

The Impact of Work on Pilots' Personal Relationships

A Qualitative Study

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Abstract: This study investigates how pilots perceive the way in which their work and shift patterns may impact upon their personal relationships. It also examines the way in which pilots cope with frequently having to form and then put on hold relationships both at home and at work. Three hundred pilots were surveyed by questionnaire to examine the impact of working in the airline industry on personal relationships. Participants were recruited over a 4-year period between 2012 and 2016 on a university's Master's program in Air Transport Management. The qualitative data were analysed using thematic analysis (TA). The study found that that partner support was key in managing the demands of shift work and that having an understanding partner was the key to the relationship working. This study is representative of a single sample of mostly male pilots flying for more than 2 years. Future research may seek to use a more diverse sample.

Keywords: Pilots, relationships, aircrew

Mental health can be defined as psychological, emotional, and social well-being. It influences how people behave, feel, and think. Importantly, it also impacts on how people manage stress, manage interpersonal relationships, and make decisions (US Department of Health and Human Services, 2017, http://www.mentalhealth.gov). Pilot mental health and well-being is an area of increasing interest and research, particularly since March 2015 when a pilot intentionally flew a passenger aircraft into the ground in a murder/suicide, killing all passengers and crew aboard (Bor, Eriksen, Oakes, & Scragg, 2017). The psychological well-being of pilots became a key concern worldwide among crew, airlines, and regulatory authorities, as it subsequently came to light that the pilot involved was being treated for mental health problems.

Pilots encounter a unique set of conditions in their work life; their shift patterns and working environment are both physically and psychologically demanding. Nergard and Svendsen (2017) highlighted that pilots have to be able to compartmentalize/regulate their emotions owing to the nature of their job and indeed this is something they have been trained to do; for example, in the case of a mechanical issue/failure they would have to be able to manage a difficult situation even though their anxiety levels would have surged. It is imperative that a pilot is able to manage their emotions so that they can operate an aircraft without allowing their minds to wander and threaten the safety of the aircraft. They may have limited control over their work schedule, which often entails frequently changing shift patterns and

irregular schedules, frequent absence from home and social support, which can lead to feelings of loneliness, and travelling across time zones. This can result in considerable dysregulation of the biological rhythm, which can result in sleep problems, as well as disruption to normal patterns of eating and other bodily functions (Bor & Hubbard, 2006). Cumulative sleep deprivation can disrupt the ability to process emotions; lack of sleep can make aircrew become depressed and overly sensitive emotionally (Eriksen, 2009).

Pilots face numerous personal and employment challenges such as a fear of loss of license, having no set office, frequent absences from home, and erratic patterns of day and night flights (Bor et al., 2017). Most airline pilots encounter the pressure of regular flight simulator checks and this can cause high levels of performance anxiety, which may also be amplified by personal stress. They also have regular medical checks and must meet higher standards than those set for many workers in the general population (Bor & Hubbard, 2006). Yet many pilots find their work rewarding and most feel well equipped to manage the challenges of their work (Bor et al., 2017; Eriksen, 2009).

Flight crew have to cope with distinctive challenges with regard to relationships, frequently having to make and break them both at home and when travelling (Eriksen, 2009). They do not have a regular office and are not in proximal contact with their managers on a regular basis. The ever-changing relationships characterized by the making and breaking of emotional intimacy at home and forming work relationships with crew only for a short

period of time can result in feelings of loneliness and isolation. While work relationships may be rewarding, they can sometimes cause difficulties within their families with regard to trust and jealously and work relationships can at times feel superficial and transient (Bor et al., 2017) given the transient nature of crew rosters and scheduling.

Arguably, for less experienced and more emotionally vulnerable aircrew, these pressures can be particularly challenging and relationship difficulties can lead to emotional distress and elevated stress levels (Eriksen, 2009). It has long been recognized that psychological distress and mental health problems can lead to a significant impairment to pilot performance, and therefore flight safety (Bor & Hubbard, 2006). Personal relationship (defined in this study as relationships between people, especially those between friends, partners, and family members) difficulties in the lives of aviation workers can lead to stress (Eriksen, 2009), but conversely, engaged and supportive relationships can be a protective factor against stress for those working in aviation (Rigg & Cosgrove, 1994; Sloan & Cooper, 1986). Consequently, patterns of social and emotional support for aircrew are important to consider both in protecting against psychological distress and ultimately for enhancing flight safety.

