

Manuscript 1827

Cabin crew members' silence: A qualitative study with cabin attendants

Seda Ceken

Pinar Unsal

Follow this and additional works at: <https://commons.erau.edu/ijaaa>



Part of the [Human Factors Psychology Commons](#), [Industrial and Organizational Psychology Commons](#), [Interpersonal and Small Group Communication Commons](#), and the [Organizational Communication Commons](#)

This Article is brought to you for free and open access by the Journals at Scholarly Commons. It has been accepted for inclusion in International Journal of Aviation, Aeronautics, and Aerospace by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.

Ineffective interpersonal interactions among flight crew members are usually shown as one of the main reasons for most aviation incidents and/or accidents. Especially members of the flight crews who are in a subordinate position might have hesitations to speak their concerns in risky or hazardous situations (Foushee, 1984; Gladwell, 2008). In the history of aviation there have been a few aviation accidents (Air Canada Flight 797, Delta Flight 1141, Northwest Airlines Flight 253, Air Ontario Flight 1363) because of inefficient cabin communication. The recognition of this crucial fact paved the way for the establishment of the Aviation Safety Reporting System (ASRS) in 1976. The success of the ASRS in the United States inspired many countries, such as the United Kingdom, Canada, Australia, Japan, and China, to introduce similar systems (National Aeronautics and Space Administration [NASA], 2020). These foundations generally aim to create easily accessible systems based on the principles of confidentiality for all participants who are concerned with safety (Federal Aviation Administration, 2021). An effective safety reporting system in aviation might be a basic condition for the correct implementation of safety management in aviation (Jausan et al., 2017). According to the Directorate General of Civil Aviation (DGCA, 2022) in Turkey, mandatory and/or voluntary reporting of accidents, serious incidents, and incidents concerning flight safety is required to protect and increase flight safety. With these concerns, the DGCA published a document describing the nature of the incidents to be reported and the principles of confidentiality.

In aviation, ensuring communication efficiency (i.e., exchanging information, asking questions about the situation, or taking verbal action) both between cockpit and cabin crew members, and within cabin crew members significantly affect flight safety (Bourgeon et al., 2013; Krivonos, 2007). In other words, efficient flight communication is one of the basic safety mechanisms for crew members to have their opinions and voices heard in extraordinary conditions or emergencies (Katerinakis, 2014). However, past air crash accidents showed that among flight personnel, the reluctance to report problems still exists, and research about the causes of this is still rare. One exception to this is a study conducted by Bienefeld and Grote (2012), who investigated the reasons for silence in four occupational groups (captains, first officers, pursers, and flight attendants) in a European airline. Bienefeld and Grote (2012) identified a list of reasons based on a review of the literature and asked their participants to indicate their reasons for remaining silent in a past situation. This list was also taken as a reference for coding in the present study. The study found that 81% of the flight attendants' reasons for keeping silent towards pursers were "the fear of punishment", followed by "the feelings of futility" (51%), and "the fear of damaging relationships" (42%). "Perceived conflict between efficiency, comfort, and safety" was 70% of pursers' main reason for keeping silent toward captains. In other words, pursers were worried about causing delays in flight schedules in case they were not right. This

reason was followed by "the fear of punishment from captains or management" (67%) and "perceived time pressure" (41%). The study by Bienefeld and Grote was important to draw attention to the silence of flight personnel, although qualitative, in-depth data collected from specific occupational groups would be further helpful to understand these reasons in more detail.

The present study, focusing on a sample of Turkish cabin crew members, aims to collect qualitative data on the reasons for silence during flights. Although occupations in the aviation sector are global by their nature, culture-specific factors might still be influential on silence behavior. Therefore, the main contribution of the current study to the literature is to collect in-depth data from a different cultural group.

Organizational Silence

Up to date, why employees remain silent in the face of problems has been studied quite extensively in the organizational literature (e.g., Milliken et al., 2003). As silence in aviation crews might usually be experienced within a work group during a specific time period, for the present study, the description provided by Tangirala and Ramanujam (2008) is adopted: Employee silence is the intentional withholding of work related critical information from others in the workgroup. Although silence is an important issue in most work settings, in some work environments it might have life-threatening effects. For instance, silence in healthcare teams might have detrimental effects on the health of patients, while silence in flight teams might have disastrous effects on the lives of the flight crew and passengers on board. In both types of crews, safety is the most important concern. Silence about safety issues is conceptualized under the term "safety silence." Schwappach and Richard (2018), who investigated safety silence in healthcare teams, described safety silence as keeping safety concerns to oneself in case of potential harm.

