

**THE EFFECTS OF JOB STRESS ON WELL-  
BEING AND MEDICAL PROFESSIONALISM  
AMONG DOCTORS AT PUBLIC HOSPITALS IN  
HEBEI PROVINCE, CHINA: THE MODERATING  
ROLE OF HUMOR**

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**UNIVERSITI SAINS MALAYSIA**

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by

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for the degree of  
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## DECLARATION

*Peace comes from within,  
Do not seek it from without.*

*-----Buddha*



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## LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CB-SEM	Covariance Based – Structure Equation Modelling
CFA	Confirmatory Factor Analysis
CI	Confidence Interval
CR	Composite Reliability
$f^2$	Effect size
$Q^2$	Predictive Relevance
$R^2$	Explained Inflation
SEM	Structural Equation Modelling
Smart PLS	Smart Partial Least Square
SPSS	Statistical Package for Social Science
VIF	Variance Inflation Factor
WL	Workload
WE	Work Environment
JS	Job Stress
HU	Humor
PIH	Physical-ill Health
MIH	Mental-ill Health
MP	Medical Professionalism

**KESAN TEKANAN KERJA TERHADAP KESEJAHTERAAN DAN  
PROFESIONALISME PERUBATAN DI KALANGAN DOKTOR DI  
WILAYAH HEBEI, CHINA: PERANAN HUMOR SEBAGAI  
PEMBOLEHUBAH MODERATA**

**ABSTRAK**

Tekanan kerja telah dikenal pasti sebagai punca utama kesejahteraan dan hasil kerja dalam kalangan doktor perubatan di hospital. Walau bagaimanapun, kajian lepas mengenai pengurusan tekanan dalam kalangan doktor di China masih kurang mendapat perhatian. Oleh itu, kajian ini bertujuan untuk mengkaji hubungan antara tekanan kerja, beban kerja, persekitaran kerja, ketidaksejahteraan fizikal, ketidaksejahteraan mental dengan profesionalisme perubatan. Selain itu, ia juga mengkaji peranan humor sebagai pengantara terhadap hubungan antara tekanan kerja, ketidaksejahteraan fizikal, ketidaksejahteraan mental dengan profesionalisme perubatan. Soal Selidik telah diedarkan kepada doktor perubatan di hospital awam di Provinsi Hebei, China. Semua data dianalisis dengan menggunakan structural equation modeling (SEM) melalui partial least square (PLS). Hasil kajian menunjukkan bahawa beban kerja mempunyai kesan yang signifikan terhadap tekanan kerja, manakala persekitaran kerja tidak mempunyai kesan yang signifikan terhadap tekanan kerja. Tekanan kerja mempunyai hubungan langsung yang positif dengan ketidaksejahteraan fizikal dan ketidaksejahteraan mental, namun mempunyai hubungan yang negatif dengan profesionalisme perubatan. Humor didapati tidak

berperanan sebagai pengantara terhadap hubungan antara tekanan kerja dengan akibatnya (ketidaksejahteraan fizikal, ketidaksejahteraan mental dan profesionalisme perubatan). Kajian ini memberikan sumbangan secara teori dan praktikal, terutama dalam mengenal pasti punca-punca tekanan yang signifikan dan akibat berkaitan tekanan dalam kalangan doktor perubatan China. Selain itu, ia memberikan gambaran tentang peranan humor dalam industri perubatan China. Keterbatasan kajian telah dijelaskan dan cadangan kajian masa hadapan juga dibentangkan.



**THE EFFECTS OF JOB STRESS ON WELL-BEING AND MEDICAL PROFESSIONALISM AMONG DOCTORS AT PUBLIC HOSPITALS IN HEBEI PROVINCE, CHINA: THE MODERATING ROLE OF HUMOR**

**ABSTRACT**

Job stress has been known as a major cause of well-being and work outcome among medical doctors in hospitals. However, the previous study on stress management among doctors in China still has received a little attention. Hence, this study intends to examine the relationship between job stress, workload, work environment, physical-ill health, mental-ill health and medical professionalism. In addition, it also examines the role of humor as moderation effect on the relationship among job stress, physical-ill health, mental-ill health and medical professionalism. Survey Questionnaire has been distributed to the medical doctors at public hospitals of Hebei Province, China. All of data was analysed by using structural equation modeling (SEM) via partial least square (PLS). Findings indicated that workload had significant impact on job stress, work environment had no significant impact on job stress. Job stress had positive significant direct relationship on physical-ill health and mental-ill health, however it showed negative relationship between job stress and medical professionalism. Humor did not moderate the relationship between job stress and its outcomes (physical-ill health, mental-ill health and medical professionalism). This study makes both theoretical and practical contribution, especially in identifying

the significant stressors and stress related outcomes among Chinese medical doctors.

