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Strategies for Reducing Occupational Stress on Cabin Crewmembers in the Airline Industry

Wendy N. Lindsey
Walden University

Walden University

College of Management and Technology

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Wendy N. Lindsey

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Walden University
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Abstract

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MBA, American Intercontinental University, 2004

BS, University of North Texas, 1994

Doctoral Study Submitted in Partial Fulfillment

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Abstract

Occupational stress threatens airline cabin crew and passengers' health and safety. Airline leaders who lack strategies to address occupational stress may experience adverse impacts on cabin crew health, organizational efficiency, and overall aviation safety. Grounded in the job demands-resources theory, the purpose of this single case study was to explore strategies that upper-level airline leaders used to reduce occupational stress on cabin crewmembers. The participants were five upper-level airline leaders with more than 10 years of airline experience. Data were collected via semistructured interviews, organizational documents, and company records. Three themes emerged from Yin's five-step approach: inflight training for generating natural responses to safety protocol, communications are used for internal marketing practices and addressing issues, and company-provided resources for supporting employees to reduce stress. A key recommendation for airline leaders is to establish a designated social media group to communicate pertinent work group-related information and maintain direct lines of communication with management. Implications for social change include the potential to reduce passenger traveling stress, thereby increasing passenger satisfaction and willingness to travel.

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Dedication

I dedicate this project to my parents and my only child, Chancellor Lindsey, who has shown me unconditional love and unwavering support throughout my life and educational endeavors. My father (Percy Lindsey) and my mother (Evelyn Preston) have exemplified hard work, dedication, and success. You have shown me the value of love and education throughout your lives, and you paved the way for me to pursue higher education standards for myself. I recognized your hard work when you thought that I wasn't paying attention. I cannot express in words how much I love and appreciate everything you have done. I am extremely proud to be your daughter. God has truly blessed me with the most wonderful parents in the world. Additionally, I would like to thank my stepfather (Edward Preston). I will never forget what you said to me. You may not have realized it then, but those words were incredibly powerful, and they continue to propel me forward today. I could have become complacent in life. Thanks to you, I have continued to reach higher. I am not done yet!

To my heart, my world, and my only child, Chancellor Lindsey. Since the day you were born, it became my mission to be the very best Mother. It is my love for you that inspired me to take this journey and finish. Everything that I have done in my life, I have done because of you. I hope that I have made you proud. I pray that I have instilled the same drive for success in you that my parents have instilled in me. I have faith in you and I will always love you. May the Lord continue to protect and guide you always.

I can do all things through Christ who strengthens me!

Acknowledgments

First and foremost, I would like to give all thanks and praise to my heavenly father, Jesus Christ, who placed it on my heart to begin this journey. He aligned me with the right people to bring this project to life and see it through to completion. With that being said, my sincerest thanks go to my chair and mentor, Dr. Meridith Wentz, who supported and guided me through this journey. Despite the trials and tribulations, I encountered along the way, Dr. Wentz continued to give me that extra push that I needed to finish my doctoral study. God has bestowed his grace and love upon me to have such a wonderful mentor, and I do not think that I would have completed this journey without her as my guide. Many thanks to you, Dr. Wentz. I would also like to acknowledge my classmates Dr. Maurice Thorpe, Dr. Auriesheaua Bell, and Dr. Ieshia Bradley who continued to assist me after they graduated. We began as classmates together and ended as lifelong friends. I am so glad that we made this connection. Many thanks to you all.

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Section 1: Foundation of the Study

Occupational stress relates to physiological and emotional responses originating from an employees' inability to balance their workload responsibilities with the demands of the workplace (Yang & Yang, 2019). Airline leaders play an integral role in the way employees respond to physical and emotional stressors. Reactions to stress may be positive or negative based on job demand types, the amount of control exerted over the situation, and support they receive from organizations. Occupational stress has increasingly become a contributing factor in terms of economic loss and occupational health issues (Asif et al., 2018). Moreover, it may also have adverse effects on employee productivity levels and personal wellbeing (Yang & Yang, 2019).

Background of the Problem

The purpose of this qualitative single case study was to explore strategies that some airline leaders use to reduce occupational stress on cabin crewmembers in the airline industry. Stress is an adaptive response to internal or external situations, resulting in physical, mental, and behavioral changes that threaten aviation safety. Mental impairments often contribute to poor cabin crew performance (Widyanti & Firdaus, 2019). Occupational stress involves physiological and emotional responses originating from employees who feel imbalances related to work demands and their ability to meet them, alongside needed resources to meet these demands (Narban et al., 2016).

In the aviation industry, occupational stress is a threat to cabin crews and passengers' health and safety onboard airplanes. Cabin crews typically experience impairments in terms of alertness and performance due to environmental and

organizational changes in the work environment (Hajiyousefi et al., 2017). Environmental factors that affect cabin crewmembers are low air pressurization, low oxygen intake, and air quality affected by pollutants that lead to health issues (Castro et al., 2015). Approximately 80% of aircraft accidents result from human error due to reduced mental alertness, fatigue, and safety issues (Broderick et al., 2017). Furthermore, environmental and organizational changes in the work environment, such as airline mergers and acquisitions, regularly contribute to declining productivity and employee morale. Senior airline leaders can effectively manage occupational stress through pragmatic solutions and risk assessment strategies aimed to reduce stress factors affecting performance, health, and safety among cabin crewmembers.

Work demands affect cabin crew health, organizational efficiency, and overall aviation safety (Boyd, 2002). It is the cabin crew's responsibility to ensure passenger safety. For example, safety and security checks of emergency and medical equipment are required before passengers get on board the airplane to ensure proper working conditions. If a crewmember fails to conduct these checks, they will be unable to aid crewmembers or passengers in the event of an inflight emergency (Ji et al., 2019).

Problem Statement

Airline cabin crewmembers operate in a high-risk profession and in a working environment that is rich in occupational stress (Hajiyousefi et al., 2017). Approximately 83% of airline industry cabin crews reported that environmental and operational changes in the airline industry create high occupational stress accompanied by low morale (Yang & Yang, 2019). The general business problem is that upper-level airline leaders have

difficulty mitigating occupational stressors on cabin crewmembers. The specific business problem is that some airline leaders lack strategies to reduce occupational stress among cabin crewmembers.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies that upper-level airline leaders use to reduce occupational stress among cabin crewmembers. The targeted population comprised five upper-level airline leaders of an airline located in Chicago, Illinois, and Houston, Texas, who implemented successful strategies involving mitigating the effects of occupational stress. Implications for social change include more efficient airline operations and stronger commitments from airline leaders to safety and service for the flying public. Study results could help mitigate hostile environments on commercial flights that cause stressful conditions for crewmembers, resulting in increased passenger and crew safety aboard airplanes.

Nature of the Study

The three commonly used research methods are qualitative, quantitative, and mixed methods. I chose the qualitative research method because it involves words, whereas the quantitative method involves numbers. Qualitative research is exploratory in nature, and its purpose is to reveal participants' thoughts, opinions, and feelings (Rahman, 2017). It is most commonly used to help inform new concepts, theories, and products. Moreover, qualitative methods allow me to generate valuable conversations involving my subject and follow up on participants' answers.

Qualitative research includes open-ended questions to address what is occurring or has previously occurred (Saunders et al., 2015). The quantitative method was not an appropriate choice for my study because I was not examining relationships between dependent and independent variables or conducting an experiment. Mixed methods researchers focus on combining quantitative and qualitative data collection techniques and analytical procedures (Saunders et al., 2015). I chose not to use a mixed methods approach because the research design would require much more time and resources because I would have both a qualitative and quantitative component. The mixed methods approach requires the use of quantitative data, which is not part of my study.

Four qualitative research designs were considered for this study: (a) miniethnography, (b) focus group, (c) narrative, and (d) case study. A miniethnography, also known as a focus ethnography, is useful for fields under investigation involving a specific or narrow area of inquiry, mainly when time or monetary constraints are an issue (Saunders et al., 2015). Addressing occupational stressors that affect flight crews is a subject that may span numerous areas of inquiry, including crew and passenger safety issues, which made a miniethnography an inappropriate choice. A focus group is a qualitative research design in which a group of six to 12 participants comprise an interactive group who answer questions about their perceptions, opinions, beliefs, and attitudes towards a product, service, concept, advertisement, idea, or packaging (Plummer, 2017). Attempting to gather upper-level managers together in one group setting would prove to be difficult and cause unnecessary delays in the research process. Therefore, a focus group was not an appropriate choice for my study. A narrative design

enables gathering accounts of personal stories of an event or a sequence of events. A narrative is a personal story told in a sequenced way that may convey meaning or significance to the researcher (Saunders et al., 2015). This was not appropriate for my study because the design involves personal stories about subject phenomena. A case study design is an empirical inquiry for investigating cases by addressing what, how, or why questions concerning phenomena of interest (Yin, 2018). A single case study is known to be more manageable and less time consuming than a multiple case study and focuses on one person or a group of people of particular interest to the researcher (Saunders et al., 2015).

Conversely, a multiple case study is time consuming, can be very expensive, requires more evidence, and involves more than one case within the study (Saunders et al., 2015). I chose a large airline with over 80,000 employees. Cabin crewmembers make up 30% of employees. The multiple case study design was not appropriate because I was only interested in exploring strategies of one airline organization. It would require additional time and resources to gain access to different airline leaders at hubs in different cities and states.

Qualitative Research Question

What strategies do upper-level airline leaders use to reduce occupational stressors on cabin crewmembers?

Interview Questions

1. Based upon your airline experience, what are the specific job demands of cabin crewmembers that increase occupational stressors that contribute to work-related absences?
2. What training strategies do you provide to managers to help them mitigate occupational stress for cabin crewmembers?
3. Which strategies were most effective in reducing occupational stress?
4. Which strategies were least effective in reducing occupational stress?
5. How did you measure effectiveness of strategies?
6. What resources did you provide to employees to reduce stress?
7. How resistant were your employees or supervisors to strategies?
8. How did you address employee or supervisor resistance?
9. What other information would you like to share regarding reducing occupational stressors on cabin crewmembers?

Conceptual Framework

The job demands-resources (JD-R) theory, developed in 2001 by Demerouti and Bakker was chosen as the study's conceptual framework. The JD-R theory is an occupational stress theory that suggests that strain is a response to an imbalance between demands on the individual and available resources to deal with those demands. This theory involves grouping working conditions into two categories: job demands and job resources (Demerouti et al., 2001).

The central assumption of the JD-R theory is that when job demands are high and job resources are low, stress and burnout become common outcomes (Bakker & Demerouti, 2007). High job demands lead to job strain and health impairments. Additionally, sufficient resources lead to increased motivation and higher productivity. In 2004, Schaufeli and Bakker revised the theory to include work engagement to establish a relationship between job demands and resources, health problems, and turnover. Work engagement served as a mediator of relationships between health problems and job demands, job resources and turnover intention. The JD-R theory has broad applicability and usefulness. There are no restrictions on specific job demands or resources. Any job demand or resource affecting employee health and well-being applies to the JD-R theory, making it an appropriate choice for my study. The theory design directly addressed occupational stress in various work settings. Therefore, the JD-R theory of occupational stress was used to help explain my study findings.

Operational Definitions

Cabin crews: Working members of an airline crew who play a crucial role in ensuring passengers' safety on board an airplane (Abeyratne, 2019).

Commercial flights: Operation of aircraft for hire to transport businesses, leisure passengers, or loads of cargo from one place to another (Abeyratne, 2019).

Hub: Airports used by one or more airlines to concentrate the flow of passenger traffic and flight operations from one destination to another (Bhattacharjee, 2016).

Inflight: The process of an aircraft moving through the air (Heggie, 2020).

Occupational stress: The process by which demands incurred by the workplace environment result in a decline in employees' physical and mental health (Basu et al., 2017).

Assumptions, Limitations, and Delimitations

Assumptions, limitations, and delimitations are essential to explain and structure the proposed study. In addition, assumptions, limitations, and delimitations help ensure clarity in research, which is required to conduct the study (Theofanidis & Fountouki, 2018). Assumptions, limitations, and delimitations are explained below.

Assumptions

Assumptions are elements of a study that researchers can't control but are critical for interpreting results (Clarke & Veale, 2018). There were several assumptions in my study. When conducting interviews, I assumed that participants answered questions factually and without bias. Validating each participant's answers required considerable time and effort, so I expected honest responses. Another assumption was that my research findings would provide valuable insights to airline leaders regarding the pitfalls of occupational stress among cabin crews.

Limitations

Study limitations include potential weaknesses that are usually out of the researcher's control (Theofanidis & Fountouki, 2018). The sample size, lack of resources to fund the research, and lack of previous research on the topic were limitations of this study. Although limitations are out of the researcher's control, they may still affect the

design of the study, results, and ultimate conclusions. Therefore, limitations should clearly be stated upon submission of the study.

A considerable limitation of this study was my ability to secure interviews with upper-level airline leaders of the organization. Airline leaders consistently travel to and from different company hub locations making it difficult to conduct face to face interviews. My current base is in Houston, Texas. I would have had to travel from Dallas to Chicago and Houston to conduct face-to-face interviews with airline leaders. Conducting interviews during COVID was another limitation. Therefore, I substituted face-to-face meetings for online video interviews through the Zoom online video conferencing platform. Online interviews reduce data collection quality by limiting the researcher's opportunity to judge interviewee responses and attitudes. Since airline leaders in Chicago and Houston are not readily available by telephone, I scheduled interview times via email that were conducive to their office schedules.

Delimitations

Theofanidis and Fountouki (2018) define delimitations as the boundaries or limits of a researcher's work. My delimitations included the number of participants, the sample size, selection criteria, conceptual framework, and COVID restrictions. There were five upper-level airline leaders from Chicago, Illinois, and Houston, Texas that participated in the study. They were selected based on their years of experience in the airline industry and knowledge of inflight operations specific to the cabin crew workgroup. Participants with less than 10 years of experience were not eligible to participate. Moreover, I chose the JD-R conceptual framework and case study research design.

Significance of the Study

Organizational leaders in the airline industry share the same goals. Expanding business models and maximizing profits are at the forefront of airline operations. These objectives may adversely affect flight crews (Richardsen et al., 2019). Therefore, organizational leaders seek to mitigate occupational stress while also maintaining the integrity of operations. This study was potentially significant to business practices in the U.S. airline industry because findings may increase airline leaders' knowledge of strategies that mitigate occupational stressors on cabin crewmembers.

