# The Effects of Mental Health Problems of Nurses and Doctors on their Professional Commitment and Work Engagement Levels

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**Abstract**

*This study aims to investigate the effects of mental health problems on professional commitment and work engagement levels of nurses and doctors. In the literature, studies suggest that mental health problems affect employees' attitudes and behaviors both in their social and work life. In this context, the extent of this study consist of positive outputs such as professional commitment and work engagement, which are related with employees work life and considered to be effected from the mental health. Accordingly, this study aims to determine the effects of some of the mental health problems called as depression, loss of confidence, insomnia, social dysfunction and anxiety on nurses and doctor's professional commitment and work engagement levels. For this purpose, the data which are collected from 145 nurses and doctors working in public and private hospitals by the survey method are analyzed by using the structural equation modelling. In this respect, descriptive statistics, confirmatory factor analysis, and the structural equation modelling applied to the data obtained from nurses and doctors at the hospitals. The results of the study indicate that two mental health problems, which are addressed as depression and loss of confidence have a significant effect on nurses and doctors' both normative and continuance professional commitment levels, whereas affective professional commitment levels are not affected by any of the mental health problems. However, depression and insomnia that considered as common mental health problems have both significant effects on nurses and doctors' vigor and dedication levels. In addition to these, insomnia and anxiety have a significant effect on their absorption levels.*

**Keywords:** Mental Health Problems, Professional Commitment, Work Engagement, Doctors, Nurses

## Introduction

In modern working life, employees are needed to able to adjust quickly to the changing world as the rapid technological advancements, global competition, increasing demands and instable nature of work. These alterations indicate that today's working life requires employees, who have mental qualities besides their psychical abilities. However, it is needed to create a positive work environment, which has significant effects on employees' attitudes, motivation, performance, and mental health (van der Vliet & Hellgren, 2002: 4-5). Work environment is an important place in employees' lives, because it leads them to keep on work, facilitates use of their capacity fully and affects their mental health (St-Arnaud et al., 2007: 690-691). In other words, work environment is one of the key components that effect employees' mental health levels. Mental health can be impacted by the negatively physical and psychosocial working conditions that cause to detrimental effects on employees' performance and productivity. Besides, when mental health is affected negatively from the bad conditions, it is expected that mental-ill health and several mental health problems emerge (Hassard et al., 2011: 7). Mental health problems become prevalent in work life over the last two decades based on personal, social and environmental factors (Herrman et al., 2005: 9). Due to the increasing of mental health problems, it can be seen that organizations begin to growing awareness to prevent, detect and manage them effectively (LaMontagne et al., 2014: 3).

Mental health seen as an essential component of general health and it reflects the balance between the individuals and the environment. Accordingly, it is important for employees to preserve their mental health status and avoid mental health problems (Canciu & Bardac, 2011: 175). Because mental health problems and its consequences have serious impacts

such as increasing rates of illness, accidents and turnover, result in absenteeism, decreasing of their performance and effectiveness (Mabunda and Idemudia, 2012: 189). In addition to these, mental health problems negatively affect employees' psychical conditions, motivation and commitment levels which lead them to maintain poor relationships in their social and work environments (Harnois & Gabriel, 2000: 9). Therefore, it can be seen that mental health problems influence employees' attitudes towards not only their social lives but also their working lives. In the literature, it is indicated that mental health problems have some negative effects on individuals' attitudes and behaviors in terms of life and job satisfaction (Ueda & Niino, 2012: 27; Sarjaloei & Hashemi, 2013: 585). Furthermore, researchers suggest that mental health problems result in employees to exhibit bullying behaviors and increasing their burnout levels while decreasing their work engagement levels (Pienaar & Willemse, 2008: 1057; Vilotti et al., 2013: 23; Reis et al., 2013: 9; Reknes et al., 2014: 479).

It can be said that mental health problems induce some negative consequences for both organizations and individuals. Accordingly, this study aims to investigate some outputs of mental health problems such as professional commitment and work engagement from the nurses and doctors perspective. Since the professional commitment and work engagement are crucial components on some specific professions like health sector and the mental health of nurses and doctors are important factor on patients' safety; this research is conducted on this population. However, there is not any research existing literature investigating the relationships among mental health problems, professional commitment and work engagement. Therefore, this study aims to add some contribution to the literature. Thus, this study aims to investigate the effects of mental health problems on the professional commitment and work engagement levels of nurses and doctors.

## 2.Theoretical Framework

### 2.1. Mental Health Problems

Mental health refers to the psychological wellbeing of an individual who is working for any organization (Nahar et al., 2013: 521). According to the World Health Organization, mental health is defined as "a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community'' (Slade, 2010: 2; Mokhtari et al., 2013: 83-84). In case of mental health absence for an individual, social, psychological, biological factors and working conditions, mental health illness and mental health problems may occur. In other words, factors such as insecurity, hopelessness, rapid changings, high unemployment, low income, limited education, gender discrimination, unhealthy lifestyle, organizational barriers, and stressful working conditions lead employees to have mental health problems (Herrman, 2005: 4). Mental health problems are matters of modern age due to the changing living conditions. For example, the employees used to be exposed to contagious, incurable and fatal diseases in the past decades, while they face a few of these problems under today's working conditions, but still they encounter several mental disorders and problems (Sarjaloei & Hashemi, 2013: 585).

Nowadays, mental health problems are increasing social problems, which can affect an individual's performance and interactions both in social and work life. Mental health problems are usually defined as some symptoms that can affect an individual's thoughts, feelings and behaviors and also show them somehow different from the rest of the society (IBEC, 2012: 5-10). In addition, mental health problems are seen the most important contributors to the increasing number of disease and disability problems worldwide. In the literature, it is indicated that five of the 10 leading causes of disabilities are related with mental health problems (Harnois & Gabriel, 2000: 1). In other words, according to the international labor office, approximately 20% of the working-age population has mental health problems (St-Arnaud et al., 2007: 691; Hassard et al., 2011: 5; Rössler, 2012: 65). On the other hand, World Health Organization indicates more than 150 million people in worldwide experienced depression which is labelled one of the common mental health problems in 2004 (Karban, 2011: 2). Therefore, it is expected that in the future, these problems gradually will increase and by the year 2020, depression will emerge as one of the leading causes of disability in the world (Dewa et al., 2007: 347). Mental health problems are considered as common disorders by the world in general, which have significant impacts on employees work lives. Although these are regarded as minor illnesses, they have strong effects on individuals' capacity to work and cause sicknesses and absences in the long term (Hensing et al., 2013: 3). Furthermore, mental health problems result in employees to loss cognitive skills, self-control, self-confidence, self-esteem and hope for the future as well as they lead impairment of social relations and the mutual trust between individuals (Baum & Neuberger, 2014: 309). From the organizational perspective, mental health problems triggers number of costs that include loss of potential labor supply, unemployment, absenteeism and reduced productivity in the workplace. Therefore, due to the adverse effects of mental health problems, they seem significant for an individual, society and employer (IBEC, 2012: 9). Moreover, since the mental health problems cause lots of additional cost, it is important that these problems are needed to be diagnosed and treated.

