



AIR TRAFFIC CONTROLLER HEALTH AND WELL-BEING

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Abstract: *Air Traffic Controller health and well-being is paramount to the safety of flight. Prior research discovered that Air Traffic Controllers are not likely to seek medical or psychological attention. This lack of proper care poses risks to the safety of flight. The Federal Aviation Administration is considering modifying standards for pilots. This is due to a pilot shortage. A similar shortage exists in the Air Traffic Control profession. These shortages were exacerbated by the COVID-19 pandemic. Finding ways to combat this shortage could help to fill this increasing void.*

Keywords: *Air Traffic Control, health, well-being, mental, physical, stress.*

INTRODUCTION

The purpose of this study was to conduct research on burnout in Air Traffic Controllers. One of the vital aspects of this research was the ability to conduct interviews using participants who were working in the air traffic control profession, which is considered a very demanding job (Costa, 2023). The author went on to explain that stress involving this type of work includes particular skills regarding data administration, cognitive judgment, imminent conclusions, specific communications, and interactions with other traffic controllers.

While conducting research on burnout in Air Traffic Controllers (ATC). A vital aspect of research is conducting interviews with participants. These interviews uncovered an emergent finding about Air Traffic Controllers. Although Air Traffic Controllers work in one of the most stressful jobs, they are unlikely to seek medical or mental health treatment for any ailments.

AIR TRAFFIC CONTROL.

First, it is necessary to provide some information about the profession. Air Traffic Control is a unique profession. Air Traffic Controllers safeguard the safety of aviation commuters on a daily basis. Air Traffic Controllers (ATC) use their skills and discernment to safely direct airline flights daily to their destinations (NATCA, 2023). This is not a job that everyone is familiar with or knowledgeable about. As such, it is important to describe and examine what is involved in the performance of this job. ATCs work in a high-demand, high-risk work environment. These workers employ observation technology, for example, radar, to supervise the flow of aircraft as they alight and leave airports. They work in Terminal Radar Approach Control (TRACON) areas that cover an expanded area. Specific ATC roles include departure controller, flight information, radar, and arrival controller, according to the Controller Workforce Plan

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(Arblaster, 2018). ATCs also utilize non-radar, radar, and visual surveillance to maintain control of the aircraft assigned to their jurisdiction (Nealley & Gawron, 2015). This requires the Air Traffic Controller to analyze, prioritize, and respond to both auditory and visual information; sustaining vigilance in an environment that has constantly changing information (Chappelle et al., 2015). This level of stress can result in fatigue and even burnout. Depression and burnout were used to gauge psychological welfare at work; however, the correlation between the two continues to be undetermined. Whereas depression is a psychological condition, burnout is implied to be a matter influencing the state of one's health (Brenninkmeyer et al., 2001).

When compared with teachers, ATC is considered to be in the same scope, size, and extent: a problem of enormous dimensions exists in burnout and depression. The findings of burnout and depressive indications were strongly correlated. Burnout and depressive indicators were similarly correlated with each, stress-related factors, stressful life events, job adversity, and workplace support, in categorical analyses (Bianci, & Schonfeld, 2015).

To maintain positive control of aircraft, Air Traffic Controllers must evaluate speed, altitude, direction, and distance of multiple aircraft; while maintaining awareness of weather conditions to ensure safety of flight (Chappelle et al., 2015). This is a fast-paced, unpredictable environment where mistakes can be fatal and uncontrollable events can arise at any time. It is always essential for Air Traffic Controllers to be alert for potential conflicts (Nealley & Gawron, 2015).

According to Freudenrich (2021), the job of safeguarding movements of commercial and private aircraft falls on the shoulders of the Air Traffic Controllers. Their responsibility is to coordinate the progresses of multiple aircraft, keep each aircraft at safe

distances from each other, manage them during takeoff and landing from one airport to the next, advise them and route them around bad weather, and warrant the smooth flow of the aircraft without delays. The author went on to explain that when considering Air Traffic Controllers, the ideal of men and women in airport tower springs to mind. However, the air traffic control system is much more complex than that which is visualized. We must consider and assess ATC not only in the United States but throughout the world—the actions of the controllers, the operations of each, and the equipment and how they are educated to use it.

Air Traffic Controllers are expected to meet stringent standards prior to being accepted into the training pipeline. Military Air Traffic Controllers are required to meet military medical standards, as well as specific Air Traffic Controller medical standards. Prior psychiatric or medical illness can be grounds for disqualification from training (Chappelle et al., 2015). Medical conditions, past or present, could disqualify Air Traffic Controller candidates including closed head injury, cardiovascular disease, bacterial meningitis, and uncorrected vision. This is not an all-inclusive list. Psychiatric illnesses that could be disqualifying include anxiety and major depression. Air Traffic Controllers must be able to perform their duties in high-stress situations while maintaining the safety of flight. Additionally, Military Air Traffic Controllers are pre-screened using a vocational aptitude test, to determine if the candidate meets eligibility requirements (Chappelle et al., 2015).