Contribution to Business Practice

Proposed study results may provide airline leaders with increased knowledge for identifying strategies that mitigate and reduce negative impacts of occupational stress on cabin crewmembers. By identifying factors in the working environment that hinder or improve cabin crews' wellbeing, leaders may minimize occupational stressors contributing to reduced health, safety, and crew performance. My study's findings may help airline leaders identify strategies to reduce negative effects of occupational stress on cabin crewmembers. Reduced stress on the cabin crews may result in improved working environments for cabin crews, less hostile environments, more efficient operations, and increased safety and security onboard commercial airline flights.

Implications for Social Change

Implications for social change include reducing occupational stress for cabin crews and traveling stress for passengers by reducing potential for hostile environments contributing to stressful traveling conditions experienced by crewmembers and

passengers onboard commercial flights. Additional implications for social change include increased attentive services, safety, and security provided by cabin crews.

Review of the Professional and Academic Literature

Occupational stress is the process of workplace environmental demands resulting in a decline in employees' physical and mental health (Basu et al., 2017). Stressful working environments are not conducive to employee health, safety, and productivity (Colligan & Higgins, 2006). In this literature review, I showed how occupational stress negatively affects cabin crew members. Critical analysis of the literature shows occupational stress as a strong work hazard that leads to a pattern of adverse reactions that affect cabin crew work environments.

In this literature review, I examined existing research relevant to my chosen study topic. I developed a strong understanding of the study topic and related current issues. This review will serve as the basis for justifying the business problem and research question. The purpose of the study was to explore strategies that upper-level airline leaders use to reduce occupational stress on cabin crewmembers.

Strategies used to research the literature for my review began with selecting a research topic. Once I established the topic, I developed the research question. Then I decided on the scope of the review, information I wanted to cover, publication age, relevance to the study, and developed an outline. Finally, I conducted Internet searches to locate relevant literature and began my review.

The primary objectives of reviewing professional and academic literature are to (a) provide an understanding of current research and establish a framework that links

existing literature to proposed research, (b) explore how occupational stress affects cabin crews, and (c) review literature that explores strategies and methods to mitigate stress. I began the literature review by discussing the conceptual framework and supporting and contrasting theories. Then, I discussed occupational stressors specific to the airline industry. Finally, I reviewed airline leader strategies to reduce occupational stress and how those strategies affect cabin crewmembers.

In this literature review, I aimed to critically analyze and synthesize existing bodies of knowledge on my research topic. I used Google, EBSCO eBooks, ProQuest, and other dissertations accessible through Walden's library to find peer-reviewed journals. My sources consisted of peer-reviewed journal articles, dissertations, books, and government web pages. I ensured compliance with the 85% rule by including literature published after 2018. Out of 122 references cited, 105 were published after 2018, and 97 were peer-reviewed (78%). There were 18 references published prior to 2018 (15%) and 12 peer-reviewed sources (9%). There were 10 articles (8%) that were not peer-reviewed.

Table 1
Summary of the Literature Review

References	Count	Percentages
Total References published within 5 years	105	85%
Total References published more than 5 years	17	14%
Total Peer-reviewed published within 5 years	97	78%
Total Peer-reviewed published more than 5 years	12	9%
Total of References Used		122

JD-R Theory

I used the JD-R theory as the conceptual framework for this study. This theory suggests that strain responds to an imbalance between workplace demands on the individual and available job resources required to handle those demands (Bakker & Demerouti, 2014). Bakker and Demerouti introduced the JD-R theory as an alternative to other employee wellbeing theories, such as the effort-reward imbalance and demand-control theories. The JD-R theory incorporates a variety of working conditions into analyses of employees and organizations. Moreover, instead of solely focusing on negative outcome variables (e.g., ill health, burnout, and repetitive strain), the JD-R theory involves positive and negative indicators as well as outcomes of employee wellbeing.

The JD-R theory involves assumptions. The first assumption is that while every occupation may have its own set of risk factors associated with job stress, they fall into two main categories: (a) job demands and (b) job resources (Schaufeli, 2017). The second assumption is that two different underlying psychological processes play a role in developing job strain and motivation, which are physical and social resources. The third assumption is that health impairment results from continued job strain. Finally, the fourth assumption is that motivation results from abundant job and personal resources (Bakker & Demerouti, 2007).

Schaufeli (2017) stated all jobs include demands and resources. According to Bakker and Demerouti (2014), job demands and resources are any organizational, physical, psychological, and social job aspects that require consistent physical or

psychological effort or skills. Examples of job demands that affect cabin crews include unfavorable physical environments, extreme work pressures, and emotionally demanding customer encounters (Schiffinger & Braun, 2020). Job resources are any physical, social, or organizational aspects of the job that may be functional in achieving work goals, reducing job demands and the associated physiological and psychological costs, and stimulating personal growth and development (Schaufeli, 2017). Examples of job resources include managerial and coworker support, job control, and performance feedback. The JD-R theory can be used to review those positive and negative effects of employee work experiences associated with employee perceptions of job demands and resources directly associated with their psychological wellbeing (Schneider et al., 2017).

If employees maintain their job performance under extremely demanding conditions, it will result in job strain (Schaufeli, 2017). Schiffinger and Braun (2020) stated the job strain process leads to additional exertion and requires employees to manage demands while maintaining their job performance. Constant exposure to job strain correlates with poor health and wellbeing, burnout, absenteeism, and poor job performance. Job demands generally predict workplace strains. Examples of job demands that apply to the airline industry include excessive flying, reserve on-call status, and work-home life interference, which typically leads to crewmember burnout and low employee morale (Schaufeli, 2017).

Job performance in conjunction with employee wellness in any organization depends on job demands and direct and perceptive expectations (Schneider et al., 2017). Bakker and Demerouti (2014) stated health impairment occurs with increasing job

demands while exhausting employees' physical resources and cognitive abilities leading to burnout and failing health. Job demands require efforts which potentially lead to pain. Jobs tend to become more relaxing, satisfying, and less painful when resources are available. Job resources, such as colleague and supervisor support, can lead to substantial motivation.

Various job demands and resources might affect employees' health and well-being regardless of their occupation. It is necessary to balance physical and mental job demands and job resources for competitive advantage. A lack of balance may be detrimental to developing and implementing daily job requirements. Physical demands and life-saving resources are essential job requirements for all cabin crewmembers (Bakker & Demerouti, 2007). Cabin crewmembers need sound mental capabilities for proper administration of life-saving procedures in the event of an inflight emergency to avoid costly errors that may result in the death of a passenger or crewmember.

The JD-R theory can be useful in any job sector to help determine the balance between physical and mental job demands and resources for competitive advantage. Creating a list of job requirements alongside comparisons of job resources and positives may help determine this balance. Taking proactive measures can promote job resources. By ensuring employee participation, organizations can benefit from employees' extra value while contributing to their wellbeing (Narban et al., 2016).

The JD-R theory has been recognized as one of the leading job stress theories (Demerouti et al., 2001). The JD-R theory has two processes that lead to burnout. The first is excessive long-term job demands from which employees do not adequately

recover. These job demands eventually result in exhaustion. Lack of job resources precludes meeting job demands and achieving work goals, which leads to withdrawal behavior.

Schaufeli and Bakker (2004) introduced a revised version of the JD-R theory. The revised version included work engagement. In the revised theory, burnout and work engagement became mediators of the relationship between job demands, resources, and turnover intentions. The JD-R theory shows that burnout results from excessive job demands accompanied by inadequate resources, and burnout leads to health issues such as depression, cardiovascular disease, and psychosomatic issues (Schaufeli, 2017).

Supporting and Contrasting Theories

There are many existing theories to address occupational stress and its effects in the workplace. Organizational failure to effectively address occupational stress effects on their employees led to four new theories for understanding stress. These theories were (a) the demand-control theory by Karasek in 1979, (b) job characteristics theory by Hackman and Oldman in 1980, (c) two-factor theory by Herzberg in 1959, and (d) effort-reward imbalance theory developed in 2002 by Siegrist. According to Mensah et al. (2021), the basic approach of these theories establishes relationships between occupational stressors and strain measures. These theories are addressed in the next section.

The four supporting and contrasting theories mentioned in this section were developed to address relationships between specific stressors and job strains affecting employees. Although the models support occupational stress, they do not encompass all stress-related issues. Bakker and Demerouti (2014) argued that these occupational stress

models are restricted to address specific variables, whereas the JD-R theory incorporates a wide range of variables related to any working conditions. Instead of focusing solely on negative outcome variables like repetitive strain, ill health, and burnout, the JD-R theory involves negative and positive indicators that affect employee wellbeing (Schaufeli, 2017).

Job Demand-Control Theory

The job demand-control theory (JD-C) involves job characteristics influencing employees' psychological wellbeing (Asif et al., 2018). The JD-C theory illustrates how job demands such as heavy workload, role ambiguity, and job-related strain can cause stress for employees. Individuals can manage these stressors by using their job specific skills to gain autonomy and control over their work (Jalilian et al., 2019). The control component of the demand-control theory hedges the impact of stressful job demands and may help enhance employees' job satisfaction, inciting opportunities to engage in challenging tasks and learn new skills.

In the JD-C theory, occupational stress is a combination of high psychological and physical work demands. Job demands accompany lack of social support and decision-making autonomy in the model. Examples of job demands include time pressures, heavy workloads, and poor relationships with management. Psychological demands of the job create occupational stressors that may lead to mental and physical problems. Moreover, poor psychological conditions in the workplace may increase occupational stress (Jalilian et al., 2019). Overall, occupational stress can have adverse effects on employees' physical and mental health and wellbeing.

In the JD-C theory, interactions between job demands and control predict various job strain types. Inferences between job demands and control are inappropriate for my study because the key idea focuses on the amount of control employees have to meet job demands. Factors deeming the theory inappropriate for my study include: (a) the theory focuses on employees' ability to manage stress on their own, and (b) the theory doesn't consider individual characteristics of employees' (Mensah et al., 2021). Integration of job resources, self-efficacy, and social support would help to address these concerns. Furthermore, the JD-C theory involves job characteristics and how they influence employee psychological wellbeing.

Job Characteristics Theory

In 1980, Oldham and Hackman developed the job characteristics theory, also known as the core characteristics theory, a widely used framework to study how particular job outcomes are affected by specific job characteristics. The primary goal of the job characteristics theory is boosting worker productivity while rewarding them with nonmonetary rewards. Blanz (2017) posited incentivized work may result in increased job satisfaction and a greater sense of personal achievement on the job.

The job characteristics theory is a work design theory that provides a set of principles implemented to enrich jobs in organizational settings. A work design is a work arrangement that aims to overcome worker alienation and job dissatisfaction that stems from repetitive tasks or what an individual would view as a tedious job. In the job characteristics theory, the task itself is the key to motivating employees (Oerlemans & Bakker, 2018). A dull and monotonous job will generally hinder any motivation for the

employee to perform well, and a challenging job typically enhances motivation. Three ways of adding challenge to a job are variety, autonomy, and decision authority. Demirkol and Nalla (2018) stated job enrichment and rotation are examples of adding variety and challenge. According to the theory, employees need their voices heard by management and have some degree of autonomy for success and job satisfaction. These types of job enhancements could result in employee loyalty and job enrichment. In their absence, the results are work disassociation and drops in productivity (Schaufeli & Jonge, 1998).

When employees experience more autonomy on the job, they are more satisfied with the job (Oerlemans & Bakker, 2018). There are 5 core job characteristics of the theory forecasted to benefit employees psychologically. These work-related outcomes are (a) skill variety, (b) task identity, (c) task significance, (d) autonomy, and (e) feedback. These core job characteristics impact the employees' psychological state by allowing them to (a) experience meaningfulness, (b) experience responsibility for outcomes, and (c) gain knowledge of outcomes (Kamani, 2020).

Overall, the job characteristics theory is a recognized and valuable theory, enabling professionals to consider how to best design jobs. Most of the elements within the theory's framework receive support from empirical evidence; however, I deemed the job characteristics theory inappropriate for the current study because the theory's main benefit is to provide a template on how to design jobs through the five core characteristics. One of the main focuses of the theory is job satisfaction. The five

characteristics, along with a focus on job satisfaction and motivation, are not relative to my study, which focused on stress.

Two-Factor Theory

Herzberg, a U.S. psychologist, developed the two-factor theory in 1959. The theory, also known as the motivation theory, is based on the premise that organizations may adjust to the workplace's motivational influence through motivating and hygiene factors (Evans & Rothbart, 2009). Motivating factors, including achievement, job recognition, responsibility, growth, and advancement opportunities, are present work motivators that influence the employees to be more productive. However, hygiene factors, such as job security, salary, benefits, and favorable working conditions, typically surround the job and are not present within the job itself. When motivational and hygiene factors are missing, the employees become complacent and counterproductive (Alshmemri et al., 2017).

There is a two-step process to using the two-factor theory that helps to increase employee motivation. The two-step process includes (a) eliminating job hygiene stressors and (b) boosting job satisfaction (Evans & Rothbart, 2009). Ultimately, the Herzberg two-factor theory correlates to the employees' satisfaction or dissatisfaction with their job (Alshmemri et al., 2017).

Hygiene factors are less important to job satisfaction than motivation factors, but they relate to the need to avoid unpleasantness. The individual's need for self-growth and actualization lead to motivating factors like job satisfaction. Many nursing research studies used the two-factor theory as the theoretical framework for testing job satisfaction

(Evans & Rothbart, 2009). Alshmemri et al. (2017) demonstrated support for Herzberg's motivation-hygiene theory, which confirmed hygiene factors as less important than job satisfaction. The motivation factors are considered more important and may generate job satisfaction.

According to the two-factor theory, management can avoid employee dissatisfaction by ensuring the acceptability of hygiene factors. Managers must ensure that the work motivates and rewards the employees for being more productive. I deemed the two-factor theory inappropriate for my study because it focuses on job enrichment and employee motivation. The two factors of this theory are not directly related to my study, which was focused on job stress.

Effort-Reward Imbalance Theory

The effort-reward imbalance (ERI) theory was created in 1966 by Siegrist. Bakker and Demerouti (2014) discussed stressful, psychosocial work environments and explained their adverse effects on stress-related health risks. The theory reflects an exchange between high efforts and low rewards at work, positing strong, negative emotions and stressful reactions that adversely affect long-term health (Tsutsumi & Kawakami, 2004). Monetary and nonmonetary rewards include prospects of promotion, salary, job security, recognition, and esteem.

