

ISTANBUL BILGI UNIVERSITY  
INSTITUTE OF SOCIAL SCIENCES  
ORGANIZATIONAL PSYCHOLOGY MASTER'S DEGREE PROGRAM

THE RELATIONSHIP BETWEEN CHALLENGES OF OCCUPATIONAL  
SAFETY SPECIALISTS, PSYCHOLOGICAL SAFETY, PROFESSIONAL  
SELF – EFFICACY BELIEF AND PROACTIVE WORK BEHAVIOR

Şeyhmus AKSOY

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Prof. Dr. Nihal MAMATOĞLU

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İş Güvenliği Uzmanlarının Yaşadıkları Sorunlar, Psikolojik Güvenlik, Mesleki Öz – Yeterlilik İnancı ve Proaktif Çalışma Davranışı Arasındaki İlişki

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Tezin Onaylandığı Tarih : 18.06.2019  
Toplam Sayfa Sayısı: 200

Anahtar Kelimeler (Türkçe)

- 1) Sorunlar
- 2) Psikolojik güvenlik
- 3) Mesleki öz – yeterlilik inancı
- 4) Proaktif çalışma davranışı
- 5) İş güvenliği uzmanı

Anahtar Kelimeler (İngilizce)

- 1) Challenges
- 2) Psychological safety
- 3) Professional self-efficacy belief
- 4) Proactive work behavior
- 5) Occupational safety specialist

## ACKNOWLEDGEMENTS

To be honest, it was not easy to reach this point. I absolutely felt support of many people along this way. Firstly, I am extremely grateful to my adviser Prof. Dr. Nihal MAMATOGLU to alleviate my stress by giving support and feedback in every phase of this study and encouraging me. I saw unexpected intimacy from her. I also would like thankful her to cultivate me the love of intellectual curiosity and knowledge.

I additionally spent great time in Istanbul Bilgi University with Associate Professor İdil IŞIK who is Director of the Department and Asst. Prof. Dr. Gergely Czukur who is my academic adviser. Their encouragement and understanding made it possible for me to pursue the master programme. Hope we will meet again.

I am also thankful to participants of this study. This study couldn't be concluded without their support and interest.

I lastly wish to thank you Prof. Dr. Hilmi SABUNCU who encouraged us not just in the occupational health area but also for our future life. Rest In Peace.

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## LIST OF ABBREVIATION

**ÇSGB:** Çalışma ve Sosyal Güvenlik Bakanlığı

**ILO:** International Labor Office

**OHS:** Occupational Health and Safety

**OHSL:** Occupational Health and Safety Law

**OHSSR:** Occupational Health and Safety Services Regulation

**DARTOSSR:** The Duty, Authoritization, Responsibility and Trainings of Occupational Safety Specialists Regulation

**PHSU:** Public Health and Safety Units

**PS:** Psychological Safety

**PSEB:** Professional Self – Efficacy Belief

**SRPI:** Self – Reported Personal Initiative

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## **ABSTRACT**

As well as the object of this study was to investigate the relationship between challenges of occupational safety specialists, psychological safety, professional self – efficacy belief, proactive work behavior, self-reported personal initiative which is a one of the proactive work behavior was examined in the context of organizational level challenges organizational level psychological safety perception and individual level professional self – efficacy belief. This study was designed as an exploratory research to investigate relationships between variables. Only significant results were reported. Data have been collected from private sector occupational safety specialists including consultants from different sectors. Public sector occupational safety specialists excluded from this research since the obligation of employing occupational safety specialist in public sector has been suspended to 2020. 332 occupational safety specialists participated to this study by using snowball sampling method. 5 measurement instruments, (Demographic Information Form, Challenges of Occupational Safety Specialists scale which was developed within this study, Psychological Safety Scale (Edmondson, 1999), professional self – efficacy belief scale which was developed within this study, and Self-Reported Personal Initiative Scale (Frese, Fay, Hilburger, Leng & Tag, 1997), that was adapted to Turkish within this research), have been conducted.

Findings of this research showed that psychological safety was found positively and significantly correlated with self-reported personal initiative, professional self – efficacy belief and legislative challenges. Also, professional self – efficacy belief was found significantly and negatively correlated with Insufficient awareness of employer, unwillingness of employees to participation, ignorance of employees, providing lack of resources, organizational challenges, challenges of occupational safety specialists. There wasn't any correlational finding between professional self – efficacy belief, and law based and legislative challenges. Self-reported personal initiative was found positively and significantly correlated with

professional self – efficacy belief, organizational challenges and law based challenges, and negatively and significantly correlated with providing lack of resources.

Findings were also revealed that professional self – efficacy belief mediated the relationship between psychological safety and self-reported personal initiative. The relationship between challenges of occupational safety specialists and self-reported personal initiative was moderated by professional self – efficacy belief. Besides, psychological safety moderated the relationship between challenges of occupational safety specialists and self-reported personal initiative.

According to one of the other finding of this study, it could be said that occupational safety specialists show self-reported personal initiative, which is a one of the proactive work behavior, not just in case they feel psychologically safe but also in case they face some kind of challenges. Obtained findings have been discussed in light of relevant literature.

**Keywords:** Challenges, psychological safety, professional self – efficacy belief, proactive work behavior, occupational safety specialist



## ÖZET

Bu çalışmanın amacı, iş güvenliği uzmanlarının sorunları, psikolojik güvenlikleri, mesleki öz-yeterlilik inancı, proaktif çalışma davranışı arasındaki ilişkiyi incelemekle birlikte, proaktif çalışma davranışlarından biri olan kişisel inisiyatif alma davranışını iş güvenliği uzmanlarının örgütsel düzeyde yaşadıkları sorunları, örgütsel düzeyde hissettikleri psikolojik rahatlık algıları ve mesleğe olan inançları bağlamında değerlendirmektir. Değişkenler arasındaki ilişkiler açılımlı araştırma yöntemi ile incelenmiştir. Yalnızca anlamlı araştırma bulguları paylaşılmıştır. Araştırmaya kartopu örnekleme yöntemi kullanılarak ulaşılan, özel sektörlerin farklı alanlarında çalışan 332 iş güvenliği uzmanı katılmıştır. Kamuda iş güvenliği uzmanı çalıştırma zorunluluğu 2020 yılına ertelendiğinden dolayı kamudaki iş güvenliği uzmanları çalışmanın dışında tutulmuştur. Araştırma kapsamında demografik bilgi formu, İş Güvenliği Uzmanlarının Sorunları Ölçeği (Araştırmacılar tarafından geliştirilmiştir), Psikolojik Rahatlık Ölçeği (Yener, 2015), Mesleki Öz-Yeterlilik İnancı Ölçeği (Araştırmacılar tarafından geliştirilmiştir), ve araştırmacılar tarafından türkçeye uyarlanan beyana dayalı kişisel inisiyatif ölçeği (Frese, Fay, Hilburger, Leng & Tag, 1997) uygulanmıştır.

Araştırma bulguları psikolojik rahatlığın kişisel inisiyatif, mesleki öz-yeterlilik inancı ve mevzuattan kaynaklanan sorunlar arasında pozitif yönde anlamlı ile ilişkiler bulunmuştur. İşveren kaynaklı sorunlar, çalışanların katılım göstermeme isteği, çalışanların önemsememesi, işverenin yetersiz kaynak sağlaması, örgütsel sorunlar, toplam iş güvenliği uzmanlarının iş hayatında yaşadıkları sorunlar ile mesleki öz-yeterlilik inancı arasında negatif yönde anlamlı ilişkiler bulunmuştur. Yasadan kaynaklanan sorunlar ve mevzuattan kaynaklanan sorunlar ile mesleki öz-yeterlilik inancı arasında bir ilişki bulunamamıştır. Ayrıca kişisel inisiyatif ile mesleki öz-yeterlilik inancı, organizasyonel problemler ve yasadan kaynaklanan sorunlar arasında pozitif yönde, işverenin yetersiz kaynak sağlaması ile negatif yönde anlamlı ilişkiler bulunmuştur.

Araştırma bulguları ayrıca mesleki öz-yeterlilik inancının psikolojik rahatlık ve kişisel inisiyatif arasında aracı rolü olduğunu ortaya koymuştur. Yine mesleki öz-yeterlilik inancının iş güvenliği uzmanlarının iş hayatında yaşadıkları sorunlar ve kişisel inisiyatif arasındaki ilişkide düzenleyici rolü olduğunu ortaya koymuştur. Ayrıca, psikolojik rahatlığın iş güvenliği uzmanlarının iş hayatında yaşadıkları sorunlar ve beyana dayalı kişisel inisiyatif arasındaki düzenleyici rolü de araştırmanın bulguları arasında yer almıştır.

Çalışmanın önemli bulgularından biri de iş güvenliği uzmanları yalnızca psikolojik olarak rahat hissettikleri durumlarda değil, bazı tür sorunların yaşandığı durumlarda da proaktif çalışma davranışlarından biri olan kişisel inisiyatif alma davranışı gösterebildikleridir.

**Anahtar Kelimeler:** Sorunlar, psikolojik güvenlik, mesleki öz – yeterlilik inancı, proaktif çalışma davranışı, iş güvenliği uzmanı

## CHAPTER 1 - INTRODUCTION

As well as the object of this study was to investigate the relationship between challenges of occupational safety specialists, psychological safety, professional self – efficacy belief, proactive work behavior, self-reported personal initiative which is a one of the proactive work behavior was examined in the context of organizational level challenges organizational level psychological safety perception and individual level professional self – efficacy belief. In this section, occupational safety specialist concept have been reviewed in terms of the literature and legislation. Also, the literature of challenges of occupational safety specialists, psychological safety, professional self – efficacy belief and self – reported personal initiative have been reviewed. Finally, the relationship between challenges of occupational safety specialists and self – reported personal initiative, psychological safety and self – reported personal initiative, professional self – efficacy belief and self – reported personal initiative have been reviewed in light of literature.

The importance of occupational safety speciality has been increased after 6331 no. OHS Law enacted in Turkey. The main approach of 6331 no. OHS Law is to orchestrate the authority, responsibilities, obligations, duties, of parties and to enhance safety and health conditions (OHSL, 2012). OHS system in Turkey mostly involves legislative responsibilities, duties and authorities exposing employees, professionals and employers to comply with. Occupational safety specialists are assigned wide range of duties and responsibilities in DARTOSSR as risk management, guidance, training, workplace surveillance, documentation, notification and cooperation with related units. The Turkish OHS legislation focus on two fundamental basis to be occupational safety specialist. One of them is to be certified and authorized by The Ministry. The second condition is to be graduated from certain degrees such as engineering, architecture or to be a technical personnel. OHS professionals have significant role in providing, protecting and enhancing of OHS. Works of OHS professionals are generally directly intervention to workplace (Yamakoğlu, 2015).

Task definition of occupational safety specialists vary across the organizations. Occupational safety specialists working in triangle of employees, employers and legislative pressure. They work subject to an employer with work contract so occupational safety specialists can't urge employers to take measures even it is crucial for employees or workplace due to concern to be fired. Although studies examining psychological state (such as stress, anxiety, engagement etc.) of employees at work have increased in OHS literature recently, there are scarce of studies that focusing on psychological state of occupational safety specialists.

The main approach of OHS is proactivity. Proactive approach in OHS is to prevent undesired situations before they occurred. One of the major necessity is to make risk assessment in OHS. Risk evaluation is a one of the duty of occupational safety specialists stated in legislation. Within risk assessment, occupational safety specialists are expected to proactively foresee health and safety related danger before turning into risk for employees or workplace. In addition to that occupational safety specialist are expected to foresee probable undesirable consequences that would be creates occupational diseases and accidents. As one of a form of proactivity at work, personal initiative was defined by Frese and Fay (2001), as forecasting performance at the of team, individual and organizational level and includes going beyond assigned duties, trying to solve problems before occurred and improve existing situation. When they are not able to forecast probable undesirable consequences, they would experience many legal and organizational sanctions. Thus, psychological safety perception of occupational safety specialists at organizational level was investigated in terms of whether they take interpersonal risks regardless of thinking to be penalized, embarrassed, punished or considered as uneducated towards employees and employers with these high level of responsibilities and duties with limited authority (ÇSGB & ILO, 2017). Supportive environment that encourages employees to try alternative solutions in their work without concerning about potential risks is likely to streamline proactive behavior (Parker et al., 2010). Employees who expressed to be supported by or satisfied with

their work group are more likely to show proactive behaviors (LePine & Van Dyne, 1998). Bandura (1977), individuals incline to avoid conditions which they do not believe in that they could achieve, but become in and are pretentious in situation that they consider that they are able to be successful. Therefore, beliefs on personal efficacy could guide the effort that would be exerted in the case of barriers and could directly affect the activities individuals select to involve in.

### **1.1.Occupational Safety Specialist Concept**

There is no prevalent terminology in the concept and work area of occupational safety specialists. (Karakaya, 2018). Although safety practitioner, safety manager, safety officer, safety professional, safety coordinator is used in the literature “occupational safety specialist” is used in our legislation. Although occupational safety professionalism is discussed in international level, publications about occupational safety specialists are mostly related to alteration of legislation and legal obligations in Turkey (Bıyıkçı, 2010). Also, some researches are descriptive studies that conducted on limited occupational safety specialists with a few variables which is already being discussed on national level (Arslan & Ulubeyli, 2016).

Although specialist concept was started to be popular in 2012 after 6331 no. OHS law come into force, it has already been in Turkish legislation (Bıyıkçı, 2010). The conditions to be occupational safety specialist is defined as to be authorized by ministry to work in ohs field, having occupational safety specialist certificate, to be graduated from engineering or architecture faculties, technical personnels and inspectors who are auditing work life. Technical personals are described as ‘ technical teachers, physicist, chemisteris, biologists and graduates from OHS bachelors’ or associate degree programme (DARTOSSR, 2016).

The Turkish OHS legislation focus on two fundamental basis to be occupational safety specialist. One of them is to be certified and authorized by The Ministry. The second condition is to be graduated from certain degrees such as engineering, architecture or to be a technical personnel. Also, inspectors who are auditing worklife and biologists are qualified to be specialists in 2016 providing that certain condition (DARTOSSR, 2016). Occupational adequacy of biologists to be occupational safety specialists has been argued a lot. Even though the Turkish OHS legislation provides opportunity biologist to be occupational safety specialist regardless of sector, working in hospitals, laboratories and drug industry as an occupational safety specialist contribute occupational adequacy of biologist. Within this context, employer should recognize occupational adequacy and abilities of occupational safety specialists while recruiting in order to determine whether occupational safety specialist meet ohs requirement of workplace or not. It is substantial for employers to work with occupational safety specialists in social dialog (Eyüpoğlu, 2015).

Workplaces are classified as very hazardous, hazardous and less hazardous based on the main process within 6331 no. OHS Law. Speciality classes are divided into three segments that is A class, B class and C class. Transition is started from C class to A class. Occupational safety specialists are not recruited considering sectoral and occupational title rather hazardous class of workplace. Such as mining and construction sectors are classified into very hazardous class. On the other hand, such as vegetative and zoic manufacturing, textile production manufacturing are classified into hazardous class and such as trade, storage, transport, accomodation services are classified into less hazardous class. Very hazardous workplaces could assign A class occupational safety specialists, hazardous workplaces could assign B class occupational safety specialists and less hazardous workplaces could assign C class occupational safety specialists (Karakaya, 2018).

### **a) A Class Occupational Safety Specialist Certification**

Due to A class occupational safety specialist could recruited by very hazardous, hazardous and less hazardous workplaces, it has special importance and qualification of having A class certification should be assessed in depth. For this reason, A class certification has exposed many alteration in the Turkish legislation (Karakaya, 2018). The requirements to have A class occupational safety certification are;

- 1) Occupation inspectors in engineering, architectures or technical personnels occupation group who have at least 10 years inspection experience in OHS field (exempted from exam)
- 2) 10 years experience in Occupational Health and Safety General Directorate and subjected units as engineer, architecture and technical personnel(exempted from exam).
- 3) Occupational safety specialists of ministry who worked in Occupational Health and Safety General Directorate and subjected units at least 10 years as engineer, architecture and technical personnel(exempted from exam).
- 4) Documentation of specialist contract of working at least 4 years owning B class specialist certificate on the condition that to participate A class specialisation training and to be success in A class exam.
- 5) Graduates from faculties that educate in engineering or architecture and technical personnels who have doctorate degree in OHS or Occupational Safety programme (exempted from exam) (DARTOSSR, 2016).

## **b) B Class Occupational Safety Specialist Certification**

The requirements to have B class certificate are;

- 1) Engineers, architecture or technical personnels who provides documentation of specialist contract of working at least 3 years owning C class specialist certificate on the condition that to participate B class speciality training and to be success in B class exam.
- 2) Engineers, architectures or technical personnels graduated from OHS or Occupational Safety master programme on the condition that to be success in B class certification exam.
- 3) Occupational inspectors who worked at least 10 years in ministry or subjected units on the condition that to participate B class speciality training and to be success in B class speciality exam. (Except engineers, architecture and technical personnel inspecting in OHS field) (DARTOSSR, 2016).

## **c) C Class Occupational Safety Specialist Certification**

The requirements to have C class certificate are;

- 1) Graduates of faculties that educate in engineering and architecture areas and technical personnels who participated to C class speciality certification training and succeeded in C class occupational safety speciality exam.
- 2) Occupational inspectors who worked at least 10 years (including elapsed time as assistant inspector) in ministry or subjected units on the condition that succeeded in C class speciality exam. (Except engineers, architecture and technical personnel inspecting in OHS field).
- 3) Graduates of OHS Bachelors' degree who succeeded in C class occupational safety speciality exam(DARTOSSR, 2016).



Ekmekci (2005) was having attention in his study that is inappropriate to stipulate certain graduation to be occupational safety specialist. He claimed that is proper to keep eligibility conditions of occupational safety speciality wide. It is not substantial to graduate from certain schools, rather it is important to have OHS related knowledge. Thus, it is not adequate to graduate from certain schools to be occupational safety specialist in Turkish legislation but also it is required to have speciality certification pertinent to hazard class of workplace. The reason for requirement of having speciality certification is inadequate of knowledge getting from graduation schools (Ekmekci, 2005). In addition to that trainings to have occupational safety specialist certificate are arguable in terms of sufficiency (Yamakoglu, 2015).

Considering inherent specification of workplaces, ensuring prolonged enhancement, protection of human tenet which is focusing on proactive measurement is adopted in modern OHS management. After 6331 no. OHS law came into force, recruitment of occupational safety specialist became mandatory in all workplaces regardless of employee count and sector. It made occupational safety speciality more important (Yamakoglu, 2015).

Many obligations of employer related OHS is implemented by means of occupational safety specialists. There are different aspects in literature concerning whether occupational safety specialist is representative of employer or not. According to dominant aspect, occupational safety specialists are representative of employer owing to acting on behalf of employer and to be assigned to workplace management (Süzek,2014). On the contrary, Yamakoğlu (2018) claimed that to decide whether occupational safety specialists are representative of employer, work contract should be considered as occupational safety specialist is authorized to intervene, instruct and order in the workplace in terms of OHS.

In order to prohibit working under pressure caused by problem of receiving salary directly from employer, salaries of occupational safety specialists should be

provided from independent fund involving employer (Orhan, 2014). Within regulations of OHS in Turkey, ‘occupational safety engineer’ term which is emerged in 4857 no. Work Law has been changed into ‘occupational safety specialist’ contained occupation groups in level of technical personal which is not equal to engineering. For this reason, it could be thought that unemployment anxiety is prominent in preferring this field. Namal, Kanber and Kavas (2016) stated in their study that occupational safety specialists generally consider not be recruited in their graduation field, thus, they tend to work in occupational health and safety field. This situation emerges so many occupational safety specialists who are working with low salaries and it causes prohibiting effect on working efficiently for occupational safety specialists. In spite of intense responsibilities, occupational safety specialists challenges many other challenges such as pressure of losing job due to notification of deficiencies of workplaces to the Ministry (Namal, Kanber & Kavas, 2016).

### **1.1.1. Training of Occupational Safety Specialists**

As stated in DARTOSSR, training content of occupational safety specialists is comprises two parts as theoretical and practical. Qualifications of trainers are determined by General Directorate. Training duration couldn’t be under 220 hours comprising 180 hours theoretical part and 40 hours practical part. These part could be applied as in one package. Practical trainings could be implemented in workplaces where assigns at least one occupational safety specialist.

### **1.1.2. Duties of Occupational Safety Specialists**

Occupational safety specialists are assigned wide range of duties in DARTOSSR such as risk management, guidance, training, workplace surveillance, documentation, notification and cooperation with related units (Yamakoğlu (2018).

### **a) Guidance**

Prevention of occupational diseases and work accidents is subject to provide employees safe and healthy workplaces. Thus, occupational safety specialists are obligated to guide employers in order to maintain work processes complying with OHS legislation. As stated in regulation of DARTOSSR, guidance related obligations of Occupational safety specialist are;

1. Giving suggestions to employer in order to ensure that work planning, work organization, work implementations, selection and situation equipments involving substances, supply, usage, maintenance, protection and testing of personal protection equipments are sustained in compliance with OHS legislation and general occupational safety rules.

2. Notify employer in writing about necessary precautions that should be taken in related to OHS.

3. Giving suggestions to employer by working about investigation and measurements that should be taken in order to prevent re-emergence of work accidents and occupational illness in the workplace.

4. Giving suggestions and working about reasons of cases not to caused death and injury but that may have potential to be detrimental to employees, workplace or equipments. (DARTOSSR, 2016).

As seen in this duties, occupational safety specialists are expected to intervene workplace since phase of construction of workplace and preference of work equipments. Interest of modern OHS principle is not just prevention of risks that employees exposed, but also focusing on setting up a system enhancing health and safety. Hence, modification of workplace and equipments coherent to ergonomic condition should be considered as work of occupational safety specialists. Besides, 'General safety rules' phrase is wide and dynamic term which endorses opinions stated above. Secondly, occupational safety specialists notify employers in writing to take measurements related to OHS. Occupational safety

specialist fulfill this obligation by writing 'approved book' of workplace. In writing notification is crucial for discharging from responsibilities in case of work accident. In writing notification also prove that necessary measurements related to OHS are notified to employer. Notified vital measurements should be taken in certain period of time by employer. Otherwise, occupational safety specialist notify to Ministry or Work Cooperations Provincial Directorate as workplace deficiency. If vital measurement couldn't be taken and intervention needed, occupational safety specialists should apply employer to shut down. Nevertheless, occupational safety specialist should notify employers verbally as well relying on honesty tenet. It is loyalty requirement of occupational safety specialist who are dependent to employer with job contract (Yamakoğlu, 2015).

#### **b) Risk Assessment**

As stated in regulation of DARTOSSR, risk assessment related obligations of occupational safety specialist are;

1. Participation in works and implementation of risk assessments related to OHS, following and giving suggestions about OHS measurements that should be taken as a result of risk assessment. (DARTOSSR, 2016).

The definition of risk assessment is stated in the Regulation of Risk Assessment as specification of hazard factors that may turn into risk, risks stemming from hazards in the workplace or could affect workplace from outside and rating of these risks in order to determine control measurements. The basis of risk assessment is determination and elimination hazards. Rating of risk assessment is done to prioritize precautions in order to see whether risks are in acceptable level. Safe workplaces are built in the time that risks are in acceptable level. Risk may vary according to employee count, hazard class, work process of workplace so risk assessment should be done considering inherent specification of workplaces. To do

this, risk assessment squad must be built including occupational safety specialists in compliance with the Regulation of Risk Assessment.

### **c) Workplace Surveillance**

As stated in regulation of DARTOSSR, workplace surveillance related obligations of occupational safety specialist are;

1) Planning and controlling execution of periodical maintenance, periodical controls and periodical measurement that should be done in accordance with OHS legislation at the workplace.

2) Participating and following the fire, accident and explosion prevention executions in the workplace, giving suggestions about related issues, participating to emergency case plan preparation works for natural disaster, accident, fire and explosion, auditing and controlling execution of periodical trainings and practices and tracing and controlling of acting in accordance with emergency case plan.(DARTOSSR, 2016).

Workplace surveillance is one of the duty of occupational safety specialists. Occupational safety specialists are obligated to notify employer about determined deficiencies in the workplace. Özdemir(2014) have attention that audition of employees and workplace surveillance are different topics. To him, occupational safety specialists are not auditors who are standing over employees. Tests and examinations are required in workplace surveillance through the way that focusing on objective work condition and environment. Özdemir(2014)

#### **d) Training, Notification and Recording**

As stated in regulation of the DARTOSS, workplace surveillance related obligations of occupational safety specialist are;

1. Controlling or practicing of planning OHS trainings of employees in compliance with related legislation and submitting employer's approval.
2. Preparing annual assessment report containing workplace OHS works and consequences of workplace surveillance in cooperation with occupational physician.
3. Controlling implementations of informing activities intended for employees prepared for submitting to employer's approve.
4. Preparing and controlling executions of OHS instructions and work permission procedures so as to be used in necessary states and submitting employer's approval. (DARTOSSR, 2016).

#### **e) Cooperation with Related Units**

As stated in regulation of DARTOSSR, cooperation related obligations of occupational safety specialist are;

1. Doing assessment related to occupational diseases and work accidents with occupational physician, making examination and investigations in order to prevent reemergence of hazardous cases and following these implementations.
2. Preparing annual work plan with occupational physician which involves OHS related implementations.
3. Working in cooperation with OHS committee if available.
4. Working in cooperation with employee representative and support employees and providing support to their work. (DARTOSSR, 2016)

### **1.1.3. Authority and Responsibilities of Occupational Safety Specialists**

As stated in regulation of DARTOSSR, the authorities of occupational safety specialist are;

1. Applying employer to shut down in case of undeterred hazard, vital and emergency intervention need exist.

2. Investigating and examining in all part of workplace as a requirement of work related to occupational health and safety, accessing necessary information and documents and negotiating with employees.

3. Cooperating with relevant cooperations and institutions complying with inside regulation by allowance of employer as a requirement of work. (DARTOSSR, 2016)

The authorities of occupational safety specialists are inadequate. It is arguable that what extent these authorities considered as in scope of authority. As an example, occupational safety specialists are not authorized to shut down, rather to apply employer in emergency cases and related situations stated above. Yamakoğlu(2015)

### **1.1.4. The Responsibilities of Occupational Safety Specialists**

As stated in regulation of DARTOSSR, the responsibilities of occupational safety specialist are;

1. Not to impair normal flow of process, contributing in ensuring of efficient workplaces, keep informations about occupational secrets, economical and trade states of organization and employer confidential.

2. Occupational safety specialists write determinations and suggestion in approved book concerning assigned workplaces, works that implemented with occupational physician and other topics s/he consider as necessary.

3. Occupational safety specialists are responsible to employer that s/he service for omissions in implementation of OHS services.

Authority document is suspended for 6 month whether omission of occupational safety specialists detected in case of work accidents or occupational diseases.

### **1.1.5. Working Hours of Occupational Safety Specialists**

As stated in regulation of DARTOSSRs, working hours of occupational safety specialists are;

- a) At least 10 min. per employees in low dangerous workplaces
- b) At least 20 min. per employees in dangerous workplaces
- c) At least 40 min. per employees in high dangerous workplaces

The concept of occupational safety specialists in terms of legislation and literature is considerable in assessing base of challenges of occupational safety specialists. In the following sections, literature of variables have been reviewed in order of challenges of occupational safety specialists, psychological safety, professional self – efficacy belief and self – reported personal initiative.

### **1.2. Challenges of Occupational Safety Specialists**

Occupational safety specialists experience many challenges caused by employers, organizations, employees, law or legislation. Although, occupational safety specialists have to work independently, it is obvious that they are forced by considerable duties and responsibilities with limited authorization attributed from 6331 no. Law (ÇSGB & ILO, 2017) and this makes occupational safety specialists



subject to their employers. In addition to that, employees don't contribute to occupational health and safety works rather they ignore. When organizational problems are added to these challenges, working as an occupational safety specialist becomes harder. There are limited studies about occupational safety specialists to investigate this issues in literature.

### **1.2.1. Employer Based Challenges**

Occupational safety specialists are dependent to employer with a work contract except outsourcing consultants working in Public Health and Safety Unit as an occupational safety specialists. As stated above, occupational safety specialists are assigned an organization to enable safe and healthy workplaces through adapting this workplace(s) into 6331 no. Turkish OHS Law. In this processes occupational safety specialist face many challenges stemming from employers in workplace(s) they service. Occupational safety specialists are exposed employer pressure due to cost of suggested regulations and advices within occupational health and safety. Occupational safety specialists also bother due to employer(s) who have lack of knowledge about law, OHS trainings and OHS culture (Başkan Takaoğlu, Çelenk kaya & Ölmezoğlu İri, 2018).

Audits and workplace surveillance should be conducted in basis of objectiveness and away from financial concerns (Bıyıkçı, 2010). To be dependent on an employer creates arguments in terms of conducting objective audits. It is not probable to thought job independency for occupational safety specialists owing to dependency relationship between employer and occupational safety specialist. Akboğa (2016) stated that the most crucial challenge of occupational safety specialist is to be dependent to employer. Intervention of employer is the most crucial challenge that occupational safety specialists face. To be paid salary directly from employer is the one of the other threats for job independency of occupational safety specialists (Arslan ve Ulubeyli, 2016). Occupational safety specialists have

to work independent from employers so as to achieve OHS related goals. To ensure independency, Arslan and Ulubeyli (2016) claimed that occupational safety specialist should be employed by independent institution. Akboğa (2016) also claimed that the one of the other challenge of occupational safety specialists is authority ambiguity. Authority ambiguity cause to lose independency of occupational safety specialists. Occupational safety specialist both auditing employer and receive salary from the same employer. Besides, unwillingness of employers concerning not to reserve resources for OHS reduces job independency of occupational safety specialists (Akın, 2012).

As a result, occupational safety specialists are squeezed between triangle of Ministry, Public Health and Safety Units and employers. They are expected as actor of sector to guide in ensuring safety of employees, organization and workplace and to audit practices of OHS legislation (Akboğa kale et al, 2018). They have different obligations and responsibilities towards Ministry, Public Health and Safety and employers. Ministry impose occupational safety specialist to be follower of OHS related works that employers are not fulfilled (Güzey, 2014).

### **1.2.2.Employee Based Challenges**

Occupational safety specialists bother about OHS trainings of employees due to time pressure, unwillingness of employees to participation in OHS trainings and fire drill. Employees don't comply with rules and instructions, ignores occupational health and safety related events (Başkan Takaoğlu, Çelenk kaya & Ölmezoğlu İri, 2018). Karakaya (2017) stated that occupational safety specialists generally don't have chance to tell employees what to do in terms of OHS. Occupational safety specialists couldn't track employees whether they comply occupational safety rules and instruction.

### **1.2.3.Law and Legislation Based Challenges**

Although articles regarding duties and responsibilities of occupational safety are positive news, there are problems and complexities in practice (ÇSGB & ILO, 2017). Many articles in 6331 no. OHS law are contentious and ambiguous (Emirođlu ve Kořar, 2012). One of the main reason to arbitrary attitude of employer is that occupational safety specialists are exposed intense responsibilities (Tařkiran, 2016).

Technical knowledge of jurisdiction is limited. Generally, information request is needed from legal expert and other institutions. Need for legal expert report concerning OHS related cases is a source of worry due to making jurisdiction processes complex. Finding expert in OHS related issues is hard so report are generally inadequate. Assessment of legal expert report is hard for jugdes owing to lack of information. For this reason, number and generating efficient report capacity of legal experts should be increased. The main reason to confront adversities in judgement processes of occupational safety specialists is stemmed from lack of knowledge and awareness between judges, lawyers and prosecutors (ÇSGB & ILO, 2017).

Although there are many positive idea on OHS legislation of Turkey, some parties including judges consider OHS legislation as complex and detailed. Employers complaint about rapid changes in OHS legislation, to be expected to apply legislation in short time. All parties agree with that present OHS legislation couln't not properly comprehended and implemented. In order to turn well prepared theoretical OHS into well implemented OHS practices, a set of measurements should be progressed for all parties. Occupational safety specialists thought to duties and responsibilities of employers and occupational safety specialist are not well identified in OHS Law (ÇSGB & ILO, 2017).

#### **1.2.4. Organizational Challenges**

Occupational safety specialists face organizational challenges such as inadequate salaries, working under pressure, over work, transportation, to be exposed intense duties and responsibilities in organization and to be charge of work accidents caused by fault of employees (Taşkıran, 2016). Güzey (2014) stated that occupational safety specialists are the main responsible according to opinion of prosecutors in work accidents and deaths. Orhan(2014) also claimed that occupational safety specialists face challenges of job security and they need extra job security in order to work properly.

Organizational challenges and psychological work conditions influence occupational safety professionals. Leitão, Mc Carthy & Greiner (2018) claimed that occupational safety professionals work efficiently when ensuring supportive work organizations. This ultimately enhances OHS performance of organization. Additionally, in order to provide supportive work organization, occupational safety professionals should be ensured right of decision making and enough degree of autonomy (Leitão, Mc Carthy & Greiner, 2018). It is arguable that what extent occupational safety specialists exercise their authority due to receiving money from auditing organization. On the other hand exam to be occupational safety specialists is away from technical knowledge rather mostly consist of legislative knowledge. It causes challenges in solving technical issues. Occupational safety specialists are mostly work in different sectors that they graduated. Working in sector that is not probable to know inherent risks is not contribute to reduce work accident frequency and severity. Some occupational safety specialists are work for 50 - 60 workplaces and more. Inadequate and Insufficient audits emerges in this case. As stated above, occupational safety specialists are dependent to an employer with job contract in an organization. This financial tie disrupt to work efficiently for occupational safety specialists. According to ethics codes constituted by Occupational Health Comission, one of the main condition to work properly for occupational health implementation is occupational independency. From this aspect, notifying

employer to Ministry in case of inappropriateness of workplace is not applicable and get occupational safety specialists into scrape. Occupational safety specialists hardly fulfill this obligation due to concern of employment security. Occupational safety specialists are also seem themselves as weak to actively reduce work accidents in workplaces (Kale et al, 2018). Also, due to recruiting occupational safety specialists with cheap salaries, Public Health and Safety Units leads OHS to away from the main purpose (Namal, Kanber & Kavas, 2016).

For all of this reasons, works of occupational safety specialists exist on paper only, not in practice efficiently (ÇSGB & ILO, 2017).