Members of the military and Air Traffic Controllers are exposed to unique stressors that other occupations do not experience. Some of these stressors include low manning, rotating shifts, hazardous environments, noise, other administrative duties and tasks, long hours, and the ability to monitor

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multiple situations at one time. Another unique stressor is that Air Traffic Controllers are expected to perform their duties even during emergencies or immediately after an emergency (Chappelle et al., 2014; Schwarz et al., 2016). This could cause the Air Traffic Controller to react immediately to the stress or force them to contain the stress until they have downtime to deal with it. This causes unpredictability in the workplace, because it is impossible to predict which reaction would occur (Schwarz et al., 2016). Without proper recovery time after an incident, stress causes impaired performance and poses a risk to safety of flight. Unfortunately, worker shortages can sometimes make it impossible to allow for an immediate recovery period (Schwarz et al., 2016).

Air Traffic Controllers do not always have access to the appropriate resources to allow for recovery. These resources could be time, rest, or counseling (Schwarz et al., 2016). Additionally, a lack of resources such as knowledge, budget, training time, established procedures, or equipment could contribute to mishaps (Schwarz et al., 2016). Air Traffic Controllers risk being temporarily or permanently disqualified from the performance of their duties, as well. ATCs are required to meet stringent medical standards to be allowed to perform their job. Medications, psychological concerns, or illness could be cause for temporarily downing the controller, grounding the controller long-term, or even revoking the controller's certifications to control aircraft (Nealley & Gawron, 2015).

EMERGENT FINDINGS.

The health and well-being of Air Traffic Controllers was the focus of the interviews. The results showed that Air Traffic Controllers often conceal their health problems and do not seek medical assistance. They must meet a high medical standard that includes passing yearly flight physicals and

avoiding any medication except acetaminophen or ibuprofen. The participants shared that they were afraid of losing their qualification or their job if they had any medical issues or treatment. They also believed that they would not be able to find another well-paying career without a college degree, like air traffic control. Therefore, they did not want to quit the profession willingly or do anything that might jeopardize their employment. Each of the controllers interviewed had either experienced burnout, were currently experiencing burnout, or had witnessed burnout in other controllers. Other health issues expressed included insomnia, cardiovascular issues, obesity, and stress caused by relationship issues.

In a recent article in *Simple Flying*, the author discussed possible measures the Federal Aviation Administration (FAA) is considering that will ensure that pilots are healthy. The author indicated that the FAA may ease mental health requirements for pilots (Bailey, 2023). If this comes to pass, the logical next step would be to offer Air Traffic Controllers the same accommodation.

Air Traffic Controllers and pilots both rely on each other for the safety of flight. If either party is unable to perform their job accurately, it could result in damage to the aircraft, other property damage, or loss of life. This is why the health of Air Traffic Controllers is of utmost importance. If an ATC is hesitant to seek medical or psychological attention, the results could be catastrophic.

As this information is not well known, it is not receiving the attention it needs. Participants in the study often mentioned alcohol consumption to deal with stress. This type of self-medicating may be minimized if Air Traffic Controllers could seek the help they need without fear of repercussions. The ability to seek counseling alone might help to reduce this problem.

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Many of the participants also indicated that management played a significant role in their experience of burnout. This came from a lack of recognition, staffing issues, and scheduling practices. Many controllers had the perception that management did not care. In defense of management, it is difficult to solve a problem if they are unaware that it exists.

As this information comes to light, it is vital that steps are taken to address the issue. It is also important to recognize the impact of the COVID-19 pandemic, that has exacerbated the issue. The pandemic led to the hiring and training pipeline screeching to a halt. The result is that now the FAA is experiencing a shortage of Air Traffic Controllers. According to Transportation Secretary Pete Buttigieg, the FAA needs to hire an additional 3,000 Air Traffic Controllers to make up for this shortage (Russell, 2023).

Based on these statistics, the stringent medical requirements to become an Air Traffic Controller and possible atrophy of existing controllers to medical and mental health issues will be a challenge. It is also important to consider that many Air Traffic Control towers employ contract workers. These contract workers are not accounted for in this figure. The ability to retain existing Air Traffic Controllers would help to prevent this number from growing larger. The creation of a system where Air Traffic Controllers are willing to seek the medical and psychological treatments they need could help reduce attrition in a workforce that is already hamstrung by the shortage the COVID-19 pandemic created.

CONCLUSION

As with any profession, there are concerns with well-being and health. This includes burnout, well-being, and mental and physical stress. The field of nursing is faced with these same concerns. The coronavirus pandemic

and the racial justice movement across America have caused considerable havoc, the uncertainty and upheaval of the past years has challenged American nurses in similar ways that Air Traffic Controllers have been affected. According to Botha et al. (2015), stress affects high-level reasoning functions, especially attention and memory. This increases the high stakes for nurses as well as air traffic controllers. These two professions are required to deal with very difficult conditions that require accurate, timely decisions that affect human lives on a daily basis. Delays in attention increase the possibility of serious significance of errors, failure to recognize life-threatening signs and indications, and other essential safety issues.

Consider that there are a limited number of Air Traffic Controllers performing their duties for pilots. Ensuring the health and well-being of Air Traffic Controllers is paramount to the safety of flight. If modifications to the medical standards of Air Traffic Controllers would allow Air Traffic Controllers to put their health at the forefront, it would benefit both the profession and the public that relies on them performing their duties safely.

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