The ERI theory is one of the most important theories used to guide occupational health research, and it has gained popularity over the past years. The theory offers guidance due to the additional insight into occupational stress to help orchestrate changes in the work environment. The theory's premise is that work-related benefits are dependent

on reciprocal relationships, efforts, and rewards at work (Siegrist & Li, 2017). Job demands represent efforts and obligations expected from the employees. Money, esteem, job security, and career opportunities return rewards from the employing organization (Vegchel et al., 2005).

Work characterized by high efforts and low rewards illustrates a deficit between the "costs and gains." The sustained reactions of stress or strain create imbalance. In essence, hard work efforts without return appreciation is an example of stressful imbalance. The ERI theory shows workplace stress measures differently from the job-demand control theory. Each theory's adverse health effects are independent and complementary to each other, preferably to measure job satisfaction, motivation, performance, and morale simultaneously as organizational level outcomes (Vegchel et al., 2005).

Studies applying the ERI theory showed various poor health results in response to stressful work environments (Siegrist & Li, 2017). The imbalances of the theory's negative health effects are greater amongst less-privileged workers. Psychosomatic symptoms, such as nausea, shortness of breath, and bloating, were identified as short range target outcomes. Short range targeted outcomes reflected symptoms experienced most frequently during short term observations. Sick leave was a medium-range target outcome. Medium range target outcomes reflected symptoms experienced during slightly longer observations. Evidence showed psychosomatic symptoms as the best outcome for intervention based on the ERI theory (Bakker & Demerouti, 2014; Tsutsumi & Kawakami, 2004). Tsutsumi and Kawakami found that the effort-reward imbalances

associated with psychosomatic symptoms consistently showed positive results in prospective and cross-sectional observations.

The ERI theory is also one of the leading theories of health-adverse psychosocial work environments (Siegrist & Li, 2017). The theory references economic and socio-demographic context of its applications, its distribution across working populations, and its theoretical foundation. Authors of the EFI theory indicated that lack of fairness or reciprocity between high cost and low gain conditions causes emotional distress, leading to poor health outcomes. I eliminated the ERI theory as the framework for my study because its main focus was to establish a fair balance between the costs invested in cooperative activities and the gains received. My objective was to explore strategies to reduce occupational stress and not consider the EFI costs and gains aspect.

Occupational Stress in the Workplace

Various authors have proposed different definitions of occupational stress (Basu et al., 2017; Stickle & Scott, 2016). Basu et al. indicated occupational stress as the process by which the demands incurred by the workplace environment result in a decline in the employees' physical and mental health. Stickle and Scott (2016) posited that occupational stress constitutes a condition arising from coworker interaction and their jobs characterized by changes forcing them to deviate from normal functions. When an employee's negative interactions on the job coincides with their working conditions, it may lead to stress. An indication of how specific work conditions may cause stress is the change in an individual's character, such as coping skills and personality (Basu et al.,

2017). However, everyone handles stress differently and one may handle stress more favorably than the next (Pi et al., 2016).

Occupational stress often leads the body to have a physiological reaction causing strain on an employee physically and mentally. Some of the physiological factors contributing to work stress are feelings of loneliness, extended workdays, toxic environments, strained relationships between coworkers and management, harassment, and bullying by management and coworkers (Colligan & Higgins, 2006; Pi et al., 2016). Although these particular factors are not exclusive to cabin crewmember roles, they are relevant to the job.

Before the COVID-19 pandemic, nearly 70% of workers reported feeling stress from work (Sobieralski, 2020). Recent surveys show that people around the U.S. reported occupational stress levels, sources of stress, intensity level, and their physical and mental responses to stressors have increased since the COVID-19 outbreak. Nearly 8 out of 10 people (78%) stated the coronavirus pandemic significantly raised their stress levels, and 2 out of 3 people (67%) reported experiencing increased stress levels due to the pandemic (Sobieralski, 2020). There are numerous surveys and studies that confirm that the workplace's occupational fears and pressures are the leading causes of stress for U.S. employees. An employee’s response to occupational stress may be negative or positive. Their response depends on the type of demands placed on them, how much control they have over the situation, the amount and type of support they receive, and how their response is perceived (Narban et al., 2016).

Narban et al. (2016) posited five job conditions that specifically relate to the cabin crew work environment that may lead to stress. The first job condition is the design of tasks, including extended work hours, shift work, hectic routines, monotonous tasks, and limited control over work or rest times. The second job condition entails management style, which involves the lack of employee participation in managerial decisions, lack of employee-friendly policies, and insensitivity to the employee's family needs. The third job condition infers that there are too many different work roles. The fourth job condition addresses career concerns that involve job security, lack of growth, advancement opportunities, and rapid changes. The fifth job condition includes environmental conditions, which are unpleasant or dangerous conditions such as angry customers, airplane noise, air pollution, or mechanical problems. Environmental stressors may arise at any time upon discrepancies between the workplace demands, the employee's ability to meet those demands, and the working environment (Khushnood et al., 2020). The total of all factors experienced by the cabin crewmember concerning the job and working environment affects the worker's psychosocial and physiological homeostasis (Narban et al., 2016).

Occupational Stress in the Airline Industry

Stress has become an everyday reality for cabin crew employees throughout the aviation industry. Stress is a threat to crew and passenger safety because it creates impairments in performance and mental alertness, leading to injury. Recent studies show that the financial cost of occupational stress has considerably increased worldwide. Although anyone can become a victim of occupational stress, the most stressful jobs

require responsibility for people. The possibility of physical danger is a significant contributor to occupational stress (Stickle & Scott, 2016).

The global air travel industry has rapidly expanded over the past 30 years (Marshall & Rossman, 2016). The total number of passengers flown approached 2 billion yearly (IATA, 2018). Stress can cause crewmembers to commit egregious errors in thinking, whereas they deem it necessary to take mental shortcuts that could prove to be potentially fatal. Extreme stress levels will lead to reductions in job performance in all crewmembers. Previous studies identified stress as the main factor in determining aviation security.

In efforts to justify the significance of occupational stress in the workplace, it is necessary to provide a valid explanation that links the study to essential theoretical perspectives, policy and practice issues, or persistent social issues known to affect the crew's daily life. Although there is limited research on occupational stress among cabin crews in the airline industry, I wanted to evoke existing occupational stress theories to provide additional research on this topic for future scholars. I discussed the adverse effects of occupational stress on cabin crews and the strategies used to mitigate stress by airline leaders without imposing personal bias and assumptions.

Types of Occupational Stressors in the Airline Industry

There are many occupational stressors in the airline industry. In this section, I discussed three common types of occupational stressors that occur daily: environmental, inflight, and economic stressors that affect cabin crewmembers. Environmental stressors are factors in the working environment that create stress, such as excessive noise

(Kalemba et al., 2017). Inflight stressors are safety and service-related duties regarding the environment onboard an aircraft and passengers that lead to stress (d'Ettorre & Greco, 2015). Economic stressors include events that affect the organization and its employees financially (Kalemba et al., 2017). The presence of these occupational stressors is interrelated and may trigger others to arise.

Environmental Stressors. A stressor is the root cause or source of stress. It is a condition or event known to evoke strain as it applies to cabin crews (French et al., 1982). Two specific groups of environmental stressors may lead to adverse health conditions and excessive employee absences. The first group of stressors, called *physical stressors,* consists of prolonged sitting time in airports, repetitive tasks, limited mobility, fast-paced work, shift work, short breaks, inadequate lighting, air humidity, ventilation, temperature control, and excessive noise. The second group of stressors, called *psychosocial stressors,* consists of unrealistic scheduling timelines, excessive work hours, extended duty days, underutilized job skills, inflexible work rules, conflicting schedule demands, poor relations with coworkers and management, lack of respect, dead-end job (no promotions), job insecurity, reserve (on-call status) and sexual harassment (DeCelles et al., 2019).

Narban et al. (2016) reported these specific occupational stressors as significant contributors to various health issues, including acute traumatic injuries, psychological and musculoskeletal disorders, gastrointestinal illnesses, cardiovascular disease, and cancers. There is an increasing need to assess psychosocial work factors to improve the employees' well-being. For instance, unfavorable working conditions and employee

burnout are closely associated with chronic illness absenteeism, occupational injuries, accidents, poor work performance, reduced productivity levels, and lack of organizational commitment, leading to employee turnover (Schaufeli, 2017).

Some of the most frequently overlooked determinants of burnout, exhaustion, and turnover intention are customer confrontation, scheduling satisfaction, and time constraints, leading to stress. However, the opposite is true under favorable working conditions and employee satisfaction. In essence, psychosocial factors and employee well-being translate into positive or negative financial results for the organization (Pi et al., 2016). As a result, it is in the organization's best interest to consistently monitor psychosocial work factors and the employees' well-being to direct timely and targeted efforts to prevent stress, burnout, and turnover while pushing productivity (Narban et al., 2016). Cabin crews' workday and environmental specific elements may show constant exposure to varying schedules, irregular flight operations, extended workdays, jet lag, and other factors that conflict with their bodily rhythms. These elements contribute to fatigue, sleep loss, health, and, eventually, safety issues (Yates & Leggett., 2016).

Inflight Stressors. There are several occupational stressors specific to the airline industry. The inflight environment involves engine noise, decreased cabin pressure, and gravitational forces surrounding the aircraft's acceleration and deceleration (Zevitas et al., 2018). Although the passengers typically observe the flight attendants performing service-related duties, the cabin crew's primary role is safety-related duties (Kalemba et al., 2017). Safety-related duties associated with the cabin crew role include responding to medical and other emergencies, remaining vigilant for safety and security issues within

the cabin environment that may threaten passenger and crew safety, and assuring passenger compliance with federal aviation regulations. Up to one-third (37%) of cabin crew reported feeling stressed because most airplane accidents occur during takeoff and landing (Hajiyousefi et al., 2017).

Scheduling and time constraints emerged as factors leading to emotional exhaustion (Kinnunen et al., 2017). The airline's inflight operation involves flight crew workloads, the working environment, emergency equipment, recurrent training, company policy, and quality control factions. Widyanti and Firdaus (2019) also found that flight crews often confront demanding situations such as being on 24-hour reserve status, reporting to the aircraft on time, and unruly passengers.

A combination of factors may contribute to fatigue and other adverse health effects when considering the airplane cabin-specific environment. These factors included high altitudes, low air pressure, insufficient oxygen intake, air quality, engine noise, temperature oscillations, and increased cosmic ionizing radiation levels, leading to cancer (Castro et al., 2015). Jackson et al. (1986) posited that occupational stress could have been a transactional phenomenon created by the person interacting with their work environment.

Economic Stressors. The terrorist attacks on September 11, 2001, fluctuations in the economy, and the COVID-19 pandemic has created uncertainty for the airline industry. The COVID-19 pandemic caused substantial numbers of sudden illnesses, quarantines, hospitalizations, and tragic deaths. The pandemic also constituted nationwide travel restrictions and undermined individuals' business and leisure mobility.

The transportation industry, particularly the airlines, suffered financial losses as air travel diminished because of capacity reductions and weak demand leading to flight cancellations due to COVID-19.

The U.S. airline industry experienced a decrease in capacity of approximately 60-80% at major carriers, with further reductions on the horizon (Josephs, 2020). On July 8, 2020, United Airlines announced that it would issue furlough notices to 36,000 employees, including 15,000 of the 26,000 cabin crewmembers employed by the airline. In ongoing efforts to keep the airline industry from imminent failure, the U.S. government has passed a large stimulus bill to keep the airlines in business and save countless employees from furloughs (Gilbertson, 2020). Despite this stimulus, United Airlines and other carriers relied on the U.S. government to provide additional stimulus to avoid massive job loss and impending bankruptcies. The employees who manage to avoid displacement due to COVID-19 may face potential wage, schedule, and benefits cuts, worsening the effects of occupational stress throughout the aviation industry (Bergen & Labonte, 2020).

Cabin crewmembers have also reported the passengers' failure to disclose infectious diseases for fear of being denied boarding. When faced with this situation, the cabin crew needs to access the emergency medical kit or medical equipment on the plane for emergency medical assistance. If the passenger’s health is critical, the flight may need to divert to an unplanned destination and then quarantine the passengers and crew onboard the flight until health officials clear the flight for arrival at the gate or departure.

Exposure to infectious diseases has often created feelings of fear or uncertainty in the crew (Schiffinger & Braun, 2020).

How Occupational Stress Affects Health

Research shows that excessive job stress can lead to many long-term health problems, such as cardiovascular diseases, diabetes, weakened immune system, high blood pressure, migraines, ulcers, substance abuse, depression, anxiety, and suicide. Stress may also cause psychological disorders and mental health problems, such as depression and burnout. According to conservative estimates found in medical books, Miracle (2016) revealed that 80 percent of all illnesses originate from stress. There are growing concerns that stressful work environments interfere with safety and set the stage for injuries (Narban et al., 2016).

Adverse Health Conditions

According to Castro et al. (2015), there is documented evidence from an increasing number of research studies that irregular workdays and hours, fatigue, growing health concerns, family and social life, safety, and performance have impacted cabin crews since the 1900s. The International Agency of Research on Cancer (IARC) recently considered shift work and its involvement with circadian disruption as a potential cancer risk. Breast cancer was a particular consideration in female flight attendants who experience circadian disruption from frequently flying across different time zones (Khushnood et al., 2020). McNeely et al. (2018) reported on the various effects of shift work relative to sickness-related absences that are contradictory to those reporting the negative effects of varying flight schedules. Some studies report the potential risks of

prostate cancers among male crewmembers despite the research limitations (McNeely et al., 2018; Narban et al., 2016). The number of studies regarding cancer and the time spent at work has increased. Castro et al. (2015) suggests that night work contributes to increased risk of several types of cancer in male crewmembers due to stress.

When the cabin crews are subject to irregular work schedules during flight operations, it often leads to contracting illnesses from sick crewmembers and passengers. Cabin crewmembers have reported working ill due to fear of punishment or lack of available sick time. Some implications related to flight operations included health issues such as vision and hearing problems due to cabin air quality, high exposure to contagious diseases, and major injuries (Widyanti & Firdaus, 2019). Over the last 2 decades, there have been increasing numbers of studies reporting adverse effects from irregular work schedules. Some studies reported a potential risk for prostate cancer among male cabin crewmembers and breast cancer among female cabin crewmembers. Also, the IARC considers irregular work schedules involving circadian rhythm disruption as a potential cancer risk (Castro et al., 2015). To address health concerns, the airlines should strive to regulate the flight crew schedules. Addressing these concerns may foster higher attendance levels and allow the cabin crews to balance their home and work life, encourage dedication and enthusiasm to work, and achieve customer satisfaction to improve performance. Moreover, the airline leaders should establish healthcare-related training courses and regularly arrange on-site healthcare check-ups for crewmembers to mentally and physically equip them to perform their duties (Tsaur et al., 2020).

