



COVID-19 on Job Insecurity and Mental Health of Thai Airways International Flight Attendants [†]

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[†] Presented at the 2nd Innovation Aviation & Aerospace Industry - International Conference 2021, 28-30 June 2021; Available online: <https://iaai-2021.sciforum.net>, <https://iaai.asia/>

Published: 1 July 2021

Abstract: The ongoing COVID-19 pandemic, which plunging the entire aviation industry into a deep crisis and putting hundreds of thousands of airline jobs at risk, affects Thai Airways flight attendants, with high stressors towards their job insecurity. As human factors are considered critical aspects that influence safety in aviation, this study aimed to 1) examine the impact of job insecurity on Thai Airways flight attendants' mental health during COVID-19 disruption, 2) investigate how they managed themselves to regain life satisfaction during the indefinite suspension of all scheduled flights, and 3) measure psychological distress development, a year after the airline announcement to halt all air services. The GHQ-12 (General Health Questionnaire-12), a self-administered instrument, was adopted to screen flight attendants' psychological well-being. Five male and seven female flight attendants, who had the highest scores, indicating worse conditions between 9 to 11 of total scores 12, were selected for the in-depth online interviews in February 2020 and a year later in January 2021. The result showed psychological strains caused by prolonged stress that can lead to safety-related performance decrements when flight attendants need to perform safety-critical roles in emergencies. Hence, the flight attendants should have a mental health check-up before resuming regular commercial flight operations.

Keywords: COVID-19; flight attendants; job insecurity; mental health

1. Introduction

Aviation is one of many industries that profoundly has been affected by the outbreak due to the individual's state restrictions, which impose travel bans to limit COVID-19's further spread. For the past year, Suvarnabhumi Airport's tarmac has turned into a parking space for Thai Airways International's grounded planes. Meanwhile, the non-drug interventions such as state quarantine and physical distancing measures have proven to help flatten the transmission curve from one person to another [1,2,3]. Hence, Thai Airways flight attendant's future is still miserably caused by worries regarding the present job loss's possibility [4,5].

Definitions of Key Terms

The General Health Questionnaire (GHQ) is a self-administered screening tool to detect minor psychological distress and assess the chance of developing psychiatric disorders [6]. The 12-item General Health Questionnaire (GHQ-12), designed for use by psychiatrists and researchers in various fields for common psychiatric morbidity [7,8], has been translated to many languages undertaken in

three dimensions psychological distress 1) anxiety and depression, 2) social dysfunction, and 3) loss of confidence [9,10,].

2. Objectives

The objectives of this research aimed to:

1. Examine the impact of job insecurity on Thai Airways flight attendants' mental health during COVID-19 disruption.
2. Investigate how they managed themselves to regain life satisfaction during the indefinite suspension of all scheduled flights.
3. Measure psychological distress development a year after the airline announcement to halt all air services.

3. Materials and Methods

3.1. Instruments

The GHQ-12 contains 12 items; each question assesses the mental state using four possible options, splitting the response in a bi-model fashion coded 0-0-1-1. The scoring technique refers to the GHQ method providing a score ranging from 0–12, where the score over 2 indicates unhealthy psychological well-being [11].

3.2. Methods

This qualitative research involved twelve anonymous Thai Airways flight attendants using a purposive sampling technique. Key informants were allowed to freely express the consequent intensity of job insecurity caused by the impact of COVID-19 disruption.