### **1.3. Psychological Safety: Definition and Measurement of Psychological Safety**

Psychological safety was initially outlined by Schein and Bennis (1965) regarding organizational change. Then other researchers have started studying on definition, meaning and measurement of psychological safety in work organizations. Kahn (1990) evaluated psychological safety on individual perception highlighting whether employees are comfortable or feel anxiety on negative consequences on career, self image or status. He claimed that employees feel psychologically safe when they are provided supportive interpersonal relations and trust. Recently, Edmondson (1999) identified psychological safety as a shared belief that agreed with others regarding interpersonal risk taking. She claimed that psychological safety should be assessed as a team level. She developed 7-item psychological safety scale to measure perception of rejection, positive intentions of others, respect of others on competences and caring each other.

Even a number of definitions of psychological safety have been asserted, the vast majority of studies considered the definition of Edmondson(1999). Employees who feel psychological safe behaviorally tend to be more likely open to communicate, voice their worries and, seek feedback and help which may create

interpersonal risks (Pearsall & Ellis, 2011). This situation, in turn, affect various organizational outcomes such as learning, performance and initiative (Edmondson & Lei, 2014). Although Kahn (1990) and Edmondson (1999) focused on individual and team level measurements, recent studies consider antecedent, outcomes, moderators of psychological safety (Baer & Frese, 2003). People feel psychologically safer when they trust that situations are nonthreatening, consistent and predictable (Kahn, 1990).

Schepers (2008) attributes psychological safety concept to motivation theory of Maslow specifying that human being needs safety after physiological needs. Employees demand psychologically safe climates to achieve their goals. In order to ensure psychologically safe organizations, employees are guaranteed that they won't be accused and embarrassed in case of fault. From this aspect, psychological safety is related to interpersonal trust relation but psychological safety concept is prior to trust relations in that psychologically safety organizations values employees so employees feel themselves safe. Leaders play crucial role in ensuring psychological safety organization. Accessibility of leaders are the prominent determinant of psychological safety. Besides, psychological safety concept alleviate concern of employees in case of ambiguities and complex situations. A number of studies that investigating importance of psychological safety has been carried out recently ( Edmondson, 1999).

Edmondson (2002) segregates psychological safety from trust in that psychological safety reduces interpersonal risks and facilitates structurel learning processes. Employees may have a number of interpersonal concerns that is emerged in complex and uncertain conditions. In these conditions, employees have to ask question, seek help and feedback and try to innovate new solutions in order to conduct job. Employees may have to felt be seen as uneducated, disruptive and annoying when ask a question or seek feedback by others in organization. This processes includes both socially acceptance side by other colleagues and employer side that to be felt valued. As a result of this, employees avoid to take risk in

interpersonal relations that would be fuzzy. This prohibits learning. If asking question or seeking feedback is not prevalent in organizations, employees probably avoid asking question or seeking feedback and they assume to know answer of this question. On the contrary, employees are encouraged to act to innovate, ask and seek regardless of bad results in organizations that consider faults as experiences. Employees are assessed from many aspects by other employees so this generates impression risk.

Trust is the more broad term in contrast to psychological safety. Psychological safety is a risk perception that mostly focus on interpersonal relations and work conditions. Otherwise, trust covers perceived grief concept. Trust condition is constructed in organization through avoiding emotional grief and damage. Mutuality is striking in trust. Employees are focused on reliability of others in trust relations but on the contrary others gives safe feeling to employees in uncertain and complex states. Consequently, employees are targeted in psychological safety against others. While psychological safety is mostly perceived as organizational, public and team levels, trust is mostly perceived individual level. Psychological safety is equally perceived by other members of organization in general. Other thing that segregates psychological safety from trust is that psychological safety is perceived in specific and certain states rather trust is generally perceived in procesess (Edmondson, 2002).

Employees take more risks to seek feedback and propose solutions at workplaces that supportive organizational climate ensured. Taking risk means not to be penalized, punished or censored (West, 1990). Usage of creativity potential of employees is more basic in psychologically safe organizations due to reduce risks to propose new ideas (Edmondson, 1999). Baer and Frese (2003) stated that psychologically safer organizations perform better. They argued that organizations that is safe to take interpersonal risks enhance potential of innovation. Employees are able to speak up regardless of risks to come up with novelties and problem solving solutions in psychologically safe organization. (Baer & Frese, 2003).

Baer & Frese (2003) have widened the concept of psychological safety to the organizational level. Organization refers to a climate that involves formal and informal support and trustful interrelations within the work environment that employees do not feel to be rejected or punished when spoken up, sought feedback or asked help. Brown & Leigh (1996) also view organizational psychological safety as the perception of employees about organizational characteristics involving the allowance of self-expression, clear job roles and the support of management.

Edmondson and Wooley (2003) claimed that the psychological safety concept facilitates organizational and structural changes. It is observed that employees who are working in psychologically safe organizations promote changes and employees do not avoid making mistakes.

### **1.3.1. The Concept of Psychological Safety at Organizational Level**

Organizational psychology cares for employees about how to tackle uncertainties and interpersonal risk within an organization. In the same basis, uncertainty management theory states that employees need to cope with uncertainties and interpersonal risks at workplace. Employees are cognitively, emotionally and behaviorally influenced by uncertainties and interpersonal risks. (Chen et al, 2015)

Kahn (1990) has initially constructed the psychological safety concept in organizations by his qualitative studies. Findings of his studies showed that four factors affect the psychological safety of employees in workplaces. First, social connection that contains mutual trust, acceptance and agreement has a crucial role in ensuring the psychological safety of employees. People try to keep away from uncertainties by contacting others and learning information/details so as to foresee



probable consequences. Second, psychological safety is affected by characteristics of organization such as size, status, power imbalances, norms and interpersonal relations. Third, supportive leadership encourage employees to take risk and displaying tolerance for failure. Employees share their ideas on organizational issues when they are bolstered by leaders with participatory management techniques. Finally, employees feel psychologically safer when they are not obligated to obey rules.

Organizationally, psychological safety perception emanated in psychological climate (Chen et al, 2015). Schneider(1975) claimed that climate is psychological perception for a certain experience. Employees forecast the probable results considering perceived psychological climate and take proper actions (Jones & James, 1979). Employees view workplace as assistance for their well being in psychologically safe organizations. They aware that displaying high freedom in taking action is safe in psychologically safe organizations regardless of losing organizational status or self image (Brown & Leigh, 1996). Schein & Bennis(1965) also argued psychological safety in work environment focusing on organizational change. They pointed out that member of an organization feel safe if they are able to manage change. Kahn (1999) also defined psychological safety concept in this employee engagement study that acting regardless of not to be worry about losing self image. Edmondson (1999) claimed that psychological safety better ensured in case of member of organization respect each other and are allowed and supported to take risk and speak up freely. Ling Bin (2010) asserted that psychological safety is a multi level concept that is called individual, group and organizational level. Psychological safety perception is found as an intermediate relation between individual outcomes( such as motivation, learning, performance) and organizational characteristics (Edmondson, 2003).

Although Edmondson (2004) stated profits of psychologically safe climate in ensuring individuals to be comfortably themselves, a number of researchers reported non-significant effect of psychologically safe climate on performance

(Faraj & Yan, 2009), learning behavior (Choo, Linderman, & Schroeder, 2007) and failure based improvement (Wilkins & London, 2006). This interesting result displayed researchers to examine psychological safety climate in depth including negative aspects. Edmondson (2004) asserted that people spend unproper time with each other in case they are too comfortable with each others so psychological safety climate may damp down work motivation of others due to individuals may lack the induce others forward (Deng et al, 2017). This underlying processes of this suprising possibility has not been systematically studied (Deng et al, 2017). The present researches improve dual model in psychological safety climate which negative aspects operates in parallel with its known positive aspects. According to accountability perspective, people intended to be more careful when they awared to be judged or evaluated by others so people concern that a mistake may damage their social image and self esteem (Schlenker, 1986). However, psychological safety climate reduces anxiety of making mistake and negative consequences and thus induces risk taking behavior (Deng et al, 2017). Also, people intend to exert less effort in case they are not monitored and evaluated so psychological safety climate may reduce work motivation of members(Latane, Williams, & Harkin, 1979).

#### **1.4. Professional Self – Efficacy Belief**

Schwitzgebel (2010) identified belief as a ‘propositional attitude’. Belief could be expressed as an attitude or in the form of sentence. It includes mental acceptance and validity of proposition (Schwitzgebel, 2010).

Occupational safety specialists develop beliefs on their work capabilities as a result of how successful they perceive to conduct their duties, roles and tasks effectively. Professional self – efficacy belief concept is especially studied in the education field for teachers and students in the literature. Within this study, professional self – efficacy belief term have been evaluated from aspect of self-

efficacy (Bandura, 1986) belief of occupational safety specialists at work by focusing on investigation of how occupational safety specialists believe to conduct their tasks, duties and roles effectively in the organizations. In Turkish OHS legislation, tasks of occupational safety specialists entitled as (1) Guidance, (2) Risk Assessment, (3) Training, (4) Cooperation with Related Units, (5) Notification and Recording, (6) Workplace Surveillance. Recent findings in the safety science showed that safety professional struggle long held beliefs on their professional role and safety.

In social-cognitive theory, Bandura (2001) defined structures depending on individuals' own agentic behaviours, personal factors and environmental conditions. Individuals are considered as self-reflection, self-reactiveness (or self-regulation) and agents – capable of using forethought in social-cognitive theory (Bandura, 2001). Bandura's aspect significantly differed from behaviourism in terms of characterising individuals as reactors only concentrating on behaviours. Actually, Bandura (2001)'s study would be viewed as an addition to the cognitive revolution in psychology literature. In socio - cognitive aspect of Bandura (1986), people are seen as self-regulating and proactive rather than reactive and controlled by other forces. Besides, people are viewed to have self – beliefs that provides them to control over their actions, feelings and thoughts.

Self-efficacy is identified as a belief that individuals could successfully perform the required action to generate an outcome (Bandura, 1977). Actually, many studies have studied on students' and teachers' belief of self-efficacy to affect their desires to study, their persistence, and their success in complex cases (Bandura, 1986). Self-efficacy belief is a persuasive belief regarding individuals capabilities that one could control own level of performing. Self-efficacy belief is not concerned with ones' capability, but with ones' perceptions of what s/he could do with their capabilities. Behavior of individuals are be better comprehended by belief that they hold on their capabilities (Bandura, 1986).

### **1.4.1.The Sources of Self – Efficacy**

Bandura (1977) suggested four main sources of self – efficacy knowledge: “past performance accomplishments” (additionally called enactive advanced attainment or performance or advanced experiences), “vicarious experiences” (likewise called observational gaining, demonstrating or comparisons), “verbal persuasion” (and other social impacts), and “emotional and physiological situations”. From that point forward, others (Maddux, 1995) have made a different classification for imaginal experiences, and have isolated emotional situations from physiological states.

#### **a) Past performance accomplishments**

Owing to based on individuals’ own experiences, past performance accomplishments are the most powerful source of efficacy information (Bandura, 1997). Along this line, the performance of behaviours which generates successful outcome is the most powerful method of assembling self-efficacy (Maddux and Lewis, 1995).

As indicated in self-efficacy theory, while failures lower self-efficacy belief, successful performance increases self – efficacy belief. Thus, researchers have used different way manipulations to examine the impact of success and failure on self-efficacy beliefs (Bandura, 1986). Escarti and Guzman (1999) employed college students as participants to asses how well they perform a adverse task after being demonstrated the task. In the first session, the college students implemented the task. After a week, the college students were notified on their first session results. First group was informed that their task performance was lower than they estimated, and second group was told a higher score than they previously estimated.

## **b) Vicarious experiences**

Vicarious experiences which is a second source of self – efficacy includes observation and comparison of oneself with norms or others. Therefore, vicarious experience involves the more advanced modelling – grounded implementations. As indicated by Bandura, “people must appraise their capabilities in relation to the attainments of others” (1997). As given an example by Bandura(1997), student who gets 115 points in an exam would have no idea to judge his/her own performance in terms of whether it is good or bad without comprehending the maximum score one can achieve or score his/her classmates obtained. Bandura (1997) also suggested that “a formidable-looking opponent instils lower efficacy beliefs than does one who looks less impressive”.

Social comparisons is also assessed a part of the modelling process. As referred by Feltz *et al.* (2008), modelling enables efficacy knowledge by indicating that a duty or task could be learned, by enabling instructional data, and by displaying that a challenging task or duty is resolvable. According to applied aspect, models are considered as a stimulus for psychological or behavioural change, so the adoption of modelling can be seen as an intervention method. Though vicarious experiences are assessed by Bandura (1997) to be less powerful in comparison with past performance accomplishments, this experiences are especially valuable in case individuals have less knowledge on their own capacity to achieve a task (Feltz *et al.*, 2008).

There are many studies on modelling related to self-efficacy theory. This researches stresses on investigating which characteristics of models are impressive for observer, and focusing on efficacy of various modelling types on improving performance and self-efficacy beliefs, and some of studies exposing observers to various modelling conditions.

### **c) Imagery**

Even Bandura (1986) assessed imaginal experiences as in vicarious experiences (i.e. cognitive self-modelling), other researchers assessed these kind of experiences separately (Maddux, 1995). Imagery experiences are identified as “an experience that mimics real experience. We can be aware of ‘seeing’ an image, feeling movements as an image, or experiencing an image of smell, tastes or sounds without actually experiencing the real thing” (White and Hardy, 1998:). Dreaming is not the same as imagery; individuals are conscious and aware when adopting imagery (Richardson, 1969). The large amount of studies on imagery interventions displayed that imagery interventions enhance self-efficacy levels. The researches by Garza and Feltz (1998), showed that the imagery interventions raises the self-efficacy scores.

### **d) Verbal Persuasion**

The consideration of the verbal persuasion source could be gathered with this quotation: “All effective psychological interventions begin and end with communication, regardless of the techniques employed in between” (Maddux and Lewis, 1995).

The process within this source involves feedback, expectations on the part of others and cognitive strategies (Feltz *et al.*, 2008). Bandura (1986) showed that the impact of persuasive influence on self-efficacy could vary according to the trustworthiness, credibility, prestige, expertise or knowledge of the persuader. The feedback given to an individual could boost self-efficacy beliefs or diminish them (Bandura, 1997). In addition to that, Escarti and Guzman (1999) displayed that there is mediation role of self-efficacy between relation of feedback and performance. One of the other finding of their study is that feedback had positive impact on performance, task choice and self-efficacy. In contrast to participants

who gets negative feedback, participants who gets positive feedback had higher level self-efficacy, picked more difficult tasks and achieved tough tasks better. As indicated by Bandura (1997), individuals who consider themselves as high efficacious incline to attribute their faulties to inadequate effort and/or situational hardles, whereas individuals who have low sense of self-efficacy see their faulties as arised from a lack of skill.

Bandura (1997) suggested that setting goals influences self-efficacy and self-efficacy influences the goals an individual assign for theirselves. However, according to Feltz et al.,(2008), “when people assign goals to others, they are engaging in a form of verbal persuasion”. By assigning a goals, individuals express their belief to others by tacitly indicating that s/he is competent of obtaining that performance.

#### **e) Physiological States**

Individuals cognitively evaluate their condition or physiological state to shape self-efficacy judgements to decide whether they meet task expectations (Feltz *et al.*, 2008). Bandura (1997) merges affective and physiological states owing to both of them have physiological basis. According to Bandura (1997), physiological states affects self-efficacy beliefs in case individuals identify repulsive physiological arousal with perceived incompetence, perceived failure, poor behavioural performance and.

### **1.5.Proactive Work Behavior**

Owing to technological and structural advancements, organizations experiences a number of challenges and changes which is needed to be adapted to its organizations to retain continuity. In order to deal with these challenges and

rapid changes, individuals play crucial role in adaptation processes. Global competitive trade market requires employees not solely to follow instruction and to comply with the rules but also to display better performance that is previously expected for organizational mission. Due to this organizational changes in the trade market, organizations push employees forward to be proactive.

Studies on proactivity examines why an individual undertakes to alter situations or external environment and also the outcomes of proactivity for organizations, teams and individuals. Wide range of studies have been implemented until today on proactivity such as personal initiative (Frese et al., 1996), proactive personality (Crant, 1995), taking charge (Morrison & Phelps, 1999).

Proactive work behaviors are based on anticipatory activities intended in order to alter existing situations (Parker et al., 2006). Proactive work behavior concept contains four different dimension which are “taking charge”, “individual innovation”, “problem prevention” and “voice” (Parker & Collins, 2010). Taking charge denotes the self – initiated based activities that is effort for providing improvement and change (Morrison & Phelps, 1999). Individual innovation refers to coming out new ideas and carrying out of these ideas in the workplace (Scott & Bruce, 1994). Problem prevention refers to avoidance of the potentially problematic issues before occurred (Frese & Fay, 2001). Voice is defined as creating better through sharing ideas, innovating and sounding thoughts with colleagues within the work organization (LePine & Van Dyne, 2001). Proactive work behaviors have common highlight on initiating change and looking ahead. Frese, Garst & Fay (2007) claimed that proactive work behaviors such as personal initiative, are positively associated with complexity, job autonomy and control.

All proactive behaviors don't always have proper outcomes rather sometimes causes negative outcomes (Bateman & Crant, 1993). Bolino & Turnley (2005) pointed out that individuals who work proactively are more likely to have higher level of work-family conflicts, role overload and job stress.



### **1.5.1. Personal Initiative**

Personal initiative which is a one of the proactive work behavior was examined in the context of organizational level challenges organizational level psychological safety perception and individual level professional self – efficacy belief.

As one of a form of proactivity at work, personal initiative was defined by Frese and Fay (2001), as forecasting performance at the level of individual team and the organizational level and includes going beyond assigned duties, trying to solve problems before occurred and improve existing situation. They discussed that personal initiative means overcoming challenges and carrying out plans and goals. According to Frese et al.,(1996) personal initiative involves proactivity (foresee future issues and opportunities), persistency (overcoming barriers) and self - starting. Showing personal initiative implies to be persistent, proactive and self starting. Researchers assesses personal initiative as a behavior within this study. Self – starting means that individuals perform a behavior without being told, without certain role requirement and without explicit instructions. Self – setting a goal is entailed to take initiative. This goal could be on a developing idea, but personal initiative requires to take charge so putting into action. Proactivity implies to long term focus on and forecast that not to wait till demand is responded. Long term forecast and focus enable individuals to anticipate necessary action to be taken before challenges, problems or opportunities occurred. Persistence is also required to reach goals. Changes is inevitable in a processes, a task or a procedure so setbacks and failures may be emerged. This changes sometimes doesn't managed properly. Thus, persistence is needed to overcome barriers stemming from changes. Consequently, self-starting means that individuals foresee probable future issues, and, thus, higher level of proactivity occurs. According to Frese et al., (1997), persistence is also emerged as going beyond assigned tasks. Employees engage in personal initiative when the behaviour fits the goal of organization (Frese et al., 1996).

### **1.5.1.1.Facets of Personal Initiative**

A theoretical base for personal initiative as outlined by Frese, Fay, Hilburger, Leng and Tag (1997) illustrated in Table 1.1. Action sequence is composed of to (1) goal / redefinition of task, (2) information collection and prognosis, (3) plan and execution, (4) monitoring and feedback. When a goal was set, an individual investigate informations and makes prognosis of future situations to deal with dynamic processes. The information is utilized to improve plans that are then carried out. An action is monitored during the plan execution. Then, individuals collect feedback to adjust their actions.

Three facets of PI are indicated in three columns for each part of action sequence in Table 1.1; (1) self-starting, (2) proactive, and (3) overcoming barriers.

**Table 1.1:** Facets of Personal initiative (Frese, Fay, Hilburger, Leng and Tag,1997)

<i>Action sequence</i>	<i>Self-starting</i>	<i>Proactive</i>	<i>Overcome barriers</i>
<i>Goals/redefinition of tasks</i>	– Active goal, redefinition	– Anticipate future problems and opportunities and convert into a goal	– Protect goals when frustrated or taxed by complexity
<i>Information collection and prognosis</i>	– Active search, i.e. exploration, active scanning	– Consider potential problem areas and opportunities before they occur – Develop knowledge on alternatives routes of action	– Maintain search in spite of complexity and negative emotions
<i>Plan and execution</i>	– Active plan	– Back-up plans – Have action plans for opportunities ready	– Overcome barriers – Return to plan quickly when disturbed
<i>Monitoring and feedback</i>	– Self-developed feedback and active search for feedback	– Develop pre-signals for potential problems and opportunities	– Protect feedback search

### **a ) The Self – Starting Facet**

Actions of individuals are directed by goals. Goals are defined by the assigned tasks at work. The redefinition process ensures the definition of extra-role goals that entailing self-starting behavior and thus personal initiative. The starting point of personal initiative is the “redefinition processes”. (Frese and Fay, 2001). The next processes of the action sequence is showed in the Table 1.1 is the “information collection and prognosis” phase (Dörner & Schaub, 1994). Information collection and prognosis means that individuals find out whats going on their environment. The third processes of self-starting facets is displayed in Table 1.1 as “plan”. Plans could be seen as a bridge between action and thought and they indicates the phases to reach a goal. Plans can include a few rudimentary notions on how to reach goals or they would elaborate keystone of an action. The final processes is monitoring of execution and feedback In this processes, self-starting refers that an individual improves their own feedback and checks. ( Frese and Fay, 2001).

### **b) The Proactive Facet**

Each phase of action sequence associated with tackling future opportunities and problems. A long-term approach generates better outcomes than a short-term orientation in terms of personal initiative. A long term orientation facilitate to seek feedback so as to find out opportunities and potential problem fields. The proactive perspective individuals deliberately investigates problematic fields and challenges and seek alternative ways and methods before the problematic states occured. Proactivity related to plans points out that an individual improves back-up plans, when undesirable results appear. This also the same for dealing with opportunities (Frese et.,al, 1995).

Finally, pre-signals enables employees to be aware of undesirable states or potentially pleasant events. When barriers are forecasted by pre-signals before occurred, they could be determined and coped with faster (Frese and Fay, 2001).

### **c ) The Overcoming-Barriers Facet**

Individuals have to preserve their goals. One precondition for retain actions even confronting problems is to feel responsibility for the outcome and process. If individuals are frustrated of their responsibility by attributing failures to others, there is relatively less incentive to overcome challenges. Information collection and prognosis could also be damaged by negative emotions as well as the challenges of the organization individuals cope with (Frese et.,al, 1995).

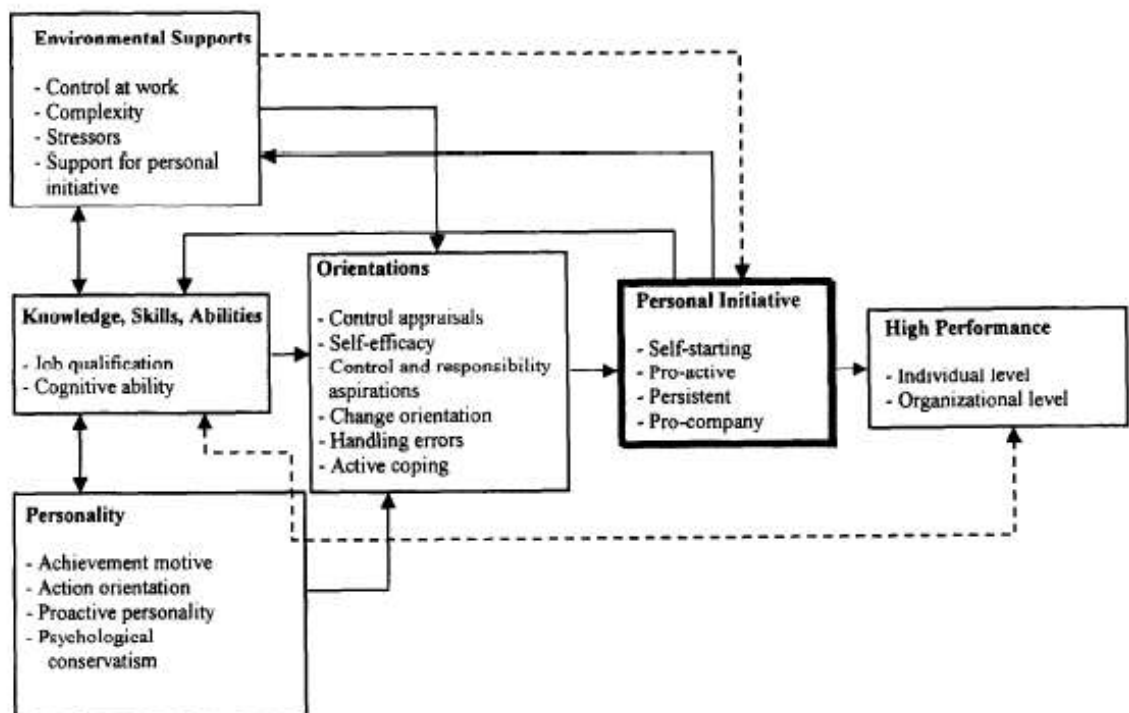
When plans are progressed and took into account, barriers have to be overcome. Indeed, barriers may limit action plans. On the other hand, it is not worth to focus on a plan that is not functional. Overcoming barriers in the monitoring and feedback process is associated with preserving the feedback search in spite of the difficulties. A state could be thought that it is hard to receive information signals. Besides, it would be difficult to seek for information owing to the conditions was not transparent or asking is restricted (Frese and Fay, 2001).

#### **1.5.1.2. Antecedents of Personal Initiative**

Two broad conceptual antecedents of proactive behavior has been defined as individual and contextual factors by Crant's (2000) integrative framework. Similarly, a model of consequence and antecedents of personal initiative suggested by Frese and Fay (2001) illustrated in Figure 1.1. In their comprehensive model, they considered job complexity, job control, and support as "environmental supports" that rises personal initiative level employees. They pointed out that stated

environmental factors, individual factors and achievement motivation positively related with personal initiative level of employees. Personal initiative is considered as a behavior (not as a personality trait) by Frese and Fay (2001).

**Figure 1.1.** Consequence and Antecedents of Personal Initiative. ( Frese and Fay, 2001)



### a) Orientations

The orientations influences personal initiative, so that orientations enables individuals to believe that demonstrating personal initiative is possible and one could handle with potential negative outcomes. Considering personal initiative entails the demands control of the situation, performance and that individuals are motivated by control. Control beliefs could emerge in two conditions that are the

condition of control over one's actions and outcomes. (Frese and Fay, 2001). Control appraisal is associated to believe that one have impact on decisions at work so, able to influence of outcomes at work (Folkman, 1984). Control over a ones' actions signifies self-efficacy that is the demand that an individual is capable of performing a action efficiently (Bandura, 1997). There is a disadvantage of the control that it is generally regarding to responsibilities or obligation; an individual who is obligated for a consequence may confront negative sanctions in case s/he made something wrong. Frese and Fay (2001) discussed three control orientations as depicted in Figure 1.1. ("control aspiration", "control appraisal" and "self-efficacy") influences personal initiative. Individuals who have high level control orientation would more likely to have stronger feelings of responsibility (Morrison & Phelps, 1999); this kind of individuals usually don't have chance to give up easily when challenges appear (Bandura, 1997), they have to seek more opportunities to perform (Folkman, 1984); they must have higher level of hopes for achievement and, thus, consider a long-term aspects in planning and goal-setting (Heckhausen & Schulz, 1995) and they actively seek for information and feedback (Ashford & Tsui, 1991), that generates better insight of where to take initiative. Individuals who holds changes as negative, scared to make errors, and not sure whether s/he could tackle with stressors effectively are less likely to show personal initiative. Individuals goes beyond their routine work scope and changes the conditions when taking the initiative. This raises the possibility of making errors, because nonroutine actions and changes increases complexity of work. Appropriate ways are needed to tackle them. Change orientation raises the possibility of showing personal initiative. Errors increases when people try to find new actions which is a main perspective of PI. Individuals who are not capable of tackling with errors are less motivated to show personal initiative (Frese and Fay, 2001).

## **b) Personality Factors**

Frese and Fay (2001) identifies proactive personality as ‘need for achievement, action control, psychological conservatism, need for cognition,’ as in personality factors since this personality factors are related to personal initiative according to them. Need for achievement means a potent orientation for achievement in coping with a task demand, high aspiration, concentrating on personal development, and an attention to feedback on performance (McClelland, 1987). Even need for achievement is evaluated as working hard or overcoming challenges, it does not means that performance is self-started. Frese et al.,(1997) found that significant correlation between personal initiative and need for achievement. Whereas the personal initiative concept propose that individuals overcome all type of barriers against their goal (Frese and Fay, 2001), Kuhl (1992) suggested only one kind of barrier which has been named as internal barriers. Additionally, need for cognition is positively associated with personal initiative (Fay et al., 1998). As indicated above, personal initiative usually requires difficult, new and unstructured situation. Individuals who have high level of proactive personality is “one who is relatively unconstrained by situational forces and who effects environmental change. Proactive personalities identify opportunities and act on them; they show initiative, take action, and persevere until they bring about meaningful change” (Crant, 1995). Personal initiative and proactive personality is conceptually associated. Unlike the personal initiative definition of Crant (1995), Frese and Fay (2001) defined personal initiative as a behavior. Last personality factor depicted in Figure 1.1 is psychological conservatism. (Fay & Frese, 2000a) found in their study that psychologically conservative individuals had lower propensity to demonstrate personal initiative.



### **c) Knowledge, Skills, Ability (KSA)**

Personal initiative could be more useful if an individual is successful at work and capable of learning quickly. Thus, high level of ability, skills and knowledge are antecedents of personal initiative. Fay and Frese (2001) found that cognitive ability influenced personal initiative. In this vein, qualifications of an individual were also associated to personal initiative (Frese & Hilligloh, 1994). Knowledge, skills, and abilities are sources since they provides people to deal with the job requirements. They allow individual to mastery experience, and this in turn, provides people to improve self-efficacy (Bandura, 1997). If an individual comprehended that s/he has the knowledge and is capable of coping with a case, s/he also foresee that the result is under control. When knowledge, skills and abilities are high, coping with expected stressors, errors and changes, is getting easier. According to Frese and Fay (2001), job knowledge and cognitive ability are sources that generates mastery experiences. Thus, they produces higher level of orientations and, in turn, induces the higher level of personal initiative.

### **d) Environmental Supports**

Environmental supports signifies organizational and job conditions that facilitates to demonstrate personal initiative. Supports have direct and indirect impact on personal initiative. Frese and Fay (2001) concentrated on complexity and control at work and their association to 'control aspirations, control appraisal and self-efficacy' in environmental support depicted Figure 1.1. Whenever control is impeded at work, helplessness occurs (Heckhausen & Schulz, 1995). Lack of control could lead to improve aspirations for control. Then the case is that individuals have less control at work and the states would not possible to change. Additionally, complexity and control also influence self-efficacy, since they ensure people to gain mastery experiences (Frese and Fay, 2001). Bandura (1997) argued that mastery experiences generates higher level of self-efficacy. According to Frese

and Fay (2001), there was correlational association between personal initiative and control and complexity. They argued that personal initiative in turn, causes to higher level of complexity and control.

Frese and Fay (2001) suggested that stressors have positive impact on personal initiative. According to them, this could be understood as counterintuitive but stressors are signal that something goes wrong. Thus, stressors prompts individuals to cope with the negative situations so as to develop it.

### **1.5.2. Self – Reported Personal Initiative**

This research considers proactive work behaviour in the light of personal initiative as theoretically outlined by Frese et al., (1997). According to Frese and Fay (2001), personal initiative should not only be measured with questionnaire method. Within this master thesis, personal initiative was measured at perception level relying on self-reported personal initiative score of participants. Researchers was used proactive work behaviour term in general but self-reported personal initiative have been integrated for operationalization.

## **1.6. Relationships Between Variables**

### **1.6.1. Challenges and Personal Initiative**

6331 no. OHS law expect occupational safety specialists to be proactive that to provide interventions before risks and hazards occur. On the other hand, occupational safety specialists face wide range of challenges. Thus, it is important to investigate the relationship between challenges and personal initiative in that whether occupational safety specialists take personal initiative in case of challenges.

Actions of individuals are goal-oriented and directed by goals. Frese and Fay (2001) described personal initiative as a proactive and work behavior by self starting to do something without being told. Self-starting refers that individuals have active plan previously created instead of meeting standard demands. Self-started goals would produce the results to overcome challenges. Overcoming barriers also generates the self-starting goals, because unexpected innovations usually entail a self-start. When taking personal initiative, persistence is often necessary to achieve one's goal. When plans are progressed and took into account, barriers have to be overcome. Overcoming barriers refers that information collection, feedback, goals, and plans are preserved against prevention. Individuals have to preserve their goals. They have to persuade themselves that it is valuable to retain self-started action. One precondition for retain action even confronting problems is to feel responsibility for the outcome and process. If individuals are frustrated of their responsibility by attributing failures to others, there is relatively less incentive to overcome barriers. Information collection and prognosis could also be damaged by negative emotions as well as the challenges of the organization individuals cope with (Frese et.,al, 1995).

Barriers might sometimes causes reduces personal initiative and sometimes may raises the motivation to engage in a self-set goal (Vroom, 1964). Vroom's (1964) claimed that a high level of barriers causes to interrupt a goal. But, after implementation intention was formed (after an action plan was created), barriers must raises efforts to reach the goal. According to Vroom (1964), individuals with high level of personal initiative would be quicker in creating an implementation intention or they would be better in improving action plans than individuals with low personal initiative.

High level of personal initiative enables individuals to forecast opportunities and overcome challenges. A comprehensive proactivity perspective requires individuals seek for information so as to understand potential problem fields. The proactive perspective of information collection and prognosis claims

that proactive individuals consciously anticipate barriers and for problematic fields and seek for alternative methods and strategies before the problems occurred. Frese and Fay (2001) suggested that stressors have positive impact on personal initiative. According to them, this could be understood as counterintuitive but stressors are signal that something goes wrong. Thus, stressors prompts employees to cope with the negative conditions so as to develop it.

### **1.6.2. Psychological Safety and Personal Initiative**

It is important to investigate psychological safety perception of occupational safety specialists at organizational level in terms of whether they take interpersonal risks regardless of thinking to be penalized, embarrassed, punished or considered as uneducated towards employees and employers with these high level of responsibilities and duties with limited authority.

