

T.C.
YAŞAR UNIVERSITY
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DEPARTMENT OF BUSINESS ADMINISTRATION
MASTER'S THESIS

**THE RELATIONSHIP BETWEEN PSYCHOLOGICAL RESILIENCE AND
DEPARTMENTAL COMMITMENT IN INTENSIVE CARE UNIT AND EMERGENCY
ROOM EMPLOYEES: A STUDY OF PRIVATE IZMIR HOSPITALS**

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SUMMARY

Master's Thesis

THE RELATIONSHIP BETWEEN PSYCHOLOGICAL RESILIENCE AND DEPARTMENTAL COMMITMENT IN INTENSIVE CARE UNIT AND EMERGENCY ROOM EMPLOYEES: A STUDY OF PRIVATE IZMIR HOSPITALS

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Positive Organizational Behavior (POB) finds its roots in the Positive Psychology (PP) movement. Earlier studies have found Psychological Capital (PsyCap), the core construct of POB, to be positively correlated with positive work outcomes such as organizational commitment and job satisfaction and negatively correlated with negative work outcomes such as turnover.

By studying psychological resilience (one dimension of PsyCap) in a high stress context (intensive care units (ICUs) and emergency room (ER) departments) outside of North America, the author hopes to add to the current body of research on POB. To accomplish this, 106 surveys measuring psychological resilience and departmental commitment were collected from private hospitals throughout Izmir and analyzed using IBM SPSS 20 statistical package. The results showed a correlation between psychological resilience and affective and normative departmental commitment.

Key Words: *Positive Organizational Behavior, Human Resource Development, Psychological Capital, Employee Resilience, Health Management*

ABSTRACT

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THE RELATIONSHIP BETWEEN PSYCHOLOGICAL RESILIENCE AND DEPARTMENTAL COMMITMENT IN INTENSIVE CARE UNIT AND EMERGENCY ROOM EMPLOYEES: A STUDY OF PRIVATE IZMIR HOSPITALS

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The sample of this study consisted of a convenience sample of 106 employees ($n=106$) from the intensive care units (ICUs) and emergency rooms (ERs) of twelve private Izmir hospitals. The participating employees were 26.4% male ($n=28$) and 73.6% female ($n=78$). The ten question Connor-Davidson Resilience Scale (CD-RISC-10) was used to measure psychological resilience in employees, while the Meyer-Allen TCM scale was revised and used to measure departmental commitment. The Meyer-Allen TCM scale held to the past theoretical considerations as three factors were extracted using principal component analysis. The results showed a correlation between psychological resilience and affective and normative departmental commitment. Further studies using performance appraisals in addition to questionnaires may add to this research.

Key Words: *Positive Organizational Behavior, Human Resource Development, Psychological Capital, Employee Resilience, Health Management*

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ABBREVIATIONS

ICU	Intensive Care Unit
ER	Emergency Room
POS	Positive Organizational Scholarship
PP	Positive Psychology
POB	Positive Organizational Behavior
SWB	Subjective Well-Being
PsyCap	Psychological Capital
OB	Organizational Behavior
PWB	Personal Well-Being
HERO	Hope, Efficacy, Resilience, Optimism
HRD	Human Resource Development
PTSD	Post Traumatic Stress Disorder
CSF	Comprehensive Soldier Fitness
TCM	Three Component Model
COR	Conservation of Resources
CD-RISC-10	Connor-Davidson Resiliency Scale 10
PCA	Principal Component Analysis

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INTRODUCTION

Positive Organizational Behavior (POB) finds its place in the field of Positive Organizational Scholarship (POS), which itself alongside Positive Psychology (PP) began to emerge at the beginning of the 21st century. POB is defined as “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (Luthans, 2002a, p. 59). These three interrelated and concurrently growing fields have a positive agenda within the social sciences to bring focus to human strengths, virtues, and thriving rather than limitations, weaknesses and disease. Whereas POS focuses on the theory and research of positive states and dynamics within and across organizations (Cameron et al., 2003, p. 3-5) and PP has the mission to understand and foster the factors that contribute to human, group and institutional flourishing (Seligman and Csikszentmihalyi, 2000, p. 13), POB has a more specific focus, narrow inclusion criteria, and field of application.

In this paper, we add to the current field of POB by focusing on the core construct of psychological resilience and its relationship to departmental commitment in intensive care unit (ICU) and emergency room (ER) department employees. Youssef & Luthans (2007) studied the impact of three out of the four PsyCap resources (hope, optimism, and resilience) in the workplace, by looking at both self-reported employee performance as well as organizational performance appraisals (Youssef & Luthans, 2007, p. 774). Results suggested that resilience “may be more relevant in organizations in extreme conditions or undergoing crises or dramatic changes” and that it may be necessary to test these findings in cultural settings outside of the United States (Youssef & Luthans, 2007, p.792).

By studying resilience in a high stress context (ICUs and ER departments), we hope to more fully see the effect of resilience on positive work outcomes displayed by employees. We also hope to see whether current findings translate across cultures or if different patterns emerge by studying in a context outside of North America. This research can then be applied to human resource development in contexts where psychological resilience would benefit employees facing high amounts of stress and improve the overall departmental or organizational performance.

CHAPTER ONE

THE EMERGING FIELD OF POSITIVE ORGANIZATIONAL BEHAVIOR

Luthans (2002a, 2002b), in order to bridge the gap between the “simple prescriptive solutions” of popular business bestsellers and the “theory/research driven focus” of Organizational Behavioral (OB) scholars, proposed a new field of Positive Organizational Behavior (POB) (Luthans, 2002a, p. 58, 2002b, p. 696). He suggested the study of state-like qualities with a strong theoretical background that were relatively unique to OB. The proposed qualities of hope, optimism, confidence (efficacy), subjective well-being (SWB) and emotional intelligence were put forward because of their meeting of the inclusion criteria of being “measurable, open to development (i.e., state-like), related to performance improvement in the workplace” and also, “relatively unique to the OB field” (Luthans, 2002b, p. 699). In the following years of research, core constructs were further developed and labeled as Psychological Capital (or PsyCap to be further discussed later in this introduction). The inspiration and motivation of studying positive constructs and applying them to the workplace were birthed from the research and theory put forth by the positive psychology (PP) movement.

1.1 Roots in Positive Psychology

The emerging field of POB finds its roots in the positive psychology movement. The term can be seen as early as 1954 by Abraham Maslow in his work, *Motivation and Personality* whose last chapter is titled “Toward a Positive Psychology” (Maslow, 1954, p. 353). PP focuses on the strengths of people, rather than their weaknesses. The focus since World War II in the field of psychology has been primarily negative, focusing on curing mental illness, rather than the optimization of existing strengths (Seligman and Csikszentmihalyi, 2000). According to Myers (2000):

“An electronic search of Psychological Abstracts since 1887 turned up 8,072 articles on anger, 57,800 on anxiety, and 70,856 on depression, while only 851 abstracts mentioned joy, 2,958 happiness, and 5,701 life satisfaction. In this sampling, negative emotions trounced positive emotions by a 14-to-1 ratio (*even greater than the 7-to-1 margin by which treatment exceeded prevention*)” (Myers, 2000, p. 56).

A focus on pathology neglects the benefits of studying human strengths and virtues—benefits which may be a key ingredient missing to current prevention strategies or disease treatment. With Martin Seligman’s focus on positive psychology in his inaugural year as the American Psychological Association president and several special issues devoted to the field, its importance is gaining greater recognition. Seligman (1998) has described the focus on such positive emotions as happiness, optimism, etc. as the keys to human thriving (Seligman, 1998, p. 561).

1.2 Psychological Capital (PsyCap): A Core Construct of POB

The definition of POB details the inclusion criteria for its core concepts. This criteria includes “unique, state-like psychological capacities that can not only be validly measured, but also be open to development and performance management” (Luthans, 2002a, p. 695). In contrast to the constructs of intellectual capital, “what you know” (Van Marrewijk & Timmers, 2003, p. 175) and social capital, “who you know” (Adler & Kwon, 2002 p. 18, Wright & Snell, 1999, p. 63), Luthans et al. (2007) developed the construct of psychological capital comprised of the state-like qualities of hope, efficacy (confidence), resilience, and optimism (Luthans et al., 2007, p. 15). The characterization of “state-like” takes after Wright’s (2005) use of the term “trait-like” for psychological well-being (PWB) (Wright, 2005, p 223). Just as PWB is seen as distinct from traits (which are unchangeable over one’s lifetime) being relatively stable, yet developable

over a long period of time, the POB constructs are seen as “state-like” to distinguish them from positive “states” that are momentary and changeable. Thus, state-like capacities are seen as more stable. This state-trait continuum can be proposed as the following (Luthans et al. 2007: p544):

“(1) Positive States—momentary and very changeable; represents our feelings. Examples could include pleasure, positive moods, and happiness.