When emotional distress is present, aircrew may not always seek appropriate professional help; they may be put off by the thought of regular attendance at a health-care facility and the financial implications of taking time off work. Pilots may fear loss of license and there may also be stigma attached to psychiatric or psychological care (Bor & Hubbard, 2006; Bor et al., 2017). It is therefore even more important for aircrew to have supportive relationships that they can use as a resource in their self-care and to mitigate against stress. Relationships may, however, be a source of stress for some pilots and shift work patterns may challenge intimacy and stability in personal relationships.

The relationship between attachment patterns and psychological well-being has been the subject of much research. Attachment can be defined as an enduring psychological bond with a meaningful person (Bowlby, 1958, 1969). The quality of attachment has a vital effect on development, and has been connected to many aspects of positive functioning, such as the ability to cope with stressful situations. Pistole (2010) stated that, "even in adulthood, the attachment system is influential: people monitor the partner's proximity, thereby preserving the option to obtain caregiving functions if needed" (p. 118). Investing in one's relationships with partners, friends, and family can protect against feelings of stress (Karlins, Koh, & McCully, 1989) and this includes accessing support when needed such as peer or spousal support. It has been found that secure attachment patterns in relationships can enhance wellbeing and that people who have support from their close friends or partner are more likely to be resilient to the detrimental effects of stressful life events (Eriksen, 2009). Pilots may have their attachment patterns interrupted as they are often separated from the people who buffer them from the effects of stress.

These patterns of attachment are not entirely unique to airline workers. A study of families of offshore oil workers in Aberdeen, UK, found that the recurring parting and reunions were linked to depression in the wife (Morrice, Taylor, Clark, & McCann, 1985). However, Taylor, Morrice, Clark, and McCann (1985) did not find a significant difference between the wives of onshore and offshore oil workers. This intermittent period of absence was also investigated by Dimberg et al. (2002), who found that there was a higher rate of psychological treatment sought by the spouses of international business travelers in comparison with the spouses of non-travelling employees in their investigation of mental health insurance claims among spouses of frequent business travelers. For psychological disorders linked to stress, the rate tripled for spouses of frequent travelers as opposed to the employees who did not travel. Diamond, Hicks, and Otter-Henderson (2008) studied 42 couples over a 21-day period that was timed to correspond with a naturally occurring 4-7-day separation. They found significant separation-related and reunion-related changes for both partners. Similarly, Clifford (2009) found that commute arrangements and extended working hours have adverse effects both on employees' work satisfaction and in the long term may be disruptive to the employees' and their partners' lifestyle.

Some pilots have nontraditional family lifestyles that may work well for some families/marriages but not for others. There is a circular relationship between disruptive factors, that is, sacrificing sleep in order to invest in personal relationships or vice versa (Bor & Hubbard, 2006). Both lack of sleep and lack of investment in relationships can cause stress, which in turn can negatively impact on performance, which encompasses decision-making, concentration, and mental acuity and agility, amongst other cognitive functions (Eriksen, 2009).

Studies have highlighted the significance of aircrews' spouses in protecting against stress levels. However, as Karlins et al. (1989) point out, the bulk of the aviation community underestimates the spouse's critical role in helping pilots cope with the pressures and strains of flying. Rigg and Cosgrove (1994) reported that aircrew wives had a reduced sense of well-being and that wives below the age of 40 scored higher on common depressed mood scores compared with the well-being and mood of ground crew wives. Hubinger, Parker, and Clavarino (2002) investigated the impact of home and away occupations across different industries, with specific attention on the experiences of Great Barrier Reef pilots. They found that stress is a result

of the routine and limiting backwards and forwards aspects of the job; issues with planning and attending social events together and a deficiency in informational and emotional support were reported by pilots and their partners. Most published research has focused on heterosexual married couples with the male partner being the index traveler in the work role, which, of course, may not reflect patterns in modern society.

Some research has suggested that the main factor in an aviator's capability of managing stress is their home life and their relationship with their partner being stable (Sloan & Cooper, 1986). While pilots might develop emotional coping skills they might also be vulnerable and they might be better able to cope with psychosocial stress if their relationships and home life are perceived as going well (Sloan & Cooper, 1986). A key recommendation made in the past is that airlines should construct programs that help the aviator manage personal and domestic stress more effectively (Karlins et al., 1989).

