Histogram for Normality about Cognitive Readiness for Change

To validate the homoscedasticity and linearity, scatter plots were checked to control the

patterns and differences in the spread of each scatter and linear relationship between variables. As displayed in Figure 4.6., the variables are scattered randomly without creating a certain shape (Field, 2005).

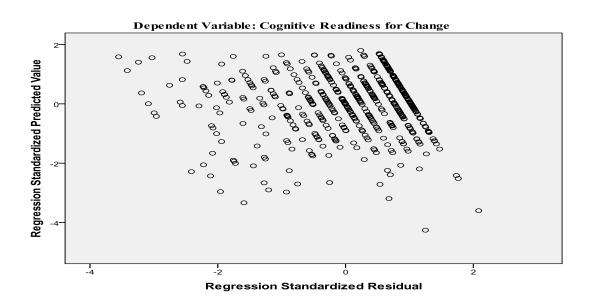


Figure 4.6. Scatter Plots for Homoscedasticity and Linearity Assumptions about Cognitive Readiness for Change

Lastly, the assumption of independence of residuals was checked and it was observed that Durbin-Watson value (1.915) was significantly between 1.5 to 2.5. Therefore, there was no problem about the residuals; thus, the assumptions seem to be met.

4.4.1. Results of Multiple Linear Regression Analysis about Cognitive Readiness for Organizational Change

A simultaneous multiple linear regression analysis was conducted to understand the linear combination of internal locus of control, pessimism, self-esteem, and lack of social competence. The combination of variables partially contributed to cognitive readiness for change, F(4,602) = 13, 121, p < .017 and the adjusted R squared value was .07. This indicates that 7% of the variance in cognitive readiness for change was explained by the model. However, in this model, of the combination, only self-esteem factor significantly predicted the cognitive readiness for change as displayed in Table 4.4.

Table 4.4

Simultaneous Multiple Linear Regression Analysis Summary for Internal Locus of Control,

Pessimism, Self-esteem, and Lack of Social Competence (N=606)

Variable	В	SEB	β
Internal Locus of Control	-,085	,307	-,051
Pessimism	,096	,101	,065
Self-esteem	,395	,084	,257*
Lack of Social Competence	,085	,085	,058
(Constant)	2,026	,307	

Note. $R^2 = .080$; F(4,602) = 13, 121, p < .017

4.5. Multiple Regression Analysis about Intentional Readiness for Organizational Change and Resiliency Factors

Before starting data analysis, the assumptions of multiple linear regression were checked. First of all, the normality assumption was checked and no major violation was observed considering the related analysis. Besides that, for outliers, there does not seem to be a

^{*}*p* < .017.

violation, but this analysis is already robust against them because of large sample size (Field, 2005).

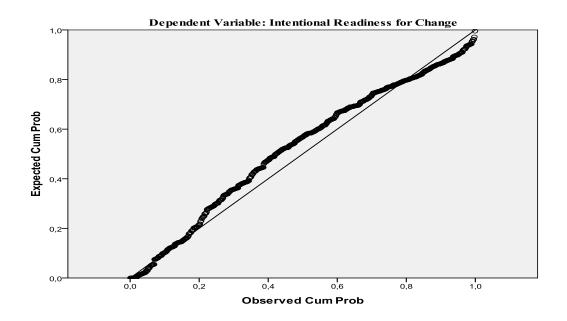


Figure 4.7. Normal P-P plot for Outliers and Normality about Intentional Readiness for Change

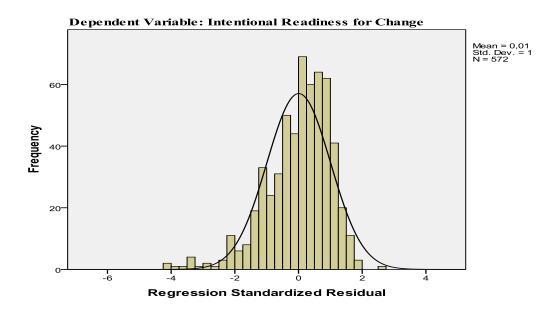


Figure 4.8. Histogram for Normality about Intentional Readiness for Change

To validate the homoscedasticity and linearity, scatter plots were checked to control the patterns and differences in the spread of each scatter and linear relationship between variables. As displayed in Figure 4.4, the assumption seems to be met.

