Developing the Job Stress Model for Airlines Flight Crew

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Abstract

Job is one of the most important issues in the discussion of human resources, and since the discussion of job stress in the flight crew and its relationship with the performance of the flight crew is very important and vital .This research is about recognizing and developing a model for job stress among the cabin crew of Mahan Airline. The qualitative research methodology has been followed by qualitative inductive approach and grounded theory, that is the common approach in this case. The population of this research has two sections; the first section includes the new related scientific documents from 10 to 20 texts that are collected by using targeted approach until achieving domination criteria. Inductive qualitative content analysis method was applied for analyzing the specialized texts that are related to the research. The second population contains the whole flight crew of Mahan Airline Company. The research sample is chosen by using targeted and snowball method and by 37 items has been reached to theoretical saturation. The data are gathered by Semi-structured approach and they are analyzed by Straws & Corbin(1998) systematic analysis method. A total of 260 opening codes and 19 axial codes were extracted, which were categorized into 5 selected codes. In the section on identifying the nature of stress, 1 Selective code, 3 axial codes and 62 opening codes were inferred. In the section on Factors and conditions leading to job stress, 1 Selective code, 2 axial codes and 61 opening codes were inferred. In the section on The emergence of job stress, 1 Selective code, 4 axial codes and 49 opening codes were inferred. In the section on Reaction to

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job stress, 1 Selective code, 4 axial codes and 48 opening codes were inferred. In the section on The consequences of a reaction to job stress, 1 Selective code, 6 axial codes and 40 opening codes were inferred as a result the job stress model of Mahan Airline flight crew is established and then is validated by focus group. The results show that the established pattern for job stress has five main aspects including the job stress nature, appearing job stress, the sources and conditions of job stress, reaction to job stress and consequences of job stress, and there is connection among them.

Keywords: Stress, Job stress, Nature of the Job Stress, Cabin Crew, Job Stress Model.

Introduction

Society is struggling with stress at homes and workplaces. No one can avoid stress and all individuals need some in their routines. Stress is a broad concept that can refer to occasions or more enduring characteristics of the environment, a person's reaction to these events or enduring characteristics, and the impact between the person and the environment (Sonnentag, 2018). referring to stress as the internal condition of a person who experiences break down due to pressure and anxiety thereby causing a condition endangering the health of a normal person. The first person who created and defined stress as something that endangers life and causes psychological changes was (1950) who created and conceptualized the theory of general adaptation syndrome (GAS) as a common pattern of somatic responses to noxious situations and the physiological literature provides a consistent picture of two neural/hormonal systems responding to threat: a pituitary/adrenal cortex system and a sympathetic/adrenomedullary system that organize the body's response in fight-or-flight situations (Dismukes, Kochan & Goldsmith, 2018; Selye, 1956; Melancon, 2014). Selye (1956) discovered stress to be a common reaction and response to any demand which is on the body. Stress is a response to threatening situations that involves biological, cognitive, behavioral, and emotional components.
 History of the term "stress" shows that it first appeared in writing in the 14th century as a way to show variety or strain (Lazarus & Folkman, 1984). The definitions and nature of stress changed the study of stress responses for Lazarus and Folkman (1984), the response is dealing and adaptation through different therapies and behavioral changes. There are several types of stress and the most important one is occupational

stress. Studies shows that the job stress will be created when there is incongruence between the demands of the workplace and the ability of a person or imbalanced between the demands of the work environment and his or her resources (Walter, 2009; Irving, 2017; Trybou, Germonpre, Janssens, Casini, Braeckman, Bacquer & Clays, 2014).

Studies of job stress among mental health professionals have shown that different associated with job stress are frequently related to job design, Stressors include "the work-related causes of or inputs to job stress" (Cosio, Olson, & Francis, 2010): high job demands such as overall workload, role conflict, role ambiguity and confusion, and supervision, High job demands are often conceptualized as challenge stressors and comprise stressors such as a high workload or time pressure(Walter, 2009; Menard & Arter, 2013). Two notable reasons, long work hours or high physical demands fall into this category. Hindrances refer to stressful factors that are threatening and impede task accomplishment such as role ambiguity, role conflict, or organizational constraints Because of its threatening nature, job insecurity can also be noticed as a hindrance stressor (Shoss, 2017; Cosio, Olson, & Francis, 2010) occupational stress factors in the social environment comprise workplace discrimination, harassment, or destructive leadership may create burnout, exhaustion, sleep disorders, alcoholism, relationship concerns, and posttraumatic stress disorder (Theorell, 2014; Irving, 2017). Flight crew is one of the jobs which is highly struggling with the different kinds of the factors that cause stress (Hanson,2019).And the stress can have a negative effect on the flight crew and their productivity. However, many researches have been done in respect of job stress of the flight crew such as:

Kilic, Ucler (2019) Results showed that the most important criterion in stress among ab-initio pilots is personal factors, followed by organizational factors and environmental factors. Furthermore, the results revealed that the first four stressors within the global ranking were determined as the lack in body of knowledge, meteorological conditions, personality, and facilities and the fleet with the weights.Another research has been done by Omholt, Tveito, Ihlebæk (2017) in the research reported high numbers of SHCs and high levels of work-related stress were associated with high numbers of SHC. More knowledge is needed on the physical, organizational and psychosocial stressors affecting cockpit and cabin crew in order to create a healthier work environment for these groups.

Furthermore, Hassani (2006) showed that there were differences between employees in eventful and eventless branches. In another study entitled "the pathology of the reasons for the job stress of air traffic control employees", Rouhollahi and Ahadi Motlagh (2014) developed a conceptual model, as shown in Figure 1. They solely addressed the factors that affected job stress; however, the current study investigates other factors along with these factors.
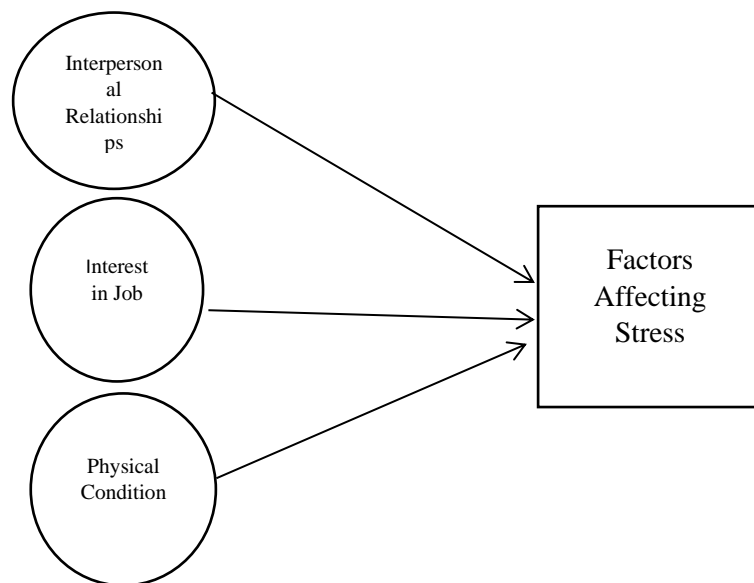

Figure 1. Conceptual Model of Job Stress of Air Traffic Control Employees

Moreover, in a study, Maymand, Shakhsian and Hosseiny (2012) demonstrated that stress gave rise to emotional, physiological, and environmental problems and influenced performance levels. However, from the perspective of the current study, their research did not address stress-related reactions. Therefore, this study examines job stress reaction. Hence, adding up the above researches, it can be said that many of these studies attended to the relationship of job stress to other variables, including general health, job performance, personal efficiency and mental health, job satisfaction, and flight performance, or they measured the rate of job stress in the different branches of airway companies. Thus, further investigations are required on the job stress resources of the flight crew because the obligations of flight crew

and its nature are different from other jobs, and thus, its essence, fields, and stressful factors are different. Since the social, economic, and cultural conditions of every country is unique and varying; moreover, every airway company faces certain conditions and requirements, it enjoys different nature and job stress resources. On the other hand, the job stress nature of Mahan Air Company's flight crew is specific to the same organization, and a major part of it is unknown. Therefore, with respect to the presence of a gap concerning the recognition of the job stress nature resources of flight crews, it was necessary to deeply and specifically investigate these resources.