Family stress and domestic problems could potentially have an adverse effect on a pilot's performance (Jones et al., 1997). Raschmann et al. (1990) found that pilots who experience significant marital distress reported that they had a decreased capability to concentrate. Relationship support is also a key factor in predicting pilot performance (Bor et al., 2017; Rigg & Cosgrove, 1994). The well-being of pilots is, in part, linked to the amount of control they feel they have while working, and possibly also by levels of social support and the amount of restorative sleep they get (Eriksen, 2009).

There are few occupations that require the high degree of emotional stability required by the job of an airline pilot (Butcher, 2002). There has been some research on employees in sectors and industries in which shift work is common (Collinson, 1998; Diamond et al., 2008, Hubinger et al., 2002; Parkes, Carnell, & Famer, 2005). There have also been specific studies on the effect of shift work on the relationship patterns of air crew (Clifford, 2009; Cooper & Sloan, 1985; Karlins et al., 1989; Rigg & Cosgrove, 1994) but much of this has focused on the impact on partners or spouses of the index shift worker rather than on the individual who is working away from home. There is a lack of research that specifically addresses how pilots perceive how their job, shift work, absences from home, work stress, and job demands may affect their relationships. This study seeks to investigate the challenges to pilot relationships and how pilots cope with these.

Aims of the Study

Given that pilots operate under a unique combination of physiological and psychological conditions (Bor et al., 2017; Eriksen, 2009; Karlins et al., 1989), it is important to learn about how pilots perceive their personal relationships and how working in the aviation industry affects them. This study is therefore relevant to understanding how working in aviation affects personal and emotionally intimate relationships. Research appears to suggest that well-supported relationships improve the psychological well-being of the aviation worker (Rigg & Cosgrove, 1994; Sloan & Cooper, 1986). This, in turn, can lead to an improved sense of well-being and potentially augments flight safety.

Method

Participants

In total, 300 pilots were surveyed by questionnaire to examine the impact of working in the airline industry on personal relationships. We asked participants their age, gender, relationship status, and whether they had children. No other identifying demographics were sought in order to preserve confidentiality in this opportunistic cohort.

Data Collection

Participants were recruited over a 4-year period between 2012 and 2016 from a master's program in Air Transport Management at the University of London. This program is for professionals who have been working within the aviation industry for at least 2 years. The questionnaire was given to students during a class given by one author. The participants selected were airline pilots flying for various international airlines but they were not asked which airline or whether they were long-haul or short-haul pilots in order to maintain confidentiality. Participation in the study was voluntary and optional. Only data from commercial airline pilots were included in this survey as some students attending the course were also air traffic controllers or came from other professional aviation-related backgrounds.

Data Analysis

Qualitative data collected from the questionnaires was analyzed using thematic analysis (TA). This is a method for identifying patterns of meaning and themes across a dataset in connection to a research question. TA is relatively unique among qualitative analytic methods "in that it *only* provides a method for data *analysis*; it does not prescribe methods of data collection, theoretical positions, epistemological or ontological frameworks" (Braun & Clarke, 2013,

p. 178). One of the key strengths of TA is that it is flexible, that is, it can be used to analyze nearly all types of data (Braun & Clarke, 2013). The researchers chose to use TA in a bottom-up way in which the themes were identified on the basis of what was in the data. Given that it was an explorative study, TA seemed best suited for this aim. We wanted to provide a "rich thematic description" (Braun & Clarke, 2006, p. 11) of the entire dataset, and therefore we endeavored that the themes we identified, coded, and analyzed were an accurate representation of the entire set of data. While we acknowledge that some of the complexity might be lost by doing this, we felt that overall it was the right decision for an under-researched area and tried to make sure that we maintained a rich overall description.

We followed Braun and Clarke's framework (2006) for identifying themes. We used their six-step model to:

- Familiarize ourselves with the data (reading and rereading the questionnaires and noting down initial thoughts);
- 2) Generate the first set of codes (aspects of the data that seem meaningful);
- Look for themes (we primarily found themes when there were a number of instances of the theme across the date set; data extracts were organized that were linked to the pertinent themes);
- 4) Review the themes (we did this in two phases the themes were checked according to the codes in Step 1 and the overall set of data);
- 5) Name the themes; and
- 6) Write the analysis making sure that there are quotes from the participants (extracts from the questionnaires) that show the validity of the study.

We tried to choose vivid quotes that captured the themes as best they could.