In the literature, it can be seen that mental health problems are classified in different categories by the researchers. The World Health Organization, who is a global public health agency of the United Nations, developed and revised international classification systems for health. This classification, which was approved in 1990, is labelled as an International Classification of Disorders (ICD-10) (Gaebel, 2012: 895). The ICD-10 guides the components, which impairs mental health as well as refers to the negative and abnormal behaviors (Cooper & Hassiotis, 2009: 254). These components are classified in 10 different axis such as mental disorders, psychoactive substance use, schizophrenia, mood disorders, stress-related and somatoform disorders, behavioral syndromes, disorders of adult personality and behavior, mental retardation, disorders of psychological development, behavioral and emotional disorders which occur in childhood and adolescence (Robles et al., 2014: 6). American Psychiatric Association (1994) categorized mental health problems as delirium, dementia, amnestic and other cognitive disorders, substance-related disorders, schizophrenia and other psychotic disorders, mood disorders, anxiety disorders, somatoform disorders, factitious disorders, dissociative disorders, sexual and gender identity disorders, eating disorders, sleep disorders, impulse-control disorders, adjustment disorders and personality disorders (Goldberg, 2010: 15). In this study, within those disorders, some of the common mental health problems like insomnia, anxiety, depression, loss of confidence and social dysfunction will be examined.

Insomnia: Insomnia is defined as a sleep disorder that may occur sharply and dissipate or may become an irritating chronic disorder (Pigeon, 2010: 321). Insomnia is the most frequent sleep disorder which affects large proportions of the society as a situational, recurring or in a persistent way. However, it is considered as one of the important mental health problems due to the effects on individuals' psychological, occupational, economic domains of lives and also affects the quality of life (Morin & Benca, 2012: 1129). In addition, insomnia is regarded antecedents of other mental health problems such as both depression and anxiety (Sivertsen et al., 2009: 109).

Anxiety: Anxiety refers to the distressful emotions which frequently accompanied by behavioral reactions and consist of psychological and somatic manifestations (Cooray & Bakala, 2005: 355). In fact, it is considered as one of the most common mental health disorders in the community (Stein & Stein, 2008: 1115). Anxiety emerges when individuals face with some stressful events and it begins to have negative impacts gradually on their work and social lives. Thus, it becomes a significant mental health problem (IBEC, 2012: 12).

Depression: Depression is considered as a common mental disorder associated with depressed mood, loss of interest, feelings of guilt or low self-esteem, having insomnia, eating disorders and poor concentration (Chang et al., 2010: 528). However, individuals who have a depression tendency to suicide and thoughts of death, frequent crying, chronic aches, and excessive gain or loss in weight (Spielberger et al., 2003: 211). Therefore, depression has a significant impact on an individual's life domains such as family, friends, work life etc. (Hysenbegasi et al., 2005: 145)

Loss of Confidence: Loss of confidence refers to an attitude, which includes the lack of self-confidence and feelings of a worthless person (Khan et al., 2013: 604). In other words, individuals think that they have no success and satisfaction on their work and social lives. Moreover, individuals, who have lost their confidence to themselves do not concentrate whatever they have done in their life and have the feeling of being useless (Abeysena et al., 2012: 151).

Social Dysfunction: Social dysfunction, which is considered as an abnormal behavior, is defined as on the basis of impaired social interactions. (Kipps et al., 2009: 593). Social dysfunction includes individuals not to have a verbal and non-verbal skills, to possess a lack of social, emotional and cognitive or information processing skills, so they are not successful at negotiation of social roles and interpersonal transactions in their lives (Munroe-Blum et al., 1996: 211).

### 2.2. Professional Commitment

By the transformations of working life in the 21th century, stabilization of employment is a difficult goal for organizations to achieve. Due to the individuals' level of educations and competencies are increasing, employees are not tendency to sign long-term contracts and they are not inclined to cultivate bonds with the organization (Bieńkowska, 2012: 22-23). Therefore, as organizations continue to restructure, high levels of economic uncertainty emerge and employment relationships become less stable, it is observed that employees are shifting their loyalty to their professions instead of their organizations. Accordingly, it is possible to claim that commitment type has been changed from organizational commitment to professional commitment (Blau, 2009: 116; Simola, 2011: 69). Professional commitment refers to the employee's affective attachment, a person's belief and acceptance of the values of their profession. Professional commitment represents the willingness of an individual to continue in that job (Teng et al., 2007: 48; van der Heijden et al., 2009: 618). However, it can be inferred that professional commitment is consisted of three components such as belief and acceptance of goals and values of profession, willingness to make an effort for the profession and have desire to remain in that profession (Chang et al., 2014:

52). Generally, professional commitment reflects employees' attitudes and behaviors about their jobs and it is viewed as an identification and involvement with one's profession (Chen, et al., 2008: 1739).

Professional commitment shows the degree of importance of work, which plays a significant role in individuals' life and requires a deep loyalty with the adaptation of specific values of the profession beyond the monetary gain. Particularly, due to the characteristics and the key role of commitment in some professions such as doctors, nurses, military, education etc., professional commitment is considered as more necessary and crucial than the other professions (Somech & Bogler, 2002: 557). Because professional commitment constitutes a major part of employees' life and brings positive consequences both from the organizational and individual perspectives (Elias, 2008: 286). In the literature, it is indicated that the professional commitment leads to improve job performance and job satisfaction, whereas it reduces turnover intention (Teng et al., 2009: 302; van der Heijden et al., 2009: 620; Nasution & Östermark, 2012: 168; Cho & Huang, 2012: 34). However, employees who are committed to their professions, have more work ethical values, job concentration and tendency to exhibit the organizational citizenship behaviors than the others (Kim & Chang, 2007: 65-66). In other words, professional commitment affects employees to exhibit positive behaviors and force them to protect the interests of their organizations and clients (Chen & Kao, 2012: 152). Moreover, professional commitment facilitates organizations to acquire a good performance and to achieve its goals efficiently by the involvement of employees to their professions (LLapa-Rodríguez et al., 2008: 488). In addition to these, a professionally committed employee provides benefits both for the organizations and societies on the whole. Because professional commitment prevents higher 'costs' such as additional needed training and human capital investments, which occur when person change his/her occupation (Van der Berg, 2011: 16).

