

Gender on the flightdeck: Experiences of female commercial airline pilots in the UK

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ABSTRACT

The reasons for, and the implications arising from, the underrepresentation of women on the flightdeck of commercial aircraft continues to challenge national Governments, the aviation industry, and the academic community. Although some airlines have made concerted efforts to improve the gender balance of their flightcrew, female participation in the profession remains low. Of the 130,000 airline pilots worldwide only 4,000 (3%) are female and only 450 hold the command of Captain. The dominant historical discourse of airline pilots as assertive masculine figures may act to dissuade women from pursuing a career on the flightdeck and female pilots are often subject to sexist remarks and behaviour from colleagues and passengers. Given commercial aviation's increasing growth worldwide and the concurrent increase in demand for highly skilled labour, the inability to recruit and retain female pilots represents a significant problem for both the sector and the wider economy as it will constrain growth, hinder aviation's expansion by failing to capitalise on female skill sets, and delay the achievement of gender equality. Understanding the experiences of flightcrew is therefore vital in addressing this important research problem. Through the use of in-depth interviews with male and female flightcrew in the UK, this paper seeks to set the agenda in terms of future research. It identifies a number of obstacles to greater female participation and recommends that airlines not only focus on gender differences in learning, leadership and communication but that they also take steps to more effectively manage diversity in their workforce and actively promote positive representations of female flightcrew both within and beyond their organisation.

1 INTRODUCTION

2 Although women have been flying since the beginning of the twentieth century (1, 2) and
3 flying commercially for over four decades, they continue to be underrepresented on the
4 flightdeck of commercial aircraft (3). Of the 130,000 airline pilots worldwide only 4,000 (3%)
5 are female and of the 3,000 who hold the command of Captain, only 450 are women (4, 5).
6 Undoubtedly there are many reasons for this imbalance, including public perceptions of what
7 constitutes typically 'female' or 'male' professions and the perceived or actual (in)flexibility
8 of the job.

9 Recent research by British Airways (6) on the career aspirations of 650 school
10 children aged 6 to 12, for example, discovered that while becoming a pilot was the second
11 most popular career aspiration for boys it was not considered by girls who opted instead for
12 more traditional 'female' careers in healthcare, popular culture and education. As Ashcraft (7)
13 has shown, the conscious historical construction of commercial and military pilots in popular
14 and institutional discourses as skilful, brave, professional and, above all, masculine, has
15 resulted in a profound gender imbalance among flightcrew as many women do not consider a
16 career in the flightdeck. Those that do enter the profession and qualify as pilots often
17 encounter sexist attitudes, remarks and behaviour from their (overwhelmingly male)
18 instructors, peers and eventual colleagues (8, 9).

19 Nor are such opinions confined to the flightdeck. In a passenger survey conducted in
20 2012, 51% of respondents reported that they were less likely to trust a female pilot than a
21 male one and 32% believed male pilots would be 'more skilled' than females (10) despite
22 research showing no significant difference in the accident rates of male and female flightcrew
23 (11, 12). Given pervasive historical, cultural and popular perceptions of piloting as 'male'
24 work and the evident gender imbalance in the flightcrew population this paper seeks to set the
25 agenda reporting on the findings of a series of in-depth interviews with airline pilots of both
26 genders in the UK. Identifying a start point for future research, it identifies some of the
27 barriers which may prevent women from entering the profession, examines current
28 experiences of female flightcrew (and their male colleagues' perceptions of them), and makes
29 recommendations as to how best to support flightcrew of both genders to ensure airlines
30 continue to attract and retain highly talented employees and effectively manage diversity in
31 the workplace

32 LITERATURE REVIEW

34 Although continuing to make progress entering male-dominated industries still raises
35 persistent gender issues for women during the attraction, selection and retention phases. For
36 example, within Engineering, only 6% of the UK workforce is female
37 (<http://www.wes.org.uk/statistics>), likewise, the UK Parliament consists of just 147 female
38 MPs out of a total 650 members. ([http://www.ukpolitical.info/female-members-of-](http://www.ukpolitical.info/female-members-of-parliament.htm)
39 [parliament.htm](http://www.ukpolitical.info/female-members-of-parliament.htm)). Furthermore, in Medicine, studies have found that career success for female
40 academics lags behind that of males and in the UK, women account for just 22% of the
41 logistics workforce (<http://www.womeninlogistics.org.uk/aboutus.html>). Similar to the
42 aviation industry, all these sectors offer careers suitable for both men and women, however
43 there is an evident gender imbalance throughout industries.

