

Exploring the enablers and barriers for women pilots in Australian commercial aviation

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Abstract

Purpose – This article explores the enabling and constraining factors affecting women pilots and cadets in Australian commercial aviation. Despite women’s long involvement in aviation, gendered stereotypes persist in a traditionally male-dominated career setting, thereby impacting and impeding women’s entry to and retention in commercial pilot roles.

Design/methodology/approach – This study adopts a qualitative, social constructivist approach that draws on Acker’s (1990) feminist theory of gendered organisations to help make sense of these pilots’ experiences. Purposive sampling was utilised to identify 15 Australian women pilots at various stages of their careers. In-depth, semi-structured interviews were conducted with a priority on voicing women’s voices and perspectives and thematic coding was undertaken to elicit core themes.

Findings – Qualitative analysis identified two theme clusters: the gendered barriers in aviation that constrained the pilots in their careers and the enabling negotiation strategies used to navigate those careers. Our analysis demonstrates the effects of gender dynamics in male-dominated organisational settings. The findings demonstrate that the organisational structures and practices in commercial aviation still inherently favour masculine norms.

Originality/value – “Airline pilot” has been described as one of the most strongly gender-stereotyped jobs (Miller and Budd, 1999; Gorlin and Bridges, 2021), yet there have been few qualitative studies exploring the lived experiences of women in these roles. The findings highlight the need for greater career guidance and tailored initiatives to cater for women’s specific workplace and career needs and support the call for more visible role models. This study sheds further light on the impacts of such gendered stereotypes and barriers, together with enabling influences that assist with recruiting and retaining.

Keywords Women, Pilots, Commercial aviation, Flight training, Australia, Gendered organisation theory

Paper type Research article

Introduction

Existing stereotypes about pilots, combined with the role’s traditionally gendered nature (Yanikoğlu *et al.*, 2020), continue to present difficulties with recruiting and retaining women as pilots in commercial aviation (Marintseva *et al.*, 2022). Indeed, the *International Society of Women Airline Pilots* (2023) reports that women currently comprise just over 5% of commercial pilots worldwide. Despite decades of effort to redress gender gaps, being a commercial aircraft pilot is regarded as a “non-traditional” role for women in what is still a male-dominated industry (Germain *et al.*, 2012; Gorlin and Bridges, 2021).

In response to this imbalance, this study explored the experiences of women pilots in Australia’s commercial aviation sector who are either currently employed or undergoing

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training. This research draws on feminist theories of gender in organisations (primarily the work of [Acker, 1990](#)), which argue that organisational structures and practices inherently favour masculine norms. While over three decades old, we argue that Acker's work – and the work of others who have built upon and extended the theory – is still highly relevant in helping to explain how long-standing institutional practices reinforce gendered, masculine assumptions about women's roles ([Clark-Saboda and Lemke, 2023](#)). At the heart of [Acker's \(1990\)](#) theory is that organisations are not gender-neutral; in fact, she argues that, “on the contrary, assumptions about gender underlie the documents and contracts used to construct organizations and to provide the commonsense ground for theorizing about them” (p. 139).

Working from this gendered theoretical standpoint, this present study contributes to a growing body of literature focussing on how organisational practices in aviation and other male-dominated industries create systemic barriers, such as through exclusion from networks, differential performance evaluation, gender pay gaps and differences in work–life flexibility ([Martin and Barnard, 2013](#); [Cha, 2013](#)). Studies in industries such as transport and mobility ([Nienaber et al., 2023](#)), engineering ([Watts, 2009](#)), information technology ([Michie and Nelson, 2006](#)), entrepreneurship ([Naguib, 2024](#)), school superintendency ([Clark-Saboda and Lemke, 2023](#)) and aviation ([Casebolt, 2023](#); [McCarthy et al., 2015](#)) highlight the gendered impacts and constraints for women navigating traditionally male-defined careers. Visibility is also needed in formal institutional policy and processes. As [Martin and Barnard \(2013, p. 3\)](#) argue, “[t]he persisting lack of visible and tangible strategies to empower women in organisations, may well be because of male-dominated and gender-biased management strategies”.

In the aviation context more specifically, [Rodoplu Şahin et al. \(2024\)](#) and [Dinçer and Yirmibeşoğlu \(2024\)](#) show the benefits and opportunities that emerge when policies are deliberately women-centred and mindful of the other responsibilities and lives that women must balance. While making a strong contribution to the literature, these studies primarily examined experienced pilots, leaving early career experiences underexplored.

Drawing on [Acker's \(1990\)](#) theory of the gendered organisation, and in response to shortfalls in the literature outlined above, this study pursues three interconnected aims:

- (1) Analyse how gendered organisational structures and practices shape women pilots' opportunities and experiences.
- (2) Investigate how women pilots construct and negotiate their professional identities within a masculinised industry.
- (3) Identify the enabling and structural barrier factors for women pilots in the aviation sector.

Such an investigation has the potential to assist in further unearthing and addressing the root causes of the ongoing underrepresentation of women pilots in commercial aviation. This is especially the case in the Australian context, where more pilots are needed to fill expected skills shortages. Before the COVID-19 pandemic, women were seen as an underutilised resource to address the looming pilot shortage ([Turney and Maxtant, 2016](#)). Now, with air travel recovery, [Boeing \(2024\)](#) projects a need for 674,000 pilots globally from 2024 to 2043. A diverse, gender-inclusive and contemporary aviation industry is clearly required for women to participate to their fullest capacity.

Literature review

Women's participation in aviation has been recorded since the invention of flying machines ([Neal-Smith, 2014](#)). Despite there being a long-held stereotype of women having supposedly “inferior” piloting skills, women were active in aviation during the Second World War. As [Miller and Budd \(1999\)](#) emphasises in the context of this war, while women made significant contributions, they were still largely seen as supporting the frontline men. [Puckett and Hynes](#)

(2011) found that there are insignificant differences in flying ability between men and women, while Carretta's (1997, p. 6) study confirmed that, "despite sex differences in mean test performance", the actual "acquisition of additional flying knowledge and flying skills showed similar results". That said, the characterisation of men as having "the right stuff" has reportedly led to an ongoing preference for male pilots (Mitchell *et al.*, 2005).