Cabin Crew Silence

Silence in cabin crews can be examined first as silence among the members of the cabin and secondly as silence towards cockpit members. Both types of silence could have disastrous effects. For instance, in June 1982, from Dallas to Toronto on Air Canada Flight 797, the failure in communication and coordination between the cabin and cockpit crews cost the lives of 23 people (National Safety Board, 1984). In the Air Ontario Flight 1363 crash, 24 people were killed because of the cabin crew's reluctance to convey some crucial information (the ice on the wings) to pilots (Moshansky, 1992). Thus, a cabin supervisor might choose one of the two options: either ignoring a problem or presenting it to the cockpit crew. However, even though both the level of safety and the quality of service depend on a high level of communication and coordination within and between each crew (Skogstad et al., 1995), some barriers could still prevent cabin supervisors from speaking up.

Although pilots and cabin crew members are considered together as flight crew, these two groups essentially refer to two different cultural groups in civil aviation. They differ in terms of educational background, professional positions, technical knowledge, wage rates, and gender ratios. As cabin pursers/chiefs usually perceive pilots hierarchically in a higher position (Bienefeld & Grote, 2012), this might cause a barrier in communication. Cockpit crews might also be skeptical of reports from cabin crews (Chute, 1994). In a study conducted on cockpit and cabin crew members by Skogstad et al. (1995), it was found that half of the flight crew members were not satisfied with the level of information exchange and cooperation between the cockpit and cabin crews. Especially women cabin crew members reported that they had insufficient information on operational and technical issues and that nine out of 10 women needed better information on the technical issues of the aircraft. Similarly, a study by Ford et al., (2013) also indicated that flight attendants felt uncomfortable about the level of technical knowledge of the aircraft, which would cause them not to speak up in an emergency. Other barriers to communication include locked flight deck doors and interphone protocols, a lack of combined cabin crew members and pilot preflight briefings, the use of different hotels or crew buses by pilots and cabin attendants, and a lack of debriefings after incidents (e.g., following an incident of smoke in the cabin) (Ford et al., 2013).

The silence of flight attendants towards cabin chiefs or pursers is also problematic since they need to be informed about potential threats or safety-threatening incidents by cabin crew members. Therefore, the present research attempts to find an answer to the following research question: What are the reasons cabin crew members (cabin supervisors/pursers, and flight attendants) remain silent in the case of a problem or critical incident that might affect the safety of the flight? Finding answers to this question might help design systems that prevent effective communication among flight crew members.

Method

Procedures

In-depth, semi-structured interviews were conducted with 21 participants living in Turkey. Participants who agreed to take part in the study were invited to take part in an online interview setting. All interviews were completed between January and December 2022. Each interview took between 45 and 50 minutes. All interviews were recorded on a confidential basis and later transcribed for subsequent examinations.

Participants

Twenty-one (14 females and 7 males) Turkish cabin crew members who were either flight attendants or pursers for an airline based in Turkey took part in the study. Table 1 shows the sample's demographic characteristics. In qualitative research, the term "data saturation" refers to the sufficiency of the data to end the data collection process (Fusch & Ness, 2015; O'Reilly & Parker, 2013). Baker et

al., 2012) recommended that the sample size be sufficient to the point where the answers from the participants did not differ anymore. Based on these views, for the present data, 21 participants were considered sufficient to obtain different viewpoints on the subject.

Table 1
Participants' Demographic Characteristics

Demographic Variables			
Gender	Male		Female
	7		14
Education	Bachelor's Degree		Postgraduate
	4		17
Length of Time Spent in the Occupation	0-5 years	6-15 years	16-25 years
	2	4	15
Total Flight Hours Spent in the Occupation	5000-10000	10001-20000	20000+
	5	6	10

Interview Questions

Participants were asked to give information on their gender, level of education, status, length of time working as a flight crew member, and flight experience (total flight hours). Based on past research (Bienefeld & Grote, 2012; Milliken et al., 2003) and the research question of the present study, four semi-structured interview questions were developed:

1. Which factors caused you to remain silent about an issue or problem that you were concerned about during a flight?
 - 2.a. Did you ever have a conflict about telling your supervisor/cockpit member about a problem or issue you were worried about? How did you get into this conflict? Can you explain it with an example?
 - 2.b. What action did you take at that moment? Did you report it? If so, how did you report it? How was it received?
 - 2.c. If you decided to remain silent, what made you feel/think not to speak up?
3. Did you observe a co-worker who had a conflict about reporting an issue or keeping quiet? If so, why do you think he/she remained silent or was in conflict?

4. Why do cabin crew members sometimes remain silent and not report problems that might threaten flight safety? What do you think about the reasons for this?

Data Analysis

The data were analyzed through content analysis in the MAXQDA 22 Qualitative Analysis Program. Themes and coding related to the research question were obtained by analyzing the scripts with creative coding techniques. The content analysis technique comprises processes such as (1) coding the data, (2) coding the themes, (3) managing the codes and themes, (4) transforming the data into themes by examining the codes, and (5) identifying and interpreting the findings (Elo & Kyngäs, 2008; Sıgır, 2018). Interview data were analyzed using thematic analysis. Thematic analysis is a method that defines, organizes, and offers insight into patterns of meaning (themes) through a data set (Braun & Clarke, 2012). The data were read and interpreted through content analysis in the MAXQDA 22 Analysis Program. Overall, 211 expressions, 9 themes, and 16 sub-themes were determined and titled.