4. Results and Discussion

4.1 Results

Results in appendix A, Table 1, and Table 2 display twelve anonymous Thai Airways flight attendants' psychological well-being, the first results conducted in February 2020 indicated that flight attendants ages between 39-45 who worked for 16-21 years showed the highest GHQ-12 scores at a range between 9-11. The outputs were followed-up in January 2021 on the same selected flight attendants to track the psychological distress. The results showed affirmative psychological strain on all flight attendants when the GHQ-12 scores raised to a range of 11-12. Simultaneously, single female flight attendants disclosed worse mental conditions than married ones, while married male flight attendants expressed more tension than the single. Lastly, older flight attendants who cannot fulfill the determined-life purpose regardless of gender and marital status were more likely to find themselves trapped in the cycle of obsessive rumination thoughts than those younger. The researcher experienced various emotions, a subjective state of blended feelings, including disbelief, anger, stress, anxiety, depression, and yearning [12,13], as shown in appendix A, Table 3. COVID-19, a change catalyst, forced Thai Airways flight attendants to contribute to self-development and enhanced their quality of life throughout this uncertain period of job insecurity [14,15,16,17]. There were several activities, which they adopted to eradicate their negative emotions and restore confidence to cope with mental stress. Each activity fitted each individual based on the level of effort required and the potential impact or benefits they received in return from those activities, which were grouped into four categories, 1) self-relaxing, 2) cleaning and organizing, 3) developing good habits, and 4) contributing to self-development, as described in Table 4.

Table 4. The type of activities that based on the level of effort and impact.

Type of Activities	Effort		Impact	
	Low	High	Low	High
1. Self-relaxing	√		√	
2. Cleaning and organizing		√	√	
3. Developing good habits	√			√
4. Contributing to self-development		√		√

4.2 Discussion

Flight Attendants' career at the point of change for a post-COVID-19 will have to find a new balance of incomes and expenses. The worrisome of unpredictable situations, especially the true magnitude of their careers, had increased their social dysfunction. The view of their unclear future amid massive layoffs of airline staff across the globe left them with so many questions and led them to the maze of their anxiety and depression [18]. The desire for flight attendants was longing for their good old days in terms of glamorous lifestyle, and the best earn for a living eventually caused them to lower the self-esteem. However, all participants learned to empower current thinking and escalate their enthusiasm to stay mentally healthy in various ways. While some of the underlying activities helped promote their self-achievement and constructively motivated their inspiration to escalate their lives to live in a meaningful way linked with life satisfaction [19,20,21], insecure employees tend to smoke, drink alcohol, and do not exercise [22,23,24]. Other self-help activities allowed them to speed up the recovery and push themselves to the limits to do what they never did before. It helped them turn the crisis into opportunities and become goal-oriented people, driven and motivated by purpose [25,26,27,28]. Even though some of the specific constructive ideas were discomfort processes, they believed it was worth the effort.

Nevertheless, all participants revealed that it is not easy for them to get through all the burdens within the night as chronic stress has affected their mental health in various negative ways. Many people think of mental distress in terms of human factors only to change emotions. However, the scientists had indeed done their investigation. They found an association between the brain's chemistry and stress that change the brains' structure of people with psychiatric distress over a long period, which may underlie the mental disorder [29]. It refers to a biological basis, a cluster of brain systems and mechanisms that dominate human personality, including changes in a person's thinking, feelings, and behavior, which result in confusion and frustration [30,31]. It also explains the change of neuron pathways inside the brain caused by the repeated adverse psychiatric morbidity that shapes a new deconstructive habit in responding to their mental environment [32,33]. Therefore, the airline should consider having all flight attendants metal screening before returning to their regularity for the benefits of alleviating risk factors associated with human error and the impaired performance of flight attendants caused by the prevalence of mental health problems [34,35,36,37].

5. Conclusion

Thai Airways International has temporarily ceased operations as the COVID-19 pandemic wreaked havoc on the global economic structure, especially towards the airline industry. It caused Thai Airways flight attendants' future careers in jeopardized, affected their job insecurity, and influenced their mental health [38,39,40,41]. The hope for air travel will soon come back after the COVID-19 vaccine has already begun to roll out. Nonetheless, the psychological strain due to mental distress during the past year left them a deep scar that can potentially change their behaviors.

Author Contributions: K.P. conceptualized the idea and provided supervision. V.L. and A.I. reviewed the measurement tool, methodology and conducted a data investigation process. V.L., I.C., and P.J. applied formal analysis and synthesized the data. V.L. prepared the initial draft. All authors reviewed and provided suggestions. V.L. wrote the final manuscript of the version to be published. All authors approved the final manuscript.