Fatigue

Fatigue is another growing concern in flight operations across the aviation industry, largely due to long duty periods, disrupted circadian rhythms, high workplace demands, insufficient rest, and social and societal demands (Caldwell et al., 2019). Various researchers have described fatigue as a physical and moral disorder resulting in functional disruptions, breakdowns of the mind and body, impairment of the will, and total exhaustion (Castro et al., 2015). The causes of fatigue, its mechanisms, and consequences have long been the discourse and study topic concerning its adverse effects on cognitive functioning and emotional dispositions. Sleep quality, quantity, timing, amount of time elapsed since the last rest period, and recovery from long duty days are major determinants of performance and associated safety (Caldwell et al., 2019). The lack of proper rest also impairs the regulation of glucose, hormones, and cardiovascular function. There has been a 13% increase in mortality risk linked to fatigue and an estimated economic impact of $280 to $411 billion annually across the United States.

Fatigue leads to impaired concentration, decision making, and slow reactionary times. Airline leaders must learn about the dangers of fatigue to the crew and passengers' health and well-being. Leaders must understand the importance of obtaining adequate sleep and that full recovery from fatigue may take more time than allotted. Correcting the issues responsible for chronic and widespread fatigue should be a major national priority, given the devastating impact of improper rest on public health, safety, performance, and national economic performance (Grandner, 2017). Fatigue management is important for the aviation industry because safety-sensitive operations and the employees' health and well-being are at risk (Caldwell et al., 2019).

According to Castro et al. (2015), consistently working variable work shifts, whether early morning, evening, or red-eye flights, either on a fixed or rotating basis, may affect cognitive mental performance. Under these circumstances, it is very difficult to manage sleep and fatigue, but proper shiftwork scheduling is quite helpful. Fatigue in modern society is a personal and occupational risk. Insufficient rest from self, society imposed or sanctioned sleep restrictions, intense and lengthy work schedules, varying schedules, jet lag, and other factors constantly challenged crews to adapt. There are individual differences in adaptation, indicating that mild stress may differ from one individual to another. As a result of individual differences, stress has organizational, social, and environmental dimensions. In the past, researchers sought to signify whether occupational stress was either a characteristic of the crewmember's work environment or merely an experience felt by the person (Nosker et al., 2020). Failure to achieve adaptation leads to a lack of safety, performance, and general well-being (Yang & Yang, 2019).

Research shows that excessive fatigue in the workplace is a serious safety hazard, and that insufficient sleep poses significant risks to health, well-being, and longevity (Nosker et al., 2020). There are validated strategies that may help promote and optimize better rest, work scheduling, and workplace practices to mitigate the impact of fatigue in real-world settings (Caldwell et al., 2019). Both cabin and cockpit crewmembers face long duty days, early morning check-ins, all-night flying, multiple legs of flight per day, and crossing time zones. These job aspects may contribute to jet lag symptoms relating to reduced sleep quantity and quality due to circadian rhythm disruptions (Nosker et al.,

2020). Van Drongelen et al. (2017) found that fatigue is a common phenomenon that interferes with normal social activities in 70% of flight crewmembers. There is limited research referencing the adverse health effects of varying flight schedules.

Lack of Federal Protections

The Occupational Safety and Health Administration (OSHA) has excluded airline crews from radiation protections granted to most U.S. workers throughout history. Limited protections were implemented for cabin crew in 2014. The National Council on Radiation Protection (NCRP) reflects flight crews as having the largest average annual effective radiation dose of all U.S. radiation workers. Despite the NCRP's report, exposure to ionizing radiation remains an unprotected issue. There is relatively sparse literature addressing cabin crew health, and it varies in quality with mixed results. According to McNeely et al. (2018), the existing literature points toward an association between job tenure and inflight exposures, declining respiratory health, increased skin and breast cancers, musculoskeletal injuries, health issues from contaminated cabin air, and increased rates of mental health issues.

Stress-Related Absences

Specific aspects affecting the cabin crew role include physical health issues and, on a smaller scale, mental health issues. Based on previous research, role conflict, role ambiguity, or both may increase anxiety, depression, low morale, and decreased job satisfaction. Research on occupational stress shows that stress-related absences predicate work disabilities and long-term adverse health (van Drongelen et al., 2017). Research also shows that the most common causes of stress-related workplace problems are

increased workload closely followed by prolonged work hours (Castro et al., 2015). According to Castro et al., stress-related work absences and mental health issues have risen. Some studies show that irregular work hours have little bearing on sickness absence days and incidences, while others reflect greater sickness-related absences resulting from irregular work hours (van Drongelen et al., 2017). Stress-related illness is now the most common cause of long-term absence from the workplace, contributing to economic loss.

Occupational stress has increasingly become a contributor to economic loss relative to chronic absences. Rising health issues for the employees may produce physiological and overt psychological disabilities. Furthermore, it may also cause the subtle manifestation of morbidity that can affect an employee's productivity and personal well-being (Narban et al., 2016). Past research on occupational stress indicates that excessive job stress can lead to many long-term health problems. Cardiovascular diseases, weakened immune systems, high blood pressure, musculoskeletal disorders, narcotic substance use, depression, anxiety, psychological disorders, mental health problems, burnout, and cancer are commonly associated with occupational stress and increased work absence (Castro et al., 2015). A study conducted by van Drongelen et al. (2017) on flight type exposure and its association to sickness absence in cabin crewmembers indicated sickness absence was the predominant predictor of past sickness absence. Previous studies showed early detection yielded positive results through preventive actions. Airline leaders may wish to identify employees with chronic sickness absences through company records. In turn, they may develop and implement preventive

measures to effectively reduce future absences and the possible deterioration of their employees' health.

Annual Training

Occupational stress stems from the negative aspects of the working environment seen as physically or emotionally threatening, which is a significant occupational health concern. Cabin crews typically experience extreme stress in areas with important health implications, where appropriate recognition and formal support are necessary. The cabin crews' requirements involve the performance of multiple roles consisting of safety and service-related duties. Nevertheless, crews worldwide receive yearly training to administer first aid, facilitate airplane evacuations during an emergency, handle chemicals and explosive devices, and manage, control, and restrain violent or disorderly passengers. A recent internet-based study showed occupational stress results among 497 cabin crewmembers who reported a disturbing pattern of high work demands (Van Den Bert et al., 2020). Results also indicate a need for appropriate formal and informal managerial support and training to avoid stress-related health issues.

Seniority-Based System

Cabin crews often operate on a seniority-based, variable shift system involving overnight layovers away from their home base and reserve (airport standby) duties. The frequent air travel and working varying shifts have resulted in major changes in lifestyles. McNeely et al. 2018 posited that circadian rhythms and exhausting variable shift work proved detrimental to the crew's mental alertness and clarity. Cabin crews must remain

alert in an emergency, especially during critical phases of flight (takeoff and landing). These types of occupational stressors may contribute to higher overall stress levels.

How Occupational Stress Affects Safety and Security

Occupational stressors have a significant effect on safety and security. Cabin crewmembers are responsible for performing and managing safety-related duties in a passenger or airplane emergency. Vatankhah (2020) confirmed cabin crew responsibilities extend beyond service-related duties, including passenger safety compliance with Federal Aviation Administration and airline policies and regulations. In this section, I addressed inflight injuries, irregular flight operations, and air rage. These types of stressors associate cabin crew preparedness with their ability to handle emergencies under stressful situations. (How does this sound? Did I do the citation above correctly?)

Inflight Injuries

The cabin crew stands at a high risk of injury due to the limited usable workspace and equipment onboard the aircraft that may impose physical stress. For example, attempting to pull and push 200-pound service carts during flight ascent and descent under limited time pressures could injure the crew or passengers. Pulling and pushing the service carts, lifting heavy objects such as suitcases, being struck by falling objects, and being thrust around the cabin during extreme turbulence events are the leading causes of cabin crewmembers' injury. The responsibility of tending to passengers should also be a consideration for safety and security purposes to gain a broader perspective of the crew workload (Castro et al., 2015).

Flight Operations

Safety and security are the primary responsibility of the cabin crews in the airline industry. The 24-hour a day operation, inconsistent work schedules, reporting times, and frequent time zone transitions often have adverse effects on cabin crews' internal circadian rhythms. The reduction of quantity and quality of rest links to short and varying off-duty periods, less than optimal sleep environments, and lengthy commutes, which interfere with alertness while on duty. A decline in reactionary time and performance is present in as little as ten minutes. The number of daily and weekly hours flown in association with impaired alertness and performance levels increases injury risk (Caldwell et al., 2019). According to Grandner (2017), the combination of degraded attention, memory, decision making, vigilance, reaction time, mood, arousal, and emotional/affective regulation can seriously jeopardize workplace efficiency and safety.

The cabin crews have to perform mentally and physically demanding work duties. They are responsible for conducting aircraft safety, security, and equipment checks before a flight and after emergency use. Therefore, observing the mental workload of flight crews is of equal importance as the other factors. The Federal Aviation Administration noted the significance of considering the mental aspect of managing fatigue for cabin crews to provide optimal workload performance and enhance the crew's safety and health. Mental workload is crucial during flight operations since it is associated with decreased performance, well-being, and increased chances of committing egregious errors. Particularly, when cabin crewmembers experience extensive mental workloads coupled with insufficient rest time, health problems due to stress will arise

(Widyanti & Firdaus, 2019). Sufficient crew rest is vital for survival and optimal daily cognitive functioning during flight operations. Insufficient rest due to sleep depravity, restrictions, and disorders are associated with adverse mental and physical health and decrements in performance-related accidents (Grandner, 2017).

Air Rage

Air travel can be highly stressful for the crew and passengers, resulting in various stressful experiences. Disruptive airline passenger behavior (DAPB), or "air rage," has become a common occurrence in the airline industry today. Intoxicated crew and passengers, illegal smoking, arguments about carry-on bags, poor customer service, mental illness, cramped seating, delayed flights, upgrade disputes, and environmental stressors are commonly associated with DAPB (DeCelles & Norton, 2016b). DAPB also includes verbal, physical, or sexual abuse directed towards the cabin crew or other passengers, damage to the aircraft or crew property, and failure to comply with crewmember or safety instructions while onboard the aircraft. It also encompasses incidents that occur at the airport. The airport experience includes stressors such as early morning check-ins, red-eye flights, TSA security checks, boarding procedures, baggage handling, and commuting. During the flight, the crew and passengers typically experience cramped seating, physical discomfort, hypoxia, headaches, nausea, aircraft and passenger noise, and anxiety (Hubbard & Bor, 2016). When combined with individual factors, such as intoxicated and mentally ill passengers, these stressors can lead to disruptive behavior that jeopardizes safety onboard the aircraft, including attempts to breach the cockpit and take control of the aircraft (Felkai & Kurimay, 2017).

Statistics show evidence that the frequency of DAPB has drastically increased over the past few decades and has reached a plateau over the past couple of years (Timmis et al., 2016). Between 2007 and 2016, the IATA reported 58,000 incidents of air rage (IATA, 2019). In 2015, an Australian airline reportedly averaged 30 incidents per month (Timmis et al., 2016). DAPB is detrimental to the crew and passenger well-being and is costly to prevent and manage (International Air Transport Association, 2019). For example, in 2015, a transatlantic flight had to dump fuel as they rerouted the flight to Belfast. The reroute caused a mandatory 24-hour delay due to DAPB. It reportedly cost the airline an estimated $500,000 (McLinton et al., 2020). Consistent calls in the literature have been for airline leaders to develop an understanding of underlying factors contributing to DAPB, inform about prevention strategies, and update cabin crew training (Schaaf, 2018). Before the September 11 terrorist attacks and the air rage phenomenon, the goal was to measure the extent of air rage, its contributory factors and identify potential solutions. Findings suggest that further research could only help develop and implement a proper incident reporting system using a uniform data collection method. This system would make it possible to gauge the extent, frequency, and type of incidents occurring across the airline industry (Schaaf, 2018).

Cabin crew responsibilities include handling air rage incidents, which expose them to physical conflict. Lane et al. (2002) surveyed a cabin crew in 2001. They reported that the crew experienced high rates of verbal abuse, which is the highest reported DAPB incident. Many also reported feeling at risk of physical violence. Boyd (2002) surveyed a United Kingdom cabin crew about their experiences with air rage.

Boyd noted that 50% of crewmembers reportedly experienced an increase in verbal abuse over the preceding year. IATA data collection from 2016 reveals that verbal abuse is accountable for 86% of air rage incidents (IATA, 2018). In a questionnaire, Gale et al. (2018) conducted a questionnaire and reported that 89.6% of U.S. and Canadian cabin crew had experienced verbal abuse, consistent with the 2016 IATA findings. Verbal abuse appears to be a frequent and long-standing issue (IATA, 2019).

In 2016, the IATA reported 12% of air rage incidents were rated level 2 incidents, indicating physical violence (IATA, 2018). Gale et al. (2018) posited that exposure to violence is a recognized occupational stressor for cabin crews. Women are at higher risk of sexual violence. A decade later, IATA reported an even higher frequency of sexual harassment in U.S. and Canadian cabin crew. Sexual harassment and assault of airline staff perpetrated by passengers create a broader workplace safety issue (McLinton et al., 2020). Crewmembers have frequently experienced sexual advances from passengers, other coworkers, or a supervisor. In line with previous studies, the Hong Kong Equal Opportunities Commission (2014) reported more than one-fourth of cabin crewmembers being the subject of sexual harassment. Almost half of cabin crewmembers surveyed reported witnessing or hearing of colleagues being subjected to sexual advances while on duty (Schiffinger & Braun, 2020).