Besides, it provided the insights of humor role in medical industry of China.

Limitations of the study were explained and future suggestion were also presented.

# CHAPTER 1

## INTRODUCTION

This study discusses the effects of job stress on well-being and medical professionalism among medical doctors in Hebei Province, China with moderation effect of humor. This chapter includes the background of the study, problem statement, research objectives, research questions and significance of the study. Finally, the definitions of key terms and organization of chapters are presented at the end of the chapter.

### 1.1 Background of Study

The job stress among doctors becomes an irresistible and incredible hard issue over the world that both academic researchers and practitioners pay highly attention on. Job stress leads to a wide variety of problems which has negative effect on both individuals and organizations. Work-related stress represents an occupational sign of greatly reducing productivity. Especially, Chinese doctors have to meet the unprecedented challenge of job stress compared to other industries (Li & Liu, 2008; Yu & Li, 2010). For instance, there is an increasing number of Chinese doctor's intention to leave during past decades, which indicated China is experiencing a chronic shortage of physicians (Zhang et al., 2019).

Some research has been carried out the experimental study on job stress. For example, studies found that the different stress level among doctors due to the coping ability (Xu et al., 2019). The studies also mentioned that job stress is related to doctor's health which includes physical and mental condition (Lacy & Chan, 2018). In other words, it may reduce organizational performance especially for treatment quality in hospital. Therefore, stress management among doctors in medical industry is in great need.

Stress management study plays an important role that helps to promote doctors' wellbeing and enhance health care quality. Understanding and investigating doctors' stress level provides essential evidence to implement measures in exploring more effective coping strategy and potential stressors. Moreover, doctors' well-being issue are more concerned by hospitals and even the whole society.

Actually, medical doctors are important profession in guarantee quality of health care and medical consultation for citizens. Only if the doctors behave professionally with positive working attitude can improve patients' satisfaction (Kee et al., 2018). Doctors also have to satisfy patients and their relatives in hospital working place (Boquiren et al., 2015). Moreover, the treatment decision was conducted by doctors has commonly decided patients' recovery and lasting lifetime happiness

(Nausheen et al., 2016). That is the reason why doctor's stress issue is closely related to the citizens' health standard (Krishnan & Chelliah, 2016).

Workload is a serious stressor that contributes to doctors' stress. The growing demand for health professionals is hard to meet the needs of an increasing number of patients. According to the United Nations Projection, China has a large population which means there are also many amounts of patients (World Population Review, 2017). And also China's State Council said, "the overall healthcare resources are insufficient, our structures are badly organized and service systems fragmented", and China aims to achieve the target which is two general doctors can serve per thousand people annually by 2020 (Reuters, 2015), as well as improving number of doctors in a landscape where the available health care resources are limited.

The high workload is impairment for doctors (Sun, W. et al., 2012). In 2014, the total number of medical treatment was 7.8 billion cases, more than 90 % of doctors have to work more than 8 hours per day and 60% of doctors need to take more than 60 patients per day, around 50% of doctors have more than 5 times of night shift per week, 42.4% of surgeon doctor take more than 8 hours of operation on operation's day, 58% of doctors say the enormous workload is hard to bear the stress (Gong, 2015).

According to Wang et al. (2015), harmonious working environment could help physicians release tension from stress. Otherwise, the relative poorly coordinate

working environment is one cause of job stress (Li & Fu, 2017). Some studies investigated the significant relationship between working environment and job stress (Aziz, 2004). In addition, most of the doctors are not satisfied with their current work. According to the latest statistical result collected by the Chinese Medical Doctor Association, 48.51% of the medical staffs are not satisfied with current working environment (China People News, 2015). Hence, the potential risk form working environment that causes stress had been taken into consideration.

Moreover, job stress commonly leads to physical and mental disorder among Chinese doctors. According to Chinese Doctor Health Report Kunming Daily (2014), a quarter of doctors got cardiovascular in the survey of 7000 respondents; half of them were suffering from hypertension. Also, the report showed that chances of illness among medical doctors is twice as higher as other professions such as hypertension, hyperglycaemia, dyslipidemia, and alveolar morbidity. Another, the incidence of sudden death caused by job stress also increased significantly within last two years (China News, 2015).