Professional commitment emerges when employees internalize the values of profession, accept the codes of professional ethics and consider work as the most important component of their lives. However, professional commitment occurs when employees have a deep identification with the profession, have a tendency to remain in the same profession due to the investments and efforts that they have done before (Vardi & Weitz, 2002: 103). Meyer et al., (1993) suggested that professional commitment composes of three facets such as affective professional commitment, (want to stay), continuance professional commitment (have to stay) and normative professional commitment (should stay) (Blau, 2009: 117; Simola, 2011: 70). In addition to these, Blau (2003) re-conceptualized professional commitment by introducing a four-dimensional structure as follows: affective, normative, accumulated costs and limited alternatives (Vernon, 2011: 18). In this study, professional commitment will be examined in accordance to Meyer's classification:

Affective professional commitment; this component refers to the employees identification with, involvement in and emotional attachment to his or her occupation (Dwivedula & Bredillet, 2010: 80). Affective professional commitment begins with the choice of profession; continues based on actual experience of employees and opportunities that organization provides. In other words, employee's affective professional commitment levels increase or decrease regarding their abilities, career goals, monetary and non-monetary contributions and etc. (Weng & McElroy, 2012: 257).

Continuance professional commitment; it refers to the employees willingness to stay in the profession based on the accumulated investment that they have done before (Nasution & Östermark, 2012: 168). Professional continuance commitment shows employees who are committed to their profession due to the difficultness of leaving the profession. Because leaving profession and changing occupation may result in facing worse conditions such as lack of benefits and opportunities, and reduced income etc. (Cho & Huang, 2012: 34).

Normative professional commitment; it refers to the employee's feeling of obligation to stay in his or her profession (Van der Berg, 2011: 16). Normative professional commitment emerges as a result of received benefits or having positive experiences as a result of engagement with the profession (Nogueras, 2006: 87). Accordingly, it can be said that normative professional commitment represents the employees who remain in that occupation because of the appreciation that they have received up to now.

### 2.3. Work Engagement

In the contemporary world, organizations need employees who are psychologically connected to their work; who are willing and able to invest themselves fully to their work roles. In other words, organizations have a tendency to employ individuals who are engaged with their works to achieve superior performance (Bakker et al., 2010: 2). Therefore, work engagement considered as potentially an important topic in the organizational behavior literature, which has been conceptualized first time by the Kahn's (1990). Kahn (1990) described work engagement as being physically active, cognitively, and emotionally connected with work roles (Murthy, 2014: 349). According to Schaufeli et al. (2002) work engagement defined as "a positive,

fulfilling, work-related state of mind, which is most commonly characterized by vigor, dedication and absorption" (Bakker & Demerouti, 2008: 209; Lu et al., 2014: 142; Karatepe, 2014: 308). In this context, it can be said that work engagement constitutes three different components as vigor, dedication and absorption, which are corresponded to physical, emotional and cognitive components (Geldenhuys et al., 2014: 3).

Vigor; it refers to having a high level of energy and mental resilience while working and having a willingness to make an effort for work roles and to behave in a persistence manner when facing the difficulties (van der Colff & Rothmann, 2009: 3; Barnes & Collier, 2013: 486). However, vigor represents positive affective response to the work environment and it includes of individuals having physical strength, emotional energy, and cognitive liveliness (Shraga & Shirom, 2009: 272). Therefore, individuals, who perceive themselves to possess the physical, emotional, and cognitive abilities to handle job demands are more effective and have a high level of motivation (Little et al., 2011: 467).

Absorption; this component refers to employees being totally engrossed in their works, so that time passes quickly and it is difficult them to detach from their work (Hakanen et al., 2008: 79; Menguc et al., 2013: 2164). Absorption is characterized as an individual having a focused attention, a clear mind, and intrinsic enjoyment, loss of self-consciousness and distortion of time (Alarcon & Edwards, 2010: 1). However, it shows that employees have pleasure from work and consider working as being rewarded (Mustosmäki et al., 2013: 51).

Dedication: it is characterized as "an individual is being strongly involved in towards his or her work's and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge (Gonza´lez-Roma´ et al., 2006: 166; Jenaro et al., 2010: 867). In another words, dedication represents that employees have a great involvement with their jobs (Hayati et al., 2014: 2). Thus, it refers to the emotional side of work engagement and the willingness of individuals to spend amount of time and effort in doing something meaningful at work (Coetzee & de Villiers, 2010: 31).

Work engagement is a motivational construct which represents the more persistent and pervasive affective-cognitive state than a momentary and specific state. However, work engagement is not depended on any particular object, event, individual, or behavior (Peng et al., 2014: 3). Work engagement changes and emerges based on some individual and organizational antecedents. Due to the work engagement importance, it can be seen that researchers has mainly focused on identifying individual and organizational level of antecedents of this concept (Park & Gursoy, 2012: 1195). In the literature, it is suggested that some individual factors such as personality type, self-efficacy, positive affect and organizational components like work overload, job characteristics, leadership are strong predictors of work engagement (Sulea et al., 2012: 5; Baker et al., 2014: 391). Moreover, Saks (2006) determined several antecedents of work engagement from the organizational perspective such as job characteristics, perceived organizational support, supervisor support, rewards and recognition, procedural and distributive justice, perceived organizational support. Shraga & Shirom (2007) asserted that big five personality variables lead to work engagement (Gill, 2007: 7-8). In addition to these, Bakker & Demerouti (2007) developed a job demands-resources (JD-R) model which includes job resources such as social support from colleagues and supervisors, performance feedback, skill variety, autonomy and personal resources like optimism, self-efficacy, resilience and self-esteem. According to this model, job and personal resources have a positive impact on engagement when job demands (work pressure, emotional, psychical and mental demands) are high (Bakker & Demerouti, 2008: 218). On the other hand, it is expected that some organizational components like trust, empowerment and organizational tenure have a contribution on employees' work engagement levels to be increased or decreased (Ugwu et al., 2014: 378).