Studies showed that psychologically safe climates promotes proactive behaviors. Supportive environment that encourages employees to try alternative solutions in their work without concerning about potential risks is likely to streamline proactivity (Parker et al., 2010). People who expressed to be supported by or satisfied with their work group are more likely to show proactive behaviors (LePine & Van Dyne, 1998). Similarly, employees who percept support from the organization (Ashford et al., 1998), showing more proactive behaviors at work. Parker and colleagues (2006b) suggested that trust in coworkers would raises the degree of self-reported proactivity at work, through widening perception of employees regarding their role. Individuals who work in psychologically unsafe work groups are less probable to be proactive due to lack of risk taking. Thus, psychological safety emerges as having substantial role in facilitating decision of employees to act on proactive goals. Frese and Fay (2001) also pointed out that support for personal initiative is associated with personal initiative. They claimed that perceived supervisor support for personal initiative haven't occurred as crucial

variable. The study of Frese, Teng, & Wijnen, 1999 also support this findings that they found that supervisor support was not associated with to higher personal initiative. Frese and Fay (2001) assume that the culture and general climate of a organization would be much more considerable to showing personal initiative. Openness of management was significant for the improvement of the personal initiative (they used “taking charge,” that is very similar to personal initiative) (Morrison & Phelps, 1999)

### **1.6.3. Professional Self – Efficacy Belief and Personal Initiative**

There is no sector specific occupational safety specialists qualification system in Turkey. They are qualified to work any sector they desire providing that to have occupational safety specialist certificate though they were graduated from different field. Thus, it is important to investigate professional self – efficacy belief and its relationship with personal initiative in that in which challenges and psychological safety context occupational safety specialists take personal initiative to enhance their professional self – efficacy belief.

According to Bandura (1977), individuals incline to avoid conditions which they do not believe in that they could achieve, but become in and are pretentious in situation that they consider that they are able to be successful. Morrison and Phelps (1999) - they used the concept of “taking charge” that is very similar to personal initiative- found that self-efficacy was associated with personal initiative. According to Bandura (1977), individuals incline to avoid conditions which they do not believe in that they could achieve, but become in and are pretentious in situation that they consider that they are able to be successful. Therefore, beliefs on personal efficacy could guide the effort that would be exerted in the case of barriers and could directly affect the activities individuals select to involve in. Besides, according to Frese and Fay (2001), complexity and control ensure people to gain mastery experiences. Bandura (1997) argued that mastery experiences generates

higher level of self-efficacy. According to Frese and Fay (2001), there is correlational association between personal initiative and control and complexity. They argue that personal initiative in turn, causes to higher level of complexity and control.

Parker et al. (2006) showed that the behaviors related with proactive personality could potentially be malleable with the mediation effect of self-efficacy. They demonstrated support for the suggestion that engaging in proactive behaviors includes making decision on whether an performance would be successful. The consideration of self-efficacy in the proactive perspective encourages the importance of creating employees' perceptions of their own competencies (Parker et al.,2006).

### **1.7.The Object of The Study and Hypotheses**

Modern occupational health and safety approach covers not only technical issues of employees but also focus on psychological state of employees. Employees are considered by multidisciplinary aspects in modern OHS. In terms of other disciplinaries, first psychological study in occupational safety area in Turkey conducted by Mamatoğlu ( 2001). In conventional occupational health and safety, technical and engineering measurements and managerial sanctions by relying on legislative obligation are taken in order to ensure safety and health of employees. In Turkey similarly, Turkish OHS system mostly involves legislative responsibilities, duties and authorities exposing employees, OHS professionals and employers to comply with them. These responsibilities, that employers, employees and OHS professionals have to comply with, mainly encompasses technical and legal obligations elaborates workplace safety and surveillance instead of motivating on employees. Until recent years, only engineer based employees were qualified to be occupational safety specialist. So, Work Ministry and related units, working for health and safety, mostly have engineer based employees. Naturally, decision makers for occupational health and safety are technical based managers so far. It

has been reflected to Turkish OHS legislation as covering mostly technical aspect by ignoring psychological side of OHS. The more focusing on safety and technical side of OHS doesn't prevent occupational accident rather occupational accident are increased annually according to Social Security Institution Statistic Annuals. There are numerous sectors in Turkey so technical necessities may vary according to main processes so it is very hard to manage OHS from only safety aspect in Turkish system that try to construct occupational health and safety only since recent past.

Although studies examining psychological state ( such as stress, anxiety, engagement etc.) of employees at work have increased in occupational health and safety literature recently, there are scarce of studies that focusing on psychological state of occupational safety specialists. Occupational safety professionals have crucial role in providing safety and health of employees. As in Turkish occupational safety legislation, occupational safety specialists are obligated to fulfill many responsibilities and duties towards employers, employees, Work Ministry and related OHS units. When organizational specific responsibilities and duties are added to them, occupational safety specialists are come across many work parties. In addition to that occupational safety specialists working as consultant come across different employer and employees. Even responsibilities, duties and responsibilities of occupational safety specialists have been stated in legislation, there are numerous challenges they face in practice. Occupational safety specialists thought to duties and responsibilities of employers and occupational safety specialist are not well identified in OHS legislation (ÇSGB & ILO, 2017).

Task definition of occupational safety specialists vary across the organizations. Occupational safety specialists working in triangle of employees, employers and legislative pressure. They work subject to an employer with work contract so occupational safety specialists can't urge employers to take measures even it is crucial for employees or workplace due to concern to be fired. On the other hand, occupational safety specialists have some obligation in terms of employees but they are not legally authorized in legislation to intervene workplaces

or instruct employees but it differs organization to organization. Some employers added this authorization into work contract so occupational safety specialists behave as a employer representative (Yamakoğlu,2018). So, there is no consistent and standard practices in implementation of occupational health and safety even some points stated in the legislation so this may creates challenges for occupational safety specialists at work.

H1.1. Challenges of occupational safety specialist negatively correlated with psychological safety.

H1.2. Challenges of occupational safety specialists negatively correlated with professional self – efficacy belief.

H1.3. Challenges of occupational safety specialists positively correlated with self – reported personal initiative.

Occupational safety specialists work in an organization except individual consultants. Apart from occupational challenges of occupational safety specialists, they confront organizational challenges as well. Occupational safety specialists interact with employees and employers by exposed high level of responsibilities and duties with limited authority (ÇSGB & ILO, 2017). Thus, it is important to investigate psychological safety perception of occupational safety specialists at organizational level in terms of whether they take interpersonal risks regardless of thinking to be penalized, embarrassed, punished or considered as uneducated towards employees and employers with these high level of responsibilities and duties with limited authority. In terms of employers, they are obligated to warn employers in case of danger and guide them to take measures even they are dependent to an employer with job contract but sometimes employers are not willing to take measures due to different reasons such as financial issues or productional concerns so occupational safety specialists may feel to be rejected in other measure notifications related to OHS. Even notification of improper states and demand to take measures in case of danger from employer is part of occupational safety specialists job, they may be directly or indirectly punished, penalized or



embarrassed by employers. To ensure OHS, organizations have to spare time for OHS practices. These practices are generally conducted by stopping manufacturing so they may be accused for delay of manufacturing. Furthermore, employees are sometimes assigned a task with limited time but they have to participate OHS practices. In this cases, employees expect occupational safety specialists to break OHS practices short. Otherwise, employees stand against occupational safety specialists. This all are part of psychological safety of occupational safety specialists.

H2.1: Psychological safety is positively correlated with professional self – efficacy belief.

H2.2: Psychological safety is positively correlated with self-reported personal initiative.

H2.3: Psychological safety has moderator role between challenges of occupational safety specialists and self – reported personal initiative.

Namal, Kanber and Kavas (2016) thought in their study that engineers prefer occupational safety field because of unemployment anxiety. Tülü (2014) found in his study that according to response rates amongst 2479 occupational safety specialists, %43 of occupational safety specialists thought that they are employed in order to fulfill legal obligation of organization. Besides, there is no sector specific occupational safety specialists qualification system in Turkey. They are qualified to work any sector they desire providing that to have occupational safety specialist certificate though they were graduated from different field. Quality of training courses to be occupational safety specialists and graduation courses taken in university are arguable in terms of whether they meet requirements to implement OHS related practices properly. In addition to that, it is not possible to know all OHS necessities of workplaces that involves wide range of different risks, danger, processes and, employee and managerial characteristics. On the employee side, as stated above, employees sometimes don't comply with rules and instructions, ignores occupational health and safety related events (Başkan

Takaoğlu, Çelenk kaya & Ölmezoğlu İri, 2018) even if occupational safety specialists work harder, trace practices and warn employees. In this cases, to prevent confrontation of employees and occupational safety specialists, managerial support is crucial. All of this are exhibits necessity for investigating professional self – efficacy belief of occupational safety specialists in terms of how much they believe to conduct their work efficiently. This study was designed as an exploratory research to investigate relationships between variables.

H3.1:Professional self – efficacy belief has mediator role between psychological safety and self-reported personal initiative.

H3.2:Professional self – efficacy belief has moderator role between challenges of occupational safety specialists and self-reported personal initiative.

The main approach of OHS is proactivity. Proactive approach in OHS is to prevent undesired situations before they occurred. One of the major necessity is to make risk assessment in OHS. Making risk assessment is one of the duty of occupational safety specialists stated in legislation. Within risk assessment, occupational safety specialists are expected to proactively foresee health and safety related danger before turning into risk for employees or workplace. Studies showed that psychologically safe climates promotes proactive behavior. Individuals who expressed to be supported by or satisfied with others are more likely to show proactive behaviors (LePine & Van Dyne, 1998). In order to implement other job requirements properly and prevent problems caused by employees, employers, organizations or legislation, occupational safety specialists need to show personal initiative, as a form of proactive work behavior (Frese and Fay, 2001). Thus, it is important to investigate whether occupational safety specialist show proactive work behavior of across employer, employees and legislative pressure.

This study is unique in terms of investigating psychological safety, proactive work behavior, professional self – efficacy belief and challenges of occupational safety specialists. Examination of psychological safety, professional

self – efficacy belief and proactive work behavior of occupational safety specialists is important within problematic context. Measuring relations between psychological safety, professional self – efficacy belief and proactive behavior and challenges of occupational safety specialists will shed light on future researches. As well as the object of this study was to investigate relationship between challenges of occupational safety specialists, psychological safety, professional self – efficacy belief and proactive work behavior, self-reported personal initiative which is a one of the proactive work behavior was examined in the context of individual level professional self – efficacy belief, organizational level challenges and organizational level psychological safety perception. The research interest was based on examination of the relationship between that organizational level (Challenges of occupational safety specialists and Psychological safety) perceptions and individual (professional self – efficacy belief and self-reported personal initiative) attributes.

## CHAPTER 2 - METHODOLOGY

As well as the object of this study was to investigate the relationship between challenges of occupational safety specialists, psychological safety, professional self – efficacy belief, proactive work behavior, self-reported personal initiative which is a one of the proactive work behavior was examined in the context of organizational level challenges organizational level psychological safety perception and individual level professional self – efficacy belief. This study was designed as an exploratory research to investigate relationships between variables. This chapter consist of methodological procedures employed in this master thesis involving data collection, instruments, sample and measurement. 332 occupational safety specialists working different work organizations and sectors participated in this cross - sectional research. Exploratory Factor Analysis (EFA) was carried out to provide construct validity and to detect sub dimensions of developed scales using Maximum Likelihood extraction method and oblimin rotation method. Also, Confirmatory Factor Analysis (CFA) was conducted in order to verify factor construct of challenges of occupational safety specialists scale which appeared to have six dimensions. Although challenges of occupational safety specialists scale assumed as combined with organizational challenges of occupational safety specialists, the result of Confirmatory Factor Analysis (CFA) showed that organizational challenges scale need to be separately assessed from challenges of occupational safety specialists. Cronbach's Alpha value of scales was calculated so as to measure internal consistency of scales. Hypotheses was tested by using correlation, mediation and moderation analysis.

### 2.1.Sample

Data have been collected from private sector occupational safety specialists including consultants. Public sector occupational safety specialists excluded from this research since the obligation of employing occupational safety specialist in

public sector has been suspended to 2020. 332 occupational safety specialists participated to this study by using snowball sampling method. The mean age of the participants is 35,6 years in range of 21 years and 69 years. Participants consists of 72 A class (21.7%), 149 B class (44.9%) and 111 C class (33.4%) occupational Safety Specialist over 20 years 209 males (63%) and 123 females (37%), at least associate degree graduated. Participants service about 27 workplaces in the mean divided by low dangerous, dangerous, high dangerous. 202 of participant employed by Public Health and Safety Unit (60.8%), 122 participant working subject to an employer in company (33.7%) and 18 participants work as individual consultant (5.4%). The mean tenure of participants as an occupational safety specialists is 3.6 years, as a whole work life is 9.2 years. 284 (85.5%) of participants don't have Occupational Liability Insurance. 126 (38%) participants have additional duty apart from OHS. Social Security Pension of 158 (47,6%) participants are deposited by minimum salary. The specifics of demographic data are shown in Table 2.1.

**Table 2.1:** Specifics of Demographics

	<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Sex</b>	Female	123	37.0
	Male	209	63.0
<b>Education Status</b>	Associate Degree	29	8.7
	Bachelors Degree	129	38.9
	MSc OHS without thesis	107	32.2
	MSc OHS with thesis	24	7.2
	MSc / MA in different area	38	11.4
	Doctorate Degree	5	1.5
<b>Service Type</b>	Public Health and Safety Unit	202	60.8
	Subject to an Employer in a Company	112	33.7
	Individual Counselling	18	5.4
<b>Condition Ensured to be Occupational Specialist</b>	I have taken exam as an engineer / architect.	181	54.5
	I have taken exam as a graduated of Science and Letter Faculty.	56	16.9
	I have taken exam as a graduated of Technical Education Faculty.	33	9.9

I have taken exam as a graduated of Formal OHS Associate Degree Programme.	27	8.1
I have taken exam as a graduated of Distance Education OHS Associate Degree programme.	24	7.2
		3.3
I have taken exam as a graduated of OHS Bachelors.	11	

<b>Speciality Class</b>	A class	72	21.7
	B class	149	44.9
	C class	111	33.4
<b>Danger Class</b>	Low Dangerous	12	3.6
	Dangerous	33	9.9
	High Dangerous	101	30.4
	Low Dangerous / Dangerous	47	14.2
	Low Dangerous / High Dangerous	6	1.8
	Dangerous / High Dangerous	45	13.6
	Low Dangerous / Tehlikeli /High Dangerous	87	26.2
<b>Weekly Average Working</b>	Normal Hours	227	68.4
	Over Work	94	28.3
<b>Total Employee Number in Workplaces</b>	0-50	22	6.6
	51-100	20	6.0
	101-250	68	20.5
	251-500	82	24.7
	501-1000	87	26.2
	1001-5000 +5000	44 9	13.3 2.7
<b>Occupational Liability Insurance</b>	Yes	46	13.9
	No	284	85.5
<b>Additional duty</b>	Yes	126	38.0
	No	205	61.7
<b>Social Security Institution Pension</b>	Deposited over minimum salary	158	47.6
	Deposited over my salary	172	51.8

## 2.2.Data Collection

In order to measure the relationship between challenges of occupational safety specialists, psychological safety, professional self – efficacy belief and proactive work behavior, Demographic Information Form, Challenges of Occupational Safety Specialists scale, Professional Self – Efficacy Belief Scale, Psychological Safety Scale (Edmondson, 1999) and Self - Reported Personal Initiative Scale (Frese, Fay, Hilburger, Leng & Tag, 1997) are used. Ethics board permission of research was obtained from Istanbul Bilgi University. Anonymous survey link sent to occupational safety specialists via e - mail in my contact list and they have been asked to send the survey link to their contact / colleagues / friends to fulfill. Also, survey link also shared after getting permission in google group, in facebook, consulting and private firms. Of 443 responses, 111 responses were disregarded owing to the missing data and remaining 332 responses data was used for this study. Thus, %74 of response rate was reached in a period of 2 weeks. The fulfillment of scales took about 15 - 20 minutes. Although it is not expected occupational safety specialist to feel anxiety while fulfilling scales, they would think that ‘what if my answers are shared to my employer, organizations, auditors or inspector? It leads to lose my work. It would take me to bad situations at work.’ participants were expected to give honest and sufficient information. To ensure this, they were informed in consent form that volunteering is essential in this study. No one be pushed to participate to this study by anyone. Participants would have been withdrawn any stage of this study with no reason and they informed that data have been analyzed collectively. No individual data needed. Participants haven’t been pushed to complete scales until any time and no one tried to take their answers immediately and intentionally. By doing this, conformity was ensured to participants. Also, snowball sampling facilitated this processes that participants was aware about who send them this scales. By knowing this, discomfort of participants, whether this data have been used against them, were tried to be prevented. Confidentiality and anonymity of research provided to all participant in all phase of study in data collection phase by consent form. In online data collection

stage, participants were sent anonymous survey link instead of docx or excel format. So, participants wouldn't have been observed and determined while fulfilling survey. In this way, data couldn't be attributed to any participant. Assurance has been given that data won't be reported anyone and will be used only for dissertation. So, contact details of research team shared under consent form in case of discomfort.

### **2.3.Instruments**

5 measurement instruments (Demographic Information Form, Challenges of Occupational Safety Specialists scale, Professional self – efficacy belief scale, Psychological Safety Scale (Edmondson, 1999) and Self-Reported Personal Initiative Scale (Frese, Fay, Hilburger, Leng & Tag, 1997) have been conducted within this study.

#### **2.3.1.Demographic Information Form**

Demographic variables consist of gender, age, education status, service type, graduation field, specialization class, tenure working as an occupational safety specialists and whole working life, number of workplace, danger classes, weekly average working hours, total employee number. Participants also asked whether they have liability insurance, additional work apart from OHS and how Social Security Institution Pension is deposited. (Appendix : A.2)

#### **2.3.2. Challenges of Occupational Safety Specialists Scale**

Challenges of occupational safety specialists scale was developed in order to measure challenges of occupational safety specialists within this research. 6 items organizational part was divided from 30 items main part due to participants who are working as a consultants may be confused in terms of whether they



consider their consulting organization or organization they service. In organizational challenges part, participants were asked to consider their organization while answering questions instead organization they service. Participants who are working individually were also expected not to rate organizational challenges part because they have no subjected organization. Scale was prepared through reviewing literature and getting views of occupational safety specialists. Thus, the items of challenges of occupational safety specialists scale intended to measure challenges stemming from employers, employees, legislation, law and organizations. Employers and employees related challenges items are mostly based on their approach on OHS in workplaces such as *Employer(s) conceives OHS investmensts as redundant in workplace(s) that I service.and employees don't request employer to take measure when they confront a hazard workplace(s) that I service.* Legislation related challenges items are consist of challenges in practice and content of OHS legislation such as *It is hard to follow OHS legislation updates.* Law related challenges items are related to attribution of 6331 no. OHS Law such as *OHS law is inadequate to prevent accidents because of mostly focusing on technical measures.* Organization related challenges items consist of challenges stemming from organizational context such as *assigned tasks and responsibilities are too much to me as an Occupational Safety Specialist.* 6 factor was obtained in main challenges (challenges of occupational safety) with 28 items which were named as 'insufficient awareness of employees', 'providing lack of resource', 'ignorance of employees', 'unwillingness of employees to participation', 'legislative challenges' and 'law based challenges'. Cronbach's alpha internal consistency coefficient of challenges of occupational safety specialists scale was observed as .954. Total 6 factors explained 70.575% of the variance. Besides, 1 factor was obtained in organizational challenges part with 6 items. Initial eigenvalue results of organizational challenges scale showed that first factor explained 52.9% of the variance. There is scarce of studies and instruments in measuring challenges of occupational safety specialists quantitatively. This scale will contribute to occupational health and safety literature. Opinions of academicians studying in area of Turkish language, psychology, occupational

safety and labour law were taken regarding language, comprehension and legislative suitability of scale. Scale also sent four occupational safety specialists to be controlled in terms of comprehension before implemented. Participants were asked to rate items on 6 point Likert-type (1 - totally disagree and 6 - totally agree) scale. 332 participants responded challenges of occupational safety specialists scale and 314 participants responded to organizational challenges scale (Appendix : A.4). The reliability and validity analysis of challenges of occupational safety specialist scale and organizational challenges were reported in Results section.

### **2.3.3. Psychological Safety Scale**

Psychological safety perception of occupational safety specialists was measured with seven-item scale which has been developed by Edmondson (1999). Scale is generally used by researcher to measure psychological safety climate of team and organization. Following sentences would be given as examples of this scale; “Members of this organization are able to bring up problems and tough issues”, “It is safe to take a risk in this organization”, “No one in this organization would deliberately act in a way that undermines my efforts”. Participants were asked to rate items on 6 point Likert-type (1 - totally disagree and 6 - totally agree) scale. While low rates reveal low level of psychological safety, high rates reveal high level of psychological safety in the organization. Yener (2015) adapted psychological safety scale into Turkish sample by conducting psychometric analysis. Adapted psychological safety scale have two sub - dimension as tolerance which are reversed items of 1, 3 and 5 and initiative which are items of 2, 4, 6 and 7. The Cronbach alpha internal consistency coefficient of adapted Turkish psychological safety scale is observed as .810. Maximum Likelihood extraction method has been adopted to determine factor structure. (Appendix : A.6)

#### **2.3.4. Professional Self – Efficacy Belief Scale**

In order to measure how much occupational safety specialists believe in conducting their work efficiently, professional self – efficacy belief scale was developed. Although professional self – efficacy belief concept is employed in education field and applied to teacher, measuring professional self – efficacy belief of occupational safety specialists is important especially in challenging and psychologically unsafe work context. Thus, duties of occupational safety specialists as guidance, cooperation with related units, risk assessment and workplace surveillance stated in the regulation of duties, authority, responsibilities and education and occupational safety specialists were ask to measure how much they believe in conducting their duties efficiently. Besides, participants are expected to rate three other questions of *I believe I exactly implement duties and responsibilities that my job requires, I believe I do efficient works that support safety and health of employees, I believe I use communication channels efficiently when implementing my duties and responsibilities*. Professional self – efficacy belief scale consist of 7 items. Initial eigenvalue results showed that first factor explained 57.1% of the variance. Professional self – efficacy belief scale has a .869 Cronbach’s alpha value, which represents high level of internal consistency. Opinions of academicians studying in area of Turkish language, psychology, occupational safety and labour law were taken regarding language, comprehension and legislative suitability of scale. Scale also sent four occupational safety specialists to be controlled in terms of comprehension before implemented. Participants were asked to rate items on 6 point Likert-type (1 - totally disagree and 6 - totally agree) scale (Appendix : A.8). The reliability and validity analysis of professional self – efficacy belief scale was reported in Results section.

#### **2.3.5. Self - Reported Personal Initiative Scale**

Proactive work behavior was measured with seven-item elf-reported personal initiative scale which has been developed by Frese et al., (1996). The

Cronbach alpha internal consistency coefficient of self-reported personal initiative scale is observed as .810 in German sample. Followings would be given as example of items; *“I actively attack problems”*, *“I use opportunities quickly in order to attain my goal”* and *“Usually I do more than I am asked to do”*. Initial eigenvalue results showed that first factor explained 56.1% of the variance. Self Reported Personal Initiative scale has a .857 Cronbach’s alpha value, which represents high level of internal consistency.

Self - Reported Personal Initiative Scale was adapted to Turkish sample within this research. 3 Turkish - English bilingual experts who are working in Sakarya University as academicians were asked to review adapted items. After getting approval of experts, scale was sent five occupational safety specialists to evaluate the comprehension of items. Then, permission to adaptation of self-reported personal initiative scale was taken from Prof. Dr. Michael Frese. 332 occupational safety specialists responded items. Participants were asked to rate items on 6 point Likert-type (1 - totally disagree and 6 - totally agree) scale (Appendix : A.10). The reliability and validity analysis of self – reported personal initiative scale was reported in Results section.

### CHAPTER 3 - RESULTS

This study was designed as an exploratory research to investigate relationships between variables. Only significant results were reported. This section presents the results of analysis that applied to obtained data according to the object of this study. As well as the object of this study was to investigate relationship between challenges of occupational safety specialists, psychological safety, professional self – efficacy belief, and proactive work behavior, self-reported personal initiative which is a one of the proactive work behavior was examined in the context of individual level professional self – efficacy belief, organizational level challenges and organizational level psychological safety perception. 332 occupational safety specialists working different work organizations and sectors participated in this cross - sectional research. Exploratory Factor Analysis (EFA) was conducted to measure the construct validity and to refine the dimensionality of challenges of occupational safety specialists scale, organizational challenges scale, professional self – efficacy belief scale and self-reported personal initiative scale. Also, Confirmatory Factor Analysis (CFA) was conducted through SPSS AMOS 22 in order to verify factor construct of challenges of occupational safety specialists scale which appeared to have six dimension. Although challenges of occupational safety specialists scale assumed as combined with organizational challenges of occupational safety specialists, the result of Confirmatory Factor Analysis(CFA) showed that organizational challenges scale need to be separately assessed. Cronbach's Alpha value of challenges of occupational safety specialists scale, organizational challenges scale, professional self – efficacy belief scale was calculated so as to measure internal consistency of scales. Correlational analysis was applied to all variables to see relations of research variables. Besides, moderator role of professional self – efficacy belief between the relationship of challenges dimensions (independent variables; IV) and self-reported personal initiative (dependent variable; DV), and moderator role of psychological safety between the relationship of challenges dimensions (independent variable; IV) and self-reported personal initiative (dependent variable; DV) were tested.

Descriptive findings of demographics, sub dimension of challenges of occupational safety specialists scale, psychological safety scale, professional self – efficacy belief scale, and self-reported personal initiative scale are shown in Table 3.1.

**Table 3.1:** The Results of Descriptive Analysis

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<b>Demographics (Except Categorical Demographics)</b>					
Age	332	21	69	35.68	9.42
Tenure as an Occupational Safety Specialist (Month)	332	2	180	43.52	32.46
Total Tenure ( Month)	318	2	1188	111.35	121.98
Number of Workplace	330	1	185	26.85	110.87
<b>Self-Reported Personal Initiative Scale</b>					
Self-Reported Personal Initiative	332	1	6	4.98	.74
<b>Professional self – efficacy Belief Scale</b>					
Professional self – efficacy Belief	332	1	6	4.71	.90
<b>Psychological Safety Scale</b>					
Psychological Safety	314	1	6	3.42	.58
<b>Challenges of Occupational Safety Specialists Scale</b>					
Challenges of Occupational Safety Specialists	332	1	6	3.83	1.01

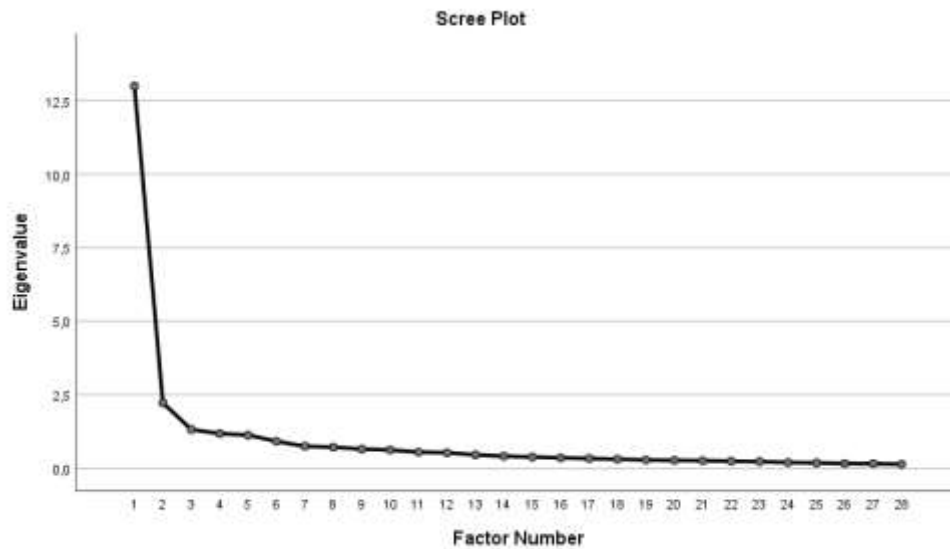
Insufficient awareness of employer	332	1	6	4.01	1.19
Unwillingness of Employees to Participation	332	1	6	3.56	1.39
Ignorance of Employees	332	1	6	3.73	1.28
Providing Lack of Resources	332	1	6	3.13	1.28
Legislative Challenges	332	1	6	3.35	1.29
Law Based Challenges	332	1	6	4.71	1.12
<b>Organizational Challenges Scale</b>					
Organizational Challenges	314	1	6	4.83	1.02

### **3.1. Reliability and Validity Analysis of Challenges of Occupational Safety Specialists Scale**

#### **3.1.1. Factor Construct of Challenges of Occupational Safety Specialists Scale**

Challenges of occupational safety specialists scale was developed within this research. Scale was implemented to 332 occupational safety specialists. Factorability of 30 items of challenges of occupational safety specialists was examined. The Barlett Sphericity value of challenges of occupational safety specialists scale is significant ( $p=.00 < .05$ ) and KMO value is .948 which is very high. Direct oblimin rotation method was used for factor analysis of challenges of occupational safety specialists scale. The result of the rotation could be seen in the Table 3.2. Factor scree plot of challenges of occupational safety specialists scale could be seen in Figure 3.1.

**Figure 3.1:** Factor Scree Plot of Challenges of Occupational Safety Specialists Scale



5 eigenvalue of factor recorded as above 1. Researchers has confronted that one dimension which contains items of 25,26,27,28,29 and 30 has 2 two dimension ( items of 25,26,27 and 28,29,30) according to results of maximum likelihood factor analysis of dimensions. Therefore, fixed number of factor selected as 6. As a result of this, items of 27,28 and 29 constituted a new factor. Even initial eigenvalue of sixth factor is 9.18, this factor has involved to the variance. This result was supported by results of structural equation modelling and this allocation complies with theoretical base of this research. Maximum Likelihood factor analysis was conducted with direct oblimin rotation. Results of factor analysis of each dimensions are also shown in the Table 3.3. Initial eigenvalue results showed that first factor explained 46.3%, second factor explained 7.94%, third factor explained 4.708%, fourth factor explained 4.23% and fifth factor explained 4.033%, sixth factor explained 3.28% of the variance. All factor loadings met the minimum criterians expect 2 items that factor loadings of them under .30 so 2 items were eliminated. Total 6 factors explained 70.575% of the variance. Items and dimension names of challenges of occupational safety specialists scale with factor loadings was also shown in the Table 3.4.



**Table 3.2:** The Results of Direct Oblimin Factor Rotation of Challenges of Occupational Safety Specialists Scale

Items	Factor						% of Variance	Cumulative %
	1	2	3	4	5	6		
Challenges24	1.06						46.383	46.383
Challenges23	.62						7.949	54.332
Challenges25	.56						4.708	59.039
Challenges10		.88					4.223	63.262
Challenges4		.71					4.033	67.295
Challenges15		.70					3.28	70.575
Challenges9		.70						
Challenges12		.69						
Challenges5		.67						
Challenges8		.56						
Challenges14		.48						
Challenges13		.48						
Challenges6		.45						
Challenges22		.39						
Challenges11		.35						
Challenges7		.33						
Challenges17			.93					
Challenges16			.76					
Challenges19			.48					
Challenges27				.84				
Challenges28				.76				
Challenges26				.41				
Challenges21					.88			
Challenges20					.77			
Challenges18					.38			
Challenges2						.82		

Challenges1	.71
Challenges3	.38

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Maximum likelihood factor analysis with direct oblimin rotation was also conducted to all dimensions of challenges of occupational safety specialists scale. As a results of this, factor 1 contained 3 items and explained 70.73% of the variance, factor 2 contained 12 items and explained 59.63% of the variance, factor 3 contained 3 items and explained 80.743% of the variance, factor 4 contained 3 items and explained 67.11% of the variance, factor 5 contained 3 items and explained 79.04% of the variance and factor 6 contained 3 items and explained 75.27% of the variance.

**Table 3.3.:** Maximum Likelihood Factor Analysis of Dimensions of Challenges of Occupational Safety Specialists Scale

<b>Items</b>	<b>Factor 6</b>	<b>% of</b>	<b>Items</b>	<b>Factor 2</b>	<b>% of Variance</b>	<b>Items</b>	<b>Factor 3</b>	<b>% of</b>
	<b>Loadings</b>	<b>Variance</b>		<b>Loadings</b>			<b>Loadings</b>	<b>Variance</b>
Challenges1	.850	75.272	Challenges4	.787	59.784	Challenges16	.875	80.743
Challenges2	.835		Challenges5	.684		Challenges17	.920	
Challenges3	.697		Challenges6	.499		Challenges19	.738	
			Challenges7	.482				
			Challenges8	.728				
			Challenges9	.733				
			Challenges10	.812				
			Challenges11	.703				
			Challenges12	.879				
			Challenges13	.856				
			Challenges14	.830				
			Challenges15	.867				
			Challenges22	.791				

<b>Items</b>	<b>Factor 5</b>	<b>% of</b>	<b>Items</b>	<b>Factor 1</b>	<b>% of Variance</b>	<b>Items</b>	<b>Factor 4</b>	<b>% of</b>
	<b>Loadings</b>	<b>Variance</b>		<b>Loadings</b>			<b>Loadings</b>	<b>Variance</b>
Challenges18	.942	79.041	Challenges24	.973	70,737	Challenges27	.844	67.116
Challenges20	.820		Challenges23	.650		Challenges28	.777	
Challenges21	.727		Challenges25	.643		Challenges26	.525	

Factor 1, which is legislative challenges, covers the complexity and hardship in following of legislation to implement duties that comes from legislation. Factor 2, which is insufficient awareness of employer, is related to inhibiting and improper approach of employers to occupational health and safety implementations. Factor 3, which is unwillingness of employees to participation, involves the unwillingness of employees to OHS related activities. Factor 4, which is law based challenges, includes the challenges caused by 6331 no. OHS Law that specifies the responsibilities, obligations and authority of parties and have broader attributions and references on occupational health and safety implementations than legislation. Factor 5, which is ignorance of employees, covers the improper approach of employees to OHS related rules, instructions and hazards at workplaces. Factor 6, providing lack of resources, involves the approach of employers on providing lack of resources to employees regarding to their works (equipments, devices and tools) and OHS related personal protective equipments.