(2) “State-Like”—relatively malleable and open to development; the constructs could include not only efficacy, hope, resilience, and optimism, but also a case has been made for positive constructs such as wisdom, well-being, gratitude, forgiveness, and courage as having “state-like” properties as well (Luthans et al., 2007).

(3) “Trait-Like”—relatively stable and difficult to change; represents personality factors and strengths. Examples could include the Big Five personality dimensions, core self-evaluations, and character strengths and virtues (CSVs).

(4) Positive Traits—very stable, fixed, and very difficult to change. Examples could include intelligence, talents, and positive heritable characteristics.”

The PsyCap constructs of hope, efficacy, resilience, and optimism will be discussed in the following section.

1.2.1 Hope, Efficacy, Resilience, Optimism (HERO)

Luthans et al. (2007) has put forth hope, efficacy, resilience and optimism (creating the acronym, HERO) each as state-like psychological resource capacities that make up the POB core construct of PsyCap (Luthans et al., 2007, p. 4). Each of these four resources has a long history of being studied in the social sciences, but are relatively new to the field of OB. As developable constructs that may lead to improvement in

individual and organizational performance, they are valuable to both the field of OB and Human Resource Development (HRD). According to Luthans, Youssef & Avolio (2007), the resources are defined as the following:

“having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks, making a positive attribution (optimism) about succeeding now and in the future, persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed, when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success” (Luthans et al, 2007, p. 542)

1.2.2 Meta-Analysis of PsyCap Studies

In a meta-analysis that included 51 independent studies, representing a total of 12, 567 employees, tested the relationship between PsyCap and employee outcomes. Among these outcomes tested were desirable employee attitudes (*job satisfaction, organizational commitment, and psychological well-being*), behaviors (*citizenship*), and performance measurements (*self, supervisor evaluations, and objective*) as well as undesirable employee attitudes (*cynicism, turnover intentions, job stress and anxiety*) and undesirable employee behaviors (*deviance*) (Avey et al., 2011, p. 127-128). PsyCap was shown to have a strong positive relationship with desirable attitudes, behavior and performance, while having a negative relationship with undesirable employee outcomes. This early analysis of the emerging research of PsyCap demonstrates “a strong and significant relationship with established desired outcomes especially employee performance” (Avey et al., 2011, p. 149). These results also showed these relationships to be strongest in studies conducted in the United States and in the service sector.

CHAPTER TWO

AN OVERVIEW OF THE CONSTRUCT OF RESILIENCE

In the field of POB, resilience is defined as the ability to “bounce back” after facing adversity (Luthans et al. 2006, p. 26; Luthans & Youssef, 2007, p. 332). To gain a deeper understanding of the construct, we will review the development of resilience research over the past 50 years. For the sake of this discussion, we will use the term resilience to refer to the process of reacting to the stress of adversity, distinct from the term resiliency, which will refer to the specific personality trait (Luthar et al., 2000, p. 554). Richardson (2002) in his overview of the meta-theory of resilience and resiliency described three waves of research (Richardson, 2002, p. 307). The first wave looked into the qualities of resilient individuals. The second wave focused more on resilience as a process, while the third wave began to develop theories about resilience as a process. Similar to this format, we will review resilience in regards to the foundational research in development psychology that studied resilient individuals and the research of resilience as a developable trait and lastly. The theoretical background of the resilience process will be discussed in chapter four.

2.1 Early Resilience Studies

2.1.1 Children of Kawai Study

Emmy Werner and her colleague, Ruth Smith began a longitudinal study following 698 children born on the island of Kawai in 1955. Many of these children, although growing up with significant risk factors, were found to be thriving and living healthy productive lives into adulthood. The risk factors of peri-natal stress, poverty, daily instability, and serious parental mental health problems were thought to be major predictors of negative developmental outcomes. The children who lived competent lives

in the face of high-risk environments were labeled as resilient and in some cases, even invincible (Werner & Smith, 1982, p 25). As a result of these studies done by Werner and Smith (1977, 1982, 1992, 2001) these individuals were seen to possess specific traits of resiliency. Some of these characteristics included “being female, robust, socially responsible, adaptable, tolerant, achievement oriented, a good communicator, and having good self esteem” (Richardson, 2002, p. 309). They were also “consistently characterized by their mothers as active, affectionate, cuddly, good-natured, and easy to deal with” (Richardson, 2002, p. 309). Though, Werner and Smith (2001) would later state that buffers (protective factors) have a greater impact than risk factors or stressful life events, on children’s life outcomes, resiliency was still categorized as an innate capacity (Werner and Smith, 2001, p. 44).

2.1.2 Garmezy and the Minnesota Risk Research Project

Norman Garmezy (1984, 1991) studied children of schizophrenic mothers, who also thrived despite facing adversity and high risk factors (Garmezy, 1991, p. 416, Garmezy et al, 1984, p. 98). This research through the Minnesota Risk Research Project followed children from 1971 to 1982 and found the criteria of “effectiveness, high expectancies, positive outlook, self esteem, internal locus of control, self-discipline, good problem-solving skills, critical thinking skills, and humor” as traits of resilient children (Richardson, 2002, p. 309). His initial findings layed a strong foundation for resilience studies to come.

2.1.3 Rutter and London Inner-City Youth

Michael Rutter (1979, 1985) studied inner-city youth in London and found that 1 in 4 children demonstrated resilient qualities despite facing risk and adversity (Rutter, 1979, p. 50, Rutter, 1985, p. 598). These qualities included “easy temperament, being

female, a positive school climate, self-mastery, self-efficacy, planning skills and a warm, close, personal relationship with an adult” (Richardson, 2002, p. 309). Despite these authors’ attempts to draw attention to protective factors and environmental aspects of children’s development, resiliency came to be known as a rare phenomenon (Masten, 2001, p. 227). Later research was done displaying not only the commonness of the resilience process among most humans, but the ability to develop it during clinical treatment or harness it in the human population.

2.2 Resilience as a Common and Developable Trait

2.2.1 Masten’s “Ordinary Magic”

Research done by Ann Masten (2001) has demonstrated that resilience exhibited in children is the result of what she terms “ordinary magic” (Masten, 2001, p 227). Looking at studies focusing on developing competence, Masten and Coatsworth (1998) put forth several suggestions for early childhood education and preventative interventions (Masten & Coatsworth, 1998, p. 205). She suggests that resilience is brought about from “ordinary, normative human resources in the minds, brains, and bodies of children, in their families and relationships, and in their communities (Masten, 2001, p. 235). It can be seen that the environmental factors of having “competent and caring adults”, “self-regulation skills”, “positive views of self” and “motivation to be effective in the environment” make up the “ordinary magic” leading to the healthy outcomes of resilient individuals facing adversity (Masten, 2001, p. 234).

2.2.2 Bonanno and Self-Enhancement

Bonanno (2005) looked at self-enhancement among survivors of the September 11th attacks in New York City as a resource for developing resilience to counteract posttraumatic stress disorder (PTSD) (Bonanno, 2005, p. 984). Self-enhancement has

been argued to be an adaptive trait that promotes well being and effective coping (Taylor and Brown, 1988, p. 240). Bonanno's study provided evidence that resilience is quite prevalent in the face of high stress contexts, such as the September 11th attacks. In a further study of loss, trauma and human resilience, Bonanno (2008) reviewed evidence from several studies that "suggests that resilience is common, is distinct from the process of recovery, and can potentially be reached by a variety of different pathways" (Bonanno, 2008, p. 101).

2.2.3 Comprehensive Soldier Fitness Program

Cornum et al. (2011) discuss the benefits of building psychological resilience among soldiers to promote holistic fitness and combat the negative outcomes of stress (Cornum et al., 2011, p. 8). Influenced by the emerging research of the positive psychology movement, the U.S. army moved away from the common response of testing for the rate of psychopathological prevalence, followed by channeling increased resource to the development of therapy. By using a proactive response of training soldiers before their deployment, Cornum et al. (2011) have found that this program predicts success in future military challenges and identifies character strengths that will lead to enhanced performance (Cornum et al., 2011, p. 8). This application of positive psychology to an organization with over 1.1 million members sets a precedent that constructs such as PsyCap can be measured and developed to improve employee and organizational performance.