Work engagement is considered as one of the positive organizational behaviors which are essential for organizations grappling with new challenges to remain competitive in today's working conditions (Koyuncu et al., 2006: 299-300). Work engagement is seen as vital for survival, sustainability and growth of the organizations. Since employees, who are engaged in their works, invest more psychical and mental energy in work, so it facilitates improved productivity in the organizations (Agarwal et al., 2012: 1). Due to the engaged workforce is considered to be a mail stone of sustaining competitive advantage and contributing to the organization's performance work engagement has captured the attention of the practitioners and researchers in recent years (Agarwal, 2014:42). In literature, it can be seen that researchers suggested that work engagement leads some positive results both in individual and organization levels. For example, Salanova et al., (2005) have shown that work engagement induces increasing of employee performance and customer loyalty (Salanova et al., 2005: 1217). Xanthopoulou et al., (2009) indicate that work engagement predicts financial returns (Xanthopoulou et al., 2009: 183). However, Harter et al. (2002) reported that work engagement leads to increase of customer satisfaction, productivity and profitability, whereas decrease of employee turnover (Menguc et al., 2013: 2163). Stairs & Galpin (2010) claimed that work engagement results in lower absenteeism, improved quality, reduced errors, faster business growth and higher business success (Armstrong & Taylor, 2014: 197). In addition to these, it is indicated that work engagement linked

with some other positive outputs such as job satisfaction, commitment and general health (Strom et al., 2014: 71). Otherwise, it is emphasized that employees who have a work engagement are likely to be involved in organizational citizenship behaviors due to having positive emotions and they feel themselves capable of performing extra-role behaviors eagerly (Sulea et al., 2012: 7). Furthermore, work engagement facilitates employees to exhibit some other positive organizational behaviors such as proactive and innovative behaviors and to have a personal initiative and learning motivation (Bakker & Demerouti, 2009: 221). Given these important consequences of work engagement, it is critical for organizations to employ individuals who have an engagement to their works and understand the factors which are possible to contribute increasing of work engagement like positive working conditions (Ugwu et al., 2014: 378).

## 3. Research Hypotheses

Mental health problems are seen as a recurring problem in today's modern organizations due to its detrimental effects both on individuals and organizations. Previous literature has focused on negative outputs of mental health problems from the employees' perspectives than the organizational consequences. In other words, mental health problems such as depression, anxiety, stress etc. have significant impacts on individuals' performance, productiveness, job satisfaction and life satisfaction levels. Accordingly, it is suggested that mental health problems negatively affects employees' attitudes towards their social life but also their jobs and organizations. (Ueda & Niino, 2012: 27). Professional commitment considered as one of the positive attitudes which can be affected from the employees' mental health. Therefore, it can be said that professional commitment levels of employees can be changed due to the individual traits of employees like mental health problems.

In the literature, it can be seen that researchers only focusing on the relationships between professional commitment and stress, which is labelled as one of the common mental health problems. Pai (2012) et al., have found that IT employees, who are working under work stress, have less professional commitment (Pai et al., 2012: 25). In addition to this, scholars indicate that nurses, who are working under work stress, have less professional commitment levels (Lo et al., 2006: 92; Lu et al., 2007: 110). Moreover, it has been suggested that professional commitment moderates stress levels of the nurses (Jamal, 2014: 3). Therefore, it is seen that researches, which investigate the relationship between professional commitment and stress, focus on hospital employees. Because hospitals are stressful environments due to the some conditions arises like accidents, injuries, deaths and other incidents. It is possible to express that occupational stressors may be physical, chemical, biological, or psychosocial which may occur based on the working conditions more frequent among hospital workers, so these are also important factors that contributing to mental and somatic health levels of nurses and doctors (Mahdavinejad et al., 2011: 147). Wainwright et al., (2001) indicated that 27% of all hospital workers are classified as suffering from stress and mental health problems, which is between 14% and 18% of the general population (Mark & Smith, 2011:1). It is suggested that doctors have high rates of mental health problems including depression, anxiety, addiction to alcohol and drugs; emotional exhaustion etc. which may have significant effects on their professional future (Brooks et al., 2011: 146-149). Therefore, from this point of view, it is expected that mental health problems such as depression, loss of confidence, insomnia, anxiety and social dysfunction may occur in hospital employees more than other people working in some other work places, and these problems may influence their professional commitment levels. In this context, the following hypotheses are proposed:

H1: Mental health problems influence affective professional commitment levels of nurses and doctors.

H2: Mental health problems influence normative professional commitment levels of nurses and doctors.

H3: Mental health problems influence continuance professional commitment levels of nurses and doctors.

Healthcare professionals are frequently exposed to several job stressors that can affect both their mental and psychical health adversely and also decrease their work engagement levels. In the literature, studies showed that healthcare workers particularly nurse have a higher risk to possess some mental health problems such as burnout, anxiety, depression and etc. (Fiabane et al., 2013: 2614). Mental health is seen as a crucial component for employees that can cope with the job stressors and it is considered as one of the indicators of the mental well-being of employees (van der Berkel et al., 2014: 1). In other words, it can be said that mental health represents something the beyond the disease such as well-being, quality of life and work engagement (Torp et al., 2012: 1). However, a few studies have examined the relationship between work engagement and mental health and mental health problems until today. For example, Peterson et al. (2008) found that engaged health care employees have lower levels of anxiety and depression, whereas Shirom (2010) indicated that one of the components of work engagement vigor is positively related to physical and mental health (Bakker et al., 2010: 16). In addition to these, Hallberg & Schaufeli (2006) have shown some negative relationships between work engagement

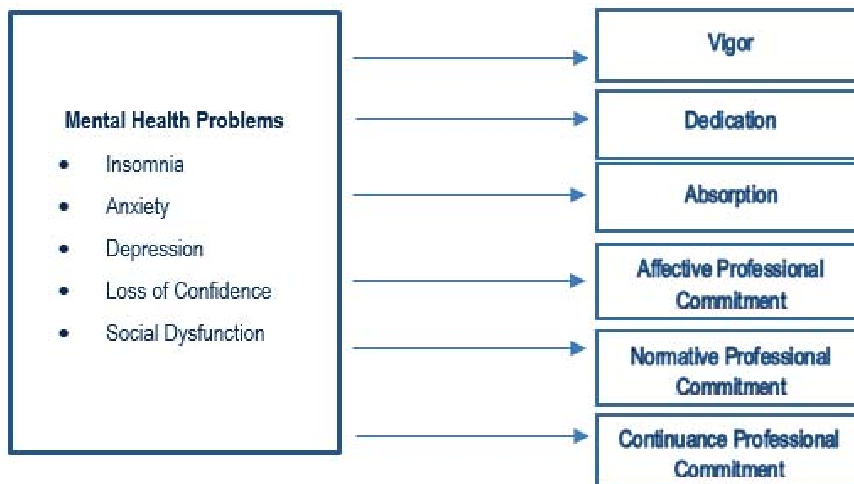
and mental health problems like somatic and depressive symptoms and sleep disturbances, besides Kubota et al., (2011) found that there is a positive relationship between work engagement and sleep quality (Reis et al., 2013: 2). Therefore, researchers suggested that mental health and its consequences such as burnout, depression, distress and psychosomatic complaints are commonly related with work engagement (Schaufeli et al., 2008: 192; Bakker & Demerouti, 2008: 216; Berkel et al., 2013: 1). Accordingly, in this study, it is expected that some mental health problems may influence employees work engagement levels, thus the following hypotheses are proposed:

H4: Mental health problems influence vigor levels of nurses and doctors.