Funding: This research received funding from Dhurakij Pundit University.

Conflicts of Interest: All authors proclaim no conflict of interest.

Appendix A. The psychological well-being of twelve Thai Airways flight attendants.

Table 1. The total GHQ-12 scores of twelve flight attendants were conducted in February 2020.

	F/A (1)	F/A (2)	F/A (3)	F/A (4)	F/A (5)	F/A (6)	F/A (7)	F/A (8)	F/A (9)	F/A (10)	F/A (11)	F/A (12)
Anxiety and Depression												
- Loss of sleep over worry	1	1	1	1	1	1	1	1	0	1	0	1
- Felt constantly under strain	1	1	1	1	1	1	1	1	1	1	1	1
- Feeling unhappy or depressed	1	1	1	1	1	1	1	1	1	1	1	1
- Could not overcome difficulties	1	1	1	0	1	0	1	0	1	1	1	1
Social Dysfunction												
- Able to concentrate	1	1	1	1	1	1	1	1	1	1	1	1
- Playing a useful part in things	1	1	0	1	0	1	1	1	0	1	1	1
- Capable of making decisions	0	1	1	1	1	1	1	1	1	0	0	1
- Able to face up to problems	1	1	1	1	1	1	1	1	1	1	1	1
- Able to enjoy day-to-day activities	1	1	1	1	1	1	1	1	1	1	1	1
- Feeling reasonable happy	1	1	1	1	1	1	1	1	1	1	1	1
Loss of Confidence												
- Losing confidence in self	1	1	0	1	1	1	1	0	1	0	1	0
- Thinking of self as worthless	1	0	0	0	0	1	0	0	0	0	1	0
Total GHQ-12 Scores	11	11	9	10	10	11	11	9	9	9	10	10

Note: The highest score of 12 indicates the worst mental health.

Table 2. The total GHQ-12 scores of twelve flight attendants were conducted in January 2021.

	F/A (1)	F/A (2)	F/A (3)	F/A (4)	F/A (5)	F/A (6)	F/A (7)	F/A (8)	F/A (9)	F/A (10)	F/A (11)	F/A (12)
Anxiety and Depression												
- Loss of sleep over worry	1	1	1	1	1	1	1	1	1	1	1	1
- Constantly under strain	1	1	1	1	1	1	1	1	1	1	1	1
- Feeling unhappy or depressed	1	1	1	1	1	1	1	1	1	1	1	1
- Could not overcome difficulties	1	1	1	1	1	1	1	1	1	1	1	1
Social Dysfunction												
- Able to concentrate	1	1	1	1	1	1	1	1	1	1	1	1
- Playing a useful part in things	1	1	1	1	1	1	1	1	1	1	1	1
- Capable of making decisions	1	1	1	1	1	1	1	1	1	1	1	1
- Able to face up to problems	1	1	1	1	1	1	1	1	1	1	1	1
- Able to enjoy day-to-day activities	1	1	1	1	1	1	1	1	1	1	1	1
- Feeling reasonable happy	1	1	1	1	1	1	1	1	1	1	1	1
Loss of Confidence												
- Losing confidence in self	1	1	1	1	0	1	1	1	1	1	1	1
- Thinking of self as worthless	1	1	1	0	0	1	1	0	0	1	1	0
Total GHQ-12 Scores	12	12	12	11	11	12	12	11	11	12	12	11

Note: The highest score of 12 indicates the worst mental health.

Table 3. States of emotions that challenge the Thai Airways flight attendants' mental health.