44 Focusing on the airline industry, despite women performing a number of highly visible roles,
45 most notably as cabin crew, the proportion of qualified female aerospace engineers, air traffic
46 controllers and pilots remains low. According to UK Civil Aviation Authority (CAA) figures
47 (13), 450 women held an ATPL (Airline Transport Pilot Licence) in the UK in 2013
48 compared to 10,478 men. At British Airways (BA), the country's largest full service carrier,
49 the proportion is slightly higher. 5.7% of BA pilots are female and, like many other airlines,
50 the company is keen to encourage applications from suitably qualified women (6). However,

as numerous studies have shown, historical gender biases in degree subjects studied at university combined with biased recruitment policies, inflexible employment terms and negative perceptions of women in traditionally 'male' professions including areas of medicine, engineering, law and academia have resulted in a gender hierarchy within these professions in which women are underrepresented at almost all levels, most notably in the most senior positions (14, 15, 16).

Women who wish to enter traditionally male dominated careers face the challenge of confronting gender, educational and occupational stereotypes concerning their physical, cognitive and psychological abilities and suitability to undertake such roles (17). As a consequence, Turney (18) suggested that the perceived difficulties associated with entering a 'macho' male dominated industry prevented some women from believing they could become flightcrew. Indeed, a study of female airline pilots in the USA found that 80% said that it was difficult to enter the profession owing to male resistance and being obliged to work with men who resented them entering 'their' profession (19). As Deborah Douglas (20 p256) pertinently noted in her study of American women aviators, although 'the airplane may not be able to distinguish the sex of a pilot (or engineer, air traffic controller, flight attendant, or assembler)... but human beings can and do' and it is this issue which has resulted in the current gender imbalance in the flightdeck population.

Women who do train to become pilots often find themselves discriminated against on grounds of their gender (18). Mitchell et al's (9) study in Australia, for example, discovered that while trainee female pilots scored significantly higher than males on performance measures during initial training, both male and female recruits held negative perceptions of female pilots' proficiency and safety orientation. These negative perceptions were also evident in a South African study (21) which found significant differences between male and female flight instructors' perceptions of female flying proficiency. Such findings aligned with previous studies which found that female pilots had to work harder to prove themselves and that they often felt severely pressured to maintain a consistently (and perhaps unrealistically) high level of performance (8, 18).

Davey and Davidson (8) also compared the experiences of female pilots who began working for a European airline over a decade ago with the experiences of female pilots recruited to the same airline more recently. The study found that the first women to fly for the carrier believed the male pilots found it difficult to adapt to women on the flightdeck as they found it difficult to communicate effectively or instigate appropriate topics of conversation. The female pilots also claimed that some male colleagues were aggressive and intimidating while some acted in ways that would constitute sexual harassment. Significantly, the female pilots who had joined the airline more recently reported far fewer occurrences of such behaviour and thought that cultural shifts in the perception of female pilots and women in the workplace more generally were partly responsible for this.

The nature of the profession demands that pilots (particularly long haul crew) spend time away from home and, in the past, overseas trips have involved (male) flightcrew behaving in ways that they would not at home (8). On such trips, drinking, socialising and 'pilot talk' were commonplace. These traits became synonymous with a notion of what constituted a 'typical pilot' who was, of course, male (22). In order to fit in to this male environment and be accepted, some female pilots found that they had to be accepting of sexist remarks, be able to brush off lewd jokes and be willing to laugh at demeaning female stereotypes (8). Women also face a further, unique set of issues concerning pregnancy, maternity leave, and flexible phased returns to work which not only fit around childcare and domestic commitments but enable sufficient flying hours to be retained for them to remain qualified.