There are many diverse factors thought to explain DAPB, but evidence of cause is presently lacking. Gu et al. (2020) identified 16 unruly passenger behaviors faced by cabin crew in a study examining inflight customer service. However, the three most challenging behaviors experienced by crew include (a) mentally disturbed passengers, (b)

passengers who conceal or attempt to avoid important information, and (c) passengers under the influence of drugs or alcohol. Gu et al. (2020) conducted a parallel study involving ground staff from three different international airlines that service a Taiwanese airport. They identified 17 unruly passenger behaviors. Of the 17 behaviors, the five behaviors most consistently reported across the airline industry are (a) verbal or physically abusive behavior; (b) under the influence of alcohol or drugs, (c) customers that are unhappy with services offered, (d) photographing or filming the crew, and (e) customers demanding the assistance of a manager. These findings coincide with IATA findings regarding most commonly committed incidents of DAPB, related to alcoholics, narcotics or substance abuse, and substandard customer service.

Unmet travel expectations and ineffective coping strategies may lead to angry passengers. DeCelles et al. (2019) reported retrieving data from an observational study finding passenger aggression related to situational stressors occurring before the boarding process. For example, standing in long customer service and security lines and bumping from oversold flights. Tsaur et al. (2020) stated that cabin crews would also encounter difficult situations during the boarding process and inflight. For example, removing inebriated passengers from the flight, restraining passengers from fighting, seating assignments, and baggage disputes. The passengers have often been abusive towards the crew under these stressful situations, resulting in psychological stress for the cabin crew (Schiffinger & Braun, 2020).

Other common situational stressors include mechanical problems, weather, and non-weather-related flight delays. Flight delays often occur in the airline industry and are

among the most common sources of passenger dissatisfaction. Internal delays, such as mechanical issues that subsequently result in flight cancellation, cause more angry passengers than external delays, such as weather, which is out of the airline's control (Gu et al., 2020). DeCelles et al. (2019) affirmed delayed flights might contribute to DAPB. Flight delays point to the role that the travel experience plays in the boarding process that may deplete emotional and cognitive resources and vulnerable individuals, leading to less self-control and aggression on the aircraft. There are limited studies that explore the contributory factors of specific airport-related stressors to DAPB.

Cabin crews may also experience emergencies or unexpected situations during the flight. Turbulence can often be expected or unexpected and may vary in intensity from mild to extreme (Ji et al., 2019). The flight deck crew will signal expected turbulence by alerting the crew through the cabin interphone system or turning on the fasten seat belt sign, followed by an announcement. Clear air turbulence may not always come with a warning, can be extremely dangerous and may strike without warning (Schiffinger & Braun, 2020). There have been many incidents of turbulence in which a crewmember was hurt or severely injured. For example, Jansen and Cipriano (2014) reported United Flight from Denver to Billings, Montana, encountered severe turbulence while cruising at 34,000 feet. After the jet landed, emergency services transported three cabin crewmembers and two passengers to the hospital. One of the crewmembers suffered a broken neck (Jansen & Cipriano, 2014).

How Occupational Stress Affects Crew Morale

As the airline's frontline representatives, the cabin crew plays a pivotal role in ensuring its passengers' happiness and well-being (Tang et al., 2020). Therefore, the most crucial issue facing airline leaders today remains the cabin crew's morale. For example, the uncertainty of the cabin crew work schedules may include unplanned landings, aborted takeoffs and landings, repositioning flights, flight delays, cancellations, and short-crewed flights. These unexpected demands typically result in the cabin crew member's inability to maintain family-related responsibilities or duties efficiently. As a result, unexpected demands adversely impact the crewmember's attitude, job performance, morale, and well-being (Lu et al., 2016).

Salas-Vallina et al. (2018) described happiness as a short-lived emotion or mood experienced by individuals at the workplace. Happiness on the job is indicative of the morale of the employees. According to Söderlund and Sagfossen (2017), happiness positively correlates to the customer's assessment of service encounters and organizations. Upadyaya et al. (2016) posited future organizational goals to increase the cabin crews' morale remain an important issue for future exploration, especially in the aviation setting (Lesener et al., 2019).

Byrne and Canato (2017) stated an organization should maintain crew morale by creating a positive working environment and promoting a family-friendly work culture to enhance cabin crewmember's happiness and well-being. A positive working environment creates balance between working and non-working aspects and enhances crewmember work engagement (Byrne & Canato, 2017). Cheng et al. (2018) posit that a positive

environment will benefit good health and productivity. Business Insider magazine ranked Dallas-based Southwest Airlines second on its list of best US airlines (Warrick, 2017). The working environment is a major source of shaping employee morale and feelings about life. Warrick (2017) also suggested organizations should delineate a work environment conducive to developing positive morale in the workgroup. They also maintained that to best understand the employee's needs, the organization should implement effective ways to boost employee morale. The organization should also enable two-way and open communication activities, such as interviews and surveys between the upper management and staff.

According to Demerouti et al. (2019), the employee's developmental possibilities hinge upon their organizational and coworker support access. Organizational support is a valuable resource intended to assist the crew and increase morale. Employee support should be the antecedent for increasing the employee's degree of job and life satisfaction by decreasing the mediating effect of work-family conflict. The JD-R theory reflects an extensive examination of work-family conflict as an intervening variable in the adverse effects of workload on job satisfaction and how managerial support aids in preventing emotional exhaustion in the airline industry (Lesener et al., 2019).

Demerouti et al. (2019) maintained that the airline industry should address cabin crews' work-family discrepancies by implementing meaningful internal marketing practices. There are three types of internal marketing: (a) communication, (b) reward systems, and (c) management support. Each marketing practice needs specific attention because of the significant role played in the work-family interface. The airlines should

have various communication methods such as online channels, monthly meetings, printed publications, and annual surveys to promote the bilateral process of information exchanged between management and crewmembers. These communication channels may help management share organizational information regarding objectives or goals, development process, core values, and passenger feedback to the crew. Interpersonal interaction should always be the preferred way of communicating with the employee. Face-to-face communication such as meetings, dialogue, and job counseling services for personal, family-related, and psychological services will enable management to engage directly with the cabin crews to understand their needs and address their specific issues directly and efficiently (Tang et al., 2020).

Scheduling

Tang et al. (2020) stated cabin crews are the face of the airlines and the final and most significant encounter with the passengers. For this reason, the crew needs to be well-rested, and morale should be high. Flight planning varies from month to month due to peak and off-peak seasons. There is more demand for flying during the spring and summer months than in the fall and winter. Therefore, the scheduling of flights tends to be very irregular. For example, a typical international flight crew may travel up to six consecutive days, which causes them to miss very important family functions and holidays (Tsaur et al., 2020).

Seniority for bidding schedules is predominant in the airline industry. The senior cabin crewmembers hold the best schedules consisting of more days off, depending on the amount of time employed with the airline. Senior cabin crewmembers will have

weekends, holidays, and more days off each month. The junior crewmembers fly the least desirable schedules that consist of working weekends and holidays, sitting reserve (on-call status), and receiving less pay for the same job. Therefore, cabin crew work and family life easily face conflicts, making it difficult to maintain relationships (Lu et al., 2016). Lack of control over personal life and limited flexibility in work schedules may lower morale, increase absences, and disrupt the airline's operation (Tsaur et al., 2020). In summary, organizations need to take steps to address occupational stressors by addressing employee morale.

Summary of the Study

In this literature review, I addressed the idea that too much stress at the workplace has toxic effects. On the contrary, limited amounts of stress may result in boredom and apathy, low performance, job stress, and job satisfaction, which are inversely or negatively correlated. I concluded and suggested that empirical research in occupational stress and employee health should consider and map the impact and influences of these environmental, organizational, and economic factors. Occupational stress should be harnessed and minimized to provide a conducive work environment. (Narban et al., 2016).

Airline leaders must obtain ways to maintain the workload of cabin crews that are safe and secure. The industry must also provide organizational support to obtain the crewmembers' best performance, as Vatankhah et al. (2017) stated. Airline leaders should also recognize and respond appropriately to the stressors associated with the crewmember's duties. Moreover, it is necessary to conduct further research and

appropriate stress management interventions and programs. The stress management programs will help alleviate and quantify the risk of exposure to harmful work-related stress levels among cabin members, affecting productivity and passengers. Annual formal training and support for crewmembers are required, especially since the aftermath of the September 11 terrorist attacks. Van Den Berg et al. (2020) confirmed an increase in air rage incidents in which angry or disturbed passengers challenged or initiated physical violence against the crew.

Airplane travel can be a stressful experience due to the various potential stressors that contribute to DAPB. I explored the many stressors that pose considerable financial costs and burdens to the airline and personal costs to the passengers and crews. The current industry trends move toward sustainability and better management of security challenges. It should also address DAPB with an evidence-based practice approach (Ahmadpur et al., 2016). Narban et al. (2016) posited occupational stress needs to be minimized and harnessed to provide a safe working environment for the cabin crew (Narban et al., 2016).

Transition Statement

In Section 1, I provided a rationale for choosing a qualitative single case study design and my objective and purpose. I addressed the problem statement, purpose statement, nature of the study, research questions, conceptual framework, and significance of the study. Section 1 also included assumptions, limitations, delimitations, and operational definitions. The literature review included a comprehensive and critical analysis and synthesis of literature related to the conceptual framework.

Section 2 served to justify selecting the qualitative research method. I restated the purpose statement. I also addressed the role of the researcher during the data collection process, participants in the study, population sampling, and ethical research procedures.

Section 3 included a presentation of findings and how they apply to professional practice. Section 3 also includes implications for social change and recommendations for action and further research. This section includes reflections.

Section 2: The Project

Occupational stress is the mental and emotional strain that creates tension resulting from negative or demanding workplace events. It is a negative response to the immense pressures that organizations impress upon their employees (Cahill et al., 2020). The focus of this study was upper-level airline leader strategies to reduce occupational stress on cabin crewmembers at a major U.S. airline. I aimed to explore these strategies to mitigate stressors. This section includes justification of my choice of research method and reasons for selection. This section also includes an explanation of my role in the data collection process, study participants, population sampling, and ethical research.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies that upper-level airline leaders use to reduce occupational stress on cabin crewmembers. The targeted population comprised five upper-level airline leaders at an airline headquartered in Chicago, Illinois, and Houston, TX, who implemented successful strategies for mitigating the effects of occupational stress. Implications for social change include more efficient airline operations and more substantial commitments to safety and service for the flying public. Study results could help mitigate hostile environments onboard commercial flights that cause stressful conditions for crewmembers, resulting in improved passenger and crew safety aboard airplanes.

Role of the Researcher

The researcher adopts the role of an internal researcher. The internal researcher's role entails formulating the purpose of the study, obtaining informed consent, and

collecting and analyzing data. An internal researcher's role consists of negotiating access to participants and gaining their trust in their willful participation (Saunders et al., 2015). Research data included interviews conducted through guided discussions, documents, and other organizational documents collected. My personal experiences as an employee of the airline organization chosen for this study gave me personal insight into current business issues. Throughout my career, I established relationships with various inflight managers possessing in-depth knowledge of current strategies to reduce the effects of occupational stress on cabin crews.

The Belmont Report serves as an ethical framework for research consisting of three major components: (a) respect for persons, (b) beneficence, and (c) justice. Its primary purpose is to protect participant rights. Based on the *Belmont Report*, my primary role as the researcher is to gain access to participants' inner thoughts and feelings, which may be a difficult task. Some participants were apprehensive about sharing their feelings for various reasons, including retaliation from organizational leaders. I ensured beneficence or respect for participants and safeguarded them from harm. I also attempted to clarify my intentions before the start of the interview process. Lastly, I advocated for justice and fair treatment for all participants. These provisions prevented the exploitation of participants who may be vulnerable because of their situation.

During the planning, data collection, analysis, and publication stages of research, bias may occur. Tobi and Kampen (2018) posited bias as any trend or deviation from the truth in data collection, analysis, interpretation, and publication phases of research. Bias

can occur either intentionally or unintentionally and can create false conclusions. Researchers must consider how bias can influence study outcomes. They must ensure only valid and unbiased research is conducted in a highly professional and competent manner before publishing.

Bias in qualitative research is any influence that leads to distorted results (Galdas, 2017). To avoid bias, researchers must be familiar with the different bias types that may infiltrate the study. I mitigated bias in my research by preparing an outline with an awareness of my own potential biases using a semistructured interview protocol (see Appendix B) and member-checking.

I used an interview protocol refinement (IPR) framework. The IPR framework is a four-phase process for developing and refining an interview protocol. There are four phases of this process: (a) ensuring the alignment of interview questions with the research questions, (b) construction of an inquiry-based conversation, (c) feedback received through interview protocols, and (d) piloting the interview protocol (Castillo-Montoya, 2016). I used the IPR method to strengthen interview protocol reliability. This may contribute to improving data quality obtained from interviews.

Participants

Eligibility criteria are guidelines to determine who may be eligible or ineligible for participation. The criteria consist of a list of characteristics that each participant must possess, and it varies from study to study (Patino & Ferreira, 2018). All participants were airline leaders with direct knowledge of inflight operations. Leaders possessed more than 10 years of airline experience.

I conducted a public study on a major U.S. airline. I chose this design because it allowed me to directly recruit participants through social media platforms and request referrals. Next, I searched through social media and made a list of potential participants to contact. Then, I contacted participants through Facebook messenger to determine whether they fit eligibility criteria. Once targeted participants were established and determined as a fit, I sent email invitations to ask if they would participate in the study (see Appendix C).

In maintaining a working relationship with targeted participants, I made multiple contacts via email, and then I conveniently scheduled interviews for participants. I also secured agreements to participate in research through an informed consent form. A deep level of respect and trust was established and maintained for quality results. I established trustworthiness through formalized confidentiality agreements written into consent forms and provided copies. Finally, I addressed all concerns or requests from participants to provide comfort and ensure participation. The end goal was to ensure participants' safety and security to maintain strong working relationships involving mutual trust and respect.

Research Method and Design

Qualitative and quantitative methods are the most commonly used research methods (Saunders et al., 2015). The research design is an organized plan to answer the research question. The research method is a strategy used to implement that plan (Theofanidis & Fountouki, 2018). Research designs ensure collected data will help to effectively answer the research question.

Research Method

The chosen method for this study was the qualitative research method because qualitative research is exploratory in nature. The qualitative method helps the researcher understand people's beliefs, attitudes, experiences, interactions, and behaviors. I chose the qualitative research method because it allowed me to explore strategies that upper-level managers at a major airline use to reduce occupational stress on their cabin crews.