CHAPTER THREE

ORGANIZATIONAL COMMITMENT, ORGANIZATIONAL CHANGE, AND HOSPITAL STUDIES

POB has examined psychological resilience to be linked to positive work outcomes such as organizational commitment, work happiness, and job satisfaction (Youssef & Luthans, 2007, p. 774). The following section gives a general overview of organizational commitment, the related area of organizational change (in light of past studies linking resiliency and organizational change, and studies done in hospital settings). These topics give a quick introduction to topics specific to the research context and variables to be discussed in this paper.

3.1 Meyer and Allen Three Component Model (TCM)

Meyer and Allen (1991) developed the popular three-component model of organizational commitment (Meyer & Allen, 1991, p. 61). While examining organizational commitment theory and research, they proposed a model split into three separate components: 1) desire (*affective*), 2) need (*continuance*) and 3) obligation (*normative*). These components can be described as the reasons why employees stay: because they want to (*affective*), because they felt they ought to (*normative*), or lastly, because they have to do so (*continuance*) (Meyer & Allen, 1991, p. 61). The correlative relationships between organizational commitment and other attitudes and behavior will be summarized below.

3.2 Meta-Analyses of Organizational Commitment Research

3.2.1 Meta-Analysis by Mathieu and Zajac

Mathieu and Zajac (1990) performed meta-analyses on the relationship of organizational commitment with other variables (Mathieu & Zajac, 1990, p. 171). In

total 48 meta-analyses were performed, the variables were categorized into three separate categories: antecedents (26), consequences (8) and correlates (14). Antecedents included categories of personal characteristics (e.g. as age, sex, education and tenure), role states, job characteristics, group/leader relations and organizational characteristics (p. 174). Correlates were further split into motivation and job satisfaction, where consequences

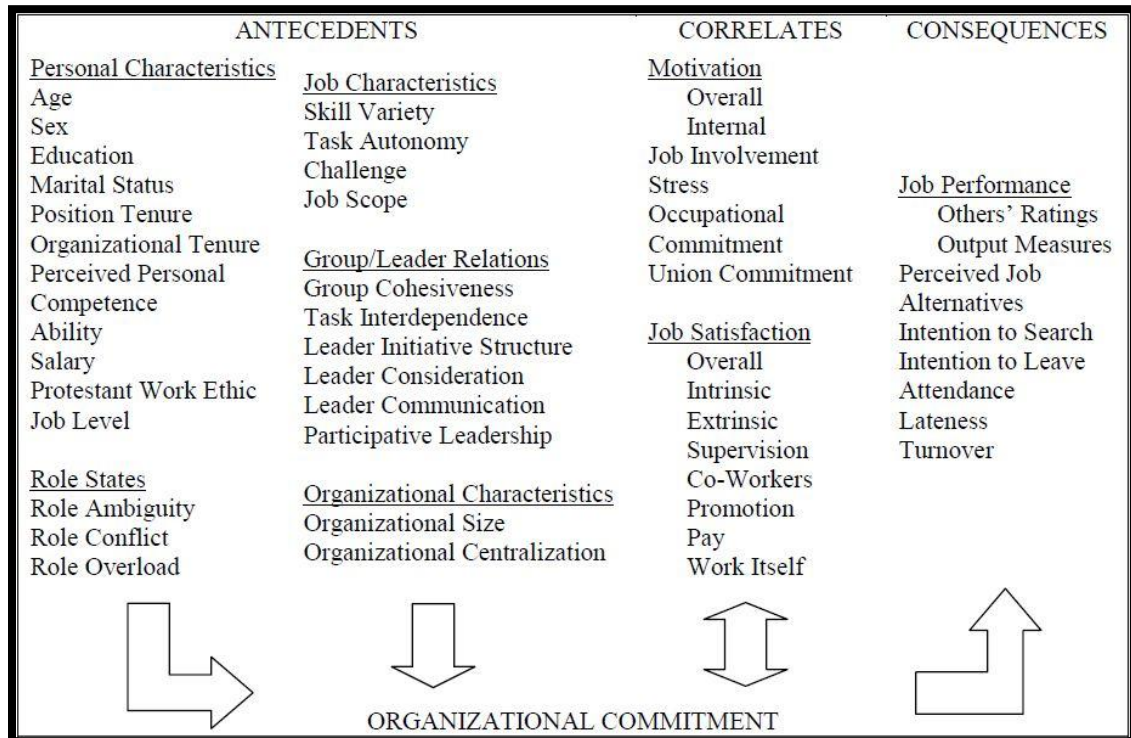


Figure 1: Classification of antecedents, correlates, and consequences of organizational commitment (adapted from Mathieu and Zajac, 1990, p. 174)

were characterized as specific job performance outcomes (see Table 1). The findings found the strongest correlations among the categories of motivation and job satisfaction (p. 183). The correlations in the consequence classification were found to be relatively low, likely to be mediated or moderated with other factors. In the antecedent category, only personal perceived competence was found to have a high correlation (p. 178).

3.2.2 Meta-Analysis by Meyer et al.

In a more recent study done by Meyer et al (2002), meta-analyses were performed to assess relationships between the three components of the organizational commitment model of Meyer and Allen (1991) and other variables (Meyer et al., 2002, p. 20, Meyer & Allen, 1991, p. 61). Again these variables were characterized as antecedents, correlates and consequences. The meta-analyses included 155 independent samples for a total of 50,146 employees (p. 25). The antecedents of age and tenure had a weak correlation with all three components, though interestingly had a strong correlation in studies done outside of North America (p. 27). Work experience variables correlated more strongly with affective commitment than with the other components. Among correlate variables, job satisfaction, job involvement and occupational commitment had strong correlations with affective commitment (p. 32). In regards to consequences, there was a negative correlation with all three components of organizational commitment and turnover, while only affective commitment was found to have a strong correlation with absenteeism (p. 32). In addition, all three components had a positive correlation with job performance (p. 32).

3.3 Resiliency and Organizational Change

Commitment to organizational change, though different from organizational commitment has drawn attention in past years. The three component model has been modified and applied to organizational change (Herscovitch and Meyer, 2002, p. 474), Meyer et al., 2007, p. 185). Two studies have been conducted that have drawn a correlation between the personality characteristic of resiliency and employees' roles in organizational change. In a study done by Shin et al (2012), employee psychological resiliency was positively related to normative and affective organizational change with

state positive affect as a mediator (Shin et al., 2012, p.727). Nikolaou et al (2007) tested several personality profiles and their relationship to organizational change (Nikolaou et al., 2007, p. 291). Findings found that those who exhibited higher resilient personalities considered themselves “more ready to accept and apply change” (Nikolaou et al., 2007, p. 291). These studies support the importance of psychological resiliency as a personality characteristic in commitment to organizational change. Findings suggest that those who are psychological resilient are more capable of dealing with the stresses of organizational change and adapting to support and even promote these changes (Shin et al., 2012, p. 740, Nikolaou et al., 2007, p. 306).

3.4 Recent Hospital Studies

3.4.1 Hospital Research Using Variables Relevant to OB

Over the last decade, there have been relatively few studies done in hospital settings examining variables traditionally studied in OB (e.g. stress, turnover, job satisfaction, and organizational commitment). A brief review of the findings of these studies is valuable before we proceed to a more detailed discussion of our research context. A study done on 2,323 registered nurses in the United States found that “working conditions” was the highest reported reason among nurses intending to leave their position in the following year (Stone et al., 2006, p. 1907). In a study carried out in three hospitals in Turkey on 677 nurses and 195 medical secretaries a significant relationship was found between job satisfaction and organizational commitment (Top and Gider, 2013, p. 667). Affective organizational commitment was found to mediate the relationship between emotional exhaustion and turnover intention in Chinese hospital employees, as well as the role of emotional exhaustion has in predicting job performance (Tourigny et al, 2013, p. 514).

3.4.2 Resilience and Stress Studies in Hospitals

In studies on resilience in hospitals, findings offer support that resilience appeared to protect against emotional exhaustion among nurses in Spain (Manzano Garcia and Ayala Calvo, 2012, p. 101). It “was significantly associated with a lower prevalence of posttraumatic stress disorder, symptoms of anxiety or depression, and burnout syndrome” in ICU nurses in America (Mealer et al., 2013, p. 292). It was found to be high among psychiatric nurses working in inpatient units in a large American urban center (Matos et al., 2010, p. 307). A pilot study done on hospital and ambulatory clinic staff demonstrated that “stress and its symptoms are problematic issues” and can be addressed through an educational intervention (Pipe et al., 2010, p. 11).