Method

The current study was conducted qualitatively by using the grounded theory and the qualitative inductive content analysis. The statistical population consisted of two parts: written specialized documents in the first step and Mahan Air Company's flight staff in the second step. Data were collected from specialized works of the past fifteen years in the first step and from semi-structured interviews in the second step. Once the pioneer works of the scope 20 number of valid documents were reviewed, they were analyzed by the qualitative inductive content analysis method. Then, in coordination with a supervisor and an advisor, questions were designed for the questionnaire. After receiving a letter from the university, the questionnaire was delivered to Mahan Air Company's managers. Then, it was sent to the human resource department after it was reviewed by the managers. The objectives of participating in the study were explained to individuals. Anonymous individuals participated in the study by assigning a code and conscious written consent.

The first individual was introduced purposefully; then, they introduced the second person, and this trend (purposeful and snowball sampling method) continued until theoretical saturation was achieved by 37 participants.. Interviews were conducted in Mahan's office and each interview lasted 45 to 60 minutes. The interviews were recorded by a tape recorder. Then, the interviews were written down. Qualitative data were collected by in-depth semi-structured interviews. The collected data were analyzed by the three-stage systematic analysis coding method of and Corbin (1990). Using this method, coding was carried out in three stages, including open coding, axial coding, and selective coding. These three stages are described below.

Open Coding**:** The content of the conducted interviews was openly coded, meaning that the interviews were studied and the initial codes were inferred, extracted and named from their content.

Axial Coding: In this stage, the codes identified in the first stage were categorized based on similarity in the classes.

Selective Coding: The categories classified in the previous stage were combined and the selected codes were inferred and extracted from their combination.

Results

The concepts were extracted from two parts: the first part of the documents and the second part of the interviews, which are reported in order.

A) Content of documents :

The content of the specialized works of the 10 recent years was analyzed. Table 2 reports the extracted components and categories.

Table 1. Components and Categories Extracted Form Specialized Works

Category	Concept	Axial Category	Main Category
Facilities and Equipment	In their study, klick and Yusler (2019) showed that facilities and equipment in a flight along with the equipment and standards of the fleet had the largest weight in the effects of stressful factors, respectively.	Environmental factors	
Leadership Style	According to the study of Irving, the leadership style of a manager impacts the rate of job stress (Irving, 2017)	Organizational factors	
Supervisor Support	The job stress model of the novice pilots was developed according to the study of klick and Yusler (2019). It was shown that the manager support factor impacts the job stress of novice pilots.		Factors creating job stress
Feeling Competent	A person feels that they have the required readiness and competency to fulfill their responsibilities (Bayani & Samiei, 2015).	Personality factors	
Personality Traits	Some personality traits that are based on an individual's stress and behavioral patterns can impact stress experience. Individuals with the behavioral pattern Type A are always in a hurry, have a shortage of time, attempting and competing, more inclined to compete		

	with others. Many studies suggest a strong relationship between this behavioral pattern and job stress (Ghasemian, Kumar,2017)	
Coping Style	The coping style used against stress has a significant effect on the rate of their stress (Rass & Altmayer, 2002).	
Interpersonal Relationships	The interpersonal relationships that are full of tension and anxiety extensively affect job stress and life dissatisfaction (Michel, 1978).	
Familial-Social Support	Lack of support from family and society can impose great pressure on individuals (Irving, 2017).	Social and familial factors
Excessive Job Demand	Crask presented the structure of job demands and explained that there was a relationship between job demands and the stress related to the jobs (Howatt, 2011).	
Role Overload	If a person cannot tackle a certain job and suffers from malfunctioning, the role overload will emerge, which is both quantitative and qualitative (Ras & Altaymer, 2002).	
Job Characteristics	Job characteristics are among the factors that can be stressful. Some jobs essential have some characteristics that make them more stressful (Molaei, 2011).	
Temporal Stressful Factors	The pressure arising from doing a job, or excessive number of jobs before the deadline, or doing a job in the shortest time (Whetten, Cameron, & Woods ,2007).	Job factors
	The anxiety of facing undesirable individuals, ambiguous conditions (Whetten, Cameron, & Woods ,2007).	
Waiting-caused Stressful factors	Worrisome and fear of imminent and unexpected incidents (Ivask,2018) .	
Job rhythm	Job rhythm is a stressful factor. In particular, it depends on the rate of control a working person has over his responsibilities. If they cannot adjust the pace and rhythm of their job, they will experience enormous stress (Molaei, 2011).	
Working Shift	The jobs that necessitate working out of the working hours, especially nightly shifts, can aggravate the emergence of stress(Molaei, 2011).	