Validity and Reliability

One of the ways to ensure validity and reliability in qualitative research is to use a computer-aided statistical program (Sıgır, 2018). The interview data were analyzed through the MAXQDA 22 Statistical Data Analysis program. The second way was peer debriefing. Peer debriefing allows for the supervision of themes and codes developed in the research. In other words, this procedure refers to the examination of research findings by experts on the research subject (Barber & Walczak, 2009; Başkale, 2016). In this research, the study was reviewed and approved for eligibility by a cabin crew member with 23 years of experience. The third way is to use intercoder reliability. Inter-coder reliability is a method of agreement between different coders that assesses consistency in the same data. It is stated that a minimum of two independent coders is necessary for intercoder reliability (O'Connor & Joffe, 2020). For the present study, Kappa (Cohen's kappa) analyses were used to determine the description of agreement. Cohen (1960) stated that weighted Kappa statistics were defined as follows: Kappa < 0 was considered to indicate no agreement; Kappa = 0.0 to 0.20 as slight agreement; Kappa = 0.21 to 0.40 as fair agreement; Kappa = 0.41 to 0.60 as moderate agreement; Kappa = 0.61 to 0.80 as substantial agreement; and Kappa = 0.81 to 1.00 as almost perfect agreement. Cohen's kappa (0.99) was determined in the MAXQDA 22 Statistical Program (Brennan & Prediger, 1981).

Findings

Nine themes were identified by the content analysis, namely "poor relationship with cabin supervisors/pilots", "lack of knowledge on rules and/or procedures", "fear of punishment", "feelings of futility", "fear of damaging relationships", "status differences", "fear of negative label", "workload" and

"laziness." As can be seen in Table 2, the "poor relationship with cabin supervisors/pilots" category contained the most idea unit code descriptions (50 times). "Poor relationship with cabin supervisors/pilots" refers to unpleasant interactions with cabin supervisors/pilots. Participants argued that these unpleasant interactions caused disruption in communication. "Lack of knowledge of rules and/or procedures" was the second-most-stated important factor by participants (48 times). The participants especially mentioned that they remained silent when their knowledge was not up to date. "Fear of punishment" was coded 26 times, and it was the most frequently expressed third factor to remain silent. Participants expressed that they withdrew themselves as they thought they might get punished. They mentioned that various scenarios of punishment would be created in their minds. The greatest fear was being dismissed. In the Discussion section, we argued all themes with the relevant literature. Table 2 shows themes, sub-themes, frequencies, and participants' expression samples.

Table 2
Overview of Silence Categories

Themes/Sub-themes	n	%	Text Example
Poor relationship with cabin supervisors/pilots	50		
<i>Bias against cabin supervisors /pilots</i>	23	7.06	"Once people start to interact with each other, they begin to form some impressions of each other. For example, if a supervisor on the surface seems to be messy, irresponsible, or not able to manage her crew well , she/he is not taken seriously, and this deters them from reporting to her/him."
<i>Negative feedbacks from cabin supervisors/pilots</i>	21	6.44	"When the security check was completed... I sensed a smell in the vicinity of the emergency exit windows. It smelled like gasoline. After telling this to the cabin chief, we both went to the cockpit and talked to the captain pilot about it. The captain told me (mockingly) to pray and then said, 'Don't worry, nothing will come of it' . Maybe it was a normal situation and needed no intervention, however, the captain should have explained it to us in a more suitable way. The captain's approach there prevented me from reporting on a next similar incident."

<i>Generation gap</i>	6	1.84	"I fully argue that this situation is based on generational differences . In 2010, when I was just starting out, my cabin supervisors were mostly from the baby boomer generation, and so were the captains. It would be disgraceful to say anything against them or to say "this is wrong" because that was not the case in their generation."
Lack of knowledge on rules and/or procedures	48		
<i>Lack of confidence in knowledge</i>	21	6.44	"...When you face a problem on the plane, you ask the person next to you, "Did you hear that sound too or did you feel that too?" The need to confirm the problem with these questions is indeed based on not being sure of yourself and your knowledge ."
<i>No updating of knowledge on rules and/or procedures</i>	10	3.07	"This also results from the frequent changes in legislation. It is people's responsibility to follow them. However, the workload makes it difficult to keep track... "
<i>Lack of experience</i>	10	3.07	"On a... flight, while the plane was taking off, two cabin crew members in the back heard a sound. But because of their lack of experience, they did not fully understand what was happening . Therefore, they did not report it to the purser. Afterward, it was noticed during the external controls that the incident was serious."
<i>Occupational illiteracy</i>	7	2.15	"The cabin crew found a mobile phone on the plane. They didn't report it immediately, and then they forgot about it . Later, they decided to hand it over to the lost property office. However, after the plane landed after completing a four-leg flight, they forgot to deliver it. After going home, the crew member who initially found the phone noticed it in her bag. She wanted to get rid of it in a panic and threw it into a bin. The owner of the phone later