H5: Mental health problems influence dedication levels of nurses and doctors.

H6: Mental health problems influence absorption levels of nurses and doctors.

**Figure 1. Research Model**




## 4.Research Method

### 4.1.Sample and Procedures

The sample of the research was composed of public and private hospitals in Tekirdağ and Burdur provinces of Turkey. The participants of the study consist of 145 employees who have been working as nurses and doctors in four different hospitals that are determined via convenient sampling method. From the 200 questionnaires that have been sent out, 150 have been returned, representing a response rate of 75%. After elimination of cases having incomplete data and outliers 145 questionnaire (72%) have been accepted as valid and included in the evaluations. However, in this study questionnaire survey method is used for data collection. Questionnaire form contains three different measures related to research variables.

### 4.2.Measures

Measures used in the questionnaire forms are adapted from the previous studies in the literature. General health questionnaire, professional commitment and work engagement scales were adapted to Turkish by the lecturers. Before the distribution of the survey to the actual sample, a pilot study was conducted in order to determine whether the questions had been understood properly and to check the reliability of the scales. For answers to the statements of survey, a Likert-type metric, that is, expressions with five intervals has been used. Anchored such; "1- strongly disagree, 2- disagree, 3- agree or not agree, 4- agree, 5-strongly agree". However, 8 demographic questions were asked in the questionnaire form. Firstly, all scales were subjected to the exploratory factor analyses to check the dimensions, and then confirmatory factor analyses were applied to all scales.

General Health Questionnaire Scale: Employee's mental health problems were measured by 30 items in general health questionnaire scale conducted from Abeysena et al., (2012) studies. Exploratory factor analysis using principal component analysis with varimax rotation was applied to the adapted scale to check the dimensions. As a result of the varimax rotation of the data related to the mental health problems, ten items were removed from the analysis due to the factor loadings under 0.50 and five factor solutions were obtained per theoretical structure. Factor loadings of the items ranged from .62 to .87. The Cronbach's alpha coefficient of the general health questionnaire scale items is 89.

Professional Commitment Scale: Employees' professional commitment levels were measured by 18 items from Bagraim's (2003) study. As a result of the exploratory factor analysis of the data related to professional commitment variables six items were removed from the analysis due to the factor loadings under 0.50 and three factor solutions were obtained per theoretical structure. Factor loadings of the item ranged from .50 to .85. The Cronbach's alpha coefficient of the professional commitment scale items is .83.

Work Engagement Scale: Employees' work engagement levels were measured by 17 items taken from Salanova et al., (2005) studies. As a result of the exploratory factor analysis of the data related to work engagement variables five items were removed from the analysis due to the factor loadings under 0.50 and three factor solutions were obtained per theoretical structure. Factor loadings of the item ranged from .55 to .89. The Cronbach's alpha coefficient of the work engagement scale items is .90

After the exploratory factor analyses, the confirmatory factor analysis has been conducted by Lisrel 8.8 for all scales. Goodness of fit indexes is presented in Table 1.

***Table 1. Goodness of fit indexes of the scales***

| *Variables* | *$\chi^2$* | *df.* | *$\chi^2$/df $\leq 5$* | *GFI $\geq .85$* | *AGFI $\geq .80$* | *CFI $\geq .90$* | *NFI $\geq .90$* | *NNFI $\geq .90$* | *RMSEA $\leq 0.08$* |
|---|---|---|---|---|---|---|---|---|---|
| ***Mental Health Problems*** | *134.83* | *97* | *1.39* | *0.90* | *0.85* | *0.98* | *0.93* | *0.97* | *0.05* |
| ***Professional Commitment*** | *48.08* | *24* | *2.00* | *0.93* | *0.87* | *0.96* | *0.93* | *0.93* | *0.08* |
| ***Work Engagement*** | *96.81* | *49* | *1.97* | *0.90* | *0.84* | *0.97* | *0.95* | *0.96* | *0.08* |

### 4.3.Data Analysis

SPSS for Windows 20.0 and Lisrel 8.80 programs were used to analyze the obtained data. After the exploratory and confirmatory analysis, descriptive statistics such as means, standard deviations and pearson correlation analysis of the study variables were examined. Following that, structural equation modelling (SEM) was used to conduct a test of the variables in the research model to examine to what extent it is consistent with the data.

## 5. Research Findings

### 5.1. Respondent Profile

62% of the employees, who have participated in the research, were female while 38% of them were male. 40% of the employees were between the ages of 32-43, 31% of them were between the ages of 26-31, 19% of them under 26, whereas 10% of them are older than 43. In terms of education level, 41% of the participants have bachelor, master and doctorate degrees, while 59% of the employees have high school education. 59% of employees were working in public hospitals and 41% of them working in private hospitals. 54% of the employees were working as nurse, 46% of them were working as doctor. 56% of nurses and doctors were working in service units and outpatient clinics, 15% of them were working in emergency departments, 11% of the employees were working in blood center and laboratories, 9% of them were working in surgery units, and 9% of them were working in intensive care unit. 55% of the participants have been working for between 1-6 years and 31% of them have been working for more than 7 years, while 14% of them less than one year in the same hospital. However, most of the nurses and doctors (67%) have seniority more than 7 years in their professions.

### 5.2 Descriptive Analyses

In the scope of the descriptive analyses means, standard deviations and correlations have been computed which are related to mental health problems, professional commitment and work engagement variables. The values are given in Table 2.

***Table 2. Means, standard deviations and correlations of the study variables***

| Variables | Mean | SD | 1 | 2 | 3 |
|---|---|---|---|---|---|
| ***Mental Health Problems*** | 2.12 | .68 | 1 | | |
| ***Professional Commitment*** | 3.63 | .75 | -.284** | 1 | |
| ***Work Engagement*** | 3.79 | .77 | -.515** | .491** | 1 |

***p<0.01*

As can be seen in Table 2, the mental health problems levels of nurses and doctors were relatively lower, while their professional commitment and work engagement levels were relatively high. However, the results of correlation analysis reveal that the mental health problems of nurses and doctors were negatively related to their professional commitment levels ($r=-.284$, $p<0.01$). In addition, mental health problems of them were negatively related to their work engagement levels ($r=-.515$, $p<0.01$).