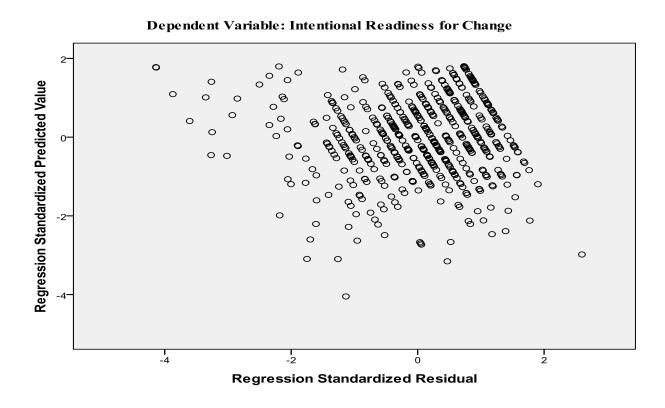


Figure 4.9. Scatter Plots for Homoscedasticity and Linearity Assumptions about Intentional Readiness for Change

Lastly, the assumption of independence of residuals was checked and it was observed that Durbin-Watson value (1.953) was between 1.5 to 2.5. Therefore, there was no problem about the residuals.

4.5.1. Results of Multiple Linear Regression Analysis about Intentional Readiness for Organizational Change

A simultaneous multiple linear regression analysis was conducted to determine the best linear combination of internal locus of control, pessimism, self-esteem, and lack of social competence. The combination of variables partially contributed to intentional readiness for change, F(4,602) = 23,049, p < .017 and the adjusted R squared value was .13. This indicates that 13% of the variance in intentional readiness for change was explained by the model. However, in this model, of the combination internal locus of control and self-esteem factors significantly predicted the intentional readiness for change as displayed in Table 4.5.

Table 4.5

Simultaneous Multiple Linear Regression Analysis Summary for Internal Locus of Control,

Pessimism, Self-esteem, and Lack of Social Competence (N=606)

Variable	В	SEB	β
Internal Locus of Control	,23	,085	,158*
Pessimism	,030	,072	,023
Self-esteem	,309	,070	,232*
Lack of Social Competence	-,019	,071	-,015
(Constant)	1,647	,258	

Note. $R^2 = .12$; F(4,602) = 21, 207, p < .017

^{*}*p* < .017.

CHAPTER V

DISCUSSION

In this chapter, firstly, the results of the study are discussed, then some implications for practice are suggested, and lastly, the recommendations for further research are stated in accordance with the shortcomings of the study.

5.1. Discussion of the Study Results

This study was a correlational study in which the relationships between teachers' cognitive, emotional, and intentional readiness for organizational change and resilience were examined. The participants of the study were 691 teachers working at primary and secondary level public schools. The primary aim of the study was to investigate how the resiliency factors (internal locus of control, pessimism, self-esteem, and lack of social competence) predict the readiness for organizational change factors (emotional, cognitive, and intentional readiness for organizational change).

According to the descriptive statistics results of readiness of teachers towards organizational change, participating teachers' cognitive, emotional, and intentional level of readiness is much closer to the mean of 5 ("strongly agree") which is evidence for their cognitively, emotionally , and intentionally ready for the change. However, the intentional level of readiness is slightly lower than other two variables. Especially, in this factor, the 9th item asking whether they devote themselves to the change process or not is so low with a mean score of 3.22. On the

other hand, for other items of this factor, teachers' responses indicate that they are keen on doing something for the change in their organizations, but they are doubtful about devoting themselves. Devoting may be an extraordinary term for teachers because it refers to giving (one's time, attention, or self) entirely to a particular activity, pursuit, cause, or person. Therefore, teachers may see such an activity extreme for their capacity or they may expect extra incentives to commit a dedication process. Another explanation for the low scores on intentional readiness can be related to "how they perceive change interventions". Considering the highly centralized nature of the Turkish Education System, teachers may consider change interventions as the job of top management or middle level management. In other words, the centralization can be considered as a core value in the system. As a result, teachers may emotionally and cognitively feel ready for the change, but putting these feelings and thinking into practice seems to be a different dimension for the teachers. This finding basically suggests that the teachers may need to be involved more and more in change interventions, which is likely to contribute to realization of change interventions successfully.

The descriptive statistics results of resilience indicated that teachers find themselves resilient enough with a total mean score (M Resiliency = 4.05) of all the factors. However, teachers' mean score about their resilience in relation to the internal locus of control is not as high as other two factors. Differently from other sub-scales, the internal locus of control dimension contains 22 items that are asking a variety of questions about teachers' characteristics in which they are evaluated how they see the sources of their successes, from external or internal powers. In this factor, especially, in regard to the responses of the teachers to the 24^{th} question, the participants seem to be unsure about their capability to return the bad situations to the better with a mean score of 3.34. On the other hand, teachers generally see themselves peace of mind with a total mean (4.37) in the same factor.