Despite these gendered obstacles, many women have entered commercial aviation as pilots, either to earn an income or to pursue a personal passion (Women in Aviation/Aerospace Australia, 2022). This entry pattern has emerged in other nontraditional, male-dominated fields, particularly in high-reliability organisations (HROs) operating in high-risk environments that strive for error-free performance, such as aviation and transport (Christianson *et al.*, 2011; Martin and Barnard, 2013; Nienaber *et al.*, 2023). Yet women continue to be overrepresented in service-related positions, such as flight attendants, which highlights the aviation sector's longstanding gender segregation (ICAO, 2023). Indeed, "airline pilot" has been described as one of the most gender-stereotyped jobs (Miller and Budd, 1999), a contention recently reinforced in Gorlin and Bridges' (2021) review on aviation culture.

Owing to the underrepresentation of women pilots, those already in the industry have reportedly experienced sexist jokes, unpleasant comments and aggressive behaviour from male colleagues (Davey and Davidson, 2000; Mitchell *et al.*, 2005). Passengers can also be unenthusiastic about women on the flight deck. In a 2012 passenger survey, 51% of respondents stated that they would prefer a male pilot, while 32% held that men would be "more skilled" as pilots (Anderson, 2013). Similarly, Kohn-Stuart (2000) reported that flight instructors *expected* women to be less competent than men.

In recent years, research on women pilots has expanded somewhat, which has contributed to further understanding of their lived experiences in aviation. Neal-Smith and Cockburn (2009), for example, identified three dimensions of cultural sexism in UK airlines: informal exclusion from decision-making, differential performance standards and resistance to women's leadership. Along similar lines, Walton and Politano (2014) argued that the perpetuation of tightly held cultural expectations about job characteristics has also likely contributed significantly to the exclusion of women. McCarthy *et al.* (2015) found that masculine cockpit culture and inflexible work patterns created barriers for women pilots in the UK, with masculine norms becoming encoded in operating procedures and communication patterns, while Casebolt (2023) revealed how systemic biases in recruitment and training processes limit gender diversity and perpetuate structural barriers. Such issues were pointed out some three decades ago by Hansen and Oster (1997, p. 4), who observed that "pilots and senior managers" continued to be "predominantly white and male". In the recent Australian context, Mills *et al.* (2024) analysed how historical gendering has led to ongoing discrimination and the underrepresentation of women.

While a lack of career planning models affects all pilots, the effects on women are disproportionate, with women's careers often being interrupted by maternity leave and family responsibilities – a pattern seen in other industries with male-defined roles (Cha, 2013; Cha and Grady, 2024). The "Age-60" rule in the United States, which requires commercial pilots to retire at the age of 60, and the mandatory retirement age of 65 for commercial pilots in Australia, pose unique challenges for women entering the profession late or taking extended career breaks, leaving them with less time to accumulate flight hours and thus seniority before retirement. These interruptions can significantly impact pension benefits and leadership opportunities (Maxwell *et al.*, 2018).

Despite these barriers, enablers also exist. Rodoplu Şahin *et al.* (2024) demonstrated regional carriers' capacity for providing more flexible career pathways that suit women's gendered needs. This is particularly important because Anderson and Pucel (2003) identified key motivational differences between men and women entering aviation, with women placing higher value on work–life balance – and the social expectations or pressures that often

necessitate this “balance”. Similarly, [Dinçer and Yirmibeşoğlu \(2024\)](#) revealed the critical role of mentorship networks for promoting career longevity for women.

Yet a significant research gap remains in understanding how organisational structures in Australian commercial aviation specifically affect women’s experiences and career trajectories. There is also a methodological gap in advancing our qualitative and gendered understanding of women pilots’ lives and perspectives, particularly in male-defined career settings ([Charmaz, 2011](#); [Martin and Barnard, 2013](#)). This is particularly important given recent evidence that commercial pilot roles remain fundamentally designed around masculine career patterns and expectations ([Women in Aviation/Aerospace Australia, 2022](#)).

Theoretical and empirical approach

Given the need outlined above to prioritise our understanding of women’s lived experiences and the enabling and constraining factors they face in male-dominated careers, this study draws largely on [Acker’s \(1990\)](#) feminist theory of gendered organisations, which recognises that gender roles are the outcome of interactions between individuals and their respective environments and societies. In essence, Acker refers to gendered organisations as the “advantage and disadvantage, exploitation and control, action and emotion, meaning and identity of men and women” within organisational settings (p. 146). The gendered organisation makes visible five separate, but interrelated, processes in the workplace (p. 146), including (1) the gendered division of labour and the behaviours that define how women should behave and act; (2) the organisational construction of symbols and images that “explain, express, reinforce, or sometimes oppose those divisions”; (3) workplace interactions between men and women and also between men and men, and women and women that include “all those patterns that enact dominance and submission”; (4) the way in which such organisational processes construct and impact upon individual identities, rules and conduct and (5) organisational logic, whereby “gender is implicated in the fundamental, ongoing processes of creating and conceptualizing social structure”. Together, all of these societal, organisational and individual processes – in effect, day in, day out – work to form, perpetuate and reinforce the gendered organisation.

These interactions provide people with cues about the sorts of behaviour that are appropriate for their gender ([Acker, 1990](#)). Such a framework allows us to move beyond mere reference to biological sex; rather, it recognises that interactions between individuals and how they experience, negotiate and interpret life and identity are inherently gendered. Though developed in 1990, Acker’s theoretical model remains highly relevant today and provides a strong foundation for analysing gender dynamics within contemporary organisations and career settings of all types and sectors ([Bates, 2022](#); [Clark-Saboda and Lemke, 2023](#)).

Aligned with this gendered framework, this research takes a purposefully exploratory, qualitative and descriptive methodology, guided by the tenets of social constructivism ([Acker, 1990](#); [Charmaz, 2011](#)). Qualitative research purposefully allows for a comprehensive understanding of individuals and allows participants to express their own lived experiences, which are then interpreted through the identification of common themes and patterns emerging from transcript analysis ([Creswell and Creswell, 2017](#)). As social constructivism relies on knowledge gathered from interaction with others in society, conducting in-depth interviews for this study facilitated interactions with the participants to garner extensive details about their experiences.