Table 2. reports the demographic characteristics of the study participants.

Table 2. Frequency Distribution of Participants' Jobs

Job	Frequency	Frequency Percentage
Pilot	9	29%
Co-pilot	5	13%
Toastmaster	9	24%
Flight Attendant	11	29%
Technician	3	8%

B) Content of the interview:

The content of the interview was analyzed. Table 3 reports the extracted open codes, concepts, axial codes, and selective codes.

Table 3. Open Codes, Concepts, Axial Codes, and Selective Codes of Interviews

Open Codes	Concept	Axial Code	Selective Code
Flight team	Problems related to human relationships		
Familial problems			
Relationships among colleagues			
Pilot's permission concerning the execution of the flight operation by the co-pilot			
Stressful thoughts	Cognitive problems		
Fear of air crash			
he fall of another airplane (perceived stress			
Navigation facilities and standards	Problems related to the navigation system	The nature of job stress before flying	The nature of job stress
Airport standards			
Varying flight hours	Problems related to the organization		
Compactness of programs			
Flight openings			
A line with international supervision	International problems		
Flying to some destinations that have high standards			
Sanctions			
Flight team	Relational and human factors	The nature of job stress during a flight	The nature of job stress
Encountering with the different			

characteristics of passengers			
Special guests			
Passenger illness	Emergency cases		
Out of control factors			
Rainfall			
Elevated heights	Climate conditions		
Severe wind			
Reports' examination	Organizational problems		
The disarrangement of plans due to delays in flights	Personal problems	The nature of job stress after a flight	The nature of job stress
Communicating with children	Communicational problems		
Society problems	Social problems		
Familial anxieties and problems	Relational cases		
Compatibility with colleagues			
Notifications	Problems related to the organization	Controllable factors and conditions	
Performance examination by the organization			
- Lack of true judgment and conception from an event - Negative thoughts	Cognitive problems		Factors and conditions leading to job stress
Not to be understood by others	Communicational problems		
The role of humans and their behaviors			
The political decisions of other countries	Political problems		
A change in the country's status		Uncontrollable factors and conditions	
Unanticipated incidents	Emergency cases		
Anything out of its normal condition and order			
The suitability of an airplane for a line	Problems related to the organization and navigation		
Airport standards			

Excessive sweating High temperature Heartburn Headache Bitterness of mouth	Physiological resources	The resources of job stress	The emergence of job stress
Mental occupation	Cognitive resources		
-An increase in error number -Environment abandonment -Overeating	Behavioral resources		
-Heartbeat -An increase in respiration rate -A change in body temperature	Physiological reactions	Reaction to stress	Reaction to job stress
-Identifying stressful factors -Distractions -Avoiding illogical thoughts	Psycho-cognitive reactions		
-Worry -Uneasiness -Nervousness	Emotional reactions		
-Facing -Talking -Engaging with another job	Behavioral reactions		
A decrease in physical health	Physical consequences	consequences of Physical, Emotional, Psycho-cognitive, Behavioral, Familial-social, Operational	The consequences of a reaction to job stress
-Annoyance -Low mentality -Reproaching	Emotional consequences		
-Mental occupation -Confusion and vagueness -A decrease in concentration and precision	Psycho-cognitive consequences		
-A change in the behavior -Increase in human error -Retiring from cooperative works	Behavioral consequences		
The conflict between job-family and family-job roles -Insufficient time for communicating with	Familial-social consequences		

family members and children	
-A decrease in job satisfaction -Fatigue	Operational consequences