	State of Emotions	Number of respondents	Agree (%)
1.	Disbelief	12	100
2.	Anger	6	50
3.	Stress	12	100
4.	Anxiety	12	100
5.	Depression	6	50
6.	Yearning	12	100

References

- [1] Valdez, L. D., P. A. Macri, and L. A. Braunstein. 2012. "Intermittent Social Distancing Strategy for Epidemic Control." *Phys. Rev. E* 85(3):036108. doi: 10.1103/PhysRevE.85.036108.
- [2] Bansal, Priya, Theresa A. Bingemann, Matthew Greenhawt, Giselle Mosnaim, Anil Nanda, John Oppenheimer, Hemant Sharma, David Stukus, and Marcus Shaker. 2020. "Clinician Wellness During the COVID-19 Pandemic: Extraordinary Times and Unusual Challenges for the Allergist/Immunologist." *The Journal of Allergy and Clinical Immunology: In Practice* 8(6):1781-1790.e3. doi: 10.1016/j.jaip.2020.04.001.
- [3] Dietz, Leslie, Patrick F. Horve, David A. Coil, Mark Fretz, Jonathan A. Eisen, and Kevin Van Den Wymelenberg. 2020. "2019 Novel Coronavirus (COVID-19) Pandemic: Built Environment Considerations To Reduce Transmission" edited by J. A. Gilbert. *MSystems* 5(2):e00245-20. doi: 10.1128/mSystems.00245-20.
- [4] De Witte, H. (2005). Job insecurity: Review of the international literature on definitions, prevalence, antecedents and consequences. *South African Journal of Industrial Psychology*, 31(4), 1-6. (accessed on 20 February 2020).
- [5] De Witte, H., Vander Elst, T., & De Cuyper, N. (2015). *Job insecurity, health and well-being*. In J. Vuori, R. Blonk, & R. H. Price (Eds.), *Aligning perspectives on health, safety and well-being. Sustainable working lives: Managing work transitions and health throughout the life course* (p. 109–128). Springer Science + Business Media. https://doi.org/10.1007/978-94-017-9798-6_7
- [6] Goldberg, D., & Hillier, V. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9(1), 139-145. doi:10.1017/S0033291700021644 (accessed on 7 January 2020).
- [7] Goldberg DP, Williams P (1988). *A User's Guide to the General Health Questionnaire*. Windsor: nferNelson (accessed on 7 January 2020).
- [8] Lesage, F., Martens-Resende, S., Deschamps, F. and Berjot, S. (2011) Validation of the General Health Questionnaire (GHQ-12) adapted to a work-related context. *Open Journal of Preventive Medicine*, 1, 44-48. doi: 10.4236/ojpm.2011.12007.
- [9] Claes, R., & Fraccaroli F. (2002) The General Health Questionnaire (GHQ-12): Factorial invariance in different language versions. *Bollettino di Psicologia Applicata* 237,25-35. (accessed on 7 January 2020).
- [10] Gao, Fei, Nan Luo, Julian Thumboo, Calvin Fones, Shu-Chuen Li, and Yin-Bun Cheung. 2004. "Does the 12-Item General Health Questionnaire Contain Multiple Factors and Do We Need Them?" *Health and Quality of Life Outcomes* 2(1):63. doi: 10.1186/1477-7525-2-63.
- [11] Hankins, Matthew. 2008. "The Reliability of the Twelve-Item General Health Questionnaire (GHQ-12) under Realistic Assumptions." *BMC Public Health* 8(1):355. doi: 10.1186/1471-2458-8-355.
- [12] Ni Putu Wulan Purnama Sari and Maria Manungkalit. 2019. "The Best Predictor of Anxiety, Stress, and Depression Among Institutionalized Elderly." *International Journal of Public Health Science* 8(4):419–26. doi: 10.11591/ijphs.v8i4.20359.
- [13] Gloria, Christian T., and Mary A. Steinhardt. 2016. "Relationships Among Positive Emotions, Coping, Resilience and Mental Health." *Stress and Health* 32(2):145–56. doi: 10.1002/smi.2589.
- [14] van der Weiden, Anouk, Jeroen Benjamins, Marleen Gillebaart, Jan Fekke Ybema, and Denise de Ridder. 2020. "How to Form Good Habits? A Longitudinal Field Study on the Role of Self-Control in Habit Formation." *Frontiers in Psychology* 11:560. doi: 10.3389/fpsyg.2020.00560.