Reliability and Validity

Reliability was addressed by having an independent registered counselling psychologist with broad experience of qualitative research code the qualitative data who was blinded to any knowledge of the participants, their work context, or their personal circumstances. A clinical psychologist who also had extensive experience of qualitative research independently coded the questionnaires and their related themes, and then both compared their findings. Triangulation was used in order to access the consistency of findings (Tindall, 1994). Using qualitative analysis implies that there may be no single correct answer in terms of themes; research is a subjective process but by discussing the themes with another researcher, it can help to check that the themes found were similar, which was the case in

this research. The purpose of including qualitative data extracts is to evidence the analytic claims (Braun & Clarke, 2013).

The inclusion of direct extracts from the questionnaires in the Results section allows the individual narratives and experiences of the participants to be accessed. The researchers connected themes that emerged from the questionnaire with the existing literature in this section. A theme relays something significant within the content of the data and it can be viewed as a central organizing concept (Braun & Clarke, 2006); it tells the reader something significant in relation to the research question.

Participants were specifically asked the following questions:

- 1) Do you believe that working in the airline industry is more disruptive to family/social/intimate life than working in other areas or fields? Are there specific challenges or hazards to relationships? Do you have any examples to illustrate?
- 2) Do you think people in the industry specifically choose a lifestyle that makes close and intimate relationships more of a challenge?
- 3) Do you think they know what to expect (regarding disruption) when they start working in the industry?
- 4) How have you specifically adapted to the lifestyle and work and what measures have you taken to preserve your family/close relationships?

Results

The primary and secondary themes of the study are presented in Table 1.

Theme 1: The Intermittent Partner: Flying in and out of Family and Friends' Lives

The master theme of "flying in and out of friends and family lives" reflects the participants' responses as to whether working in the airline industry may be more disruptive to family/social/intimate life than working in other areas or fields and whether there are specific challenges or hazards to relationships. The names assigned to respondents are fictitious and reflect the gender of the respondent so as to preserve confidentiality.

In total, 207 of the pilots said that there were disruptions to their personal lives, especially within their relationship with partners, although children and friends were also mentioned. However, some said that although there are challenges, these challenges are also true for other industries

Table 1. Study themes

Primary themes	Secondary themes
Theme 1. The intermittent partner: Flying in and out of family and friends' lives	1a. "Green eye" jealousy and envy1b. Differing timetables and unpredictability
Theme 2. Unexpected emotional turbulence	2a. Living the "high life"2b. Input and output into relationships
Theme 3. Emotional safety procedures	3a. Self-care 3b. Quality time 3c. Partner support

with shift work or for people with demanding jobs and are not specific to those who work in the airline industry. Scott, a 44-year-old male pilot stated:

"The demands on time away can be just as onerous for international businessman... I certainly do not consider the airline industry as more stressful for families than others."

The majority of respondents spoke not only about the impact of shift work, which could be the same as many other industries, but about the particular challenges of shift work as a pilot, for example, not being contactable when flying, shifts, and the particular lifestyle of being a pilot, such as staying in hotels with crew. Jane, a 27-year-old female pilot married to another pilot commented that:

"Combine shift work with a job that takes you abroad, hundreds or thousands of miles from home and family for a period of time ranging from 2 days to 2 weeks and you have turned up the bias of any minor stresses or problems, particularly those of which are relationship based."

The participants described the unique challenges of being a pilot to family/social/intimate life and that those challenges can have an impact on their relationships.

Theme 1a: "Green Eye" - Jealousy and Envy

Jealously and mistrust were often cited as the most specific challenges to relationships. Respondents reflected the challenges of the image of crew enjoying a glamorous lifestyle as having an effect on the trust within the relationships. Tiffany, a 27-year-old female pilot, described the assumptions she faces of working in the industry:

"Stereotype assumptions of glamour lives with wild nights in exclusive hotels...you have to work hard to maintain it, need a lot of understanding and trust from your partner, at vulnerable times it is easy to get involved in an out-of-marriage relationship." Several participants (6%) also highlighted that infidelity can be a real risk, especially due to being away for long periods in "glamorous" places. People who do not fly may be less likely to fully understand the pressures linked to the profession. They may have misconceptions too, founded on stereotypical views that may be different from the reality of the job. It is difficult for aircrew to explain that their lives are not full of parties and constant holidays, but rather that they are often coping with sleep deprivation and loneliness due to their work schedule. John, a 40-year-old male pilot, said:

"There is also always the worry, especially for crew, that being away for long periods the element of doubt in your partner can play a part...these problems I think would be mirrored in other industries that have similar shift patterns...but I do not think the same potential risks to relationships exist solely due to the nature of being away (in the case of crew) for long periods, glamorous places, nice hotels."