Given these diverse complex challenges and the continuing underrepresentation of women on the flightdeck, it is imperative that academics and airlines fully understand the reasons why more women don't pursue a pilot career. There is also an urgent need for empirically informed academic research which will enable airlines to adopt measures that better support the recruitment, retention, and positive employment experiences of all pilots, irrespective of their gender.

METHOD

In order to further academic comprehension of this compelling research issue, 10 in-depth interviews were conducted with commercial flightcrew based in the UK. While this is a small sample size it does afford real insight into the issues currently facing the sector. The respondents (6 male and 4 female) were recruited through a snowball sample and face-to-face interviews were conducted during the winter of 2013/14. In order to preserve anonymity, respondents are identified by the letters A to F (for the male pilots) and 1 to 4 (for the female pilots) in subsequent sections of this paper (see Table 1). The semi-structured interview schedule, which was piloted with two flightcrew to ensure the appropriateness of the questions, began by asking for each respondent's age, current rank, flying experience and the type of aircraft they fly. This was followed by four questions relating to their experiences of entering the profession and experiences of initial training. Six questions concerning barriers they have encountered since qualifying as a commercial pilot followed. The male pilots were then asked about their experiences of flying with female colleagues and the female colleagues for their experiences of flying with male pilots. Each interview lasted between 30-60 minutes and ethical approval for the work was granted by our institution's ethics committee.

TABLE 1: List of respondents

Respondent	Rank
A	Captain
B	Line Captain
C	Captain
D	Captain
E	First Officer
F	Captain
1	First Officer
2	First Officer
3	First Officer
4	First Officer

FINDINGS

The 6 male interviewees had an average age of over 50 and included 1 Line Captain, 4 Captains and 1 First Officer. All fly narrow-bodied, twin engine jets, had been flying commercially between 2 and 25 years and had experience ranging from 400 to 7,000 hours on type. The four female respondents are all First Officers in their early 30s. They also fly narrow-bodied, twin engine jets and have been flying commercially from 1 year and 9 months to 6 years. Their experience ranged from 500 to 5,000 hours.

Male Responses

All the male respondents agreed that piloting is male dominated. Respondent B stated that “statistically, there are more males flying” and opined that the reasons for this are the military background of aviation and because young boys are often more exposed to flying than girls. When asked why so few women might consider a career as a pilot all six male respondents mentioned the role of women within the home and suggested that the pilot lifestyle does not readily lend itself to raising a family. Interestingly, two respondents suggested that the lack of female pilots and mentors means it might be harder for women to progress.

All the male respondents said that they find it difficult to balance their career with their family and made reference to a strong support network at home that enables them to fly abroad and work anti-social hours. Respondent A remarked that “my roster dominates my lifestyle” and “it is very hard with irregular times”. Being away from home for extended and/or irregular periods of time was challenging. Four of the six stated they have to “compromise” their career and their family and articulated frustration at often feeling they were doing neither very effectively. Reflecting on their time in initial training, three of the male respondents reported a difference in the ways in which male and female recruits approached new tasks. Respondent E suggested that “I think females were possibly even harder working than males” while respondent B remembered “maybe some of the physical aspects were more demanding and required more strength” which some of the women, owing to their physiology, found more difficult.

In terms of their current experiences of flying, all of the male respondents have experience of flying with a female pilot but only two have flown with a female of a higher rank. All stated that they enjoy the experience. According to respondent D it is “a different type of flight, I enjoy it!” while respondent B stated that “it is becoming more pleasant in the industry and it is nice to have different conversations [with female pilots]”. Three respondents stated that the atmosphere on the flightdeck is more relaxed and less competitive when flying with women. “There isn’t any of the ‘mine is bigger than yours’ type of atmosphere” and there “is no issue of gender competitiveness” (Respondents B and E). All six mentioned that the conversations they had with female colleagues were “different” or “more interesting”. However, they were also quick to state that while the in-flight conversation topics might differ the “job does not alter” and “the flying is the same” (Respondent C). When asked about the extent to which they believed female pilots might adopt a different behaviour or persona on the flight deck, two of the respondents suggested that women may try to appear “harder” and “sterner” in order to be taken seriously as well as occasionally adopting a more “macho” approach.

