E-ISSN: 2708-4523
P-ISSN: 2708-4515
AJMC 2022; 3(1): 09-11

www.allcommercejournal.com
Received: 07-11-2021
Accepted: 09-12-2021

Pavithra Kumari
Research Scholar, College of Management and Commerce, Srinivas University, Mangalore, Karnataka, India

PS Aitha
Professor, College of Management & Commerce, Srinivas University, Mangalore, Karnataka, India

Correspondence
Pavithra Kumari
Research Scholar, College of Management and Commerce, Srinivas University, Mangalore, Karnataka, India

A study of stress in cabin crew members of the aviation industry

Pavithra Kumari and PS Aithal

Abstract
Long haul flights and night shifts that often cause fatigue. Other short-term effects may be sleep loss and decreased job performance. Problems of physical and mental health associated with shift work are mostly linked to the disruption of biological cycles followed by our circadian rhythm. These problems increase when crossing multiple time zones frequently. Some long-term effects of fatigue and circadian disruption include disturbed wellbeing, metabolic disturbances, gastrointestinal diseases, cardiovascular diseases and cancer. Nevertheless, some people are more tolerant to the irregular hours than others. Some factors that may affect one's tolerance for shift work are age, gender, circadian rhythm and personality. It has been found that young people are more tolerant to the effects of jet lag. As for gender, women are more prone to have sleep related problems. A self-reported health data of two U.S. airlines to U.S. population. The results revealed that the female flight attendants reported diagnosed sleep problems nearly 6 times more compared to the general population while for the male flight attendants the corresponding number was close to 4. This study puts in an effort to find the stress in the cabin crew of the aviation Industry.

Keywords: stress, cabin crew, aviation industry

Introduction
Cabin crew members work in a unique environment where they face a range of different stress. The special working environment is described as a high-performance and safety-critical with shift work issues. Shift hours are defined as working hours that deviate from the 8 am to 5 pm Monday to Friday standard. Shift work has multiple forms: evening shift, night shift, rotating shifts, split shifts, and irregular or standby duty both during the weekdays and on weekends. In the airline industry in particular, shift working schedules include a range of features that have a negative impact on the health and well-being of an individual. Examples are long haul flights and night shifts that often cause fatigue. Other short-term effects may be sleep loss and decreased job performance. Problems of physical and mental health associated with shift work are mostly linked to the disruption of biological cycles followed by our circadian rhythm. These problems increase when crossing multiple time zones frequently. Some long-term effects of fatigue and circadian disruption include disturbed wellbeing, metabolic disturbances, gastrointestinal diseases, cardiovascular diseases and cancer. Nevertheless, some people are more tolerant to the irregular hours than others. Some factors that may affect one's tolerance for shift work are age, gender, circadian rhythm and personality. It has been found that young people are more tolerant to the effects of jet lag. As for gender, women are more prone to have sleep related problems. A self-reported health data of two U.S. airlines to U.S. population. The results revealed that the female flight attendants reported diagnosed sleep problems nearly 6 times more compared to the general population while for the male flight attendants the corresponding number was close to 4. This study puts in an effort to find the stress in the cabin crew of the aviation Industry.

Aims and Objectives
To find the stress in the cabin crew of the aviation Industry

Materials and Methods
This study was done in the College of Management and Commerce, Srinivas University, Mangalore. The study was done from Dec 2017 to Nov 2020 at International Airport, Bajpe, Mangalore.
One hundred workers were included in the study.

Stress was measured using Perceived Stress Scale (PSS-10). It is the most widely used psychological instrument for the measurement of the perception of stress. It is a 10-item scale with good reliability and validity and has been used in various population samples to assess the levels of perceived stress. The cockpit management attitudes questionnaire has been widely used in aviation and was developed to measure attitudes toward stress, status hierarchies, leadership, and interpersonal interaction issues [1]. The questionnaire is reliable, sensitive to change [2] and the elicited attitudes have been shown to predict performance [3]. A subsequent version, the flight management attitudes questionnaire [4], was developed to broaden the perspective of the instrument to include the effect of organisational climate and national culture on safety.

Results

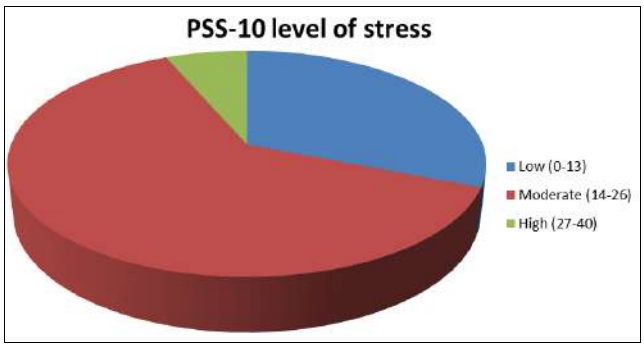
Table 1: Frequency of items on the PSS-10 scale displayed as percentages