			located it by signal and made a complaint. She was fired."
Fear of punishment	26		
<i>Fear of being dismissed</i>	14	4.29	"...People are afraid of being fired or disposed of just because they do not want to lose their uniforms, status, respect, or benefits. As this is not an easily entered occupation, people worry about losing their jobs."
<i>Rigid company policies and procedures</i>	6	1.84	"This partly results from the company culture. The company imposes that 'If you make a mistake and report it, you might pay for it.' So people start to avoid reporting. The main reason is the fear based on the company culture. "
<i>Lack of trust in the system</i>	6	1.84	"..I had a problem with a supervisor. In general, cabin supervisors also have good relations with ground service employees. Sometimes, they can call the supervisor and warn by saying "Such a report has been written about you". They provide a lot of information and support for each other. That's why people feel lonely.
Feelings of futility	20		
<i>Thinking that the problem will not be taken seriously</i>	12	3.68	"People might say, Don't let her (cabin chief) hear about it, even if we tell her about it, probably she will not take it seriously. "
<i>Solving the problem with other flight attendants</i>	8	2.45	"Flight attendants also might think that it was between them and the passenger." They think they can discuss and solve the problem among themselves and close the matter. "
Fear of negative label	18	5.52	"...I don't want to be seen as a problematic person . I don't need to be viewed as a great worrier".
Fear of damaging relationship	17		
<i>Damaging relationships with other crew members</i>	13	3.99	"I would definitely say that the first reason for staying silent is not to spoil my relations with my teammates. I don't want to have problems with that person when I meet them on another flight or somewhere."

<i>Protection of other crew members</i>	4	1.23	“Crew members unite and try to protect the cabin chief or a flight attendant. There are fears that something bad would happen to that person, they think she/he may lose her/his job, and they do not want to cause it. ”
Status differences	14	4.29	“When there was an incident that needed to be reported, the captain would tell us ‘Don't report it, keep quiet, don't make it a big deal of it’ and we would drop the issue. Now, I would not have remained silent. At that time we were obeying to captains. This attitude made us to keep a distance with the cockpit when faced with similar events in the future.”
Workload	12		
<i>Hurry up</i>	8	2.45	The thought of 'letting the working end and I'll go home right away ' is too much. I will sleep when I get home. Why should I still carry the flight mood with me and deal with the report?
<i>Length of working hours and aeroasthenia</i>	4	1.23	“People who take long flights feel exhausted, long working hours affect reporting negatively. ”
Laziness	6	1.84	“..I think the main reason is; to feel lazy. Nobody wants to deal with the report unless it is very basic and essential. He is too lazy to be summoned and even give an account for it. I say, 'I'm already tired from the flight, I'll write my report tomorrow'. The next day I forget about that situation, and I don't report it. You don't actually take work home.”

Considering the demographic differences between the groups, although it seems that the sample (flight attendants) consists of a high proportion of women in this research, laziness and workload factors were found to be one of the main reasons for male participants to remain silent. We found no other significant differences between groups in relation to other sociodemographic variables.

Discussion

In this study, reasons for the cabin crew to remain silent in face of potential problems were examined via semi-structured interviews. Participants' statements showed nine themes were identified by the content analysis, namely “poor relationship with cabin supervisors/pilots”, “lack of knowledge on rules and/or

procedures”, “fear of punishment”, “feelings of futility”, “fear of damaging relationships”, “status differences”, “fear of negative label”, “workload”, “laziness.”

Results show that "poor relationship with supervisors/pilots" was the most frequently stated reason to remain silent. Here, three sub-themes were identified. Namely; "first impression bias against cabin supervisors/pilots", "negative feedback from cabin supervisors/pilots", and "generation gap." First-impression biases have already been indicated by many authors. For instance, Tversky and Kahneman (1986) expressed that perceptions and decision-making were influenced by biases. There are some findings in the literature that first impressions affect evaluations of whether one can count on somebody (Nahari & Ben-Shakhar, 2013) and judicial decisions (Kerstholt & Jackson, 1998). On the other hand, this finding might be related to the national culture of Turkey. Turkish culture is characterized as a collectivist, high-power distance, and uncertainty-avoidant culture (Kabasakal & Bodur, 1998). In collectivist and high power distance societies, members at the lower hierarchy are expected to show obedience and respect to the individuals at the higher hierarchy. Powerful members belonging to the higher level of the hierarchy might feel they are entitled to speak or behave negatively towards people who do not have power over them. Intuitive thinking bias might also be useful to explain the first impression bias against supervisors/pilots. Intuitive thinking bias (Turkey's average score is 0.80) is the use of shortcuts to handle problems related to work situations (Pereira, 2022). According to this, people rely on their intuitions before speaking up and guarantee that they will feel safe by remaining silent. Negative feedback from supervisors/pilots might lower cabin crew members' safety feelings and prevent them from expressing their opinions for fear of being harshly criticized. In relation to the generation gap, older participants in the study talked about the baby boomer generation's high expectations from younger generations. Generational differences have been an important concern in explaining work-related attitudes among employees. For instance, generation Y participants, unlike the baby boomer generation, were reported to be more adaptable/accommodating and less hierarchical (Venter, 2017).