Furthermore, doctors are stressful professionals who always have mental health disorders (Ding et al., 2014). The majority of Chinese doctors showed depressive symptom and anxiety disorder to varying degree (Sun et al., 2012). Jing et al. (2013) found that Chinese doctors are eager to express stressful experience or negative

emotion in hospital. Mental health problem has the significant negative on well-being and quality of medical service (Lockley et al., 2004; Shen et al., 2012). According to Wang et al. (2010), medical error is a serious consequence that would be avoided from mental problems. Unfortunately, the negative attitude of health care received the most severe effect from mental disorders (Landrigan et al., 2004).

Besides, medical professionalism and medical mistakes are the main issue that most of patients focus on over the years. And medical professionalism is an essential stress-related outcome in hospital working place (Tucker et al., 2016). The foundation of trust between doctors and patients is fragile which may lead to misunderstanding and even conflict. (Zhang & Cong, 2014; Zhang & Sleeboom-Faulkner, 2011). Many reports indicated that doctors are threatened by patients due to ineffective treatment (Cai et al., 2011; Jiao et al., 2015; Jie, 2012; Sun & Wang, 2011; Yang et al., 2013). According to Hesketh et al. (2012), there is an increasing trend of violence during the past 10 years because of poor medical care, medical mistake, expensive cost and so forth.

In term of coping, the previous research mentioned some coping methods in order to reduce stress such as social support, physical fitness, mindfulness meditation and so forth (Bazzano et al., 2015; Seiffge-Krenke, 2013). Under the consideration of doctor's job characteristics, exploring the function of humor is more appropriate for

Chinese people. According to Liu (2012), Chinese humourists show higher score of sense of humor with 45.5% of the and 32.6% among foreign humourists. Therefore, applying the self-enhancing humor for reducing the doctor's stress may bring the graveness research significance.

Above all, job stress is a nonnegligible social problem because the causes of health problem and medical professionalism. In Chinese context, there are rare studies are conducted to investigate job stress in medical industry. Understanding doctor's stress issue in depth may provide the references for medical authorities who formulate relevant policies to foster medical industry development. This study focuses on the relationship between job stress and its outcomes of well-being and medical professionalism with moderation effect of humor.

## **1.2 Medical Industry of China**

Before independence in China, three types of institutes provide the medical service: governmental hospital, church-owned hospital and private hospital. After independence in 1949, most of the big hospital belongs to state-owned hospital which also called public hospital (Chen, 2010). In 1978, with the transformation from planned economy to market economy, the classified management of medical institutions emerged according to their classification (Li, 2016). At present, the medical industry started its own journey with majority nationalized public hospitals.



The medical sector in China comprises the essential part of national health service which is closely related to people's livelihood and social security. Professionalism and accessibility and of hospital industry are important signs for the development of medical and health services in a country (Li, 2013). The government has invested heavily in health care in order to ensure the citizens to receive the medical service inexpensively and in time (You & Kobayashi, 2009).

Recently, China has experienced a medical health reform involving the transformation in social structure and the adjustment of the benefits distribution. China is granting and undertaking health care system reform in providing quality care for patients and reduce medical dispute, at the same time Chinese doctors have been required higher expectation from patients and society. China has started the health care system reform plan in 2009 and ensuring for 3 years with the expenditure of 125 billion dollars, which is with the goal set of achieving medical equity by all 2020 (He, 2014; Yip et al., 2012; Zhu, 2009).

The public hospital occupies 96% of Chinese medical service which concentrates quality medical resources. The reform of public hospitals is closely related to hundreds of millions of citizens in China (Guo, 2012). In addition to providing clinical services and non-clinical services, public hospitals also perform functions of public health, preventive care, teaching and scientific research and other

social services (Barber et al., 2013). In comparison, the private hospital focuses on the specialist clinic and offer better and expensive services to their target patients, and thus a patient amount gap has widened with public hospital (Eggleston et al., 2010). Hence, private hospital doctors experience less stress than those in public hospitals.

Stress management has been the challenging issue among public hospitals in China to improve doctor's health and positive working behaviour such as medical professionalism. For instance, China General Bureau of Health is required to conduct decompression training in providing help for medical doctors to release job stress (Lu et al., 2017). And also, it was conducting stress topic related workshop or seminar to promote the importance of stress reduction.