CHAPTER FOUR

THEORETICAL BACKGROUND AND RESEARCH QUESTION

Although previous studies have examined the effect of psychological resilience and resiliency in the workplace (Youssef & Luthans, 2007, p. 774, Shin et al, 2012, p. 727, Nikolaou et al., 2007, p. 291), we will discuss the theoretical background for these studies by introducing some of the theories and models that have contributed to PP, POB, and stress. These theories include the broaden and build theory of Fredrickson, Richard's resiliency theory and Hobfoll's conservation of resources (COR) theory. In addition we will also introduce the models detailed by Masten (2001) in her discussion of variable-focused vs. people focused resilience, which categorize the spectrum of focus found in resilience research (Masten, 2001, p.227). From these theories and models, we hope to lay the foundation for the hypotheses to be proposed and studied in this paper.

4.1 Theoretical Background

4.1.1 Fredrickson's Broaden and Build Theory

Fredrickson's (2001) broaden and build theory states that "certain discrete positive emotions—including joy, interest, contentment, pride, and love—although phenomenologically distinct, all share the ability to broaden people's momentary thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources" (Fredrickson, 2001, p. 219). For example, the presence of the positive emotion of "joy creating the urge to play, interest the urge to explore, contentment the urge to savor and integrate, and love a recurrent cycle of each of these urges" (Fredrickson, 1998, p. 17). This theory was tested in a study done with 104 college students. The participants watched different films the elicited a variety of emotions and asked to imagine being in a situation that

would elicit similar emotions. They then were asked to write responses that began with the phrase “I would like to.” Those who were in the groups that watched positive emotion conditions (joy and emotion) identified more things that they would like to do than those in the group that watched clips associated with negative emotions (fear and anger) (Fredrickson and Branigan, 2005, p. 323-324). The evidence that certain positive emotions can broaden an individual’s potential course of actions supports the idea that these type of emotions help build personal resources (Fredrickson, 1998, p. 1089). This theory provides support for the study of positive state-like qualities that improve performance in the workplace, which is the basis of POB.

4.1.2 Richardson’s Resilience Theory

Richardson et al. (1990) developed a resilience model (see figure 1) that described the process an individual goes through in encountering, responding to, and

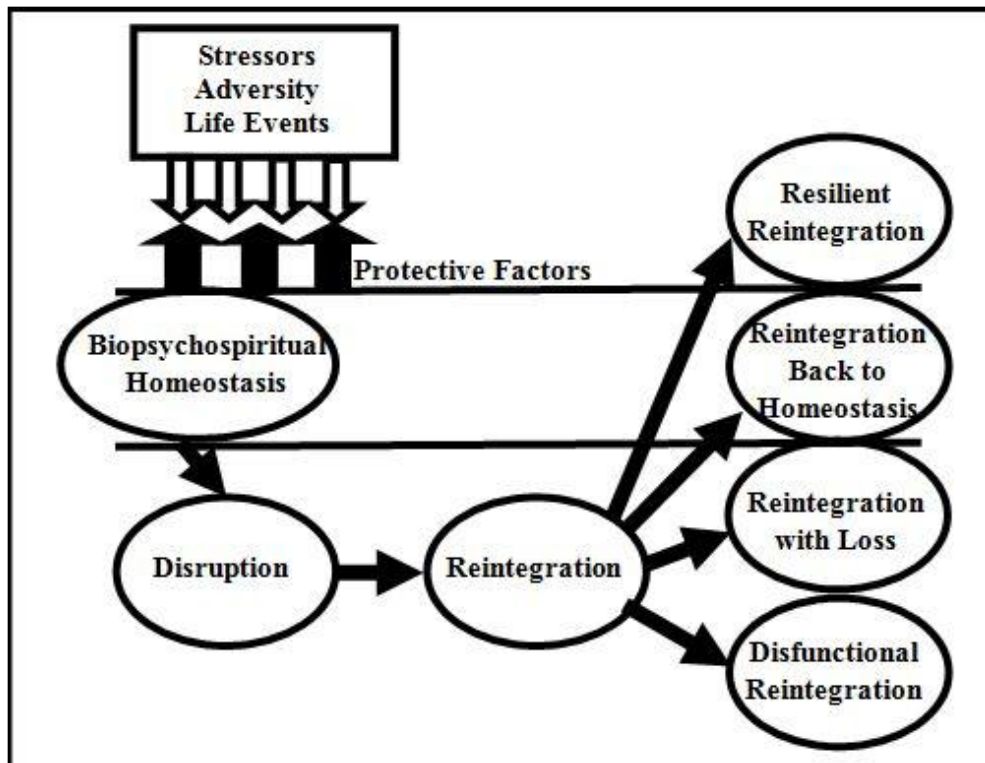


Figure 2: Richardson’ Resilience Model (adapted from Richardson, 2002, p. 311)

possibly growing from stressors, adversity, or life events (Richardson, 2002, p. 311) . An individual's adaptation to his/her current state in life is labeled as "biopsychospiritual homeostasis" (Richardson, 2002, p. 311). This term combining "bio" for body, "psycho" for mind and "spirit" for spirit with the word "homeostasis", meaning a constant or stable state. Thus meaning a state, where the body, mind, and spirit of an individual have adapted and are at a standstill in regards to the environment. This state constantly interacts with different life stressors both positive and negative resulting in a necessary reaction to the changes. These stressors are buffered by the protective factors and depend on the strength of both the stress as well as the protective factors result in a disruption of some sort to the biopsychospiritual homeostasis. In response to this disruption, an individual goes through reintegration with four possible outcomes of individual functioning: 1) Dysfunctional Reintegration, 2) Reintegration with Loss 3) Reintegration back to Homeostasis or 4) Resilient Reintegration (p. 311). From this model we can see that life stresses cause disruptions that can lead to a return to normal functioning, a fall to a diminished level of functioning, or even to an increase in optimal functioning for an individual. This model lays out a clear process for possible outcomes of individuals encountering stressors, adversity, and significant life events.

4.1.3 Hobfoll's Conservation of Resources Theory

Hobfoll's (1989) work on the stress theory of conservation of resources aids in our understanding of how individuals may utilize resilient processes as a psychological resource in counteracting the negative effects of stress (Hobfoll, 1989, p. 513). Under the theory of conservation of resources, stress is defined "as a reaction to the environment in which there is (a) the threat of a net loss of resources, (b) the net loss of resources, or (c) a lack of resource gain following the investment of resources" (p. 516). Individuals

encountering stress will choose to act in a way that builds their current resources or leaves them with most available net resources. Resources, in turn are defined as “objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies” (p. 516). The concept of resource gain and resource loss in this model is useful in our understanding of the resilience process and how an individual will react to stress. In using Luthans et al. (2006) POB definition of the “state-like” resilience, we also can view it as a psychological resource in itself that helps an individual retain other important personal resources (Luthans et al., 2006, p. 26).

4.1.4 Variable Focused vs. People Focused Models of Resilience

Masten (2001) presented two categories of resilience studies in her discussion on assessment of current resilience models and intervention strategies derived from these models (Masten, 2001, p.29). Variable-focused approaches analyze qualities of the individual, aspects of the environment, and level of stress in an attempt to draw conclusions on which factors lessen the affect of specific stresses on the individual. Person-focused approaches compare individuals with different profiles over time in attempt to draw out what specific aspects set resilient individuals apart. Both have value in discussing resilience. While variable-focused approaches are able to draw out linkages between several factors, they may fail to see the specific patterns that emerge out of person focused studies that look at individuals’ lives over a long period of time. In the field of POB it is valuable for us to use both approaches in order to focus on both the necessary variables in the workplace that limit the affects of stress, while taking the time to know specific individuals in order to develop their PsyCap. From Masten’s discussion, it can be drawn that the study of “PsyCap resilience focuses on the proactive

assessment of risks and personal assets that affect employee outcomes” (Luthans, 2006, p. 28).

