

Relationships for air crews – How does the job affect the work-life balance?

Master Thesis submitted in fulfillment of the Degree

Master of Science

in Management

Submitted to Prof. Dr. Ivo Ponocny

Gloria Victoria Fila

1521021

Vienna, 26th February 2021

AFFIDAVIT

I hereby affirm that this Master's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed.

The thesis was not submitted in the same or in a substantially similar version, not even partially, to another examination board and was not published elsewhere.

Date

Signature

ABSTRACT

Work-life balance has become a central part of interest for individuals as well as companies over the last decades. The focus lays on keeping a balance and further achieving satisfaction with the work and the life spheres. Being able to balance these dimensions becomes extremely difficult when severe job irregularities take place. This can be seen for example among flight attendants and pilots, who never have regular work hours or days and are even considered as shift-workers all over the world.

Overall, the aviation industry offers millions of jobs globally and therefore influences many daily lives. Therefore, the objective of this research is to analyze the work-life balance of flight attendants and pilots. To achieve this, work-life balance in general was assessed as well as the job of a crew member. In addition, work-life balance conflict issues in general, but also with the focus on the aviation industry are examined. In order to be able to minimize these conflicts and other work-life balance related issues, focus is put on incentives on an individual as well as company level.

For the primary data collection, a mixed method approach has been chosen. First, the qualitative data is collected through in-depth expert interviews with pilots and flight attendants. The focus of the interviews lays on getting a real-life insight into the work-life balance and relationships. Secondly, the quantitative data is collected through an online survey among the same target group and the collected data is run through tests and analysis in SPSS. The main objective of this is to get an even deeper insight to the effects of the irregular job on the work-life balance of an individual and to address a larger and therefore more representative sample size. Further, an adapted online survey is also distributed to a control group which are air traffic controllers.

The final outcome of this research shows that all factors influencing work-life balance are strongly dependent on an individual's personality and the individual perception on them. However, certain measures and incentives like planning ahead, sleeping routine, socializing and others, are relevant and essential to all individuals, but the precise extent to which it is needed and perceived as essential varies widely. Further, the results intend to raise awareness among aircrew members as well as for an airline's management itself.

TABLE OF CONTENTS

Affidavit.....	i
Abstract.....	ii
List of Figures.....	vi
List of Abbreviations	viii
1 Introduction.....	1
1.1 Context, previous research, motivation and cognitive interest	1
1.2 Research aims, objectives, research question and limitations.....	2
1.3 Structure of thesis.....	3
2 Literature review.....	4
2.1 Work-life balance.....	4
2.1.1 Definition of work-life balance.....	4
2.1.2 Work-family, family-work conflict and the spillover effect.....	6
2.1.3 Changes in work-life balance	9
2.1.4 Gender issues and aspects concerning work-life balance.....	10
2.1.5 Work: satisfaction, stress, and well-being	12
2.1.6 Work and Employment.....	15
2.1.7 Health	17
2.1.8 Relationships.....	18
2.1.9 Measures to improve work-life balance for employees/How to integrate WLB – Organizational and Individual Level	20
2.2 Airlines and Air Crews	25
2.2.1 Aviation industry – History and Overview of the industry	25
2.2.2 Airlines – Overview and Structure.....	26
2.2.3 Job description, duties and training - What is a pilot? What is a flight attendant?.....	27
2.2.4 Duty times – working hours, irregularities, legal regulations.....	28
2.2.5 Health – physical and mental health	30
2.2.6 Relationships of aircrews	34
2.2.7 Work-life balance issues for aircrew.....	36
2.2.8 Work-life balance measures by crew member and by the management of the airline.....	39
2.3 Conclusion	42
3 Methodology	43
3.1 Introduction.....	43
3.2 Aim.....	43
3.3 Selection of methodology	43
3.4 Research instrument.....	44
3.5 Qualitative research - Interviews.....	44

3.5.1	Interview partners.....	45
3.5.2	Interview questions.....	45
3.6	Quantitative research – Online Survey	48
3.6.1	Questions.....	49
3.6.2	Testing of the data	50
3.6.3	Control Group	50
3.7	Limitations	51
3.8	Data analysis.....	51
3.8.1	Qualitative analysis	52
3.8.2	Quantitative analysis	53
3.9	Conclusion	53
4	Results and discussion.....	54
4.1	Introduction.....	54
4.2	Evaluation and interpretation of interviews	54
4.2.1	Interview partners and their descriptives.....	54
4.2.2	Job and Relationships	54
4.2.3	Children and flying	56
4.2.4	From past to present -Job influences on life expectations	57
4.2.5	Jetlag and Fatigue.....	58
4.2.6	Work-Life Balance	59
4.3	Evaluation and interpretation of online surveys	62
4.3.1	Descriptive analysis	62
4.3.2	Conflicts within relationships.....	65
4.3.3	Relationships.....	65
4.3.4	Unfaithfulness.....	66
4.3.5	Work-related stress and colleagues	67
4.3.6	Work-life balance	68
4.3.7	Work-life balance at home and on a layover	69
4.3.8	Work-life balance measures by an airline.....	71
4.3.9	Jetlag and Fatigue.....	71
4.4	Evaluation of Control Group.....	72
4.5	Differences between focus group and control group.....	75
4.6	Discussion / Conclusion / Summary.....	75
5	Final Conclusion	77
5.1	Future research.....	78
6	Bibliography.....	79
	Appendices	90
	Appendix 1: Questionnaire for online survey of focus group	91
	Appendix 2: Questionnaire of online survey for focus group	95
	Appendix 3: Interview schedule	98

LIST OF TABLES

Table 1 Participants Overview	51
Table 2 Airline Distribution.....	63
Table 3 Benefits & Threats of work irregularity	66
Table 4 Cross Table Gender and Unfaithfulness of self	67
Table 5 Age distribution of Air traffic Controllers.....	72
Table 6 Relationship status Air traffic controllers	73

LIST OF FIGURES

Figure 1 Work-Life Balance Process.....	6
Figure 2 Work-Family Conflict	7
Figure 3 Changes in Family Structure	9
Figure 4 Work-life Balance Satisfaction	12
Figure 5 Relationship between Stress & Performance - Yerkes-Dodson Model	13
Figure 6 Stress	14
Figure 7 WLB Strategies	21
Figure 8 WLB Strategies	23
Figure 9 Work-life conflict Correlations	37
Figure 10 WLB among air crews	38
Figure 11 Response rate of Aircrew Survey	52
Figure 12 Response rate of Control Group.....	52
Figure 13 Gender Distribution	62
Figure 14 Age distribution.....	62
Figure 15 job Position Distribution	63
Figure 16 Years of Employment.....	64
Figure 17 Conflict Issues.....	65
Figure 18 WLB Satisfaction.....	68
Figure 19 WLB Incentives	69
Figure 20 WLB on a Layover	70
Figure 21 WLB measures by an airline	71
Figure 22 Effect of Jetlag or Fatigue.....	72

Figure 23 Job Experience..... 73

Figure 24 Wok-Life Balance Air Traffic Controllers..... 74

LIST OF ABBREVIATIONS

ATAG – Air Transport Action Group

CC – Charter Carrier

EASA – European Aviation Safety Agency

GDP – Gross Domestic Product

FSC – full-service carrier

IATA – International Air Transport Association

ICAO – International Civil Aviation Organization

LCC – low cost carrier

WLB – work-life balance

1 INTRODUCTION

1.1 Context, previous research, motivation and cognitive interest

In 2019, airlines have carried 4.5 billion passengers all over the world and because of various factors, this number is expected to increase further in following years (ATAG,2020). In consequence, in order to move all these passengers, the industry offers millions of jobs all over the world, which are either directly, indirectly or induced by the aviation industry. In fact, currently 65.5 million people are employed within the industry of which 10.2 million jobs are directly in aviation (ATAG, 2020). Not surprisingly, the aviation industry is part of the travel and tourism sector which represents the largest economic sector (Hanlon, 2007).

Furthermore, the aviation industry plays a major role for the world economy, especially since the ending of the Second World War and still faces new challenges and changes on daily basis (Hanlon, 2007). The growth of the aviation industry increases the competition between the different carriers and often forces down cutting on costs, as well as more efficiency from the employees (Cento, 2009). As a result, especially the duty times of air crews have been affected and new regulations have been established with more legal working hours and fewer days off.

Nevertheless, crews are often perceived to have a quite privileged lifestyle whilst jet setting all over the world and are therefore often envied (Eriksen, 2018). However, most outsiders neglect the fact that these jobs come with very irregular duty times and days off far away from home (Eriksen, 2018). This can have a major influence on the individual crew member's work-life balance which therefore also includes their relationships, as relationships can be seen as fundamental to an individual's life, this topic is crucial for the human wellbeing.

Relationships also are a major part of the work-life balance, in which an individual deals with the integration of numerous roles an individual plays in his or her life (Blyton et al., 2006). Therefore, the authors further explain that, there is a main distinction between "work" and "life" roles, which both are aimed to be equally integrated in order to achieve a satisfying balance which indicates the sense of quality of life. Nevertheless, integrating these roles can often result in difficulties as they may conflict with each other, or an imbalance between the working and private life, might be perceived as unfulfilling or unsatisfying. The topic has not only gained importance to individuals but also is present throughout various facets of life. For instance, it is present throughout media, but also has been took up by politicians who even integrate aspects of work-life balance in their missions (Blyton et al., 2006; Drobnič & Guillén, 2011). Unsurprisingly, an individual faces his or her individual work-life balance on daily basis and is often forced to think about it and evaluate their satisfaction with it and is therefore an unneglectable aspect of life.

1.2 Research aims, objectives, research question and limitations

As explained above the aviation industry employs a lot of people who are facing a very different kind of work-life balance with irregular duty times as well as absence from home (Eriksen, 2018). The job irregularity can be seen as a severe factor towards a relationship, yet it shall not solely be seen as a negative influence nor as the only influential determinant.

The main aim of the thesis is to gain an insight on how work-life balance is managed by an individual crew member with focus on their relationships.

Further aims of the thesis are the following:

- Definition of work-life balance
- Definition of relationships
- Representation of crew schedules
- Analysis of relationships among crews

Following, the research questions on which the thesis will focus on, in order to achieve the above listed aims:

- What does the term work-life balance mean?
- What effect do irregular work hours have on a relationship?
- How does a relationship work for an air crew member?
- Does a crew member have the actual chance to have a “normal” relationship?
- What incentives by the airline’s management are implemented for crew members for a better work-life balance?
- What can the individual crew member do to maintain a satisfying work-life balance?

Accordingly, the main research question for this thesis is that: *“Maintaining a satisfying work-life balance and relationship depends on the personality and not on the job.”*

This thesis is subject to various limitations, one of them is the time limit which is set for the submission of the research paper. Therefore, surveys and interviews cannot be done infinitely and as a result cannot be seen as representative for the entire industry. Furthermore, considering the representativeness, also the geographical location portrays a limitation. The personal engagement of the researcher within the aviation industry can be seen as another limitation as it shapes already a concrete concept and as well might influence the objectivity. An additional limitation for the quality of the thesis is the corona virus, as the access to books is narrow.

1.3 Structure of thesis

Overall, this thesis consists of five main chapters.

In the first part of the thesis a main overview about the topic is given. Furthermore, also the aim, the hypothesis as well as the limitations of the thesis are presented.

The second chapter is the literature review of the thesis. In more detail, work-life balance is analyzed and defined, with the focal point on relationships and the impact of irregular working hours on the social life. Additionally, also the job of a pilot or flight attendant is analyzed.

The next big chapter represents the methodology for the thesis. In this part, the aims are further evaluated as well as the research design and the unit of analysis is presented. Furthermore, also the creation of the online questionnaire as well as the interview questions are displayed, including also the selection criteria for the target group.

The fourth part displays the results of the personal interviews as well as the online questionnaire. This includes a summary as well as an analysis part.

The very last chapter of the thesis is the conclusion which summarizes the main aspects and gives a future outlook.

2 LITERATURE REVIEW

The literature review puts the term work-life balance in context with the aviation industry. More precisely, the focus lies on the flying personnel and their work-life balance.

Therefore, the first part of the literature review defines work-life balance in detail. This includes the work-related aspects, as well as the private ones.

The second main half of the literature review gives an insight to airlines with focusing especially on their crews. Therefore, this part will outline the aviation industry itself and further their jobs characteristics like duty times but also the relationships of crew members, private as well as professional ones.

2.1 Work-life balance

This theoretical part of the thesis is devoted to the subject of work-life balance. The term work-life balance brings together two considerable topics, work and life, which are therefore evaluated individually as well as overall. Therefore, various work-related aspects as well as relationships will be investigated. Later, also managerial measures towards a satisfying work-life balance will be analyzed.

2.1.1 Definition of work-life balance

It has only been since the 1970s that an understanding has been gained that the terms “work” and “life” are closely related to each other and should not be treated independently (Campel Clark, 2000, as cited by Blyton et al., 2006). The term “work” itself can be interpreted widely, yet, generally in connection with work-life balance, it is used in professional terms which usually is compensated monetarily (Drobnič & Guillén, 2011). Therefore, voluntary work or housework are not considered as the authors explain. Further, the expression “life” is quite broad too and typically includes all aspects besides the professional engagement so Drobnič and Guillén (2011).

The term work-life balance, or short WLB, cannot be defined very simply and therefore not a specific definition can be found (Kalliath & Brough, 2008). Nevertheless, work-life balance can basically be described as an equilibrium point in an individual’s life, when combining the job and the personal life are favorably integrated or balanced (Blyton et al., 2006). Another possible definition for the term is the prioritization an individual gives to his work and family or other duties within a work-life system (Munn et al., 2011). Work-life balance is strongly dependent on how an individual perceives the balance of his or her roles (Haar et al., 2014).

On the other hand, the authors Kalliath and Brough (2008) identify six different definitions based on different aspects. For instance, the authors define their first interpretation of the term work-life balance on the multiple roles of the individual. They strongly point out the relationship as well as the effects of home-to-work and work-to-home, which can often be rather conflicting. The next definition proposed by Kalliath and Brough (2008) focuses on the suggested equality of the two worlds, which does not only focus on an equal distribution, but also on the satisfaction with it. In fact, it is proposed to balance three elements which are time, involvement and satisfaction (Greenhaus, Collins & Shaw, 2003). The third definition focuses on the satisfaction between the individual's different roles, which also includes the managing of the needed resources (Kalliath & Brough, 2008). A similar approach to this one is according to the authors the weight and importance which is given to the different roles and the level of satisfaction which can be reached through it, which again may change over time. Kalliath and Brough (2008) define another approach which focuses on conflict and facilitation which represents the psychological construction concerning a work-life balance. A very popular approach and definition towards work-life balance is the control an individual perceives to have over their different roles (Kalliath & Brough, 2008). Lockwood (2003) points out that when people mention that they do not have enough time for something, or struggle to manage something concerning either their work or private life, it indicates an imbalance between these two worlds. Poelmans, Kalliath & Brough (2008) point out the importance of the word "balance". They explain that the term indicates that two components are in balance and further point out that if one changes, automatically an imbalance is created, yet this is not necessarily always the case in the real world.

Work-life balance also deals with the various roles an individual has in his or her life, these can again be differentiated between their work and family life (Marshall, 2001). For instance, one person can be an employee, a mom or dad, spouse, sibling, or a volunteer. In fact, social psychologists state that it is normal for an individual to have over ten different roles (Marshall, 2001). Marshall (2011) further points out that these roles can be either more or less central towards life and are often differentiated on ground of either the importance given to it or based on the needed input (time and/or effort).

The term "balance" itself can be also widely interpreted, therefore, Munn et al. (2011) stated that "balance" is quite relative as it depends on the personal prioritization of work and private life. Further, it can be said that a balance does not necessarily have to be 50:50, as balance will depend on the personal perception of it (Munn, 2013). Accordingly, the author once more points out that the process of balancing is individualistic. Munn (2013) further specifies that depending on meaningfulness, as well as appropriateness concerning the individual aspects of life, as well as different organizational and societal factors, a unique work-life balance is created.