Five of the male respondents believed female pilots have to work harder within the industry to be accepted and they might feel more pressure in this regard; “it is very sad, but they do, they are perceived differently and they feel like they have to prove themselves” (Respondent A) and “yes-without a doubt!” (Respondent F) but “females are equally as good” (Respondent E). Respondent F went as far as to suggest that “females are more thorough at times”, opining that this might be because they want “to prove they are as good as males”. Respondent C stated that “they believe they have to work harder to be accepted” and “it is very sad”, however Respondent F argued that “males maybe have to prove themselves even more than females” owing to the masculine discourse of piloting.

Five of the six male respondents had experienced a male colleague making a derogatory gender-related remark to a female pilot but all were quick to emphasise that these comments were “jokes”, or “only have been a bit of light hearted banter” which was not to be taken seriously (Respondents C and D). One respondent suggested that older pilots, who are closer to retirement, were more likely to “make stupid comments, such as: women should not be pilots as they belong in the kitchen” than younger ones but these attitudes were declining.

Respondent E stated that “in the UK we have brilliant laws and regulations in place to reduce this as much as possible” and they felt these kind of comments would become increasingly rare as the older generation of (often ex-military) pilots retired. Respondent C, however, suggested that sometimes derogatory comments could be used as a way to diffuse tension on the flightdeck “it is sometimes joked when a female pilot makes a stupid mistake that she should be at home looking after the kids or washing up”.

In addition to sexist comments made by colleagues, three respondents had experienced passengers making negative remarks about female pilots. These comments, while unwelcome and unwarranted in their view, were usually made by “old fashioned types of passengers who usually feel blokes are better as pilots and girls as stewardesses” (Respondent C).

In order to promote females in aviation, the overriding view was that current female pilots should attend career events to publicise females in the role as well as “reducing the cost of training and improving the pay and conditions” of all employees (Respondent A). In addition, there was a consensus that more females should enter the profession and gender misconceptions be more effectively challenged at school and university so “women should not feel as though they cannot perform the male tasks” (Respondent A).

Female Responses

All four of the female respondents considered piloting to be a male-dominated field. Their rationale for this varied from the “historical divide” of the profession to the “stress and challenging nature of the work” (Respondent 1). Respondent 3 explained, “the work can be stressful and challenging and comes with a level of competitiveness that makes it appear masculine”. When entering the profession, none of the women encountered barriers relating to their gender; the obstacles were purely financial “as companies expected you to fund your own type rating” (Respondent 2).

All four respondents believed the lack of women on the flightdeck was an inevitable, if regrettable consequence of young women not being introduced to the possibility of the career at school. Respondent 2 identified a lack of exposure to the profession “rather than not thinking it was possible because I am female” while respondent 1 suggested “it isn’t pressed at school from an early age”. Respondent 3 reflected on the stereotypes and misconceptions of the job which conspired to “make it appeal more to males”.

Reflecting on their training, three respondents agreed that their male colleagues were more confident and determined to prove themselves. One suggested that women took criticism from their trainers to heart more than the men which is why they strove to be successful at everything all of the time and placed very high expectations on themselves. Respondent 2 also believed that “all the women worked extremely hard to try and achieve the very best”. Interestingly, they did not consider that they had had to work harder than men to prove themselves, and stated that any pressure they felt was self-imposed in a desire to succeed. Respondent 2 said that “a lot of people, for example trainers, often remark that women are better pilots in some cases as they are more attentive, organised, better communicators and good multi-taskers”.

Owing to their age none of the women had started families but they all agreed that the situation with regards to future motherhood “could get tricky” and “may be an issue in the future” (Respondents 2 and 3). However, Respondent 1 was more optimistic, believing the job “can be flexible, so it [pregnancy and parenting] can be worked around.”

All four female respondents had flown with another female pilot but said that this was a rare occurrence owing to the relatively low numbers of women pilots. All enjoyed flying with other women and stated that the atmosphere on the flight becomes more ‘feminine’ and the conversation topics differ despite their strict adherence to standard operating procedures.