**Table 3.4.:** Items and Dimension Names of Challenges of occupational safety specialists scale with Factor Loadings

<b>Factor 1: Legislative Challenges</b>	<b>Factor Loadings</b>
23. It is hard to follow OHS legislation uptades.	.62
24. OHS legislation is hard to comprehend.	1.06
25. OHS legislation is hard to be totally implemented because of exhaustiveness.	.56
<b>Factor 2: Insufficient Awareness of Employer</b>	<b>Factor Loadings</b>
4. Employer(s) tends to only comply with legal responsibilities rather than serving quality OHS trainings.	.71

5. I am being felt by my employer(s) that not to behave in reverse manner to him/her because of paying my salary.	.67
6. Time and place of OHS trainings are planned according to desire of employer(s) in workplace(s) that I service.	.45
7. Employer(s) doesn't allow me to write down his/her unwilling suggestions and precautions to approved notebook in workplace(s) that I service.	.33
8. Employer(s) doesn't aware of their OHS responsibilities in workplace(s) that I service.	.56
9. Employer(s) consider expenditure of Personal Protective Equipments prior to their preservation and ergonomic while suppling in workplace(s) that I service.	.70
10. Forms, instructions, procedure and plans that I am preparing in scope of OHS are only used to meet to comply with legal responsibilities by employer(s) in workplace(s) that I service.	.88
11. Employer(s) ignores suitability of staff in terms of health and safety while assigninga task to them in workplace(s) that I service.	.35
12. Employer(s) conceives OHS investmensts as redundant in workplace(s) that I service.	.69
13. Employer(s) doesn't take effective measures according to risk assesment in workplace(s) that I service.	.48
14. Employer(s) doesn't follow if OHS precautions are complied or not in workplace(s) that I service.	.48
15. Employer(s) evaluates OHS trainings as waste of time in workplaces that I service.	.70
22. OHS related precautions are remained limited in audit periods in workplace(s) that I service.	.39

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<b>Factor 3: Unwillingness of Employees to Participation</b>	<b>Factor Loadings</b>
16. Employees don't participate OHS trainings fully in workplace(s) that I service.	.76
17. Employees don't participate Emergency Case Practices fully in workplace(s) that I service.	.93
19. Employees evaluate OHS training as waste of time in workplace(s) that I service.	.48
<b>Factor 4: Law Based Challenges</b>	<b>Factor Loadings</b>
26. OHS law mostly attributed the implementation of legislation to Occupational Safety Specialist.	.76
27. OHS law is inadequate to ensure psychological well-being of employees in workplaces.	.84
28. OHS law is inadequate to prevent accidents because of mostly focusing on technical measures.	.41
<b>Factor 5: Ignorance of Employees</b>	<b>Factor Loadings</b>
18. Employess don't comply with rules and instructions in workplace(s) that I service.	.88
20. Employees don't request employer to take measure when they confront a hazard workplace(s) that I service.	.77
21. Employees ignore hazardous states and cases when they confront in workplace(s) that I service.	.38
<b>Factor 6: Providing Lack of Resources</b>	<b>Factor Loadings</b>
1. Necessary equipments, devices and tools aren't provided to staff by employer when employ staff in worpklace(s) that I service.	.71
2. Proper Personal Protecting Equiepmnts aren't provided to staff by employer when employ staff in workplace(s) that I service.	.82

3. My OHS field observation and audit reports aren't taken into consideration by employer(s) in workplace(s) that I service. .38

Correlations between dimensions of challenges of occupational safety specialists scale are shown in the Table 3.5. As a results of Spearman correlation coefficient, there is positive and significant (  $p < 0.01$ ) correlations between all dimensions of challenges of occupational safety specialists scale

**Table 3.5 :** Correlations Between the Dimensions of Challenges of Occupational Safety Specialists Scale

	Insufficient awareness of employer	Unwillingness of Employee to Participation	Ignorance of Employees	Providing Lack of Resources	Legislative Challenges	Law Based Challenges
Insufficient awareness of employer						
Unwillingness of Employees to Participation	.713**					
Ignorance of Employees	.776**	.724**				
Providing Lack of Resources	.728**	.588**	.662**			
Legislative Challenges	.336**	.304**	.323**	.292**		
Law Based Challenges	.423**	.300**	.395**	.326**	.399**	
Mean	4.01	3.56	3.73	3.13	3.35	4.71
Standart Deviation	1.19	1.39	1.28	1.28	1.29	1.12

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).



### 3.1.1.1. Confirmatory Factor Analysis Results of Challenges of Occupational Safety Specialists Scale

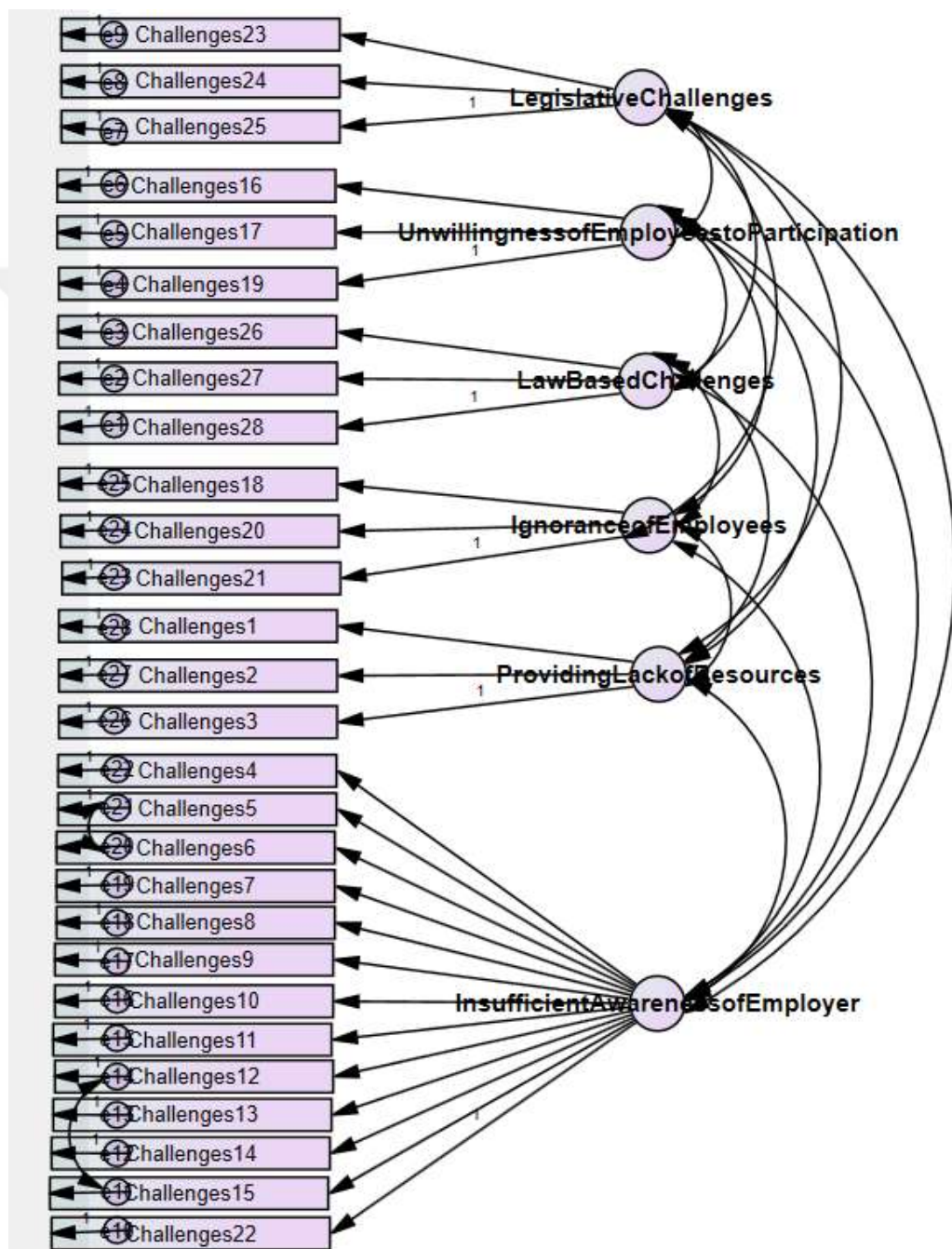
In order to test validity of 6 factor of challenges of occupational safety specialists scale, confirmatory factor analysis was employed. Factors on 6 factor vary in range of loadings of .33 and 1.06. Participants were asked to rate items on 6 point Likert-type (1 - totally disagree and 6 - totally agree) scale. Chi square and model fit indexes are utilized in confirmatory factor analysis. To test model fit of scale, either a few of model fit indices or whole of model fit indexes could be used (Schumacker, 2006). There is no consensus in the literature on what model fit indices have to be used (İlhan ve Çetin, 2014). Reported indexes varies according to consideration of researcher (Gerbing & Anderson, 1992). Confirmatory factor analysis of challenges of occupational safety scale was displayed in Table 3.7. Model of 6 factor confirmatory factor analysis of challenges of occupational safety specialists scale was showed in Figure 3.2.

Confirmatory factor analysis showed that model fit of challenges of occupational safety specialists scale was in acceptable range. ( $\chi^2 = 934,707$  dF=333,  $\chi^2 / dF = 2.8$ ,  $p < .001$ , CFI = .904, RMSEA = .074, IFI: .904, PNFI: .756, PGFI: .674).

**Table 3.6:** Results of Confirmatory Factor Analysis

Model Fit Indices	Acceptable Range	Obtained Values
$\chi^2 / dF$	$2 \leq \chi^2 / dF \leq 3$	2.8
IFI (Incremental Fit Index)	$.90 \leq IFI \leq .95$	.904
CFI (Comparative Fit Index)	$.90 \leq CFI \leq .95$	.904
RMSEA (Root Mean Square Error of Approximation)	$.05 \leq RMSEA \leq .08$	.074
PNFI ( Parsimony Normed Fit Index)	$.50 \leq PNFI \leq .95$	.756
PGFI(Parsimony Goodness of Fit Index)	$.50 \leq PGFI \leq .95$	.674

**Figure 3.2:** Model of Confirmatory Factor Analysis of Challenges of occupational safety specialists scale




### **3.1.2. Reliability Analysis of Challenges of Occupational Safety Specialists**

Reliability analysis of challenges of occupational safety specialists scale and dimensions are tested by internal consistency analysis with calculation of Cronbach's Alpha values. Cronbach's alpha internal consistency coefficient of challenges of occupational safety specialists scale was observed as .954. However, Cronbach's Alpha coefficients of dimensions of challenges of occupational safety specialists scale was calculated. Internal consistency coefficients observed as for legislative challenges .789, for insufficient awareness of employer .941, for unwillingness of employees to participation .881, for law based challenges .747, for ignorance of employees .866 and for providing lack of resources. Reliability analysis of challenges of occupational safety specialists scale are shown in the Table 3.6.

**Table 3.7:** Reliability Analysis of Challenges of Occupational Safety Specialists

	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Internal Consistency Coefficient
<b>Legislative Challenges</b>					
Challenges24	3.217	1.477	.747	.589	
Challenges23	3.247	1.560	.579	.769	
Challenges25	3.584	1.563	.574	.774	
<b>Total</b>					.789
<b>Insufficient awareness of employer</b>					
Challenges10	4.380	1.507	.797	.934	
Challenges4	4.325	1.592	.778	.935	
Challenges15	4.000	1.499	.822	.934	
Challenges9	4.470	1.514	.710	.937	
Challenges12	4.075	1.560	.832	.933	
Challenges5	4.123	1.643	.699	.937	
Challenges8	3.699	1.645	.702	.937	
Challenges14	3.873	1.538	.788	.934	
Challenges13	3.792	1.506	.816	.934	



Challenges6	4.401	1.541	.511	.943
Challenges22	3.928	1.559	.630	.935
Challenges11	3.675	1.516	.673	.938
Challenges7	3.352	1.602	.495	.944
<b>Total</b>				.941

#### **Unwillingness of Employees to Participation**

Challenges17	3.358	1.555	.819	.784
Challenges16	3.425	1.560	.793	.809
Challenges19	3.883	1.514	.697	.892
<b>Total</b>				.881

#### **Law Based Challenges**

Challenges27	4.883	1.263	.653	.580
Challenges28	4.392	1.405	.616	.611
Challenges26	4.867	1.440	.467	.753
<b>Total</b>				.747

#### **Ignorance of Employees**

Challenges21	3.798	1.485	.819	.741
Challenges20	3.548	1.549	.751	.810



Challenges18	3.651	1.321	.679	.871	
<b>Total</b>					.866
<b>Providing Lack of Resources</b>					
Challenges2	3.120	1.432	.733	.735	
Challenges1	2.940	1.528	.723	.744	
Challenges3	3.328	1.480	.635	.829	
<b>Total</b>					.835
<b>Internal Consistency Coefficient of the Challenges of Occupational Safety Specialists Scale</b>					.954

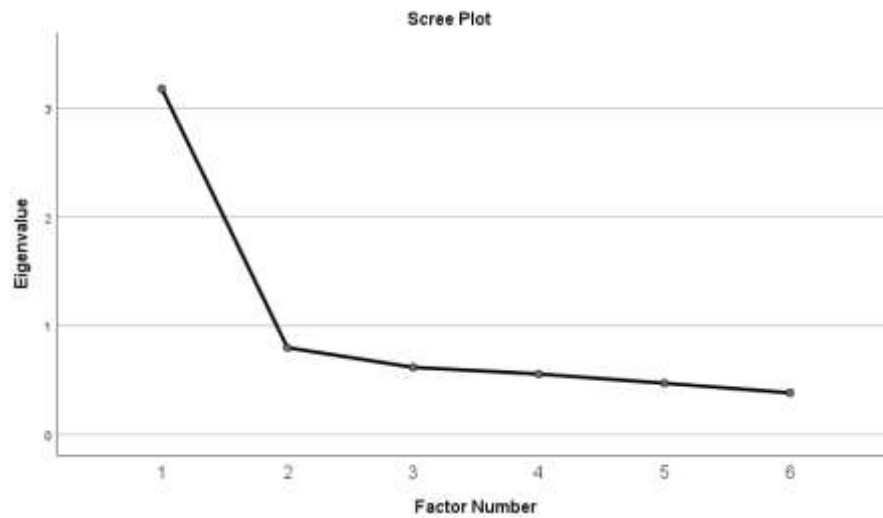
### **3.2. Reliability and Validity Analysis of Organizational Challenges Scale**

#### **3.2.1. Factor Construct of Organizational Challenges Scale**

Organizational Challenges was initially thought as integrated to challenges of occupational safety specialists but as a result of structural equation modelling, organizational part was divided from challenges of occupational safety specialists. Organizational challenges part was conducted with notification for participants that they are expected to consider their organization instead of organization they service because participants who are working as consultants may be confused in terms of whether they consider their consulting organization or organization they service.

Organizational challenges scale was developed within this study. Scale was implemented to 314 occupational safety specialists. Factorability of 6 items of organizational challenges scale was examined. The Bartlett Sphericity value of organizational challenges scale is significant ( $p=0,00 < 0,05$ ) and KMO value is .846 which is very high. Direct oblimin rotation method was used for factor analysis of organizational challenges scale. The result of the rotation could be seen in the Table 3.8. The screeplot in Figure 3.3. displayed a refraction in the slope among the first and second factor.

**Figure 3.3:** Factor Scree Plot of Organizational Challenges Scale



Only one eigenvalue of factor recorded as above 1 in the Total Explain Table. Initial eigenvalue results showed that first factor explained 52.9% of the variance. All factor loadings met the minimum criterians except 2 items that reduces internal consistency so 2 items were eliminated although scale was prepared as 8 items. These indications supported that the items were loaded to one factor.



**Table 3.8:** The results of Direct Oblimin Factor Rotation of Organizational Challenges Scale

Items	Factor Loadings	% of Variance	Cumulative %
3.I am not appreciated after achieved succesfull work.	.716	52.967	52.967
4.My authority is limited as an occupational safety specialist.	.712		
5.Assigned tasks and responsibilities are too much to me as an occupational safety specialist.	.706		
1.Carrier opportunity is limited in my poosition.	.680		
2.My salary is inadequate against risks that I am exposed to.	.633		
6.I will be one of the primary charged people in case of occupational accident.	.503		

### 3.2.2. Reliability Analysis of Organizational Challenges

Cronbach's Alpha value of organizational challenges scales was calculated so as to measure internal consistency of scale. Organizational challenges scale has a .818 Cronbach's alpha value, which represents high level of internal consistency. The Cronbach alpha values and correlations could be seen in the Table 3.9.

**Table 3.9:** Internal Consistency Analysis of Organizational Challenges Scale

Items	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Carrier opportunity is limited in my position.	4.4531	1.586	.594	.787
My salary is inadequate against risks that I am exposed to.	5.3563	1.218	.567	.794
I am not appreciated after achieved succesfull work.	4.1938	1.571	.646	.775
My authority is limited as an Occupational Safety Specialist	4.7563	1.511	.632	.778
Assigned tasks and responsibilities are too much to me as an Occupational Safety Specialist	5.1063	1.196	.629	.783
I will be one of the primary charged people in case of occupational accident.	5.1594	1.340	.451	.815

### 3.3. Reliability and Validity Analysis of Professional Self – Efficacy Belief Scale

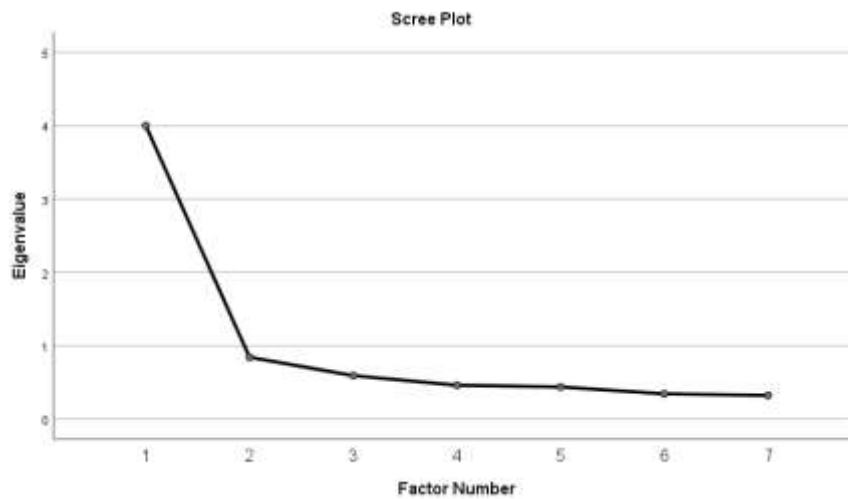
#### 3.3.1. Factor Construct and Reliability of Professional Self – Efficacy Belief Scale

In order to measure how much occupational safety specialists believe in conducting their work efficiently, professional self – efficacy belief scale was developed.

Professional self – efficacy belief scale was implemented to 332 occupational safety specialits. Factorability of 7 items of professional self – efficacy

belief scale was examined. The Barlet Sphericity value of professional self – efficacy belief scale is significant ( $p=0,00 < 0,05$ ) and KMO value is .886 which is very high. Direct oblimin rotation method was used for factor analysis of Professional self – efficacy belief scale. The result of the rotation could be seen in the Table 3.10. The screeplot in Figure 3.4. displayed a refraction in the slope among the first and second factor.

**Figure 3.4. :** Factor Scree Plot of Professional self – efficacy Belief Scale



Only one eigenvalue of factor recorded as above 1 in the Total Explain table. Initial eigenvalue results showed that first factor explained 57.1% of the variance. All factor loadings met the minimum criterians so no items were eliminated. These indications are support that the items are loaded to one factor.

**Table 3.10:** The Results of Direct Oblimin Factor Rotation of Professional self – efficacy Belief Scale

Items	Factor Loadings	% of Variance	Cumulative %
4.I believe I conduct efficient guidance events.	.79	57.16	57.16
2.I believe I do efficient works that support safety and health of employees	.78		
3.I believe I use communication channels efficiently when implementing my duties and responsibilities.	.76		
1.I believe I exactly implement duties and responsibilities that my job requires.	.73		
6.I believe I work in cooperation with related person and units.	.72		
5.I believe I efficiently participate in risk assessment works.	.58		
7.I believe I contribute workplace surveillance ( periodical maintance, control, measurements, etc. be conducted efficiently	.57		

### 3.3.2. Reliability Analysis of Professional Self – Efficacy Belief Scale

Cronbach’s Alpha value of professional self – efficacy belief scale was calculated so as to measure internal consistency of scale. Professional self – efficacy belief scale has a .869 Cronbach’s alpha value, which represents high level of internal consistency. The Cronbach alpha values and correlations could be seen in the Table 3.11.

**Table 3.11.** : Internal Consistency Analysis of Professional self – efficacy Belief Scale

Items	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I believe I exactly implement duties and responsibilities that my job requires	4.6928	1.19245	.653	.849
I believe I do efficient works that support safety and health of employees	4.5753	1.14917	.697	.843
I believe I conduct efficient guidance events.	4.8735	1.02342	.672	.848
I believe I efficiently participate in risk assessment works.	4.6988	1.11279	.725	.840
I believe I efficiently participate in risk assessment works.	4.7259	1.42067	.556	.866
I believe I work in cooperation with related person and units.	4.5723	1.26928	.699	.842
I believe I contribute workplace surveillance ( periodical maintance, control, measurements, etc.) to be conducted efficiently	4.8283	1.21324	.548	.863

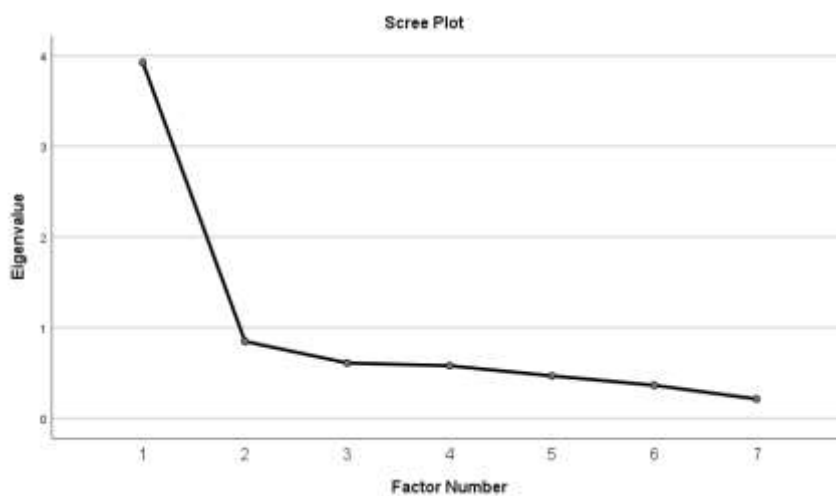
### 3.4. Reliability and Validity Analysis of Self-Reported Personal Initiative Scale

#### 3.4.1. Factor Construct of Self-Reported Personal Initiative Scale

Proactive work behavior was measured with seven-item self-reported personal initiative scale which has been developed by Frese et al., (1996). The Cronbach alpha internal consistency coefficient of self-reported personal initiative scale is observed as .810 in German sample. Self - reported personal initiative scale was adapted to Turkish sample within this research.

Self-reported personal initiative scale was implemented to 332 occupational safety specialists. Factorability of 7 items of self-reported personal initiative scale was examined. The Barlett Sphericity value of self-reported personal initiative scale is significant ( $p = .00 < .05$ ) and KMO value is .871 which is very high. Direct oblimin rotation method was used for factor analysis of self-reported personal initiative scale. The result of the rotation could be seen in the Table 3.12. The screeplot in Figure 3.5. displayed a refraction in the slope among the first and second factor.

**Figure 3.5:** Factor Scree Plot of Self-reported Personal Initiative



Only one eigenvalue of factor recorded as above 1 in the Total Explain table. Initial eigenvalue results showed that first factor explained 56.1% of the variance. All factor loadings met the minimum criterians so no items were eliminated. These indications are support that the items are loaded to one factor.

**Table 3.12:** The results of Direct Oblimin Factor Rotation of Self-reported personal initiative Scale

Items	Factor Loadings	% of Variance	Cumulative %
2. Whenever something goes wrong, I search for a solution immediately.	.871	56.100	56.100
3. Whenever there is a chance to get actively involved, I take it	.819		
1. I actively attack problems.	.802		
5. I use opportunities quickly in order to attain my goal.	.629		
7. I am particularly good at realizing ideas.	.615		
6. Usually I do more than I am asked to do	.603		
4. I take initiative immediately even when other don't	.471		

### 3.4.2. Reliability Analysis of Self-Reported Personal Initiative Scale

Cronbach's Alpha value of self-reported personal initiative scale was calculated so as to measure internal consistency of scale. Self Reported Personal Initiative scale has a .857 Cronbach's alpha value, which represents high level of internal consistency. The Cronbach alpha values and correlations could be seen in the Table 3.13. Even Cronbach's alpha value increased to .865 when item of Self-ReportedPersonalInitiative4 deleted, corrected item – total correlation of SelfReportedPersonalInitiative4 is .485 and total Cronbach Alpha value still above .70.

**Table 3.13:** Internal Consistency Analysis of Self-reported Personal Initiative Scale

Items	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1.I actively attack problems.	5.096	.921	.678	.830
2.Whenever something goes wrong, I search for a solution immidiately.	5.310	.874	.733	.824
3.Whenever there is a chance to get actively involved, I take it.	5.262	.907	.730	.823
4.I take initiative immidiately even when other don't	4.530	1.261	.485	.865
5.I use opportunities quickly in order to attain my goal.	4.877	.998	.593	.841
6.Usually I do more than I am asked to do	5.027	1.041	.626	.836
7.I am particularly good at realizing ideas.	4.765	.983	.598	.840

### 3.5. Correlation Analysis of Variables

This study was designed as an exploratory research to investigate relationships between variables. Only significant results were reported. Researchers have initially applied correlation analysis on to all variables in order to see association between them. Even it is not involved in the hypothesis of this study, correlation analysis were employed to evaluate mediator role of challenges and psychological safety between association of self-reported personal initiative and professional self – efficacy belief. Spearman correlation coefficient were computed to investigate the degree of linear relations between variables of demographics, challenges of occupational safety specialists and its



dimensions, professional self – efficacy belief, psychological safety and self-reported personal initiative. The results of correlation analysis are shown in the Table 3.14.

Challenges of occupational specialists was negatively correlated with tenure as an occupational safety specialist ( $r = -.145, p < .01$ ) and tenure as a whole working life ( $r = -.123, p < .05$ ). This result points out that occupational safety specialists experienced in working life and in occupational safety area more likely have less challenge. There was positive and significant correlation between challenges of occupational safety specialists and danger class ( $r = .149, p < .01$ ). This result indicates that occupational safety specialists, working upper level of danger class, ( low dangerous - dangerous - high dangerous) more likely to have more challenges comparing to lower level of danger class. Besides, challenges of occupational safety specialists was positively correlated with number of workplace ( $r = .284, p < .01$ ), points out as expected that occupational safety specialists who service more workplaces likely to have more challenges. There was positive and significant correlation between challenges of occupational safety specialists and weekly average work time ( $r = .203, p < .01$ ). This result show that occupational safety specialists who work over weekly legal hour (45 hours) experience more challenges. There was negative and significant correlation between challenges of occupational safety specialists and professional self – efficacy belief ( $r = -.302, p < .01$ ). This finding showed that H1.2 was supported. Occupational safety specialists who experience less challenges are more likely to have higher level of professional self – efficacy belief. Challenges is also positively correlated with service type ( $r = -.352, p < .01$ ). There were no results on the relationship between challenges, psychological safety and self – reported personal initiative thus, H1.1 and H1.3 was not supported.

Insufficient awareness of employer which is a dimension of challenges of occupational safety specialists scale was negatively correlated with speciality class ( $r = -.109, p < .05$ ), indicates that C class occupational safety specialists experience more Insufficient awareness of employer in comparing with B class and A class. In the same basis, B class occupational safety specialists experience more Insufficient awareness of employer in comparing with A class. There was negative and significant correlation between Insufficient awareness of employer and tenure as an occupational safety specialist ( $r = -.127, p < .05$ ). This result points out that occupational safety specialists who are experienced in occupational safety are likely to have less Insufficient awareness of employer. It is interesting that insufficient awareness of employer was not correlated with tenure as a whole life. Insufficient awareness of employer also positively correlated with danger class ( $r = .167, p < .01$ ), points out that occupational safety specialists, working upper level of danger class, (low dangerous - dangerous - high dangerous) more likely to have more Insufficient awareness of employer comparing to lower level of danger class. There was positive and significant correlation between Insufficient awareness of employer and number of workplace ( $r = .319, p < .01$ ). So, this result points out as expected that occupational safety specialists who service more workplaces likely to have more Insufficient awareness of employer. There was positive and significant correlation between Insufficient awareness of employer and weekly average work time ( $r = .212, p < .01$ ). This result suggest that occupational safety specialists who work over weekly legal hour (45 hours) experience more challenges. Insufficient awareness of employer negatively correlated with professional self – efficacy belief ( $r = -.305, p < .01$ ), revealing that occupational safety specialists who experience less insufficient awareness of employer more likely to have higher level of professional self – efficacy belief. There was no findings on correlation of insufficient awareness of employer and self-reported personal initiative. Insufficient awareness of employer was also negatively correlated with service type ( $r = -.368, p < .01$ )

Unwillingness of employees to participation which is dimension of challenges of occupational safety specialists scale was positively correlated with number of workplace ( $r = .173$ ,  $p < .01$ ), indicating that occupational safety specialists who service more workplaces likely to have more challenges of unwillingness of employees to participation. There was positive and significant correlation between unwillingness of employees to participation and weekly average work time ( $r = .166$ ,  $p < .01$ ). This result show that occupational safety specialists who work over weekly legal hour (45 hours) experience more challenges of unwillingness of employees of participation. Unwillingness of employees to participation was negatively correlated with professional self – efficacy belief ( $r = -.283$ ,  $p < .01$ ), suggesting that occupational safety specialists who experience less challenges of unwillingness of employees to participation more likely to have higher level of professional self – efficacy belief. Unwillingness of employees to participation is also negatively correlated with service type ( $r = -.278$ ,  $p < .01$ ).

Providing lack of resources which is a sub dimension of challenges of occupational safety specialists scale was negatively correlated with service type ( $r = -.353$ ,  $p < .01$ ). Providing lack of resources negatively correlated with self-reported personal initiative ( $r = -.112$ ,  $p < .01$ ), indicates that occupational safety specialists show more self-reported personal initiative when they experience less providing lack of resources challenge. Providing lack of resources is also negatively correlated with total tenure ( $r = -.115$ ,  $p < .05$ ), suggesting that occupational safety specialists the more experienced in working life more likely to have less challenges of ignorance of employees. Providing lack of resources was positively correlated with danger class ( $r = .152$ ,  $p < .01$ ). This results pointed out that occupational safety specialists, working upper level of danger class, ( low dangerous - dangerous - high dangerous) more likely to have more providing lack of resources comparing to lower level of danger class. There was positive correlation between providing lack of resources and number of workplace ( $r = .319$ ,  $p < .05$ ), indicating that occupational safety specialists who service the more workplaces likely to have

more challenges of providing lack of resources. Providing lack of resources was positively correlated with weekly average work time ( $r=.147$ ,  $p<.01$ ), showing that occupational safety specialists who work over weekly legal hour (45 hours) experience more challenges of providing lack of resources. Providing lack of resources was positively correlated with total employee number ( $r= .115$ ,  $p<.05$ ), indicating that occupational safety specialists who service the more employee number likely to have more challenges of providing lack of resources. There was negative correlation between providing lack of resources and social security institution pension ( $r=-.337$ ,  $p<.01$ ). Providing lack of resources was negatively correlated with self-reported personal initiative ( $r=-.112$ ,  $p<.05$ ) and professional self – efficacy belief ( $r=-.280$ ,  $p<.05$ ). This result points out that occupational safety specialists who experience less challenges of providing lack of resources more likely to have higher level of professional self – efficacy belief and self-reported personal initiative.

There was negative and significant correlation between ignorance of employees and speciality class ( $r= -.132$ ,  $p < .05$  ), indicates that C class occupational safety specialists experience more challenges of ignorance of employees in comparing with B class and A class. In the same basis, B class occupational safety specialists experience more challenges of ignorance of employees in comparing with A class. Ignorance of employees was negatively correlated with tenure as an occupational safety specialists ( $r= -.118$ ,  $p < .05$  ) and total tenure ( $r= -.118$ ,  $p<.05$  ). This result points out that occupational safety specialists the more experienced in working life and in occupational safety area more likely to have less challenges of ignorance of employees. There was positive and significant correlation between ignorance of employees and danger class ( $r= .152$ ,  $p < .01$  ). This points out that occupational safety specialists, working upper level of danger class, ( low dangerous - dangerous - high dangerous) more likely to have more ignorance of employees comparing to lower level of danger class. There was positive and significant correlation between ignorance of employees and number of workplace ( $r= .270$ ,  $p < .01$ ).

This result suggests that occupational safety specialists who service more workplaces likely to have more challenges of ignorance of employees. There was positive and significant correlation between ignorance of employees and weekly average work time ( $r = .191, p < .01$ ), showing that occupational safety specialists who work over weekly legal hour (45 hours) experience more challenges of ignorance of employees. Ignorance of employees was negatively correlated with professional self – efficacy belief ( $r = -.217, p < .01$ ), suggesting that occupational safety specialists who experience less challenges of ignorance employees more likely to have higher level of professional self – efficacy belief. Ignorance of employees was also negatively correlated with service type ( $r = -.303, p < .01$ ).

There was negative and significant correlation between law based challenges, which is dimension of challenges of occupational safety specialists scale, and speciality class ( $r = -.129, p < .05$ ). This result indicated that C class occupational safety specialists experience more law based challenges in comparing with B class and A class. In the same basis, B class occupational safety specialists experience more law based challenges in comparing with A class. Law based challenges were positively correlated with self-reported personal initiative ( $r = .147, p < .01$ ), provided that occupational safety specialists show more self-reported personal initiative when they experience more law based challenges.

Legislative challenges was negatively correlated with age ( $r = -.199, p < .01$ ), showing that legislative challenges of occupational safety specialists are reduced when age was increased. There was negative correlation between legislative challenges, which is dimension of challenges of occupational safety specialists scale, and education status ( $r = -.127, p < .05$ ). This result shows that higher educated occupational safety specialists experiences less legislative challenges. There was negative correlation between legislative challenges and speciality class ( $r = -.219, p < .01$ ), suggesting that A class occupational safety specialists experience less legislative challenges contrast to B class and C class.

B class occupational safety specialists experience less legislative challenges contrast to C class. There was negative correlation between legislative challenges and tenure as an occupational safety specialist ( $r = -.210, p < .01$ ) and total tenure ( $r = -.163, p < .01$ ). This points out that occupational safety specialists who are experienced in occupational safety area and in work life are likely to have less law based challenges. Another interesting result was that there was positive correlation between legislative challenges and psychological safety ( $r = .144, p < .01$ ), suggesting that when occupational safety specialists feel psychologically safer in organizations, they experiences more legislative challenges.