<i>Determinants</i>	<i>Nature of the balance</i>	<i>Consequences/impact</i>
Organizational factors	Subjective indicators	
Demands of work	Balance – emphasis equally on home and work	Work satisfaction Life satisfaction Mental health/well-being
Culture of work		
Demands of home	Balance – home central	Stress/illness
Culture of home	Balance – work central	
Individual factors	Spillover and/or interference of work to home	Behaviour/performance at work Behaviour/performance at home
Work orientation		
Personality	Spillover and/or interference of home to work	Impact on others at work Impact on others at home
Energy		
Personal control and coping		
Gender		
Age	Objective indicators	
Life and career stage	Hours of work “Free” time Family roles	

FIGURE 1 WORK-LIFE BALANCE PROCESS

Source: Guest, 2002, p. 265

With Figure 1 from above, Guest (2002) identifies and explains work-life balance with its stimulus, causes and effects. The researcher defines organizational factors such as work or home demand, but also personal characteristics like age, gender, traits, ability to cope and many more. These factors have the power and influence on the creation of an imbalance. Furthermore, he distinguishes between subjective and objective indicators when considering balance within an individual’s life yet notes that there is a possible interrelation. Within this column of nature of the balance, inputs like working hours or the individual roles are considered as well as possible imbalance issues are identified (Guest, 2002). As possible consequences or impacts the following are identified:

- Satisfaction with work
- Satisfaction with life
- Private & professional performance
- Impact on others
- Health issues (mental, well-being, stress or illnesses)

Source: Guest, 2002

2.1.2 Work-family, family-work conflict and the spillover effect

When failing to balance the work and family life for a certain period of time, various consequences might occur (Blunsdon et al., 2006). This can result in either a work-family or a family-

work conflict, depending on which part is being neglected. When having a work-family conflict, often the marriage is felt to be less satisfying whilst when experiencing a family-work conflict has a negative influence on job satisfaction (Erdamar & Demirel, 2013). Obviously, every individual has only a limited quantity of his or her resources, which are dedicated to the different roles of the individual's life (Goode, 1960, as cited by Drobnič & Guillén, 2011). Accordingly, inputs like time or energy, which are put into a certain role, cannot be given to another part of life, so the energy and time which is spent on work, is not available for the private life and family. The work-family conflict can be further defined as an interrole conflict where different pressures coming from the work and family dimensions and are incompatible at this point of time (Kahn et al., 1964, as cited by Greenhaus & Beutell, 1985). As a result of an imbalance between these two spheres stress, as well as conflict potential will automatically occur (King, 2005). Greenhaus and Beutell (1985) identify three different types on which a work-life conflict can occur:

- Time-based
- Strain-based
- Behaviour-based

The first one already indicates that the main issue of it occurs through time constraints between the roles of the individual, whereas the cause of a strain-based conflict occurs when an individual's entire energy flows to both spheres (Greenhaus & Beutell, 1985, as cited by Chen & Chen 2012). The behaviour-based conflict, like the name already indicates, occurs through the conflicting behaviour patterns of the individual at home and at the workplace, so the authors further.

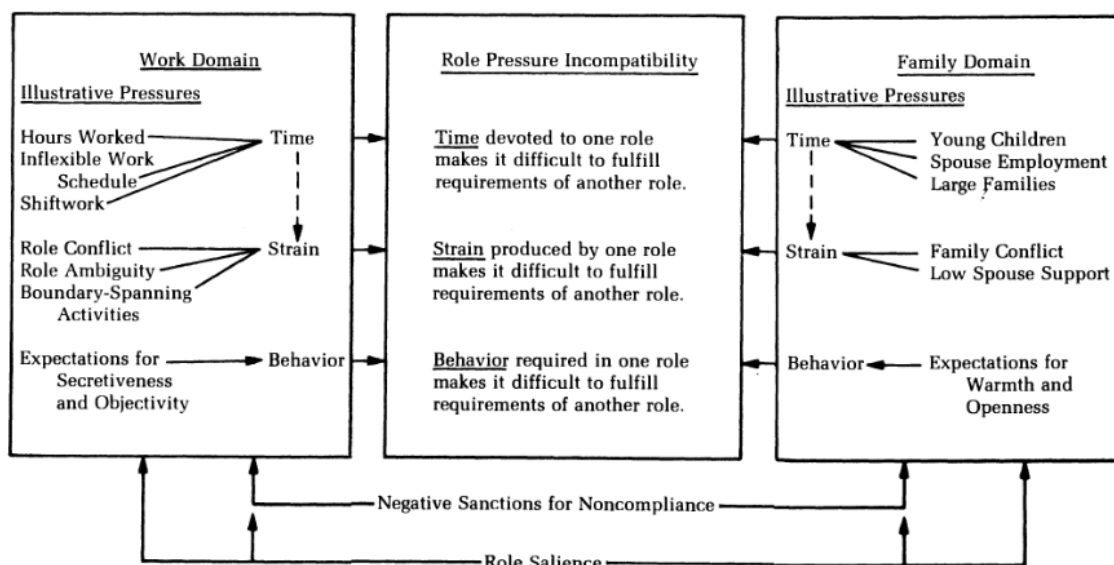


FIGURE 2 WORK-FAMILY CONFLICT

Source: Greenhaus & Beutell, 1985, p. 78

Above, Figure 2 illustrates possible role specific pressures an individual can experience between their work and family domain. In fact, the illustration states that every single act, can cause a conflict for another sphere. These can be either due to time, strain or behavior of the individual (Greenhaus & Beutell, 1985). Furthermore, it can be pointed out that, greater conflict potential is given when the individual's roles are more important to his or her own self-concept (Greenhaus & Beutell, 1985).

Nowadays, the work-to-life conflict is more common than the family-work conflict (King, 2005). Furthermore, Munn's (2013) research revealed that a work-life conflict can even have an impact on the sentiment of meaningfulness of an individual's work, which decreases by 6%. This might be due to a higher level of stress. The researcher further adds that an interference between work and family life, can lead to an imbalanced feeling concerning their roles in both spheres.

Marshall (2001) points out that juggling between the roles itself is not the problem and states that it is rather beneficial to have more roles, as it is more satisfactory. He further adds that this is due to the fact that having more roles gives, first of all less space for boredom and secondly a wider spectrum for achievements. These positive achievements gained through one role, can have an effect on a different role, this is called a spillover or the spillover effect (Marshall, 2001). In addition, this leads to numerous positive outcomes for an individual like the sense of achieving something or satisfaction. Nevertheless, Marshall (2001) also indicates the possible negative spillover, when something negative from one part or role of life is taken over to another one. Considering positive and negative spillovers further, an Asian study about Filipina female entrepreneurs shows clear results. The study reveals that the most important positive spillover among them is achieved through good reputation within the community (Edralin, 2012). The researcher explains that on the other hand, negative spillover is mostly caused by high workload and long working hours which results in health problems, exhaustion or just stress.

Nevertheless, these conflicts are not solely due to personality issues but are always subject to various external and/or internal influences too, yet, getting them resolved, is strongly depending on the individual's capability to do so (Blunsdon et al., 2006). This is further pointed out through attribution theory, which identifies numerous internal and external reasons for either family-work or work-family conflicts (King, 2005). In more detail the researcher specifies the aim to achieve success in multiple roles as an internal reason and explains that an interference between personal values, like family quality time, and duties at work often results in a conflict. On the other hand, external reasons for a conflict can be a simple a lack of time issue or not getting enough support from the life partner (King, 2005).

2.1.3 Changes in work-life balance

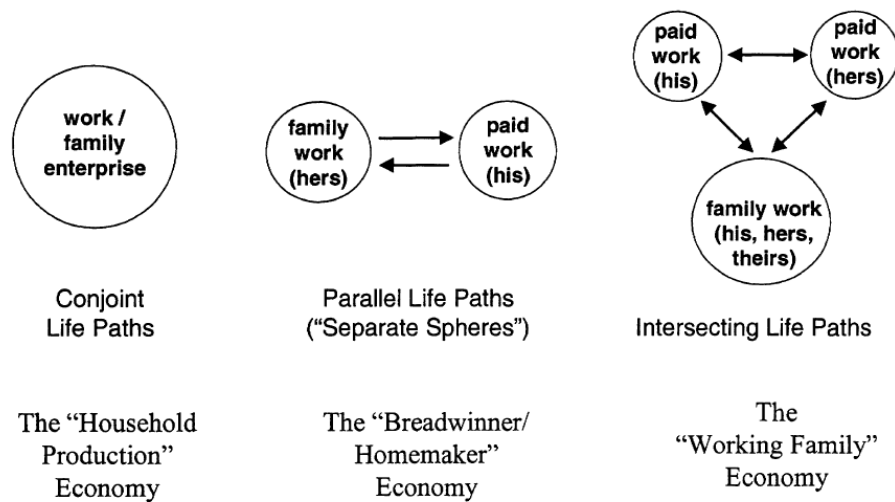


FIGURE 3 CHANGES IN FAMILY STRUCTURE

Source: Moen & Yu, 2000, p. 292

The image above (Figure 3) displays three different life paths people could have, in fact it shows the actual changes of family structures. Quite some time ago, more specifically before the industrial revolution, it was usual for all family members, regardless of any characteristic, to work (Tilly & Scott, 1978, as cited by Moen & Yu, 2000). After this, the more well-known structure and separation between family work and paid work established where usually women stayed at home and men went to work (Glickmann, 1997, Boydston, 1990, Coontz, 1988, Cott & Pleck, 1979, as cited by Moen & Yu, 2000). Moen and Yu (2000) further explain that this kind of lifestyle could not be adapted by every household, yet it somehow became the template throughout the mid-20th century. This was followed by women of every age entering the workforce, yet this created another delay within the development of family structures (Moen & Yu, 2000). In fact, many industries are based on the "breadwinner/homemaker" economy like domestic labor, which is simply due to the fact that fewer family members stay at home and therefore also succeeding at work is more difficult (Moen, 1992, Spain & Bianchi, 1996, as cited by Moen & Yu, 2000). The authors further point out that, when it comes to the model of working families, it can be seen, that often the homemaker part is missing since both individuals have a job and a discrepancy is created. The change of women being only responsible for the household, did not only create a movement for the gender, but also created challenges for families, companies and also society itself, since a new distribution needed to be handled towards unpaid responsibilities and paid work (Lewis & Cooper, 2005).

Lewis and Cooper (2005) further explain that in fact the relationships between both genders has changed over time. Old gender specific roles changed, and new ones evolved, which happened through the development and diversification of family structures. These changed relationships between genders leads to a greater potential between them and further provides individuals with the possibility to perceive a greater satisfaction with their lives (Lewis & Cooper, 2005).

As already indicated the destruction of the old breadwinner model led to women entering the work environment, which therefore resulted in a decline in permanent full-time jobs for men (Connell, 2005). Furthermore, the researcher explains that through the separation of the spheres two completely different environments have been created and that consequently, a subordination was established of the domestic domain to the public. Connell (2005) argues further that there is no direct personal dominance on an individual basis of men over women, but rather a structural subordination of the female species within the modern capitalist society.

Another aspect, which might not be that apparent, but which had and still has the power to influence and change work-life balance are technological changes. Technologies have created an eased access to work-life inclusions and harmonization concerning especially the work-related area (Lewis & Cooper, 2005). A consequence of technological improvements is the blending and overlapping of the work and private sphere (Nam, 2013). This development eased the accessibility of an individual to do work tasks in his or her private time, but also gives the possibility to engage and accomplish private duties from the workplace, so Nam (2013). Therefore, the researcher argues that the effects of technology on WLB, can be either beneficial or not, which are totally dependent on the individual's personality.

2.1.4 Gender issues and aspects concerning work-life balance

The historically strict separation between the work and the life or home sphere has left its marks, as Connell (2005) points out and states that many of these specific roles and stereotypes are still in place and not completely dissolved. Inequalities between both genders are present within nearly every facet of life, also when it comes to work-life balance various gender aspects are revealed. Nevertheless, overall, it can be said that women as well as men are affected by work-life balance (Hughes & Bozionelos, 2007).

Concerning the work-family conflict, no severe differences between men and women could be found, yet women are more often stressed and experience a family-work conflict (Friedman & Greenhaus, 2000, as cited by King, 2005). The researchers further reveal that this is especially the case when a child under the age of three is involved, which is again further pressured

when the partner is not supportive raising the child. Furthermore, when a child is sick, it is more likely that the women takes time off, rather than the partner (King, 2005).

The researchers Lunau et al. (2014) further identified gender differences towards work-life balance, which includes for instance the fact that more often men report having a work-life imbalance. Nevertheless, on the other hand Emslie and Hunt (2009) argue that there is no possible generalizability when it comes to work-life balance satisfaction between the genders, rather only estimates which vary a lot through geographical location or the exact working conditions of course.

Another very prominent and still current issue is the gender pay gap, which also has an impact on work-life balance (Moreno, 2011). The gender pay gap is an established monetary discrepancy concerning salaries between men and women doing the same job, as Moreno (2011) explains. The gender pay gap within the European Union lays between 17.6% and 22.75%, depending on which measurement the calculation is based (Moreno, 2011). Her research implies that this gap is also due to the work segregation between the genders. Furthermore, the researcher implies that the gender pay gap therefore is often the cause of conflicts between couples, since women want to contribute equally. This again actually leaves men in the breadwinner role since they earn more even though their female partners also contribute (Moreno, 2011).

Also, when it comes to work-life satisfaction, there are various discrepancies can be detected (Fagan & Walthery, 2011). The researchers revealed through their study, that overall, regardless of the age stage, women are more common to reach a higher level of satisfaction with their work-life balance than men (see Figure 4 for more details). Fagan and Walthery (2011) further stress out that this difference between the genders is the highest when a young child (under the age of six), is involved. Furthermore, the two researchers also note that in general, the gender gap concerning work-life balance declines when put into context with the accurate life stage and working hours.

Hakim (2005) studied differences between men and women concerning their attitude towards work commitment, as well as towards preferences of a family model, yet the results showed no differences among genders. Nevertheless, the researcher's study revealed a major gender issue which is that women apparently still want to have a partner who is able to supply the family income, even though the woman herself would be able to do so herself, where at the same time these women state to want same family roles (Hakim, 2005). This result seems quite paradox and Hakim states that there is no objective reason why women refuse to be the primary earners themselves and neither for men why they should continue to be so.

2.1.5 Work: satisfaction, stress, and well-being

2.1.5.1 Satisfaction

	Youngest child under 6		Youngest child 6–14		Over 50, no children <15	
	Fathers	Mothers	Fathers	Mothers	Men	Women
All	67.25	80.7	75.2	80.55	82.99	87.19
Part-time (<30 hours)	88.54	92.10	94.73	89.26	89.25	92.77
Full-time (31–44 hours)	75.21	79.09	82.91	80.11	88.96	89.34
Long full-time (>44 hours)	49.33	54.46	60.62	65.13	69.58	70.35

FIGURE 4 WORK-LIFE BALANCE SATISFACTION

Source: European Working Conditions Survey, 2005, cited in Fagan & Walthery, 2011, p. 77

Figure 4 does not only reveal a difference between women and men towards perceiving work-life balance, but also shows precise insights regarding a correlation towards work hours (Fagan & Walthery, 2011). The researchers explain in more detail, that there is a negative correlation between the working hours and the life-stage of an individual. In fact, the numbers show that the highest level of satisfaction is reached among men and women who work part-time, whereas a drastic low level of satisfaction towards WLB can be seen among people working over 44 hours a week (Fagan & Walthery, 2011).