4.2 Research Question

We propose that there is a correlation between psychological resilience and the departmental commitment. Fredrickson’s (2001) broaden and build theory suggests that the process of resilience “may be fueled by experiences of positive emotion” (Fredrickson, 2001, p. 222). It is quite possible that resilient employees bounce back faster because of their ability to draw on their positive emotions. More evidence of this can be seen in Hobfoll’s (1989) COR theory and Richardson’s resilience theory (Hoboll, 1989, p. 513, Richardson, 2002, p. 311). Because of the reactive nature of resilience, the positive outcomes of resilience should be more easily observed in an environment with higher amounts of stress. We assume that there is a correlation between employees’ psychological resilience and departmental commitment.

In light of the unique setting of ICUs within hospitals, we have chosen to study “departmental commitment” over the widely measured variable of “organizational commitment”. Our assumption is that the unique stresses of the ICUs and ERs are distinct from the stressors faced by hospital employees working in other departments. Thus, their levels of commitment for the organization would be much different than their specific commitment to their department. We propose that there is a correlation between psychological resilience and three dimensions of departmental commitment.

CHAPTER FIVE

METHODOLOGY

5.1 Sample And Setting

The sample of this study consisted of a convenience sample of 106 employees ($n=106$) from the ICUs and ER departments of twelve private hospitals in Izmir. A total of 179 surveys were distributed. A total of 108 surveys were returned. Two surveys were thrown out because they were incomplete and not included to the analysis. A total of 19 local hospitals were asked to participate in the study. Three public hospitals were asked, but at the time of this report, the Izmir Union of Public Hospitals (İzmir Kamu Hastaneleri Birliği) was still processing the request to conduct the research study. Private hospitals were ultimately chosen because of their high prevalence and close proximity to the researching university (*See Appendix 1 for Geographic Distribution of Hospitals*). In addition, permission was quickly taken from the administration of private hospitals on a walk-in basis from the Chief of Medicine with further approval from the charge nurse of the eligible departments or units. Four private hospitals were disqualified because of their lack of ICU or ER departments.

The participants were 26.4% male ($n=28$) and 73.6% female ($n=78$). Participant ages ranged from 19 to 66 years with current work experience at their occupation ranging from 4 months to 29 years. Total experience working in ICU ranged from as few as 8-10 shifts to as many as 22 years. Of the participants, 78.3% were nurses, 7.5% were emergency technicians, 4.7% were doctors, and 9.4% were other personnel. For a more thorough discussion of study demographics, please see the descriptive statistics section and accompanying tables.

5.2 Procedure

Questionnaires were hand-delivered to the participating ICUs and ER after receiving appropriate permission from hospital administration. A general overview of the research was given to the head nurse or head administrator with verbal instructions to distribute the surveys among all employees (*See Appendix 2 for Letter of Permission*). Participants were informed in writing that they were participating in a research study measuring “*The effect of psychological resilience on departmental commitment in ICU and ER employees*” (*See Appendix 3 for Questionnaire Sample*). Surveys were picked up by hand within 1-2 weeks of their initial delivery.

5.3 Instruments

The questionnaire included two scales that measure psychological resilience and organizational commitment. Permission was obtained from the scale developers to administer them for the use in current study. These scales were chosen based on their past reliability in cross cultural settings, specifically in published studies in Turkey. (Kararırmak, 2010; Özutku, 2008; Sevinç & Şahin, 2012; Wasti, 2002)

5.3.1 Connor-Davidson Resilience Scale (CD-RISC)

The Connor-Davidson Resilience Scale (CD-RISC) was developed by Connor and Davidson (2003) in order to measure individuals’ ability to cope with adversity (Connor & Davidson, 2003, p. 76). POB necessitates the need for a scale that displays resilience as a “*state-like*” trait. According to Connor and Davidson (2003), the CD-RISC scale “demonstrates that resilience is modifiable and can improve with treatment” (Connor & Davidson, 2003, p. 76) The original scale consists of 25 items, rated on a 5-point Likert scale (0-4): not true at all (0), rarely true (1), sometimes true (2), often (3), and true nearly all the time (4). The psychometric properties for this scale were tested in

a Turkish population of earthquake survivors (Karairmak, 2010, p. 350). The test was administered in Turkish and found to be a “valid and reliable measure of resilience” (Karairmak, 2010, p. 350). An exploratory factor analysis (EFA) was performed by Campbell-Sills and Stein (2007) and found to be have an “unstable factor structure across two demographically equivalent samples” (Campbell-Sills & Stein, 2007, p. 1019). After several modifications a 10-item unidimensional scale was developed. For this study, we opt to use the authorized Turkish version of the 10-item scale. As psychological resilience is one dimension of the POB construct of PsyCap, this unidimensional scale better suits our research aims. It was also chosen for its brevity and strong psychometric properties. The 5-point scale was considered as more appropriate measurement scale that ranges from (1) “not true at all” to (5) “true nearly all the time”.

5.3.2 Meyer-Allen Employee Commitment (TCM) Survey

The Meyer-Allen employee commitment survey is based on the three component model of organizational commitment developed by Meyer and Allen (Meyer & Allen, 1991, p. 62). The three component model of organizational commitment is discussed in chapter three. This survey was chosen because of the wealth of published research done in business management and other fields. The revised version consists of a total of 18 questions with 6 questions measuring each of the dimensions of affective, continuous, and normative commitment (Meyer, Allen, & Smith, 1993, p. 538). Items were rated on a 5 point Likert scale ranged from 1 to 5 (*1 = strongly disagree, 5= strongly agree*). A translated version of the scale published for a study done by Sevinç and Şahin (2012) on doctors and nurses working for a university hospital in Turkey (Sevinç & Şahin, 2012, p. 272-273). The scale was revised to measure departmental commitment instead of

organizational commitment by replacing all instances of “organization” with the word “department”. According to the author’s knowledge, there are no previously published studies using the three-commitment model scale to measure departmental commitment.

Surveys were analyzed in accordance with cross cultural research methods (Brislin, 1970, p.185-214). One reverse scored item was included in the scale in order to control for acquiescence response bias. The three dimensions of the scale were not mixed in order to prevent confusion of participants taking the survey. One item was changed for due to cross-cultural differences and workplace context of the study. Item number four of the normative commitment dimension was changed from “This department deserves my faithfulness” to “This department deserves my effort”. Due to the uniqueness of this study, there was no previous published research found on this scale measuring department commitment and the accompanying effect of narrowing the focus of the scale from the organization to the department.

CHAPTER 6

DATA ANALYSES AND RESULTS

6.1 Descriptive Statistics

IBM SPSS 20 statistical package was used to analyze the obtained data. The following sections identify the main demographics of the participants. The demographics were included gender, age, position, work experience in their listed occupation, and specific work experience in ICUs and ER departments. These demographics were collected from the self-administered questionnaires in the section immediately preceding the CD-RISC-10 and Meyer-Allen TCM scales. Out of the 106 total participants in the study, 78 were female (73.6%) and 28 were male (26.4%). Gender distribution is shown in Table 1.

Table 1: Gender Distribution

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	78	73.6	73.6	73.6
Male	28	26.4	26.4	100.0
Total	106	100	100.0	

Age of the study participants ranged from 19 years to 66 years. This range was split into 5 different groups (15-24, 25-34, 35-44, 45-54, and 55-70). More than 50% of the participants were between the ages of 15-24 years (50.4%, n = 54), while 36.8% of the participants were between the ages of 35-44 years (n= 39). Of the remaining participants, nine were between 35-44 years (8.5%), one was between 45-54 years (0.9%) and three were between 55-70 years (2.8%). The age distribution is shown in Table 2 below.

Table 2: Age Distribution

	Frequency	Percent	Valid Percent	Cumulative Percent
15-24 years	54	50.9	50.9	50.9
25-34 years	39	36.8	36.8	87.7
35-44 years	9	8.5	8.5	96.2
45-54 years	1	.9	.9	97.2
55-70 years	3	2.8	2.8	100.0
Total	106	100.0	100.0	

The participants were asked to disclose both their “occupation” as well as their current position in their department. Because of discrepancies between the two answers, the listed answer for “current position” was used due to its specificity and the greater immediacy to the desired variable. The specific positions were split into four categories: Other Personnel (*Clerical, maintenance, and security staff*), Emergency Room Technicians, Nurses (*midwife, charge nurse, and general nurse*), and Doctors. A significant majority of the participants listed their current position as Nurses (78.3%, n=83). Of the remaining participants, 9.4% were other personnel (n=10), 7.5% were Emergency Room Technicians (n=8), and 4.7% were doctors (n=5). Although nurses make up a majority of ICU and ER departments, there is an obvious lack of doctors in the research study. For the breakdown of participants by their position, please see Table 3 below.