The primary empirical contribution involved semi-structured in-depth interviews, conducted during August–September 2020, a period impacted by COVID-19. Owing to mobility restrictions, interviews were held via Zoom and Skype and participants consented to being recorded via smartphone. Written qualitative questionnaires (with the same interview guide) were also used to gather information from the two participants who were unable to be interviewed. Potential participants were contacted through a combination of both “snowball” and “purposive” techniques ([Strauss and Corbin, 2015](#)), with an emphasis on securing

participants with experience as pilots in commercial aviation or those in training. To locate qualified interviewees, attending events for women pilots and word of mouth proved effective. Participants were requested to sign a consent form before the interview. Within the initial sample of 13, redundancy of analytical insight, that is, saturation, was achieved, with no new information being generated by the final interview. To confirm, two additional respondents were sought, although this did not result in new insights. In short, a combination of pragmatics and data saturation (Vasileiou *et al.*, 2018) signalled a data collection endpoint.

Interviews, which were conducted by the lead author, a female researcher interested in the sector, were conducted in an informal conversational setting that prioritised women's comfort and encouraged the building of rapport through dialogue. A semi-structured interview approach allowed participants to verbally express their lived experiences in their own way and in their own voices (Chenail *et al.*, 2011). Broad areas of questioning focused on the women's life histories and background; childhood role models; education choices; and activities they enjoyed. In addition, they were asked about their experiences, their career goals, and any barriers and opportunities in relation to their work in aviation. This was motivated by Whittock's (2000, p. 5) observation that, to "understand the reasons so few girls and women continue to select non-traditional careers", it is necessary to "uncover factors which persuaded those who are involved to select [such] a career". All the women were living in Australia at the time of data collection and chose an alias to maintain anonymity (see Table 1).

Table 1. List of research participants

#	Name	Where raised	Position	Data collection method
1	Molly	Australia	Captain and cadet mentor	Interview and voice recording
2	Kylie	Australia	Cadet	Interview and voice recording
3	Ella	Australia	Experienced pilot	Interview and voice recording
4	Diane	Australia and the Netherlands	Experienced pilot and industry expert	Questionnaire
5	Jess	Australia (regional)	Experienced recreational pilot and instructor	Interview and voice recording
6	Mia	Australia (regional)	Cadet (recreational)	Interview and voice recording
7	Sophia	South Africa and Australia	Experienced pilot	Interview and voice recording
8	Rosa	The Philippines	Experienced pilot	Interview and voice recording
9	Eliza	Australia	Experienced pilot	Interview and voice recording
10	Linda	Australia	Industry expert	Interview and voice recording
11	Scarlet	New Zealand	Cadet	Questionnaire
12	Kate	Australia	Captain and flight instructor	Interview and voice recording
13	Fiona		Ex captain and flight instructor	Interview and voice recording
14	Mary	Australia	Retired pilot and currently flight instructor	Interview and voice recording
15	Tia	Australia	Second officer	Interview and voice recording

Source(s): Authors' own work

Interviews generally lasted between 30 and 45 min and were transcribed manually, thereby allowing the transcriber to become highly familiar with the data. Transcripts were de-identified, original recordings were deleted and a tracking system was used to link transcripts to interviewees. Transcripts were sent to each interviewee for validation (Koelsch, 2013). Through thematic analysis (Braun *et al.*, 2017), each interview was analysed and the women's stories coded line by line. From this, emerging themes were created, reviewed and defined – while stepping back into the transcripts occurred regularly to allow the researchers to re-ground with the interviews. The final thematic clusters that form the basis of the findings are outlined below.

Findings

Analysis of the 15 in-depth interviews revealed two theme clusters. A theme cluster emerged around the gendered barriers in aviation that the women faced in traversing their flying careers, while a second cluster emerged around the enabling negotiation strategies employed by the women to navigate their careers and other life responsibilities in a fulfilling way also emerged.

Theme cluster #1: gendered barriers in aviation

- (1) The “woman pilot” role stereotype.
- (2) Organisational challenges in a male-defined industry.

This thematic cluster reflects the interviewees' depictions of a persistent role stereotype around being a “*woman pilot*”, as they navigated both their careers and others' perceptions of their role in aviation. At the same time, participants spoke about organisational challenges in a male-defined industry through their work in aviation settings.

The “woman pilot” role stereotype

On the face of it, many of the women we spoke to saw themselves first and foremost “just as pilots”, thereby indicating a gender-neutral organisational position. For example, Jess observed that the club where she learned to fly was just a “bunch of guys”, where she was “treated as one of the guys, and it really shouldn't matter whether one is male or female”. Similarly, Kylie, a cadet, thought that being a woman pilot implied nothing different from being a male pilot. She noted that “we get to do exactly the same roles as the males; we get trained exactly the same way”, seeing that gender is “insignificant” in the workplace.

In the same way, Sophia defined herself as “a pilot”, instead of a “female pilot”. She remarked that “you don't fly a plane with your dick! It's just a plane . . . I fly it like anyone else”. Other women also spoke about being a women pilot as “nothing special”. Jess, a recreational pilot, went on to say that flying seems to have become mystified, possibly because of cost. From her perspective, being a pilot was just one part of her life. Some experienced pilots expressed a particular dislike for the term “female pilot” or “woman pilot”. For example, Tia observed that “I really look forward to the day when people like yourself don't ring me up and say, ‘what does it mean to be a female pilot?’”. She felt frustrated that gender still needed to be a “topic”.

That said, many of the women acknowledged their identity as women working in a male-dominated industry. With so few women pilots, being in a minority group was also linked to loneliness, a view shared by Kylie, who mentioned that she often experiences a sense of isolation within her predominantly male training group. Mary, a retired captain and, currently, a flight instructor, initially stated that being a “woman” pilot is unimportant. At the same time, she reflected on incidences in the 1980s where “being a female” was a disadvantage. Mary revealed that “. . . I started as a front desk because people saw women as most suited to be the ‘meet and greet’ face”. She recalled an ex-RAAF [1] serviceman who “didn't really believe that women had a place in aviation except on the front desk, but he didn't stop me”. Gendered

stereotypes about “women” pilots could also be seen through the women’s experiences of others’ perceptions. When the women told others that they were a pilot, they were often met with negative reactions from family, friends, colleagues and the public. For example, Sophia and Ella both discussed being confused for flight attendants, which revealed deeply rooted gender stereotypes.