Fagan and Walthery (2011) investigated further the level of satisfaction towards an individual's work-life satisfaction in relation to their job demands. Their research shows that in fact an individual perceives a lower satisfaction towards their work-life satisfaction when their job is demanding. Furthermore, also a negative work-life satisfaction, including a higher chance of a spillover effect concerning fatigue and stress caused through the working live, can be seen within jobs which are demanding in terms of time (Fagan & Walthery, 2011).

2.1.5.2 Stress

Stress is perceived differently by every individual and there are also various definitions available for it, often depending on the context of stress (Homan, 2002). In general, stress can be seen as a situation in which pressure is created for an individual through reacting to internal and external demands and pressures (Miller & Smith, 1993, as cited by Homan, 2002). Another

very basic definition is “*stress is the non-specific response of the body to any demand*” (Seyle, 1976, as cited by Fink, 2017, p. 4). Furthermore, stress can be defined as “Perception of threat, with resulting anxiety discomfort, emotional tension, and difficulty in adjustment”, when considering it within a behavioral context (Seyle, 1976, as cited by Fink, 2017, p. 4). Nonetheless, how exactly stress is perceived and how much stress an individual can handle, including the effects, is always dependent on the personality of the person itself (Homan, 2002).

When it comes to stress, it can be differentiated between internal and external stressors, which even can be imaginary (Homan, 2002). Stressors in general are caused by the environment (internal and/or external) and threaten the perceived balance of an individual and further also the well-being (Lazarus & Cohen, 1977, as cited by Glanz & Schwartz, 2008). A stressor can be very diverse, since it depends solely on the individual perceiving and can vary from a physical threat to strict deadlines (Geber, 1996). The author further identifies a conflict with another individual, a great loss of someone or something, a seemingly important event, or various threats towards our self-image, as other possible stressors. These stressors can again be categorized in distressors and eustressors, depending again on the individuals perceiving if a factor is stressful or not, so Geber (1996). A distressor is also known as distress and describes the condition in which someone is suffering from stress either mentally or physically or both (Homan, 2002).

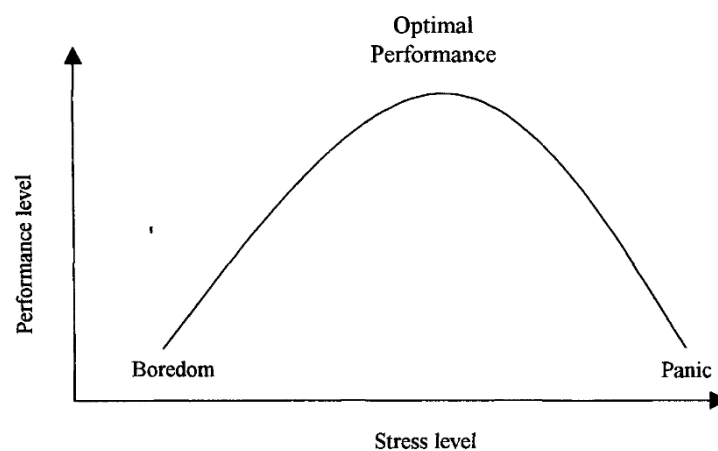


FIGURE 5 RELATIONSHIP BETWEEN STRESS & PERFORMANCE - YERKES-DODSON MODEL

Source: Homan, 2002, p. 17

Since literature states that stress is unique, also the individual’s dealing and reaction is personalized. Accordingly, also the point at which a person reacts best to stress is individual. Figure 5 shows the curve of an individual’s stress level, which starts at complete boredom and ends in panic. Homan (2002) explains that the u-shaped function indicates that in the middle, the peak can be reached for the optimal performance of a person who experiences stress, but yet cannot be generalized as this point is unique for every single person. This means, if the stress level

would be increased over the peak, the performance level would automatically decrease, so Homan (2002). Stress is usually negatively connotated, yet, this does not always have to be the case, since positive stress can actually be seen as an energy source (Homan, 2002). He further implies that this is usually only possible to a certain amount and that it can easily collapse.

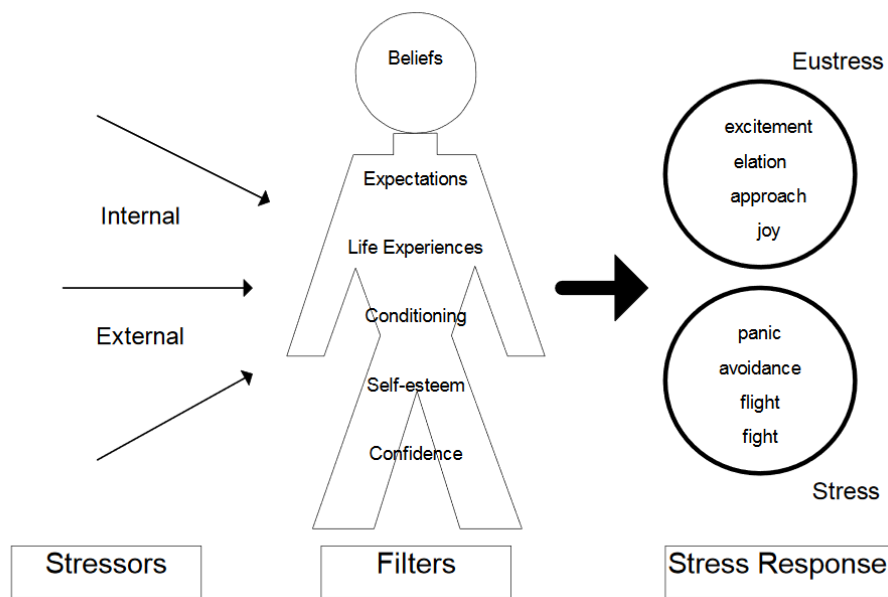


FIGURE 6 STRESS

Source: Geber, 1996, p. 4

Figure 6 summarizes and illustrates the process of perceiving stress and its outcomes. With this figure Geber (1996) demonstrates the incoming internal and external stressors for an individual who has unique experiences, skills, self-confidence, beliefs, and other characteristics, which then have a final outcome of stress response, either as perceived stress or eustress.

Understanding stress and being aware of possible effects are essential for an individual's health (Glanz & Schwartz, 2008). The authors explain that not only the psychological health is in danger through stress, but also can affect health through poorly adapted eating habits or smoking. Furthermore, stress has a negative effect on an individual's work-performance and especially on productivity and has even been declared by the World Health Organization (WHO) as the "Health Epidemic of the 21st Century" (Fink, 2017).

2.1.5.3 Well-being

The term well-being is a rather broad term which can focus on different aspects of life, however in this thesis well-being is seen as a goal of feeling a positive sentiment towards life (Gambles, Lewis & Rapoport, 2006). Well-being is a major aspect concerning work-life balance since it is closely related to being also satisfied with both domains. Positive well-being can further be described as pleasure and positively enjoying life and is definitely not just the absence of stress or sickness (Bryce & Haworth, 2002, Delle Fave & Massimini, 2003, as cited by Gambles, Lewis & Rapoport, 2006). Well-being can be experienced on an individual level, but also material or economic well-being are issues, which cannot be generalized since for instance a rich society is not automatically the happiest one (Layard, 2003/2005, as cited by Gambles, Lewis & Rapoport, 2006). The sense of well-being for an individual can be implemented for instance through paid work, since this reaches out to all kinds of individual levels such as boosting individual growth, fulfillment of social needs or giving the person some kind of identity and does not only provide an income, as the researchers further explain. Gambles, Lewis and Rapoport (2006) stress out that the exact sentiment of well-being caused by a paid job, is dependent on the individual personality.

2.1.6 Work and Employment

The topic of working time can be seen as a relevant issue, not only for an individual or a company but also globally, since they all correlate with each other (Hart, 1987/2010). There have been and there are continuous changes which cause the need to adapt to these factors (Houston, 2005). In fact, Houston (2005) states that globalization and the new economy caused for example a change concerning the expectations of customer demands and therefore force enterprises to adapt accordingly since they need to maintain competitiveness. She further indicates that therefore businesses must remain flexible. Having a job is often perceived as stressful by an individual, nevertheless, having a job is usually of great importance for an individual and not only because of monetary reasons (Fit for Work team, 2015). Having a job gives a purpose to a human's life and even an essence of pride sometimes and further allows individuals to engage with each other and enables growth (Fit for Work team, 2015).

2.1.6.1 Types of work

Work is not always the same, neither for the duties, nor when it comes to duty times, therefore, it can be differentiated widely. The most relevant ones are defined and summarized in this subchapter, which are full-time, part-time and shift work.

The most common term is full-time, which refers to a working arrangement of at least 30 hours and up to 40 hours a week usually (Marshall, 2001). Working full-time is most common

for all kind of offices jobs and are also sometimes referred to 9 to 5 jobs where a work week is Monday to Friday, where weekends and holidays are off workweek (Grosswald, 2004, Szosland, 2010). Working part-time can be seen as an alternative to full-time employment but cannot be as easily officially defined and rather depends on a firm's policy (Doyle, 2020). Therefore, also the exact hours are variable, but of course have to be lower than the full-time employment within a company (Doyle, 2020). Marshall (2001) states that part-time work is not always a matter of choice for an employee, since either there is not enough work to do or because the company simply does not want to pay benefits. Nevertheless, he continuous that based on his research, if a person chooses part-time in his or her own interest, he or she is far less stressed and has the opportunity to balance work and life better than a full-time employee.

For this thesis, shift work is most relevant and can be defined in many ways (Szosland, 2010). On possible way for defining shift work is an approach of a company to assign shifts which can be bound to certain work stations and can be constantly the same or not (Council Directive, 1993, Directive, 2002, as cited by Szosland, 2010). In general shiftwork refers to duty times which are simply abnormal from the normal standard hours and workweek (Grosswald, 2004, Szosland, 2010). Therefore, shift work is often also referred to simply irregular work hours, which can also be night shifts or rotating shift, regardless of the day of the week, so the author. The most common jobs which are bound to shift work are pilots, flight attendants, air traffic controllers, nurses, doctors in hospitals, but also of course police officers or firefighters (Eriksen, 2018; Heathfield, 2018). Unfortunately, shift work is strongly associated with severe health problems which are caused by the irregularity and disruption of the biological rhythm of an individual, so the researcher Szosland (2010).

The term flexibility in relation to working hour is used quite often. Flexibility in general is defined as the degree to which certain boundaries can be extended and adapted (Emslie & Hunt, 2009). This again, can therefore be applied to working hours or also to the location from which an employee works from, as the authors explain. Further research comes to the conclusion that flexibility eases an individual to achieve work-life balance (Duxbury & Higgins, 2006). This is also underlined by Houston (2005), yet she argues that often companies do not see work-life balance as the main aim behind flexible work-arrangements but rather as an opportunity to minimize overtime payments and to create non standardized employment agreements.

These flexible workhours are most often considered to be "reserved" for employees which have to take care of their children, so Zheng (2015). Nevertheless, flexible working arrangements should not be only focused on people with children, since there are also other duties, e.g. caring for sick, which should be taken into account, as these people are also strongly dependent on their employers cooperation (Skinner & Chapman, 2013, as cited by Zheng, 2015). Another social group which benefits flexible work-arrangements are students which therefore get the chance to enter the job market (Houston, 2005). Nevertheless, the author once more

points out that the flexibility can result in poorer working conditions and unfortunately also in a higher insecurity towards the job.

2.1.7 Health

The aspect of health is an issue which is also recognized by the Commission of the European Communities, which states that it is severely important for the overall well-being for every human being, as well as overall societies (Cooper & Bevan, 2014). Even the European Union puts focus on the importance of work and personal life concerning health among individuals through various policies (Crompton, 2006, as cited by Lunau et al., 2014). Within health, it can be distinguished between physical and mental health, which are both highly dependent on the physical environment and are influenced through work-life conflicts or also leadership (Cullen & Hammer, 2007, Barling, Loughlin & Kelloway, 2002, as cited by Chen & Li, 2014). The current health status and the effects of possible role conflicts have an impact on the work performance potential of an individual, as well as the private life and is therefore relevant for an overall work-life balance (Chen & Li, 2014).

Most often, conflicting psychological influences at the workplace create numerous health issues for individuals, which include possible cardiovascular diseases, mental illnesses or even obesity (Lunau et al., 2014). The identified factors which create such sicknesses are insecurities or instabilities concerning the job, job strains and effort-reward imbalances (Karasek & Theorell, 1990, Siegrist, 2005, as cited by Lunau, 2014).

Physical health describes the status of a human body which considers the individual fitness level as well as the absenteeism of any kind of disease, basically a healthy physical status of an individual ("Physical health - EUPATI", 2015). The European Patient's Academy, short EUPATI, further stresses out the importance of physical health on the overall perceived well-being of a human. Furthermore, various influential effects on physical health can be identified. First, of course the personal lifestyle is a key factor since it decides over diet, doing sports or being a smoker ("Physical health - EUPATI", 2015). Secondly, also the genetics play a role for physical health as they are kind of a precondition to what extent healthiness can exist and achieved, as EUPATI (2015) explains. Additionally, the personal environment is influential since it decides over the factors to which an individual exposes him or herself and lastly, also healthcare services are considered as important towards physical health since some illnesses can be prevented or treated by it ("Physical health - EUPATI", 2015).

As already implied in chapter 2.1.5.2, stress, or more precisely the amount of stress an individual perceives, has an impact on health and therefore experiencing stress for a continuous longer period of time, will unpreventably cause health, either physically, mentally or both, so Homan (2002). A common illness which occurs after being stressed for a longer time is burnout. There is no precise definition for a burnout and has not been an official medical diagnosis

for a while and was and still is often rather diagnosed as depression (Korczak, Huber & Kister, 2010). A burnout is created when imbalances are perceived in areas like: workload, fairness, people around you, lack of balance in benefits or also in control (Saunders, 2019). Burnouts do have a negative impact on an individual, social and also economical level (Korczak, Huber & Kister, 2010). However, it can be argued that mental and physical health issues are strongly related to each other (Ohrnberger, Fichera & Sutton, 2017).

2.1.8 Relationships

The first relationships of a human being are built when being born and become more complex and reach all kind of different dimensions throughout life, which are never constant (Levitt & Bor, 2003). Therefore, various researchers and psychologists have drawn various conclusions as well as theories concerning relationships and their patterns.

2.1.8.1 Theories influencing relationships

A very essential theory which concerns every single relationship of an individual, is attachment theory, which has the power to break down and outline the complexity of these connections (Mathes, Timpano, Raines & Schmidt, 2020). In general, this theory states that social relationships and connections are automatically built, since every human being has a need to have social connections, which again provide the individual with a feeling of belonging, security or a similar sentiment which is therefore essential for the wellbeing (Baumeister & Leary, 1995; as cited by Mathes et al., 2020).

Attachment theory has derived from the significant relationship between a small child and the caretaker and implying a need for safety in stressful situations within the person of the caretaker (Ainsworth, 1991; Bowlby, 1982, as cited by Mathes, Timpano, Raines & Schmidt, 2020). The theory further indicates that when a child is provided with safety and support (in physical and emotional terms), it tends to build a stronger attachment and has the need to search for support in stressful situations (Cassidy, 2016; Dujardin et al., 2016, as cited by Bosmans et al., 2020). On the other hand, children who experience less consistency in sensing safety and support, show a lower level of trust (Ainsworth et al., 1978, as cited by Bosmans et al., 2020). The authors expound that such a behaviour often leads to distrust towards the caretaker and its capability and availability to provide the needed support. Furthermore, Bosmans et al. (2020) point out that the lack of care can result in the development of ambivalence as well as preoccupation felt by the child towards the attachment figure. Obviously, these childhood experiences concerning the attachment theory have a strong impact in the long-term for the individual human's life (Bowlby, 1969, as cited by Bosmans et al., 2020). In later life it shows that a securely attached person within a relationship is able to simply go on with its duties and usually feels safe and secure as well as being relaxed (Levitt & Bor, 2003). On the other hand, some-

one with an insecure attachment is rather unable to follow normal routines, which comes along with various extreme moods and feelings towards their partner, which include:

- Dependency
- Love
- Fear of rejection
- Irritability
- Angry vigilance

Source: Levitt & Bor, 2003

These insecure feelings can even go so far and lead the person to actually punishing his or her partner for being “abandoned”, since they have the strong need to be constantly physically close to them, which from their perspective has been neglected before (Homes, 1993, as cited by Levitt & Bor, 2003).