Organizational challenges were significantly and positively correlated with self-reported personal initiative ( $r = .115, p < .01$ ), indicating that occupational safety specialists show more self-reported personal initiative when they experience organizational challenges. Organizational challenges also negatively correlated with professional self – efficacy belief ( $r = .121, p < .01$ ). This revealed that occupational safety specialists who experience less organizational challenges are more likely to have higher level of professional self – efficacy belief. There was positive correlation between organizational challenges and service type ( $r = -.144, p < .01$ ).

There was negative correlation between psychological safety and number of workplace ( $r = -.151, p < .01$ ). This result points out that occupational safety specialists who service less number of workplace are psychologically safer. Psychological safety was also positively correlated with self-reported personal initiative ( $r = .118, p < .05$ ), suggesting that occupational safety specialists show more self-reported personal initiative in psychologically safer organization. This finding points out that H2.2 was supported. There was positive correlation between psychological safety and professional self – efficacy belief ( $r = .133, p < .05$ ). This result reveals that occupational safety specialists show higher professional self – efficacy belief in psychologically safer organization. This finding provided that H2.1 was supported.

Psychological safety was also positively correlated with service type ( $r=.167$ ,  $p < .01$ ).

Professional self – efficacy belief was positively correlated with social security institution pension ( $r= .167$ ,  $p < .01$ ) and self-reported personal initiative ( $r= .432$ ,  $p < .01$ ), indicating that occupational safety specialists whom social security pension of them deposited from their salary are tended to have higher professional self – efficacy belief. There was negative correlation between professional self – efficacy belief and number of workplace ( $r= -.133$ ,  $p < .05$ ). So, professional self – efficacy belief of occupational safety specialists is reduced when number of workplaces they service are increased. Professional self – efficacy belief was also positively correlated with self-reported personal initiative ( $r= .432$ ,  $p < .01$ ). This result suggests that occupational safety specialists who have higher degree of professional self – efficacy belief tended to show more self-reported personal initiative.

There was negative correlation between self-reported personal initiative and additional duty ( $r= -.119$ ,  $p < .05$ ). This result points out that self-reported personal initiative is reduced when occupational safety specialists are exposed to more additional duty.

**Table 3.14:** Results of the Correlation Analysis

<b>Spearman's rho</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>1.Sex</b>	1														
<b>2.Age</b>	.154**	1													
<b>3.Education Status</b>	-.041	.03	1												
<b>4.Service Type</b>	.053	.10	-.016	1											
<b>5.Condition Ensured to be Occupational Specialist</b>	-.016	-.266**	-.120*	.076	1										
<b>6.Speciality Class</b>	-.047	-.548**	-.219**	-.030	.349**	1									
<b>7.Tenure as an Occupational Safety Specialist</b>	.140*	.418**	.087	.039	-.351**	.522**	1								
<b>8.Total Tenure</b>	.165**	.627**	-.062	.133*	-.136*	.423**	.487**	1							
<b>9.Danger Class</b>	-.034	-.01	.058	-.302**	-.115*	.123*	.242**	.016	1						
<b>10.Number of Workplace</b>	-.060	.115*	.009	-.452**	-.156**	.082	.145**	.068	.426**	1					
<b>11.Weekly Average Work Time</b>	.075	-.02	.059	-.048	.030	-.104	-.006	-.086	-.028	.017	1				
<b>12.Total Employee Number</b>	.068	.03	-.035	-.216**	-.007	-.006	.113*	.077	.212**	.277**	.069	1			
<b>13.Occupational Liability Insurance</b>	-.016	.131*	.007	.037	-.096	.058	.055	.096	-.007	.022	.029	.046	1		
<b>14.Additional Duty</b>	-.044	.03	-.107	-.222**	-.012	.090	.014	.006	.001	.055	-.067	.016	-.026	1	
<b>15.Social Security Institution Pension</b>	.070	-.02	.024	.425**	.056	.032	.080	.105	-.086	-.250**	-.242**	-.017	-.053	-.077	1



<b>Spearman's rho ( Following)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	
<b>16.Self - Reported Personal Initiative</b>	.057	.09	.075	.030	.041	-.035	.021	.091	-.010	-.032	.043	-.010	-.068	-.119*	.014	1											
<b>17.Professional Self-Efficacy Belief</b>	-.004	-.08	.041	.055	.023	-.098	-.035	.046	-.042	-.133*	-.063	-.073	-.066	-.032	.167**	.432**	1										
<b>18.Psychological Safety</b>	.108	.07	-.003	.167**	-.011	.031	.020	.033	-.062	-.151**	.002	-.107	.014	.044	.080	.118*	.133*	1									
<b>19.Challenges of Occupational Safety Specialists</b>	.050	-.06	-.065	-.352**	-.005	-.140*	-.145**	-.123*	.149**	.284**	.203**	.082	.097	.027	-.334**	-.030	-.302**	.016	1								
<b>20.Insufficient Awareness of Employer</b>	.044	-.03	-.060	-.368**	-.031	-.109*	-.127*	-.099	.167**	.319**	.212**	.075	.140*	.038	-.372**	-.011	-.305**	-.033	.958**	1							
<b>21.Unwillingness of Employees to Participation</b>	.075	.02	-.016	-.278**	-.022	-.094	-.062	-.022	.081	.173**	.166**	.035	.106	.011	-.306**	-.041	-.283**	.077	.798**	.722**	1						
<b>22.Ignorance of Employees</b>	.051	-.05	-.072	-.303**	-.030	-.132*	-.118*	-.118*	.152**	.270**	.191**	.077	.076	.034	-.322**	-.011	-.217**	-.027	.867**	.803**	.724**	1					
<b>23.Providing Lack of Resources</b>	.063	-.02	-.029	-.353**	.017	-.038	-.076	-.115*	.152**	.319**	.147**	.115*	.055	.049	-.337**	-.112*	-.280**	-.016	.793**	.736**	.588**	.662**	1				
<b>24.LawBased Challenges</b>	-.041	-.05	-.081	-.085	.039	-.129*	-.081	-.089	.061	.051	.089	.001	.029	.012	-.068	.147**	-.030	.079	.529**	.424**	.300**	.395**	.326**	1			
<b>25.Legislative Challenges</b>	.008	-.199**	-.127*	-.033	.074	-.219**	-.210**	-.163**	.012	-.022	.006	.034	-.041	-.037	.042	-.064	-.103	.144**	.483**	.336**	.304**	.323**	.292**	.399**	1		
<b>26.Organizational Challenges</b>	-.024	-.04	-.026	-.144**	-.043	-.057	-.107	-.068	.104	.146**	.143*	.012	.042	.027	-.243**	.115*	-.121*	-.005	.551**	.550**	.423**	.456**	.386**	.414**	.234**	1	

### **3.6. Mediation and Moderation Relations of Variables**

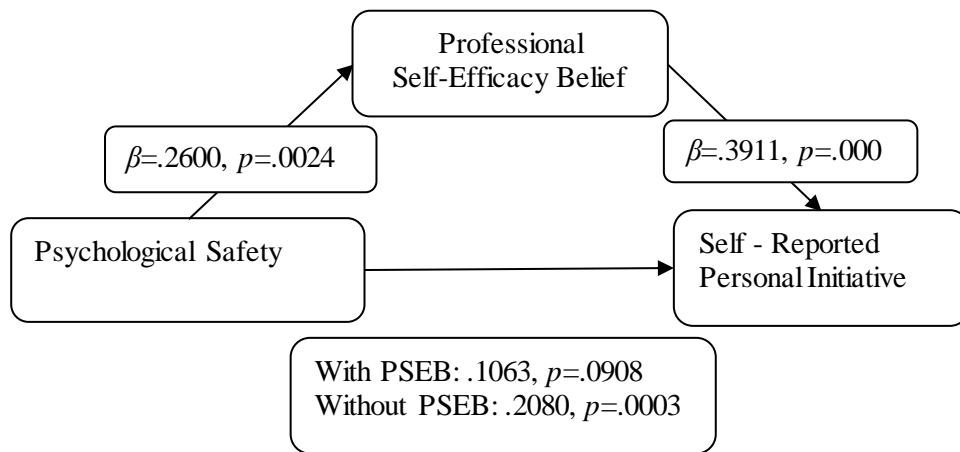
This study was designed as an exploratory research to investigate relationships between variables. Only significant results were reported. In this section, mediator role of professional self – efficacy belief between the relationship of psychological safety (independent variable; IV) and self-reported personal initiative (dependent variable; DV) was tested. Besides, moderator role of professional self – efficacy belief between the relationship of challenges dimensions (independent variables; IV) and self-reported personal initiative (dependent variable; DV), and moderator role of psychological safety between the relationship of challenges dimension (independent variable; IV) and self-reported personal initiative (dependent variable; DV) were tested.

In order to research moderator role of challenges dimensions and professional self – efficacy belief, and mediator role of professional self – efficacy belief, PROCESS macro (Model 1 and Model 4) was used as integrated to SPSS 22.00. Indirect effect and bootstrapping results was used for mediator role of professional self – efficacy belief between the relationship of psychological safety and self-reported personal initiative. In moderation analysis, the simple slope analysis of professional self – efficacy belief and challenges dimensions was interpreted by conditional effects that representing moderators various as "low", "average", and "high" scores. (Hayes, 2013).

### 3.6.1 Mediator Role of Professional Self – Efficacy Belief Between Psychological Safety and Self-Reported Personal Initiative

In this section, psychological safety included to analysis as independent variable, self – reported personal initiative included to analysis as dependent variable, and professional self – efficacy belief included analysis as mediator variable. As illustrated in the Figure 3.5, there was significant relationship between psychological safety and self-reported personal initiative without professional self – efficacy belief ( $\beta=.2080$ ,  $p<.001$ ) and the  $\beta$  interaction value between psychological safety and self-reported personal initiative was reduced and  $p$  interaction significance value turned insignificant ( $\beta=.2600$ ,  $p>.001$ ) when professional self – efficacy belief added to analysis as a mediator variable.

**Figure 3.5:** Model for Mediator Role of Professional Self – Efficacy Belief Between Psychological Safety and Self-Reported Personal Initiative



Bootstrapping results and 95% confidence intervals of mediator role of professional self – efficacy belief between psychological safety and self-reported personal initiative illustrated in the Table 3.15. Researchers tested the significance of indirect effect using bootstrapping results. Indirect effects were calculated with 10.000 bootstrapped samples. The standardized indirect effect was  $(.029)(.200) =$

.102. Thus, the indirect effect of professional self – efficacy belief was statistically significant.

**Table 3.15:** Bootstrapping Results of Mediator Role of Professional Self – Efficacy Belief Between Psychological Safety and Self-Reported Personal Initiative

	Effect	%95 Confidence Interval	
		Low Limit	Up Limit
<b>Indirect Effect</b>			
PS → PSEB → SRPI	.101	.028	.199
	<b>Bootstrapping Coefficient</b>	<b>Low Limit</b>	<b>Up Limit</b>
<b>Direct Effects</b>			
PS → PSEB	.26	.092	.427
PSEB → SRPI	.208	.070	.345
<i>R</i> <sup>2</sup>		.2458	
<i>F</i>		52.79	

Note: PS= Psychological Safety, PSEB= Professional self – efficacy Belief, SRPI= Self – Reported Personal Initiative

As a result this analysis, the relationship between psychological safety and self-reported personal initiative was mediated by professional self – efficacy belief. This result showed that H3.1 was supported.

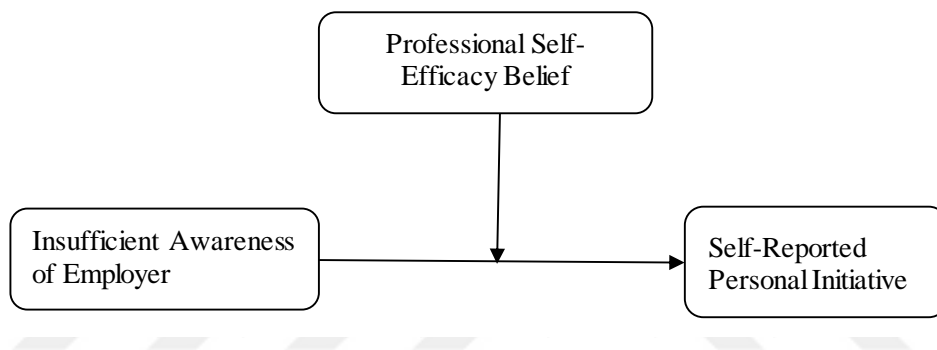
### 3.6.2 Moderator Role of Professional Self – Efficacy Belief Between Challenges of Occupational Safety Specialists and Self-Reported Personal Initiative

This study was designed as an exploratory research to investigate relationships between variables. Only significant results were reported.

### 3.6.2.1 Moderator Role of Professional Self – Efficacy Belief Between Insufficient Awareness of Employer and Self-Reported Personal Initiative

The model for moderator role of professional self – efficacy belief between insufficient awareness of employer and self-reported personal initiative was shown in Figure 3.6.

**Figure 3.6:** Model for Moderator role of Professional Self – Efficacy Belief Between Insufficient Awareness of Employer and Self-reported Personal Initiative



The conditional effects results of the moderator role of professional self – efficacy belief between insufficient awareness of employer which is a dimension of challenges of occupational safety specialists and self-reported personal initiative was illustrated in Table 3.16. The interaction results was found significant ( $\beta = -.1271, t = -4.3689, p = .000, LLCI = -.1843, ULCI = -.0699$ ).

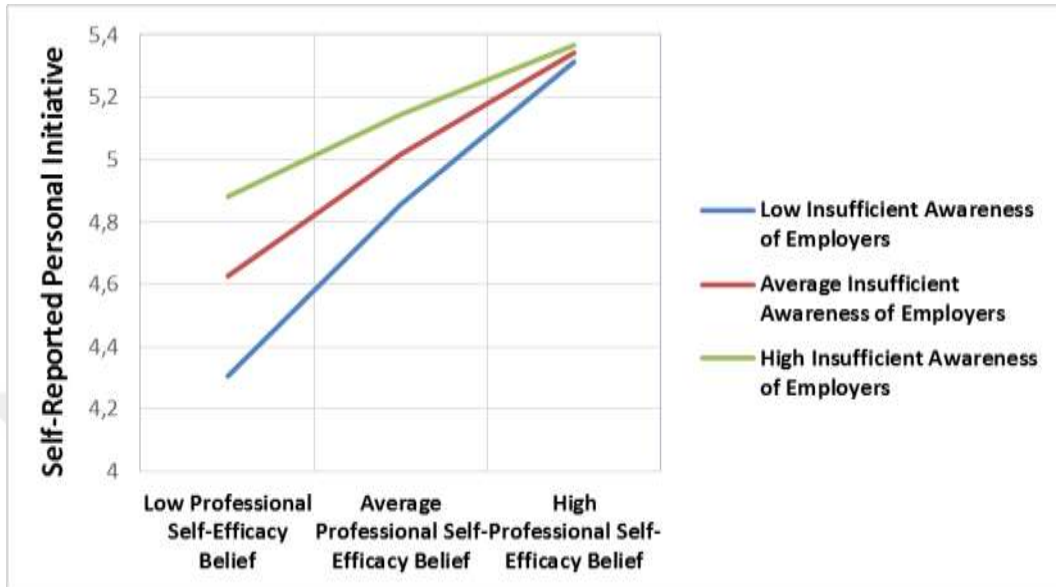
**Table 3.16:** The Results of the Moderator Role of Professional Self – Efficacy Belief Between Insufficient Awareness of Employer and Self-Reported Personal Initiative

<b>Conditional Effects</b>						
					<b>95%</b>	
	<b>PSEB</b>	$\beta$	$t$	$p$	<b>Low Limit</b>	<b>Up Limit</b>
<b>Low</b>	-.7096	.2191	5.5839	.0000	.1419	.2963
<b>Average</b>	.1476	.1102	3.7093	.0000	.0518	.1686
<b>High</b>	.8619	.0194	.5416	.5884	-.0511	.0899
<b>Interaction</b>		-.1271	-4.3689	.000	-.1843	-.0699
		$R^2$	.308			
		$F$	48.723			

Note: PSEB= Professional Self – Efficacy Belief

There was significant relationship between insufficient awareness of employer and self-reported personal initiative for low professional self – efficacy belief ( $\beta=.2191$ ,  $t(328)=5.5839$ ,  $p=.000$ ). Figure 3.7 showed that in case of low professional self – efficacy belief and high insufficient awareness of employer, occupational safety specialists show more self-reported personal initiative compared with low or average insufficient awareness of employer. There was significant relationship between insufficient awareness of employer and self-reported personal initiative for average professional self – efficacy belief ( $\beta=.1102$ ,  $t(328)=3.7093$ ,  $p=.000$ ). In case of average professional self – efficacy belief and high insufficient awareness of employer, occupational safety specialists show more self-reported personal initiative compared with low or average insufficient awareness of employer. There was not significant relationship between insufficient awareness of employer and self-reported personal initiative for high professional self – efficacy belief. Self-reported personal initiative wasn't affected by insufficient awareness of employer in case of high professional self – efficacy belief.

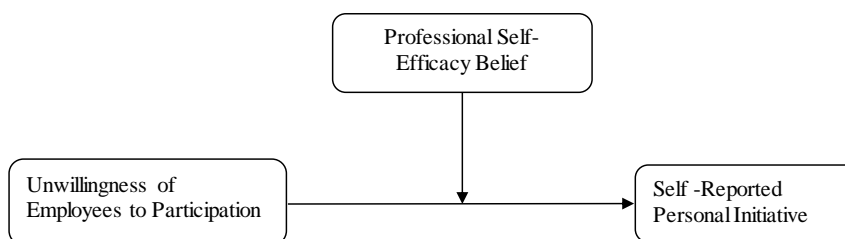
**Figure 3.7:** Moderator role of Professional Self – Efficacy Belief Between Insufficient Awareness of Employer and Self-reported Personal Initiative



### 3.6.2.2. Moderator Role of Professional Self – Efficacy Belief Between Unwillingness of Employees to Participation and Self-reported Personal Initiative

The model for moderator role of professional self – efficacy belief between unwillingness of employees and self-reported personal initiative was shown in Figure 3.8.

**Figure 3.8:** Model for Moderator Role of Professional Self – Efficacy Belief Between Unwillingness of Employees to Participation and Self-Reported Personal Initiative



The conditional effects results of the moderator role of professional self – efficacy belief between unwillingness of employees to participation which is a dimension of challenges and self-reported personal initiative was illustrated in Table 3.17. The interaction results was found significant ( $\beta = -.0695$ ,  $t = -2.6067$ ,  $p = .0096$ ,  $LLCI = -.1220$ ,  $ULCI = -.0171$ ).

**Table 3.17:** The Results of the Moderator Role of Professional Self – Efficacy Belief Between Unwillingness of Employees to Participation and Personal Initiative

<b>Conditional Effects</b>						
	<b>PSEB</b>	$\beta$	$t$	$p$	<b>95%</b>	
					<b>Low Limit</b>	<b>Up Limit</b>
<b>Low</b>	-.7096	.1141	3.3325	.0010	.0467	.1815
<b>Average</b>	.1476	.0545	2.1037	.0362	.0035	.1055
<b>High</b>	.8619	.0049	.1505	.8804	-.0589	.0687
<b>Interaction</b>		-.0695	-2.6067	.0096	-.1220	-.0171
		$R^2$	.2662			
		$F$	39.656			

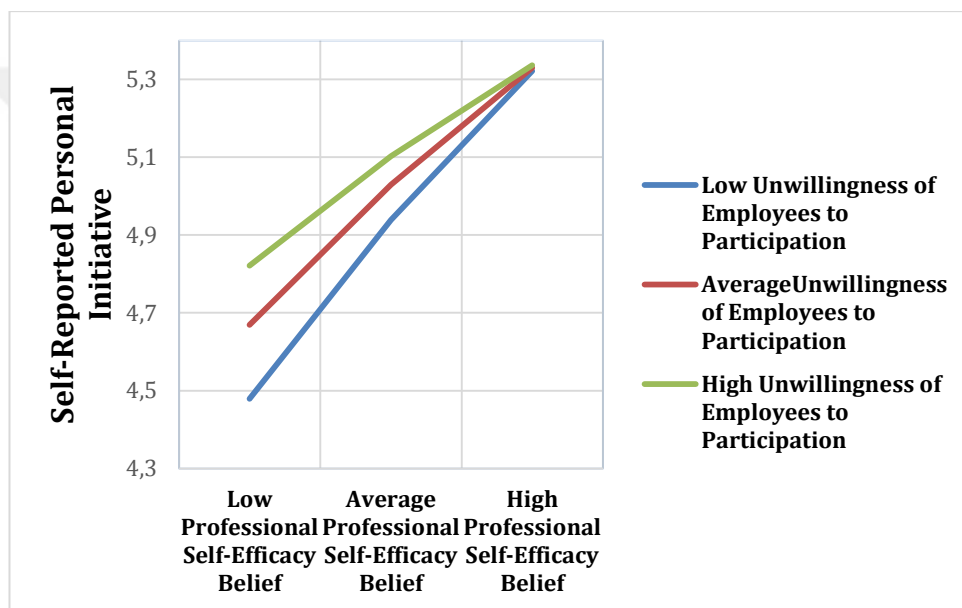
Note: PSEB= Professional Self – Efficacy Belief

There was significant relationship between unwillingness of employees to participation and self-reported personal initiative for low professional self – efficacy belief ( $\beta=.1141$ ,  $t(328)=3.3325$ ,  $p=.0010$ ). Figure 3.9 shows that in case of low professional self – efficacy belief and high unwillingness of employees to participation, occupational safety specialists show more self-reported personal initiative compared with low or average unwillingness of employees to participation. There was significant relationship between unwillingness of employees to participation and self-reported personal initiative for average professional self – efficacy belief ( $\beta=.0545$ ,  $t(328)=2.1037$ ,  $p=.0362$ ). In case of average professional self – efficacy belief and high unwillingness of employees to participation, occupational safety specialists show more self-reported personal initiative compared with low or average unwillingness of employees to



participation. There was not significant relationship between unwillingness of employees to participation and self-reported personal initiative for high professional self – efficacy belief. Self-reported personal initiative wasn't affected by unwillingness of employees to participation in case of high professional self – efficacy belief.

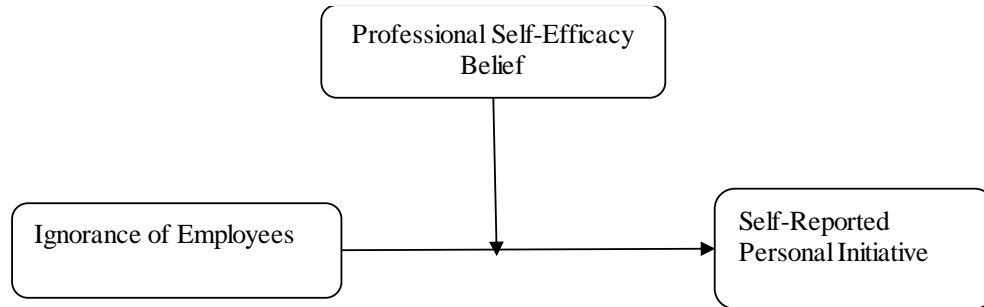
**Figure 3.9:** Moderator Role of Professional Self – Efficacy Belief Between Unwillingness of Employees to Participation and Self-Reported Personal Initiative



### 3.6.2.3. Moderator Role of Professional Self – Efficacy Belief Between Ignorance of Employees and Self-Reported Personal Initiative

The model for moderator role of professional self – efficacy belief between ignorance of employees and self-reported personal initiative was shown in Figure 3.10.

**Figure 3.10:** Model for Moderator Role of Professional Self – Efficacy Belief Between Ignorance of Employees and Self-reported Personal Initiative



The conditional effects results of the moderator role of professional self – efficacy belief between ignorance of employees which is a dimension of challenges and self-reported personal initiative was illustrated in Table 3.18. The interaction results was found significant ( $\beta = -.1188$ ,  $t = -4.0169$ ,  $p = .0001$ ,  $LLCI = -.1770$ ,  $ULCI = -.0606$ ).

**Table 3.18:** The Results of the Moderator Role of Professional Self – Efficacy Belief Between Ignorance of Employees and Self-Reported Personal Initiative

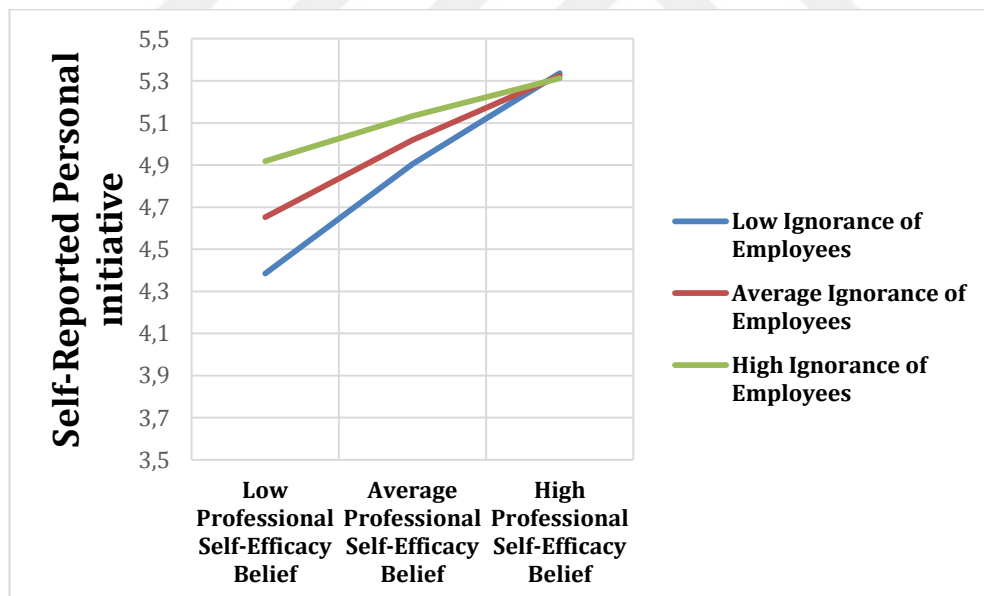
Conditional Effects						
				95%		
PSEB	$\beta$	$t$	$p$	Low Limit	Up Limit	
<b>Low</b>	-.7096	.1782	4.6565	.0000	.1029	.2535
<b>Average</b>	.1476	.0764	2.7893	.0006	.0225	.1302
<b>High</b>	.8619	-.0085	-.2527	.8007	-.0748	.0578
<hr/>						
<b>Interaction</b>	-.1188	-4.0169	.0001	-.1770	-.0606	
<hr/>						
		$R^2$	.2900			
		$F$	44.653			

Note: PSEB= Professional Self – Efficacy Belief

There was significant relationship between ignorance of employees and self-reported personal initiative for low professional self – efficacy belief ( $\beta=.1782$ ,  $t(328)=4.6565$ ,  $p=.0000$ ). Figure 3.11 shows that in case of low professional self –

efficacy belief and high ignorance of employees, occupational safety specialists show more self-reported personal initiative compared with low or average ignorance of employees. There was significant relationship between ignorance of employees on self-reported personal initiative for average professional self – efficacy belief ( $\beta=.0764$ ,  $t(328)=2.7893$ ,  $p=.0006$ ). In case of average professional self – efficacy belief and high ignorance of employees, occupational safety specialists show more self-reported personal initiative compared with low or average ignorance of employees. There was not significant relationship between ignorance of employees and self-reported personal initiative for high professional self – efficacy belief. Self-reported personal initiative wasn't affected by ignorance of employees in case of high professional self – efficacy belief.

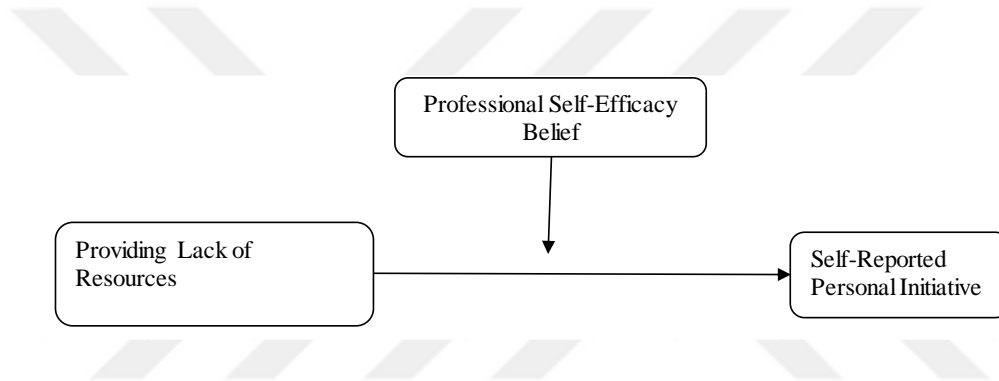
**Figure 3.11:** Moderator Role of Professional Self – Efficacy Belief Between Ignorance of Employees and Self-reported Personal Initiative



### 3.6.2.4. Moderator Role of Professional Self – Efficacy Belief Between Providing Lack of Resources and Self-Reported Personal Initiative

The model for moderator role of professional self – efficacy belief between providing lack of resources and self-reported personal initiative was shown in Figure 3.12.

**Figure 3.12:** Model for Moderator Role of Professional Self – Efficacy Belief Between Providing Lack of Resources and Self-Reported Personal Initiative



The conditional effects results of the moderator role of professional self – efficacy belief between providing lack of resources which is a dimension of challenges and self-reported personal initiative was illustrated in Table 3.19. The interaction results was found significant ( $\beta = -.1051$ ,  $t = -3.6656$ ,  $p = .0003$ ,  $LLCI = -.1615$ ,  $ULCI = -.0487$ ).

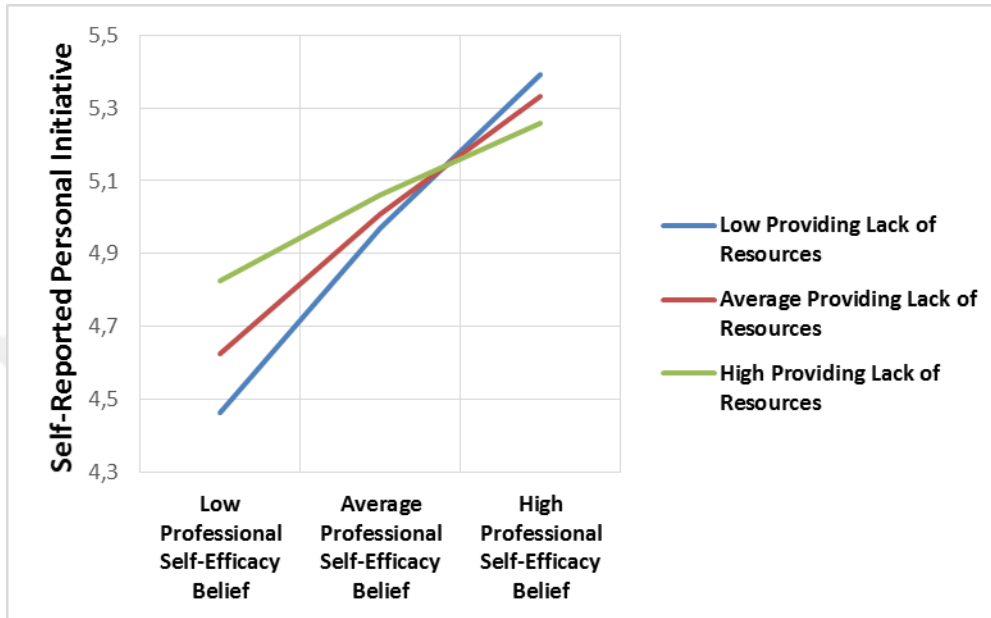
**Table 3.19:** The Results of the Moderator Role of Professional Self – Efficacy Belief Between Providing Lack of Resources and Self-Reported Personal Initiative

<b>Conditional Effects</b>						
	<b>PSEB</b>	$\beta$	$t$	$p$	<b>95%</b>	
					<b>Low Limit</b>	<b>Up Limit</b>
<b>Low</b>	-.7096	.1206	3.3119	.0010	.0490	.1923
<b>Average</b>	.1476	.0306	1.0908	.2762	-.0246	.0857
<b>High</b>	.8619	-.0445	-1.2555	.2102	-.1142	.0252
<b>Interaction</b>		-.1188	-4.0169	.0001	-.1770	-.0606
		$R^2$	.2738			
		$F$	41.232			

Note: PSEB= Professional Self – Efficacy Belief

There was significant relationship between providing lack of resources and self-reported personal initiative for low professional self – efficacy belief ( $\beta=.1206$ ,  $t(328)=3.1119$ ,  $p=.0010$ ). Figure 3.13 shows that in case of low professional self – efficacy belief and high providing lack of resources, occupational safety specialists show more self-reported personal initiative compared with low or average providing lack of resources. There was not significant relationship between providing lack of resources and self-reported personal initiative for average and high professional self – efficacy belief. Self-reported personal initiative wasn't affected by providing lack of resources in case of average and high professional self – efficacy belief.

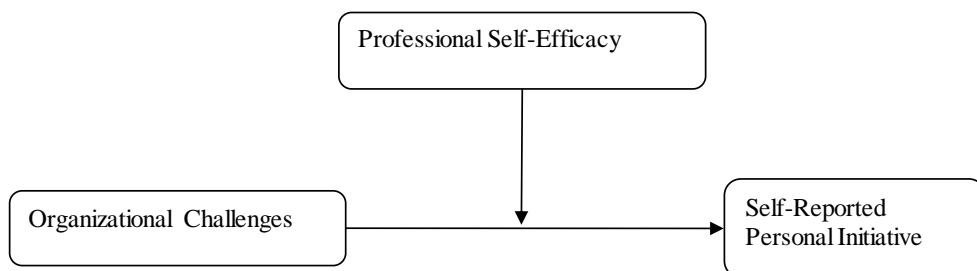
**Figure 3.13:** Moderator Role of Professional Self – Efficacy Belief Between Providing Lack of Resources and Self-Reported Personal Initiative



### 3.6.2.5. Moderator Role of Professional Self – Efficacy Belief Between Organizational Challenges and Self-Reported Personal Initiative

The model for moderator role of professional self – efficacy belief between organizational challenges and self-reported personal initiative was shown in Figure 3.14.

**Figure 3.14:** Model for Moderator Role of Professional Self – Efficacy Belief Between Organizational Challenges and Self-Reported Personal Initiative



The conditional effects results of the moderator role of professional self – efficacy belief between organizational challenges and self-reported personal initiative was illustrated in Table 3.20. The interaction results was found significant ( $\beta = -.1212$ ,  $t = -4.1198$ ,  $p = .0000$ ,  $LLCI = -.1791$ ,  $ULCI = -.0633$ ).