Mary shared instances of gender-based comments from the public, including passengers commenting “Oh my God! It’s a woman pilot!” She also recalled an incident where a passenger voiced concerns about whether she could fly if “on her period”. Assumptions about age and wealth were also recorded: “Oh! You are a woman, you must be getting older”; or “you must have started out when things were a bit tough”. Other just assume that “you are a pilot, and you are very wealthy”. Gendered comments were also experienced by the younger participants. For example, Kylie, a cadet, recalled being told by male colleagues to “calm down” despite feeling calm: “there were certain times when I was in a simulator with another female cadet and a male instructor will always tell [women] to calm down”.

Organisational challenges in a male-defined industry

Several women shared stories showing how gendered and organisational expectations have impacted their career progression. Molly remarked that, “for women making a career in aviation, [motherhood] . . . is especially challenging”. She then spoke of the need for stay-home fathers: “. . . I know we have had female pilots whose partners have stayed at home and looked after the children”. Molly also stated “. . . honestly, I am so lucky that my husband . . . isn’t in aviation at all”. Mia likewise stated that she has “a very supportive husband”. Not all women had this kind of support. Indeed, only these two women spoke of having a partner helping with the children and caring responsibilities. Mary reflected on moving into a management role and recalled “. . . a point where the pressure from him [her husband] and the way I was being rostered, I was never home. I could see that my marriage was starting to fall apart”. For her and other women, Mary felt that regional airlines offered a better work–life balance, which highlighted the challenges of a career with international airlines, where “leaving your baby for . . . 11 days, 20 days” would be required.

Fiona underscored the need for organisational practices and policies that supported women, which she welcomes in the regional airline that employed her: “I can only work on these days and kind of fit in the day-care; I’m lucky that [my employer] is that flexible”. Similarly, Sophia mentioned that the same regional airline has a high number of women pilots, with an all-female crew being “not unusual”. This theme of women having to “juggle” a career and motherhood or be a primary carer surfaced several times, as shown in Molly’s story:

One is just juggling the challenges of different rosters from one month to the next, different start times and finish times . . . sometimes it’s a one-day trip, sometimes it’s a 4-day trip, so it’s very hard to get child-care when you have no normal schedule.

Some participants reported a slowly growing degree of inclusiveness by using words like “accepting” and “accommodating”. Some women conveyed feeling “welcomed” by their male colleagues, although they reported that some older male pilots remained uncomfortable, but perhaps not for the reasons that might readily be imagined. Fiona noted that “I think some of the older ‘gents’ struggle a little bit, not necessarily being sexist . . . being *scared* of being sexist”. Such men will then overcompensate for fear of being labelled as sexist. Kate, however, mentioned that it remains possible to overhear comments such as “. . . someone has taken someone’s job and they only got it because they are the token female”. Mary, now retired, recalled one man’s remarks on her attire earlier in her career: “I would walk into a meeting, and he would comment on what I was wearing . . . At the time, I used to laugh it off”. She thought about reporting the issue, but “I . . . decided ultimately that, for my career, it would be the wrong move”. That younger participants did not mention such extreme encounters could suggest that such behaviours are no longer as commonplace.

Theme cluster #2: enabling negotiation strategies

- (1) Forging nontraditional pathways.
- (2) Achieving freedom and fulfilment through flying.

A second theme cluster emerged around how these pilots found ways to negotiate their personal, societal and organisational barriers and challenges through strategies centred on motivation, resilience and empowerment. The women we spoke to forged nontraditional pathways to retain a strong sense of self-efficacy and succeed in the aviation industry. Further, the women achieved freedom and fulfilment through flying, finding satisfaction, pride and enriching work as commercial pilots.

Forging nontraditional pathways

Entering a nontraditional job pathway required a particular set of circumstances, with the older interviewees in particular reporting gendered obstacles before embarking on a piloting career. Most interviewees shared “childhood epiphanies” and “motivations” for becoming pilots. These moments were often triggered by tangible exposure to aviation, such as “watching an aircraft take off”, or experiencing “joy rides”. Kylie traced her interest back to a flight with a female pilot: “I went on a flight to Uluru, and there was a female pilot and that was the first time I had seen it [i.e. a woman pilot] and decided I will fly for a living”. Molly, Ella and Mia had the opportunity to visit flight decks and had travelled extensively when they were younger, all of which solidified their passion. Another important catalyst was the influence of family members, and especially fathers, who often played a significant role in influencing career choices. In a similar vein, Tia recalled that she took her first trial instructional flight with her father alongside her. She tagged along with her father and enjoyed the whole experience: “. . . he didn’t end up learning to fly, but I did”.

Others mentioned a maternal influence. For example, Linda recalled a moment when her mother, whom she described as being a “migrant ... [and] very supportive [who] enabled me to do what I love”. At 13 years old, on a flight, she shared her aviation dream with her mother: “. . . I think I’ve found what I want to do, I wanna be a cabin crew [member]”. Her mother, who was an “avowed feminist”, turned to her and said that “. . . my only daughter will be the pilot, if anything”. This started her thinking outside the gendered career box.

Yet Mary, a retired captain, mentioned that she had no specific women mentors. Instead, the trigger moment was watching Deborah Lawrie on television, who won a groundbreaking sex discrimination case against the now-defunct Ansett Airlines: “I came from a family where we were told as women that we could do anything we wanted to do; . . . so the daily conversations about Deb Lawrie were heated as my parents couldn’t believe that she was having to go through what she went through”. This suggests that girls need to see someone like them to become inspired to undertake a nontraditional role.

A generational gap among the interviewees was quite evident. The “limited guidance” offered to the older participants highlighted the challenges once faced by women. Molly observed that “there was no aviation degree for pilots back then; the only thing available was to do a degree in aeronautical engineering”:

There really was not any aviation degree that was suitable. I enquired with the air force, but they did not take female pilots . . . The only other way to become a pilot back then (as I finished school back in 1987), was to learn to fly privately, get a private license, then a commercial license.

This experience was also shared by Diane, an experienced pilot who joined the industry when some airlines did not allow women to fly. She noted that “. . . challenges were there in the early days from older men due to lack of understanding or belief that women could perform in the role”. Mary recalled that, when she started flight training in 1989, “there was probably around a hundred working pilots and two of them were women, one was me eventually”. Molly, now a captain, recalled writing to different airlines to enquire about the requirements. Tia, however,

was fortunate to be already working in an organisation that trained pilots: “I was just lucky to fall into a training organisation that was really good to me”.