Another theory concerning relationships of an individual is the development theory, which states that the roles within a relationship as well as patterns can change (Levitt & Bor, 2003). This means, that for example, as soon as a child is involved, the partner who is left behind suddenly feels abandoned and left alone, who never felt like this before, as the authors further explain. This behaviour can be further intensified when the partner is absent from home, but the exact reaction is of course dependent on the individual’s behaviour towards such external stressors, as well as the individual beliefs (Levitt & Bor, 2003). The reaction of an individual towards the absence from home of the partner is shaped through past experiences of the individual and also other adapted beliefs, so the authors. For instance, some might find being apart from each other refreshing whilst others struggle with it (Levitt & Bor, 2003).

2.1.8.2 Couple and Family Relationships

Putting focus on tensions within couple and family relationships, it can be seen that often individual identities can be the trigger (Gambles, Lewis & Rapoport, 2006). Individual identities are assumptions about a person which are related to certain characteristics, mostly based simply on the gender of a person and these identities are rather hard to change since they are so internalized and established within an individual, as the authors explain. This can therefore also be seen within the roles within a household which are sometimes rather kept traditional, where the woman is responsible for these duties (Gambles, Lewis & Rapoport, 2006).

Studies show an increase in work-life conflict as well as parental overload among couples which have more children (Adkins & Premeaux, 2012, as cited by Zheng et al., 2015). Nevertheless, on the other hand, balance, higher wellbeing as well as greater health can be seen among

couples which work and have children and are able to manage these aspects together through sharing responsibilities (Zheng et al., 2015).

2.1.8.3 Social Relationships

Furthermore, an individual also has other social relationships besides family, which can be friends or working colleagues for example. Social relationships are seen as a resource for positive well-being which usually create happiness and are stress-relieving (Argyle, 1987, as cited by Reis, 2001). Furthermore, social relationships strongly contribute to an individual's health, on a physical as well as mental level and therefore have an influence on depressions as well as cancer, as studies show (Watanabe et al., 2019; Reis, 2001). Especially, the connection between social relationships and mental health is high. For instance, people having close relationships are far more likely to have a better mental health and further state that these close relationships are their source of life satisfaction (Sears, 1977, Kasser & Ryan, 1996, as cited by Reis, 2001). Nevertheless, this effect can also be seen vice versa, that people who do not have close social relationships are likely to report social conflicts and suffer from mental health issues (Veroff, Douvan & Kulka, 1981, as cited by Reis, 2001).

2.1.9 Measures to improve work-life balance for employees/How to integrate WLB – Organizational and Individual Level

Considering now work-life balance at the workplace, various measures and opportunities can be implemented on the individual, as well as the organizational level of a company. These incentives shall not be underestimated as stress, personal well-being and job satisfaction have an influence on an individual's performance and therefore also contributes to the company's overall success (Guest, 2002).

2.1.9.1 Individual

On the one hand, an individual is of course highly responsible itself about his or her personal work-life balance and overall well-being and therefore can implement incentives or simply work on themselves. For instance, an individual has the possibility to simply work personally on their life goals and visions, as it can be seen as an important aspect of self-identity which combines work, family and other leisure time duties (Friedman & Greenhaus, 2000, as cited by King, 2005).

As leadership is affected by work-family and family-work conflicts, it is essential to gain an understanding and identify its roots, in order to resolve them (King, 2005). Therefore, research states that it all starts with the individual itself and accordingly proposes to do a self-assessment in order to identify the individual importance in life (Friedman & Greenhaus, 2000,

as cited by King, 2005). Secondly, these conflicts can be further resolved through maintaining good connections with other individuals which interact with the individual within the spheres. Another measure by an individual is the process of raising self-awareness, so that conflicts between the spheres are minimized and time can be better allocated for gaining satisfaction between the domains (Friedman & Greenhaus, 2000, as cited by King, 2005).

A possibility to further achieve balance between the domains, can be done through work-life balance strategies which can vary a lot and can be either implemented through a company's management or by an individual himself (De Cieri et al., 2005). A work-life strategy in general can be defined as an approach to promote and improve the independence of an employee within the process of the integration as well as co-ordination of work and not work-related elements of the individual's life (Felstead et al, 2002, as cited by De Cieri et al., 2005).

Strategies/Courses of Action	Frequency (n = 140)	Percentage
Engage in activities to manage stress (shopping, exercise, sports, reading, gardening, spa, watching TV/movie)	129	92.14%
Have the business located at home or near residence	110	78.57%
Plan work and household chores ahead of time	109	77.86%
Manage time efficiently	105	75.00%
Adopt a flexible time in work	90	64.29%
Have specific schedule for family activities like recreational/travel/ dining out/outing	84	60.00%
Use technology (cell phone, internet) to manage work and home	65	46.43%
Delegate work and other responsibilities to family members or house help or trusted employee	64	45.71%
Pray or attend mass daily	56	40.00%
Establish open communications with family members and in-laws	45	32.14%
Consult parents or in-laws about business concerns	38	27.14%
Learn to do multi-tasking	40	28.57%
Embrace single parenthood	28	20.00%
Network with friends and other people in the business community or social organizations	25	17.86%
Bring children to work	20	14.29%
Share with spouse work and family responsibilities	15	10.71%

FIGURE 7 WLB STRATEGIES

Source: Edralin, 2012, p. 205

For instance, a study about Filipina entrepreneurs (Figure 7) indicates various possibilities of personal WLB strategies and indicates the most pursued strategies by these women (Edralin, 2012). Most notably, the primary measure to cope with stress is scheduling leisure time activities like doing sports, going shopping, spa appointments etc., whatever fits the individual most. The next advantage identified is that the workplace is near to home. Another aspect which becomes quite clear when having a look at this table is the issue of time management. Various strategies in this table indicate planning ahead and efficiently for work as well as (family) life domains. Nevertheless, this table also indicates a gender gap as sharing work-life responsibilities with the spouse are not very common and frequently made use of.

The implementation of work-life balance strategies on an individual basis has a positive impact on the health as well as the wellbeing of the individual, as studies show (Zheng et al., 2015). Furthermore, the study also revealed that there is a positive impact on achieving balance because of the individual's incentives towards WLB (Zheng et al., 2015).

2.1.9.2 Company

In order to reduce stress for an employee and subsequently also to avoid a work-life conflict, it is advisable to make use of implementations to increase the autonomy for the individual (Friedman & Greenhaus, 2000, as cited by King, 2005). Further, the researchers imply that also socializing with peers can contribute to WLB. In fact, studies showed that the following measures contributed positively to the employee's performance:

- Home office
- More time at home
- Flexibility of working hours

Source: (Friedman & Greenhaus, 2000, as cited by King, 2005).

These implications once more indicate the importance of giving an individual the chance to maintain a satisfying work-life balance and reducing conflict potential in both dimensions (King, 2005).

Further, within a company there are various reasons or barriers which can limit a positive work-life (balance) for the employees (De Cieri et al., 2005). These include for example an organizational culture focusing and rewarding long working hours as well as a strong organizational commitment which of course forces the staff to give more priority to work-life rather than on their private or family life. Furthermore, the researchers also identify a harmful working environment as a barrier. More specifically De Cieri et al. (2005) pinpoint isolation, hostility and especially unsupportiveness at the workplace as obstacles. Another main threat for a good working environment can be the management as well as a superior supervisor with certain preventing beliefs or approaches (De Cieri et al., 2005). Additionally, also missing communication and know-how about work-life balance strategies are identified as factors for WLB.

Considering WLB strategies on an organisational level can include various policies concerning for example flexible work settings, parental leave, or childcare (Bardoel et al., 1998, Kramar, 1997, as cited by De Cieri et al., 2005). Nevertheless, the authors also point out that often many companies make use of these policies in order to follow economic purposes of the company rather than really meeting the employee's needs (Gray & Tudball, 2003, as cited by De Cieri et al., 2005). The authors further explain that a company's management might include

other motives such as cost reduction or improving the productivity for their decision process regarding WLB strategies. Furthermore, it can be said that work-life balance strategies may vary throughout the world and can be unique for every workgroup.

That a healthy workforce is essential for the overall performance of a company has been made clear repeatedly through literature, nevertheless, businesses do not often put health of an employee as one of their priorities (Cooper & Bevan, 2014). Cooper and Bevan (2014) identified seven areas which are developed and strengthened if an employer decides to put focus on the health and overall well-being of its employees. These are:

- Decrease in absence from work due to illness
- Decrease in work accidents
- Strengthened employer brand image
- Increased productivity of the workforce
- Stronger engagement and commitment of employees towards company
- Stronger flexibility and resilience of employees
- Greater retention of employees towards the company

These dimensions show that the effects are by far deeper and makes the employee as well as the employer better off.

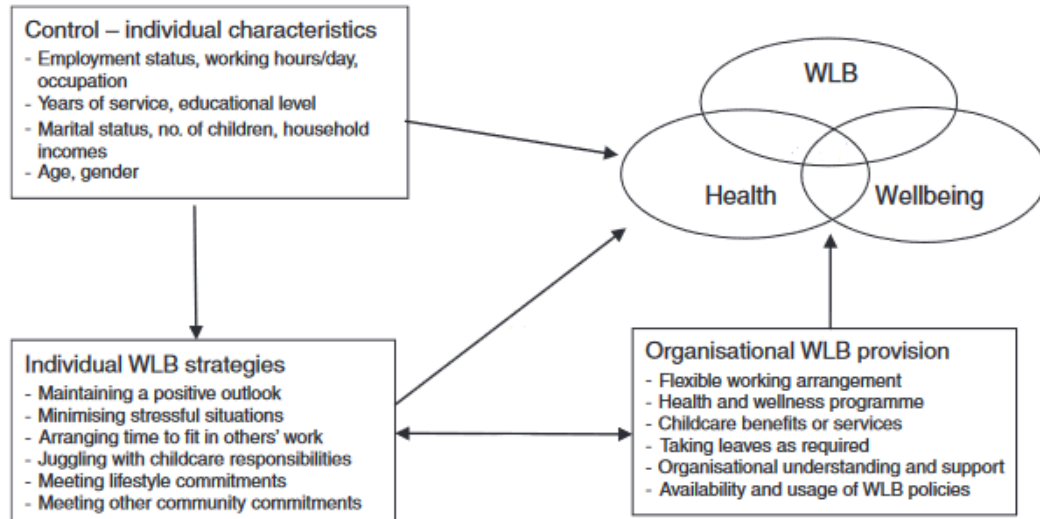


FIGURE 8 WLB STRATEGIES

Source: Zheng et al., 2015, p. 361

Figure 8 above serves as a further illustration and summary of work-life balance incentives and strategies, including their influential characteristics and outcomes. On the one hand, the individual’s personal characteristics, like e.g. job, age, marital status etc., shape the individual in-

centives towards WLB, as Zheng et al., (2015) present. The researchers further indicate that, these individual work-life strategies are often quite simple through for example just remaining positive or also more challenging when needing to also handle children. On the other hand, the organizational influence has the power to ease the lives of its employees through numerous incentives, of which flexibility of working hours and arrangements are most needed. A possible and desirable outcome of implementing WLB incentives is the combination of good health, wellbeing, and a satisfying work-life balance. For the given reasons, it can be concluded that there is no single best fit solution nor an easy task to achieve satisfaction, health and balance. However, it is the combination of the effort of an individual and the management of an enterprise, which enables an individual to create work-life balance (Zheng et al., 2015).

2.2 Airlines and Air Crews

This part of the literature review now approaches the aviation industry. Therefore, a short overall overview about the industry will be given. This is followed by an in-depth insight into the job of commercial aircrews, which includes cabin crew as well as cockpit. Additionally, also the work-life balance of flight crews is analyzed.

2.2.1 Aviation industry – History and Overview of the industry

Looking back for over a little more than 100 years, huge improvements and achievements within the aviation industry can be seen (Wensveen, 2011). The first true beginnings of the industry can be found in the early 20th century, right after the First World War, yet, the greatest developments of the aviation industry can be seen since the end of the Second World War (Hanlon, 2007). In Europe from 1918 onwards, the first commercial passenger airlines have been founded (Cook & Billig, 2017). Another boom and a new millennium for the aviation industry took place from the mid 1990's, profiting from an increase in GDP and a higher demand which was due to globalization, yet, this rise only lasted till 2001-2003 (Cento, 2009). Dennis (2005) identifies the overall economic downtrend, as well as the outbreak of SARS and the event of 9/11 as factors for the end of the growth (Dennis, 2005). Furthermore, Doganis (2002) points out that the before created over-capacity and competition on the market led to this crisis. Shortly after this, the economic crisis of 2008 followed, which again led to a decreasing demand and airlines were forced to adapt their capacities (Franke & John, 2011). However, the crisis from before somehow prepared airlines to react more quickly and as a result from the crisis, the gap between sufficient and insufficient business strategies increased, the authors explained. In general, it can be seen that airlines have been and are strongly shaped by economic crisis and recessions. Throughout the last century the aviation market was strongly regulated, which further shaped the entire industry (Cook & Billig, 2017).

The most recent crisis which the aviation industry has to face is the COVID-19 virus outbreak in Q1 of 2020. The virus forced airlines to temporarily discontinue their operations and a worldwide decrease of 55% in demand for the rest of the year is estimated (IATA, 2020). This can also be seen in the massive drop of share prices, as well as low fuel prices and of course liquidity issues for the airlines (IATA, 2020). The full harm as well as the possible full recovery for the aviation industry, can currently only be vaguely estimated. The CEO of Delta Air Lines estimates a possible recovery in two to three years (Whitley, 2020). A similar estimate is done by Alexander Otto, a manager of Austrian Airlines, who estimates only a 25-50% demand for the remaining year, as well as only 75% by the end of 2021 (Gruber, 2020).

Nevertheless, generally, the aviation industry contributes strongly to the world's economy as well as for a continuous growth (Cook & Billig, 2017). Furthermore, it belongs to travel and tourism industry which is considered to be the largest industry worldwide (Hanlon, 2007). In

fact, within the transportation industry, aviation counts as one of the most rapidly thriving ones (Ferla & Graham, 2019). Therefore, the aviation industry can be described as essential for the global tourism and also the businesses involved in it (Cook & Billig, 2017).

In 2019 the Air Transport Action Group (ATAG) reported 10.2 million jobs directly in the aviation industry and 65.5 million employments overall within the industry all over the world, (ATAG, 2020). Compared to data from 2013 of the aviation industry an increase can be seen. In fact, back then overall only 57.8 million jobs have been within the industry, of which 8.7 million have been directly within the industry (ATAG, 2014, as cited by Cook & Billig, 2017). This growth took place for various reasons, on the one hand of course, globalization plays a major role, but also liberalization, demographics and factors of production can be seen as major influence (Cook & Billig, 2017). The authors further distinguish between these factors concerning their focus on either the supply or the increase of travel demand.

2.2.2 Airlines – Overview and Structure

In order to be able to achieve such a big impact and employ so many people within an industry, it is obvious that there have to be many air carriers. An air carrier is defined as an airline which engages within air transportation which can be done either directly, via leasing or different arrangements (Vasigh, Fleming & Tacker, 2013). Furthermore, it has to be differentiated between commercial and freight airlines, whereas a freight or cargo airline focus on the transportation of goods and not on passengers or their baggage (Wensveen, 2011).