Additionally, teachers' pessimism has the highest mean score of 4.24, the participants especially stated that they find their life meaningless with a mean score of 4.56, and the 26th item questioning the participants whether they find themselves admirable or not indicates that teachers do not much appreciate themselves about their precious skills with a mean score of 3,66. These two questions much more illustrate the self-efficacy and self-esteem factors of the teachers, which are the protective factors to strengthen the individuals towards the adverse situations (Gu & Day, 2007). Teachers' low self-efficacy and self-esteem may result from their work characteristics and job satisfaction because the characteristics of the Turkish Education System contain top-down and centralized decision making model instead of participating teachers to the decision making processes, so the teachers feel themselves just the role players of the system and so cannot experience any kind of personal success and job satisfaction in a visionary way. This finding also supported the influence of self-esteem and self-efficacy on the employee perceptions of work characteristics and job satisfaction (Judge, Locke, Durham, & Klugger, 1998).

In multiple linear regression results, teachers' intentional, emotional, and cognitive readinesses for change were explained with their resilience traits. For the cognitive readiness for change dimension, of the resilience factors, higher self-esteem trait seemed to enhance the cognitive readiness of members towards organizational change. Similarly, the literature also supports the idea in various ways: Taylor and Brown (1988) associated self-esteem with openness of people towards change, or Wanberg and Banas (2000) defined a personal resilience that is a combination of self-esteem, optimism, and perceived control, were related to higher levels of change acceptance. On the other hand, self-esteem is thought to incorporate the self-efficacy elements (Gizir, 2004) and defined as "the feelings and thoughts that individuals have about their competence and worth, about their abilities to make a difference,

to confront rather than retreat from challenges, to learn from both success and failure, and to treat themselves and others with respect" (Brooks, 1994, as cited in Kirby & Fraser, 2002, p.26). Likewise, Armenakis et al. (1993) says: "individuals will avoid activities believed to exceed their coping capabilities, but will undertake and perform those which they judge themselves to be capable of" (p. 686). These statements prove the role of self-efficacy and self-esteem for improving individuals' being ready for challenging change interventions.

Secondly, intentional readiness for change was significantly predicted by internal locus of control and self-esteem factors. Both of the resilience factors positively improve the level of intentional readiness towards organizational change. As indicated above, self-esteem has a noteworthy role in order to understand how people treat the offered changes. Besides that, internal locus of control is a belief that one's efforts and actions shape his life rather than luck or destiny (Gizir, 2004). In other words, it defines how people are confident about themselves as a player in terms of doing a change in an organization rather than external forces. Accordingly, in the literature, this factor can partially be associated with self-efficacy belief since, as Holt et al. (2007) stated, readiness for change is influenced by employees' beliefs of self-efficacy.

As last, emotional readiness for change factor was predicted by lack of social competence trait; however the results are inconsistent with the literature. While social competence includes positive social skills like openness to change, communication skills, and flexibility with others (Benard, 1991; Martinek & Hellinson, 1997), the study indicated that lower social competence increases the level of emotional readiness for change. In both resilience and readiness for change literature, social competence and its components mentioned above are presented as positive individual traits. Such a result in this study may be due to the

characteristics of the sample, because the validity and reliability of the items asked to the participants were ensured with necessary procedures. On the other hand, much more studies with different methods about resilience and readiness for change at schools may help us understand it better.

In sum, the study provides significant evidence for the relationship between teachers' readiness for change and some dimensions of resilience among teachers in primary and secondary public schools. The existing literature also supports the factors of resilience about their influence on readiness. Especially, resilience and openness to change association also supports the probability of readiness and resilience relationship. Consequently, the results of the study demonstrate that resilience is another individual factor for readiness of teachers towards organizational change.

5.2. Implications for Practice

Like educational organizations, all organizations compete for the survival by adapting themselves to the changing environment. However, the relevant literature about organizational change shows that change interventions often result in failure in organizations because of different reasons; especially negative employee attitudes and ignoring human side of the change are referred as the causes of failures. In this sense, teachers' readiness for change needs to be assessed in order to gain satisfactory results in change attempts. Accordingly, the results of this study provide empirical evidence about how the readiness of teachers towards change can be explained with teachers' resiliency traits.