Table 3: Position

	Frequency	Percent	Valid Percent	Cumulative Percent
Other Personnel	10	9.4	9.4	9.4
Emergency Room Technicians	8	7.5	7.5	17.0
Nurses	83	78.3	78.3	95.3
Doctors	5	4.7	4.7	100.0
	106	100.0	100.0	

Participants' work experience in their occupation varied widely from as short as four months to as long as 29 years. The answers were grouped into 5 separate time categories (*less than 1 year, 1-4 years, 5-9 years, 10-14 years, 15 and more years*). Of the participants, 34 have less than 1 year of experience in their current occupation (32.1%), forty-three of them have 1-4 years experience (40.6%), twelve of them have 5-9 years of experience (11.3%), ten have 10-14 years of experience (9.4%) and the rest of seven participants have over 15 years of experience (6.6%). Table 4 shows the distribution of work experience among participants.

Table 4: Work Experience in Occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than a year	34	32.1	32.1	32.1
1-4 years	43	40.6	40.6	72.6
5-9 years	12	11.3	11.3	84.0
10-14 years	10	9.4	9.4	93.4
15 and more years	7	6.6	6.6	100.0
Total	106	100.0	100.0	

Participants were asked to list their total work experience in ICUs and ER departments. Listed answers ranged from as few as 8-10 shifts to as much as 24 years. Of the participants, 49 have less than 1 year of experience (46.2%), 44 have between 1-4 years of experience (31.1%), 14 have between 5-9 years of experience, seven participants have between 10-14 years of experience and the rest three participants listed total experience at greater than 15 years (2.8%). The breakdown distribution is listed in Table 5 below.

Table 5: Work Experience in ICUs and/or ERs

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1 year	49	46.2	46.2	46.2
1-4 years	44	31.1	31.1	77.4
5-9 years	14	13.2	13.2	90.6
10-14 years	7	6.6	6.6	97.2
15 and more years	3	2.8	2.8	100.0
Total	106	100.0	100.0	

6.2 Factor Analysis Results

In order to analyze whether the Meyer-Allen TCM scale was in agreement with past research, principal component analysis was performed using IBM SPSS 20 statistical package. After performing factor analysis for eighteen items, three items were categorized as problematic and excluded from the analysis in order to obtain better solutions. The three excluded items were the first and last item of the normative scales “*I feel an obligation to stay with this department*”, “*I am quite indebted to the department in which I currently work*” and the reverse coded third item of the continuous scale “*If I decided to leave this department at this moment, not many things in my life would be negatively affected*”. The resulting data reduction resulted in three factor solutions. The three dimensions obtained were categorized as normative departmental commitment (*4 items*), continuous departmental commitment (*5 items*) and emotional departmental commitment (*six items*).

Table 6: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,708
Bartlett's Test of Sphericity	Approx. Chi-Square	479,349
	Df	105
	Sig.	,000

The Kaiser-Meyer-Olin measure of sampling adequacy was measured to be at .71 above the commonly recommended value of .6. Therefore the adequacy of the sample is above recommended reference point. In addition, Bartlett's Test of Sphericity was significant. (Chi-Square=479.349) Using principal components analysis, initial eigenvalues indicated that the first three factors explained 26.5%, 13.2%, and 10.1% of the variance respectively. The three factor solution explains 49.8% of the total variance. In addition, the breaking points of the factor dimensions can be observed from the scree plot (see Figure 4). Varimax with Kaiser Normalization was used to obtain a better picture of the scale factors. Using this method, the factors confirmed previous theory of the Meyer-Allen TCM scale. Three factors were extracted with the corresponding items, which is in accordance to past research.

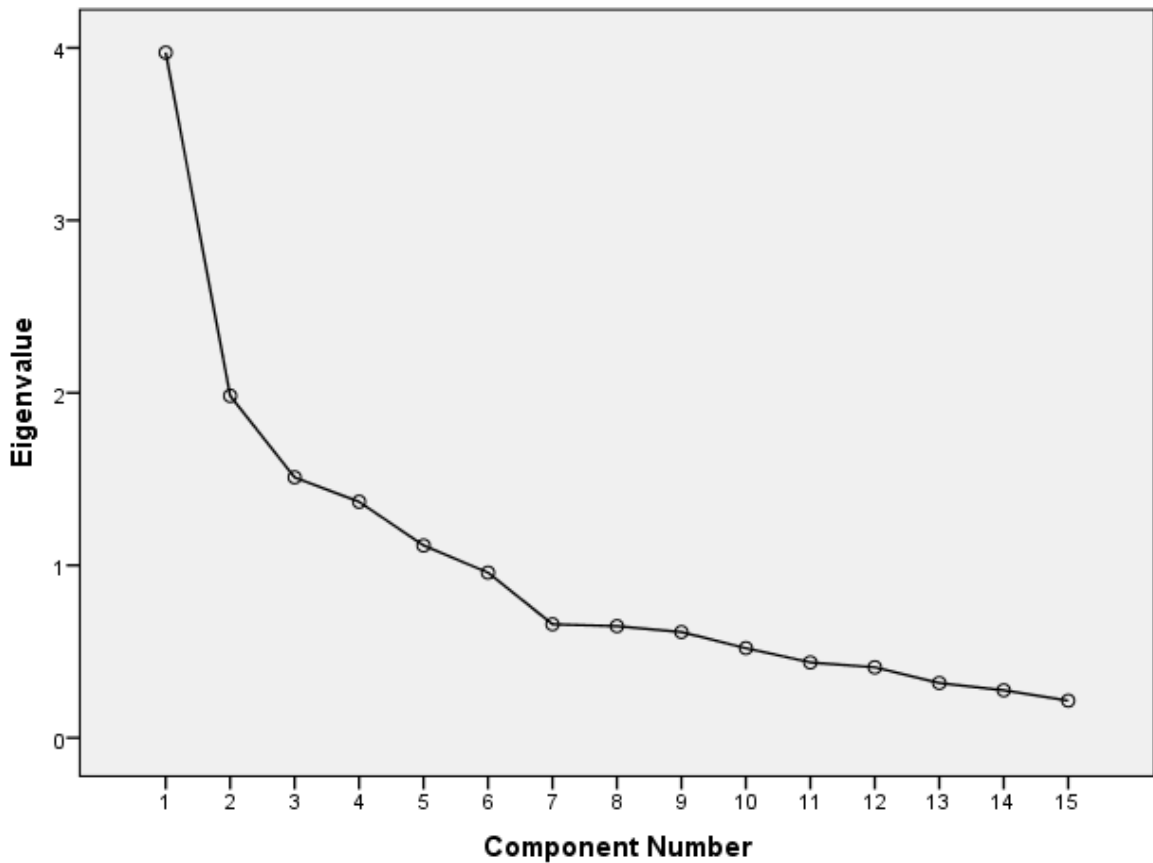


Figure 3: Scree Plot of Eigenvalues

Table 7: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,973	26,485	26,485	3,973	26,485	26,485	3,476	23,177	23,177
2	1,983	13,218	39,703	1,983	13,218	39,703	2,246	14,974	38,151
3	1,510	10,065	49,768	1,510	10,065	49,768	1,743	11,617	49,768
4	1,369	9,124	58,892						
5	1,115	7,436	66,329						
6	,958	6,385	72,713						
7	,658	4,389	77,102						
8	,647	4,314	81,417						
9	,613	4,087	85,504						
10	,520	3,465	88,969						
11	,437	2,914	91,883						
12	,409	2,725	94,608						
13	,318	2,118	96,727						
14	,276	1,837	98,564						
15	,215	1,436	100,000						
Extraction Method: Principal Component Analysis.									