The amount of cargo flights have made up about 30.8 per cent of all flights in 2000, however, passenger flights are more common (Doganis, 2002). In fact, by the end of 2018, worldwide 1303 different commercial airlines have been counted, which transported 4.5 billion passengers in 2019 (ATAG, 2018; ATAG, 2020). Like within any other business, also the size, as well as the business model of an airline can range a lot through its operational traits and dimensions (O'Connell, 2019). Nowadays, the main business models among commercial airlines are full-service carrier (FSC), low cost carrier (LCC) and charter carrier (CC), of which FSC and LCC are more dominant and compete more against each other (Cento, 2009). Depending on an airline's capabilities and focus, they also may choose to fly either short-, medium- or long-range, or a combination of it, for this, an airline will need an appropriate aircraft fleet (Cook & Billig, 2017).

As every other business, also airlines aim to achieve their goals like e.g. increase of profits or simply to grow, in order to be able to do so, the management and its decisions are essential (Wensveen, 2011). However, the author underlines that there is not a single way to manage an airline, since it depends very much on the size as well as the chosen business model of it. Nevertheless, the author further acknowledges that there normally always is a top, middle and operating management, yet, it is once more pressured, that exact size of each department or

level of management is distinctive depending on the overall size of the airline. The biggest workforce of an airline is the so-called line personnel, who are the people who work for sales or are reservation clerks, but also flight attendants and pilots belong to line personnel (Wensveen, 2011). Wensveen (2011) further stresses out the great importance of line personnel, since they have most contact with the customers, which consequently comes with great responsibility.

2.2.3 Job description, duties and training - What is a pilot? What is a flight attendant?

As already mentioned above, cabin crews belong to the biggest part of airline's employees. Furthermore, they are mainly the representatives of the airline and its image for the customer, as they really face each other. The term cabin crew includes only stewards and stewardesses, whereas cockpit or flight crew refers to the pilots and, if applicable, also the flight engineer (Doganis, 2002). When combining the entire cabin, as well as flight crew, the term flight crew, or flight crewmembers is often used (Cook & Billig, 2017). Both occupational groups have to fulfill certain prerequisites and various trainings, before being able to pursue their career, which are based on international regulations ("Cabin crew initial safety training | UK Civil Aviation Authority", n.d.). Two very strict basic requirements which are the same throughout the industry which have to be fulfilled beforehand from future flight attendants are a medical exam and a minimum age of 18 ("Initial Cabin Crew - BAA Cabin Crew Training", n.d.). The initial cabin crew trainings can be done either by a certified training institution or by an airline itself, whereas the second option is way more popular (European Commission, 2012). These initial trainings may last from only 10 days to up to 7 weeks, whereby the trainings of bigger airlines usually last for six weeks ("Cabin Crew Europe-Training", n.d.; Alitalia Training Academy, n.d.; Makó et al., 2018.).

The main topics of such an initial cabin training of an airline include:

- General aviation theory
- First aid
- Dangerous Goods
- Safety training
- Fire training
- On board service
- Passenger handling

Source: Makó et al., 2018

When actively flying, flight attendants have to do a recurrent training as a kind of refresher in order to be allowed to fly, which generally covers and refreshes the above topics once a year

(Kolander, 2019). On the other hand, the training for becoming a pilot is far more complicated and can last for years, further also the selection process before is way more demanding (Sommer, 2014). The pilot training consists of two big main parts which are: basic-training and later the type-rating (Sommer, 2014). Starting from the scratch with pilot training, also called “ab initio”, on average costs between 150.000€ to 200.000€ and takes about 3 years, depending on the personality and external factors, so Sommer (2014). Also, pilots have to do a recurrent training which is usually every six months, usually done on a simulator but sometimes also on scheduled flights (Orlady, 2010; Sommer, 2014)

Furthermore, also different hierarchies among crews can be seen. For instance, considering the cockpit, it needs to be differentiated between the captain and the co-pilot, often also referred to as first officer (Nevile, 2001). Some airlines also have the position of second officer, which is also a co-pilot, but with less experience than a first officer (Stone & Babcock, 1988). In some cases, especially on long-range flights, there is a so-called relief pilot which has the duty to take over the captain’s duties when resting and generally is a first officer with additional qualifications (IFALPA, 2013). Nevertheless, it shall not be forgotten, that a co-pilot has the same qualification and is able to fly and land the plane on his or her own, even though he or she is subordinated to the captain (Alam, 2015). Generally, the main difference between a captain and a co-pilot is the experience, the salary and most importantly the final authority (Smith, 2013, as cited by Alam, 2015).

Also, among the cabin crew different ranks can be seen, which can be more complex, depending on the size of the aircraft and the therefore needed attendants. Depending on the airline itself and the size of the aircraft, various cabin crew positions are implemented, the most basic categorization is the junior or senior position (Ford, Henderson & O'Hare, 2014). Besides that, other airlines categorize from low to high rank with a few more positions: stewardess, senior, assistant purser, purser, senior purser and chief pursers (Kim & Park, 2014). However, overall, it is usual that the captain has the final call over the entire flight crew when it comes to decisions (Orasanu-Engel & Mosier, 2019).

2.2.4 Duty times – working hours, irregularities, legal regulations

The duty plan is of great importance for the airline but also for the crew member itself, since the efficiency of the airline partly depends on it and for the employee it decides over the entire private as well as of course working life (Wensveen, 2011). A very dominant problem throughout all airlines is the management’s wish to maximize the hours possible for each crew member and to minimize the requirements of crew members on every flight, whilst of course each flight attendant wants to maximize his or her satisfaction with the duty plan (Yan, Tung & Tu, 2002). Planning crews efficiently is a complex process for the airline, as the monthly schedule for the crew member has to be in accordance with governmental regulations, but also with the airline’s own policy as well as labour unions (Yan, Tung & Tu, 2002). Furthermore, also the

airline's costs are a decisive factor involved for planning the layovers (Sandhu & Klabjan, 2007, as cited by Díaz-Ramírez, Huertas & Trigos, 2014). Therefore, it is impossible to generalize duty plans among the entire industry. Furthermore, also the fleet of an airline, as well as of course also the amount of workforce available has an influence on the exact work schedules (Díaz-Ramírez, Huertas & Trigos, 2014).

The duty plans are compiled by crew scheduling and crew rostering, the department of crew scheduling arranges all of the monthly rotations and flight pairings, whereas crew rostering assigns the exact crew members for the flights (Yan & Chang, 2002). Crew scheduling can also be called crew pairing, which is pretty diverse, it can range from single flights during a day with coming back home afterwards to a multiple day rotation with spending every night in a different city, of course with very irregular duty times (Cook & Billig, 2017). When long-range trips are involved, the layovers can last from 1 day only to an entire week all over the world (Eriksen, 2018).

Within a duty plan of an aircrew, also different types of working hours must be distinguished. One time measurement option and essential term within duty plans is block hours or block time, or sometimes also just called flight time (Doganis, 2002; Yan & Chang, 2002). Block hours are defined as the point in time when the doors of the aircraft are closed before the start until they are opened again at the destination (Vasigh, Fleming & Tacker, 2013). Nevertheless, some airlines prefer to count as soon as the airplane moves on it's on until the final gate arrival (Doganis, 2002). Furthermore, block hours can be seen as a measurement of the utilization of an aircraft (Vasigh, Fleming & Tacker, 2013). Another notion is duty time, which includes flying time, as well as the briefing time for before and after the first flight (Yan & Chang, 2002). Furthermore, the authors point out that rest times are essential for crews and refer to the periods between two duties. A further irregularity and characteristic of duty plans for air crews are reserve or stand-by duties. This means they are on hold for when a colleague of same rank calls in sick or for a flight which is somehow not covered (Cook & Billig, 2017).

The work schedule is usually published to the crews during the month and normally is valid for the entire upcoming month (Tsaur, Hsu & Kung, 2020; Yan, Tung & Tu, 2002). Usually, airlines grant one or more flight wishes per month to their crews, in order to increase their satisfaction, which are based and granted depending on the seniority of the individual (Day & Ryan, 1997, as cited by Yan, Tung & Tu, 2002). Furthermore, for every duty the crews are randomly scheduled and put together, which means that they are most often working with someone they just met before the flight (Smith et al, 2000, as cited by Tsaur, Hsu & Kung, 2020).

The duty time itself always depends on the flights and destination, however, there is a maximum duty time limitation, which is 16 hours a day (Wensveen, 2011). The Federal Aviation Regulations (FAR) further state that after a 16 hours duty, a minimum period of 10 hours of rest has to be given to the crew member, so the author. Furthermore, it is required that within

any 24-hour timeframe which included flight time, has to be followed by at least 8 hours of rest (Wensveen, 2011). Another FAR regulation implies that within 7 days, a maximum of 40 hours of flying time is the limit and further after seven consecutive days 24 hours off duty must be granted, as Wensveen (2011) summarizes.

However, the correct way of planning a duty plan is essential to ensure the safety of all individuals involved and also for Fatigue Management, which is also captured by the ICAO (Novak, Badanik, Brezonakova & Lusiak, 2020). In fact, the ICAO Doc 9966 focuses solely on the importance and principles of fatigue and outlines them as followed:

- Sleep demand
- Loss of sleep & rehabilitation
- Daily consequences on performance
- Daily consequences on sleep
- Power & amount of workload

Source: Novak et al., 2020

Due to the irregularities of flights and the therefore resulting unregular working hours for crews, fatigue will automatically occur sooner or later, as the authors further imply. Within the limits mentioned above and depending on the airline and their exact calculation of flight hours, a maximum of 80 hours duty time per month for a crew member flying full-time is normal (Wensveen 2011). The author further mentions that there are even airlines where the crews fly for only 55 hours. These working hours might seem comparatively low towards a basic 9 to 5 office job, yet, as already indicated before, this is mainly due to safety reasons and other factors which are taken into account. Crew members never have the same work routine, which makes them to shift workers who do not even have the same “office” every time (Bor, Field & Scragg, 2002). Crews are not automatically free every weekend or can start their work at more comfortable times, early check-ins and nightshifts are their routine, regardless which day of the week or holiday it is (Eriksen, 2018).

2.2.5 Health – physical and mental health

The job of a crew member comes with stressful situations, these may occur through the constant changes of their colleague and the great variance of places and can cause various health issues which can be either physically or mentally (Levitt & Bor, 2003). Overall, crew members should be attentive to the psychological aftermaths which may occur through physical burdens of the given flight environment (Richards, Cleland & Zuckerman, 2016). In general, flight attendants, but especially pilots, are expected to be mentally stable, since they are responsible for hundreds of lives, therefore, crews always must be at their highest performance level, (Wallace, 2019). These mental health issues have a large range from minor to major problems,

of which temporary stress is considered as a small issue and lasting personality or lifestyle troubles obviously as major (Bor, Field & Scragg, 2002). Often, not only external factors cause mental health issues, but rather the job of a crew member itself creates them, as jetlag, fatigue (caused by duty irregularities), stress and the interruption of all kind of relationships change and influence the individual, as the researchers further clarify.

A common mental issue among flight personnel is a burnout, which is the final cause of an experienced work-life conflict which has automatically increased the stress level of the individual (Chang & Chiu, 2009, as cited by Chen & Chen, 2012). Chen and Chen (2012) further identify work-life conflicts, which are due to the job traits of crews, as the essential forecast for a burnout. The most common negative effects of burnout among crew members are irascibility, depression, health issues caused through stress, decreased commitment towards the firm and also conflicts at the workplace are more common, which effect the person itself as well as the airline (Maslach et al., 2001, as cited by Chen & Chen, 2012). According to the researchers, burnouts among crew members have a severe effect on the health of flight personnel with the potential to enhance these issues.

Concerning only the flight crew, also so-called adjustment disorders are very common among them (Morse & Bor, 2016). This disease focuses on the maladjusted reaction behaviour of a pilot when being confronted with a psychosocial stress factor, whereas the individual's reaction is displayed after roughly three months after the trigger, as the two researchers further explain. Morse and Bor (2016) also point out the importance that if a pilot is diagnosed with an adjustment disorder should immediately be grounded, since aviation's safety is at risk. However, in general this illness is relatively easily resolved through mental health therapy or counselling without any medication and therefore not a complete threat for the pilot's job (Morse & Bor, 2016).

Among cabin attendants sometimes also boreout occurs as a mental health issue, which is created through a combination of misbehaving passengers, irregular duty times, role stress, emotional discrepancies and/or stress at work and can be described as a negative mental state where a person only has a very low level of arousal (Cheng et al., 2018; Karatepe & Eslamlou, 2017; Vatankhah & Darvishi, 2018; Stock 2015, as cited by Karatepe & Kim, 2020). Boreout is displayed through three different signs which are:

- Work-related meaning crisis
- Boredom of job
- Growth related crisis

Source: (Stock, 2015, as cited by Karatepe & Kim, 2020)

This means, that the cabin attendant who is suffering from boreout, is incapable to concentrate properly on their job-related tasks, cannot see any purpose in the job anymore and fur-

their lack to achieve goals or growth and are unable to pick up new knowledge (Stock, 2016, as cited by Karatepe & Kim, 2020).

Moreover, crew members are also very likely to suffer from various physical health issues, of which the most common ones are:

- Back pain
- Repeated colds
- Breathing problems
- Gastritis
- Diarrhea
- Indigestion
- Inflammation of the bladder

Source: (Ballard et al., 2004)

In addition to these relatively transient sicknesses, flight attendants and pilots are further said to be often affected by occupational cancer and difficulties concerning reproduction (Ballard et al., 2004). Aircrews are experiencing far more cosmic radiation as well as UV radiation than other staff in the service industry (Sanlorenzo et al., 2015). This radiation is therefore often seen as cause for breast cancer and various melanoma (Ballard et al., 2004).

2.2.5.1 Stress among aircrew

Stress is a constant companion in life and is in general always self-imposed, yet, the individual's reaction towards the stress factor is what actually weighs (Homan, 2002). Considering stress specifically for aircrews it can be distinguished between three different types of stress which can be perceived and are environmental stressors, acute reactive stress and life stress (Green, 1985, as cited by Rigg & Cosgrove, 1994). The two main environmental stressors for aircrews are fatigue and lack of sleep, whereas acute reactive stress focuses on the behavior and the reactions of a crew member during an emergency situation on board (Green, 1985, as cited by Rigg & Cosgrove, 1994). The last stressor, life, is mainly the private life of the individual but also considers for example perceived job uncertainty and is overall the most important stressor (Green, 1985, as cited by Rigg & Cosgrove, 1994).

Stress is a very present feeling for every single crew member, as it is usually felt several times for every single duty, which is also held within a very common saying among the industry which states that "*Flying is long hours of boredom interrupted by a few moments of stark terror*" (Homan, 2002, p. 15). These severe stress moments can be due to for example system failures, medicals, unruly passengers, demanding approaches, safety hazards on board and

many more, as the author further discloses. The pressure of performance, as well as the long working hours are often factors which cause stress for flight crews (Wallace, 2019). Yet, stress can also already occur even before a flight since the check-in time of the crew member is rather strict or simply the fact knowing to meet new colleagues again for the first time, or also due to the situation of being away from home for some time (Eriksen, 2018).

Further, specific stress related issues for pilots include the inattentiveness concerning their flight activities, followed by the inability to make decisions, thinking rigidly, task distraction, inability to assess the situation and also technical issues (Reinhart, 1996, as cited by Homan, 2002). In case of decision-making errors and other mismanaging of stressful situations in the aviation industry, dramatic accidents can be the consequence, so Homan (2002). Therefore, it can once more be seen that pilots' and cabin crew's balance is essential to flight safety.

2.2.5.2 Fatigue and Jetlag

Most certainly, crew members often suffer from fatigue as well as jetlag, which simply result through the irregularities and long hours of their duty times, which include all-nighters as well as early or late check-in times (Caldwell et al., 2009). The authors call attention to the fact that within aviation fatigue is often underestimated, especially the effects of it and definitely should be drawn attention to since airlines operate on a high-risk level.