### 5.3.Measurement Model

For the verification of the model two step approach by Anderson and Gerbing (1998) has been used. According to this approach, prior to testing the hypothesized structural model, first the research model needs to be tested to reach a sufficient goodness of fit indexes. After obtaining acceptable indexes it can be proceed with structural model. As a result of the measurement model, 6 latent and 40 observed variables were found. Observed variables were consist of 19 items related to mental health problems, 9 items related to professional commitment and 12 items related to work engagement. The results of the measurement model were; $x^2$: 1191.14; df: 683; $x^2$/ df; 1.74; RMSEA: 0.072; IFI: 0.94; CFI: 0.94; NFI: 0.93. These values indicate that measurement model has been acceptable (Schermelleh-Engel et al., 2003: 52; Meydan & Şeşen, 2011: 37). Besides these criterions for accepting measurement model there are some criterions such as standardized factor loadings, t-values, Cronbach's alpha values. In Table 3 these values were summarized.

***Table 3.*** *Results of Measurement Model*

| | Standardized Factor Loadings | t-values | $R^2$ | CR |
|---|---|---|---|---|
| ***Vigor*** | | | | ***0.90*** |
| *In my job, I am mentally very resilient.* | ***0.85*** | ***12.35*** | ***0.58*** | |
| *When I get up in the morning, I feel like going to work.* | ***0.83*** | ***12.00*** | ***0.61*** | |
| *At work, I feel full of energy.* | ***0.79*** | ***11.01*** | ***0.88*** | |
| *I can continue working for very long periods at a time.* | ***0.74*** | ***10.11*** | ***0.39*** | |
| *In my job, I feel strong and vigorous.* | ***0.71*** | ***9.52*** | ***0.80*** | |
| ***Dedication*** | | | | ***0.87*** |
| *I am enthusiastic about my job.* | ***0.89*** | ***13.42*** | ***0.80*** | |
| *My job inspires me.* | ***0.88*** | ***13.12*** | ***0.76*** | |
| *I find the work that I do full of meaning and purpose.* | ***0.72*** | ***9.73*** | ***0.52*** | |
| *I am proud of the work I do.* | ***0.67*** | ***8.79*** | ***0.44*** | |
| ***Absorption*** | | | | ***0.67*** |
| *I am immersed in my work.* | ***0.88*** | ***11.11*** | ***0.93*** | |
| *I get carried away when I'm working.* | ***0.59*** | ***7.10*** | ***0.31*** | |
| *It is difficult to detach myself from my job.* | ***0.46*** | ***5.36*** | ***0.14*** | |
| ***Depression*** | | | | ***0.73*** |
| *I am thinking of myself as a worthless person.* | ***0.90*** | ***11.92*** | ***0.75*** | |

| | | | | |
|---|---|---|---|---|
| *I feel my life entirely hopeless.* | ***0.73*** | ***9.31*** | ***0.57*** | |
| *I feel that life not worth for living.* | ***0.50*** | ***5.94*** | ***0.27*** | |
| ***Loss of Confidence*** | | | | ***0.70*** |
| *I am satisfied with the way that I have carried out my tasks. ®* | ***0.75*** | ***9.26*** | ***0.58*** | |
| *I felt on the whole that I have done things well. ®* | ***0.66*** | ***7.94*** | ***0.41*** | |
| *I felt that I am playing a useful part in things. ®* | ***0.59*** | ***6.94*** | ***0.35*** | |
| ***Insomnia*** | | | | ***0.91*** |
| *I am having restless disturbed nights.* | ***0.94*** | ***14.70*** | ***0.83*** | |
| *I have difficulty fall into sleep at nights.* | ***0.93*** | ***14.44*** | ***0.93*** | |
| *Even though I have tired, I could not sleep frequently at nights.* | ***0.83*** | ***11.85*** | ***0.61*** | |
| *I lost much sleep over worry.* | ***0.75*** | ***10.44*** | ***0.54*** | |
| ***Social Dysfunction*** | | | | ***0.88*** |
| *I felt capable of myself for making decisions about things. ®* | ***0.81*** | ***11.42*** | ***0.65*** | |
| *I find easy to get on with other people. ®* | ***0.79*** | ***11.07*** | ***0.63*** | |
| *I am capable of walking in other people's shoes ®* | ***0.76*** | ***10.36*** | ***0.58*** | |
| *I am managing to keep myself busy and occupied. ®* | ***0.75*** | ***10.12*** | ***0.57*** | |
| *I am able to face up to my problems. ®* | ***0.73*** | ***9.88*** | ***0.54*** | |
| *I like spending much time chatting with people. ®* | ***0.69*** | ***9.14*** | ***0.48*** | |
| ***Anxiety*** | | | | ***0.89*** |
| *I am feeling nervous and strung up all the time.* | ***0.91*** | ***13.87*** | ***0.83*** | |
| *I am feeling constantly under strain.* | ***0.85*** | ***12.30*** | ***0.72*** | |
| *I am feeling unhappy and depressed.* | ***0.83*** | ***11.92*** | ***0.69*** | |
| ***Affective Professional Commitment*** | | | | ***0.80*** |
| *I regret having entered the actuarial profession. ®* | ***0.84*** | ***11.66*** | ***0.70*** | |
| *I am proud to be in the actuarial profession.* | ***0.75*** | ***9.91*** | ***0.56*** | |
| *I do not identify with the actuarial profession. ®* | ***0.68*** | ***8.81*** | ***0.47*** | |
| ***Continuance Professional Commitment*** | | | | ***0.82*** |
| *Changing professions now would be difficult for me to do.* | ***0.86*** | ***12.01*** | ***0.75*** | |
| *I have put too much into the actuarial profession to consider changing now.* | ***0.78*** | ***10.48*** | ***0.61*** | |
| *Too much of my life would be disrupted if I were to change my profession.* | ***0.73*** | ***9.63*** | ***0.53*** | |
| ***Normative Professional Commitment*** | | | | ***0.83*** |
| *I feel a responsibility to the actuarial profession to continue in it.* | ***0.90*** | ***12.58*** | ***0.77*** | |
| *I believe who have been trained in a profession have a responsibility to stay in.* | ***0.74*** | ***0.58*** | | |
| *Even if it were to my advantage, I do not feel that it would be right to leave the actuarial profession now.* | ***0.72*** | ***9.40*** | ***0.54*** | |