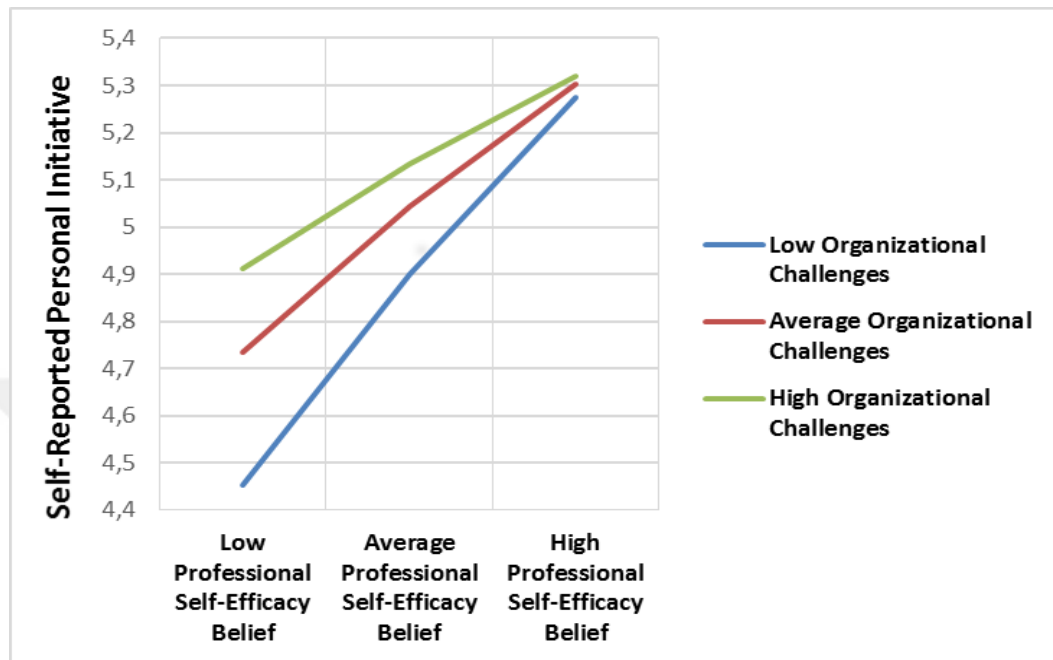
**Table 3.20:** The Results of the Moderator Role of Professional Self – Efficacy Belief Between Organizational Challenges and Self-reported Personal Initiative

<b>Conditional Effects</b>						
	<b>PSEB</b>	$\beta$	$t$	$p$	<b>95%</b>	
					<b>Low Limit</b>	<b>Up Limit</b>
<b>Low</b>	-.7112	.2118	5.6029	.0000	.1374	.2862
<b>Average</b>	.1460	.1079	3.1145	.0020	.0397	.1761
<b>High</b>	.8602	.0213	.4792	.6321	-.0663	.1089
<b>Interaction</b>		-.1212	-4.1198	.0000	-.1791	-.0633
		$R^2$	.3133			
		$F$	48.365			

Note: PSEB= Professional Self – Efficacy Belief

There was significant relationship between organizational challenges and self-reported personal initiative for low professional self – efficacy belief ( $\beta=.2118$ ,  $t(328)=5.56029$ ,  $p=.0000$ ). Figure 3.15 shows that in case of low professional self – efficacy belief and high organizational challenges, occupational safety specialists show more self-reported personal initiative compared with low or average organizational challenges. There was significant relationship between organizational challenges and self-reported personal initiative for low professional self – efficacy belief ( $\beta=.1079$ ,  $t(328)=3.1145$ ,  $p=.0020$ ). There was not significant relationship between organizational challenges and self-reported personal initiative for high professional self – efficacy belief. Self-reported personal initiative wasn't affected by organizational challenges in case of high professional self – efficacy belief.

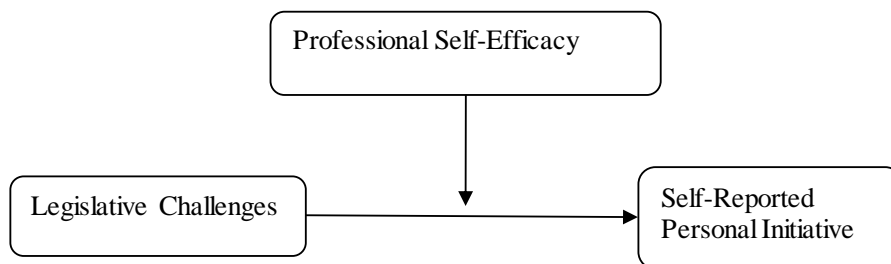
**Figure 3.15:** Moderator Role of Professional Self – Efficacy Belief Between Organizational Challenges and Self-Reported Personal Initiative



**3.6.2.6. Moderator Role of Professional Self – Efficacy Belief Between Legislative Challenges and Self-Reported Personal Initiative**

The model for moderator role of professional self – efficacy belief between legislative challenges and self-reported personal initiative was shown in Figure 3.16.

**Figure 3.16:** Model for Moderator Role of Professional Self – Efficacy Belief Between Legislative Challenges and Self-Reported Personal Initiative





The conditional effects results of the moderator role of professional self – efficacy belief between legislative challenges and self-reported personal initiative was illustrated in Table 3.21. The interaction results was found significant ( $\beta = -.8840, t = -3.1403, p = .0018, LLCI = -.1437, ULCI = -.0330$ ).

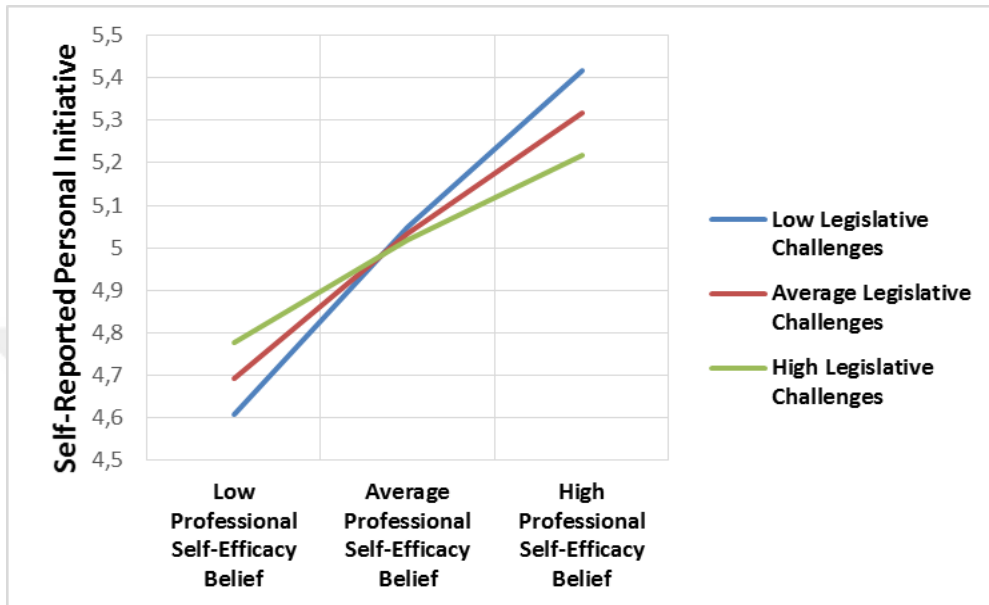
**Table 3.21:** The Results of the Moderator Role of Professional Self – Efficacy Belief Between Legislative Challenges and Self-Reported Personal Initiative

<b>Conditional Effects</b>						
<b>PSEB</b>	$\beta$	$t$	$p$	<b>95%</b>		
				<b>Low Limit</b>	<b>Up Limit</b>	
<b>Low</b>	-.7096	.0638	1.8327	.0677	-.0047	.1322
<b>Average</b>	.1476	-.0120	-.4386	.6613	-.0658	.0418
<b>High</b>	.8619	-.0751	-2.1240	.0344	-.1447	-.0055
<hr/>						
<b>Interaction</b>	-.8840	-3.1403	.0018		-.1437	-.0330
<hr/>						
	$R^2$	.2628				
	$F$	38.980				

Note: PSEB= Professional Self – Efficacy Belief

There was not significant relationship between legislative challenges and self-reported personal initiative for low and average professional self – efficacy belief. Self-reported personal initiative wasn't affected by legislative challenges in case of low and average professional self – efficacy belief. There was significant relationship between legislative challenges and self-reported personal initiative for high professional self – efficacy belief ( $\beta=.8619, t(328)=-2.1240, p=.0344$ ). Figure 3.17 shows that high level of legislative challenges and low level of professional self – efficacy belief yield higher level of self-reported personal initiative as compared to low and average legislative challenges, and average and high professional self – efficacy belief.

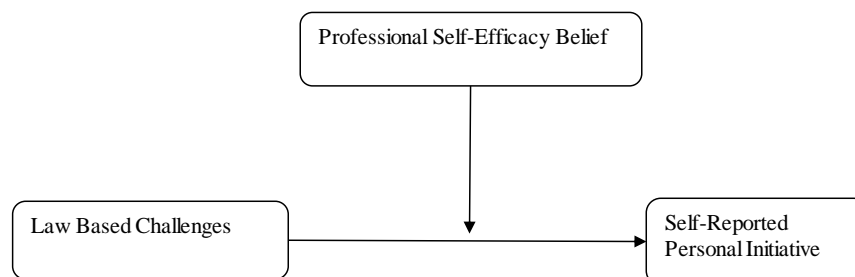
**Figure 3.17:** Moderator Role of Professional Self – Efficacy Belief Between Legislative Challenges and Self-Reported Personal Initiative



### 3.6.2.7 Moderator Role of Professional Self – Efficacy Belief Between Law Based Challenges and Self-Reported Personal Initiative

The model for moderator role of professional self – efficacy belief between law based challenges and self-reported personal initiative was shown in Figure 3.18.

**Figure 3.18:** Model for Moderator role of Professional Self – Efficacy Belief Between Law Based Challenges and Self-Reported Personal Initiative



The conditional effects results of the moderator role of professional self – efficacy belief between law based challenges and self-reported personal initiative was illustrated in Table 3.22. The interaction results was found significant ( $\beta = -.1449$ ,  $t = -5.1738$ ,  $p = .0000$ ,  $LLCI = -.2000$ ,  $ULCI = -.0898$ ).

**Table 3.22:** The Results of the Moderator Role of Professional Self – Efficacy Belief Between Law Based Challenges and Self-Reported Personal Initiative

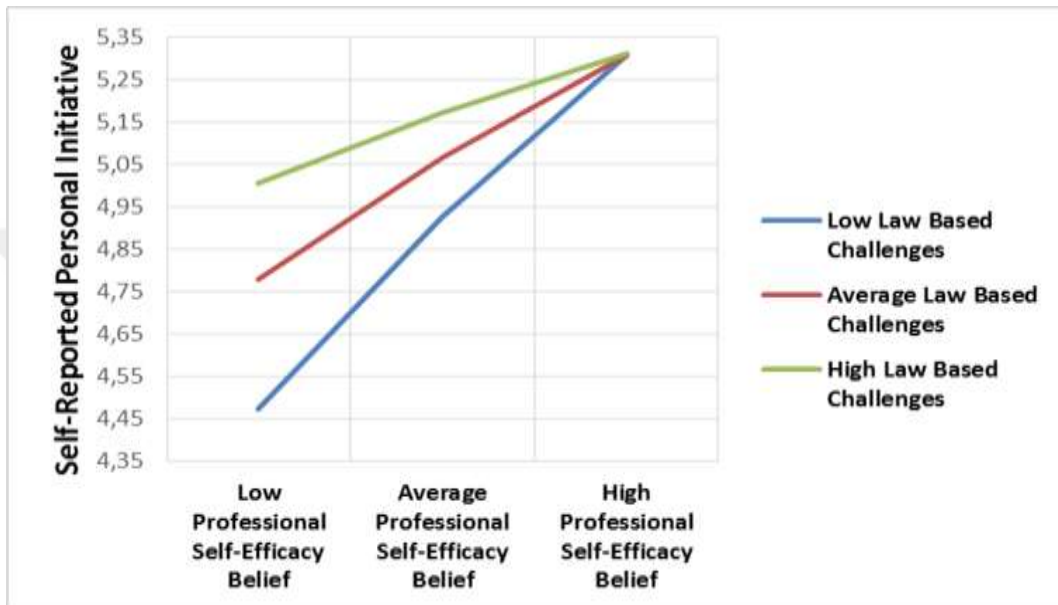
<b>Conditional Effects</b>						
					<b>95%</b>	
	<b>PSEB</b>	$\beta$	$t$	$p$	<b>Low Limit</b>	<b>Up Limit</b>
<b>Low</b>	-.7096	.2289	6.4480	.0000	.1591	.2988
<b>Average</b>	.1476	.1047	3.4756	.0006	.0454	.1639
<b>High</b>	.8619	.0012	.9758	.9758	-.0749	.0772
<b>Interaction</b>		-.1449	-5.1738	.0000	-.2000	-.0898
		$R^2$	.3331			
		$F$	54.608			

Note: PSEB= Professional Self – Efficacy Belief

There was significant relationship between law based challenges and self-reported personal initiative for low professional self – efficacy belief ( $\beta=.2289$ ,  $t(328)=6.4480$ ,  $p=.0000$ ). Figure 3.19 showed that in case of low professional self – efficacy belief and high law based challenges, occupational safety specialists show more self-reported personal initiative compared with low or average law based challenges. There was significant relationship between law based challenges on self-reported personal initiative for average professional self – efficacy belief ( $\beta=.1047$ ,  $t(328)=3.4756$ ,  $p=.0006$ ). In case of average professional self – efficacy belief and high law based challenges, occupational safety specialists show more self-reported personal initiative compared with low or average law based challenges. There was not significant relationship between law based challenges and self-reported personal initiative for high professional self – efficacy belief. Self-

reported personal initiative wasn't affected by law based challenges in case of high professional self – efficacy belief.

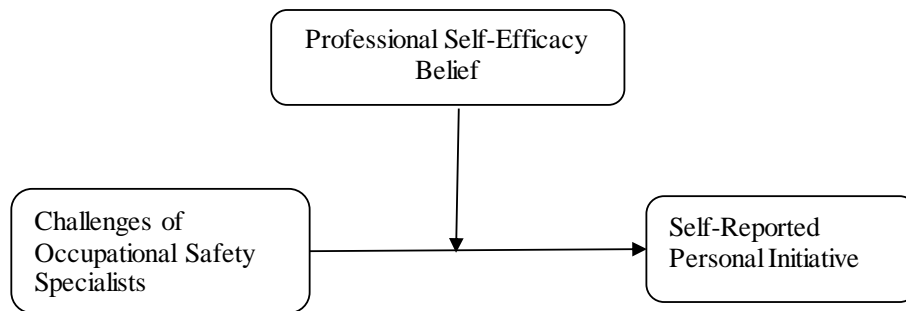
**Figure 3.19:** Moderator Role of Professional Self – Efficacy Belief Between Law Based Challenges and Self-Reported Personal Initiative



### 3.6.2.8. Moderator Role of Professional Self – Efficacy Belief Between Challenges of Occupational Safety Specialists and Self-Reported Personal Initiative

The model for moderator role of professional self – efficacy belief between challenges of occupational safety specialists and self-reported personal initiative was shown in Figure 3.20.

**Figure 3.20:** Model for Moderator Role of Professional Self – Efficacy Belief Between Challenges of Occupational Safety Specialists and Self-Reported Personal Initiative



The conditional effects results of the moderator role of professional self – efficacy belief between challenges of occupational safety specialists and self-reported personal initiative was illustrated in Table 3.23. The interaction results was found significant ( $\beta = -.1573$ ,  $t = -4.7245$ ,  $p = .0000$ ,  $LLCI = -.2280$ ,  $ULCI = -.0918$ ). This result showed that H3.2 was supported.

**Table 3.23:** The Results of the Moderator Role of Professional Self – Efficacy Belief Between Challenges of occupational safety specialists and Self-Reported Personal Initiative

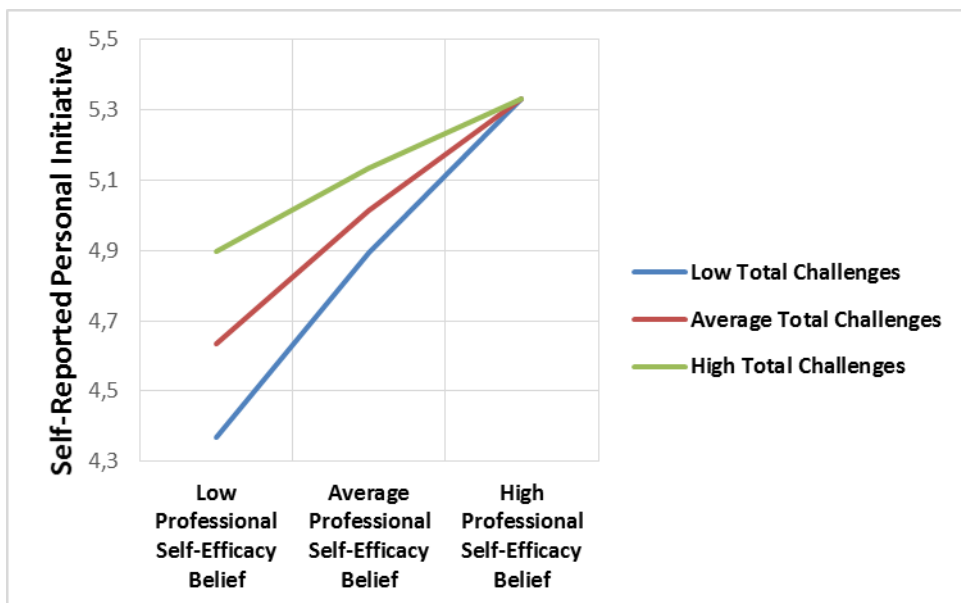
Conditional Effects						
	PSEB	$\beta$	$t$	$p$	95%	
					Low Limit	Up Limit
<b>Low</b>	-.7096	.2476	5.5383	.0000	.1596	.3355
<b>Average</b>	.1476	.1127	3.2484	.0013	.0445	.1810
<b>High</b>	.8619	.0004	.0087	.9931	-.0828	.0835
<b>Interaction</b>		-.1573	-4.7245	.0000	-.2280	-.0918
		$R^2$	.3104			
		$F$	49.212			

Note: PSEB= Professional Self – Efficacy Belief

There was significant relationship between challenges of occupational safety specialists and self-reported personal initiative for low professional self –

efficacy belief ( $\beta=.2476$ ,  $t(328)=5.5383$ ,  $p=.0000$ ). Figure 3.21 showed that in case of low professional self – efficacy belief and high challenges of occupational safety specialists, occupational safety specialists show more self-reported personal initiative compared with low or average challenges of occupational safety specialists. There was significant relationship between challenges of occupational safety specialists and self-reported personal initiative for average professional self – efficacy belief ( $\beta=.1476$ ,  $t(328)=3.2484$ ,  $p=.0013$ ). In case of average professional self – efficacy belief and high challenges of occupational safety specialists, occupational safety specialists show more self-reported personal initiative compared with low or average challenges of occupational safety specialists. There was not significant relationship between challenges of occupational safety specialists and self-reported personal initiative for high professional self – efficacy belief. Self-reported personal initiative wasn't affected by challenges of occupational safety specialists in case of high professional self – efficacy belief.

**Figure 3.21:** Moderator Role of Professional Self – Efficacy Belief Between Challenges of Occupational Safety Specialists and Self-Reported Personal Initiative



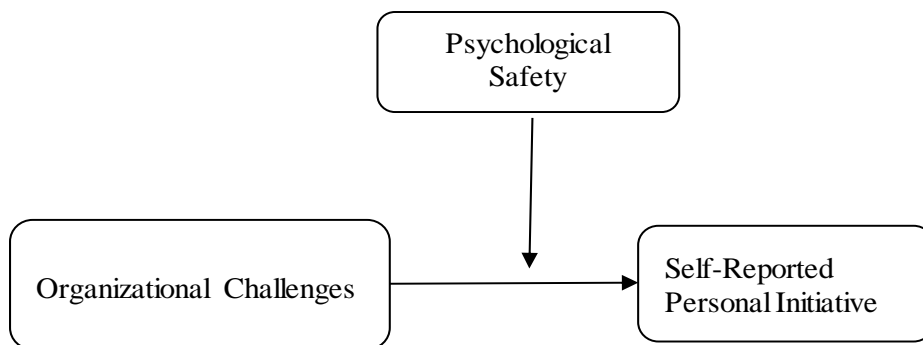
### 3.6.3. Moderator Role of Psychological Safety Between the Relationship of Challenges of Occupational Safety Specialists and Self-reported Personal Initiative

This study was designed as an exploratory research to investigate relationships between variables. Only significant results were reported.

#### 3.6.3.1. Moderator Role of Organizational Challenges Between Psychological Safety and Self-reported Personal Initiative

The model for moderator role of psychological safety between organizational challenges and self-reported personal initiative was shown in Figure 3.22.

**Figure 3.22:** Model for Moderator Role of Psychological Safety Between Organizational Challenges and Self-Reported Personal Initiative



The conditional effects results of the moderator role of psychological safety between organizational challenges and self-reported personal initiative was illustrated in Table 3.24. The interaction results was found significant ( $\beta = -.1470$ ,  $t = -2.575$   $p = .011$ ,  $LLCI = -.259$ ,  $ULCI = -.0347$ ).

**Table 3.24:** The Results of the Moderator Role of Psychological Safety Between Organizational Challenges and Self - Reported Personal Initiative

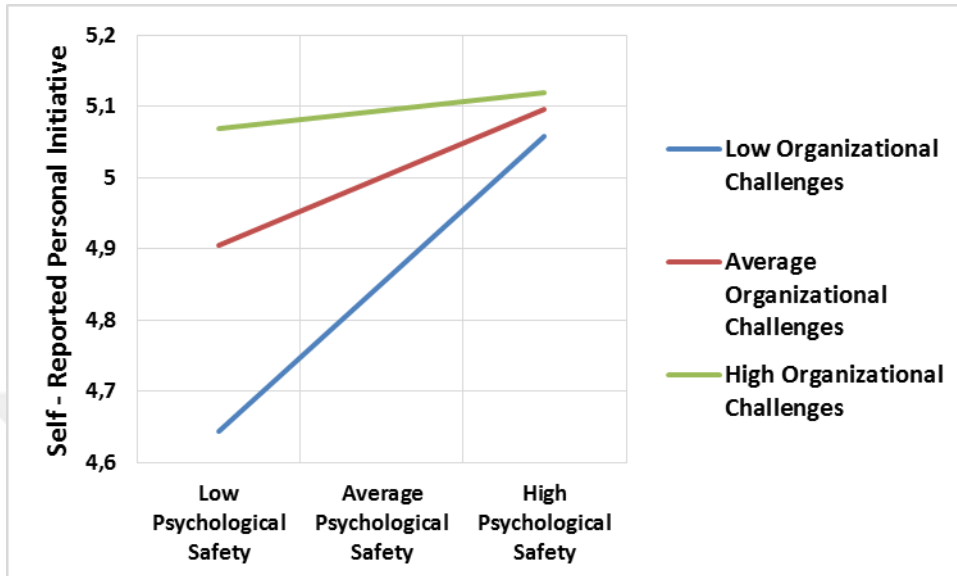
<b>Conditional Effects</b>						
	<b>PS</b>	$\beta$	$t$	$p$	95%	
					<b>Low Limit</b>	<b>Up Limit</b>
<b>Low</b>	-.5601	.1964	4.0481	.0001	.1009	.2918
<b>Average</b>	.0114	.1124	2.8448	.0047	.0347	.1901
<b>High</b>	.5828	.0284	.5272	.5984	-.0775	.1342
<b>Interaction</b>		-.1470	-2.575	.011	-.259	-.0347
		$R^2$	.073			
		$F$	8.341			

Note: PS= Psychological Safety

There was significant interaction between organizational challenges and self-reported personal initiative for low psychological safety ( $\beta=-.1964$ ,  $t(323)=4.0481$ ,  $p=.0001$ ). There was significant interaction between organizational challenges and self-reported personal initiative for average psychological safety ( $\beta=.1124$ ,  $t(323)=2.8448$ ,  $p=.004$ ). There was not significant relationship between organizational challenges and self-reported personal initiative for high psychological safety. When organizational challenges was low, occupational safety specialists show more self-reported personal initiative in case psychological safety was increased. Figure 3.23 showed that in case of low psychological safety and high organizational challenges, occupational safety specialists show more self-reported personal initiative compared with low or average organizational challenges. In case of average psychological safety and high organizational challenges, occupational safety specialists show more self-reported personal initiative compared with low or average organizational challenges. Also, self-reported personal initiative wasn't affected by organizational challenges in case of high psychological safety.



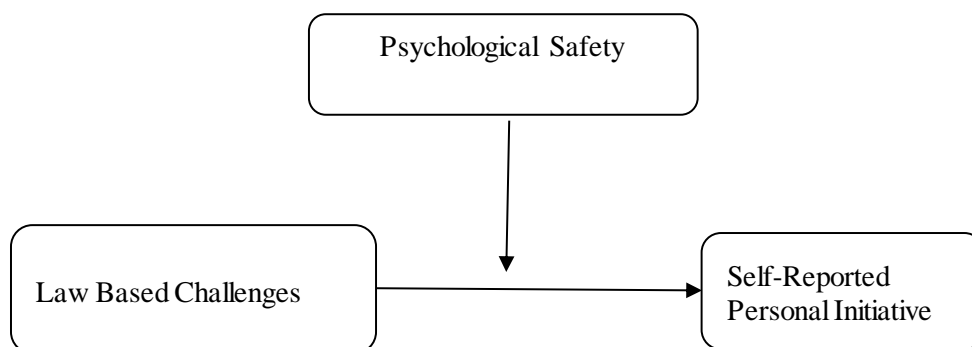
**Figure 3.23:** Moderator Role of Psychological Safety Between Organizational Challenges and Self-Reported Personal Initiative



### 3.6.3.2 Moderator Role of Psychological Safety Between Law Based Challenges and Self-Reported Personal Initiative

The model for moderator role of psychological safety between law based challenges and self-reported personal initiative was shown in Figure 3.24.

**Figure 3.24:** Model for Moderator Role of Psychological Safety Between Law Based Challenges and Self-Reported Personal Initiative



The conditional effects results of the moderator role of psychological safety between law based challenges and self-reported personal initiative was illustrated in Table 3.25. The interaction results was found significant ( $\beta = -.1116$ ,  $t = -2.000$ ,  $p = .046$ ,  $LLCI = -.2214$ ,  $ULCI = -.0018$ ).

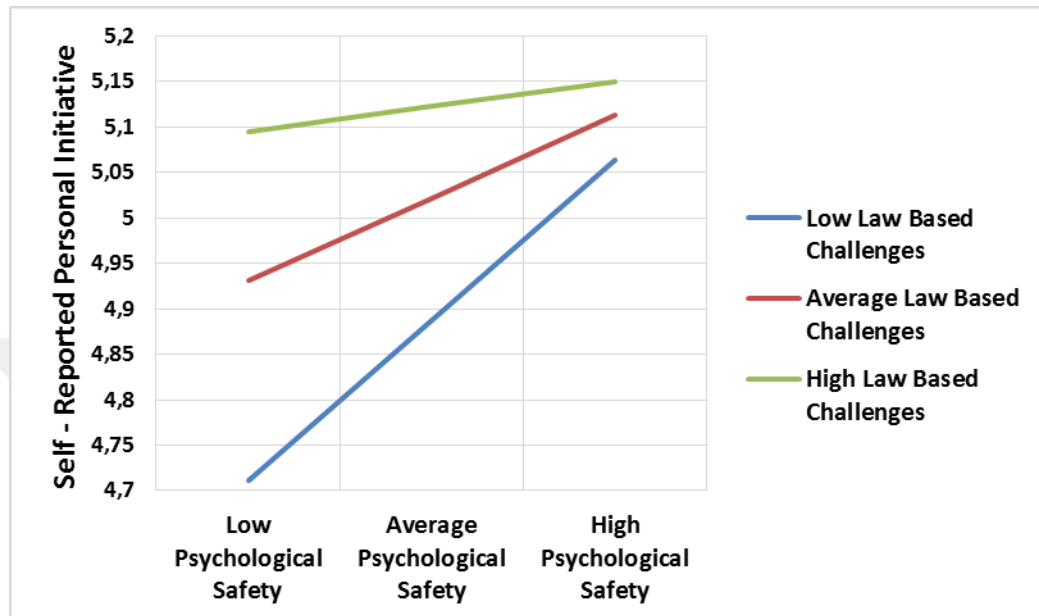
**Table 3.25:** The Results of the Moderator Role of Psychological Safety Between Law Based Challenges and Self - Reported Personal Initiative

<b>Conditional Effects</b>						
					<b>95%</b>	
	<b>PS</b>	$\beta$	$t$	$p$	<b>Low Limit</b>	<b>Up Limit</b>
<b>Low</b>	-.5651	.1648	3.791	.0002	.0793	.2502
<b>Average</b>	.0064	.1010	2.738	.0065	.0284	.1735
<b>High</b>	.5778	.0372	.6950	.4875	-.0681	.1425
<b>Interaction</b>		-.1116	-2.000	.046	-.2214	-.0018
		$R^2$	.0679			
		$F$	7.8446			

Note: PS= Psychological Safety

There was significant relationship between law based challenges and self-reported personal initiative for low psychological safety ( $\beta = -.1648$ ,  $t(323) = 3.791$ ,  $p = .0002$ ). There was significant relationship between law based challenges on self-reported personal initiative for average psychological safety ( $\beta = .1010$ ,  $t(323) = 2.738$ ,  $p = .0065$ ). There was not significant relationship between law based challenges and self-reported personal initiative for high psychological safety. When law based challenges was low, occupational safety specialists show more self-reported personal initiative in case psychological safety was increased. Figure 3.25 showed that in case of low psychological safety and high law based challenges, occupational safety specialists show more self-reported personal initiative compared with low or average law based challenges. In case of average psychological safety and high law based challenges, occupational safety specialists show more self-reported personal initiative compared with low or average law based challenges. Also, self-reported personal initiative wasn't affected by law based challenges in case of high psychological safety.

**Figure 3.25:** Moderator role of Psychological Safety Between Law Based Challenges and Self-Reported Personal Initiative



There is no finding on the moderation role of psychological safety between the relationship of challenges of occupational safety specialists and self – reported personal initiative, thus H2.3 was not supported.

**Table 3.26:** Summary of Hypothesis Testing Results

<b>No.</b>	<b>Hypothesis</b>	<b>Result</b>
H1.1.	Challenges of occupational safety specialist negatively correlated with psychological safety.	Not Supported
H1.2.	Challenges of occupational safety specialists negatively correlated with professional self – efficacy belief.	Supported
H1.3	Challenges of occupational safety specialists positively correlated with self – reported personal initiative.	Not Supported
H2.1	Psychological safety is positively correlated with self-reported personal initiative.	Supported
H2.2	Psychological safety is positively correlated with professional self – efficacy belief.	Supported
H2.3	Psychological safety has moderator role between challenges of occupational safety specialists and self – reported personal initiative.	Not Supported
H3.1	Professional self – efficacy belief has mediator role between psychological safety and self-reported personal initiative	Supported
H3.2	Professional self – efficacy belief has moderator role between challenges of occupational safety specialists and self-reported personal initiative.	Supported

## CHAPTER 4 - DISCUSSION

This study was designed as an exploratory research to investigate relationships between variables. Only significant results were discussed. As well as the object of this study was to investigate relationship between challenges of occupational safety specialists, psychological safety, professional self – efficacy belief, and proactive work behavior, self-reported personal initiative which is a one of the proactive work behavior was examined in the context of individual level professional self – efficacy belief, organizational level challenges and organizational level psychological safety perception. This study is important in terms of assessing self-reported personal initiative not just in case individuals feel psychologically safe but also in case they feel challenges. Within this object, findings obtained from statistical analysis have been discussed in this section.

Additionally, challenges of occupational safety specialists scale and professional self – efficacy belief scale was developed, and self-reported personal initiative scale was adapted into Turkish within this study. Findings obtained from reliability and validity analysis of scales has shown that scales was psychometrically applicable. Although it is not the main object of this study but significant relations between demographics and research variables was discussed.

### **4.1.The Discussion of the Relationships Between Demographics and Challenges of Occupational Safety Specialists Psychological Safety, Professional Self – Efficacy Belief, Self-Reported Personal Initiative**

Even it is not involved in the hypothesis of this study, significant relations between demographics and psychological safety, self-reported personal initiative, professional self – efficacy belief, challenges have been discussed in this section.

#### **4.1.1.The Discussion of Relationship Between Age and Research Variables**

According to findings obtained from results of this study, age was found only negatively related to legislative challenges. Interestingly, there was no relation between age and challenges of occupational safety specialists, its other dimensions or organizational challenges. This result showed that older occupational safety specialists feel less legislative challenges in that comprehension and implementation of legislation is not hard for them rather it becomes easier for older occupational safety specialists.

Occupational safety specialists are assigned a workplace to ensure health and safety through the way that to adapt this workplace(s) into 6331 no. Turkish Occupational Health and Safety Law. Occupational safety specialists are expected as actor of sector to guide in ensuring safety of employees, organization and workplace and to audit practices of OHS legislation (Akboğa kale et al, 2018). Indeed, the major worktime of occupational safety specialists is occupied by working on legislation to turn theoretical responsibilities into practice. They becomes experienced when they are getting older in condition that they work as an occupational safety specialists. Another findings of this research supported this argument that tenure as an occupational safety specialist was also negatively related with legislative challenges.

As a result, other challenges dimensions may requires personal, organizational or contextual chacteristics to deal with but legislative challenges could be handled by legislative knowledge. Older occupational specialists have chance to not just to turn theoretical information into practice but also they have advantage to see more practical applications. This reciprocal processes could facilitate comprehension and implementation of legislation for older occupational safety specialists. Additionally, it could be said that older occupational safety specialists are more capable of transferring theory to practice.

#### **4.1.2. The Discussion of Relationship Between Education Status and Research Variables**

Education status was found only negatively related to legislative challenges. There was no relation between education status and challenges of occupational safety specialists, its other dimensions or organizational challenges. This result displayed that educated occupational safety specialists feel less legislative challenges than less educated in that comprehension and implementation of legislation is not hard for them rather it becomes easier for educated occupational safety specialists.