Limited and sometimes biased guidance from school advisors also motivated some of the older participants to undertake their own “research”. Two of the more seasoned pilots discussed how they were initially directed to other careers. Ella shared that “. . . I went to an all-girls high school, and we were encouraged . . . to become doctors or lawyers”. Mary stated that her guidance teacher recommended nursing: “I wanted to be a pilot, and she looked at me and she looked at my results, which were pretty pitiful, and said that ‘nursing might be nice’”. Likewise, Fiona reported that “. . . even the guidance counsellors . . . just said ‘oh, you are not gonna be a pilot’”. While it appears that these women had the resolve to push ahead, despite the lack of encouragement, the younger participants also failed to report any great institutional support for undertaking a piloting career.

Achieving freedom and fulfilment through flying

Despite the gendered barriers reported, a predominant theme in the data was the sense of self-efficacy and personal fulfilment, such as from cadets Scarlet and Mia. Flying was their ideal job, and they used words like “love”, “proud” and “lucky” to underscore this. Among those who expressed their love for flying, Mary articulated her passion in the following way:

There is no feeling that’s comparable. Sitting on the runway with a 20-tonne aircraft, with 50 people’s lives in your hands, you have got 5,000 horsepower coming out of the engines, it feels so good. It’s just the feeling of freedom and space and possibility.

Eliza’s response to what she enjoyed most was that: “I just like aircraft in general and aviation. I always wanted to fly”. Ella mentioned that the best part of her cadetship is the very act of flying. The women often spoke of feeling “empowered”, with Mia expressing that she gets a feeling of being in a powerful position when people ask “what do you love doing?” and is able to respond: “flying”.

Many women described the feeling of freedom in flying, together with meeting people and exploring new landscapes. Both Eliza and Cathy compared an office-style job with flying, which caused Eliza to note that “. . . it’s not a sitting in an office-style job, it’s being in a dynamic work environment”. Cathy mentioned that “. . . It’s always been about the passion for flying”, while Rosa said that, “When you become a pilot, you get to travel around the world and you are actually enriching yourself”. Being a pilot can thus provide an aesthetic appeal that complements the act of flying. Cathy stated that, each day, she gets “. . . to work with a great bunch of people”.

For some, their sense of personal fulfilment is about mentorship and advocacy. Diane inspires other women and young girls “to do something that they may not think is possible”. Molly, a captain and cadetship mentor, focuses on reaching out to junior colleagues: “Being a cadet-mentor is certainly rewarding, though it’s a fairly small part of my job overall”. In contrast, Mary mentioned that she educates both men and women: “you are just equal colleagues, both of you operating an airplane, you need to work together”. She reflects that, towards the end of her career, she asked herself, “What can I add to the young women coming below me?” As a result, she decided to be a flight instructor, allowing her to nurture the next generation.

Despite the participants pointing to the need for women within the industry to become firm advocates and role models for younger women thinking about entering this career path, or even those beginning their career journey, there were some reports of a reluctance to do so for fear of not “fitting in”. Sophia expressed her disappointment regarding the lack of support from other women and noted that “I have been told by people before not to push that agenda too hard because it does pigeonhole you”. Regardless, Sophia stressed the importance of women supporting other women in male-dominated workplaces.

Discussion

Despite some shift away from gender-role stereotypes, the findings reveal that aviation remains a gendered organisational sector where traditional perceptions about women's ability as pilots persist. On the one hand, the women we interviewed did speak of fewer instances of having to "prove" themselves and reflected on a sense of inner pride regarding what they had achieved as women in aviation. On the other hand, there was a simultaneous sense of resistance to being defined, through many different gendered processes and practices, as a "woman pilot" and of having to negotiate barriers continually. This has been noted in other studies of women in male-dominated organisations. For example, [Martin and Barnard's \(2013, p. 1\)](#) research on women in South African organisations underscores our findings, in that "[w]omen in male-dominated occupations face unique challenges and use distinct coping strategies affecting their motivation and retention in these occupations".

The ongoing paucity of women pilots remains a gendered issue. Perhaps, however, this is a function of a continuing lack of overall visibility and insufficient encouragement to consider – and stay in – a piloting career. When these women pilots were provided the organisational support structures to "balance" their personal lives with the demands of being a pilot, they felt empowered and able to achieve a long and successful career in aviation. Our participants' narratives, ranging from those of experienced captains to trainees, offer valuable empirical evidence on how women's experiences are shaped in male-dominated fields, with this insight likely extending to other high-reliability professional domains that are predominantly male-centric. The findings revealed complex interplays regarding how gender identity negotiation manifests in technical assessments of competence; how role models influence career trajectories; how external perceptions shape institutional barriers and attitudes; and how personal fulfilment emerges through professional mastery.

Connecting back to [Acker's \(1990\)](#) gender organisational theory, our findings demonstrate the intersection of gender dynamics and professional roles in traditionally male-dominated sectors, such as aviation. For example, established strict safety parameters can both reinforce and challenge gender norms, especially where systemic barriers limit women's ongoing participation and advancement, with women still needing to choose between personal prerogatives and career development needs ([Singh, 2022](#)). These issues, of course, intersect with how regulatory frameworks, which do not sufficiently encompass the work-related issues caused by pregnancy, childbirth or carer's leave, shape career paths for those impacted ([Cha and Grady, 2024](#)).

The successful adaptation of regional airlines to women's gendered career needs demonstrates how organisations can balance operational requirements with gender inclusion. The increase in women pilots in this area of the industry creates a virtuous circle, where dealing with women's gendered needs becomes more the norm rather than the exception. Their approach to managing safety-critical operations while implementing flexible working arrangements offers a practical model for cognate industries. Specifically, their success in reconstructing work patterns without compromising technical and safety standards provides evidence that operational excellence and gender inclusion can coexist in highly regulated work environments ([Dinçer and Yirmibeşoğlu, 2024](#)). The key insight lies in recognising these elements as potential enablers, rather than barriers, to change. Now, we look at how our findings speak to the three most salient elements of Acker's theory of gendered organisations to highlight the study's theoretical contribution.

Gendered organisational structures

Our first research aim related to how gendered organisational structures shape women pilots' opportunities and experiences. Our findings extend [Acker's \(1990\)](#) theory of gendered organisations by demonstrating how aviation's safety-critical nature creates unique insights for gender negotiation that transcend patterns typically observed in other male-dominated professions ([Casebolt, 2023](#)). For instance, Kylie's experience in simulator training and

Sophia's way of managing her identity show how gender dynamics play out in unique ways during technical competency assessments, thus reflecting broader gender dynamics in technically oriented professions.