No matter if a pilot or flight attendant flies short-haul or long-haul, either way sleep loss and fatigue is experienced. Crew members which fly long-range will automatically suffer from emotional as well as physical exhaustion (Kim & Park, 2014). Furthermore Caldwell et al. (2009) found that pilots on the long-range suffer from the disruption of time zones as well as sleep deprivation which causes their fatigue. On the short-range on the other hand, time zones are usually not an issue, but fatigue can be traced back to experiencing high workload (since on short-range more flights have to be performed) and sleep deprivation (Bourgeois-Bougrine et al., 2003, as cited by Caldwell et al., 2009). Fatigue among aircrews is in fact one of the main roots of aviation incidents (Yildiz, Gzara & Elhedhli, 2016). Studies even show that there is a correlation between the fatigue level and the number of incidents caused by a pilot and his or her length of duty (Goode, 2003, as cited by Yildiz, Gzara & Elhedhli, 2016). This statement is further confirmed by statistics which show that a minimum of 4-8% of all accidents in aviation are due to fatigue (Caldwell, 2005, as cited by Yildiz, Gzara & Elhedhli, 2016).

Overall, it can be said that maintaining a healthy mental status is a serious issue, which makes up a part of work-life balance and is further essential for various reasons as Bor, Field & Scragg (2002) indicate. The researchers claim that mental health impacts performance and therefore is responsible for the safety of crews and passengers. Further, they point out that in case of any minor incident, that there are severe consequences (legally & financially) for the crew member as well as the airline and therefore mental health should be precisely monitored.

2.2.6 Relationships of aircrews

Working as a pilot or flight attendant comes along with the continuous change of colleagues, the absence from home from family, friends and spouses, which automatically influences and changes the original patterns of their relationships (Levitt & Bor, 2003). The relationships a crew member experiences differ from the ones other people who have a regular life experience, since transitions, so travelling, as well as irregular duty times, bring the perturbation into the picture, so the authors. The authors further clarify that perturbation which occurs through transitioning causes an emotional roller-coaster of all kinds of emotions, positive and negative, and definitely has the power to eliminate all kind of support systems as well as conventional routines. Therefore, it can be said that the combination of travelling by air and the absence from home, have created a new routine for numerous people, but especially for crew members (Levitt & Bor, 2003).

2.2.6.1 Professional relationships

Considering first the professional relationships among crew members, they are often obviated by crew rostering and therefore the formation and development of these relations is often impossible (Bor, Field & Scragg, 2002). This is further pointed out by Eriksen (2018) who explains that there is simply no stability for them, since they are always being newly put together and accordingly a strong bond with colleagues cannot really be developed. Nevertheless, this downside can also be seen as an advantage as the variety of personalities is bigger, yet, seeing this positively or negatively depends strongly on the individual character, so the author. Another important aspect which should be considered among professional relationships among crew members, is the ability to work together as a team, even if all other crew members are strangers, since the safety on board is dependent on it (Eriksen, 2018). Despite the constant change of colleagues, the relationship towards them is generally perceived as supportive and have a normalizing effect on all kind of experiences which are job related (Eriksen, 2016).

When considering professional relationships among air crews, but especially for cabin crew, not only the directly “forced” relation with colleagues is influential, but also when it comes to passengers (Eriksen, 2016). Every single passenger’s behavior has an impact on the mental and sometimes also physical well-being of a flight attendant, since sexual harassment, physical and other mental abuse are unfortunately not uncommon on board (Ballard et al., 2006).

Working as a crew member always comes along with group dynamics and the therefore possibly resulting conflicts (Ginnett, 2019). In general, crew members act according to their rank within the crew (e.g. co-pilot consults with the captain etc.) and therefore set their behaviors on board accordingly, so Ginnett (2019). Especially in emergency and other safety relevant situations on an airplane, the individual decision making and actions are and always will be essential, since one quick decision decides over many lives, as the author explains. Based on

Ginnett's (2019) research, he argues that working as a group, in this case as a crew, reduces the performance pressure of the individual members.

2.2.6.2 Social and Private Relationships

In addition to the professional relationships a crew member has, the individual also has some social or private relationships. Unfortunately, when it comes to all kind of social relationships, for instance with friends, it can be seen that these friendships are easily broken simply, because of physical separation and not enough communication, whereas the family tie is usually stronger and more stable (Levitt & Bor, 2003). The inability to maintain social relationships with family and friends, unfortunately often leads to a work-family conflict for the crew member (Ballard et al., 2004; Bergman & Gillberg, 2015, as cited by Tsaur, Hsu & Kung, 2020).

Concerning the private relationships, a pilot or flight attendant has, it can be seen that finding a balance between work and family are often perceived as stressful, but yet exactly these relationships can again be seen as an energy and support source (Levitt & Bor, 2003). In fact, studies show that happy and stable relationships or marriages can be linked to better performance among pilots, yet it can also work vice versa, that a happy relationship is driven by the contentment of the job (Rigg & Cosgrove, 1994, as cited by Bor, Field & Scragg, 2002). The authors further highlight, that it can be therefore said that flight safety is indirectly influenced by a spouse. Therefore, the personal relationships should always be considered when inconspicuous pilots start to be overtaxed by their duties (Jones et al., 1997, as cited by Bor, Field & Scragg, 2002). Research displays that when spouses of aircrew members are asked and are compared to spouses of ground crews, that they often have the feeling that they are one-parent family and are unable to engage their spouse with things they have missed whilst being apart (Levitt & Bor, 2003). Furthermore, an overall worse personal well-being can be seen, as well as a sense of isolation when left behind and followed by anger and rejection when back home due to fatigue (Rigg & Cosgrove, 1994, as cited by Levitt & Bor, 2003).

Literature states, that generally in private relationships, but especially for aircrews, attachment theory is crucial for understanding certain relationship patterns (Levitt & Bor, 2003). Within this context, attachment theory can be distinguished between secure and insecure attachments, which determine whether a person is able to handle separation and life well or not, when being apart from the partner, so the authors. Therefore, in order to be able to maintain an intimate relationship which is disrupted through physical separation, like in the case of crews, having a so-called secure base, can be seen as essential, as Levitt and Bor (2003) further indicate. The secure base provides the individuals with the sentiment of security and therefore allows them to go to work or live other facets of their life, yet, if this base again becomes unstable, tensions and attachments appear (Bowlby, 1973, as cited by Levitt & Bor, 2003).

However, nowadays it is at least easier to stay in contact with the loved ones left behind, since technology is more advanced, yet, this often makes a relationship even more complex, since it

apparently creates an alternate connection between distance and intimacy (Levitt & Bor, 2003). Levitt and Bor (2003) further reveal that knowing that the next physical separation is just around the corner, already stresses them or makes them angry, so that the intimacy whilst being face to face is not as profound as when being separated from each other.

The fact of being separated from friends and family also show an effect depending on how long the job is done (Ballard et al., 2004). The researchers found out, through a study among female flight attendants, that women who have done this job longer than their colleagues or have children, tend to see the positive aspects of irregularity and travelling as far more critical and identify fewer stable relationships with their families and others as drawbacks.

Eriksen (2018) explains the so called “passing ships phenomenon”, which occurs when two crew members are in a relationship. She indicates that even though a relationship between two people within the same carrier comes with understanding for the profession, yet, working schedules cannot always be matched and can cause weeks or sometimes also even months of not seeing each other.

2.2.7 Work-life balance issues for aircrew

Over the last years, the job of a flight attendant has received more recognition, than other jobs within the service industry, nevertheless, most people neglect the downsides and the difficulties which come with this occupation (Kim & Park, 2014). For instance, air turbulences and gravity whilst working high up in the air further increase exhaustion and fatigue (Salas et al., 2006, as cited by Kim & Park, 2014). Fatigue and sleep loss are another severe problem among crews which therefore influences both spheres of the crew members life. Furthermore, also the absence from home is very influential on the overall satisfaction with life Eriksen, 2018).

2.2.7.1 Work-life conflict

As within every other job, also flight attendants and pilots often have to deal with work-life balance conflicts. According to Eriksen (2018) there are three main reasons why a crew member experiences such a conflict:

1. Physical distance
2. Spillover effect
3. Incompatibility of behaviors

The researchers Foster and Ren (2014) outed the major reasons for work-life conflicts among flight personnel and differentiate strongly between work-related and family-related. They identify that crew members experiences work-life conflicts most often simply because of their unusual duty times, which often are rather inflexible (Colligan & Rosa, 1990; Wilson, Debruyane, Chen & Fernandes, 2007, as cited by Foster & Ron, 2014). Also, Chen and Chen’s (2012)

research states that the atypical work schedules are a severe problem and hinder the social life. Another work-related issue, specifically relevant for crew members, is the strict demands to be able to simply practice the job, which concerns the physical and mental health (Demerouti, Bakker & Schaufeli, 2005, as cited by Foster & Ren, 2014). Concerning the family-related reasons, it can be seen that the most common issues are inequality of workload at home between men and women, caring for children and generally the amount of social or family support (Crompton & Lyonette, 2011; Hewlett, 2007; Premeaux, Adkins, & Mossholder, 2007, as cited by Foster & Ren, 2014). Furthermore, Foster and Ren (2014) identified a difference between Eastern and Western cultures and the therefore resulting differences, personally and firm related, for instance in the East the value of family is seen as far more important than in the West (Hassan, 2010, as cited by Foster & Ren, 2014).

<i>Work- and family-related factors</i>	<i>Correlations with WFC</i>		
	<i>Phoenix airlines</i>	<i>Panda airlines</i>	<i>Dragon airlines</i>
Job type	0.003**	0.014*	0.000**
Work schedule inflexibility	0.021*	0.039*	0.022*
Job demands	0.025*	0.042*	0.418
Length of leave	0.034*	0.285	0.021*
Organization's negative views on women	0.004**	0.031*	0.014*
Number of children	0.065	0.771	0.056
Age of children	0.841	0.590	0.084
Eldercare	0.986	0.566	0.591
Domestic work	0.618	0.485	0.830

*Correlation is significant at the 0.05 level (two-tailed).

**Correlation is significant at the 0.01 level (two-tailed).

FIGURE 9 WORK-LIFE CONFLICT CORRELATIONS

Source: Foster & Ren, 2014, p. 1574

Figure 9 above illustrates the results of Foster and Ren's study in 2014 among female flight attendants from three different Asian airlines, Phoenix, Panda and Dragon Airlines, and shows their final identified correlations between work and family related aspects. In more detail, the results reveal for Phoenix airlines that there is a significant correlation between work-life conflicts and job-related factors, since all the p-values amount to under 0.05 (Foster & Ren, 2014). The researchers came to a similar output for the other two airlines, where only one factor was not strongly related. Therefore, it can be said that overall, the study clearly shows that work-life conflicts mainly arise through work-related factors and are not caused by family-related ones (Foster & Ren, 2014).

2.2.7.2 Work-life balance dynamics and factors

Eriksen (2018) once more summarizes and connects all aspects and struggles with which a crew member must deal with concerning their work-life balance, which are displayed in the image below (Figure 10).

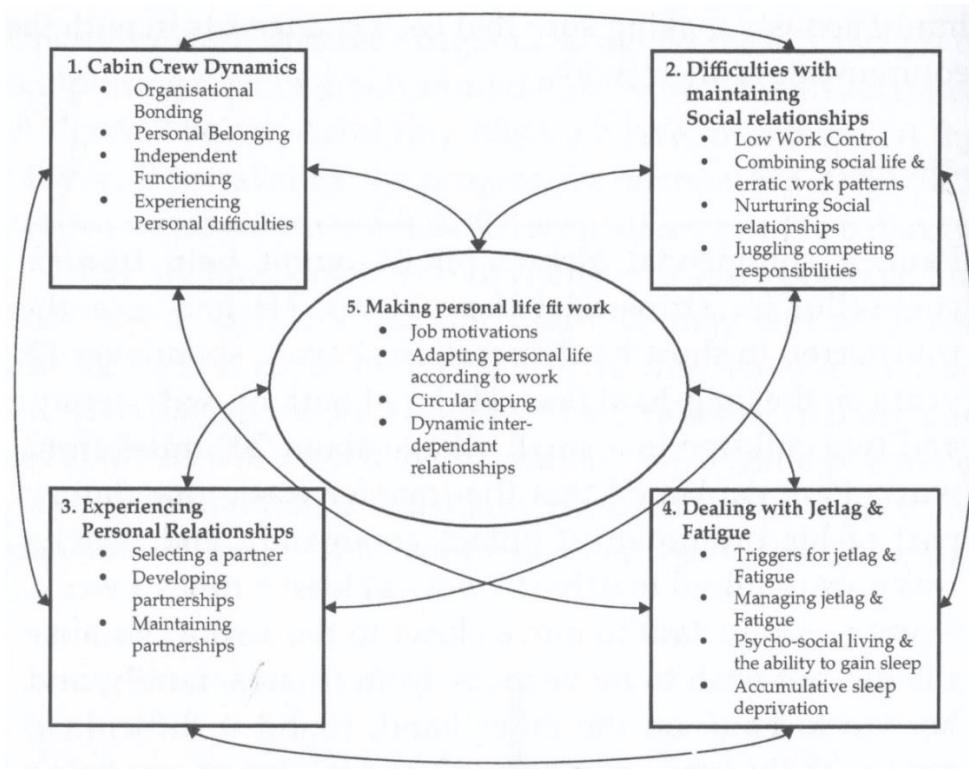


FIGURE 10 WLB AMONG AIR CREWS

Source: Eriksen, 2018, p. 77

Figure 10 precisely shows especially life- and personal-related aspects which should make the crew member more aware concerning their job, so the author. The image further illustrates the correlation and interaction between the main WLB related aspects as well as possible effects, consequences and solutions for combining both spheres and therefore creating a balance or a work-life conflict. The author and researcher identified five main different issues of an aircrew member’s life. The first one deals with the dynamics within the crew itself, which focuses on the individual traits and the interdependence (Eriksen, 2018). Secondly, the issues concerning social relationships and maintaining them when being away are pointed out by the author. Within this, the low control over the own duty plan as well as the struggle about managing relationships and responsibilities are addressed. The third part which is suggested by Eriksen (2018) deals entirely with the aspect of personal relationships and the processes from the very beginning to the continuous maintaining. As already indicated in chapter 2.2.5.2 jetlag

and fatigue among crews is quite an issue and therefore also addressed within this figure. Point five focuses on linking personal life with work life through e.g. finding motivations for the job. Eriksen's (2018) summary about these aspects give the individual crew member an overview about the relevant factors of which he or she might not even be aware. If an individual is able to follow and manage most of the aspects, it will reduce the level of stress and therefore decrease the chance of health issues, so Eriksen.

2.2.8 Work-life balance measures by crew member and by the management of the airline

As usual, the optimal balance of both spheres of an individual can be best created when the person itself as well as its employer are aware of the issues about work-life balance (Eriksen, 2018). Accordingly, the person itself has various opportunities, as well as the airline to ease a satisfaction with work and life. Nevertheless, the aim to achieve such a balance always lays within the choice of the employee itself (Harvey, Finniear & Greedharry, 2019).

2.2.8.1 Individual level

On the individual level many small, yet very effective incentives can be followed by the aircrew member itself, which will automatically lead to a more satisfying overall well-being and creates balance between work and life (Eriksen, 2018). For instance, a decisive measure by the individual itself is managing their time when being on a layover. This means that the individual crew member should try to find their perfect fit for relaxation in order to not create any additional stress and avoid coming back home even more exhausted. This is a rather individual task and can range from either finding time for him or herself, doing sports or rather spending some time with the rest of the crew (Levitt & Bor, 2003; Eriksen, 2018). However, precise time management should also be considered when being at home, where basic chores, paying bills and also focusing on an effective sleeping schedule should be integrated (Green, 2014).