Discussion

Figure 2 illustrates the model obtained from the findings of the qualitative phase. Bases and conditions of job stress consequences of job.
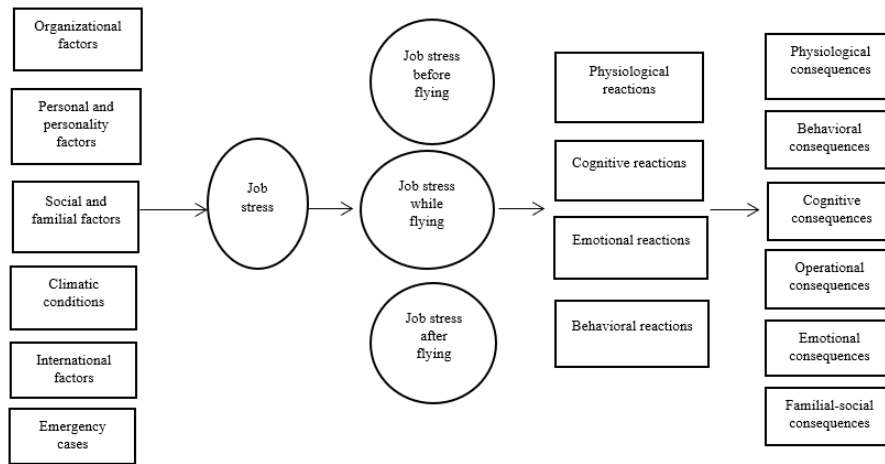

Figure 2. Conceptual Job Stress Model of Mahan Air Company's Air Traffic Control Employees

The internal validity of the extracted codes (open, axial, and selective codes), along with the conceptual model of the job stress of the air traffic control employees, was acquired by focused interviews. To this end, seven experts (Elite refers to people who have at least a doctorate in psychology and counseling and experience in career counseling). were invited to a meeting. And because 5 to 9 people are suggested to determine the validity of the content and usually 7 people are used, which is the average.

They were required to confer and discuss the extracted codes and developed model and specify their opinions based on a three-point scale, including relevant, average, and irrelevant, regarding each section. Thereafter, the content validity was computed as

$$CVR = \frac{n_E - \frac{N}{2}}{\frac{N}{2}}$$

Where n_E is the number of experts that selected "relevant", while N is the total number of experts. If the calculated value is larger than the rate in the Table 4, the content validity of that item is accepted. Table 4 presents the values.

Table 4. Determining Minimum Acceptable CVR Value Based on the Number of Responding Experts

Number of Experts	Minimum Acceptable CVR
5	0.99
6	0.99
7	0.99

Table 5 demonstrates an example of responses on the open, axial, and selective codes.

Table 5. Evaluating the Codes and Model by Lawshe Method

Cases under investigation	Relevant	Average	CVR Criterion 0.99	Status
-1	7	0	1	Accepted
-2	7	0	1	Accepted

After collecting the comments, the content validity ratio (CVR) indexes of the item were calculated according to Eq. (1). Seven experts made resonses, and the CVR value (0.99) was acceptable according to Table 5. If the CVR index was smaller than 0.99 for an item, it should be revised or removed. Concerning the conducted examinations, none of the codes was smaller than the relevant criterion limit. The content validity of the components and categories extracted from specialized works and the content validity index of the open, axial, and selective codes, as well as the concepts of the interviews, were calculated by the content validity ratio (CVR), which equaled 1. Therefore, the CVR index was generally verified, and the CVI index equaled 1, as well. Table 6 represents the content validity of the conceptual job stress model of Mahan Air Company's air traffic control employees based on the content validity ratio (CVR).

Table 6. The content validity of the conceptual job stress model of Mahan Air Company's air traffic control employees based on CVR.

Content	Relevant	Average	CVR Criterion (0.99)	Status
Bases and conditions leading to job stress	7	0	1	Accepted
Job stress	7	0	1	Accepted
Reaction to job stress	7	0	1	Accepted
Consequences derived from job stress	7	0	1	Accepted

According to Table 6, the minimum acceptable value for the CVR index is 0.99. If the CVR index is smaller than 0.99 for an item, that item should be revised or removed. Considering the conducted examination, none of the codes was smaller than the relevant criterion limit, and the calculated value was 1. Thus, the CVR of content validity was generally verified. Furthermore, the CVI index for the mentioned model was calculated as 1.