	Never	Almost never	Sometimes	Fairly often	Quite often
1. In the last month, how often have you been upset because of something that happened unexpectedly?	31	1.5	34.5	29	4
2. In the last month, how often have you felt that you were unable to control the important things in your life?	38	4	36	20	2
3. In the last month, how often have you felt nervous and "stressed"?	51	5.5	28.5	13.5	1.5
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	4	3.5	19	68.5	5
5. In the last month, how often have you felt that things were going your way?	14.5	5	46	31.5	3
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	16.5	13	51	17	2.5
7. In the last month, how often have you been able to control irritations in your life?	7.5	5	17.5	64	6
8. In the last month, how often have you felt that you were on top of things?	14	4.5	44	34.5	3
9. In the last month, how often have you been angered because of things that were outside your control?	16	8.5	40	32.5	3
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	29	7.5	36.5	21.5	5.5

Table 2 show the categorization of PSS-10 scores into the low, moderate and severe levels. As seen in the table, more than two-thirds of the participants reported moderate to high levels of perceived stress.

Table 2: Categorization of PSS-10 scores

	Low (0-13)	Moderate (14-26)	High (27-40)
PSS-10 level of stress	31	62.5	6.5



Graph 1: Categorization of PSS-10 scores

Table 3: Perceptions of stress and fatigue

More work is fun	41
Capable of managing when stressed	32
Perfection when stressed	17
Team work builds after stress	10

Table 4: Measuring teamwork attitudes and behaviour

Poor	11
Ok	16
Standard	36
Superb	37

Discussion

The airline industry has used surveys to collect data on pilot attitudes about safety and interpersonal interactions to diagnose strengths and weaknesses and to aid in the development of interventions. Individuals' attitudes (as opposed to personalities) are relatively malleable to training interventions [5] and predict performance [6]. A successful intervention called crew resource management training has been developed to address specific attitudes, change related behaviour, and improve performance of the cockpit crew [7]. Correspondingly, attitudes about errors, teamwork, and the effect of stress and fatigue on performance could be prime targets for measurement and improvement in medicine. Surveys are an inexpensive method of data collection that points to interventions and fit well with the systems approach since they elicit (on a large scale) what caregivers actually think. For the past 20 years, the University of Texas human factors research project has been investigating teams at work in safety critical environments such as aviation, space, maritime, and medicine. In this paper, we present recent data comparing attitudes about error, stress, and teamwork among healthcare workers and airline cockpit crew members. We also present error related perceptions of intensive care doctors and nurses. Aviation data are presented to serve as a point of reference from another safety critical domain. The survey items presented tap into attitudes toward stress, hierarchy, teamwork, and error. Previous research has found that these items are relevant to understanding error, [8] predictive of performance, [6] and sensitive to training interventions [8, 9, 10] Attitudes regarding the recognition of stressor effects indicate the degree to which individuals will place themselves in error inducing conditions, and items regarding hierarchy and teamwork indicate the abilities of team members to manage both threats and errors in a team

environment.

Conclusion

Much research is needed to gain a full understanding of attitudes and behaviours and their relationship with outcomes in the aviation industry.

References

1. Gregorich SE, Helmreich RL, Wilhelm JA. The structure of cockpit management attitudes. J Appl Psychology. 1990;75:682-690. [PubMed] [Google Scholar]
2. Helmreich RL. Cockpit management attitudes. Human Factors. 1984;26:583-589. [PubMed] [Google Scholar]
3. Foushee HC. Dyads and triads at 25 000 feet: factors affecting group process and aircrew performance. American Psychologist. 1984;39:885–993. [Google Scholar]
4. Helmreich RL, Merritt AC, Sherman PJ, Gergorich SE, Wiener EL. The flight management attitudes questionnaire (FMAQ). Austin, TX: University of Texas. 1993. (NASA/UT/FAA technical report 93-4.) [Google Scholar]
5. Irwin C. Proceedings of the sixth international symposium on aviation psychology. Columbus, OH: Ohio State University; The impact of initial and recurrent cockpit resource management training on attitudes, 1991, 344-349. [Google Scholar]
6. Helmreich RL, Foushee HC, Benson R, Russini W. Cockpit management attitudes: exploring the attitude-behaviour linkage. Aviation, Space, and Environmental Medicine. 1986;57:1198-1200. [PubMed] [Google Scholar]
7. Helmreich RL, Wilhelm JA, Gregorich SE, Chidster TR. Preliminary results from evaluation of cockpit resource management training: Performance ratings of flight crews. Aviation, Space, and Environmental Medicine. 1990;61:576-579. [PubMed] [Google Scholar]
8. Helmreich RL, Merritt AC. Culture at work in aviation and medicine: national, organizational, and professional influences. Aldershot: Ashgate. 1998. [Google Scholar]
9. Helmreich RL, Wilhelm JA. Outcomes of crew resource management training. Int J Aviation Psychology. 1991;1:287-300. [PubMed] [Google Scholar]
10. Gregorich SE, Helmreich RL, Wilhelm JA. The structure of cockpit management attitudes. J Appl Psychology. 1990;75:682-690. [PubMed] [Google Scholar],