Recently, China has experienced a medical health reform involving the transformation in social structure and the adjustment of the benefits distribution. China is granting and undertaking health care system reform in providing quality care for patients and reduce medical dispute, at the same time Chinese doctors have been required higher expectation from patients and society. China has started the health care system reform plan in 2009 and ensuring for 3 years with the expenditure of 125 billion dollars, which is with the goal set of achieving medical equity by all 2020 (He, 2014; Yip et al., 2012; Zhu, 2009).

Furthermore, the main factors that have dominated that from disease-centered to patient-centered development (Sun, W. et al., 2012). During the treatment process, patients' feeling and benefits have been assumed primacy rather than the only pursuing of the number of cured cases. More and more patients realized their rights with prudence requirement to doctors (Wu et al., 2014). Doctors experience high-level of job stress that goes against with the expectation of their role therefore rarely expresses wholehearted feelings of huge psychological pressure (Wang et al., 2010; Zhou et al., 2014). According to Liu et al. (2008), patients are paying more and more attention to experience and feelings of the therapeutic process especially under the health-system reform policies been settled. Formerly, China is constantly deepening the medical system reform which is also a challenge for doctors.

Recognizing stress management play an important practicing role for doctors' well-being and even medical professionalism (Zheng et al., 2017). Chinese hospital has prioritized effective stress management as a vital consideration to boost medical service (Liu et al., 2012a). Such a concern is illustrated by various initiatives the Chinese hospital has undertaken. Stefanovics et al. (2016) state that public hospital should try to look for some psychology aspects which is based on the doctor personality difference through HRM. These findings may use for the tracking stress problem and even creating proper organization support.

### **1.3 Problem Statement**

Doctor stress ranks high on the list of occupations and Chinese doctors are suffering from job stress for a long time (Gao & Gurd, 2018). Job stress is a critical crisis for both individuals and society. World Health Organization stated that stress-related health problem would be the threat to people's life (Hassard et al., 2018) which means that job stress related problem become a hindrance to industry development. Hence, addressing job stress issue is in great need so that doctors' well-being and work outcome would cause wide attention. According to He (2014), Chinese doctors report high rate of work-related illness due to stress which comes from hospital environment, doctor-patients relationship and medical error. Consequently, job stress is closely linked to performance and productivity that reflect research value and practical significance.

The suicide issue among doctors has received widespread concern in China and the suicide rate is alarming especially in Hebei Province, China (News, 2017). The suicide rate of doctors ranked at top one which compared to the other 55 social occupations (Dai, 2016). Most doctors commit suicide caused by depression and anxiety. The probability of suicide among doctors much depends on the variety of stress, which is difficult to adjust and find a balance point (Health Sohu, 2016).

Furthermore, the deterioration of changes in medical services environment witnesses the “medical trouble” frequently, the patients’ families would cross the limit to threaten the security of doctors. Chinese Medical Association (2007) has conducted a study on 350 hospitals and found that the “medical trouble” occurred increase from 89.58% to 97.92% from 2004 until 2006. The number of injured medical staff goes up from 203 to 332 annually. It was also found that direct economic loss for the medical trouble was sharply increased from 9.78 million Yuan up to 1448 million Yuan (Chinese Medical Association Working Committee, 2007). In Hebei Province, “medical trouble” is a serious issue and distress the doctors. Over the past decade, doctors have been under the violence threat from patient’s family. Physical injury accidents happened to doctors in Hebei such as stabbing wounds on face, hitting head by patients’ family when they encounter the invalid rescue or medical mistake (Medical Trouble Review, 2012).

The health issue is very important for doctors and closely related to the quality of medical profession which is gradually aroused the concern among the public (Agha, 2014; Dixon-Woods et al., 2012; Yaphe, 2013). As a doctor, being health care professions need to take good care of their own health in order to cure the sickness and save the patients’ life (Peters et al., 2013). Therefore, the exposure to stress was found that is more related to mental and physical health problem (Baba, 2012). There is an

increasing number of mental disorder among doctors that may affect their quality of medical practice as a result of producing negative attitude on work (Landrigan et al., 2004; Stansfeld & Candy, 2006; Tyssen & Vaglum, 2002). In 2014, 78.51% of doctors in China hold the opinion that their own health and mental condition impose an adverse effect on work; there is 54.66% of them realized that the difficulty in work process gradually increases (Chinese Medical Doctor Association, 2015).