Developing the job stress pattern of the air traffic control employees of the Mahan Air Company was the outcome of this study. It possessed the main components of bases and conditions that led to job stress and comprised several factors, including environmental factors, airport standards, flight equipment and facilities, and navigation. For example, an airplane that flies toward an airport brings job stress if the airport does have the minimum standards, or if the necessary equipment and facilities are unavailable. Moreover, a line may be located in highly mountainous geographical conditions, and its airport may not have the required standards. Hence, a flight in this line may impose extensive stress. The other bases and conditions involve organizational factors, including examining the performance after the flight by the organization. This investigation involves passengers' opinions and the examinations conducted by the organization itself. If a person does not have a good performance, or if there is a problem, there will be stress. Another case is the notifications received by the employees. If an employee fails to accomplish their responsibilities and makes a mistake, they will be notified, and this can result in job stress. Another factor is the leadership style of managers, as mentioned in studies. Irving (2017) showed that the leadership style of a manager impacts the rate of job stress. Another organizational factor is the support of supervisors. The job stress model of the novice pilots was developed according to klick and Yusler (2019). The model showed that the managers' support impacted the job stress of novice pilots.

The personality factors that cause job stress include interpersonal relationships with the flight team, familial relationships, and relationships with passengers, colleagues, and managers. A problem in an any of these categories and the lack of proper relationships can pave the way for the emergence of stress. For example, one of the stressful factors is the flight team; their behavior and performance can create stress; specifically, that this job is among the jobs necessitating collaboration. The lack of proper relationships with family members

and children can also generate stress. Another personal factor is feeing competent. A person feels competent when they feel ready and competent enough to fulfill their responsibilities (Bayani & Samiei, 2015). Therefore, if a person does not feel competent to fulfill their job responsibilities, they will suffer from job stress. Another factor is personality traits, based on which individuals are divided into personality types A and B. The personality Type A is active, influential, time conscious, competitive, patient, job lover, and more likely to be exposed to job stress (Ghasemian, & Kumar, 2017). The personality Type B is quiet, comfortable, patient, stressless, and uncompetitive. Type A individuals are more likely to experience stress. Another factor is the coping style. The coping style employed against stress impacts the rate of stress (Rass & Altmayer, 2002). Selecting an active style lessens stress, while applying an inactive style produces higher stress. Another factor is the lack of skills. If a person is not provided with the necessary training and does not have the required skills, they will be apt to stress. Likewise, cognitive problems, such as unrealistic thoughts and stressful ideas, influence stress emergence. The perceived stress, for example, is a phenomenon that can be stressful, as if an incident recently occurred in the same line or flight destination or with the same type of airplane. Other stressful factors are social and familial factors. The lack of social and familial support can impose severe pressure for every person (Irving, 2017). Moreover, the presence of economic problems can be stressful.

Job factors are among other factors. Conflicts between job and home tasks (managing home and caring for children) can lay the ground for job stress (Molayi, 2011). Job demands were proposed by Karasek as another factor. They suggested that there was a relationship between job demands and job-related stress (Howatt ,2011). Role overload can also lay the ground for job stress; if an individual cannot fulfill a specific task and experience malfunction, role overload happens in two manners: quantitatively and quantitatively (Ras & Altaymer, 2002). In addition, job characteristics can be stressful. Some jobs essentially have features that impose stress more than other jobs, including flight crew members (Molayi, 2011). Temporal stressful factors are the pressure arising from fulfilling tasks or from excessive tasks before the predefined time, or doing tasks in a short time. Encounter stressful factors refer to the anxiety of encountering unpleasant individuals with

ambiguous conditions, which pave the way for stress (Whetten, Cameron, & Woods ,2007).

Weather is another factor leading to the stress experience. It includes flying in raining, cloudy, and windy conditions. Although flights are not allowed in unsuitable conditions, sometimes situations happen. Compared to suitable conditions, flying in raining conditions, particularly at night, is more stressful due to the reduced sight. Furthermore, landing in a highly windy condition that causes the airplane to move and makes it more difficult to control the airplane, and flying in a windy condition that reduces the sight range, can lay the ground for job stress. Another factor is international conditions, including lines in which international checking is performed. Such a situation can be stressful. Moreover, political situations (i.e., sanctions and preventing the import of parts) can impact job stress. The might also be specific situations. For example, passengers may be sick, or undergo a physical problem, or die in the flight. Specific guests in a flight, such as authorities, and flight openings attended by company managers can influence the emersion of job stress. Unpleasant, unpredicted events may occur, which can lay the ground for job stress. Such factors are divided into two groups: controllable factors and uncontrollable factors. For example, controllable factors include familial issues and anxiety, focusing on unpleasant events, lack of sleep, and being notified. Uncontrollable factors, on the other hand, include specific guests, flight delay, inclement weather, ambiguous conditions, unrealistic expectations from others, and the job. These factors create a job stress nature that emerges before, during, and after flights. Stressful factors before flights involve the geographical conditions of the flight path, airport transportation facilities and standards, paths with international checking, and compact plans. Stress factors during flights are encountering different passengers with different personalities, flight crew, job type (dealing with the lives of humans), and weather. The most important stress factors after flights include surveys from passengers, responding to organizations, the change and interference of plans due to delayed flights, and social problems. Stress factors before, during, and after flights appear in the forms of physiological, cognitive, emotional, and behavioral sources, such as blood pressure drop, obsessive rumination, high heat beat, non-concentration, low performance, shortness of breath, muscle contraction, high sweating, and bitterness of mouth. Individuals make different reactions to such