Tom, a 52-year-old pilot who had separated from his wife, stated that:

"Jealousy of my job and suspicions of infidelity were major factors in the breakup of my own marriage...I feel that my wife's suspicions would have been there anyway but she would not have found it so easy to convince herself of my non-existent infidelity if (a) she didn't see me setting off for a week with a bunch of attractive younger women and (b) she hadn't seen the marriage of several other pilots break up because the husband...went off with a younger flight attendant."

Tom's words depict a relationship breakup that had a main cause of imagined infidelity, which was exacerbated by his wife having been aware than it was not just a perception that pilots can leave their wives for younger aircrew: It has been a reality for some.

While three participants mentioned jealously on their part as to what their partners were up to at home, for example, "Does my wife trust me/do I trust her?," most spoke of their partners being worried about the lifestyle of an aviator, rather than concerns that their partner may be having an affair outside of the relationship.

Theme 1b: Differing Timetables and Unpredictability

Two thirds of participants named the difference in expectations of time spent when the airline worker comes back home as being one of the key sources of conflict. Whereas airline crew talk about the need for recovering physically and having rest time when home, their partners are often keen to do activities together and share responsibilities. While they are away working, life continues as normal for their partner/families. When they come back, they can feel a pressure to slot right in as soon as they return, but for the pilot there is a need for time to readjust back to life on the ground and back to their relationships.

Pilots can also try to spend most of their spare time with their partners in order to protect their relationships but this might result in less time with other relationships in their lives, for example, friends or other members of their family. Tom recounted that:

"As well as the lack of physical presence, the spouse (wife) left at home has to cope with the children, plumber, bills, in-laws etc., perhaps while holding down his/her job while the aviator has been ...lazing on a tropical beach ...from the aviator's point of view ...they have flown a 12-hour night flights and all they want to do is get into bed ...this tale of hardship doesn't convince the spouse ...they're both tired and emotional and a row ensues."

As Tom discusses here, his partner has had to manage the domestic issues, leading to them feeling alone and possibly resentful. Tom also said that he thinks it is as much the type of personality that is attracted to piloting that is to blame as the job itself in terms of marital discord. Jim, a 40-year-old male pilot, stated that:

"Pilots are control freaks. I had to find out the hard way that working on a relationship has nothing to do with cockpit work and is far more complex. It's not black and white."

Tom and Jim reflected that relationships cannot be treated in the same way as flying an aircraft, they cannot be controlled or compartmentalized. Jim's quote implies that that there has to be a greater understanding of the intricacies and process from pilots toward their relationships and they cannot be managed in the same approach they would use for work. Pilots are used to be being logical, being in charge and having to switch off their emotional selves under pressure; these same qualities can be beneficial but also cause conflict when applied to personal relationships

A recurring theme was that shift work and the unpredictability of work hours made it difficult to commit to relationships, social arrangements, and outside interests. Careful planning was mentioned as a way to try and keep these going, but the difficulties in changing shift patterns and rotas meant that this coping mechanism was not always possible. Richard, a 34-year-old pilot, highlighted this by saying:

"My previous relationship ended when my company "force drafted" me into work over a weekend.

My girlfriend was a working mother... it was the final straw for her."

Participants said that the challenges of working in the airline industry did not just affect current relationships but also potential relationships. Jane said that many of the cabin crew she flies with are single; she attributes singledom to them finding it difficult to find someone who understands the demands of the job. Perhaps this is why many respondents said it is helpful to have a partner who also works in the industry that understands the difficulties in shift work. Richard summarized:

"The fact that she (his romantic partner) sees how hard the job is and the reality of night-stops helps break down the common misconceptions that abound in the public domain...people in the aviation world do end up together ...it is certainly true that many flight crew/cabin crew relationships are strengthened by both parties sharing similar lifestyles."

This quote from Richard highlights that he feels having a partner who experiences the same challenges as him at work is beneficial to challenging stereotypes about the life of an aviator.

Theme 2: Unexpected Emotional Turbulence

Nearly everyone who responded said that they had not known what to expect when they started working in the industry and that it was not an intentional lifestyle to make close and intimate relationships more of a challenge. Others commented that it may be a way for others in the aviation industry to run away from their problems but did not say it was them who had done so. One male participant commented:

"A major disadvantage in this field can be that people generally tend to escape and literally avoid conflict altogether. This can build up and cause problems in the long run."