Table 8: Rotated Component Matrix^a

Item	Component		
	1	2	3
<i>Çalıştığım birimin problemlerini kendi problemlerim gibi hissediyorum.</i>	.792		
<i>Bu birimde kendimi “ailenin bir parçası” gibi hissediyorum.</i>	.781		
<i>Çalıştığım birime karşı güçlü bir aidiyet duygusu hissediyorum.</i>	.742		
<i>Kariyer emekliliğime kadar bu birimde devam etmekten mutluluk duyarım.</i>	.726		
<i>Çalıştığım birimin kişisel açıdan benim için büyük bir önemi vardır.</i>	.665		
<i>Bu birime karşı duygusal bir bağ hissediyorum.</i>	.661		
<i>Bu birimden şimdi ayrılırsam suçluluk hissedirim.</i>		.850	
<i>Bu birimden şimdi ayrılmanın, burada çalışan diğer insanlara karşı duyduğum sorumluluklar nedeniyle yanlış olacağını düşünüyorum.</i>		.750	
<i>Benim avantajıma olsa bile, çalıştığım birimden şimdi ayrılmak bana doğru gelmiyor.</i>		.658	
<i>Bu birim benim çabalarımı hak ediyor.</i>		.473	
<i>Şu an bu birimde kalmam, istekten ziyade gerekliliktir.</i>			.658
<i>Eğer bu birime bu kadar emek vermemiş olsaydım başka bir birimde çalışmayı düşünebilirdim.</i>			.639
<i>Diğer birim alternatifleri daha iyi olmadığı için bu birimden ayrılmayı düşünmüyorum.</i>			.529
<i>Birimden ayrılmak istesem bile şu anda bunu yapmak benim için çok zor olurdu.</i>			.514
<i>Benim için bu birimden ayrılmanın olumsuz sonuçlarından biri de, başka bir birimin burada sahip olduğum olanakları sağlayamama ihtimalidir.</i>			.501
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 5 iterations.			

(See APPENDIX 4 for English)

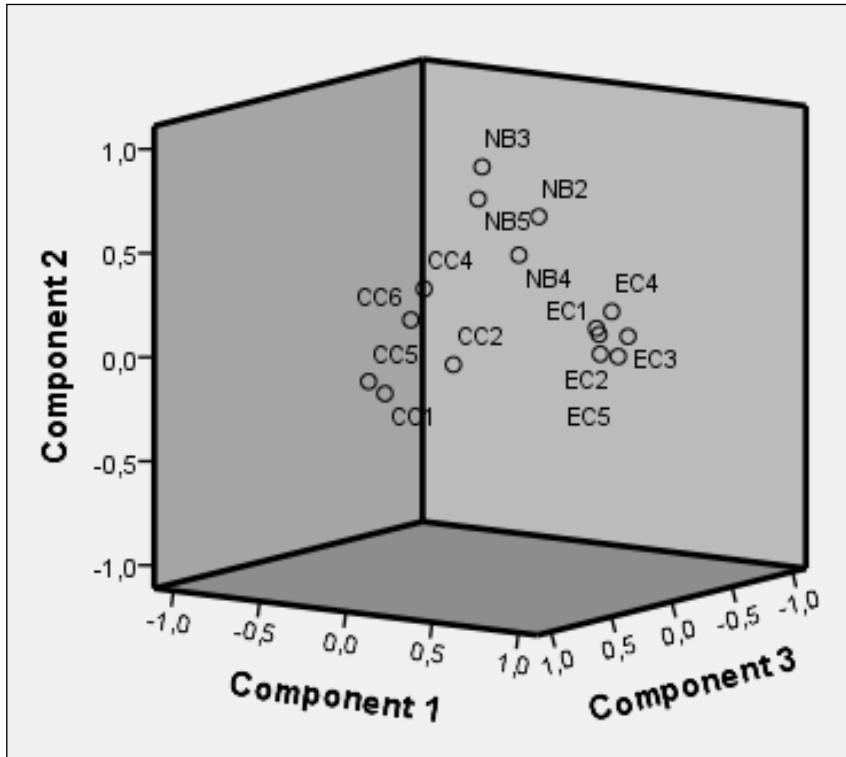


Figure 4: Factor Plot in Rotated Space

6.3 Reliability Analysis

Reliability analysis was performed after the factor analysis in order to determine whether the items of a specific dimension were reliable. Using IBM SPSS 20 Statistical package, item means, item variances and Cronbach's Alpha were measured. Scales were accepted as reliable when Cronbach's Alpha was .70 or above.

Table 9: Psychological Resilience Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,841	,845	10

Table 10 : Psychological Resilience Summary Item Statistics

	Mean	Min	Max	Range	Max/ Min	Variance	N of Items
Item Means	3,606	3,057	3,972	,915	1,299	,083	10
Item Variances	1,184	,790	1,706	,916	2,161	,061	10

Reliability of Psychological Resilience was measured based on Cronbach's Alpha score. reference point of Cronbach's Alpha is .70 and greater. Therefore the psychological resilience Cronbach's Alpha is .84, which is an acceptable reliability of the scale.

Table 11: Emotional Departmental Commitment Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,836	,839	6

Table 12 : Emotional Departmental Commitment Summary Item Statistics

	Mean	Min	Max	Range	Max/Min	Variance	N of Items
Item Means	3,470	2,736	3,783	1,047	1,383	,146	6
Item Variances	1,313	,853	1,834	,981	2,151	,108	6

Reliability of Emotional Departmental Commitment was measured based on Cronbach's Alpha score. The reference point of Cronbach's Alpha is .70 and greater. Therefore the emotional departmental commitment Cronbach's Alpha is .84, which is an acceptable reliability of the scale.

Table 13: Continuous Departmental Commitment Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,508	,506	5

Table 14 : Continuous Departmental Commitment Summary Item Statistics

	Mean	Min	Max	Range	Max/Min	Variance	N of Items
Item Means	3,072	2,943	3,283	,340	1,115	,018	5
Item Variances	1,718	1,458	1,940	,482	1,331	,033	5

Reliability of Continuous Departmental Commitment was measured based on Cronbach's Alpha score. The reference point of Cronbach's Alpha is .70 and greater. Therefore the continuous departmental commitment Cronbach's Alpha is .50, which is not enough to accept the reliability of the scale.

Table 15: Normative Departmental Commitment Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,706	,704	4

Table 16: Normative Departmental Commitment Summary Item Statistics

	Mean	Min	Max	Range	Max/Min	Variance	N of Items
Item Means	3,028	2,642	3,264	,623	1,236	,084	4
Item Variances	1,493	1,358	1,611	,252	1,186	,018	4

The internal consistency for Normative Departmental Commitment was measured based on Cronbach's Alpha. The reference point of Cronbach's Alpha is .70 and greater. Therefore the normative departmental commitment Cronbach's Alpha is .70, which is at the reference point and therefore is acceptable.

6.4 Correlation Analysis and Results

A correlation analysis was conducted in order to determine correlative relationships between psychological resilience and the three dimensions of departmental commitment—emotional, continuous, and normative departmental commitment. The correlation coefficient of +1 indicates there is a small effect, a perfect positive relationship between variables where, -1 indicates a perfect negative relationship between variables and 0 indicates there is no linear relationship between variables. The effect size 0.1 (either – or positive) indicates a small effect, 0.3 indicates a medium effect and 0.5 indicates large effect size (Field, 2005:112).

Results showed a correlation between psychological resilience and both emotional departmental commitment and normative departmental commitment. In addition, there was a correlation between emotional and normative departmental commitment. Table 17 shows the means, standard deviations, and correlations of the

study variables. Continuous departmental commitment did not display any correlations with any of the variables.

Table 17: Means, Standard Deviations, and Correlations of Study Variables

Variables	Mean	SD	N of Items	Cronbach's α	Correlations			
					1	2	3	4
1. Psychological Resilience	36.1	7.0	10	.85	1.00			
2. Emotional Departmental Commitment	20.8	5.1	6	.84	.30**	1.00		
3. Continuous Departmental Commitment	15.4	3.8	5	.51	.14	-.04	1.00	
4. Normative Departmental Commitment	12.1	3.6	4	.71	.20*	.34**	.13	1.00

* $p < .05$, ** $p < .01$, $N = 106$

CHAPTER SEVEN

CONCLUSION

7.1 Discussion

The aim of this paper was to contribute to the relatively new field of POB. By studying psychological resilience (*one dimension of the construct, PsyCap*) in ICUs and ERs in a context outside of North America, the author's intention was to see if past research held up in a different culture and work context. According to the research findings, a correlation between psychological resilience and both emotional and normative departmental commitment was found. There was no correlation found between psychological resilience and continuous departmental commitment. In addition, there was no correlation between continuous departmental commitment and the other two dimensions of departmental commitment measured. In a past study, Youssef and Luthans (2007) found a positive correlation between resilience and organizational commitment (Youssef & Luthans, 2007, p. 793). Mealer et al. (2012) found that psychological resilience was related to a healthier psychological profile in ICU nurses in the United States (Mealer et al., 2012, p. 292). The findings of this study support that there is a relationship with psychological resilience and positive work outcomes.