Two respondents believed that the job does not require them to adopt masculine type behaviours and flying is “the same whatever the gender of the pilot” (Respondent 2). However, Respondent 3 stated that in adding to being “thick skinned” female pilots “need to be assertive and not be afraid to speak out against more dominant personalities”.

Two respondents had not experienced, or could not remember, a male colleague making a gender related remark towards them while the other two dismissed the remarks they had received as “jokes”. Respondent 3 recalled situations in which male pilots adapt their behaviour out of consideration for their female colleagues “if the weathers bad, they [the male pilots] will often offer to do the walk around so as not to ruin our hair”. All four female respondents agreed that gender stereotypes and prejudice still exist within the flightdeck, but suggested this was a historical legacy, the influence of which was rapidly declining over time.

While the situation with colleagues appears to be improving, all four women had experienced gender-related remarks being made by passengers. Some of these were positive with female passengers, in particular (but not exclusively), often congratulating them on their achievement and asking if they could take their photograph to show to their daughters. However, the majority of comments were perceived negatively with gender-related “jokes” such as “can you park this?” or “are you qualified to fly this?” reportedly being common. Interestingly, both the male and female cabin crew they have flown with were very accepting of female pilots with respondent 4 stating that female cabin crew, in particular, “like the fact a female is in the flight deck”.

Recommendations for encouraging more females to enter the profession included having airlines support female pilots in encouraging them to attend schools and events to reach out to girls at a young age as well as having access to a more experienced female mentor to support their career progression. None offered any opinions on pregnancy, maternity leave or supporting female pilots returning to work as this was not something that they had direct experience of. Interestingly, and by way of a final comment, respondent 3 suggested that being female in a male dominated field could actually work in your favour as “a CV [from a women] can stand out because it is a bit different”.

DISCUSSION

Both male and female pilots indicated that cost and the masculine nature of the profession might put off some women from pursuing a career as a pilot. More significantly, the female pilots stated that a lack of awareness of the role of women in aviation at school could be instrumental in limiting the numbers of women who aspired to it as a career. In order to overcome this, both the male and female respondents advocate a far greater emphasis being placed on raising awareness of the opportunities flying affords and on school and university students being given access to relevant and appropriate careers advice. Several respondents suggested that this could take the form of female pilots going into schools and colleges to promote the role of female flightcrew and act as mentors for female students considering a career in the industry, something that they themselves felt was lacking.

During initial training, it was suggested that male recruits may deal with criticism more easily than females. It was felt that some women take criticism to heart and dwell more on their mistakes and shortcomings than their competencies and success which may impact on their confidence and lead to a vicious cycle of self-criticism. In order to counter this, instructors need to be aware of gender differences in learning and be able to adapt their approach to best suit the needs of the individual in recognition that a ‘one size fits all’ approach to training is not necessarily the most effective way to support a diverse intake of new pilots.

Once in the profession, both genders agree that balancing family life with a pilot career is extremely difficult due to the nature of the work and shift patterns. Interestingly,

males believe that they are more suited to the pilot lifestyle due to females having children and conventionally taking on responsibility for the majority of domestic duties. However, the female pilots strongly disagreed that the career is more suited to men. Throughout their careers, a substantial issue for the female pilots is the need to continually prove their competencies and avoid mistakes (which may be casually and unhelpfully attributed to their gender) to be considered a good pilot. Although the women interviewed for this study enjoy the male dominated environment, we (and they) are aware this may not be true for all women.

In terms of the perceptions of female pilots, two key issues emerged: the perceptions of female pilots by their male peers and the perceptions of female pilots by passengers. Half of the male pilots had experienced a male colleague using derogatory language towards a female pilot but they were all keen to emphasise that these were just 'jokes'. This suggests men may find the use of derogatory and discriminatory behaviour acceptable, assuming the women will recognise what they perceive to be the 'light-hearted' nature of the 'banter'.