According to Borgstrom et al. (2010), most of the problem in medical professionalism were caused by doctors' stress. The doctors will experience chronic stress particularly when they committed medical mistakes which have serious consequences on the patients (Simpson & Grant, 1991). The area of medical professions is considered as an "unforgiving error"; if the doctors cannot build up the good relationship with patients, which could lead to medical errors or mistakes with huge possibility (Williams, 2004). Meanwhile, ensuring higher medical service quality may directly reduce the risk of "medical trouble". Above all, the medical professional is still a challenge for doctors' career.

In general, doctors are lacking proper method and strategy to reduce job stress. Expressing job stress would go against their normal job role expectation. Doctors also were regarded as someone with expertise to refer to and get advice from, thus they were considered as the counsellors and have the ability to control their feeling, cope

with problems, and even if they experience high stress, they would rarely express it (Bates, 1982). Multifarious and high-duty work make doctors too busy and rarely to take exercise to reduce stress (Physicians Practise, 2014). Hence, finding a way out to help doctors relax in daily routine is in a great need.

Although numerous studies have addressed job stress experienced by doctors, the effect of job stress in explaining the outcomes and effective intervention for doctors in managing their stress still remains largely unexplored (Shaw et al., 2013). Therefore, the relentless effect of job stress remains as an imperative element has led to many people to ponder a feasible method that could reduce the stress especially among the doctors in the hospital. The feasible method is commonly known as coping strategy and developing the coping is the focus of many stress management areas (Ruotsalainen et al., 2015).

The extent of job stress also depends on the workload or patients load. According to Wen et al. (2016a), Chinese doctors reported high workload with 60 or more working hours per week. And Chinese doctors are facing pressure in providing medical service where available resources are limited. The consequence of long working hour is burnout that suffered by medical doctors chronically.

Work environment is the main stressor which may increase doctors stress level in various way. For example, dealing with relationships with patients and other

physician has increased doctors stress experience in patients' distrust and colleagues' cooperation (Ma et al., 2018). In addition, modern technology is trying to keep with the rapidly changing hospital environment, it is demanded to improve doctors' professional abilities which become the considerable pressure (Rothenberger, 2017). Thus, doctors experience job stress as a result of work environment.

Above all, the present study seeks the potential factors of job stress among doctors in order to build up a good work environment in medical industry. Besides, the appropriate coping method would be investigated and ensure whether to help doctors reduce job stress or not. Also, the current status of health and medical professionalism among doctors were tested for studying the stress-related outcomes.

#### **1.4 Research Objective**

The prime objective of the study aims to investigate the relationship between stressors (workload, work environment) and job stress. Additionally, this study intends to examine the effect of job stress on well-being and medical professionalism. There is rare study reported the relationship between stressors and outcomes among doctors in the medical industry. Lastly, this study aims to examine the moderating role of humor in the above relationships.

In particular, research objectives of this study are as follow:

1. To examine the relationship between workload and job stress.



2. To examine the relationship between work environment and job stress.
3. To examine the relationship between job stress and physical-ill health.
4. To examine the relationship between job stress and mental-ill health.
5. To examine the relationship between job stress and medical professionalism.
6. To examine if humor moderates the relationship between job stress and physical-ill health.
7. To examine if humor moderates the relationship between job stress and mental-ill health.
8. To examine if humor moderates the relationship between job stress and medical professionalism.

### **1.5 Research Questions**

Given the problem statement described in the previous section, this study aims to investigate the relationship between stressors (workload, work environment) with job stress and its outcomes. The following research questions were proposed for this study:

1. Does workload have an influence on job stress?
2. Does work environment have an influence on job stress?
3. Does job stress have an influence on physical-ill health?
4. Does job stress have an influence on mental-ill health?
5. Does job stress have an influence on medical professionalism?

6. Does humor moderate the relationships between job stress and physical-ill health?
7. Does humor moderate the relationships between job stress and mental-ill health?
8. Does humor moderate the relationships between job stress and medical professionalism?