The lack of knowledge of rules and/or procedures was another significant reason for cabin members to remain silent. The sub-themes of the lack of knowledge were determined as "the lack of confidence in knowledge", "no updating of knowledge on rules and/or procedures", "the lack of experience", and "occupational illiteracy." This theme seems to be specific to the current study, which employed Turkish cabin crew members, as in Bienefeld and Grote's (2012) it did not appear as a significant reason for the silence of cabin crew members. This result could be better explained by regarding the theme of “the fear of punishment”, another significant silence reason for the cabin crew members. It might be possible that participants who were not confident of their knowledge was unsure about

reporting and therefore remained silent. By acting this way, they might have also excluded the possibility of punishment in case they were wrong. This finding clearly shows that crew members competency and self-efficacy in relation to the knowledge of systems, procedures, regulations, and safety-related information is quite important to raise their voice when they encounter problems during flights. Starting from early trainings they should be dictated that acquiring and updating knowledge continuously would be crucial aspects of their job.

The fear of punishment was another reason for hesitation to report. Three sub-themes were determined in this theme: “the fear of being dismissed”, “rigid company policies and procedures”, “the lack of trust in the system.” All these sub-themes show that cabin crew members remained silent because of their fear of being dismissed, and being exposed to negative treatment, such as being scolded by the managers or not getting promoted. This finding is consistent with “acquiescent silence” (Dyne et al., 2003) which was suggested as a kind of silence related to withholding ideas and opinions based on the fear of risking some occupational prospects (Milliken, 2000; Öztürk & Cevher, 2016; Pinder & Harlos, 2001). Results also showed participants’ fears that reporting an incident might turn against them. In other words, by reporting an error, they feared becoming a target. At this point, the term “safety culture” might be useful to consider. Culture, as defined by Rousseau (1990), is “the ways of thinking, behaving, and believing that members of a social unit have in common. A “safety culture” is one in which safety plays a very important role (Hudson, 1999). Reason (1997) proposed certain characteristics of safety culture (i.e., “informed”, “reporting”, “just”, “flexible”, and “learning”). Based on these suggestions, our results show that creating an organizational culture where the trust between employees and managers is high, the provision of any safety-related information is valued and viewed as an opportunity to learn is important. Additionally, a fair examination of reports would be important to break the silence of cabin crew members.

Thinking that the problem would not be taken seriously was another silence reason and named “Feelings of futility.” Cabin workers believed that sometimes speaking up to the supervisor would not change anything. Cornell National Social Survey (2009) found that more employees remain silent because of a sense of futility (26%). People fear giving feedback and think nothing will change when they voice it to anyone. Especially, it might cause a decline in employers’ organizational trust (Nikolau et al., 2011) and organizational commitment (Dedehanov & Rhee, 2015; Fard & Karimi, 2015). On the other hand, Morrison and Milliken (2000) suggested that if employees’ sense of futility is high, they might be exposed to learned helplessness. The sub-theme “solving the problem with other flight attendants” suggests that cabin crew members would sometimes remain silent because they believed that the problem could be managed as a crew. Therefore, they might not seek further help or need to report. Sometimes this

reluctance might be caused by disbelief in the supervisor's capability to solve it or seeing no necessity to take the initiation based on the belief that the problem was not serious enough.

"The fear of negative label" theme shows participants' fears that reporting might cause them "be mocked", or "embarrassed" or be seen as a "troublemaker." This silence factor was discovered by Milliken et al. (2003), who stated that people keep their ideas to themselves for the fear of harming their social image. Cabin workers might avoid speaking up unless they are completely sure, to decline the risk of harming their reputation (Brazel et al., 2016; Schaefer, 2013). The codes about "fear of damaging relationships" suggest that respondents were reluctant to speak up because they feared causing some negative impact on themselves ("damaging relationships with other crew members") and on others' life ("protecting of other crew members"). Dyne et al. (2003) explained that individuals remained silent because of the anxiety of causing a negative impact on personal relationships. In this type of silence, the focus is based on friendship and the motivation to protect the work colleague.