Theme 2a: Living the High Life...

Most participants depicted that it was not a conscious choice to opt for a lifestyle where it is more challenging to maintain intimate relationships. Instead they talk about not having known what to expect and not having spent much time analyzing the lifestyle implications before they entered the profession. Richard stated:

"Are you asking that we choose aviation because we like an extra challenge to our relationship? If you are,

then the answer must be no...in my experience many people do enter the industry with little experience or knowledge...sometimes the effort to become a pilot suppresses the effort required to make a good relationship."

Jane's father was a long-haul pilot and she has not felt disappointed by the reality of being a pilot, perhaps owing to having grown up within the industry and having always seen the reality of it as opposed to the perception or image: She stated:

"I had no misconceptions about this industry having grown up with it all my life and seen my father long haul for 30 years."

Theme 2b: Input and Output Into Relationships

Just under 1/5 of participants spoke about the tension in the balance between their personal life and their professional life. Jane depicts an uneven balance between the amount of work put in and the rewards gained:

"Airlines have changes and continue to change. They take more and more of your life and give you less and less choice and rewards."

Jane represents the feelings of many of the participants when she states that airlines are under financial pressure and it was common to find concerns about the hours worked, unpredictable shifts, and not receiving enough acknowledgment for the amount of work. Richard said:

"Airline life has often been perceived as glamorous, overpaid, and fun ...for many pilots the image soon rubs off after 2 years of poorly paid work, often with long hours and little thanks."

Despite the challenges of being a pilot, most said it is their love of flying that allows them to carry on despite the difficulties of working in the industry. One male participant said that:

"There is no doubt that we have delayed having children due to the stresses in the industry over the last couple of years ...despite this we both love our jobs and desperate to see us and our companies succeed."

Jane was clear in her feelings overall toward being a pilot:

"For me personally as a female pilot life is very good and I have an exceptionally supportive husband who is also a commercial pilot."

Mike maintained that working as a pilot has always been his dream and remains so; he said that as long as he managed his work-life balance he felt happy about his decision to become a pilot.

Theme 3: Emotional Safety Procedures

Participants recounted how they specifically adapted to their lifestyle and work and what measures they have taken to preserve their family/close relationships.

Theme 3a: Self-Care

Participants reflected upon self-care, in the form of a healthy diet and getting enough sleep and exercise, as being essential to taking care of themselves and adapting to their lifestyle. Some participants mentioned that they joined sporting schemes operated through work so that even though they were not able to commit to regular activities outside of work, they were able to engage in healthy activity while at work. John said:

"I have compensated by joining a squash club and also an airline sports and social club to maintaining my sporting activities."

Jason and Jane highlighted that eating healthily and sleeping can really help in coping with difficult situations at work and also the ability to think rationally and logically in solving personal relationship conflicts. Tom reflected:

"I consciously try and take exercise when away from home ... I try to avoid spending too much time in bars."

Theme 3b: Quality Time

Of the participants, 5% said that although it can be difficult scheduling time together, they have greater blocks of time with their family and use time more valuably when they are together. There are perks, such as being able to bring their family with them on flights and that they also get to see different parts of the world. Jane stated that:

"Our days off each month and the half days here and there we probably see more of each other than the average 9–5 couple ...the quality time we do have together easily outweighs the time we may be apart."

Pilots who had been in the industry longer spoke about becoming more senior affording them a reward for their hard work and more control over their schedule and time with their loved ones. Richard said:

"As I become more senior I am able to fit my work around my life more and more...it is a very important and long-fought for element in our reward as pilots...we try to plan for a few special days each month that could be our own..."

It seems that as aviators progress in their career, they have more autonomy over this schedule and subsequently can use shift work to their advantage, by using consecutive days off to spend quality and uninterrupted time with partners/families.

Theme 3c: Partner Support

The respondents in this study when discussing measures to preserve their relationships or how they cope with shift work often cited their partners as being their primary support. Planning, patience and communication were key, and one pilot called it a "juggling act." The aviator informing and communicating to their partner about what their work involved allowed their partners to reflect and be understanding regarding the demands of the work, which often meant that the relationships were less fraught. Pilots also spoke about this being a two-way relationship: They have had to learn to be patient and understanding as to how their partners feel as much as they want their partners to understand the life of an aviator.