Also, concerning the relationships of crew members various measures can be done on the individual level. Since, outsiders often only see the bright sides coming with the job of a flight attendant or pilot, the crew member should simply inform others about the different stress factors which are actually created through flying (Eriksen, 2018; Levitt & Bor, 2003). Concerning any social relationship a crew member has, contacting friends, family or partners on frequent basis when being apart will demonstrate the loved ones back home, that they are at least thinking of them (Levitt & Bor, 2003). The authors further suggest that the individual could actively demonstrate the family that they are important to the individual through. The authors also give precise examples like:

- Providing them with the exact duty plan
- Spending time before flying off again
- A special dinner either before or after work

- Integrating the family actively through sharing their experiences from the last layover
- Small souvenirs

Based on the suggestions from above, the most essential individual opportunities are maintaining an efficient time management, back home as well as on duty, and having organisational abilities (Eriksen, 2018). Furthermore, the researcher and author stresses out that prioritization, the ability to make constructive decisions as well as being able to think creatively, are characteristics and abilities on which an individual should work out, as through these work-life conflicts can be avoided.

2.2.8.2 Company

An airline also has various opportunities to provide its pilots and flight attendants with incentives to ease a balance between work and life for them, which should also be in their interest since, the airline's performance depends on it (Chen & Chen, 2012). A starting point from an airline's perspective is to first integrate, promote and raise awareness for work-life balance, are the trainings for crews, this can be done through the initial trainings, recurrent trainings or simply through informing the employees about this sensitive topic (Bor, Field & Scragg, 2002). Especially, the issue and great importance of mental health should be addressed, as the authors further stress out. In addition to this, also the connection between stress and private relationships should be highlighted, since they do not only influence both spheres of the individual but are further also essential for flight safety (Karlins et al., 1989, as cited by Bor, Field & Scragg, 2002).

Since mental and physical health are essential for the personal well-being, but also from a management's perspective since a fit and in balance workforce is essential also for the profits of the company, an airline could present their crews a health plan (Chen & Chen, 2012). The researchers further suggest that an airline could provide its employees with sport facilities, either within the headquarter or with discounted gym memberships, and organize various sport events. Furthermore, also Chen and Chen (2012) strongly emphasize to ensure the mental health of pilots and flight attendants and therefore advise to offer courses for psychological healing and consultative services from a professional psychological advisor.

In order to minimize fatigue among crews, the department of crew rostering within an airline is an essential key player (Novak et al., 2020). Furthermore, not only fatigue can be minimized through an effective crew planning procedure, also an airline has the possibility to provide its employees with flexibility concerning their flight requests and duty times on their own, at least to a certain limit (Harvey, Finniear & Greedharry, 2019). This means that a certain layover to the favorite destination, with the favorite colleague, to a certain date can be chosen or a few days off, based on the exact individual preferences (Day & Ryan, 1997; Guo, Mellouli, Suhl & Thiel, 2006). This measure does not only make going to work appealing for the crew member,

but also provides him or her with a certain level of self-determination and further also gives the opportunity to be at home for an important event e.g. family party, a wedding, etc., yet, these requests must of course comply with all regulations (Guo, Mellouli, Suhl & Thiel, 2006).

Various human resource policies can be implemented within an airline in order to firstly minimize work-life conflicts for crew members and secondly improve the airline's internal and external value (Foster & Ren, 2014). Precise examples for this are the option provide flight staff with the possibility to only fly part-time, or other more flexible work agreements, as well as other benefits (Beham, Prag & Drobnic, 2012; Crompton & Lyonette, 2011, as cited by Foster & Ren, 2014).

Another possibility for the airline is to offer employees as well as to their family members discounts on tickets and travel benefits, so that they can accompany their loved ones (Eriksen, 2018). These can be used by the partner, family member or friend and is therefore beneficial for all kind of relationships of a human being and subsequently also influences than the personal well-being of the crew member.

The suggested summarized incentives for an airline's management offer a variety of possibilities and can be seen as starting points to create a likeable work-environment for the employees. Through the implementation of the one or other incentive, an airline will be able to reduce its costs in various areas and create a supportive working environment, on which the individual can rely and base its further actions on (Chen & Chen, 2012; Novak et al., 2020; Wallace, 2019).

2.3 Conclusion

Overall, it can be said that work-life balance is an essential term of great importance for every single person since the personal wellbeing and consequently also the overall health is dependent and influenced by it. Minor as well as major mental health issues might arise, which can vary from stress to depression and are usually caused through a combination of fatigue, disruption of relationships, absence from home, irregular work routines and others. Therefore, individuals as well as also employers and managers need to be aware of this, since work-life balance is very complex and there is no best fit solution for everyone. This is due to the fact that every person has to face different factors in his or her work and private spheres, which makes every situation unique. Nevertheless, there are certain basic frameworks which seem to be applicable for all kind of situations. For instance, maintaining a good time management in both life dimensions is essential. Furthermore, an individual should raise self-awareness and set priorities and goals for him or herself.

From the management side, a measure would be to offer flexible workhours as they give a certain freedom to the employees, which again will make it easier to combine both life spheres. The literature revealed that work-life balance becomes even more important for pilots and flight attendants since they must face even more factors than the normal office worker. They have to deal with very irregular working hours and are often far away from home without their friends and families. Further, fatigue and jetlag strongly influence and shape their entire life cycle, but also is crucial for the safety of flights. An airline's management greatest capability to provide the flying staff with good preconditions for work-life balance, are the monthly duty plans. These decide over their work as well as private life, whether they are able to work with favorable colleagues and to satisfying destinations and if they are able to attend an important family party. Furthermore, also an airline can educate their aircrews about work-life balance easily with their annual trainings. However, once again the individual factor should not be forgotten, where again time management can be seen as fundamental and should be integrated when being on a layover, as well as at home.

After coming to this conclusion and having an in-depth look into the literature about work-life balance in general, as well as within the aviation context, the next part of the thesis aims to reveal and detail how work-life balance is really seen and handled among crew members.

3 METHODOLOGY

3.1 Introduction

After an intense literature review on the main topic of work-life balance, followed by aircrews in general, as well as their personal work-life balance from a literature's perspective, the following chapter gives a practical insight to this topic. The conducted literature built the base for the following chapter. The methodology part of this thesis specifically consists of firstly finding a topic for the thesis, followed by an intensive literature review. Parallely to the literature research and based on the first research and assumptions, the questions for the interviews have been constructed and the interviews conducted. Based on the research and the outcomes of the interviews, a new questionnaire has been constructed and published as an online survey, in order to gain a deeper insight into the main topics, as well as a more representative outcome. Two summaries and analysis are provided within this methodology part, one for the main revelations of the expert interviews and one for the main findings of the survey. The final conclusion is the last part for this thesis, which will summarize all the findings of the literature as well as from the research. Furthermore, also a connection to the research question, as well as hypothesis towards the findings is drawn.

3.2 Aim

As already described in chapter 1.2 the main aim as well as the secondary aims of thesis have been presented. The main intention is to present a concrete and representative understanding of work-life balance for an aircrew member, concerning their relationships and personal incentives towards a work-life balance. Therefore, this thesis includes individual and managerial aspects and measures concerning this specific industry, as well as influential factors towards work-life balance.

3.3 Selection of methodology

In order to achieve the stated aim, the thesis is based on an intense literature review which is followed up with quantitative as well as qualitative research. Previous research has focused mostly on quantitative research only and therefore generally never reached a broader focus group, especially not when it comes to this specific topic. The decision to approach this thesis through mixed methods has been made, since this method is known for incorporating qualitative and quantitative data and therefore usually supports a more profound answer and real-life insight to the research problem (Creswell, 2014). Qualitative research is used to gain an understanding and insight knowledge about the research topic, so Creswell (2014). Further he highlights that the conducted information is than subject to the interpretation by the researcher

itself. Quantitative research and data on the other hand focuses on relations of variables which are numeric data (Creswell, 2014). The big advantage of quantitative research is that more people can be targeted through it and therefore the possibility for generalizability can be given (Malhotra, 2010).

However, the precise research method for this thesis is exploratory sequential mixed method. As Creswell (2014) states, this method first deals with the collection of the qualitative data. Based on these conducted results the quantitative research method is built with an according research instrument.

3.4 Research instrument

Since the chosen research method is mixed methods for this thesis also two different research instruments must be applied. Therefore, qualitative research is conducted through interviews with experts concerning the thesis topic. The quantitative research is conducted through an online survey distributed to pilots and flight attendants only. Furthermore, also air traffic controllers have been chosen as a control group, which received an online survey, which was an adaptation of the original one.

3.5 Qualitative research - Interviews

The first chosen and implemented research instrument have been in-depth interviews. The research question for this thesis is "How does the job effect the work-life balance of an aircrew member?". Therefore, the main fields of interests which have been approached through the in-depth interviews were the effect of the interviewee's job on their relationships and the individual's measures of gaining balance between work and life. Furthermore, also the perceived satisfaction towards the personal WLB has been a topic of interest.

The method of doing interviews has been chosen since it gives the researcher lots of flexibility and the chance to adapt questions depending on the specific situation which might arise and be more applicable (Bryman & Bell, 2007). For the interviews for this thesis a semi-structured approach is made use of, which means that there is a given set of questions for each interview but are rather seen as guidance for the interviewing process so that possible topics of interest can be further investigated (Smith & Coyle, 2020). Further, the interviews are considered to be in-depth interviews as the outcome shall provide the researcher with an understanding and insight for the research topics provided by the interviewee's expertise (Miles & Huberman, 1994, as cited by Diamantopoulos & Cadogan, 1996).

The interviews have been conducted from the end of February until end of May, next to conducting the literature review. Unfortunately, due to the COVID-19 crisis personal interviews have become impossible and therefore it has been switched to remote interviewing which has been done via the phone. Moreover, also the physical environment plays an essential part for

an interview's outcome (King, Horrocks & Brooks, 2019). The authors identify quietness, privacy and comfortableness as especially important characteristics for the location. Therefore, the interviews have been conducted in private homes, where the interviewees could answer unre-servedly and no big distractions could create an interruption.

The interviews have all been audio-recorded and transcribed by the researcher with the permission of every interview partner. The names of the interviewees have been anonymized within the transcripts. In addition, also notes have been made by the researcher throughout the interviews, especially when patterns with previous interviews have been identified. Furthermore, all of the interviews have been conducted in German as this is the mother tongue of the researcher and of all the interview partners. Through this a clearer understanding of the questions, as well as more detailed and qualitative responses are expected. Therefore, the outcomes are translated by the researcher itself for the interpretation and presentation of the results.

3.5.1 Interview partners

Overall, 15 separate interviews have been done of which six have been face-to-face and nine remotely via telephone. These interview partners are considered as experts simply through their job of a pilot or flight attendant, which makes their background in the aviation industry the main selection criterion. All interview partners are currently flying actively for a commercial airline. Gender, age, airline, or the exact years of experience within the industry have not been decisive characteristics for the selection. However, it happened that most interviewees currently work for the same airline, which might not give a broad overview, but rather a deeper one and possibly allows the generalization of some aspects. The sampling method for the interview partners can be seen as a mixture between snowballing or chain sampling and criterion sampling. Criterion sampling is about one characteristic which all participants have to fulfill which has the advantage that a certain quality is given (Miles & Huberman, 1994, as cited by Creswell, 2007). In this research the criterion is the job of the interviewee which must be an aircrew member. On the other hand, snowballing or chain sampling can also be considered as sampling method for this research as it usually has a chain effect and interviewees recruit other interviewees (Patton, 2002). This has also been the case for this research, the first ones have been recruited through personal connections of the researcher, which then recruited their colleagues. However, this did not limit the research at all, it is rather seen as advantage as it gives a profound basis of trust and the participants can be considered as adequate interviewees.

3.5.2 Interview questions

In general, the questions are open-ended questions, yet, some could be answered with a simple yes or no but than a follow up question like "why?" would be posed. It was intended to

keep the questions simple and understandable. However, often in-between questions have been posed simply to get a deeper insight for a certain topic, which appeared important. Since there has been only one target group for the interviews, only one questionnaire has been composed. However, throughout the interviews the one or other question has been added since certain topics only appeared relevant after a couple of interviews.

The first questions for the interviews deal as an introduction for the interview and asks about personal information and experience of the interviewee. These basics include for example their work-experience and the airline they work for. The exact questions asked are:

- How long are you flying?
- What is your exact job position?
- For which airline do you fly?
- Do you fly short-range, long-range or both?

After getting these basic personal facts, the first more personal questions are posed which deal with the relationship and the potential partner of the interviewee. Therefore, one main question is posed which is followed by a few other questions if the individual is in a relationship.

- What is your current relationship status?
- Follow up questions:
 - How long have you and your partner been together?
 - What does your partner do for living?
 - Do you think that the job of your partner is compatible with yours?
 - Or do you think that it brings additional complications to your relationship?

The next questions are also quite personal and addresses the topic of children. Furthermore, also the first connection to work-life balance is drawn, as also the topic of working-part time is addressed.

- Do you have children?
- If yes: Do you therefore work only part-time?
- If no: If you do not have any children, do you think that they are often the reason why colleagues of yours work part-time?

After now asking all rather basic questions about the interview partner, the now following questions are oriented towards the former values and expectations of a family or relationship. Through this, it is aimed to animate the interviewee to reflect on the past and identify possible changes within the values. The exact questions were:

- Before you started to fly, did you have a wish for having your own family, if not would you say that this was a decisive criterion to choose your job?

- Did your idea of a family or relationship change since you started to fly?
 - Follow-up question: What has changed?

Furthermore, also one question is posed about the job itself and if or if not, an individual would do this job again. The researcher's aim is to on the one hand get an insight, what makes this job so appealing or not and on the other hand to see if an individual is actually satisfied with his or her job.

- If you had to choose to start flying again, would you still do so?
 - Follow-up question: Why?

After these rather general questions about the past the next questions are again addressed towards the relationships of an air crew member. This is due to the fact that one of the main focus points of this research lays specifically on the relationships of a pilot or flight attendant. One of the questions addresses possible former relationships and tries to gain an insight if the job or the personality might have ended such a relationship. Furthermore, also current relationships of interviewees, or for those who currently are not in a partnership address passed ones or address just general beliefs.

- Have you been in a relationship when you started to fly?
 - Follow-up question if yes: Are you still together with this person?
 - Follow-up question if no: Do you think that your job had something to do with the breakup?

Further focusing on relationships of aircrew members more in-depth questions are asked. For instance, it is questioned whether the job is perceived as rather advantage or disadvantage for a relationship. Since it is common within the industry that there are relationships among colleagues also this is investigated if it seems to be easier. Furthermore, also the extent to which a partner has to adapt him or herself because of the job is questioned.

- Do you think that it is easier to be in a relationship with another flight attendant or pilot?
 - Follow-up question: Why?
- In general, do you think that your job has more advantages or disadvantages for your relationship?
 - Follow-up question: Which ones?
- How much adaptation does your job ask from your partner in order to maintain your relationship?

After investigating the relationships, focus is put on work-life balance in general. Since pilots and flight attendants have irregular working hours and are often considered as shift-workers, the influence of this on their relationships is investigated on different levels. For instance, on

the one hand, the absence from home and the influence on the relationship is questioned. Further, also fatigue and jetlag are investigated since these two are daily companions of crew members and strongly effect the social live.

- What effects does your absence from home has on your relationship?
- Do jetlag and fatigue have an effect on your social life?

The last questions further focus on the work-life balance of an induvial flight attendant or pilot. Therefore, the currently perceived work-life balance is questioned as well as the incentives by the individual in order to maintain satisfied. In addition, also a question has been added about personal incentives when being at work or on a layover.