## **1.6 Significance of the Study**

This section presents the significance of the study and its expected outcomes. The study and its outcomes would be significant as regards to the advancement of knowledge, industry, and society. The theoretical contribution of this study includes a better understanding of the importance of job stress coping on well-being and medical professionalism. Empirically tested studies in this area are scarce, especially in the Chinese context. In addition, this study provides theoretical contribution to help researchers gain in-depth knowledge in the area of stress management in hospitals, particularly among doctors. Furthermore, this study also aims to provide managerial contributions which may prove benefits to practitioners and hospital policymaker who wish to improve medical performance and achievement. Moreover, this research will attempt to show that medical doctors are benefit from reducing the stressors and improving wellbeing's and medical professionalism whether through sense of humor or not. The expatriation of theoretical and managerial contribution are as the following.

### **1.6.1 Theoretical Contribution**

The theoretical contribution is achieved in the present study through the Social Exchange Theory (SET), Social Cognitive Theory (SCT), and Relief Theory. These theories established the theoretical framework which can lead to empirical testing of the interrelationships among the main constructs under investigation. The support of theories may help the researchers obtaining a better understanding and insight into how the relational variables impact on the paradigm variables. Furthermore, the findings can add more value to prove the general theories of job stress and its outcomes.

This research merges numerous disciplines to explain how job stress occurs and how the stressors through stress affect well-being and medical professionalism. In particular, it seeks to bridge the diversity of assumptions, theoretical perspectives and conceptual underpinnings at play, by exploring synergies between job stress and medical professionalism, and opening up new horizons for research. Moreover, the theoretical contribution will be achieved in the present study through Social Cognitive Theory (SCT), Social Exchange Theory (SET) and Relief Theory in establishing the theoretical framework which can guide empirical testing of interrelationships among constructs under investigation. Some studies proposed that stress occurs when individual capability cannot match environment expectation (Lewin, 2013).

The crux of the study still has been emphasized that humor as stress moderator can cope with job stress. At the same time, doctors can get the benefits from health and medical professionalism. Humor as one kind of personality traits which can help doctors adjust job stress level to achieve an ideal health status and act professional medical behavior. According to this study, it may provide empirical evidence to build up the stress interfere with individual characteristics.

To date, there are rare research has dealt with the impact of stress on medical professionalism. It is obvious that the connection provided has not been demonstrated empirically in medical industry (Porter, 1997). Therefore, this study provides the explanation and empirical evidence on that relationship which add one more job stress outcome. Most of the studies state that the stressors contribute to job stress and studies on the effect of stress among doctors are still lacking.

### **1.6.2 Managerial Contribution**

The managerial contribution aims to achieve and enhance improvement of many beneficial parties such as individuals (doctors, patients, researcher and HR manager), organization (hospital). The empirical findings also can guide the employees and managers in the medical industry.

Firstly, it attempts to research the factors and effects of job stress among doctors and provide insight into the growing stress issue of the medical industry.

Secondly, the present study intends to reveal whether humor moderates these relationships or not. Thirdly, by investigating the factors of job stress, the suggestions can be applied in other related industries that may arouse public concern on the issue of job stress among medical practitioners. That is, employers and managers could pay attention to particular causes and effects of job stress to help doctors relieve stress and enhance hospital service.

Moreover, this study can be served as a guideline for doctors and managers to understand the causes and effect of job stress. The present study seeks to provide findings that will help Chinese doctors realize the risk factors of job stress as well as its effects during their daily work. Doctors should aware of any potential hazard in the workplace where there is a probability to increase stress level. Identifying the proper coping method is as important as awarding stress. An established study suggested that effective prevention of job stress depends on exploring the root cause, which may improve employee well-being and work outcome (Ellis, 2016).

From this study, both practitioners and researchers will gain insights to get deeper understand the stress issue among Chinese doctors and identify ways to reduce stress. It could be vital reference for health administrators and human resource policer to notice any changes in these factors which could cause stress. The sense of humor is crucial to enhance the mental and physical health of doctors in China. The reason is

during the entertainment of jokes or laughter, the blood vessel may relax which is much healthier than the constricted one under stress.

Not only the effective coping strategies would be advisable to help them release job stress, but also doctors' health condition is the basic guarantee in term of patients' treatment. Hence, doctors' stress issue and health condition are directly related to patients' benefits. Patients will take advantages of the healthy professional doctors who can guarantee good quality of medical service.

Nonetheless, to achieve hospital sustainable development, it is significant for doctor's individual career and hospital service on future development. This study applied to improve the ability of doctors' medical productivity by reducing stress. Meanwhile, hospital human resource manager should arouse the enthusiasm, initiative, and creativeness of doctors by improving their welfare. Consequently, understanding doctors' stress situation and find the relationships among health and medical professionalism moderated by humor would be dominated by feature of practice.