The quantitative research method is a scientific method that involves deductive reasoning. The researcher forms a hypothesis and collects and uses data in order to address an investigation of a problem (Benevene et al., 2019). Once data are analyzed, conclusions are shared to communicate whether to support or not support findings (Benevene et al., 2019). The quantitative method involves statistics and variables. For this reason, I eliminated the quantitative research method. The mixed methods approach was also not chosen as my research method because it includes a quantitative component and requires additional time and resources.

Research Design

I chose a single case study. A case study is an empirical inquiry for investigating cases that conform to a case study's criteria. It addresses *what*, *how*, or *why* questions concerning phenomena of interest (Yin, 2018). A single case study is known to be more manageable and less time-consuming. Single case studies focus on an individual or a specified group of people of specific interest to the researcher (Saunders et al., 2015).

A case study is an in-depth study of a particular situation in a real-world setting. Typically, a case study narrows down a broad field of research into a more

straightforward and easily researchable form. Over the past 10 years, the case study research design has evolved into a useful tool for investigating trends in particular situations across many scientific disciplines (Saunders et al., 2015). Researchers use case studies to analyze people, decisions, events, projects, periods, organizations, policies, or other holistically studied systems using single or multiple methods. They can also be used in social and life sciences and may be descriptive or explanatory. Case study research approaches, like surveys, may be treated as qualitative or quantitative and are also useful in describing entities that form a single unit, such as a person, institution, or organization (Yin, 2018).

I did not choose a multiple case study research design because of the time commitment, demand for more evidence, and expenditures associated with this type of design (Saunders et al., 2015). The multiple case study design also calls for data collection from more than one workgroup within the chosen organization. My study focused on a single workgroup at one of the largest major airlines in the world. It would require enormous effort to gain access to two different workgroups located in different cities, states, or organizations. The miniethnography and phenomenological research were also not appropriate for my study. I chose to eliminate the miniethnography, or focus ethnography, because ethnographies focus on a specific or narrow area of inquiry, mainly when time or monetary constraints are at the forefront (Saunders et al., 2015). Occupational stressors in the airline industry are a vast subject that may span numerous inquiry areas, including crew and passenger safety issues, versus a specific or narrow field of research. I also eliminated the phenomenological design because it was a form of

qualitative research that focuses on studying an individual's lived experiences within the world. This design was not feasible for my study because phenomenology centers around an individual rather than an organization.

Population and Sampling

Neubauer et al. (2019) defined population as a full set of cases or elements from which a sample originates. A sample is a subgroup of an entity or part of a larger population. The research question and objectives help researchers determine whether to sample a subset of the population or use a census. In selecting an organization as large as a major airline, it would be difficult for me to collect or analyze all the potential data that may be available due to time restrictions, finances, and access to the participants. For this reason, I used purposeful sampling as a research method. Purposeful sampling allows researchers to reduce the amount of data needed by considering only data from a subgroup instead of collecting data from all possible cases or elements (Saunders et al., 2015).

The study participants are the people who will answer the questions in a group or personal interview. Purposeful sampling is one of the most widely used methods used by qualitative researchers. It is also useful for identifying and selecting individuals or groups of individuals who have knowledge or experience with particular phenomena of interest. The selected participants should be immediately available and willing to communicate their knowledge and expertise on the subject matter (Naderifar et al., 2017). Purposeful sampling allowed me to quickly identify the most qualified participants who possess the knowledge and the power necessary to make the decisions needed to conduct the study.

An advantage of using purposeful sampling in research is time and cost-effectiveness (Taherdoost, 2016).

My target population comprised five upper-level airline leaders. To ensure data saturation, I conducted additional interviews as needed. At times, it may be necessary to conduct between five and 30 interviews to achieve the desired results (Guest et al., 2020). Each participant will possess over a 10 years of experience in the airline industry and have extensive knowledge of inflight operations, which oversee the cabin crews.

The principle of data saturation determines the sample size when using open-ended survey questions. If the researcher's findings are the only available information, it is difficult to determine the point of data saturation. For my assessment purposes, data saturation occurred during the data analysis process in which the incoming data from interviews failed to produce any new or useful information. Guest et al. (2020) pointed out three distinct elements to help determine the point of saturation: the base size, run length (number of interviews), and the amount of new information received that contributes to the study. An experienced researcher knows when enough information is collected and reaches the data saturation point (Tran et al., 2017).

Ethical Research

Formulating the research design is a precursor to establishing research ethics. It is mandatory to act ethically when gathering information and gaining access to participants. Acting in an unethical manner impedes the researcher's progress. While designing and planning research, attempting to gain access to organizations and participants, and collecting, managing, analyzing, and reporting data, ethical concerns will develop

throughout the research process (Saunders et al., 2015). Ethical concerns, such as informed consent, beneficence (do not harm), respect for anonymity and confidentiality, and respect for privacy, will continue to emerge long after approval has been granted (Reid et al., 2018).

The informed consent process includes both written and verbal consent for participation in research projects. Establishing informed consent involves an exchange of educational information between the researcher and the participant. At times, sensitive information shared between the parties involved may induce adverse reactions requiring additional interview time. During the informed consent process, the researcher discusses issues with the participants, then presents and reviews the information on several different occasions (Kadam, 2017). After the interview concludes, the researcher presents the consent form to the participants for signatures. The consent form grants the researcher permission to publish information obtained during the interview process (Kadam, 2017). I conducted the informed consent process as follows: First, I emailed the consent form to each participant. Then, I instructed the participant to review the form, then reply to the email with the consent form attached and "I consent" in the email body. Finally, I reviewed the consent form with the participant at the start of the interview process. After the interview process, I electronically saved the consent form for 5 years.

It is up to the participant to withdraw from the research process at any given time (Ngozwana, 2018). Upon the participant's request, my procedure for withdrawal was to inform me of their intent to withdraw. If requested, I forwarded them a withdrawal request form through email, and they may resubmit the form by replying to the email

within 48 hours. The withdrawal form provided a plausible reason for withdrawal. However, the participant is not required to explain.

The researcher often provides incentives for participants or potential participants to encourage participation in research projects. Popular incentives may include cash and non-cash items such as t-shirts or souvenirs, gift cards, or certificates. Encouraging people to participate in research studies may statistically lead to more robust research outcomes, as long as no harm is inflicted upon the parties involved (Zutlevics, 2016). I did not offer incentives for participation in my study.

Regulatory guidelines and accounting procedures remained in place to ensure the anonymity and confidentiality of research participants. I maintained confidentiality by omitting the recording of names during the participatory process. The individuals involved were not required to identify themselves, and their identities remained protected throughout the study. During the interviews and in my documentation, participants were addressed as P1, P2, and P3 and the process continued as needed. Additional measures are needed to ensure ethics in the protection of research participants. The researcher must ensure that those who have agreed to participate in the process are free of physical and mental harm. Moreover, the participant should not be frightened, offended, embarrassed, or harmed in any way. Vulnerable participants such as children, disabled or older persons must be handled carefully (Palaskar, 2018). Although it is not possible to accurately predict the risks of participating in a study, it may help to have an intervention plan to offset unplanned disturbances (Roets, 2017).

I incorporated a confidentiality clause into the consent form to maintain the research integrity and establish trust with the participants. Participants were also encouraged to ask questions whenever possible, and they received copies of all documentation that required their signatures. Each participant received advanced notice that the interview sessions would be recorded and transcribed for reference purposes. At the participant's request, the audio recording was shared with them for approval and modified if necessary. If the participant showed displeasure with any part of the interview, I deleted it for their protection. Assurance of data protection for all involved in the study perpetuated that all data would be securely stored for 5 years in a locked home-based file cabinet to protect the participant's confidentiality. Lastly, the final doctoral manuscript included the Walden IRB approval number 7-19-21-0925490.

Data Collection Instruments

Data collection entails gathering and measuring information on targeted variables in an established system, enabling one to answer relevant questions and evaluate outcomes. There are different data collection methods for each research method (Saunders et al., 2015). Qualitative case studies typically use data through various methods. These methods include: informal or semistructured interviews, phenomenological in-depth interviews, direct or participant observation, documents providing secondary data, company/archival records, and focus groups (Gammelgaard, 2017). As the primary data collection instrument, I conducted semistructured interviews and reviewed organizational documents such as the collective bargaining agreement and company policy and procedures. The format for the semistructured interviews depended

on participant availability. My study's primary choice was an online semistructured video conference interview process in place of an in-person interview to comply with current COVID-19 safety guidelines. However, it is impossible to solidify in-person interviews with each participant for geographical reasons. Since I could not secure an in-person interview, I conducted interviews through Zoom, an online video conferencing platform.

The reliability and validity aspect of research is pivotal to the successful outcome of the study. The research quality is directly dependent upon reliability to ensure good quality research. A false finding or a reported relationship that is deemed inaccurate will threaten the study's validity (Spiers et al., 2018). Therefore, honesty and transparency are necessary throughout the data collection process.

The member checking follow-up interview allowed for review and interpretation of the collected data. It also helped reach data saturation by obtaining in-depth information that enhances academic rigor. Each interview question was written, followed by a one-paragraph data synthesis. To enhance the data collection instruments' reliability and validity, I provided the participants with an emailed copy of the synthesis and my interpretation of the interview responses to ensure validity. Next, I asked the participants if the synthesized information properly represented the answers provided and if they would like to add any additional information. I continued the member-checking process until there was no new data to collect, and I reached data saturation. Verification and uniformity of the participants' responses and staying within method triangulation provided a construct for testing instrument reliability related to the interview questions (Spiers et al., 2018).

Data Collection Technique

Case studies require at least two types of data and methodological triangulation. Due to strict COVID-19 restrictions in the workplace, I did not conduct in-person interviews or workplace observations. Instead, I conducted interviews through an online video interview platform and requested supporting documentation from each participant for document review. The quality of data collected depended on the data collection methods used. One of the most widely used techniques in qualitative research is the interview. Interviewing techniques encompass unique and distinguishing characteristics compared to other modes of data collection. Adhabi and Anozie (2017) stated personal commitments, time, and resource allocation are requirements of the interviewing technique. However, ethical dilemmas could arise during the process. Advancements in technology have simplified the process making it more flexible (Braun et al., 2017). My interview process will consist of three steps.

First, I emailed each participant a consent form containing a confidentiality clause and a privacy disclosure. The email contained instructions to reply to the email, providing their consent to be interviewed. Next, I reached out to the participants to schedule the interviews via email. Finally, I conducted and recorded the interviews through an online video platform to comply with COVID-19 related restrictions using an interview protocol. At the end of the interview, I requested supporting documentation from the participants and scheduled follow-up interviews for member checking purposes.

The systematic procedure for reviewing or evaluating documents known as document analysis consists of printed and electronic material. Like other analytical

methods in qualitative research, document analysis requires examination and interpretation of data to elicit meaning, understand, and develop empirical knowledge (Adhabi & Anozie, 2017). I used data obtained from interview sessions and web content. Whenever possible, I requested additional documentation from participants to support their interview responses. Upon obtaining, selecting, appraising, and synthesizing the data in documents produced from document analysis, I identified the initial themes from semistructured interviews. Then, I used the document analysis information to support those themes. I also organized the data into major themes and categories.

Semistructured Interview

The semistructured interview is a nonstandardized process consisting of a list of themes and possibly a few key sets of questions discussed in detail (Kallio et al., 2016). Some questions may be modified or omitted entirely. The order of questions asked varied depending on the interview flow. Some responses posed the need for additional questions. Interviews occurred via Zoom video conferencing, depending on the participant's schedule. I recorded and transcribed each interview session using a platform with recording capabilities.

Advantages

Numerous advantages are associated with the interview process. In-person interviews allow the participant more flexibility and the opportunity to explain issues based on their personal experiences. The researcher may also use their interpersonal skills to explore issues introduced by the participant. Telephone interviews are also advantageous because they cover a broad geographical area, making it easy to contact

those not readily accessible. Additionally, electronic messenger chats, video chat, and email can save time and resources (Adhabi & Anozie, 2017).

Semistructured and unstructured interviews enable the researcher to interject if needed and ensure that they comprehend the research topic. The most advantageous of the interview process is the in-person interview, which allows the researcher to get comfortable, articulate the issues, and probe for more information. This process also helps understand the question poised to yield the appropriate responses compared to telephone or email type interviews (Adhabi & Anozie, 2017).

Disadvantages

There are advantages to every technique, and then there are disadvantages. In-person interviews tend to be costly and time-consuming. My case warranted extended travel because selected participants were geographically located in different cities and states. Although I am not required to purchase a flight ticket for my travels, I may spend many hours in the airport trying to catch a flight, would could result in a missed interview. An additional option would be to purchase a ticket, which could prove costly. The disadvantages of the telephone interview are the lack of ability to use visual aids and difficulty in identifying the participant's physical or emotional state (Adhabi & Anozie, 2017).

Member checking is an integral part of establishing trustworthiness in qualitative research, which helps maintain the study (Candela, 2019). This process allows participants to validate the data's accuracy and how to interpret the data while ensuring the credibility of the qualitative study (Candela, 2019). I conducted member checking

after the initial data analysis. Member checking allowed me to share my interpretation of the transcript and initial findings and then confirm my interpretation's accuracy with each participant to verify that it is consistent with the information they provided. Then, I scheduled follow-up interviews, which occurred via email or online video conferences.

Data Organization Techniques

I transcribed all data into a Microsoft word document during the data organization process. Then, I imported the word documents into the NVivo software program. Next, each participant was labeled with the pseudonym associated with the individual's interview. Finally, I used the NVivo qualitative analysis software to organize all the data collected from member checking, interviews, and interview notes and documents.

Qualitative researchers have commonly used the NVivo program to organize, analyze, and find insights into unstructured or qualitative data such as text, video, audio, and image. The data retrieved from interviews, survey responses, journal articles, social media, and web content require deep analysis on small or large volumes of data (Woods et al., 2016). During the data organization process, I created an audit trail that recorded unique and interesting topics during the data collection process. The audit trail also allowed me to dictate my thoughts on coding, provide a rationale for why the codes merged, and then explained the themes (Korstjens & Moser, 2018). After data transcription occurred, I imported the documents onto the google drive cloud system and folders in yahoo email for backup purposes. I securely saved all raw data on the cloud servers and yahoo mail folders for 5 years from the study's approval date.

Data Analysis

Researchers use data analysis to examine, prepare, pull apart, and reassemble the different data pieces to form conclusions about overall trends, themes, and issues within the dataset (Elliott, 2018). This study's overarching research question inquired about upper-level airline leader strategies to reduce occupational stress on cabin crewmembers. The JD-R conceptual framework suggests that increased demand on the job may affect crewmember well-being, and job resources increase productivity and performance (Demerouti et al., 2001; Schaufeli, 2017).