In terms of change practice, schools are in a need of successful change attempts, so the findings of the study revealed that readiness of teachers towards change can be enhanced with some resiliency traits such as higher self-esteem and internal locus of control. Therefore, such empirical evidences can be a facilitator for educational organizations to handle with the negative attitudes of teachers towards the proposed changes. Accordingly, change practitioners at schools or higher levels of educational organizations may focus on such resilience dynamics in order to make teachers more durable for the continuing changes. Additionally, a kind of resilience development program that strengthens self-esteem and internal locus of control among teachers can be established to lead the change processes more professionally.

In addition to the above, theoretically, the newly developed Turkish version of Readiness for Organizational Change Scale contributed to the field with a three structure. In addition to this, the resiliency scale which had been originally prepared for teacher candidates was adapted to collect data from teachers working at schools with a four factor. These scales are presented for the use of the researchers interested in the study. As last, the research contributed to the field by doing a resilience study with teachers, which has not been studied in Turkey as much as done outside of Turkey. As a result, resilience and readiness for organizational change concepts at schools may guide the policy-makers and change practitioners for more successful change interventions.

5.3. Recommendations for Further Research

This study yielded some findings to the relevant literature, but some recommendations for further research can be suggested owing to the shortcomings of this study.

First of all, the target population of the study is limited with 31 primary and secondary public schools in Ankara; therefore, this study can be done in private schools, in other cities and with much more schools in order to increase the generalizability of the findings. Such a study may also give the chance of comparing the results coming from private and public schools. Besides that, some other stakeholders (e.g.; students, parents, and policy- makers) can be added to the study to compare the readiness for organizational change and resilience relationship in a broader context.

In addition to the above, the newly developed Readiness for Organizational Change Scale can be validated through much more studies with different participants. Similarly, Resiliency Scale can also be used in more studies in order to validate it. Besides that, this study just focused on the results of quantitative data, but a broader qualitative study can also be done in order to see how the values result in. Especially, resilience concept has been handled with a number of ways in the literature, particulary children's resiliency; thus, studies about teachers' resiliency are quite new in the literature, mainly in Turkey. Much more studies about teachers with different measurement methods can be benefical to understand resilience concept better.

As last, resilience concept is explained with several dynamics (risk factors, protective factors, and positive outcomes) except from the dimensions used in this study; therefore, teachers' resiliency issue can be evaluated with different resilient traits, as well. This may much more illustrates the relationship between resilience and readiness for organizational change.

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APPENDICES

APPENDIX A

CONSENT FORM FOR DATA COLLECTION

Bu çalışma, ODTÜ Eğitim Bilimleri Bölümü yüksek lisans öğrencisi Ömer ÇALIŞKAN tarafından, Yrd.Doç.Dr. Yaşar KONDAKÇI'nın danışmanlığında yürütülen bir yüksek lisans tez çalışmasıdır. Ankara ilini kapsayan bu çalışmada amaç, öğretmenlerin yılmazlıkları ile örgütsel değişime hazır olma durumları arasındaki ilişkiyi incelemektir. Bu çalışmanın sonucunda elde edilecek bilgiler okullardaki değişim yönetiminin daha etkin yapılmasına katkı sağlayacaktır. Çalışmaya katılım tamamen gönüllülük temelinde olmalıdır. Ankette, sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel amaçlarla kullanılacaktır.

Aşağıda yılmazlık ve değişime hazır olma durumuna yönelik toplam 62 ifade bulunmaktadır. Lütfen, her bir maddeyi okuyarak size en uygun seçeneği işaretleyiniz. Anket, genel olarak kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda anketi uygulayan kişiye, anketi tamamlamadığınızı söylemeniz yeterli olacaktır. Anket sonunda, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Ömer Çalışkan (Tel: 0312 210 40 46; E-posta: omerc@metu.edu.tr) ile iletişim kurabilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyisim	Tarih	İmza
	/	

APPENDIX B

DEMOGRAPHIC DATA FORM

Kısım I. Bu kısımda sizinle ilgili genel bilgiler sorulmaktadır. Lütfen her bir maddeyi okuyup durumunuz en iyi yansıtan seçeneği (X) ile işaretleyiniz.						
Cinsiyet	☐ Kadın	☐ Erkek				
Yaş						
Medeni hali	□ Evli	☐ Bekar				
Çocuğunuz var mı?	□ Evet	☐ Hayır				
Eşinizin iş durumu	☐ Çalışıyor	☐ Çalışmıyor				
Okulunuzu hizmet verdiği öğretim düzeyi	☐ Okul öncesi☐ Lise	□İlköğretim				
Meslekteki yılınız						
Mesleki durumunuz	□ Kadrolu □ Sözleşmeli □ Vekil					
	☐ diğer					
Şimdiye kadar herhangi idari görevi yürüttünüz mü?	□ Evet □ Hayır					
Yürüttüğünüz idari görevler	☐ Müdür ☐ Müdür yardımcısı☐ Müdür muavini☐ Diğer (yazınız)					
Okulunuzdaki yaklaşık öğrenci sayısı						
Şu ana kadar herhangi bir hizmet içi eğitim aldınız mı?	□ Evet	☐ Hayır				
Şu ana kadar herhangi bir kurumsal değişim projesinde görev aldınız mı?	□ Evet	☐ Hayır				