Further, and as was pointed out by Mary, a retired captain, "sitting on the runway with a 20-tonne aircraft and 50 people's lives in your hands" highlights the significant responsibility that every pilot carries, with this vignette illustrating how the work context shapes professional expectations in aviation. Unlike other professional contexts where competency might be judged through varied metrics, aviation's strict operational requirements create specific moments where gender and technical ability intersect under conditions of heightened scrutiny (Dinçer and Yirmibeşoğlu, 2024). This intersection is particularly evident in simulator assessments, where technical proficiency must be demonstrated within gendered perceptions of performance and emotional control (Seligson, 2024).

Our qualitative analysis has also revealed that gendered organisational structures can work to hinder women's progression in aviation. A one-size-fits-all career path often limits the needs of women pilots and suggests a need for industry-specific career planning and support. As airlines need to create multiple career templates specifically for pilots, especially women, targeted support to overcome regulatory requirements pertaining to safety and fitness to fly is crucial at various stages, particularly for women returning after family breaks (Anderson and Pucel, 2003). Acknowledging the need for flexible career paths is essential to overcome the "built by men for men" approach that has hitherto influenced piloting careers.

Individual professional identity

Our second research aim related to how women pilots construct and negotiate their professional identities within aviation, being a traditionally masculinised environment. The interview analysis shows a complex development of pilot identity over time, thereby offering new insights into professional identity theory (Seligson, 2024). The generational contrast between Mary's historical experience of explicit discrimination and the younger pilots' more integrated professional identities suggests significant shifts in how gender and professional identity have intersected over time.

This evolution, however, occurs within persistent structural constraints, which are particularly evident with respect to how regulatory requirements around medical certification and flight hours create distinctive patterns of career interruption that affect women disproportionately (Dinçer and Yirmibeşoğlu, 2024). For example, Molly and Cathy's maternity experiences demonstrate how aviation's rigid regulatory framework interacts with traditional organisational practices to create challenges for identity maintenance during significant career transitions. Thus, the data pose the question of how a woman can identify as a pilot and as an expectant or recent mother. These findings extend identity work theory by revealing how professional identity construction operates within highly regulated environments where technical competency and safety requirements cannot easily be separated from gender dynamics (Anderson and Pucel, 2003), a situation which requires creative solutions to these issues.

Institutional evolution: from barriers to best practices

Our third research aim sought to identify institutional barriers and enabling factors through a gender-aware theoretical lens, thereby revealing perhaps our most significant contribution. The analysis of the practices of regional airlines demonstrates that highly regulated organisations can successfully reconstruct traditional masculine structures, all the while maintaining operational integrity. In this regard, Mary and Fiona's experiences challenge prevailing theoretical assumptions about the stability of gendered practices in male-dominated organisations.

Particularly noteworthy is how regional airlines have leveraged safety and regulatory requirements to facilitate rather than impede structural change. This suggests that male-dominated

organisations might possess unique capabilities for greater gender inclusiveness precisely because of their operational requirements (Seligson, 2024). The successful implementation of flexible scheduling without compromising safety demonstrates how rigid operational frameworks can paradoxically enable innovation with respect to gender practices, thus setting a precedent for other industries looking to balance operational integrity with progressive gender inclusion policies.

Conclusion

Through the lens of Acker's (1990) theory, we have looked at how organisational structures are indeed gendered. In the context of this study of women pilots, the aviation industry continues to privilege masculine career patterns, particularly around scheduling and career advancement during the life phases of maternity and childcare. Our findings, however, extend this theory by revealing how some airlines in Australia, particularly regional ones, have successfully reconstructed piloting careers for women by striving to accommodate gendered needs. Here, the greater workforce participation of women in this industry sub-sector prompts a re-evaluation of traditional gendered norms relating to the profession.

Our analysis of women pilots' experiences contributes to identity work theory by showing how newer generations of pilots are crafting more integrated professional identities, thereby challenging traditional assumptions about identity sacrifice in male-dominated fields, with the women in question drawing inspirations from role models – and aspiring to be role models. Indeed, the data suggest that younger women, such as aviation cadets, perhaps no longer face the explicit impact of gendered obstacles to the degree that others once faced, despite evidence of a gendered workspace remaining. These women stated that they were comfortable with the identity of being both women and (trainee) pilots and observed that there was no need to resist this dual and intersecting set of identities.

This generational shift suggests that, as organisational structures foster more diverse career pathways, the perceived conflict between professional and gender identities may diminish. Our observations stress the importance of gender equality policies and support for women returning to work after maternity or carer's leave. Organisations offering tailored initiatives, emotional support and mentorship can help to meet women's needs and improve retention rates, as was suggested by the younger women, including cadets, involved in this study. By using insights from gender dynamics, these efforts can improve visibility and create better re-entry options after extended leave periods, thereby allowing more women to gain seniority – an outcome which will likely have positive knock-on effects on future career paths for women.

The study underscores the limited exposure of girls and young women to a piloting career, which emphasises the need for more widespread advice regarding this vocational path (Marintseva *et al.*, 2022). Together with nontraditional strategies to target girls, outreach to women lacking the resources to become a pilot emerges as highly necessary. Paramount is the need for early education providers, schools, universities, flight training academies and airlines to work together to promote nontraditional occupations until the notion of a "woman pilot" becomes unremarkable.

In sum, the ongoing low representation of women pilots perpetuates a cycle of exclusion. That few enter the role – and remain – creates a vicious and gendered cycle. This study adds an additional nuance to earlier observations regarding the lack of visible role models: to ensure that a greater proportion of commercial pilots in the future are women, the sector needs to attract and retain higher numbers of women pilots by focussing on establishing career paths designed to accommodate women's gendered needs and providing the support and mentorship required for their ongoing success.