7.2 Contributions to Current Research

This is the only study known by the author to focus on departmental commitment rather than organizational commitment. Also, this is the first research of its kind to study the variables of psychological resilience and departmental commitment in Turkey. This study also is the first time this specific scale for psychological resilience (*CD-RISC-10*) has been used in Turkey. These three unique aspects of this research study contribute to

OB, POB, and research on the construct of psychological resilience. This research also adds to past studies examining the *CD-RISC* scale and its usefulness in measuring psychological resilience. Because the study context took place in ICUs and ERs, this research is also beneficial to the health management field. The author hopes that further studies of psychological resilience would result in human resource development programs that would help employees, specifically those working in stressful environments such as ICUs and ERs, to develop greater psychological resilience.

7.3 Limitations and Future Research

Due to the exploratory nature of this study, issues of sample size and whether the sample was truly representative of the population were not considered. The cross-sectional nature of the study also allowed for only a snapshot into how certain employees were feeling at a specific moment in time when they filled out the questionnaire. Further research could include the use of performance appraisals in addition to self-administered questionnaires or could implement a longitudinal study to see the effect of psychological resilience on employees over a longer period of time. Further areas of research include developing a scale that is specific to departmental commitment. In past years, research has focused on organizational commitment and organizational change. The author suggests further studies detailing the importance of departmental commitment specifically within organizations that may have a high turnover rate in one department, but not in others. This study examined one dimension of PsyCap and how that dimension (*resilience*) was related to one specific positive work outcome (*departmental commitment*). Further studies may want to study how all four different dimensions of PsyCap affect several different work outcomes in different work contexts across different cultures.

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APPENDIX 1: GEOGRAPHIC DISTRIBUTION OF PARTICIPATING HOSPITALS

Map of Izmir



★ = Hospital Location

☺ = Yaşar University

APPENDIX 2: LETTER OF PERMISSION TO HOSPITALS



T.C.
YAŞAR ÜNİVERSİTESİ REKTÖRLÜĞÜ

Sayı : 30694532-755.02.01-204/1134
Konu : İzin

23/05/2013

İlgili Makama

Üniversitemiz Sosyal Bilimler Enstitüsü İşletme İngilizce Yüksek Lisans öğrencisi Joseph Fred CASTRO'nun "Acil servis ve yoğun bakım ünitelerinde çalışan personelin psikolojik dayanıklılığının bölüm bağılılığı üzerindeki etkisinin ölçülmesi" konulu tezi kapsamında ilgili ölçekleri kurumunuzda uygulamak istemektedir. Etkinlik uygulama izni verilmesi hususunda gereğini rica ederim.

Saygılarımla,

Prof. Dr. Ali Nazım SÖZER
Rektör Yardımcısı

Dağıtım : İzmirde Bulunan Devlet ve Özel Hastaneler

APPENDIX 3: QUESTIONNAIRE SAMPLE

Değerli Katılımcı;

Elimizdeki mevcut çalışma, İzmir’de faaliyet gösteren özel ve devlet hastanelerinin acil servis ve yoğun bakım ünitelerinde çalışan personelin psikolojik dayanıklılığının bölüm bağlılığı üzerindeki etkisini ölçmeye yöneliktir. Çalışmada kimlik bilgileriniz kesinlikle talep edilmemekte olup, verilen tüm bilgilerin bilimsel ahlaka uygun gizlilik ilkeleri kapsamında ele alınacağı taahhüt edilmektedir. Araştırma bulgularından elde edilecek sonuçlar istenildiği takdirde, joseph.castro@gmail.com adresine talebimizi bildirirseniz, sonuç raporu tarafınıza en kısa sürede iletilecektir. Yoğun çalışma tempomuz içinde, bilimsel çalışmamıza sağladığınız katkılardan ötürü teşekkür ederiz.

Saygılarımızla;

Joseph Fred CASTRO, joseph.castro@gmail.com, Yaşar Üniversitesi İşletme Bölümü Yüksek Lisans Öğrencisi
Doç. Dr. Çağrı BULUT, cagri.bulut@yasar.edu.tr, Yaşar Üniversitesi, İİBF, İşletme Bölümü

Cinsiyetiniz	<input type="checkbox"/> Kadın <input type="checkbox"/> Erkek
Yaşınız
Çalışmakta olduğunuz hastanenin statüsü	<input type="checkbox"/> Devlet <input type="checkbox"/> Özel
Mesleğiniz
Çalışmakta olduğunuz hastanedeki pozisyonunuz
Meslekteki çalışma süreniz
Yoğun Bakım ve/veya Acil Serviste toplam çalışma süreniz
Haftalık çalışma süreniz
Haftalık ortalama bakılan hasta sayısı

1. Hiç Doğru Değil, 2. Nadiren Doğru, 3. Bazen Doğru, 4. Sıklıkla Doğru, 5. Neredeyse Her Zaman Doğru

	1	2	3	4	5
Item Descriptions					
PS1-1					
PS2-1					
PS3-1					
PS4-1					
PS5-1					
PS6-1					
PS7-1					
PS8-1					
PS9-1					
PS10-1					

*Specific items not included due to agreement with author. Please contact Jonathan Davidson at mail@cd-risc.com regarding use of the CD-RISC.

1. Kesinlikle Katılmıyorum, 2. Katılmıyorum, 3. Kararsızım, 4. Katılıyorum, 5. Kesinlikle Katılıyorum

	1	2	3	4	5
Duygusal Bağlılık					
DB1- Kariyer emekliliğime kadar bu birimde devam etmekten mutluluk duyarım	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DB2- Çalıştığım birimin problemlerini kendi problemlerim gibi hissediyorum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DB3- Çalıştığım birime karşı güçlü bir aidiyet duygusu hissediyorum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DB4- Bu birime karşı duygusal bir bağ hissediyorum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DB5- Bu birimde kendimi "ailenin bir parçası" gibi hissediyorum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DB6- Çalıştığım birimin kişisel açıdan benim için büyük bir önemi vardır	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Devam Bağlılığı					
DEB1- Şu an bu birimde kalmam, istekten ziyade gerekliliktir	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DEB2- Birimden ayrılmak istesem bile şu anda bunu yapmak benim için çok zor olurdu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DEB3- Birimden şu anda ayrılmaya karar vermem halinde, hayatımdaki pek çok şey bundan olumsuz etkilenmeyecektir	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DEB4- Diğer birim alternatifleri daha iyi olmadığı için bu birimden ayrılmayı düşünmüyorum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DEB5- Eğer bu birime bu kadar emek vermemiş olsaydım başka bir birimde çalışmayı düşünebilirdim	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DEB6- Benim için bu birimden ayrılmanın olumsuz sonuçlarından biri de, başka bir birimin burada sahip olduğum olanakları sağlayamama ihtimalidir	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normatif Bağlılık					
NB1- Bu birimde devam etme zorunluluğu hissediyorum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NB2- Benim avantajıma olsa bile, çalıştığım birimden şimdi ayrılmak bana doğru gelmiyor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NB3- Bu birimden şimdi ayrılırsam suçluluk hissederim	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NB4- Bu birim benim çabalarımı hak ediyor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NB5- Bu birimden şimdi ayrılmanın, burada çalışan diğer insanlara karşı duyduğum sorumluluklar nedeniyle yanlış olacağını düşünüyorum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NB6- Çalıştığım birime çok şey borçluyum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Teşekkür ederiz...

APPENDIX 4: ROTATED COMPONENT MATRIX - ENGLISH

Item (English)	Component		
	1	2	3
I really feel as if this department's problems are my own.	.792		
I feel like "part of the family" at my department.	.781		
I feel a strong sense of "belonging" to my department.	.742		
I would be very happy to spend the rest of my career with this department.	.726		
This department has a great deal of personal meaning for me.	.665		
I feel "emotionally attached" to this department.	.661		
I would feel guilty if I left my department now.		.850	
I would not leave my department right now because I have a sense of obligation to the people in it.		.750	
Even if it were to my advantage, I do not feel it would be right to leave my department now.		.658	
This department deserves my effort.		.473	
Right now, staying with my department is a matter of necessity as much as desire.			.658
If I had not already put so much of myself into this department, I might consider working elsewhere.			.639
I feel that I have too few options to consider leaving this department.			.529
It would be very hard for me to leave my department right now, even if I wanted to.			.514
One of the few negative consequences of leaving this department would be the scarcity of available alternatives.			.501
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
Rotation converged in 5 iterations.			