I used Yin's five-step approach to qualitative data analysis to analyze textual data. Yin's five step process consists of (a) compiling the data, (b) disassembling the data, (c) reassembling the data, (d) interpreting the data's meaning, and (e) concluding the data. First, I compiled the data for grouping purposes. Next, I disassembled the data to reduce and eliminate invariant themes of the phenomenon, and then I reassembled the data and grouped the core themes. Lastly, I checked the patterns against the interview transcripts. Upon completing the thematic analysis, I carefully examined the emergent themes and cross-referenced them to the literature review and conceptual framework. This process helped to identify and ensure alignment.

Identifying themes is one of the most fundamental and mysterious tasks in qualitative research (Elliott, 2018). Investigators lament over a clear explanation and justification of plans for discovering themes during the proposal phase of a research project. I identified themes through (a) quick word counts, (b) in-depth, line-by-line wording, (c) short answers, and (d) open-ended questions, which will help to conduct

better research initiatives. Synthesizing thematic analysis consisted of line-by-line coding of the findings through the organization of ‘free codes’ into related areas. This process helped to construct descriptive themes and develop analytical themes (Hanafizadeh & Harati, 2020). I continued to recycle the thematical synthesis process until I could identify where my findings aligned or did not align.

Reliability and Validity

When designing a study, analyzing the results, and judging quality, qualitative researchers must establish reliability and validity (Cypress, 2017). The qualitative research process should include strategies built into the study to ensure rigor, which helps attain reliability and validity. Strategies should ensure rigor before completing the study, not during the inquiry process. If rigor is not established before the study is complete, the researcher risks exposure to missing information and the loss of ability to address serious threats before it’s too late. The interface between reliability and validity is necessary for the analysis's direction and the study’s development (Spiers et al., 2018). Reliability and validity increase transparency but decreases the opportunity for researcher bias mistakenly inserted into qualitative research (Spiers et al., 2018).

Reliability

Reliability or consistency replicates an earlier research design achieving similar findings that deem the research reliable (Saunders et al., 2015). Reliability is a measurement that supplies equal values with consistent results. Reliability, also referred to as dependability, measures precision, consistency, repeatability, and trustworthiness of

the research. The research should show consistency in results across time and be without bias to be deemed reliable (Cypress, 2017).

Dependability

The qualitative counterpart, known as dependability, can be established through audit trails and triangulation (Spiers et al., 2018). Dependability means that all recorded changes will produce a reliable/dependable account of the emerging research focus that others may understand and evaluate (Saunders et al., 2015). The researcher's responsibility is to explain the assurance of dependability and credibility in data collection and research methodology (Spiers et al., 2018). I addressed dependability through the member checking protocol. Each participant received my summary and interpretation of the participant responses. This process allowed the participant to validate my interpretation. Also, interpretive accuracy was verified, in turn, increasing reliability. Validity indicates consistency and trustworthiness in qualitative research by verifying research data, analysis, and interpretation. Dependability, credibility, confirmability, and transferability are necessary to ensure the study's credibility (Spiers et al., 2018).

Validity

In qualitative research, validity indicates the trustworthiness and appropriateness of the measures used. Validity is the accurate analysis of the results and the generalizability of the findings. There can be different meanings and descriptions for validity in qualitative research, such as rigor, trustworthiness, appropriateness, or quality (Hayashi et al., 2019). Studies should convey trustworthiness, which will be under scrutiny during and after the study. The study's criteria summarized four questions related

to applicability, consistency, neutrality, and truth value. These four terms became known as dependability, credibility, transferability, and confirmability (Cypress, 2017).

Credibility

Credibility is the most important aspect needed to establish trustworthiness. Credibility requires the researcher to link the research study's findings with reality to demonstrate the truth of the research study's findings. Strategies typically used to ensure credibility include prolonged engagement, persistent observation, methodological triangulation, and member checking (Korstjens & Moser, 2018). I addressed credibility through member checking and methodological triangulation.

Transferability

Transferability is synonymous with generalizability, or external validity, in quantitative research. Providing readers with evidence of the research study's findings and its applicability to other contexts, situations, times, and populations established transferability. The researcher cannot prove that the study's findings will be applicable. Instead, the researcher must provide evidence that it could be applicable (Korstjens & Moser, 2018). I enhanced transferability by thoroughly describing the assumptions and research contexts central to the research. The individual who chooses to transfer the results to a different context takes responsibility for judging the sensibility of the transfer (Korstjens & Moser, 2018).

Confirmability

Confirmability is the last criterion of trustworthiness, and the most popular technique that researchers use to establish confirmability is its incredible usefulness in writing the results chapter. The researcher may assess the study's confirmability and dependability by posing different questions. Questions should be similar to those asked during the participant's interview process. For example, one can ask whether the study's general procedures and methods are explicitly described in detail or if a complete picture was formed (Haven & Van Grootel, 2019). I used the audit trail to establish confirmability because it is the most useful technique qualitative researchers use to detail the process of data collection, analysis, and interpretation.

Data Saturation

Saturation in qualitative research has come to be associated with the point in a research project when there is enough data to ensure the research questions garner an answer. The depth of the data is often more important than the numbers. A minimal number of rich interviews or sources may have a similar importance as conducting dozens of shorter interviews. When the amount of variation in the data begins to level off and new perspectives and explanations no longer emerge from the data, data saturation nears (Saunders et al., 2018).

According to Rahman (2017), the quantity of interviews needed to conduct a qualitative study for data saturation is not quantifiable, so the researcher uses what is available. Therefore, I ensured data saturation using the interview process, a method in which the study results reach data saturation. I structured the interview questions to ask

the same questions for each participant to achieve data saturation. Without structure in the interview process, it would be impossible to achieve saturation due to a consistently changing narrative (Hennink & Kaiser, 2019). When needed, I further enhanced data saturation by interviewing others I would never have considered (Rahman, 2017).

Transition and Summary

Section 1 of the proposal provided rationale for choosing a qualitative single case study, including explaining its objective and purpose. This section also included the problem statement, purpose statement, nature of the study, research question, conceptual framework, and significance of the study. Section 1 also reflected assumptions, limitations, delimitations, and operational definitions, defining commonly used organizational terminology readers may not understand. The literature review provided a comprehensive, critical analysis and synthesis of the literature related to the chosen research topic's conceptual framework.

Section 2 of the proposal elicited justification for selecting a qualitative research method versus a quantitative or a mixed-method study and includes the restated purpose statement. Also included in this section is the role of the researcher in the data collection process, the participants in the study, population sampling, and ethical research. I also discussed the strategies for gaining access to selected participants, establishing relationships, ensuring ethical research, data collection instruments, techniques, and organizational approaches. Lastly, I discussed how reliability and validity would ensure trustworthiness relative to the qualitative research findings' quality, authenticity, and truthfulness (Cypress, 2017).

In Section 3, the final part of the proposal, I illustrated the outcome of the study's qualitative research findings. It reflected the first sentence of the study's purpose statement and a summary of the findings. I addressed the overarching research question, the findings, and the identified themes. I also discussed how my findings confirmed, disputed, and extended knowledge in the discipline by comparing the findings with other peer-reviewed studies presented in the literature review. My study's findings aligned with the conceptual framework, and I discussed the alignment of findings to the existing literature. Finally, section 3 of the proposal presented findings, applied professional practice, recommended further actions and further research, and reflected on the qualitative research experience.

Section 3: Application to Professional Practice and Implications for Change

Introduction

This qualitative single case study aimed to explore strategies that upper-level airline leaders use to reduce occupational stress on cabin crewmembers. Data were collected via semistructured interviews with five airline leaders. I reviewed public documentation revealing strategies currently used by airline leaders to reduce occupational stress. Each participant received a consent form via email, which they reviewed and confirmed by replying with the words, "I consent." The consent form thoroughly explained the purpose of the research and how participants may choose to withdraw at any time. Three themes emerged: (a) inflight training for generating natural responses to safety protocols, (b) communications are used for internal marketing practices and addressing issues, and (c) company-provided resources for supporting employees to reduce stress. The JD-R theory grounded this study.

Presentation of the Findings

Five airline leaders from a major airline corporation agreed to participate in my study. Years of experience in the airline industry ranged from 20 to more than 30 years. During interviews, I addressed one overarching research question: What strategies do upper-level airline leaders use to reduce occupational stress on cabin crewmembers? Participants responded to nine open-ended research questions (see Appendix A) to procure detailed information regarding strategies used to reduce occupational stress on cabin crewmembers. Each airline manager who participated in interviews discussed their experiences with implementing strategies. Data saturation became evident during the

third interview, but the fourth and fifth interviews confirmed saturation. Member checking follow up interviews allowed for review and interpretation of collected data. No new data emerged from member checks that would change the study results.

Upon obtaining approval from the Institutional Review Board (IRB), approval number 7-19-21-0925490, I began my research with a search inquiry to find willing participants through popular social media sites such as Facebook and LinkedIn. I allowed each participant to schedule interview times conducive to their schedules. I conducted the first interview via Zoom on January 2, 2022. Several other recruits agreed to participate but changed their minds or suddenly stopped responding. I continued the recruiting process and successfully located several more willing participants. I emailed each participant a consent form containing instructions to respond with the words "I consent" to verify and confirm participation. I conducted the final interview on January 31, 2022.

I used Yin's five-step approach to qualitative data analysis to analyze textual data. The process consisted of compiling, disassembling and reassembling data, interpreting data meanings, and concluding results (Yin, 2018). First, I compiled data for grouping purposes. Next, I disassembled data to reduce and eliminate invariant themes involving the phenomenon, and then I reassembled the data and clustered core themes. Last, I checked patterns against interview transcripts. Upon completing thematic analysis, I carefully examined emergent themes and cross-referenced them to the literature review, conceptual framework, organizational documents, transcripts, and NVivo results.

I ensured confidentiality by using pseudonyms. For example, I labeled the first participant as P1, and other participants were labeled similarly. Transcripts were also

coded in the same manner. Data collection consisted of recording participant interviews on Zoom, manual transcription, and reviewing organizational documents against participant responses. First, I transcribed interviews in Microsoft Word, reviewed and edited transcriptions, and highlighted relevant information supporting the guiding research question. Next, I imported transcripts into NVivo to organize, analyze, and code data. I also created an audit trail during the data organization process, which helped organize my thoughts regarding coded data. Next, I completed the data organization process by conducting a word search query in NVivo to confirm emergent themes compared to themes from participant transcripts. Next, I completed data organization by grouping coded data according to emergent themes. Finally, three themes emerged: (a) inflight training for generating natural responses to safety protocol, (b) communications are used for internal marketing practices and addressing issues, and (c) company-provided resources for supporting employees to reduce stress (see Table 2).

Table 2
Emergent Themes in Data Analysis

	Inflight Training for generating natural responses to safety protocol	Communications are used for internal marketing practices and addressing issues	Company-Provided Resources for supporting employees to reduce stress
Participants	266	256	135
Company documents	199	113	168
Total	465	369	303

Theme 1: Inflight Training For Generating Natural Responses to Safety Protocol

Theme 1 emerged with the greatest number of participant comments. There were 266 mentions from participant interviews and 199 from company documents. Study participants consistently provided information about the importance of inflight training. Information included training related to crewmember familiarity with safety and emergency procedures, and training associated with necessary skills to handle any emergency or unusual situation. Therefore, I concluded with inflight training generates natural responses to safety protocol as the first theme.

Each participant affirmed that inflight training is integral to cabin crewmember job requirements. P1 said, “Recurrent training is an essential requirement to the role of the cabin crewmember, and having that training helps during unplanned situations and emergencies.” Successful inflight training programs help improve aviation safety for crews and passengers (Tsaur et al., 2020). P3 said successful inflight training programs

require employee engagement and strong commitments to building safe and trusted organizations for employees and travelers. In general, job requirements for cabin crews involve performing safety, security, and service-related duties where appropriate recognition and formal support are necessary. Each participant discussed the significance of inflight training to provide safety and security and reduce stress for passengers and crewmembers.

A review of company documents also provided supportive evidence for this theme. For example, the inflight manual, computer-based training modules, and standard operating procedures showed annual training and support for crewmembers as required by the organization. The Federal Aviation Regulations (FAR) section of the inflight manual shows requirements for completion of annual training during crew members' designated due month or the following month to remain qualified as flight crew. Additionally, the inflight manual also included training information on emergency equipment and security and standard operating procedures. Finally, the collective bargaining agreement revealed training must be scheduled in compliance with all rules regarding duty and rest times per FARs.

My findings reflect training is critical to the success of an organization. The FAA regulates airlines to ensure compliance and effective execution of safety protocols that govern safety and comfort of passengers onboard an aircraft. Moreover, my findings remain synonymous with the recent research literature. For example, effective employee training enhances productivity, increases confidence, and helps cabin crewmembers generate natural responses during emergencies which helps reduce stress for favorable

outcomes (Korstjens & Moser, 2018). Van Den Berg et al. (2020) asserted annual training and crewmember support as a requirement for crewmembers across the industry. Stickle and Scott (2016) confirmed cabin crews must receive annual training to administer first aid, command airplane evacuations, and handle chemical and explosive devices. In addition, cabin crews received training in self-defense tactics for use against terrorist or disorderly passengers due to the September 11 terrorist attacks, which increased air rage incidents against the crew.

Schaufeli (2017) maintained that the JD-R theory could apply to any job. Airline leaders should implement appropriate training programs to address stress management intervention. Inflight training for generating natural responses to safety protocol is a resource to help employees meet job demands and reduce stressors. These findings align with both components of the conceptual framework. The JD-R theory highlights the necessity of providing resources to meet job demands deeming the theory best suited for this study.

Theme 2: Communications are Used for Internal Marketing Practices and Addressing Issues

Theme 2 emerged with the second greatest number of participant comments. Theme 2 included 266 mentions from participant interviews and 199 from company documents. The participants emphasized the importance of workplace communication to build relationships of commitment and trust. Communication enables the organization to obtain feedback, address issues, and maintain a smooth, productive operation. Therefore, communications are used for internal marketing practices and addressing issues.