Status differences, especially when communicating with someone of a higher status, might cause silence. Our study also shows that silence in relation to status differences may occur due to "seniority", "age", and "position." The difference between the different generations complicates the communication process. These findings are in line with Koudenburg et al.'s (2013) finding that status differences may affect values, such as belonging, social acceptance, and respect and may cause silence in lower-status individuals. Turkey's high-power distance and collectivist characteristics might also contribute to these results. Overall, it could be suggested that cabin supervisors/pilots, as the leaders of their crews, should be aware of the importance of good communication from the beginning of a flight, since negative first impressions might be difficult to change later.

"Workload" was one of the other reasons for remaining silent. Factors such as job autonomy, long working hours, irregular work schedules, and jet lag might burn out cabin crew (Castro et al., 2015; Tsaour et al., 2020) and may hinder information sharing. "Length of working hours and aero asthenia" was one of the sub-themes of this theme. We found another sub-theme "hurry-up syndrome" which may also prevent cabin workers from reporting. Hurry up is a negative factor often pointed out in reports of accidents and incidents in aviation (dos Santos et al., 2014). It causes crew members not to allocate enough time to complete their tasks properly and therefore might cause faulty performance. Hurry-up syndrome errors usually occur under high workload conditions and fatigue. Besides, some external distractions and schedule pressures (McElhatton & Drew, 1993) might increase this syndrome.

Last, we found that “laziness” was another factor in cabin crew members’ silence behavior. In laziness, people are disinclined to act and exert themselves. Based on the silence literature, it could be suggested that laziness might relate to the “MUM Effect”. The mum effect occurs when people avoid transferring bad news or delay delivering it to managers because of protecting their comfort (Dyne et al., 2003; Rosen & Tesser, 1970). Cabin workers might be motivated by that not being held responsible for the problem and prefer not to cause any disturbance in their lives.

Conclusion, Practical Implications, and Limitations

Cabin crew members’ silence behavior in the face of threats or problems is an important issue as it threatens security-based information sharing and reporting. This study, conducted with a sample of Turkish flight attendants, provided a deeper understanding of the results of Bienefeld and Grote’s (2012) study. "Lack of knowledge of rules and/or procedures", "workload", and "laziness" were found to be specific to our sample. Distant relationships between cockpit and cabin and inefficient communication based on status differences might also be further supported by Turkish society’s high power distance and collectivist characteristics.

In particular, the COVID-19 process might have further affected participants' fears. Especially with the pandemic process, the number of flights was reduced, and uncertainty regarding layoffs and payments increased. Nevertheless, it was also evident that our participants answered interview questions from a broader perspective rather than limiting their answers to their experiences during the pandemic period. Therefore, although some of the data were collected during the pandemic period, answers were not specific to this period. In future research, we suggest repeating the same study to test whether the COVID-19 pandemic was a significant variable, as the study suggests.

In future research, we recommend supporting these results with quantitative and mix method approach studies. Based on the present data, a silence scale specifically developed for cabin crew members would be useful for future studies. In terms of practical implications, aviation companies should consider these reasons and take culture-specific measures. Especially "punishment fear" and "status differences might be at the forefront for high-power distance societies like Turkey, although participants indicated that these issues were more problematic in past times. In future research, it is also suggested that researchers should include different cultural groups (e.g., low power distance) in their samples because aviation companies are multinational in nature. These culture-specific reasons would also provide a facilitating effect on taking precautions. In training, case studies should be used to strengthen communication among the members of the flight crew. Further emphasis on confidentiality-based reporting processes would also be helpful. Managerial policies and implementations increasing trust among company members are also important, as researchers (e.g., Nikalou et al., 2011)

support that trust between individuals strengthens communication and information sharing.

References

- Baker, S. E., Edwards, R., & Doidge, M. (2012). *How many qualitative interviews is enough?: Expert voices and early career reflections on sampling and cases in qualitative research*. Discussion Paper. National Centre for Research Methods, Southampton.
- Barber, J. P., & Walczak, K. K. (2009, April 13-17). *Conscience and critic: Peer debriefing strategies in grounded theory research* [Paper presentation]. Annual Meeting of the American Educational Research Association, San Diego, CA.
- Başkale, H. (2016). Nitel araştırmalarda geçerlik, güvenirlik ve örneklem büyüklüğünün belirlenmesi. *Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi*, 9(1), 23-28.
- Bienefeld, N., & Grote, G. (2012). Silence that may kill: When aircrew members don't speak up and why. *Aviation Psychology and Applied Human Factors*, 2(1), 1–10. <https://doi.org/10.1027/2192-0923/a000021>
- Bourgeon, L., Valot, C., & Navarro, C. (2013). Communication and flexibility in aircrews facing unexpected and risky situations. *The International Journal of Aviation Psychology*, 23(4), 289-305. <https://doi.org/10.1080/10508414.2013.833744>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (1st ed., pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Brazel, J. F., Jackson, S. B., Schaefer, T. J., & Stewart, B. W. (2016). The outcome effect and professional skepticism. *The Accounting Review*, 91(6), 1577-1599. <https://doi.org/10.2308/accr-51448>
- Brennan, R. L., & Prediger, D. J. (1981). Coefficient kappa: Some uses, misuses, and alternatives. *Educational And Psychological Measurement*, 41(3), 687-699. <https://doi.org/10.1177/001316448104100307>
- Castro, M., Carvalhais, J., & Teles, J. (2015). Irregular working hours and fatigue of cabin crew. *Work*, 51(3), 505-511. <https://doi.org/10.3233/WOR-141877>
- Chute, R. D. (1994). *Issues in cockpit/cabin communication and coordination* (Unpublished doctoral dissertation). San Jose State University.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37–46. <https://doi.org/10.1177/001316446002000104>
- Cornell National Social Survey. (2009, September 25). *2009 Cornell national social survey questionnaire*. <https://sri.cornell.edu/sri/polls/files/cnss/>