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Note

1. Royal Australian Air Force.

References

- Acker, J. (1990), "Hierarchies, jobs, bodies: a theory of gendered organizations", *Gender and Society*, Vol. 4 No. 2, pp. 139-158, doi: [10.1177/089124390004002002](https://doi.org/10.1177/089124390004002002).
- Anderson, S. (2013), "Who do you trust more, male or female pilots?", available at: <http://www.sunshine.co.uk/news/who-do-you-trust-more,-male-or-female-pilots-105.html>
- Anderson, S.L. and Pucel, D.J. (2003), "An investigation into factors influencing men and women in becoming professional pilots", *Journal of Aviation/Aerospace Education and Research*, Vol. 12 No. 3, pp. 31-42, doi: [10.15394/jaaer.2003.1569](https://doi.org/10.15394/jaaer.2003.1569).
- Bates, T. (2022), "Rethinking how we work with Acker's theory of gendered organizations: an abductive approach for feminist empirical research", *Gender, Work and Organization*, Vol. 29 No. 4, pp. 1041-1064, doi: [10.1111/gwao.12795](https://doi.org/10.1111/gwao.12795).
- Boeing (2024), "Pilot and technician outlook 2024-2043: overview", available at: <https://www.boeing.com>
- Braun, V., Clarke, V. and Gray, D. (2017), *Collecting Qualitative Data: A Practical Guide to Textual, Media and Virtual Techniques*, Cambridge University Press, Cambridge.
- Carretta, T.R. (1997), "Sex differences on US AF pilot selection tests", Armstrong Laboratory Human Resources Directorate, Brooks AFB, TX, available at: <https://apps.dtic.mil/sti/citations/ADA430291>
- Casebolt, K. (2023), "Systemic biases in aviation recruitment and training processes", *The International Journal of Aviation Psychology*, Vol. 33 No. 2, pp. 110-125, doi: [10.1080/10508414.2023.1935021](https://doi.org/10.1080/10508414.2023.1935021).
- Cha, Y. (2013), "Overwork and the persistence of gender segregation in occupations", *Gender and Society*, Vol. 27 No. 2, pp. 158-184, doi: [10.1177/0891243212470510](https://doi.org/10.1177/0891243212470510).
- Cha, Y. and Grady, R.K. (2024), "Overwork and the use of paid leave and flexible work policies in U.S. workplaces", *Social Science Research*, Vol. 121, 103006, doi: [10.1016/j.ssresearch.2024.103006](https://doi.org/10.1016/j.ssresearch.2024.103006).
- Charmaz, K. (2011), "A constructivist grounded theory analysis of losing and regaining a valued self", in Wertz, F.J., Charmaz, K., McMullen, L.M., Josselson, R., Anderson, R. and McSpadden, E. (Eds), *Five Ways of Doing Qualitative Analysis*, Guilford Press, New York, pp. 165-204.
- Chenail, R.J., Duffy, M., St George, S. and Wulff, D. (2011), "Facilitating coherence across qualitative research papers", *Qualitative Report*, Vol. 16 No. 1, pp. 263-275, doi: [10.46743/2160-3715/2011.1052](https://doi.org/10.46743/2160-3715/2011.1052).
- Christianson, M.K., Sutcliffe, K.M., Miller, M.A. and Iwashyna, T.J. (2011), "Becoming a high reliability organization", *Critical Care*, Vol. 15 No. 6, p. 314, doi: [10.1186/cc10360](https://doi.org/10.1186/cc10360).
- Clark-Saboda, J.L. and Lemke, M. (2023), "Revisiting Acker's gendered organizational theory: what women overcome to stay in the superintendency", *Frontiers in Education*, Vol. 8, pp. 1-14, doi: [10.3389/feduc.2023.1160225](https://doi.org/10.3389/feduc.2023.1160225).
- Creswell, J.W. and Creswell, J.D. (2017), *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, Sage, Thousand Oaks, CA.
- Davey, C.L. and Davidson, M.J. (2000), "The right of passage? The experiences of female pilots in commercial aviation", *Feminism and Psychology*, Vol. 10 No. 2, pp. 195-225, doi: [10.1177/0959353500010002002](https://doi.org/10.1177/0959353500010002002)
- Dinçer, F.C.Y. and Yirmibeşoğlu, G. (2024), "Constraints on women pilots in airline industry: a rising sector of international trade", *Journal of Air Transport Management*, Vol. 115, 102538, doi: [10.1016/j.jairtraman.2024.102538](https://doi.org/10.1016/j.jairtraman.2024.102538).
- Germain, M.-L., Herzog, M.J.R. and Hamilton, P.R. (2012), "Women employed in male- dominated industries: lessons learned from female aircraft pilots, pilots-in-training and mixed-gender flight