factors, including physiological, cognitive, emotional, and behavioral reactions, such as increased heat beat, increased breath rate, changed body temperature, concern, reduced concentration, aggressiveness, reduced tolerance, isolation, silence, concerning with other things, hiding stress signs, leaving the place, tolerating, and consulting. These reactions have physical, cognitive, emotional, behavioral, and performance consequences, such as mind conflict, burnout, not talking to others, reduced concentration, reduced tolerance, obsession with problems, reduced motivation, and feeling inner tension. The present study's findings are consistent with the following studies:

Vosoughi-Nayyeri et al. (2016) investigated the effects of job stress on the general health and job performance of air traffic control employees. The findings indicated that there was a negative significant relationship between the workplace stress and job performance; job performance declined as job stress increased. In addition, general health played a mediating role in the relationship between workplace stress and job performance. Rasouli (2012) studied the relationship of job stress and burnout with productivity among 150 military pilots. The results suggested that there was a significant correlation between job stress and productivity. The findings revealed relationships between emotional analysis and productivity, between depersonalization and productivity, and between insufficiency and productivity. The emotional analysis and insufficiency accounted for the largest portion of productivity prediction. Yasaei et al. (2007) evaluated the relationship between job stress and job dissatisfaction among military pilots. The stress factors of the pilots included life stress, organizational stress, aviation stress, and flight plan stress. Kilik and Yousler (2019) indicated that personality traits and organizational and environmental factors accounted for the first and second ranks of stressful factors. In addition, in the rankings of stressful factors, the lack of knowledge, weather, personality, facility, and fleet accounted for the largest weights on stressful factor effects. Bayor and Herbig (2019) studied stress among flight crews. They introduced reduced energy and mental health as the main stress outcomes, leading to job burnout. Meymand et al. (2012) evaluated the effects of stress of the flight performance. The results demonstrated that different factors are involved in a safe and secured light, among which the human factor accounted for the greatest portion. The analysis of the results show that emotional and

physiological stress play essential roles in the operational performance of flights. However, the effects of environmental stress on the operational performance of flights were not included in the case study. Costa (2000) studied Italian flight control employees. They demonstrated that stress and anxiety increased as responsibilities and job dissatisfaction increased. However, stress and anxiety reduced as job encouragements increased. Extensive stress can arise from the importance of this job, noise pollution, legal proceedings in incident cases, and nightly work shifts (and shortage of sleep). Melton ,Smith, McKenzie,Wicks & Saldivar (1997) studied ten flight traffic control employees in two low-traffic watchtowers. The results showed that stress and anxiety were among flight traffic control employees in more crowded airports than those in less crowded airports. In addition, stress and anxiety among flight traffic control employees was proposed to be dependent on the organization and organization culture, and on job stressful factors. Overall, it can be concluded that the proposed model is a comprehensive model that can be employed to identify stressful factors and prevent job stress causes in order to improve mental health and productivity. Thus, it is recommended to provide training on controllable conditions so flight crews can obtain the required skills to cope with job stress. These recommendations will be provided in the form of a training package for flight crews in the next study, and its effectiveness will be evaluated. Given that the present study was based on interviews and the grounded theory, it is recommended to conduct a phenomenological study on job stress based on the experience of flight employees. This research is a qualitative research and like other qualitative researches, its purpose is to explain the phenomenon and does not seek to generalize the findings.

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