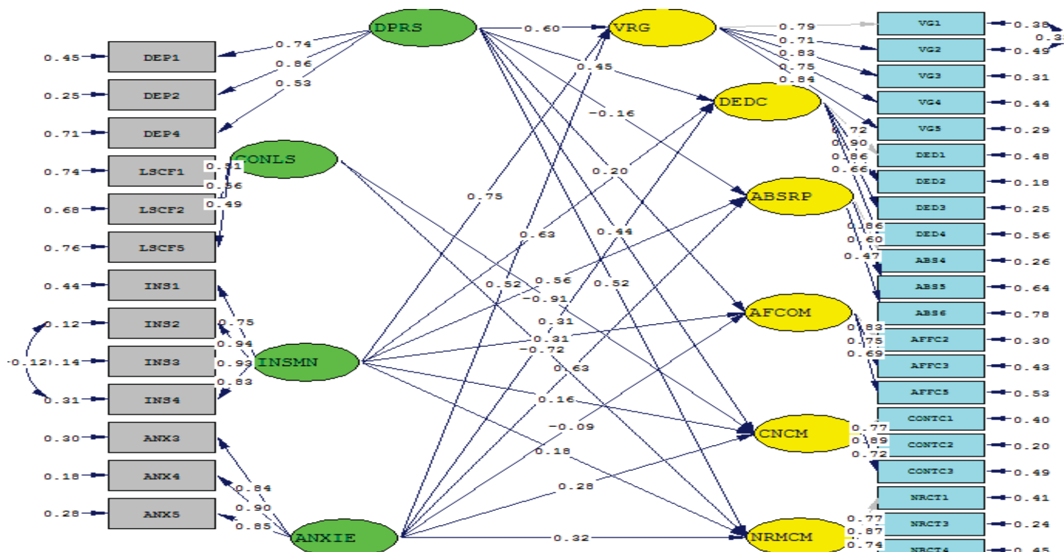
*∗ t-values significance at p<0.01 level*
*CR:Cronbach Alpha values*
*®: Reversed items*

### 5.4. Structural Equation Model

After the measurement model was demonstrated as acceptable, the structural equation model was applied to verify hypotheses for the causal relationships in the research model. The results of the structural equation model were; $x^2$: 1148.41; df: 497; $x^2$/df: 2.31; RMSEA: 0.09; CFI: 0.91; IFI: 0.91; NNFI: 0.90. These results indicate that structural model has a weak fit with the data and RMSEA value was not considered in the acceptable range. (Schermelleh-Engel et al., 2003: 52; Meydan & Şeşen, 2011: 37). On the basis of these results, research model was revised according to the theoretical framework. In this context, social dysfunction dimension of mental health problems were excluded from the scope of the analyses due to the unacceptable values of path coefficients. After revising the structural model, a more significant model was obtained. The revised model that was used to test the relationships is shown in Figure 2. The results

of the revised model were; $x^2$: 964.07; df: 495; $x^2$/df: 1.94; RMSEA: 0.08; IFI: 0.93; CFI: 0.93; NNFI: 0.92. According to the revised model, it can be seen that the results were getting better ($x^2$/df, RMSEA, IFI, CFI, NNFI). In fact, these results indicate that structural model has been acceptable (Schermelleh-Engel et al., 2003: 52; Meydan & Şeşen, 2011: 37).

Figure 2. Structural model and path coefficients




According to the results of structural equation model, the path parameter and significance levels show that mental health problems have no significant effect on affective professional commitment. Accordingly, the affective professional commitment levels of nurses and doctors were not affected by the mental health problems, so H1 hypothesis was not supported. However, depression which is considered one of the common mental health problems has a significant and positive effect (γ=0.52; t-value=3.50) on normative professional commitment and loss of confidence has a significant and negative effect (γ=-0.72; t-value=-2.62) on normative professional commitment, whereas insomnia and anxiety have no significant effects on normative professional commitment levels, so H2 hypothesis supported partially. Therefore, it is possible to express that normative professional commitment levels of nurses and doctors were affected by the depression and loss of confidence. In addition to these, depression has a significant and positive effect (γ=0.44; t-value=2.83) on continuance professional commitment and loss of confidence has a significant and negative effect (γ=-0.91; t-value=-3.11) on continuance professional commitment, while insomina and anxiety have no significant effects on continuance professional commitment, thus H3 hypothesis was supported partially. In this context, it can be said that only depression and loss of confidence have significant effects on normative professional commitment and continance professional commitment levels of nurses and doctors.

The results of structural equation model, the path parameter and significance levels show depression has a significant and positive effect (γ=0.60; t-value=2.19) on vigor, insomnia has a significant and positive effect (γ=0.75; t-value=2.48) on vigor, whereas loss of confidence and anxiety have no significant effects on vigor. Therefore, vigor levels of nurses and doctors which are labelled as one of the components of work engagement were affected by the mental health problems such as depression and insomina. Thus, H4 hypothesis was supported partially. However, depression has a significant and positive effect (γ=0.45; t-value=2.19) on dedication, meanwhile insomnia has a significant and positive effect (γ=0.63; t-value=2.42) on dedication, and loss of confidence and anxiety have no significant effects on dedication. In this context, it can be seen dedication levels of nurses and doctors were affected by the depression and insomina hence H5 hypothesis supported partially. In addition to these, insomnia has a significant and positive effect (γ=0.56; t-value=2.40) on absorption and anxiety has significant and positive effect (γ=0.63; t-value=2.56) on absorption, whereas depression and loss of confidence have no significant effects on absorption levels of doctors and nurses so H6 hypothesis was supported partially. Thus, it can be said that mental health problems like insomnia and anxiety have a significant effect on absorption.

**Table 4. Summary of Hypotheses Results**

| Hypotheses | Standardized β | T-values | Results |
|---|---|---|---|
| H1: Mental health problems influence affective professional commitment levels of nurses and doctors. | | | |
| Depression → | 0.20 | 1.38 | Not Supported |
| Loss of Confidence → | -1.06 | -3.87 | |
| Insomnia → | 0.31 | 1.69 | |
| Anxiety → | -0.09 | -0.48 | |
| H2: Mental health problems influence normative professional commitment levels of nurses and doctors. | | | Partially Supported |
| Depression → | 0.52 | 3.50 | |
| Loss of Confidence → | -0.72 | -2.62 | |
| Insomnia → | 0.18 | 1.02 | |
| Anxiety → | 0.32 | 1.68 | |
| H3: Mental health problems influence continuance professional commitment levels of nurses and doctors. | | | Partially Supported |
| Depression → | 0.44 | 2.83 | |
| Loss of Confidence → | -0.91 | -3.11 | |
| Insomnia → | 0.16 | 0.83 | |
| Anxiety → | 0.28 | 1.40 | |
| H4: Mental health problems influence vigor levels of nurses and doctors. | | | Partially Supported |
| Depression → | 0.60 | 2.51 | |
| Loss of Confidence → | -2.04 | -4.48 | |
| Insomnia → | 0.75 | 2.48 | |
| Anxiety → | 0.52 | 1.64 | |
| H5: Mental health problems influence dedication levels of nurses and doctors. | | | Partially Supported |
| Depression → | 0.45 | 2.19 | |
| Loss of Confidence → | -1.72 | -4.33 | |
| Insomnia → | 0.63 | 2.42 | |
| Anxiety → | 0.31 | 1.16 | |
| H6: Mental health problems influence absorption levels of nurses and doctors. | | | Partially Supported |
| Depression → | -0.16 | -0.87 | |
| Loss of Confidence → | -1.44 | -4.18 | |
| Insomnia → | 0.56 | 2.40 | |
| Anxiety → | 0.63 | 2.56 | |