Occupational safety specialists who participated to this study were at least associate degree. Associate degree occupational safety specialists taking 220 hours course after graduated and then, they take an exam to be occupational safety specialists. Associate degree program in Turkey mostly devoted to practical knowledge than theoretical knowledge. Even participants with bachelor's degree was not much, this was stemmed from that bachelor's degree of occupational health and safety is new in Turkey as their programme not robust in terms of legislative knowledge rather mission of bachelor' degree of occupational health and safety focuses on modern occupational health and safety implementations. MA degree of occupational health and safety is mostly studied to get B class occupational health and safety rather quality education. Even students in MA occupational health and safety are not expected to attend classes rather it is mostly enough to take exams. So, being graduated from MA occupational health and safety doesn't mean that they get fully appropriate legislative education.

All this situations supports that relation between education and challenges was not stemmed from legislative knowledge. Discussion stated above signifies that university education about legislative knowledge is inadequate even it is thought that associate degree which is lowest degree in education for occupational safety specialists give much more legislative knowledge to implement in the field.

Findings of this results could be interpreted that educated occupational safety specialists have more reading comprehension, interpretation and transferring theory to practice than uneducated.

#### **4.1.3.The Discussion Relationships Between Service Type and Research Variables**

Findings has showed that service type was negatively related to challenges and its dimensions that are insufficient awareness of employer, unwillingness of employees to participation, ignorance of employees, providing lack of resources and organizational challenges, and positively related to psychological safety. Also, there was no relationship between service type and legislative challenges and law based challenges. This findings showed that occupational safety specialists working in Public Health and Safety Unit feel more insufficient awareness of employer, unwillingness of employees to participation, ignorance of employees, providing lack of resources and organizational challenges than occupational safety specialists who working as subject to an employer in a company and who work as individually. Also, occupational safety specialists who works as subject to an employer in a company feel this challenges more than who works individually. Another findings related to service type was that, occupational safety specialists who works as subject to an employer in a company feel psychologically safer than who works in Public Health and Safety Unit.

Occupational Safety specialists who works in Public Health and Safety Units are consultants that service companies regarding occupational health and safety. Occupational safety specialists who works an consultants in Public Health and Safety Unit service companies at least 40 min. for high dangerous, 20 min. for dangerous and 10 min. for each employees. This times are not sufficient to manage occupational health and safety effectively. Occupational safety specialists should be always accessible whenever employees needed. They mostly service more than one company so they confront many employers and employees than occupational



safety specialists who works as subject to an employer in a company. They are also expected by their employer (Public Health and Safety Unit) to retain works rather giving up in companies that they service even if they confronted many barriers, challenges and so on. Because occupational safety specialists earn money not on behalf of theirselves rather they causes Public Health and Safety Unit to earn money and then they receive salary from their employer (Public Health and Safety Unit). They wish to make much profit with limited resources by forcing occupational safety specialists to work hard. This lead to other stressfull forces such as to finish works quickly to transfer another company owing to that their employers doesn't desire to lose client. Thus, occupational safety specialists who work in Public Health and Safety Units have less time to express importance of OHS to employees and employers and to create safety culture in organizations. This may creates ignorance of employees and unwillingness of employees to participation. So, it is so hard to follow organizations' health and safety implementations in terms of whether it is complied with OHS law, employees comply with instructions or employers meet their OHS related obligations. Occupational safety specialists are subject to employer with a work contract except outsourcing consultants working in Public Health and Safety Unit as an occupational safety specialists. So, employers don't see occupational safety specialists who work in Public Health and Safety Unit as part of their company. In addition to that, employers are not willing to implement OHS obligations and consider OHS investments as redundant ( ÇSGB &ILO, 2017). For this reasons, it is acceptable that occupational safety specialists who work in Public Health and Safety Unit feel more insufficient awareness of employer and providing lack of resources challenges than who works as subject to an employer in a company. Besides, occupational safety specialists who work in Public Health and Safety Unit assigned with different employers, employees, challenges, workplaces with lower salaries (Namal, Kanber & Kavas, 2016) than occupational safety specialists who work as a subject to an employer in a company. Thus, it could be said that exposing much more duties and responsibilities could produces organizational challenges for occupational safety specialists who work in Public

Health and Safety Units than occupational safety specialists who work as subject to an employer in a company.

It would be interesting that, as stated above, individual consultants have less related challenges than others. However, their work principal and processes of individual occupational safety specialists are different than consultants who work in Public Health and Safety Unit. Individual occupational safety specialists don't subject to an employer like Public Health and Safety Units to force them to work faster to make money. Probably, employers recruiting individual occupational safety specialists from their acquaintance that have intimate relation with employer or acquaintance of employer but as opposed to that employer wouldn't have any relation before recruiting occupational safety specialists working in Public Health and Safety Unit owing to that employer of Public Health and Safety assigns relatively 'convenient' occupational safety specialist to service companies. To be an acquaintance of employer may reduces related challenges in that approach of employer to OHS would be changed. In that states, employers would also provide more OHS related resources. In this situation, there was work contract between individual occupational safety specialists and employer. So, this processes make easier to adopt occupational safety specialists in terms of employer and in turn, employees as well. Even there was a work contract between individual occupational safety specialists and employer, they work individually in that working without feeling less force than occupational safety specialists working in Public Health and Safety Unit.

Another finding of this section occupational safety specialists who work in Public Health and Safety Unit feel less psychological safety than occupational safety specialists who work as a subject to an employer in company. Vast majority of occupational safety specialists are based on engineering field. Namal, Kanber and Kavas (2016) thought in their study that engineers prefer occupational safety field because of employment anxiety. This could be generalized to other minor majority of occupational safety specialists graduated from different fields because

after 6331 no. OHS Law enacted within adaptation of European Union and International Labour Offices (ILO) standards, it is considered by individuals who prefer to be occupational safety specialists as a 'work gate'. Especially, it could be said for occupational safety specialists who prefer to work in Public Health and Safety Unit that unemployment anxiety is more dominant for them owing to that they continue to work even if they come across much more different employers, employees, challenges, workplaces with lower salaries than occupational safety specialists who work as a subject to an employer in a company. Indeed, this was supported by the study of Namal, Kanber & Kavas, (2016) in that they claimed that due to recruiting occupational safety specialists with cheap salaries, Public Health and Safety Units leads OHS to away from the main purpose. This reasons causes occupational safety specialists who works in Public Health and Safety Units to feel psychologically less safer than occupational safety specialists who works as a subject to an employer because according to Kahn (1990) employees who feel less psychological safety feel anxiety on negative consequences on career, self image or status.

Ulubeyli&Arslan (2016) and Akboğa (2016) discussed in the literature that occupational safety specialists have to work independently. This finding supports this argument in that when going through individual occupational safety specialists consultants to occupational safety specialists who work subject to an employer in a company, and to occupational safety specialists who work subject to an employer in a company to occupational health and safety consultants working in Public Health and Safety Units, insufficient awareness of employer, unwillingness of employees to participation, ignorance of employees, providing lack of resources and organizational challenges increases, and psychological safety decreases.

#### **4.1.4. The Discussion of Relationships Between Speciality Class and Research Variables**

Speciality class was negatively related to challenges of occupational safety specialists, insufficient awareness of employer, ignorance of employees, law based challenges and legislative challenges. It is required in Turkish OHS legislation to be A class occupational safety specialists that to spend 4 years active tenure with B class occupational safety speciality certificate, and the similar condition stated in Turkish OHS legislation that is required to be B class occupational safety specialists that to spend 3 years active tenure with C class occupational safety speciality certificate. One exception is that engineers, architectures or technical personnels graduated from OHS or Occupational Safety master programme could participate B class certification exam and can get B class occupational safety certification without 3 years active tenure with C class occupational safety speciality certificate (DARTOSSR, 2016). Shortly, apart from exceptions, taking exam and tenure with related occupational safety speciality class certificate is striking to skip upper level that are from C class to B class and B class to A class.

Findings in this section showed that when certificate class skipping upper level, and the legislative challenges decreases. Questions in exams to get occupational safety specialists certificate contains %30 of legislative questions. Thus, it could be said that A class occupational safety specialists have more legislative knowledge than B and C class, and it would be told that the questions in A class exam are harder. In addition to that, to get A class certificate requires more tenure as a occupational safety specialist than B class and C class so A class occupational safety specialists have more OHS related implementation and experiences. This reciprocal processes that involves theoretical knowledge and tenure would promotes each other in terms of strenghtening to handle with legislative challenges. Thus, A class occupational safety specialists could easily

handle with legislative challenges than B class and C class. Similar processes could be thought between B class and C class occupational safety specialists.

Besides, when certificate class skipping lower level, the insufficient awareness of employer increases. Vast majority of occupational safety specialists who C class occupational safety speciality certificate, which is the lowest level certificate, are new graduated or new in the occupational health and safety field. Thus, it is acceptable that they confront more challenges than B class and A class occupational safety specialists. From aspect of employers, first of all, they have to maintain their work to make profit and they generally consider occupational health and safety redundant and as interference to manufacturing or service (ÇSGB & ILO, 2017). Therefore, it is hard for lower class occupational safety specialists who are relatively less experienced in OHS field to tackle with employers than upper level.

Another finding in this section is that ignorance of employees decreases, when certificate class skipping upper level. It could be acceptable that upper level occupational safety specialists are more capable of transferring tenets of occupational health and safety to employees by means of their knowledge and experiences so this could diminish the ignorance of employees on OHS, rather this enhance the importance of this field. Therefore, for this reasons upper level occupational safety specialists confront less ignorance of employees challenges.

Interestingly, there was no relationship between unwillingness of employees and certification class. It would be thought by this finding that upper level occupational safety specialists aren't much more esteemed and regarded by employees participate OHS implementation.

Consequently, the law based challenges decreases when certificate class skipping upper level, means upper level occupational safety specialists confront less law based challenges. It could be said that upper level certified occupational safety

specialists more capable of tackling with commands and obligations regarding their authority, duty and responsibilities.

#### **4.1.5. The Discussion of Relationships Between Tenure and Research Variables**

Tenure as an occupational safety specialist was negatively related to challenges of occupational safety specialists of occupational safety specialists and its dimension that are insufficient awareness of employer, ignorance of employees and legislative challenges. Total tenure was also negatively related to challenges of occupational safety specialists of occupational safety specialists and its dimensions that are ignorance of employees, providing lack of resources and legislative challenges. It could be said that total tenure involve more general problem solving experiences in occupational health and safety area, and different work field(s), rather tenure as an occupational safety specialists contains have just specific experiences related to occupational health and safety. Distinctively, when total tenure of occupational safety specialists ascending, insufficient awareness of employer (more general than providing lack of resources) decreases but tenure as an occupational safety specialist wasn't related to insufficient awareness of employers. This means that tenure in different fields promotes occupational safety specialists to tackle with insufficient awareness of employer in that different fields may contribute to general problem solving capacities of occupational safety specialists. However, when tenure as an occupational safety specialists ascending, providing lack of resources decreases but total tenure wasn't related to providing lack of resources. Providing lack of resource is about not to provide OHS related resources caused by employer and more OHS specific challenge than insufficient awareness of employer. Additionally, as stated above, tenure as an occupational safety specialists is more focused on occupational health and safety related background and implementations. So, it is acceptable that tenure as an occupational safety specialists was related to providing lack of resources, rather total tenure

wasn't because it focuses on more different and general implementations and background.

#### **4.1.6. The Discussion of Relationships Between Danger Class and Research Variables**

Danger class was positively related to challenges of occupational safety specialists and its dimension that are insufficient awareness of employer, ignorance of employees and legislative challenges. According to 6331 no. occupational health and safety law, workplaces are divided into 3 danger classes that are high dangerous, dangerous and low dangerous. Dangerous classes are mainly formed according to main processes of workplace regardless of the employee count. Such as mining and construction are high dangerous, painting and service are dangerous and office works and retail are low dangerous. This classification is important in terms of the responsibilities and obligations are increased when danger class ascending. Such as employers are obligated to recruit occupational safety specialists at least 40 min. per employees in high dangerous workplaces, at least 20 min. per employees in dangerous workplaces, and at least 10 min. per employees in low dangerous workplaces. OHS trainings have to be updated at least in 1 year for high dangerous workplaces, at least 2 years for dangerous workplaces and at least 3 years for low dangerous workplaces. Health surveillances have to be updated at least 1 years for high dangerous workplaces, at least 3 years for dangerous workplaces and at least 5 years for low dangerous workplaces ( OHSSR, 2014).

One of the finding of this study showed that insufficient awareness of employers increases when danger class was ascending. It could be expected that when dangerous processes arises, employers should be awared to be prepared for dangers but result is different. According to obligations shortly stated above, it could be said that more dangerous workplaces spend more time and probably more money for OHS related implementations. This was supported by another finding of this section that danger class was positively correlated with providing lack of resources.

Thus, intense obligations shortly stated above and unwillingness of employers to spend time and money for OHS with huge fines for more dangerous workplaces would promote to employer based challenges for more dangerous workplaces. This was also supported by the finding that unwillingness of the employees and danger class wasn't related, probably because the sanction threats of managements on employees to participate in order not to get OHS related fine and penalties. Thus, employers in the higher danger class workplaces would confront more OHS related issues to tackle with. This reasons also lead to avoid quality OHS works, rather it could promotes employers to comply with obligations only on the paper. This all reasons could enhances insufficient awareness of employers challenge in more dangerous worplaces for occupational safety specialists.

One of the other interesting finding was that ignorance of employees challenges increases when danger class was ascending, shows that employees are used to confront dangers in more dangerous workplaces than lower dangerous workplaces so they in turn ignore dangers.

#### **4.1.7.The Discussion of Relationships Between Number of Workplaces and Research Variables**

Number of workplaces was negatively related to professional self – efficacy belief and psychological safety, positively related to organizational challenges, challenges of occupational safety specialists and its dimensions that are insufficient awareness of employer, unwillingness of employees, ignorance of employees and providing lack of resources.

Professional self – efficacy belief was negatively related to number of workpaces. Employer(s) tends to only comply with legal responsibilities rather than serving quality OHS services. Besides, works of occupational safety specialists exist on paper only, not in practice efficiently (ÇSGB & ILO, 2017). It could be also thought that servicing the more workplaces would reduces to transfer tenets of



occupational health and safety to employees and employers in that another result of this section showed that when number of workplaces ascended, challenges regarding to employees and employers increased. In light of this arguments, it could be said that this all hinder occupational safety specialists who service more workplaces to set a goal regarding to occupational health and safety, in turn diminishes professional self – efficacy belief. Bandura (1997) suggested that setting goals influences self-efficacy and self-efficacy influences the goals an individual assign for themselves. Other researches that evaluated the relationship between self-efficacy and goals and have displayed that individuals with higher level of self-efficacy were more likely to assigns harder goals for themselves (Boyce and Bingham, 1997).

In order to ensure psychologically safe organizations, employees are guarenteed that they won't be accused and embarrassed in case of fault (Schepers, 2008). Servicing the more workplaces brings the more responsibilities and duties with limited authority (ÇSGB & ILO, 2017). This lead to make more faults their duties so they would be more likely to be accused and embarrassed by their employers.

Also, number of workplaces was related to challenges and its dimensions regarding employees, organizations and employers. This could be acceptable that servicing the more workplaces brings the more challenges related to employees, organizations and employers. This was supported by that number of workplace was not related to law based or legislative challenges.

#### **4.1.8.The Discussion of Relationships Between Weekly Average Working Time and Research Variables**

Weekly average working time was positively related to challenges and it dimensions that were insufficient awareness of employer, unwillingness of

employees to participation, ignorance of employees, providing lack of resources and organizational challenges.

According to Turkish 4857 no. Work Law, weekly working hour was stated as utmost 45 hours. Works above 45 hours specified as ‘over work’ in Work Law. Findings in this section showed that occupational safety specialists working as ‘over work’ in a week, were the more likely to confront the more challenges regarding to employers, employees and organizations. Average working time rely on scientific base in terms of physical and psychological resilience of employees. This finding showed that occupational safety specialists who work as ‘over work’ in a week, less likely to cope with challenges regarding to employers, employees and organizational owing to their psychological and physical resilience decreases.

#### **4.1.9. The Discussion of Relationship Between Total Employee Number and Research Variables**

Total employee number is just positively related to providing lack of resources. The main object of occupational health and safety is to ensure employees to healthy and safe workplaces. To create this kind of workplaces, employers have to provide resources. Therefore, it could be thought that when total employee number increases, occupational safety specialists have to expect more resources from employers to create to ensure healthy and safe workplaces. On the other hand, according to study of ÇSGB & ILO (2017), employers consider occupational health and safety as an legal obligation, they do not to desire to spend time or money for it. This creates the more providing lack of resources for occupational safety specialists.

It was also interesting that total employee number was not related to challenges dimensions regarding to employees that are the unwillingness of employees to participation, and the ignorance of employees. This result showed that employee related challenges wasn’t increased, when total employee number was

ascended. This, having no relation between number of workplace and employee related challenges, could be stemmed from that the service time of occupational safety specialists in workplaces vary according to employee number. When employee number ascended, then the service time of occupational safety specialists increased. Service time of occupational safety specialists are adjusted as per employee. This means that the quantity of employees were not important in terms of employee based challenges rather it could be said that researchers should focus on cultural and managerial aspect to investigate employee related OHS challenges. Every organizations have a safety culture and employees behave according to this culture.

#### **4.1.10. The Discussion of Relationships Between Occupational Liability Insurance and Research Variables**

Occupational liability insurance was positively related to insufficient awareness of employer, means that occupational safety specialists who have occupational liability insurance confront less insufficient awareness of employer. Occupational liability insurance are made by employers to occupational safety specialists to protect them from probable undesirable consequences that could be stemmed from their OHS related works. This finding showed that employers who haven't made occupational liability insurance to occupational safety specialists care less about occupational safety specialist, and thereby, occupational safety specialists who do not have occupational liability insurance confront more insufficient awareness of employer.

#### **4.1.11. The Discussion of Relationships Between Additional Duty and Research Variables**

Additional duty is negatively related to self-reported personal initiative, shows that when occupational safety specialists have additional duty, they show more self-reported personal initiative.

The main duty of occupational safety specialists are to provide services to workplaces in order to adapt them 6331 no. OHS Law. However, some occupational safety specialists have additional duty that most probably related to their background such as engineering, quality or other managerial duties. This result showed that occupational safety specialists who have additional duty seek more alternative routes to overcome barriers before problems occur (Frese et.,al, 1995).

#### **4.1.12.The Discussion of Relationships Between Social Security Institution Pension and Research Variables**

Social security institution pension was positively related to professional self – efficacy belief, and negatively related to challenges of occupational safety specialists of occupational safety specialists and its dimensions that are insufficient awareness of employer, unwillingness of employees to participation, ignorance of employees and organizational challenges.

Social security institution pension was positively related to professional self – efficacy belief, means that occupational safety specialists whom social security pension deposited from their salaries, shows more professional self – efficacy belief. Cooperated firms more likely to deposit social security pension from employers' salary, not from minimum salary. Shortly, it could be thought that occupational safety specialists who work in cooperated firms show more professional self – efficacy belief.

On the other hand, social security institution pension was negatively related to insufficient awareness of employer, unwillingness of employees to participation, ignorance of employees and organizational challenges, means that occupational safety specialists whom social security pension deposited from minimum salaries the more likely to have this stated challenges. Again, it could be said that occupational safety specialists who work in less cooperated firms have more

insufficient awareness of employer, unwillingness of employees to participation, ignorance of employees and organizational challenges.

#### **4.2.The Discussion of the Mediator Role of Professional Self – Efficacy Belief Between Psychological Safety and Proactive Work Behavior**

Professional self – efficacy belief was mediated the relationship between psychological safety and self-reported personal initiative. This finding showed that occupational safety specialists who work in psychological safer organization with higher level professional self – efficacy belief show more self-reported initiative. Another finding of this study was that professional self – efficacy belief positively correlated with both psychological safety and self – reported personal initiative.

Employees take more risks to seek feedback and propose solutions at workplaces that supportive organizational climate ensured (West, 1990). The feedback given to an individual could boost self-efficacy beliefs or diminish them (Bandura, 1997). According to this finding obtained in this study, in psychological safer organizations, occupational safety specialists are more encouraged and supported to show their capabilities. Thus, self – efficacy perceptions of individuals are enhanced on what s/he could do with their capabilities. (Bandura, 1986). According to Bandura (1977), individuals incline to avoid conditions which they do not believe in that they could achieve, but become in and are pretentious in situation that they consider that they are able to be successful. In light of this finding, it could be said that occupational safety specialists who believe to be succesfull on their tasks in psychologically safer organization are more likely to show self-reported personal initiative.

### **4.3. The Discussion of the Moderator Role of Professional Self – Efficacy Belief Between the Relationship of Challenges and Self-Reported Personal Initiative**

In this section, moderator role of professional self- efficacy belief between the relationship of challenges and its dimensions and, self – reported personal initiative were discussed. According to the correlation analysis of this study there was no relation between challenges, its dimensions ( except legislative challenges), and self- reported personal initiative. However, moderation analysis showed that professional self – efficacy belief have moderator role between the challenges of occupational safety specialists and self – reported personal initiative. Findings of this section showed that, in case of low professional self – efficacy belief, occupational safety specialists show more self- reported personal initiative if challenges and its dimensions except legislative challenges increased.

Even occupational health and safety is a multi – disciplinary field regarding to psychology, statistic, ergonomics, law, sociology and etc., 6331 no. OHS Law expect ‘joint’ role from occupational safety specialists at work. Additionally, it could be said that the OHS related burdens are on the shoulders of occupational safety specialists. Occupational safety specialists are expected as actor of sector to guide in ensuring safety of employees, organization and workplace and to audit practices of OHS legislation (Akboğa kale et al, 2018). Occupational safety specialists are exposed intense responsibilities (Taşkıran, 2016). They are the more expected to fix OHS related issues than occupational hygienist and workplace nurse. This could be stemmed from that occupational safety specialists have the more service time than other occupational health and safety professionals. Besides, occupational safety specialists would be perceived as a first responsible of work accidents at workplaces. Thus, occupational safety specialists are generally charged with injuries and accidents of employees at workplaces. They are exposed to legal force in that they would be punished or prosecuted in case of accidents. In addition to that the duties of occupational safety specialists stated in legislation involves controlling of many implemantions (DARTOSSR, 2016). For this reasons,

occupational safety specialists have to control employees and OHS related implementation to avoid undesirable consequences such as legal sanctions, punishments or prosecutions. Control is generally regarding to responsibilities or obligation; an individual who is obligated for a consequence may confront negative sanctions in case s/he made something wrong. Individuals who have high level control orientation would more likely to have stronger feelings of responsibility (Morrison & Phelps, 1999); this kind of individuals usually don't have chance to give up easily when challenges appear (Bandura, 1997), they have to seek more opportunities to perform (Folkman, 1984); they must have higher level of hopes for achievement (Heckhausen & Schulz, 1995) and in turn, it could be said that they must have higher level of professional self – efficacy belief. Besides, they actively seek for information and feedback (Ashford & Tsui, 1991), that generates better insight of where to take initiative (Frese and Fay, 2001). This finding showed that when challenges level getting higher ( except legislative challenges), occupational safety specialists need more professional self – efficacy belief since they have to control implementations and employees that they are obligated and responsible and, that may have undesirable consequences. Thus, occupational safety specialists show more personal – initiative to in case of low professional self – efficacy belief on to control OHS related implementation and employees to avoid perception of getting punished or prosecuted legally. It could be also said that in case of low professional self – efficacy belief occupational safety specialists have to pass over their inefficacy by trying to take more initiative to increase their belief of achievement to show that they control implementations and employees, otherwise occupational safety specialists know that they would confront intense legal sanctions.

Additionally, self – reported personal initiative of occupational safety specialists wasn't affected by organizational challenges, challenges and its dimensions except legislative challenges, when professional self – efficacy belief high. Occupational safety specialists develop beliefs on their work capabilities as a result of how successful they perceive to conduct their duties, roles and tasks

effectively. When plans are progressed and took into account, barriers have to be overcome. Personal initiative means overcoming actively challenges and carrying out active goals and plans (Frese & Fay, 2001). Bandura (1997) suggested that setting goals influences self-efficacy and self-efficacy influences the goals an individual assign for themselves. This finding showed that occupational safety specialists who devoted to their goal (high professional self – efficacy belief), ignores organizational challenges, challenges and its dimensions ( except legislative challenges), and show more self – reported personal initiative.

On the other hand, there was significant relationship between legislative challenges and self-reported personal initiative for high professional self – efficacy belief. Finding of this section showed that, in case of high professional self – efficacy belief, occupational safety specialists show more self- reported personal initiative if legislative challenges decreases. 6331 no. OHS legislation have attribute many responsibilities and obligations to workplaces, and occupational safety specialists have been expected to implement and control this legislative implemantations and responsibilities. It could be said that 6331 no. OHS legislation dominates the worklife of occupational safety specialists. Therefore, it seems as guide for occupational safety specialists to reach their OHS related goals in the organizations. Personal initiative is described as being persistent in dealing with issues in following goals (Frese & Fay, 2001). As stated above, Bandura (1997) suggested that setting goals influences self-efficacy and self-efficacy influences the goals an individual assign for themselves. Also, proactivity implies to long term focus on and forecast that not to wait till demand is responded. Long term forecast and focus enable individuals to anticipate necessary action to be taken before challenges, problems or opportunities occured. (Frese et al., 1997). On the other hand, 6331 no. OHS law exposed many rapid changes in OHS legislation, to be expected to apply legislation in short time. All parties agree with that present OHS legislation couldn't not properly comprehended and implemented (ÇSGB & ILO, 2017). Consequently, it could be said that this rapid changes and complexity in comprehension and implementation reduces the persistence of occupational safety



specialists and hinder them to focus on and forecast probable outcome. Therefore, when occupational safety specialists devoted to their goals ( high professional self – efficacy belief), they need to focus on and forecast probable outcomes, so occupational safety specialists need less legislative challenges to show more self – reported personal initiative.

#### **4.4.The Discussion of the Moderator Role of Psychological Safety Between the Relationship of Challenges of Occupational Safety Specialists and Self-Reported Personal Initiative**

In this section, moderator role of psychological safety between the relationship of organizational challenges self – reported personal initiative, and also law based challenges and self – reported personal initiative were discussed. Findings of this section showed that, in case of low psychological safety, occupational safety specialists show more self- reported personal initiative if organizational challenges and law based challenges increased.

According to Vroom (1964), barriers might sometimes causes reduces personal initiative and sometimes may raises the motivation to engage in a self-set goal. This result showed that organizational challenges in psychologically less safe organizations raises the motivation of occupational safety specialists to show more self – reported personal initiative. On the other hand, 6331 no. OHS Law includes broader approaches in implementation and behavior of parties (employers, employees and occupational health and safety professionals) than legislation. Thus, occupational safety specialists expect 6331 no. Law to facilitates their works in implementation. This results showed that occupational safety specialists who consider 6331 no. OHS law as not a facilitator in psychological less safe organizations, show more self – reported initiative to remedy.

#### **4.5. The Discussion of the Relationship Between Psychological Safety, Professional Self-Efficacy Belief, Proactive Work Behavior And Challenges of Occupational Safety Specialists at Work**

There was negative and significant correlation between challenges of occupational safety specialists, insufficient awareness of employer, unwillingness of employees to participation, providing lack of resources, ignorance of employees, organizational challenges and professional self-efficacy belief. Shortly, professional self-efficacy belief was negatively related to employer, employee and organization based challenges, rather it was not related to law based and legislative challenges. Self-efficacy is identified as a belief that individuals could successfully perform the required action to generate an outcome (Bandura, 1977). Outcome of works of occupational safety specialists could be seen in organizations, over employers or employees. It could be said that when occupational safety specialists see these challenges raising, it means that they couldn't generate an outcome and in turn, self-efficacy belief diminishes. In addition to that, as indicated in self-efficacy theory, while failures lower self-efficacy belief, successful performance increases self – efficacy belief (Bandura, 1986).

Professional self-efficacy belief was also positively correlated with self-reported personal initiative. Morrison and Phelps (1999) - they used the concept of “taking charge” that is very similar to personal initiative- found that self-efficacy was associated with personal initiative. According to Bandura (1977), individuals incline to avoid conditions which they do not believe in that they could achieve, but become in and are pretentious in situation that they consider that they are able to be successful. In light of this finding, it could be said that occupational safety specialists who believe to be successful in their tasks are more likely to show self-reported personal initiative. Occupational safety specialists are prominent at workplaces in that they are abided by their occupational health and safety related skills, abilities and knowledge in implementations and theory ( such as technical or legislative). According to Bandura (1997), knowledge, skills, and abilities are

sources in that they provides people to deal with the job requirements. They allow individual to mastery experience, and this in turn, provides people to improve self-efficacy. Besides, it could also be thought that professional self-efficacy belief of occupational safety specialists are stemmed from their OHS related knowledge, skills and abilities. Additionally, high level of ability, skills and knowledge are antecedents of personal initiative (Fay and Frese, 2001). Therefore, it could also said that when skills, knowledge and abilities enhanced, self – reported personal initiative of occupational safety specialists raised.

There was positive correlation between psychological safety and professional self- efficacy belief. Employees take more risks to seek feedback and propose solutions at workplaces that supportive organizational climate ensured (West, 1990). According to this finding, in psychological safer organizations, occupational safety specialists are more encouraged and supported to show their capabilities. Thus, self – efficacy perceptions of individuals are enhanced on what individuals could do with their capabilities. (Bandura, 1986). Psychological safety was also positively correlated with self-reported personal initiative, suggesting that occupational safety specialists show more self-reported personal initiative in psychologically safer organization. It was an expected finding in this research. Individuals who expressed to be supported by or satisfied with their work group are more likely to show proactive behaviors (LePine & Van Dyne, 1998). Similarly, employees who percept support from the organization (Ashford et al., 1998) or from their coworkers (Griffin et al., 2007), showing more proactive behaviors at work. This finding was important in that 6331 no. OHS law expect occupational safety specialists to be proactive that to provide interventions before risks and hazards occur. Thus, it could be said that occupational safety specialists who work in psychological safer organizations work more properly by foreseeing probable risks and hazards. Another important finding of this research was that individual consultants feel psychological safer than occupational safety specialists who work as a subject to an employer, and occupational safety specialists who work as a subject to an employer feel psychological safer than occupational safety specialists

who work in Public Health and Safety Unit. So it could be considered by other researchers in investigating personal initiative behavior of occupational safety specialists.

An interesting result was that legislative challenges were also positively correlated with psychological safety, suggesting that occupational safety specialists experience more legislative challenges in organization when they feel psychological safer. Occupational safety specialists have to read, study on, research and follow up updates in legislation to handle with legislative challenges, From the negative perspective of psychological safety, people sometimes intend to exert less effort in the psychological safety climate (Latane, Williams, & Harkin, 1979), because employees who feel psychological safe behaviorally tend to be more likely open to communicate and seek feedback (Pearsall & Ellis, 2011), thus this ensures occupational safety specialists to reach instant legislative knowledge easily by other colleagues but legislative challenges requires more comprehensive struggle to overcome.

Providing lack of resources was negatively correlated with self-reported personal initiative. Theoretical base of personal initiative as outlined by Frese, Fay, Hilburger, Leng and Tag (1997) includes 'plan and execution' in action plan. When a goal was set, an individual investigate informations and makes prognosis of future situations to deal with dynamic processes. The information is utilized to improve plans that are then carried out. An action is monitored during the plan execution ( Frese and Fay, 2001). It could be said that to manage plan and execution phase properly, individuals need resources. This results showed that the more employer provides resources to enhance OHS the more occupational safety specialists show self-reported personal initiative.

Law based challenges were positively correlated with self-reported personal initiative. Even legislation involves more specific solution to implemantions, law includes broader approaches in implemenation and behavior of parties (employers,

employees and occupational health and safety professionals). Thus, occupational safety specialists expect 6331 no. Law to facilitate their work in implementation. This results showed that occupational safety specialists who consider 6331 no. OHS law as not a facilitator to their work, show more self – reported initiative to remedy. In these cases, occupational safety specialists have to seek more alternative routes to overcome barriers (Frese et.,al, 1995).



## CHAPTER 5 - CONCLUSION

As well as the object of this study was to investigate relationship between challenges of occupational safety specialists, psychological safety, professional self – efficacy belief, and proactive work behavior, self-reported personal initiative which is a one of the proactive work behavior was examined in the context of individual level professional self – efficacy belief, organizational level challenges and organizational level psychological safety perception.

After 6331 no. OHS Law enacted, the interest of the safety climate of organizations and psychological state of occupational safety specialists have been increased. Investigation of proactive work behavior of occupational safety specialists is considerable since 6331 no. OHS Law which is a ‘guide’ of occupational safety specialists, is based on the proactive approach. Although proactive work behaviors such as personal initiative was mostly examined from the aspect of positive phenomenans such as cognitive abilities, support, achievement motive, active coping, this study was important in terms of evaluating personal initiative from challenges aspect.

Even associate degree graduates from occupational health and safety take more theoretical and practical courses intended to apply field regarding to OHS legislation, they face more legislative challenges than other graduates. This result generates that associate degree graduates should be more trained in terms of legislation by increasing the quality of courses. Also, it has been supported in this study that the more occupational safety specialists work indepently, the less they face challenges. Additionally, work conditions and psychological state of occupational safety specialists working in PHSU should be studied specifically. Ignorance of employees challenge was more in high hazardous than low hazardous workplaces but results showed that occupational safety specialists confront more ignorance of employees in high hazardous workplaces than low hazardous.

Overwork also causes challenges for occupational safety specialists, most probably because of decreasing their performance. This study also exhibited the importance of social security pension in terms of relation with challenges and professional self – efficacy belief. Besides, rapid changes and complexity of legislation inhibits occupational safety specialists who have low professional self – efficacy belief to show self – reported personal initiative. Even responsibilities and obligations of occupational safety specialists have been referred in 6331 no. Law, distribution of of this responsibilities and obligations are problematic in practice in terms of controlling implementation and undesired consequences. Responsibilities and obligations have to be distributed in justice in practice, in turn control orientation to avoid occupational safety specialists perception of legal sanction, punishment and penalty threats. Besides, professional self – efficacy belief should be studied in wider aspect since it was correlated with many challenges and its dimensions. This study also showed that professional self – efficacy belief also more considerable than psychological safety to show self – reported personal initiative to overcome challenges. Consequently, this study unique in terms of that not all challenges are negative for proactive work behavior, rather in some challenging states or with under influence of some variables, individuals would show more proactive work behavior.