### **1.7 Scope of Study**

The present study aims to investigate doctors' job stress of medical industry in the People's Republic of China. The study will be conducted in the public hospitals in Hebei province, China, which collectively represent the doctors from typical medical industry. According to Xu (2014), the medical doctors in Hebei province experience

the higher stress level and it also shows the high rate of conflict between patients and doctors. For instance, the family members of patient perpetrate violence against doctors due to the unexpected treatment outcome. Moreover, the empirical stress-related study in Hebei context is still insufficient (Xu et al., 2014). From this, respondents are doctors who work at the front line in the hospitals of Hebei province, China offered a proper context for studying stress-related outcomes. Empirical data will be collected from doctors who are presently serving in these hospitals, that will boost representatives of the study sample.

## **1.8 Definition of Key Terms**

### **1.8.1 Job Stress**

Job stress occurs when occupational requirement exceeds employee's work ability, the individual cannot balance and cope with stress (Griffin et al., 2010).

### **1.8.2 Workload**

Workload refers to the amount of work and it shows high workload when it exceeds doctor's general operational capability (Aziz, 2004).

### **1.8.3 Work Environment**

Work environment is composed of the sources of stress from hospital environment which contribute to doctor's stress level (Aziz, 2004).

#### **1.8.4 Well-being**

Well-being is defined as a person's affective and cognitive evaluation of his or her life, and reflected in measures of health complaints. There are two dimensions namely as physical ill-health and mental ill-health (Dijkstra et al., 2005).

##### **1.8.4(a) Physical-ill health**

Physical-ill health refers to the situation when someone recognized the unhealthy symptom from compoence of physical body (Dijkstra et al., 2005).

##### **1.8.4(b) Mental-ill health**

Mental-ill health refers to the situation when someone recognized the unhealthy mental symptom or disorder (Dijkstra et al., 2005).

#### **1.8.5 Medical Professionalism**

Medical Professionalism is defined as the behaviour when doctors deal with the relationships with patients and physicians during the process of medical practice, and engenders trust or respect by patients and physicians (Tsugawa et al., 2011).

##### **1.8.5(a) Doctor-patient relationship**

Doctor-relationship was built by both parties of doctors and patients in the process of medical service such as inquiry, treatment and rehabilitation (Tsugawa et al., 2011).



### **1.8.5(b) Reflective skill**

Reflective skill is a learning habit which need asking feedback from patients and never conceal the medical mistake in order to learn from medical practice result (Tsugawa et al., 2011).

### **1.8.5(c) Time management**

Time management is the fundamental requirement for doctors during the medical service to ensure the enough time for each patient and give respond of help for colleagues (Tsugawa et al., 2011).

### **1.8.5(d) Inter-professional relationship skill**

Inter-professional relationship skill is a social network skill in workplace such as respect, helpful and self-assessment accurately (Tsugawa et al., 2011).

### **1.8.6 Humor**

Humor is one kind of personality traits which can be used for regulating one's emotion to release tension from stress and enhance self-development (Martin et al., 2003).

## **1.9 Organization of Chapters**

This study will be organized into five chapters and the organization of thesis can be described as follows: The first chapter included the background of the study, problem statement, research objectives, research questions, significance of conducting this study, and definition of terms that were discussed in this study.

In chapter two, it presented a compilation of literature reviews with regard to the domain variable tested in the present study. In addition, the underlying theories behind the understanding of variables' interrelationship were also elaborated, this is followed by the development of research framework.

Chapter three highlighted the research design and methodologies used to conduct this study. The Chapter discusses the participants involved, questionnaire design, data collection procedures, followed by statistical tool used for data analysis.

Chapter four provides the insight into report that obtained from data analysis covering the statistical result. This is followed by Chapter five which concludes with a discussion of findings, the theoretical and managerial implications derived, limitations and future suggestion.

## **1.10 Summary**

This study indicated that two stressors (workload and work environment) significantly contribute to job stress. And the present study focus on investigating the relationship among job stress, well-being and medical professionalism by moderating effect of humor. In detail, the chapter presents the background of research, research problems, research objectives, research questions, significant of research and organization of the thesis. The following chapter will classify the review of literature related to latent variables and underlying theories.