- [15] Killian, Kyle D. 2012. "Development and Validation of the Emotional Self-Awareness Questionnaire: A Measure of Emotional Intelligence." *Journal of Marital and Family Therapy* 38(3):502–14. doi: 10.1111/j.1752-0606.2011.00233.x.
- [16] Pocnet, Cornelia, Marc Dupuis, Anne Congard, and Daniela Jopp. 2017. "Personality and Its Links to Quality of Life: Mediating Effects of Emotion Regulation and Self-Efficacy Beliefs." *Motivation and Emotion* 41(2):196–208. doi: 10.1007/s11031-017-9603-0.
- [17] Dadkhah, Asghar, and Peymaneh Shirinbayan. 2012. "Cognitive Emotion Regulation in Aged People: Standardization of Cognitive Emotion Regulation Questionnaire in Iran." *Iranian-Rehabilitation-Journal* 10(2):24–27. (accessed on 20 February 2020).
- [18] Vander Elst, Tinne, Hans De Witte, and Nele De Cuyper. 2014. "The Job Insecurity Scale: A Psychometric Evaluation across Five European Countries." *European Journal of Work and Organizational Psychology* 23(3):364–80. doi: 10.1080/1359432X.2012.745989.
- [19] Wesson, C.J., Derrer-Rendall, N.M. (2011). Self-beliefs and student goal achievement. *Psychology Teaching Review*, 17(1), 3–12. (accessed on 20 February 2020).
- [20] Clauss, Kate, Joseph R. Bardeen, Natasha Benfer, and Thomas A. Fergus. 2019. "The Interactive Effect of Happiness Emotion Goals and Emotion Regulation Self-Efficacy on Anxiety and Depression." *Journal of Cognitive Psychotherapy* 33(2):97–105. doi: 10.1891/0889-8391.33.2.97.
- [21] Gökben Bayramoğlu and Menekşe Şahin. 2015. "Positive Psychological Capacity and Its Impacts on Success," *Journal of Advanced Management Science*, Vol. 3, No. 2, pp. 154-157, June 2015. doi: 10.12720/joams.3.2.154-157
- [22] Park, Jae Bum, Akinori Nakata, Naomi G. Swanson, and Heekyoung Chun. 2013. "Organizational Factors Associated with Work-Related Sleep Problems in a Nationally Representative Sample of Korean Workers." *International Archives of Occupational and Environmental Health* 86(2):211–22. doi: 10.1007/s00420-012-0759-3.
- [23] Ferrie, J. E., M. J. Shipley, S. A. Stansfeld, and M. G. Marmot. 2002. "Effects of Chronic Job Insecurity and Change in Job Security on Self Reported Health, Minor Psychiatric Morbidity, Physiological Measures, and Health Related Behaviours in British Civil Servants: The Whitehall II Study." *Journal of Epidemiology and Community Health* 56(6):450. doi: 10.1136/jech.56.6.450.
- [24] Burgard, Sarah A., and Sarah Seelye. 2016. "Histories of Perceived Job Insecurity and Psychological Distress among Older U.S. Adults." *Society and Mental Health* 7(1):21–35. doi: 10.1177/2156869316679466.
- [25] Benfer, Natasha, Joseph R. Bardeen, and Kate Clauss. 2018. "Experimental Manipulation of Emotion Regulation Self-Efficacy: Effects on Emotion Regulation Ability, Perceived Effort in the Service of Regulation, and Affective Reactivity." *Journal of Contextual Behavioral Science* 10:108–14. doi: 10.1016/j.jcbs.2018.09.006.
- [26] Bartram, David, and Ilona Boniwell. 2007. "The Science of Happiness: Achieving Sustained Psychological Wellbeing." *In Practice* 29(8):478–82. doi: 10.1136/inpract.29.8.478.
- [27] Becerra R, Preece DA, Gross JJ (2020) Assessing beliefs about emotions: Development and validation of the Emotion Beliefs Questionnaire. *PLoS ONE* 15(4): e0231395. <https://doi.org/10.1371/journal.pone.0231395>
- [28] Serpe, R.T., Long-Yarrison F., Stets, J.E., and Stryker, S. (2019). Multiple Identities and Self-Esteem. In Stets, J.E. & Serpe, R.T. (Eds). *Identities in Everyday Life*. New York: Oxford University Press. doi:10.1093/oso/9780190873066.003.0004.
- [29] Bremner, J. (2002). Structural Changes in the Brain in Depression and Relationship to Symptom Recurrence. *CNS Spectrums*, 7(2), 129-139. doi:10.1017/S1092852900017442