- 2009/ CNSS% 202009% 20-% 20questionnaire% 20-% 2020090925% 20-% 20FINAL% 20(clean).pdf
- Dedahanov, A. T., & Rhee, J. (2015). Examining the relationships among trust, silence and organizational commitment. *Management Decision*, 53(8), 1843–1857. <https://doi.org/10.1108/MD-02-2015-0041>
- Directorate General of Civil Aviation. (2022, December 17). *Reporting*. <https://web.shgm.gov.tr/tr/raporlama/2248-raporlama>
- dos Santos, I. C., Vieira, A. M., & de Morais, P. R. (2014). Poor communication skills means high risk for aviation safety. *Gestão & Regionalidade*, 30(88). <https://doi.org/10.13037/gr.vol30n88.2541>
- Dyne, L. V., Ang, S., & Botero, I. C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, 40(6), 1359-1392. <https://doi.org/10.1111/1467-6486.00384>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Fard, P. G., & Karimi, F. (2015). The relationship between organizational trust and organizational silence with job satisfaction and organizational commitment of the employees of university. *International Education Studies*, 8(11), 219-227. <https://doi.org/10.5539/ies.v8n11p219>
- Federal Aviation Administration. (2021). *Aviation voluntary reporting programs* (PDF file). <https://www.faa.gov/newsroom/aviation-voluntary-reporting-programs-1>
- Ford, J., Henderson, R., & O'Hare, D. (2013). Barriers to intra-aircraft communication and safety: The perspective of the flight attendants. *The International Journal of Aviation Psychology*, 23(4), 368-387. <https://doi.org/10.1080/10508414.2013.834167>
- Foushee, H. C. (1984). Dyads and triads at 35,000 feet: Factors affecting group process and aircrew performance. *American Psychologist*, 39(8), 885–893.
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408. <https://doi.org/10.46743/2160-3715/2015.2281>
- Gladwell, M. (2008). *Outliers: The story of success*. Little, Brown and Co.
- Hudson, P. (1999). The human factor in system reliability: Is human performance predictable? Safety Culture—Theory and Practice. In *RTO HFM Workshop, Itália*.
- Jausan, M., Silva, J., & Sabatini, R. (2017). A holistic approach to evaluating the effect of safety barriers on the performance of safety reporting systems in aviation organisations. *Journal of Air Transport Management*, 63, 95-107. <https://doi.org/10.1016/j.jairtraman.2017.06.004>.

- Kabasakal, H., & Bodur, M. (1998). *Leadership, values and institutions: The case of Turkey*. Research paper, Bogazici University, Istanbul, Turkey.
- Katerinakis, T. (2014). *Aviate, navigate, communicate: Silence, voice and situation awareness in aviation safety* (Unpublished doctoral dissertation). Drexel University.
- Kerstholt, J. H., & Jackson, J. L. (1998). Judicial decision making: Order of evidence presentation and availability of background information. *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, 12(5), 445-454.
[https://doi.org/10.1002/\(SICI\)1099-0720\(199810\)12:5<445::AID-ACP518>3.0.CO;2-8](https://doi.org/10.1002/(SICI)1099-0720(199810)12:5<445::AID-ACP518>3.0.CO;2-8)
- Koudenburg N., Postmes T., & Gordijn E.H. (2013) Conversational flow promotes solidarity. *PLoS ONE* 8(11), 1-6.
<https://doi:10.1371/journal.pone.0078363>
- Krivosos, P. D. (2007, June 9-10). *Communication in aviation safety: Lessons learned and lessons required* [Paper presentation]. Regional Seminar of the Australia and New Zealand Societies of Air Safety Investigators, Australia.
- McElhatton, J., & Drew, C. (1993). Hurry-up'syndrome identified as a causal factor in aviation safety incidents. *Human Factors Aviation Medicine*, 40(5), 1-6.
- Milliken, F. J., Morrison, E. W., & Hewlin, P. F. (2003). An exploratory study of employee silence: Issues that employees don't communicate upward and why. *Journal of Management Studies*, 40(6), 1453–1476.
<https://doi.org/10.1111/1467-6486.00387>
- Morrison, E. W., & Milliken, F. J. (2000). Organizational silence: A barrier to change and development in a pluralistic world. *The Academy of Management Review*, 25(4), 706–725. <https://doi.org/10.2307/259200>
- Moshansky V.P. (1992). *Commission of inquiry into the Air Ontario crash at Dryden, Ontario. Final report*. (Report No. CP 32-55/1-1992). Ottawa: Minister of Supply and Services Canada. https://publications.gc.ca/collections/collection_2014/bcp-pco/CP32-55-1-1992-1-eng.pdf
- Nahari, G., & Ben-Shakhar, G. (2013). Primacy effect in credibility judgements: The vulnerability of verbal cues to biased interpretations. *Applied Cognitive Psychology*, 27(2), 247–255. <https://doi.org/10.1002/acp.2901>
- National Aeronautics and Space Administration. (2020). *The international confidential aviation safety systems group* (PDF file). <https://asrs.arc.nasa.gov/international/overview.html>
- National Safety Board. (1984). *Air Canada Flight 797 aircraft accident report* (PDF file). <https://libraryonline.erau.edu/online-full-text/ntsb/aircraft-accident-reports/AAR84-09.pdf>