This study have some limitations as occupational safety specialists who work in public sector were excluded since employment obligation of occupational safety specialists was suspended to 2020. Additionally, proactive work behavior could have been measured by experimental method not by an scale. Also, personality trait of occupational safety specialists haven't been involved in this study. Other researchers would consider the personality trait of participants.

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## Appendixes

### A.1. Demographic Information Form ( English)

**Gender:** Female ( ) Male ( )

**Age :**(.....)

**Education Status:**

- ( ) Associate Degree
- ( ) Bachelors Degree
- ( ) MSc OHS without thesis
- ( ) MSc OHS with thesis
- ( ) MSc / MA in different area
- ( ) Doctorate Degree

**Service Type:** Public Health and Safety Unit ( ) Subject to an Employer in a Company( ) Individual Counselling ( )

**Which condition have you ensured to deserve to have Occupational Safety Specialist Title stated below?**

- ( ) I have taken exam as an engineer / architect.
- ( ) I have taken exam as a graduated of Science and Letter Faculty.
- ( ) I have taken exam as a graduated of Technical Education Faculty.
- ( ) I have taken exam as a graduated of Formal OHS Associate Degree Programme.
- ( ) I have taken exam as a graduated of Distance Education OHS Associate Degree programme.
- ( ) I have taken exam as a graduated of OHS Bachelors.

**Specialization Class:** C Class ( ) B Class ( ) A Class ( )

**Tenure (As an Occupational Safety Specialist)**

As an A class( .... Year /....Month)

As an B class( .... Year /....Month)

As an C class ( .... Year /....Month)

**Tenure (Whole Working Life )** ( .... Year /....Month)

**Danger class(es) ofworkplace(s) you work for:**Low Dangerous( ) Dangerous ( ) High Dangerous ( )

*You may mark more than one option.*

**Number of workplace you service as an occupational safety specialist:**  
(.....)

**Your weekly average working hours as an occupational safety specialist:** ( ..... )

**Total employee number in workplace(s) you service in scope of your OHS works:**

- 0–50
- 51–100
- 101–250
- 251–500
- 501–1000
- 1001–5000
- +5000

**Do you have Occupational Liability Insurance as an Occupational Safety Specialist?**

- Yes, I have.
- No, I haven't.

**Do you have additional duty apart from OHS services in your organization?**

- Yes, there are.
- No, there aren't.

**My Social Security Institution Pension is;**

- Deposited over minimum salary.
- Deposited over my salary.

## A.2. Demografik Bilgi Formu ( Turkish)

### Demografik Bilgi Formu

**Cinsiyet:** Kadın ( ) Erkek ( )

**Yaş:** (.....)

**Eğitim Durumu:**

- ( ) Önlisans  
( ) Lisans  
( ) İSG Alanında Tezsiz Yüksek Lisans  
( ) İSG Alanında Tezli Yüksek Lisans  
( ) Farklı bir alanda Yüksek Lisans  
( ) Doktora

**Hizmet Türü:** OSGB ( ) Firmada Bir İşverene Bağlı ( ) Bireysel  
Danışmanlık ( )

**İş Güvenliği Uzmanı ünvanını almaya aşağıdaki şartlardan hangisini sağlayarak hak kazandınız?**

- ( ) Mühendis/mimar ünvanım ile sınava girdim.  
( ) Fen – Edebiyat Fakültesi mezunu olarak sınava girdim.  
( ) Teknik Eğitim Fakültesi mezunu olarak sınava girdim.  
( ) Örgün Öğretim İş Sağlığı ve Güvenliği Önlisans bölümü mezunu olarak sınava girdim.  
( ) Açık Öğretim İş Sağlığı ve Güvenliği Önlisans bölümü mezunu olarak sınava girdim.  
( ) İş Sağlığı ve Güvenliği Lisans mezunu olarak sınava girdim.

**Uzmanlık Sınıfı:** C Sınıfı ( ) B Sınıfı ( ) A Sınıfı ( )

**Hizmet Süresi ( İş Güvenliği Uzmanı olarak)**

A Sınıfı olarak ( .... Yıl /....Ay)

B Sınıfı olarak( .... Yıl /....Ay)

C Sınıfı olarak ( .... Yıl /....Ay)

**Hizmet Süresi (Toplam Çalışma Hayatı )** (..... Yıl /..... Ay)

**Çalıştığınız işyer(ler)inin tehlike sınıf(lar)ı:** Az tehlikeli ( ) Tehlikeli ( ) Çok tehlikeli ( )

*Birden fazla seçenek işaretleyebilirsiniz.*

**İş Güvenliği Uzmanı olarak hizmet verdiğiniz işyeri sayısı:** (.....)

**İş Güvenliği Uzmanı olarak haftalık ortalama çalışma saatiniz:** ( ..... )

**İSG çalışmaları kapsamında hizmet verdiğiniz toplam çalışan sayısı:**

- 0-50
- 51-100
- 101-250
- 251-500
- 501-1000
- 1001-5000
- +5000

**İş Güvenliđi Uzmanı olarak mesleki sorumluluk sigortanız bulunuyor mu?**

- Evet, bulunuyor.
- Hayır, bulunmuyor.

**Organizasyonunuzda İSG hizmetleri dışında ek bir göreviniz var mı?**

- Evet, var.
- Hayır, yok.

**SGK Primum;**

- Asgari ücret üzerinden yatırılmaktadır.
- Maaşım üzerinden yatırılmaktadır.

Question No.	<b>A.3. Challenges Of Occupational Safety Specialist Scale ( English)</b>  This survey was prepared to investigate challenges of Occupational Safety Specialists working in private sector. Survey is consist of 36 questions. If you think to confront challenges stated below, please score in range of <input type="text" value="1"/> - Strongly disagree , 2- Disagree 3- Somewhat disagree , 4 – Somewhat agree , 5 - Agree , 6 - Strongly agree						
		Strongly disagree ( 1 )	Disagree ( 2 )	Somewhat disagree ( 3 )	Somewhat agree ( 4 )	Agree ( 5 )	Strongly agree ( 6 )
1	Necessary equipments, devices and tools aren't provided to staff by employer when employ staff in worpklace(s) that I service.	( )	( )	( )	( )	( )	( )
2	Proper Personal Protecting Equipments aren't provided to staff by employer when employ staff in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
3	My OHS field observation and audit reports aren't taken into consideration by employer(s) in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
4	Employer(s) tends to only comply with legal responsibilities rather than serving quality OHS trainings.	( )	( )	( )	( )	( )	( )
5	I am being felt by my employer(s) that not to behave in reverse manner to him/her because of paying my salary.	( )	( )	( )	( )	( )	( )
6	Time and place of OHS trainings are planned according to desire of employer(s) in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
7	Employer(s) doesn't allow me to write down his/her unwilling suggestions and precautions to approved notebook in workplace(s) that I service.	( )	( )	( )	( )	( )	( )

<b>8</b>	Employer(s) doesn't aware of their OHS responsibilities in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>9</b>	Employer(s) consider expenditure of Personal Protective Equipments prior to their preservation and ergonomic while suppling in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>10</b>	Forms, instructions, procedure and plans that I am preparing in scope of OHS are only used to meet to comply with legal responsibilities by employer(s) in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>11</b>	Employer(s) ignores suitability of staff in terms of health and safety while assigning a task to them in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>12</b>	Employer(s) conceives OHS investmensts as redundant in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>13</b>	Employer(s) doesn't take effective measures according to risk assesment in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>14</b>	Employer(s) doesn't follow whether OHS precautions are complied or not in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>15</b>	Employer(s) evaluates OHS trainings as waste of time in workplaces that I service.	( )	( )	( )	( )	( )	( )
<b>16</b>	Employees don't attend OHS trainings fully in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>17</b>	Employees don't attend Emergency Case Practices fully in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>18</b>	Employess don't comply with rules and instructions in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>19</b>	Employees evaluate OHS training as waste of time in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
<b>20</b>	Employees don't request employer to take measure when they confront a hazard workplace(s) that I service.	( )	( )	( )	( )	( )	( )



21	Employees ignore hazardous states and cases when they confront in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
22	OHS related precautions are remained limited in audit periods in workplace(s) that I service.	( )	( )	( )	( )	( )	( )
23	It is hard to follow OHS legislation uptades.	( )	( )	( )	( )	( )	( )
24	OHS legislation is hard to comprehend.	( )	( )	( )	( )	( )	( )
25	OHS legislation is hard to be totally implemented because of exhaustiveness.	( )	( )	( )	( )	( )	( )
26	OHS law mostly attributes the implementation of legislation to Occupational Safety Specialist.	( )	( )	( )	( )	( )	( )
27	OHS law is inadequate to ensure psychological well-being of employees in workplaces.	( )	( )	( )	( )	( )	( )
28	OHS law is inadequate to prevent accidents because of mostly focusing on technical measures.	( )	( )	( )	( )	( )	( )
<b>Please consider your organization while answering questions instead organizations you service.( Consider PHSU if you work in PHSU. Consider your firm if you work in a firm you subject to). If you work as an individual consultant of occupational safety, please don't mark questions below.</b>							
1	Carrier opportunity is limited in my poission.	( )	( )	( )	( )	( )	( )
2	My salary is inadequate against risks that I am exposed to.	( )	( )	( )	( )	( )	( )
3	I am not appreciated after achieved succesfull work.	( )	( )	( )	( )	( )	( )
4	My authority is limited as an Occupational Safety Specialist.	( )	( )	( )	( )	( )	( )
5	Assigned tasks and responsibilities are too much to me as an Occupational Safety Specialist.	( )	( )	( )	( )	( )	( )
6	I will be one of the primary charged people in case of occupational accident.	( )	( )	( )	( )	( )	( )

Soru No.	<p><b>A.4. İş Güvenliği Uzmanlarının Sorunları Ölçeği ( Turkish)</b></p> <p>Aşağıda yer alan anket özel sektörde çalışan İş Güvenliği Uzmanlarının iş hayatında karşılaştıkları durumların araştırılması amacıyla hazırlanmıştır. Anket 36 sorudan oluşmaktadır. Lütfen ankette belirtilen durumlarla ne sıklıkta karşılaştığınızı;</p> <p>Lütfen işyerinizde aşağıda verilen önermeler ile karşılaştığınızı düşünürseniz;1 - Kesinlikle Katılmıyorum, 2- Katılmıyorum,3 -Kısmen Katılmıyorum, 4 - Kısmen Katılıyorum, 5 - Katılıyorum, 6 - Kesinlikle Katılıyorum şeklinde işaretleyiniz</p>						
		Kesinlikle Katılmıyorum ( 1 )	Katılmıyorum ( 2 )	Kısmen Katılmıyorum ( 3 )	Kısmen Katılıyorum ( 4 )	Katılıyorum ( 5 )	Kesinlikle Katılıyorum ( 6 )
1	Hizmet verdiğim işyer(ler)inde işveren, çalışanları gerekli makine, ekipman, cihaz, araç ve gereçleri sağlamadan çalıştırır.	( )	( )	( )	( )	( )	( )
2	Hizmet verdiğim işyer(ler)inde işveren, çalışanları uygun Kişisel Koruyucu Donanımları sağlamadan çalıştırır.	( )	( )	( )	( )	( )	( )
3	Hizmet verdiğim işyer(ler)inde işveren, İSG saha gözlem ve denetim raporlarımı dikkate almaz.	( )	( )	( )	( )	( )	( )

<b>4</b>	Hizmet verdiğim işyer(ler)inde işveren, nitelikli İSG eğitimleri sunmak yerine sadece yasal yükümlülüğünü yerine getirme eğilimindedir.	( )	( )	( )	( )	( )	( )
<b>5</b>	İşveren, maaşımı ödediği için kendisine aykırı hareket etmemem gerektiğini hissettirir.	( )	( )	( )	( )	( )	( )
<b>6</b>	Hizmet verdiğim işyer(ler)inde, İSG eğitimleri işverenin istediği yer ve zamana göre planlanır.	( )	( )	( )	( )	( )	( )
<b>7</b>	Hizmet verdiğim işyer(ler)inde işveren, onaylı deftere istemediği tedbir ve önerileri yazmama müsaade etmez.	( )	( )	( )	( )	( )	( )
<b>8</b>	Hizmet verdiğim işyer(ler)inde işveren, İSG yükümlülüklerinin farkında değildir.	( )	( )	( )	( )	( )	( )
<b>9</b>	Hizmet verdiğim işyer(ler)inde işveren, Kişisel Koruyucu Donanımları tedarik ederken ergonomikliği ve koruyucu özelliklerinden önce maliyetini düşünür.	( )	( )	( )	( )	( )	( )
<b>10</b>	Hizmet verdiğim işyer(ler)inde işveren, İSG kapsamında hazırladığım formları, talimatları, prosedürleri ve planları yalnızca yasal yükümlülüğün yerine getirilmesi amacıyla kullanır.	( )	( )	( )	( )	( )	( )
<b>11</b>	Hizmet verdiğim işyer(ler)inde işveren, çalışanların görev dağılımını yaparken sağlık ve güvenlik yönünden işe uygunluklarını gözardı eder.	( )	( )	( )	( )	( )	( )
<b>12</b>	Hizmet verdiğim işyer(ler)inde işveren, İSG yatırımlarını gereksiz maliyet olarak görür.	( )	( )	( )	( )	( )	( )
<b>13</b>	Hizmet verdiğim işyer(ler)inde işveren, risk değerlendirme sonuçlarına göre etkin önlemler almaz.	( )	( )	( )	( )	( )	( )
<b>14</b>	Hizmet verdiğim işyer(ler)inde işveren, İSG tedbirlerine uyulup uyulmadığını takip etmez.	( )	( )	( )	( )	( )	( )
<b>15</b>	Hizmet verdiğim işyer(ler)inde işveren, İSG eğitimlerini zaman kaybı olarak değerlendirir.	( )	( )	( )	( )	( )	( )
<b>16</b>	Hizmet verdiğim işyer(ler)inde çalışanlar, İSG eğitimlerine gerekli katılımı sağlamazlar.	( )	( )	( )	( )	( )	( )

17	Hizmet verdiğim işyer(ler)inde çalışanlar, Acil Durum Tatbikatlarına gerekli katılımı sağlamazlar.	( )	( )	( )	( )	( )	( )
18	Hizmet verdiğim işyer(ler)inde çalışanlar, iş güvenliği emir ve talimatlarına uymazlar.	( )	( )	( )	( )	( )	( )
19	Hizmet verdiğim işyer(ler)inde çalışanlar, İSG eğitimlerini zaman kaybı olarak değerlendirirler.	( )	( )	( )	( )	( )	( )
20	Hizmet verdiğim işyer(ler)inde çalışanlar, tehlike ile karşılaştıklarında işverenden önlem alınmasını istemezler.	( )	( )	( )	( )	( )	( )
21	Hizmet verdiğim işyer(ler)inde çalışanlar, karşılaştıkları tehlikeli durum ve olayları önemsemezler.	( )	( )	( )	( )	( )	( )
22	Hizmet verdiğim işyer(ler)inde İSG'ye ilişkin tedbirler denetim dönemleri ile sınırlı kalır.	( )	( )	( )	( )	( )	( )
23	İSG mevzuat güncellemelerinin takibi zordur.	( )	( )	( )	( )	( )	( )
24	İSG mevzuatının anlaşılması zordur.	( )	( )	( )	( )	( )	( )
25	İSG mevzuatı fazla ayrıntılı olmasından dolayı tümüyle uygulanması zordur.	( )	( )	( )	( )	( )	( )
26	İSG kanunu yasanın uygulanmasını büyük ölçüde İş Güvenliği Uzmanına yüklemektedir.	( )	( )	( )	( )	( )	( )
27	İSG Kanunu çalışanların işyerinde psikolojik iyilik hallerinin sağlanması açısından yetersizdir.	( )	( )	( )	( )	( )	( )
28	İSG Kanununun önemli ölçüde teknik önlemler üzerinde durması kazaların önlenmesinde yetersizdir.	( )	( )	( )	( )	( )	( )
<b>Lütfen aşağıdaki durumları hizmet verdiğiniz işyerlerine göre değil, bağlı olduğunuz organizasyona göre değerlendiriniz. ( OSGB’de çalışıyorsanız OSGB’nizi değerlendiriniz. Firmaya bağlı olarak çalışıyorsanız bağlı olduğunuz firmayı değerlendiriniz). Bireysel iş güvenliği danışmanlığı yapıyorsanız lütfen bu kısmı boş bırakınız.</b>							
1	Bulduğum pozisyonda kariyer imkanı kısıtlıdır.	( )	( )	( )	( )	( )	( )
2	Aldığım riske göre maaşım yetersizdir.	( )	( )	( )	( )	( )	( )
3	İşimde elde ettiğim başarıların sonunda takdir edilmem.	( )	( )	( )	( )	( )	( )

<b>4</b>	İş Güvenliği Uzmanı olarak yetkilerim sınırlıdır.	( )	( )	( )	( )	( )	( )
<b>5</b>	İş Güvenliği Uzmanı olarak üzerime yüklenen görev ve sorumluluklar fazladır.	( )	( )	( )	( )	( )	( )
<b>6</b>	İş kazası meydana geldiğinde asli kusurlulardan biri olarak görüleceğimi bilirim.	( )	( )	( )	( )	( )	( )

Question No.	<p><b>A.5. Psychological Safety Scale ( English)</b></p> <p>It is aimed in that scale to measure how much occupational safety specialists feel themselves psychologically safe in their organizations. Scale is consist of 7 questions. If you think to confront propositions stated below, please score in range of 1 - Strongly disagree , 2– Disagree 3- Somewhat disagree , 4 – Somewhat agree , 5 - Agree , 6 - Strongly agree</p> <p><b>Please consider your organization while answering questions instead organizations you service.( Consider PHSU if you work in PHSU. Consider your firm if you work in a firm you subject to). If you work as an individual consultant of occupational safety, please don't mark questions below.</b></p>						
		Strongly disagree ( 1 )	Disagree ( 2 )	Somewhat disagree ( 3 )	Somewhat agree ( 4 )	Agree ( 5 )	Strongly agree ( 6 )
1	If you make a mistake on this team, it is often held against you	( )	( )	( )	( )	( )	( )
2	Members of this team are able to bring up problems and tough issues	( )	( )	( )	( )	( )	( )
3	People on this team sometimes reject others for being different	( )	( )	( )	( )	( )	( )
4	It is safe to take a risk on this team.	( )	( )	( )	( )	( )	( )
5	It is difficult to ask other members of this team for help	( )	( )	( )	( )	( )	( )
6	No one on this team would deliberately act in a way that undermines my efforts	( )	( )	( )	( )	( )	( )
7	Working with members of this team, my unique skills and talents are valued and utilized	( )	( )	( )	( )	( )	( )

Soru No.	<p><b>A.6. Psikolojik Rahatlık Ölçeği (Turkish)</b></p> <p>Lütfen işyerinizde aşağıda verilen önermeler ile karşılaştığınızı düşünüyorsanız; 1 - Kesinlikle Katılmıyorum, 2- Katılmıyorum, 3 -Kısmen Katılmıyorum, 4 - Kısmen Katılıyorum, 5 - Katılıyorum, 6 - Kesinlikle Katılıyorum şeklinde işaretleyiniz.</p> <p><b>Lütfen aşağıdaki durumları hizmet verdiğiniz işyerlerine göre değil, bağlı olduğunuz organizasyona göre değerlendiriniz. ( OSGB’de çalışıyorsanız OSGB’nizi değerlendiriniz. Firmaya bağlı olarak çalışıyorsanız bağlı olduğunuz firmayı değerlendiriniz.) Bireysel iş güvenliği danışmanlığı yapıyorsanız lütfen bu kısmı boş bırakınız.</b></p>						
		Kesinlikle Katılmıyorum (1)	Katılmıyorum (2)	Kısmen Katılmıyorum (3)	Kısmen Katılıyorum (4)	Katılıyorum (5)	Kesinlikle Katılıyorum (6)
1	Bu işyerinde bir hata yaparsanız, bu genellikle tüm çalışanlar tarafından aleyhinizde kullanılır.	( )	( )	( )	( )	( )	( )
2	Bu işyerinde çalışanlar karşılaştıkları problemleri ve çözülmesi zor sorunları açıkça dile getirirler.	( )	( )	( )	( )	( )	( )
3	Bu işyerinde çalışanlar, diğer çalışanların fikirlerine sırf farklı (yaş, ırk, dil, din) oldukları için karşı çıkarlar.	( )	( )	( )	( )	( )	( )
4	Bu işyerinde işlerin yürütmesi için hesaplı risk alınabilir. Sonuç olumsuz olsa da çalışan zarar görmez.	( )	( )	( )	( )	( )	( )
5	Bu işyerinde çalışanlardan kolay kolay yardım istenmez.	( )	( )	( )	( )	( )	( )
6	Bu işyerinde hiç kimse benim çabalarımı kasıtlı olarak engelleyecek şekilde davranmaz.	( )	( )	( )	( )	( )	( )
7	Bu işyerinde insanlar ile çalışırken, bana özel beceri ve yeteneklerime değer verilir ve bu yeteneklerim kullanılır.	( )	( )	( )	( )	( )	( )

**A.7. Professional Self – Efficacy Belief Of Occupational Safety Specialists Scale**

Question No.	<p>It is aimed in this survey that to measure professional belief of occupational safety specialists. Survey is consist of 7 questions.</p> <p>If you think to confront propositions stated below, please score in range of 1 - Strongly disagree , 2– Disagree 3- Somewhat disagree , 4– Somewhat agree , 5 - Agree , 6 - Strongly agree</p>						
		Strongly disagree ( 1 )	Disagree ( 2 )	Somewhat disagree ( 3 )	Somewhat agree ( 4 )	Agree ( 5 )	Strongly agree ( 6 )
1	I believe I exactly implement duties and responsibilities that my job requires.	( )	( )	( )	( )	( )	( )
2	I believe I do efficient works that support safety and health of employees	( )	( )	( )	( )	( )	( )
3	I believe I use communication channels efficiently when implementing my duties and responsibilities.	( )	( )	( )	( )	( )	( )
4	I believe I conduct efficient guidance events.	( )	( )	( )	( )	( )	( )
5	I believe I efficiently participate in risk assessment works.	( )	( )	( )	( )	( )	( )
6	I believe I work in cooperation with related person and units.	( )	( )	( )	( )	( )	( )
7	I believe I contribute workplace surveillance ( periodical maintance, control, measurements, etc.) to be conducted efficiently.	( )	( )	( )	( )	( )	( )



Soru No.	A.8. Mesleki Öz – Yeterlilik İnancı Ölçeği ( Turkish)	Kesinlikle Katılmıyorum ( 1 )	Katılmıyorum ( 2 )	Kısmen Katılmıyorum ( 3 )	Kısmen Katılıyorum ( 4 )	Katılıyorum ( 5 )	Kesinlikle Katılıyorum ( 6 )
	Lütfen anketteki önermeleri yaptığınız işi düşünerek; 1 - Kesinlikle Katılmıyorum, 2- Katılmıyorum,3 - Kısmen Katılmıyorum, 4 - Kısmen Katılıyorum, 5 - Katılıyorum, 6 - Kesinlikle Katılıyorum şeklinde işaretleyiniz						
1	İşimin gerektirdiği görev ve sorumlulukları tam anlamıyla yerine getirdiğime inanıyorum.	( )	( )	( )	( )	( )	( )
2	İşyerinde çalışanların sağlık ve güvenliklerini destekleyen etkin çalışmalar yaptığuma inanıyorum.	( )	( )	( )	( )	( )	( )
3	Görev ve sorumluluklarımı yerine getirirken iletişim kanallarını etkin kullandığuma inanıyorum.	( )	( )	( )	( )	( )	( )
4	Etkin rehberlik faaliyetleri yürüttüğüme inanıyorum.	( )	( )	( )	( )	( )	( )
5	Risk Değerlendirme çalışmasına etkin katılım sağladığuma inanıyorum.	( )	( )	( )	( )	( )	( )
6	İlgili birim ve kişilerle etkin işbirliği içerisinde çalıştığuma inanıyorum.	( )	( )	( )	( )	( )	( )
7	Çalışma ortamı gözetimlerinin (periyodik bakım, kontrol, ölçümler vs.) etkin bir şekilde yürütülmesine katkı sağladığuma inanıyorum.	( )	( )	( )	( )	( )	( )

Question No.	<p><b>A.9. Self – Reported Personal Initiative Scale ( English)</b></p> <p>It is aimed in that scale to measure personal initiative of occupational safety specialist in their organizations. Scale is consist of 7 questions. Please score in range of 1 - Strongly disagree , 2– Disagree 3- Somewhat disagree , 4 – Somewhat agree , 5 - Agree , 6 - Strongly agree</p>						
		Strongly disagree ( 1 )	Disagree ( 2 )	Somewhat disagree ( 3 )	Some what agree ( 4 )	Agree ( 5 )	Strongly agree ( 6 )
1	I actively attack problems.	( )	( )	( )	( )	( )	( )
2	Whenever something goes wrong, I search for a solution immidiately.	( )	( )	( )	( )	( )	( )
3	Whenever there is a chance to get actively involved, I take it.	( )	( )	( )	( )	( )	( )
4	I take initiative immidiately even when other don't	( )	( )	( )	( )	( )	( )
5	I use opportunities quickly in order to attain my goal.	( )	( )	( )	( )	( )	( )
6	Usually I do more than I am asked to do	( )	( )	( )	( )	( )	( )
7	I am particularly good at realizing ideas.	( )	( )	( )	( )	( )	( )

Soru No.	<b>A.10. Beyana Dayalı Kişisel İnisiyatif Ölçeği ( Turkish)</b>  Lütfen ölçekteki önermeleri yaptığınız işi düşünerek;  1 - Kesinlikle Katılmıyorum, 2- Katılmıyorum,3 -Kısmen Katılmıyorum, 4 - Kısmen Katılıyorum, 5 - Katılıyorum, 6 - Kesinlikle Katılıyorum şeklinde işaretleyiniz						
		Kesinlikle Katılmıyorum (1)	Katılmıyorum (2)	Kısmen Katılmıyorum (3)	Kısmen Katılıyorum (4)	Katılıyorum (5)	Kesinlikle Katılıyorum (6)
1	Sorunlara aktif bir şekilde girişirim.	( )	( )	( )	( )	( )	( )
2	Bir şeyler yanlış gittiğinde hemen bir çözüm ararım.	( )	( )	( )	( )	( )	( )
3	Bir şeylere katılım imkanı doğduğunda, katılmaktan çekinmem.	( )	( )	( )	( )	( )	( )
4	Diğerleri almadığında bile ben hemen inisiyatif alırım.	( )	( )	( )	( )	( )	( )
5	Hedeflerime ulaşmak için fırsatları hemen kullanırım.	( )	( )	( )	( )	( )	( )
6	Genellikle benden istenenden fazlasını yaparım.	( )	( )	( )	( )	( )	( )
7	Fikirlerin hayata geçirilmesinde oldukça iyiyimdir.	( )	( )	( )	( )	( )	( )

## **A.11. Informed Consent Form**

### **INFORMED CONSENT FORM**

Dear participant,

This study is being conducted in scope of dissertation thesis by MA Organizational Psychology student Şeyhmus AKSOY, in academic counselling of Prof Dr Nihal MAMATOĞLU. This study aims to investigate psychological safety, professional belief of Occupational Safety Specialists at work.

You are asked to score states in following pages. There are no true or false answer of questions. This study is being undertaken in volunteering basis. You wouldn't participate or would withdraw any stage of the study. No individual data needed. Data won't be used apart of this study. It takes approximately 20 – 25 min. to complete. Survey data will be analyzed collectively and will be used in scientific research purpose. It is guaranteed that your answers will be kept in secure and won't be shared any institution, employer, auditor and inspector.

If you require any further information, please don't hesitate to contact me.  
Thank you for your participation.

**I have read and understood aim and content of this study so;**

**I approve to participate in this study ( )**

**I don't approve to participate in this study ( )**

**Signature**

**Research Team:**

**Academic Counsellor:** Prof Dr Nihal MAMATOĞLU

**Student:** Şeyhmus AKSOY

**Contact:** Şeyhmus AKSOY

**E – mail:** seyhmus.aksoy1@gmail.com

**Phone number:** 0534 570 87 90

## A.12. Bilgilendirilmiş Onam Formu

### BİLGİLENDİRİLMİŞ ONAM FORMU

#### Sayın Katılımcı,

Bu çalışma İstanbul Bilgi Üniversitesi Örgütsel Psikoloji yüksek lisans öğrencisi Şeymus AKSOY tarafından, Prof. Dr. Nihal MAMATOĞLU danışmanlığında, İş Güvenliği uzmanlarının psikolojik güvenlikleri, mesleki inançları, proaktif çalışma davranışları ve iş hayatında yaşadıkları sorunların araştırılması amacıyla yüksek lisans tezi kapsamında gerçekleştirilmektedir.

Takip eden sayfalarda çeşitli konularda görüşleriniz sorulacaktır. Soruların doğru veya yanlış cevapları yoktur.

Bu çalışmaya katılımınız tamamen isteğe bağlıdır; katılmayabilirsiniz veya herhangi bir noktada bırakabilirsiniz. İsminiz istenmeyecektir. Cevaplarınız araştırma dışında kullanılmayacaktır. Anketin doldurulması yaklaşık 20-25 dakika sürmektedir. Anket sonuçları toplu olarak değerlendirilecek ve bilimsel bir araştırma amacıyla kullanılacaktır. Anket kapsamında verdiğiniz cevaplar gizli tutulacak olup, hiçbir kurum, kuruluş, işveren veya denetim elemanı(müfettiş vb.) ile paylaşılmayacaktır. Araştırma sonucunda isteğiniz halinde çalışma sizinle paylaşılacaktır.

Sorularınız olursa, araştırma ekibiyle temasa geçebilirsiniz.  
Katılımınız için şimdiden teşekkür ederiz.

**Yukarıdaki çalışmanın amacını ve içeriğini okudum, anladım ve araştırmaya katılmayı;**

**Onaylıyorum ( )**  
**Onaylamıyorum ( )**

**Araştırma Ekibi:**  
**Danışman:** Prof.Dr. Nihal MAMATOĞLU  
**Öğrenci:** Şeymus AKSOY

**İLETİŞİM:** Şeymus AKSOY  
**E - mail :** [seyhmus.aksoy1@gmail.com](mailto:seyhmus.aksoy1@gmail.com)  
**Telefon:** 05345708790

### A.13. Self – Reported Personal Initiative Adaptation Permission

Permission to Adaptation of Personal Initiative Scale to Turkish  
Occupational Safety Specialists sample Gelen Kutusu x



**ŞEYHMUS AKSOY** <seyhmasuksoy@sakarya.edu.tr>  
Alıcı: bizmf, obrhead ▾

31 Ara 2018 Pzt 17:08 ☆ ↩ ⋮

Dear Michael,

I am a student from Turkey studying MA Organizational Psychology. I am in thesis level. I would like to use Personal Initiative Scale that you and your friends developed if you give me permission. Me, my professor and 2 linguistic scientists will study on adaption.

Please find my attached research summery.

Best Regards,  
Şeyhmus



**Michael Frese** <bizmf@nus.edu.sg>  
Alıcı: Neslihan, ben ▾

1 Oca 2019 05:52 ☆ ↩ ⋮

İngilizce ▾ > Türkçe ▾ İletiyi çevir

İngilizce için kapat x

I believe Neslihan may have already translated the scale into Turkish already, but I am not absolutely certain. Please inquire with her; if not, you have my permission, michael frese (and please send me the scale in Turkish).

Prof. Dr. Michael Frese  
Department of Management & Organisation,  
NUS Business School



**ŞEYHMUS AKSOY** <seyhmusaksoy@sakarya.edu.tr>

1 Oca 2019 12:47



Alıcı: michfrese, bizmf, Neslihan

Dear Michael,

Thanks for your permission. Please find translated scale below. I hope Neslihan Çetinkaya will approve this.

Best Regards,

Şeyhmus

1. Sorunlara aktif bir şekilde girişirim.
2. Bir şeyler yanlış gittiğinde hemen bir çözüm ararım.
3. Bir şeylere katılım imkanı doğduğunda, katılmaktan çekinmem.
4. Diğerleri almadığında bile ben hemen inisiyatif alırım.
5. Hedeflerime ulaşmak için fırsatları hemen kullanırım.
6. Genellikle benden istenenden fazlasını yaparım.
7. Fikirlerin hayata geçirilmesinde oldukça iyiyimdir.



**Neslihan Turnalar Çetinkaya** <ntc.psy@gmail.com>

1 Oca 2019 17:09



Alıcı: ben, Michael, bizmf

İngilizce > Türkçe İletiyi çevir

İngilizce için kapat x

Hi Şeyhmus,

We used "in our society..." rather than "I ..." version since our survey was measuring societal perception.

Your translation looks okay. I think you can use it that way. (But I can humbly suggest you to use some social desirability items in order to control it (if you are doing already, you can ignore this)).

Thanks.



**ŞEYHMUS AKSOY** <seyhmusaksoy@sakarya.edu.tr>

1 Oca 2019 19:26



Alıcı: Neslihan, Michael, bizmf

Dear Neslihan Çetinkaya,

Thank you for confirmation of translation in Turkish and also for suggestion.

Best Regards,

Şeyhmus

#### A.14. Result Of Evaluation By The Ethics Committee

##### ETİK KURUL DEĞERLENDİRME SONUCU/RESULT OF EVALUATION BY THE ETHICS COMMITTEE

(Bu bölüm İstanbul Bilgi Üniversitesi İnsan Araştırmaları Etik Kurul tarafından doldurulacaktır /This section to be completed by the Committee on Ethics in research on Humans)


**Başvuru Sahibi / Applicant:** Şeyhmus Aksoy

**Proje Başlığı / Project Title:** The Relationship Between Psychological Safety, Professional Belief, Proactive Work Behaviour and Challenges of Occupational Safety Specialists at Work

**Proje No. / Project Number:** 2019-20024-54

1.	Herhangi bir değişikliğe gerek yoktur / There is no need for revision	XX
2.	Ret/ Application Rejected Reddin gerekçesi / Reason for Rejection	

Değerlendirme Tarihi / Date of Evaluation: 9 Nisan 2019

  
Kurul Başkanı / Committee Chair

Doç. Dr. İtir Erhart

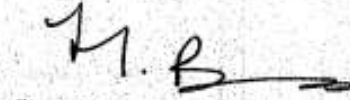
  
Üye / Committee Member

Prof. Dr. Ashı Tunç



Üye / Committee Member

Prof. Dr. Turgut Tarhanlı



Üye / Committee Member

Prof. Dr. Hale Bolak Boratav

  
Üye / Committee Member

Prof. Dr. Koray Akay