## 6. Conclusion

Mental health problems considered as common and crucial topics in our modern world due to the socio-demographic and technological advances and amendments in working conditions. These rapidly and severe changes in work life such as long working hours, increasing job insecurities, increasing demands and pressures, innovations in work processes bring some positive and negative impacts to both organizations and individuals. Global working conditions require organizations and employees to put forth the effort mentally as well as physical exertion. However, since employees have necessity to work in these circumstances, they have to invest in mentally and keep up with the intense and competitive working life so it is expected that some mental health problems may occur based on these conditions. Mental health problems emerge due to the factors, where employees face in their social and work lives. In other words, mental health problems emerge by the individual traits of employees or the issues which are related to family, friends, economic status or working conditions like injustice, stressful, pressure, heavy work load etc. Accordingly, it can be observed due to the increasing number of social and working life problems, it becomes for employees to struggle for life a handful so they have a mental disease such as depression, anxiety, insomnia, loss of confidence and social dysfunction more than ever. In the literature, mental health problems considered as an important condition in working area, which is needed to be diagnosed and treated, since it has significant effects on employees' performance, attitudes and behaviors towards their jobs, colleagues and organization. Researchers suggest that mental health problems have crucial impacts on some positive outputs like job performance, life satisfaction, work engagement, commitment; whereas they indicated that it leads to some negative outputs such as reduced productivity, absenteeism and turnover intention etc.

Nowadays, mental health problems are considered more intensely in some spesific sectors, professions and working areas, in which employees face quite stressful and intense conditions such as financial, hospitality and health sector or some professions like policing, nursing, doctors and etc. Especially, in health sector nurses and doctors have mental health disorders more than others because of the working conditions such as heavy work load, long working hours and heavy working circumstances like facing with a number of illness and deadness. However, it is important to diagnose and overcome the mental health problems of nurses and doctors for patient safety and patient care quality. In other words, treatment of the mental health problems of nurses and doctors is vital for them to exhibit positive attitudes and behaviors in their jobs. In this context, it can be said that mental health problems lead some negative results and it may reduce positive outputs if they could not be resolved. Therefore, this study aims to determine the impact of mental health problems of nurses and doctors on some positive consequences like professional commitment and work engagement. According to the results of the study, it is revealed that normative and continuance professional commitment levels of nurses and doctors were affected by some of the mental health problems, whereas their affective professional commitment levels were not affected, thus H2 and H3 hypotheses were supported partially, while H1 was not supported. When the effect of mental health problems on normative and continuance professional commitment levels were investigated, it is seen that depression effects both normative and continuance professional commitment positively. On the other hand loss of confidence effects normative and continuance professional commitment levels of nurses and doctors negatively. Thus, it is possible to express that nurses and doctors, who have a depression, feel an obligation to stay in his or her professions due to the benefits that they have received until this time. Moreover, nurses and doctors, who have a loss of confidence, no willingness to stay in that profession even though they have gained some advantages. In addition, descriptive statistics show that professional commitment levels of nurses and doctors were relatively high. Concordantly, it can be inferred that in the scope of this study, nurses and doctors have a professional commitment to their professions and their normative and continuance professional commitment levels were only affected by two of the mental health problems which are named depression and loss of confidence.

As a result of the other research findings of the study indicate that some of the dimensions of work engagement were affected by the mental health problems. When the mental health problems effect on work engagement analyzed, it is seen that the dimension of "vigor" and "dedication" were affected by the depression and insomnia; thus H4 and H5 hypothesis were supported partially. In additon to this, other dimension of "absorption" was affected by the insomnia and anxiety problems. Thus, H6 hypotheses was also supported partially. When the effects of depression and insomnia were investigated, it is possible to express that these problems affect vigor and dedication levels of nurses and doctors positively. Furthermore, insomnia and anxiety affect their absorption levels positively. Therefore, in the scope of this study, it can be said that work engagement levels of nurses and doctors are relatively high and their work engagement levels were affected by only some of the mental health problems like depression, insomnia and anxiety. However, in the scope of this study, nurses and doctors though have depression and insomnia, they have also energy and mental resilience at work. In addition, even though nurses and doctors have depression and insomnia, they have dedication to their works and feeling enthusiasm and pride from their work. Besides the nurses and doctors who have a mental health problems such as anxiety and insomnia, also have absorption at the same time and it is difficult for them to detach from their works. These results are not

consistent with the results of the previous studies. In the literature, researchers suggest that mental health problems effects work engagement levels of employees negatively, but in this study, some of the mental health problems effect work engagement positively due to the characteristics of the profession. In other words, doctors and nurses have heavy workloads and stressful working conditions, so they have subjected to insomnia, depression and anxiety wide. On the other hand, even though nurses and doctors have such disorders, they feel committed to their professions and they have feeling of engagement. Since these professions require high level of responsibility, identification with the tasks and to have an emotional attachment with the job, it is possible to say that nurses and doctors have a professional commitment and work engagement even though they have mental health problems.

In conclusion, professional commitment and work engagement levels of nurses and doctors were affected by the mental health problems. However, due to the profession characteristics, they will continue to possess these mental health problems. That is to say, even though they have mental health problems, it is required to diognase, treat and overcome these problems for to provide having a positive attitiudes towards to their jobs and positive behaviors to the patients. Therefore, nurses and doctors need to be aware of their mental health problems and should overcome these problems if they want to gain success in the work environment, which contains stressful conditions and factors to be taken care such as patient safety and patient-care quality. In this context, it can be said that mental health problems are significant predictors of some positive and negative attitudes particularly in some professions. For future studies, the research model can be tested by other spesific and intense professions such as law, policing and banking etc. In addition, these research applied in some sectors which lead to mental health problems due to the long working hours and intensive conditions like tourism, transportation and retail or etc. Moreover, the study can be expanded by adding personality type and positive or negative affect variables which are classified as individuals traits. Thus, it is possible to determine the effects of individual traits on mental health problems, then results can be compared and it can be determined whether individual traits of nurses and doctors have an effect on mental health problems or not.

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