Moreover, 10% of pilots spoke about being aware of the need for balance and priority in their lives and several respondents stated that if the job were to endanger their relationships, they would go part time or leave the job. Jane said:

"I love my job with a passion, but if the lifestyle starts to threaten my marriage and both our happiness, I will go 50% or walk away from it as it's not worth losing my partner and family over."

Participants often spoke about the use of different forms of communication they can use with their mobile phones, for example, SMS and email, FaceTime and Skype, which they said helped maintain their relationships while they were away from home. Jane explained that:

"The onset of modern technology makes communication and its regularity a lot easier than a decade ago, all crew are permanently attached to mobile phones and all have repetitive strain injury!"

Virtual communication allows aviators to see their families/friends rather than having to wait until they return home for any face-to-face contact, and for their families to get more of an idea as to what they are doing and have more access to the pilots' lives than they previously would have, for example, see the location in which they are staying. Technology also meant that whatever the time of day/evening, a message can be sent and received at the other end when the other person is awake and available.

Discussion

This qualitative research among pilots intended to explore how the personal relationships of pilots are affected by shift work and absence from home. The first theme highlights that the majority of participants found that working in the airline industry is disruptive to family life. Whereas other studies (Cooper & Sloan, 1985; Rigg & Cosgrove, 1994) have also found that working in the airline industry impacts family life, this study is unique in that it places as much emphasis on the effect it has on the pilot as on their family/partner, whereas other studies have primarily focused on the spouse who remains at home. Some pilots maintained these challenges are the same as other industries that involve shift work; however, most respondents spoke of the unique challenges of being a pilot.

Feelings associated with jealousy and mistrust were not as prevalent in the studies of oil-mining and military workers (Collinson, 1998; Parkes et al., 2005), but frequently cited by the respondents in this study. By contrast, Collinson (1998) found that worry was prevalent amongst offshore workers that their spouses could end up having affairs, whereas participants in this study seemed more worried their partners would think they were having affairs.

Sexual fidelity was a concern for aircrew, not only because they felt they would be more tempted while away, but because they were also worried about the repercussions of partners being suspicious regarding their fidelity. Pilots suggested that both the reality of their partners knowing they are away, staying in hotels with other people who may also be without their partners, and the knowledge that other relationships have broken up due to infidelity with other crew members can exacerbate worries about faithfulness.

Seemingly small relationship issues can escalate into more significant issues such as self-doubt, insecurity, discomfort, and irritability, lack of trust, fear, and detachment. From the onset of the relationship it could be useful to discuss rules around sexual intimacy and the discussion of parameters, what is acceptable, such as going to the bar to drink with colleagues, or what is not, such as going out for the day with one person, which will obviously vary from person to person and from relationship to relationship.

This study concurs with the work of Bor et al. (2017), who reported that pilots can feel emotionally and physically desynchronized when they come back to their partners and children, with their body clock and their emotions. Catching up on sleep becomes imperative, whereas the partner has been left to manage the domestic issues on his or her own. This study highlighted pilots' qualitative experiences of partner domestic issues – aloneness and resentment – can impact on the pilot's return to home life. While the pilot has been away, their partner has been getting on with their own life and their own routines, which can mean the pilot may feel like a stranger in their own home with a diminished sense of influence over day-to-day activities. This research is supported by the findings of Hubinger et al. (2002) and Parkes et al. (2005), who

reported that fatigue was a key factor in adjustment issues for UK offshore oil workers.

Aircrew in this study have suggested that it is not just the shift work that can lead to issues in the relationships, but also the particular personalities of pilots; several mentioned that pilots like to feel in control and subsequently it can feel even more difficult to return home and sometimes they feel redundant.

Some pilots spoke about having to juggle not only time with their partner when they are at home, but also their social interests and their friends. Many respondents said that they have found it is easier to be in a relationship with another aircrew member; they cited that they see the realities of the job and are more understanding of the conditions and share similar lifestyles. They also said it can be hard to meet potential partners outside of the job, which is why many may end up in relationships with fellow aircrew, mirroring earlier studies by Eriksen (2009).

The findings here may help aircrew to highlight the particular challenges of "flying in and flying out" to their partners and prepare accordingly, for example, discussing whether short-haul or long-haul jobs are better suited to their relationship, being careful when choosing a particular airline job, and finding out the culture of that particular airline in relation to autonomy over rostering. Discussions about how to symbolically keep each-other in mind during periods of physical separation might also be useful. It would be wise for aircrew to synchronize with family, such as let them know their itinerary, where they are going to be and when, and the possibilities for communication and any potential issues in advance. It would be pertinent to review this with their partner from time to time to address whether the plan is working.