- [30] Weir, K. (2012) "The roots of mental illness – how much of mental illness can the biology of the brain explain?" *Monitor on Psychology*, vol. 43, no. 6, p. 30. American Psychological Association. Available online: <http://www.apa.org/monitor/2012/06/roots> (accessed on 27 February 2021).
- [31] EYSENCK H. J. (1963). BIOLOGICAL BASIS OF PERSONALITY. *Nature*, 199, 1031–1034. <https://doi.org/10.1038/1991031a0> (accessed on 27 February 2021)
- [32] Medicine, Institute of, and National Research Council. 2000. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. edited by J. P. Shonkoff and D. A. Phillips. Washington, DC: The National Academies Press. (accessed on 27 February 2021)
- [33] Fuchs, Eberhard, and Gabriele Flügge. 2014. "Adult Neuroplasticity: More than 40 Years of Research." *Neural Plasticity* 2014. doi: 10.1155/2014/541870.
- [34] Jiang, L., & Probst, T. M. (2016). A multilevel examination of affective job insecurity climate on safety outcomes. *Journal of Occupational Health Psychology*, 21(3), 366–377. <https://doi.org/10.1037/ocp0000014>
- [35] Probst, T. M., & Brubaker, T. L. (2001). The effects of job insecurity on employee safety outcomes: Cross-sectional and longitudinal explorations. *Journal of Occupational Health Psychology*, 6(2), 139–159. <https://doi.org/10.1037/1076-8998.6.2.139>
- [36] Rajgopal T. (2010). Mental well-being at the workplace. *Indian journal of occupational and environmental medicine*, 14(3), 63–65. <https://doi.org/10.4103/0019-5278.75691>
- [37] Hilton, Michael F., and Harvey A. Whiteford. 2010. "Associations between Psychological Distress, Workplace Accidents, Workplace Failures and Workplace Successes." *International Archives of Occupational and Environmental Health* 83(8):923–33. doi: 10.1007/s00420-010-0555-x.
- [38] Nella, Dimitra, Efharis Panagopoulou, Nikiforos Galanis, Anthony Montgomery, and Alexis Benos. 2015. "Consequences of Job Insecurity on the Psychological and Physical Health of Greek Civil Servants" edited by S. Leka. *BioMed Research International* 2015:673623. doi: 10.1155/2015/673623.
- [39] De Cuyper, N., & De Witte, H. (2006). The impact of job insecurity and contract type on attitudes, well-being and behavioural reports: A psychological contract perspective. *Journal of Occupational and Organizational Psychology*, 79(3), 395–409. <https://doi.org/10.1348/096317905X53660>
- [40] Menéndez-Espina, S., Llosa, J. A., Agulló-Tomás, E., Rodríguez-Suárez, J., Sáiz-Villar, R., & Lahseras-Díez, H. F. (2019). Job Insecurity and Mental Health: The Moderating Role of Coping Strategies From a Gender Perspective. *Frontiers in psychology*, 10, 286. <https://doi.org/10.3389/fpsyg.2019.00286>
- [41] Cheng, Ting, Saija Mauno, and Cynthia Lee. 2012. "The Buffering Effect of Coping Strategies in the Relationship between Job Insecurity and Employee Well-Being." *Economic and Industrial Democracy* 35(1):71–94. doi: 10.1177/0143831X12463170.