APPENDIX C

READINESS FOR ORGANIZATIONAL CHANGE SCALE (SAMPLE ITEMS)

Kısım II. Bu kısımda sizlerin değişime hazır olma durumunuza yönelik 12 ifade bulunmaktadır. Değişim, kurumunuzun yapısal ve işlevsel özelliklerinde yapılan herhangi bir farklılığı ifade eder. Bu değişimler Milli Eğitim Bakanlığı'nın tasarlayıp uyguladığı değişimleri (örnek, öğrenci kayıt sisteminde değişim, not giriş sisteminde yapılan değişim, müfredatın içeriğinde yapılan değişim, yönetim süreçlerinin bilgisayar ortamına aktarılması, sizlerin personel özlük durumlarınızdaki değişikler vs.) ve/veya kurumunuzun/okulunuzun tasarlayıp uyguladığı değişimleri (örnek, ailelerle iletişimdeki değişimler, öğrencilere yönelik faaliyetlerin geliştirilmesi, okul binasındaki fiziki değişiklikler vs.) ifade eder. Lütfen her bir ifadeyi okuyarak, (1 tamamen katılmıyorum) ve (5 tamamen katılıyorum) olmak üzere 1'den 5'e kadar size en uygun seçeneği (X) ile işaretleyiniz.

	Tamamen katılmıyorum				Tamamen katılıyorum
Değişimi yenileyici bulurum	1	2	3□	4	5□
3. Değişim genellikle hoşuma gitmez	1	2	3 □	4 □	5
6. Kendimi değişim sürecine adamak isterim	1	2	3□	4	5
8. Değişim işimde daha fazla gayret etmem yönünde teşvik edicidir	1	2	3□	4	5
10. Değişim genellikle bana huzursuzluk verir	1	2	3□	4	5
12. Değişim okulumdaki eksikliklerin giderilmesine yardımcı olur	1□	2	3□	4□	5□

APPENDIX D

RESILIENCY SCALE (SAMPLE ITEMS)

Kısım III. Bu kısımda sizlerin bireylerin yılmazlık özelliklerine yönelik maddeler bulunmaktadır. Lütfen her bir ifadeyi okuyarak sizi ne derecede tanımladığını belirtiniz.

| Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum | Volum

APPENDIX E

RESEARCH PERMISSION DOCUMENT

T.C. ANKARA VALİLİĞİ Milli Eğitim Müdürlüğü

BÖLÜM : İstatistik Bölümü

SAYI : B.B.08.4.MEM.4.06.00.04-312/1/0549

KONU : Araştırma İzni Ömer ÇALIŞKAN 14/12/2009

ORTA DOĞU TEKNİK ÜNİVERSİTESİNE (Eğitim Bilimleri Anabilim Dalı)

İlgi : a) MEB Bağlı Okul ve Kurumlarda Yapılacak Araştırma ve Araştırma Desteğine Yönelik İzin ve Uygulama Yönergesi.

 b) Üniversiteniz Eğitim Bilimleri Anabilim Dalının 24/11/2009 tarih ve 16482 sayılı yazısı.

Üniversiteniz Eğitim Bilimleri Anabilim Dalı Yüksek Lisans programı Öğrencisi Ömer ÇALIŞKAN' ın "Öğretmenlerin Psikolojik Yılmazlıkları ile Değişime Hazır Olma Durumları Arasındaki İlişkinin İncelenmesi" konulu tez ile ilgili çalışma yapma isteği Müdürlüğümüzce uygun görülmüş ve araştırmanın yapılacağı İlçe Milli Eğitim Müdürlüğüne bilgi verilmiştir.

Mühürlü anketler (5 sayfa) ekte gönderilmiş olup, uygulama yapılacak sayıda çoğaltılması ve çalışmanın bitiminde iki örneğinin (CD/disket) Müdürlüğümüz İstatistik Bölümüne gönderilmesini rica ederim.

Müdür a. Müdür Yardımcısı

EKLER : Anket (5 sayfa)