P2 discussed the different communication strategies ranging from inflight bulletins, the company website, crew communication system, emails, and the portable mobile device called Link. Additionally, P5 stated,

> Communication strategies were enhanced to include computer automation, which became one of the company's best communication strategies. For example, crewmembers may submit sick calls directly into the crew communication system, which helps reduce stress on the crewmember because they are no longer required to speak to a live person.

P3 reiterated the importance of communication and employee relations with management as a catalyst for building a successful organization based on commitment and trust. A review of company documents also provided supportive evidence for this theme. For example, company documents revealed implementation of a communication plan detailing overall efforts to share information, address issues, and gather employee feedback. Additional examples of communication methods revealed by company documents include daily inflight bulletins and the company website. The daily bulletins and company website are sources of communications used to share company news and direction. The crew communication system was also reviewed as part of this study. This system was implemented to help crewmembers manage scheduled flights, work schedules, and receive personalized messages from management. Therefore, the review of company documents align with this theme.

My findings remain synonymous with the recent research literature. Effective communication with leadership helps cabin crewmembers manage daily work roles and

responsibilities (Demerouti et al., 2019). For example, Demerouti et al. (2019) posited that airline leaders should address issues by implementing meaningful internal marketing practices such as (a) communication, (b) reward systems, and (c) management support. Tang et al. (2020) confirmed that varying communication channels help management share organizational information regarding objectives or goals, the development process, core values, and passenger feedback, which aligns with organizational documents and participant interviews on communication. Increased levels of communication assist in reducing the risk of accidents which remains synonymous with the recent research literature. In support, Demerouti et al. (2019) maintained that leaders should have various communication methods to promote the bilateral process of information exchange.

These findings also align with the conceptual framework. Effective use of varying communication channels helps management share organizational information regarding objectives or goals, development process, core values, and passenger feedback to the crew. Examples of various communication methods are (a) online channels, (b) monthly meetings, (c) printed publications, and (d) annual surveys to promote information exchange between management and employees. In summary, communications are used for internal marketing practices to address issues aligned with the job resources component of the JD-R theory to align the framework.

Theme 3: Company-Provided Resources for Supporting Employees to Reduce Stress

Theme 3 emerged with the third greatest number of participant comments. Theme 3 included 135 mentions from participant interviews and 168 from company documents.

The participants emphasized the importance of providing job resources to optimize employee job performance and well-being. Examples of job resources mentioned in participant interviews include company offered leaves which offer additional time off to employees, and the EAP, which offers personal and professional assistance. Therefore, the company provided resources to support employees to reduce stress.

A significant number of participant quotes supported this theme. All participants discussed the different programs implemented by the organization and maintained a consensus about the importance of company-provided resources as a strategy to minimize occupational stress. P4 discussed the organization's Employee Assistance Program (EAP), which aids employees with drug or alcohol issues, grief and marital counseling, mental health issues, personal issues, and other stress-related issues. P5 added additional information on company-provided resource strategies to reduce or alleviate stress:

> Management offers company offered leaves, job share, and partnership programs to cabin crewmembers which provide them with additional time off if awarded and according to seniority. Company offered leaves may be offered monthly or for several months. Additionally, the company may grant leaves for a year or longer during economic downturns, depending on operational needs.

A review of company documents also provided supportive evidence for this theme. For example, the collective bargaining agreement supports participant responses about company offered leaves. In addition, a review of the collective bargaining agreement shows cabin crewmembers may be granted company offered leaves of absence (COLA) without pay on a seniority basis according to operational needs. Lastly, the

inflight website reflects information regarding EAP services which includes assisting employees with work-related concerns or job-related stress. The EAP provides ways for employees to reduce occupational stressors by enhancing the employee's well-being and their ability to perform the job, which also remains synonymous with the recent research literature. In summary, the company documents show that resources are provided to support employees in accomplishing work goals and responsibilities.

My findings remain synonymous with the recent research literature. Schaufeli (2017) posited job resources as an organizational, social, physical, or psychological aspect affecting the cabin crewmembers' ability to achieve work and organizational goals. Sufficient resources increase motivation, higher productivity, and reduce stress levels (Demerouti et al., 2001). Furthermore, Schaufeli (2017) indicated the JD-R theory, in conjunction with job performance and employee wellness, depends on the job demands and resources' direct and perceptive expectations (Schneider et al., 2017). In closing, my findings link company-provided resources to recent literature.

The conceptual framework chosen for this study was the JD-R theory of occupational stress, which supports the themes identified in this research. Implementing more proactive strategies to communicate the availability of all company-provided employee resources aligns with the conceptual framework. Bakker and Demerouti (2014) posited that job demands relate to organizational, physical, psychological, and social job aspects requiring consistent physical or psychological effort or skills. Bakker & Demerouti (2014) also posited that job resources refer to the job's organizational, social, physical, or psychological aspects. Examples of job demands that affect cabin crews

include anything physical or psychological, such as physical altercations or emotionally demanding encounters with a customer (Schiffinger & Braun, 2020). Examples of job resources that affect cabin crews are managerial and coworker support efforts (company resources) and performance feedback (communication). The job demands component of the theory supports the inflight training theme, which prepares cabin crews to handle adverse situations. The job resources component of the theory supports the communication and company-provided resources themes that assist in reducing occupational stressors. Therefore, the JD-R theory was an appropriate choice to help explain my study's findings.

Additionally, the participants' responses support implementing strategic initiatives to reduce occupational stress on the cabin crewmembers. Sound mental capabilities are imperative for the proper administration of life-saving procedures during inflight emergencies to avoid costly errors resulting in the death of a passenger or crewmember (Bakker & Demerouti, 2007). This study's findings confirm identifying appropriate strategies help mitigate and reduce the negative impact of occupational stress on cabin crewmembers to maintain a safe airline operation.

Applications to Professional Practice

Some airline leaders lack strategies to reduce occupational stress on cabin crewmembers in the airline industry and may benefit from the findings of this study. Therefore, it is recommended that airline leaders develop, implement, and maintain effective strategies to minimize crewmember stress. These strategies should include (a) training to reduce or eliminate the time spent on problem-solving, (b) effective

communication to prevent or resolve issues and increase productivity, and (c) company-provided resources to help employees manage issues that keep them from their full working potential and to mentally and physically equip them to perform their duties.

Airline leaders who find themselves without strategies should refer to the JD-R theory of occupational stress, which aligns with my study's findings. The JD-R theory defines occupational stress as a strain and a response to imbalances between demands on the individual and the available resources to deal with those demands. Airline leaders should understand the importance of occupational stress and its effects on the cabin crew, passengers, and operation. Paying close attention to the cabin crews' needs helps develop organizational communication and training efforts, which may aid in assessing potential problems before they arise.

Implications for Social Change

Airline passengers benefit from a traveling environment with reduced stress levels on the cabin crewmembers. When the cabin crew is stressed, it permeates throughout the cabin affecting the passengers and the traveling experience. Reducing stress may increase crew morale and hiring needs because of increased passenger traffic and minimize disruptions to the airline’s operation, presenting great experiences for the traveling public. Additionally, the most positive social change factor indicates that less stress may increase comfort levels, safety, and security with less hostile traveling environments for the crew and passengers.

Recommendations for Further Action

The study results may benefit organizations that lack strategies to reduce occupational stress on cabin crewmembers. Although this was a single case study about the airline industry, the recommendations may also apply to all airlines. The findings confirm that airline leaders interviewed in this study have strategies to reduce occupational stress on the cabin crewmembers. Recommendations for further action to airline leaders include actions in alignment with the three themes that emerged: (a) establishing a designated social media group to communicate pertinent workgroup related information and maintain direct lines of communication with management, (b) implementing appropriate training programs for stress management intervention, and (c) being more proactive at communicating the availability of all company-provided resources.

Specific goals and objectives for disseminating research are to bring awareness to targeted workgroups through scholarly journals, social media platforms, publications in the daily inflight communication bulletins, informational union meetings, and share information with participants through phone calls and emails. Airline leaders and union executives researching strategies to improve the working environment for cabin crews may use the study as a catalyst for further contract negotiation efforts. The research study will be hosted in ProQuest for accessibility to future researchers looking to bring additional knowledge and awareness to the cabin crew workgroup.

Recommendations for Further Research

The purpose of this qualitative single case study was to explore strategies that upper-level airline leaders use to reduce occupational stress on cabin crewmembers in the airline industry. Five upper airline leaders represented the targeted population to provide insight into the strategies used to reduce stress. Unfortunately, the COVID-19 guidelines and restrictions created limitations to this study. Therefore, the data collection occurred through online video interviews instead of in-person interviews. Therefore, the quality of data collected limited the ability to judge the interviewee's attitudes and responses.

Recommendations for further research include sampling a larger population of airline leaders and conducting in-person interviews for richer data collection. Another recommendation for future scholarly research includes a quantitative multiple case study of other airlines or crewmembers. Quantitative methodologies may include surveys and experiments. The final recommendation for aspiring scholars suggests further research into airline leader strategies that may induce occupational stress on cabin crewmembers using a mixed-methods approach. These future studies may gauge the extent to which the findings in this study will apply.

Reflections

The best tool to manage and cope with stress is self-reflection when dealing with stress. Reflecting on stressful situations is beneficial in helping people to understand the causes of stress and the adverse reactions that may affect their health. Good stress (eustress) can be motivational, and bad stress, which can be discouraging, may create low

morale. As a former 23-year airline employee, I witnessed the effects of both good and bad stress in the workplace. Every student has experienced some form of academic stress over DBA program expectations. All DBA students typically experience the same thoughts and feelings, such as imposter syndrome, the ability to balance work and educational goals, rising student loan debt, meeting deadlines, and completing the program.

A personal bias that I dealt with in this program is that the online learning environment was not as acclaimed as the traditional brick-and-mortar program. However, I have encountered several courses within the program that were extremely challenging. I can't imagine any differences between attending the program online or in person. I also didn't think I would get through the course expectations. With the mounting stress that I endured attempting to meet the demands of writing a literature review, the perils of learning SPSS data analysis, and the unsettling stories of failure that accompanied them, I became extremely anxious. Imposter syndrome increased, and I didn't believe that I would complete the program. However, it took approximately 2 - 3 weeks to complete a rough draft of my literature review, and I managed to pass SPSS with a final grade of A. I realized that stress is very manageable if you organize your time effectively and create a schedule conducive to the program's expectations.

I have identified several ways to manage stress throughout my doctoral journey by assembling a personal learning network (PLN) to assist me through the challenging times and organizing my work schedule with academic time. My PLN consisted of recent graduates I had the pleasure of meeting during my journey. Thank you, Dr. Auriesheaua

Bell, Dr. Ieshia Bradley, and Dr. Maurice Thorpe, for taking time out of your busy schedules to assist me in completing my study. I am blessed to have made acquaintance with you and look forward to many years of friendship. Now that the most difficult part of my doctoral journey is behind me, I can reflect on my progress in conducting rigorous research, writing in APA form, constructing a literature review, and analyzing and synthesizing the writing process.

Lastly, I learned how to use the NVivo qualitative data analysis software to organize, code, and develop themes. Those aspects of the doctoral study were the most stressful. However, learning to manage stress from the onset of this journey has enabled me to continue without unnecessary breaks or relinquishing my goal to become Dr. Wendy Lindsey. I have completed my journey. To God be the glory!

Conclusion

The purpose of this qualitative single case study was to explore strategies that upper-level airline leaders use to reduce occupational stress on cabin crewmembers in the airline industry. With effective communications, training, and company-provided resources, airline leaders can effectively reduce occupational stress on cabin crewmembers in the airline industry. The leading research question was what strategies do upper-level airline leaders use to reduce occupational stressors on cabin crewmembers? I collected data from five participants using semistructured interviews, open-ended questions, and three themes emerged: (a) inflight training for generating natural responses to emergencies, (b) communications are used for internal marketing practices and addressing issues, and (c) company-provided resources for supporting

employees to reduce stress. The themes showed that airline leaders have many strategies to reduce occupational stress on the cabin crewmembers.

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Appendix A: Interview Questions

1. Based upon your airline experience, what are the specific job demands of cabin crewmembers that increase the occupational stressors that contribute to work-related absences?
2. What training strategies do you provide to managers to help them mitigate occupational stress for cabin crewmembers?
3. Which strategies were the most effective in reducing occupational stress?
4. Which strategies were the least effective in reducing occupational stress?
5. How did you measure the effectiveness of the strategies?
6. What resources did you provide to employees to reduce stress?
7. How resistant were your employees or supervisors to the strategies?
8. How did you address employee or supervisor resistance?
9. What other information would you like to share regarding reducing occupational stressors on cabin crewmembers?

Appendix B: Interview Protocol

A. **Research Title**: Strategies for Reducing Occupational Stress on Cabin Crewmembers in the Airline Industry

B. **Research Question**: What strategies do upper-level airline leaders use to reduce occupational stressors on cabin crewmembers?

C. Interview protocol purpose

The rationale for using the IPR method used in qualitative research is to support the efforts that strengthen interview protocols' reliability. These efforts may contribute to improving the data quality obtained from research interviews.

D. **Interview protocol procedure**:

a. Ensure the alignment of interview questions with the research questions

b. Construct an inquiry-based conversation

c. Feedback received through interview protocols

d. Pilot the interview protocol.

E. **Interview Procedure**:

a. Email each participant a consent form containing a confidentiality clause.

b. The email will contain instructions on how to respond to the email, providing their consent to be interviewed.

c. Schedule interviews,

d. Conduct and record participant using interview protocol.

e. Schedule follow-up interviews.

Appendix C: Email Invitation

Dear _____, My name is Wendy Lindsey, and I am currently a student at Walden University. My goal is to obtain a Doctor of Business Administration (DBA) degree by August 2021. I am formally extending an invitation to participate in a research study to explore strategies that upper-level airline leaders use to reduce occupational stress on cabin crewmembers. You have met the criteria as a senior airline manager of a major U.S. airline that successfully implements strategies to reduce stress on cabin crewmembers. Cabin crews often face a variety of occupational stressors that may adversely affect them mentally and physically. Although this study is voluntary, it will be an honor and greatly appreciated if you accepted the invitation to become a participant and take part in an interview for my study to help me reach my goal. You are also free to reject the invitation. Even if you decide to participate in the study, you have the right to withdraw at any time, and I will respectfully honor your decision. I have attached the consent form to this email. Please carefully review the consent form before deciding whether to participate in the study. If you decide to participate, please reply to the consent form through email by stating, “I consent.” Thank you so much for your time and consideration.

Wendy Lindsey, Walden University Doctoral Candidate