- instructors”, *Human Resource Development International*, Vol. 15 No. 4, pp. 435-453, doi: [10.1080/13678868.2012.707082](https://doi.org/10.1080/13678868.2012.707082)
- Gorlin, I. and Bridges, D. (2021), “Aviation culture: a ‘glass sky’ for women pilots – literature review”, *International Journal of Aviation, Aeronautics, and Aerospace*, Vol. 8 No. 3, e13, doi: [10.15394/ijaaa.2021.1587](https://doi.org/10.15394/ijaaa.2021.1587)
- Hansen, J.S. and Oster Jr, C.V. (1997), *Taking Flight: Education and Training for Aviation Careers*, National Academies Press, Washington, DC.
- International Civil Aviation Organization (ICAO) (2023), “ICAO releases survey data on status of global aviation gender equality”, available at: <https://www.icao.int/Newsroom/Pages/ICAO-releases-survey-data-on-status-of-global-aviation-gender-equality.aspx>
- International Society of Women Airline Pilots (2023), “Media”, available at: <https://isa21.org/media/>
- Koelsch, L.E. (2013), “Reconceptualizing the member check interview”, *International Journal of Qualitative Methods*, Vol. 12 No. 1, pp. 168-179, doi: [10.1177/160940691301200112](https://doi.org/10.1177/160940691301200112)
- Kohn-Stuart, R. (2000), “Gender differences in the cockpit”, *2000 Asia-Pacific Women in Aviation Conference*, Canberra, Australia.
- Marintseva, K., Mahanecs, A., Pandey, M. and Wilson, N. (2022), “Factors influencing low representation in pilot training recruitment”, *Transport Policy*, Vol. 115, pp. 141-151, doi: [10.1016/j.tranpol.2021.11.010](https://doi.org/10.1016/j.tranpol.2021.11.010)
- Martin, P. and Barnard, A. (2013), “The experience of women in male-dominated occupations: a constructivist grounded theory inquiry”, *South African Journal of Industrial Psychology*, Vol. 39 No. 2, pp. 1-12, doi: [10.4102/sajip.v39i2.1099](https://doi.org/10.4102/sajip.v39i2.1099), available at: <https://hdl.handle.net/10520/EJC137802>
- Maxwell, S., Connolly, L. and Laoire, C.N. (2018), “Informality, emotion, and gendered career paths: the hidden toll of maternity leave in academia”, *Gender, Work and Organization*, Vol. 25 No. 5, pp. 497-514, doi: [10.1111/gwao.12306](https://doi.org/10.1111/gwao.12306).
- McCarthy, F., Budd, L. and Ison, S. (2015), “Gender on the flightdeck: experiences of women commercial airline pilots in the UK”, *Journal of Air Transport Management*, Vol. 47, pp. 32-38, doi: [10.1016/j.jairtraman.2015.05.005](https://doi.org/10.1016/j.jairtraman.2015.05.005)
- Michie, S. and Nelson, D.L. (2006), “Barriers women face in information technology careers: self-efficacy, passion and gender biases”, *Women in Management Review*, Vol. 21 No. 1, pp. 10-27, doi: [10.1108/09649420610643385](https://doi.org/10.1108/09649420610643385).
- Miller, L. and Budd, J. (1999), “The development of occupational sex-role stereotypes, occupational preferences and academic subject preferences in children at ages 8, 12 and 16”, *Educational Psychology*, Vol. 19 No. 1, pp. 17-35, doi: [10.1080/0144341980190102](https://doi.org/10.1080/0144341980190102)
- Mills, A.J., Neal-Smith, J. and Bridges, D. (2024), “A boy’s own tale’: using intersectional frameworks to chart the reproduction of historical discrimination in aviation”, in Bridges, D., Lewis, C., Wulff, E., Litchfield, C. and Bamberry, L. (Eds), *Gender, Feminist and Queer Studies*, Routledge, London, pp. 65-77.
- Mitchell, J., Kristovics, A., Vermeulen, L., Wilson, J. and Martinussen, M. (2005), “How pink is the sky? A cross-national study of the gendered occupation of pilot”, *Employment Relations Record*, Vol. 5 No. 2, pp. 43-60, available at: <https://researchdirect.westernsydney.edu.au/islandora/object/uws:1392>
- Naguib, R. (2024), “Motivations and barriers to female entrepreneurship: insights from Morocco”, *Journal of African Business*, Vol. 25 No. 1, pp. 9-36, doi: [10.1080/15228916.2022.2053400](https://doi.org/10.1080/15228916.2022.2053400).
- Neal-Smith, J. (2014), “Flying through barriers: identifying issues for female airline pilots”, in Bridges, D., Neal-Smith, J. and Mills, A. (Eds), *Absent Aviators, Gender Issues in Aviation*, Ashgate, Aldershot, pp. 187-210.
- Neal-Smith, S. and Cockburn, T. (2009), “Cultural sexism in the UK airline industry”, *Gender in Management*, Vol. 24 No. 1, pp. 32-45, doi: [10.1108/17542410910930734](https://doi.org/10.1108/17542410910930734).

- Nienaber, A., Woodcock, A., Escórcio Soares, A., Searle, R. and Tietmeyer, J. (2023), "The role of women as change agents in a male-dominated context: empirical findings from the transport and mobility industry", *Work*, Vol. 76 No. 2, pp. 853-865, doi: [10.3233/WOR-210996](https://doi.org/10.3233/WOR-210996).
- Puckett, M. and Hynes, G.E. (2011), "Feminine leadership in commercial aviation: success stories of women pilots and captains", *Academic and Business Research Institute International Conference*, Nashville, TN, available at: <http://www.aabri.com/NC2011Manuscripts/NC11009.pdf>
- Rodoplu Şahin, D., Kemik, S. and Aslan, M. (2024), "A study of aviatrixes holding leadership roles in the historical phases of aeronautics", *Women's Studies*, Vol. 53 No. 7, pp. 1-26, doi: [10.1080/00497878.2024.2400930](https://doi.org/10.1080/00497878.2024.2400930).
- Seligson, D. (2024), "Women and aviation: quality jobs, attraction and retention (No. 117)", ILO Working Paper 117, doi: [10.54394/GYUN3488](https://doi.org/10.54394/GYUN3488).
- Singh, P. (2022), "Barriers to career growth: women workplace issues in Indian Civil airline industry", (Doctoral dissertation, College of Management and Economic Studies, UPES, Dehradun)
- Strauss, A. and Corbin, J. (2015), *Basics of Qualitative Research*, 4th ed., Sage, Thousand Oaks, CA.
- Turney, M.A. and Maxtant, R. (2016), "Tapping diverse talent: a must for the next century", in Turney, M.A. (Ed.), *Tapping Diverse Talent in Aviation: Culture, Gender, Diversity*. Routledge, Abingdon and New York, Chapter 1.
- Vasileiou, K., Barnett, J., Thorpe, S. and Young, T. (2018), "Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period", *BMC Medical Research Methodology*, Vol. 18 No. 1, e148, doi: [10.1186/s12874-018-0594-7](https://doi.org/10.1186/s12874-018-0594-7).
- Walton, R.O. and Politano, P.M. (2014), "Gender-related perceptions and stress, anxiety, and depression on the flight deck", *Aviation Psychology and Applied Human Factors*, Vol. 4 No. 2, pp. 67-73, doi: [10.1027/2192](https://doi.org/10.1027/2192)
- Watts, J.H. (2009), "Allowed into a man's world' meanings of work-life balance: perspectives of women civil engineers as 'minority' workers in construction", *Gender, Work and Organization*, Vol. 16 No. 1, pp. 37-57, doi: [10.1111/j.1468-0432.2007.00352.x](https://doi.org/10.1111/j.1468-0432.2007.00352.x).
- Whittock, M. (2000), *Feminising the Masculine? Women in Non-traditional Employment*, Ashgate, Aldershot.
- Women in Aviation/Aerospace Australia (2022), *Barriers to the Pipeline: Interim Report*, Women in Aviation/Aerospace Australia, Melbourne.
- Yanıkoglu, Ö., Kılıç, S. and Küçükönel, H. (2020), "Gender in the cockpit: challenges faced by female airline pilots", *Journal of Air Transport Management*, Vol. 86, e101823, doi: [10.1016/j.jairtraman.2020.101823](https://doi.org/10.1016/j.jairtraman.2020.101823)

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