- Nikolaou, I., Vakola, M., & Bourantas, D. (2011). The role of silence on employees' attitudes “the day after” a merger. *Personnel Review*, 40(6), 723-741. <https://doi.org/10.1108/00483481111169652>
- O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and practical guidelines. *International Journal of Qualitative Methods*, 19, 1-13. <https://doi.org/10.1177/1609406919899220>
- O'Reilly, M., & Parker, N. (2013). ‘Unsatisfactory Saturation’: A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13(2), 190-197. <http://dx.doi.org/10.1177/1468794112446106>
- Öztürk, U. C., & Cevher, E. (2016). Sessizlikteki mobbing: mobbing ve örgütsel sessizlik arasındaki ilişki. *Sosyal ve Ekonomik Araştırmalar Dergisi*, 18(30), 71.
- Pereira, J. S. (2020). *The impact of national culture in cognitive biases and its relationship with workplace teams' formation* (Unpublished doctoral dissertation). Universidade Católica Portuguesa.
- Pinder, G. G. & Harlos, H. P. (2001) Employee silence quiescence and acquiescence as responses to perceived injustice. *Resources in Personnel and Human Resource Management*, 20, 331-369. [https://doi.org/10.1016/S0742-7301\(01\)20007-3](https://doi.org/10.1016/S0742-7301(01)20007-3)
- Reason, J. (1997). *Managing the risks of organizational accidents*. UK: Ashgate.
- Rosen, S., & Tesser, A. (1970). On reluctance to communicate undesirable information: The MUM effect. *Sociometry*, 33(3), 253–263. <https://doi.org/10.2307/2786156>
- Rousseau, D. M. (1990). Normative beliefs in fund-raising organizations: Linking culture to organizational performance and individual responses. *Group & Organization Studies*, 15(4), 448–460. <https://doi.org/10.1177/105960119001500408>
- Schaefer, T. J. (2013). *The effects of social costs and internal quality reviews on auditor consultation strategies* (Unpublished dissertation). University of South Carolina.
- Schwappach, D., & Richard, A. (2018). Speak up-related climate and its association with healthcare workers' speaking up and withholding voice behaviours: a cross-sectional survey in Switzerland. *BMJ Quality & Safety*, 27(10), 827-835. <http://dx.doi.org/10.1136/bmjqs-2017-007388>
- Sıgırcı, Ü. (2018). *Nitel Araştırma Yöntemleri*. Ankara: Beta Press.
- Skogstad, A., Dyregrov, A., & Hellesøy, O. H. (1995). Cockpit-cabin crew interaction: Satisfaction with communication and information exchange. *Aviation, Space, and Environmental Medicine*, 66(9), 841–848.

- Tangirala, S., & Ramanujam, R. (2008). Employee silence on critical work issues: The cross level effects of procedural justice climate. *Personnel Psychology, 61*, 37-68. doi:10.1111/j.1744-6570.2008.00105.x
- Tsaur, S. H., Hsu, F. S., & Kung, L. H. (2020). Hassles of cabin crew: An exploratory study. *Journal of Air Transport Management, 85*(2020), 1-11. <https://doi.org/10.1016/j.jairtraman.2020.101812>
- Tversky, A., & Kahneman, D. (1986). Judgment under uncertainty: Heuristics and biases. In H. R. Arkes & K. R. Hammond (Eds.), *Judgment and decision making: An interdisciplinary reader* (1.st ed., pp. 38–55). Cambridge University Press. 10.1126/science.185.4157.1124.
- Venter, E. (2017). Bridging the communication gap between Generation Y and the Baby Boomer generation. *International Journal of Adolescence and Youth, 22*(4), 497-507. <https://doi.org/10.1080/02673843.2016.1267022>