The research also indicates the extent of passengers' attitudes towards female pilots. Both the male and female respondents agreed that passengers care about the gender of their pilot and many have experienced remarks being made by passengers when they realise one (or sometimes both) of their flightcrew is a women. While some passengers clearly like to see female flightcrew, these positive comments are few and far between and passengers are often surprised when a female voice addresses them from the flightdeck. Negative passenger remarks include a women's apparent inability to park, take control and multitask. Significantly, these preconceptions do not exist for male pilots and none of the interviewees reported passengers making disparaging remarks about male flightcrew.

It would appear from the interviewees that both genders believe women bring different qualities to the flightdeck as they think and act differently to males. Both the male and female respondents noted that pilot gender alters the atmosphere on the flightdeck. Several of the men stated that they prefer flying with females as the environment is more "relaxed". According to male pilots, females may have to adapt their behaviours to fit in, in particular their socialising behaviours which need to be more male-typical and females have to be thick-skinned to take a joke. Nevertheless, it is significant that males do not have to adapt their behaviours, whereas, female pilots recognised that they sometimes have to adopt a sterner attitude to be taken seriously. Despite this, both genders agree that the job does not alter; therefore, it is the individual flying the aircraft, not their gender that matters.

CONCLUSIONS AND RECOMMENDATIONS

Despite the relatively small number of interviewees those interviewed provide a basis for further research into gender issues relating to the attraction, selection and retention of the female flight crew profession. It is evident that female pilots still believe they have to overcome certain barriers and preconceptions in order to be accepted in what remains an overwhelmingly male profession. Although finance is an issue for both pilots, aspiring female pilots have the added issue of trying to become accepted by their male peers. Additionally, women may place themselves under greater pressure to succeed in the (perhaps misguided) belief that they have to continually prove their worth and 'right' to be there and may dwell on criticism they receive from their instructors.

Once qualified, pilots of both genders face compromises between their home and their career as crew rosters, long haul trips, anti-social hours and nights away from home disrupt normal domestic arrangements and require a good support network to maintain 'normal' family life when one or other partner or parent is absent. Interestingly, the male pilots felt that flying was more suited to men because they did not bear children or bare responsibility for the majority of childcare. The female respondents to this survey, while not having direct personal experience of combining a career as a pilot with motherhood, nevertheless

1 recognised that this might be an issue in the future and further research is needed to ascertain
2 what might constitute the most effective and appropriate mechanisms to support new mothers
3 through pregnancy and parenthood. At a broader societal level, there is a need to challenge
4 the dominant cultural discourse that continues to portray piloting as 'men's work'. Although
5 this will take considerable time and concerted effort, it is hoped that reframing the profession
6 as one that is equally suited to, and welcoming of, both male and female pilots will filter
7 down to school age children and not only create a more equal balance of male and female
8 pilots but also work to promote gender equality more broadly and reduce the temptation (and
9 societal acceptance) of the casually sexist remarks from colleagues and passengers that
10 female pilots currently encounter.

11 While it will not be possible to change some of the entrenched negative perceptions
12 and attitudes certain individuals hold towards female pilots, as more women enter the
13 profession, passenger expectations of hearing a male voice from the flightdeck will be
14 reduced and female pilots will become an increasingly familiar and unremarkable sight. As
15 the older generation of male pilots retire and are replaced by younger colleagues, many of the
16 outdated attitudes will hopefully be replaced by a more open and inclusive set of opinions
17 towards the place of both men and women in the workforce.

18 Although gender-related attitudes and experiences within the career are still evident,
19 notable improvements have been brought about through the implementation of gender
20 equality policies and regulations. However, while progress has undoubtedly been made, there
21 is room for continual improvement not least since there are significant barriers for females
22 prior to entering the career and schools, colleges, universities, flight training academies,
23 airlines and society more generally must collectively seek to promote the role of women in
24 aviation. By ensuring that more young women are exposed to the profession and are given
25 appropriate education advice about school subjects and relevant university degree
26 programmes that will enable them to become a pilot if they so wish, as well as adopting
27 mentoring programmes for female recruits and introducing family and female friendly
28 recruitment, retention and career progression and promotion policies will only be to the
29 industry's long term benefit.
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