Theme 2 discusses unexpected emotional turbulence. A gap in the literature has been finding out whether pilots' expectations of their job has matched the reality of it. Most of the respondents said they had not known what to expect when entering the industry. They also mentioned that the airline industry is changing with an increase in stress due to many factors such as flight duty times and fatigue. They said that they had not entered the industry intentionally to make close relationships a challenge.

Pilots undergoing training might benefit from seminars and training that address how to balance relationships, how to manage shift work, and how to discuss their job with partners/future partners. It could be beneficial for aircrew to have sessions about stress and how relationships can be a protective factor against stress when managed effectively. This would help inform aircrew how to plan discussions with current/future partners communicating the positive and negative features of their job.

Despite some of the challenges of working in the industry, most pilots said that they enjoyed it and it is their love of flying and the actual job itself that makes it worthwhile.

Participants have said that there are also positive effects on relationships of working in the airline industry; they are also able to spend an increased amount of blocked out time together than people in other industries might be able to and that they value this quality time together. Indeed, a larger period of time spent together on days off was found to be an advantage in other industries where long-distance commuting is present (Houghton, 1993).

Theme 3 focused on emotional safety procedures. Self-care, diet, sleep, and exercise were seen as integral buffers against the side effects of being a pilot. Whilst pilots said it was difficult to commit to exercise with teams outside of work, some tried to compensate by avoiding bars while having down-time at work and exercising instead. Others said they tried to eat healthily while at home and to make they sure rest and exercise while back. Workshops on mental and physical well-being for pilots could be helpful to guide pilots in practical ways of enhancing health. Additionally, it would be helpful if exercise was highlighted by airlines as being a priority when stopping at a layover, and perhaps the health benefits of regular exercise on both mental and physical health can be emphasized during training to become and aircrew member and after.

This study also showed that partner support was a key resource in managing the demands of shift work and that having an understanding partner was the key to the relationship working; respondents said that they managed to gain the understanding of their partners by communicating to them about the pros and cons of the work and ensuring that they prioritize their partners and let them know that they are special to them. Frequent contact with their closest and most significant social partners seems to be especially important for day-to-day affect regulation. Couples who have lengthier daily conversations with each other or more regular calls/Skype/emails/text or voicemail messages described enhance satisfaction regarding communication in their relationship (Diamond et al., 2008).

Limitations

This research has sought to shed light on the effect on personal relationships of working in the airline industry. We would hope that this study has the potential to deepen the understanding of this issue and that the recommendations made will improve the well-being of pilots. The participants were not a representative sample, by nature of them seeking a postgraduate management in aviation degree also having a minimum of several years' flying experience. They were also self-selecting and it is possible that those who participated had formed opinions about the effect of working in the airline industry on relationships.

As the master's course is optional for pilots, it could be inferred that the participants were competitive, aspirational,

and ambitious. Of the participants, 90% had been involved in formal education prior to the MSc. Some participants indicated their gender and others did not and thus it is difficult to infer if there are gender- or age-related differences to the responses. The research questions were broad and there were a range of response sets; some very detailed and others not. However, keeping these questions broad allowed the participants to have a wide scope in sharing their personal experiences.

We believe the both the strength and weakness of thematic analysis lie in the lack of rigid rules governing how it should be carried out. With the absence of direct regulations, we hoped that we were doing justice to the respondents' individual accounts; however, with two researchers looking over the themes we felt confident that the themes generated did capture the experiences of the respondents. It is hoped that the presence of direct extracts from the interviews allows some of the individual experiences of the participants to be accessed by the reader.

Further Research

The study included both short- and long-haul pilots. Further research may wish to examine the effects of separation for pilots who fly short haul compared with long haul and to see whether frequent but short separation means less family discord than those who have less frequent, but lengthier, separations.

It would also be interesting to see if a more diverse sample, for example, with aircrew who have been flying for less than 2 years, would produce a different outcome. A different method of investigations such as in-depth interviews with aircrew instead of or in addition to a questionnaire may allow for a richer study of a smaller number of participants. This could help to shed light on the connections between pilot mental health, performance, and relationship support. Finally, future research may look at relationship patterns between gay or lesbian pilots, and their partner/s, and also stratify those according to whether having children posed different challenges for emotional intimacy.

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