- How do you perceive your current work-life balance?
- What do you do to obtain a satisfying work-life balance?
- What do you do for your work-life balance when you are on a layover?

Since there are numerous incentives for an airline to ease the access for its employees to work-life balance, also this is called attention to. This question does not only aim to identify specific measures by an airline, but also shows which potential goodies and incentives are actually really considered to be a measure or are just taken for granted. Therefore, the questions posed are:

- Do you have the feeling, that your airline actively does something for your personal work-life balance? Are there any measures or incentives they provide?

3.6 Quantitative research – Online Survey

The second research instrument which has been chosen is an online survey. The main topics of interest have remained the same, yet now needed to be collected in a mainly numeric way. Once again, the influence and effect of a pilot's or flight attendant's job on their life and relationships has been analyzed. Also, the satisfaction towards the work-life balance is investigated. Overall, different perceived values towards work-life balance and their individual components are analyzed.

The survey research is a common method used within quantitative research, which supplies numeric data of the research topics among the target population (Creswell, 2014). The collected data is than later seen as variables which basically represent the characteristics, which again can be distinguished into different categories, such as independent, dependent, intervening and moderating variables (Creswell, 2014).

This method of primary research has been chosen since it is easily accessible on all kind of electronic internet devices and has therefore the power to address a broader mass. Doing an

online survey is also advantageous because of the anonymity which gives the participants the chance to answer more honestly. Furthermore, also it gives the participant the freedom to do it whenever and wherever he or she wants to. The questions of the survey are aimed to kept short so that the individuals do not lose interest in it and really complete it.

Since the survey is an online survey, it has been distributed through online messaging services. The researcher has sent the link directly to pilots and flight attendants, which has been further passed on to other colleagues of them. Therefore, the sampling method can be referred to as chain or snowballing sampling, which was also similarly used for the qualitative research. The timeframe in which the survey has been online was one week in June since the aimed number of participants has been reached so quickly. 103 individuals have completed the survey. The survey tool which has been used for it was SoSci Survey, with which all questions could be easily added exactly to the researcher's requirements. The tool eased the compilation of the survey and also made it easy to access for the participants, simply through clicking on a link. The collected data is then imported and tested with the statistics software SPSS. Through this process the numeric values can be evaluated in detail and certain variables of interest are tested towards certain possible correlations.

3.6.1 Questions

The questions for the survey are based on the ones from the interview, however they are not identical and further additional questions have been added which are based on the results of the entire previous research. Different types of questions have been used throughout the online survey, these include open-ended questions, multiple choice questions and single choice questions. Most questions have been single choice which are mostly formulated as "Yes" or "No" questions. Overall, 31 questions have been asked which all needed to be answered and could not be skipped, with only one exception, since it was only necessary if the question before was yes. The questions themselves are kept simple and understandable in English so that participants could follow and be able to answer smoothly.

The survey has been categorized into different parts by the researcher. The first part deals with basic personal information of the target group (pilots and flight attendants), such as gender, age, airline they work for, years of experience etc. These basic personal questions deal as an opportunity to test the results towards a certain age group, gender, job position or years of experience. The next part holds the most questions within it and deals with the relationships of the participants. Since in the interviews distrust has been mentioned quite often, the questionnaire added a couple of questions concerning this topic. The third focus part again addresses work-life balance directly. This includes also the influence of jetlag and fatigue, as well as personal and company measures towards work-life balance.

3.6.2 Testing of the data

In order to further answer the thesis' research question and get a more in-depth insight into the topic, multiple hypotheses have been formulated and tested through the collected data of the quantitative research. However, also basic descriptive statistics are considered as representative for this research. Further, chi-squared and group comparison test are performed. Besides the main research question also smaller hypotheses are tested.

- Male crew members are more likely to cheat on their partner on a layover
- Having children is connected with flying part-time
- There is a significant effect of feeling a bond with colleagues and reducing work-related stress.

- There is no difference between cabin and cockpit regarding the work-life balance satisfaction
- There is a difference between cabin and cockpit crew regarding the work-life balance satisfaction

In addition to this, the collected data will be evaluated towards:

- Specific reasons for conflict issues
- Identified benefits or threats of the job towards the relationship
- Incentives by a crew member to create work-life balance
- Incentives and activities to create work-life balance on a layover
- Incentives by an airline to promote work-life balance

3.6.3 Control Group

The decision has been made that a similar questionnaire is contributed to a control group. The control group for this thesis are air traffic controllers. This specific job position has been chosen due to simple similar characteristics of crew members, which are irregular duty hours and even the same industry. Another reason is that the training as well as the income between air traffic controllers and pilots is very much alike.

3.6.3.1 Questionnaire control group

The questionnaire of the control group is based on the questions from the survey with pilots and flight attendants. Nevertheless, this questionnaire has been shortened and adapted specifically to air traffic controllers. The questionnaire consists of 21 questions which are again either single choice, multiple choice or open-ended questions.

3.7 Limitations

Usually every research faces multiple limitations, also this thesis underlays the one or other one. The most basic and always present limitation is time. Time for this research is certainly limited as there are deadlines to finish the thesis for graduating. Also, it would take infinite time to really conduct research and gather data from all airlines from all over the world.

One limitation is simply the geographical location, which kind of limits the reach of the survey, which is rather limited to German speaking countries which are in this case mainly Austria and Germany. Therefore, the conducted primary research cannot be seen as generalizable for each and every airline. However, this again can also be seen as an advantage as the results might be of greater representativeness for the few airlines which have been really reached.

Another limitation is the researcher's personal engagement with the airline industry. The researcher's personal views and experiences might influence the interpretation of the final results, since there might already be clear ideas about the outcome. However, this can also be seen as an advantage for the research as an understanding for the industry is given, as well as certain connections and insight views can be made use of.

An unexpected yet influential limitation has been the outbreak of the Corona virus, which effected various different aspects of the research. On the one hand, the literature review had been narrowed down since libraries and therefore the access to books was restricted. On the other hand, the interviewing process needed to be changed since personal meetings, and therefore, personal interviews have been prohibited, whether this has been a real disadvantage will never be known.

3.8 Data analysis

As already mentioned in the previous chapters, the exact numbers of responses for the different researches have been the following:

Table 1 Participants Overview

Method	Aimed responses	Valid responses	Not completed	Clicks
Interviews	15-20	15	Not applicable	Not applicable
Survey aircrew	80-100	103	23	234
Survey air traffic controller	~20	20	3	62

The actual reach of the online survey is unknown, yet the clicks themselves might indicate the actual reach, as presented through Table 1. Therefore, it can be seen that less than the half of pilots or flight attendants really filled out the survey. Nearly the same can be seen among air traffic controllers, of which only a third really completed it. However, it is unclear whether someone just clicked on the survey and clicked on it again later to fill it out. Concerning the interviews, it might appear that it was only reached for the minimum, this is simply due to the fact of repetitiveness and that the aimed insight has been reached after these 15.

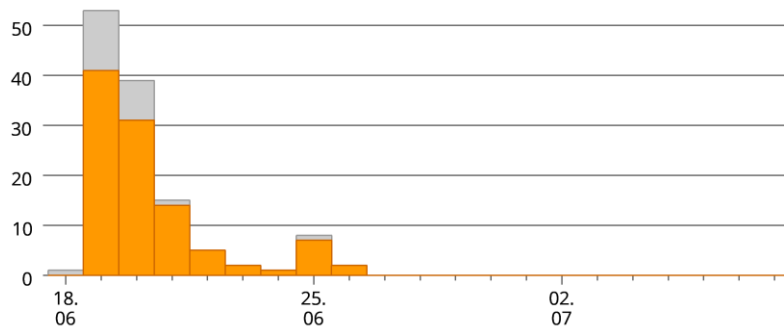


FIGURE 11 RESPONSE RATE OF AIRCREW SURVEY

Figure 11 above indicates the exact response rates in orange for the survey for aircrew members. It can be seen that most responses have been gathered within the first two days. From then onwards it continuously declined until one high again before flattening out completely. The flattening is a result of stopping to promote and sending the link to participants since the goal has been reached.

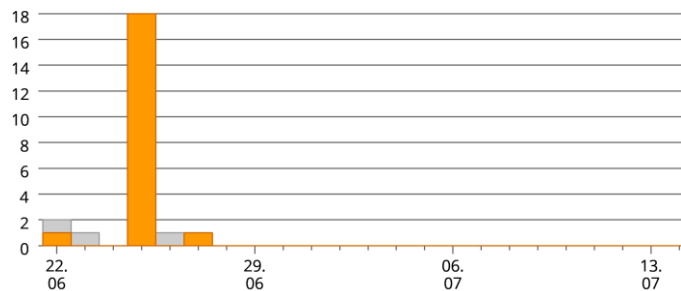


FIGURE 12 RESPONSE RATE OF CONTROL GROUP

A similar picture can be seen in Figure 12, also for the response rate period among air traffic controllers. In a very short period, the aimed responses have been reached. Furthermore, the in grey presented non-responses are by far lower when comparing it to the actual focus group.

3.8.1 Qualitative analysis

After the conduction of the interviews and transcribing them, the interviews are analyzed based on different criteria. Before being able to start the analysis all the transcripts are meticulously read through and notes are made. Based on the notes taking with it, each question is

firstly analyzed and checked towards a possible overall generalizability. A possible generalizability is seen as the first code used for the analysis. Secondly, the gathered data is compared with the conducted literature towards possible agree- or disagreements. However, the exact wording of the responses is not considered within the analysis as word clouding is not an aim for the research. After the precise elaboration and preparation of the interview data, an interpretation of the findings is carried out. Since this is the qualitative research part, no software for statistical testing has been used.

3.8.2 Quantitative analysis

After conducting the both online surveys, the gathered data is analyzed through SPSS. Before going into deeper research and testing with the collected data, basic descriptive analyses are conducted for the surveys. The descriptive analysis includes the distribution of the basic personal information such as age, gender, relationship status and others. After this it is continued with inferential analysis which include more complex testing with the focus on correlations among certain variables. The variables themselves cannot be generalized as some of them are categorial and others have a continuous score (e.g. age range). However, all these analyses are performed through SPSS with the aim to either confirm or refute the hypotheses. The final part of quantitative analyses is the interpretation of the results. This interpretation is based on the researcher's conclusion towards the initial research question, as well as the hypotheses.

3.9 Conclusion

This chapter has given a deep insight into the exact methodology behind the conducted primary research. For this, the approach, ideas, and intention of the researcher behind the conducted research is presented in detail. Especially, the interview questions are examined in detail as some of the addressed topics might seem irrational for an outsider. Also, the hypotheses for the quantitative research are presented and categorized. Furthermore, an insight is given about how the research has been conducted. The following chapter now will present the implementation of the presented approaches as well as the final outcomes of each research.

4 RESULTS AND DISCUSSION

4.1 Introduction

As already mentioned in the previous chapters this thesis has investigated in-depth the topic of work-life balance for air crew members. First the intense literature review outlined the importance of this topic as well as all relevant issues. The methodology behind the conduction of primary data has been presented before. This chapter presents the final results and findings of the conducted primary research, beginning with the evaluation of the qualitative research. The second part displays the outcomes of the quantitative data.

4.2 Evaluation and interpretation of interviews

4.2.1 Interview partners and their descriptives

As already mentioned, overall, 15 individuals have been interviewed, 10 out of these 15 interview partners are female, whereas only 5 are male. The age range among the interview partners lays between 22 and 62 years. Also, when it comes to the flight experience, there is a vast gap, the least experience is 3.5 years whereas the most is 37 years of flight experience. 13 interviewees currently fly for Austrian Airlines and two of them for Eurowings Europe. Therefore, it can be seen that these results are only representative for Austria or seen a little broader for the Lufthansa Group. Nine of the respondents are cabin crew of which three are purser, one is senior and five are junior flight attendants. Of the flight crew the distribution is four captains and two co-pilots. Currently, nine of the individual crew members fly short- as well as long-range, four fly short-range only and two long-range. Concerning their relationship status, three are single and twelve are in a relationship, from these seven are married. The length of the relationships lays between 2 years and 31 years. Seven individuals also have children, however, among the interviewees two married couples have been interviewed separately, therefore their children are counted twice, for each individual. Interestingly, among the twelve people in a relationship, eight are in a partnership with another pilot or flight attendant.

After the basic personal questions, the interviews started with the next more in-depth questions. The main addressed topics are relationships, jetlag and fatigue, life, and work-life balance. Overall, of course all topics are single aspects of work-life balance, however for the comprehensibility of the analysis these different subchapters are identified.

4.2.2 Job and Relationships

One of the major research aims focuses on the relationships of a flight attendant or pilot, therefore also within the interviews these are further investigated. As already mentioned,

most of the interview partners are in a relationship and most of them even with another crew member. When looking at the compatibleness of the job of the partner and the own one all interview partners report compatibility, regardless of the exact job of the partner. This might be simply because there is no real alternative to it and it is learned to arrange and adapt to it.

Nevertheless, among relationships between airliners themselves, it is seen as very beneficial, especially when working within the same airline as flights can be requested together. Another numerously mentioned reported aspect is that an understanding for the job and the therefore connected needs is given, for instance that flying around the world is not only fun, but also extremely exhausting. Accordingly, there usually is no jealousy concerning the travelling. However, jealousy towards what might happen on a layover is an issue which all relationships are facing but are strongly dependent on the personality of the partner.

Among people in relationships with partners doing something else the biggest issue lays with having the same days off, as crews usually have to work on weekends and are not automatically home. Therefore, a precise planning and coordination take up much effort. Further, one interviewee stated the following *"I think that a partner, who has nothing to do with this industry, also not with tourism or traveling, has problems to imagine what this job really means and is about. There I could imagine that it is far more difficult for the person left behind than for the one who is leaving."*

Since it is a well-known stereotype that pilots and flight attendants are often a couple, which has also been verified through this research, the participants are asked if they think that it might be simply easier to be in such a partnership. This has been further confirmed, as twelve state that it is easier. As reason for this once more the airline's incentives of requesting duties or days off together are mentioned. However, the understanding for the job and its problems is considered as the most important reason.

Some see it as rather mixed and dependent on the personality and one interviewee answered *"Yes and no. Yes, because the partner knows what it is about and what is important to me, as he is a similar type of person as I am. But exactly this can lead to a problem. Working within the same company, as work and life should usually be dealt separately with."* Further, another interview partner had also mixed feelings about whether it is easier or not and even identified an issue between cockpit and cabin and strongly advises to differentiate between it *"I think that in general, when looking at the divorce rates in our firm among colleagues being married to each other, that cabin and cabin works quite well, I think. But cabin and cockpit is rather difficult as the cockpit has rather different attitude apparently."*

When it comes to the level of necessary adaptation from the partner towards the irregular job of flying it has to be again differentiated between couples with the same profession and couples where only one is pilot or flight attendant. On the one hand, the research shows that it is

easier among couples within the same industry and the adaptation level is rather low. For both it is clear that there are irregularities and plans can only be made to a certain extent. However, on the other hand couples where only one is flying, more and most adaptation is asked from the one who is at home and not flying. The extent of adaptation of the partner is even considered as “*extreme*” and “*definitely above average*”.

Furthermore, the occupation as a flight attendant or pilot is regarded as an advantage for a relationship as long as no children are involved. Also, when being in a relationship with no aircrew member, the job is often regarded as disadvantage and rather favorable when being so. When being together with someone in the same firm joint flights and the same days off are regarded as benefit.

Overall, the varied everyday life is regarded as a big advantage among the participants, regardless of the job of the partner, as no specific routine is established and is even seen as “*keeping the relationship young*.” Nonetheless, others perceive exactly this as a disadvantage. Another influential aspect is whether a person is flying short- or long-range, as most regularity can be seen within the long-range. Nevertheless, exactly this is regarded as very negative by the literature, but apparently is not necessarily seen so narrow in real life. Nonetheless, one participant stated that “*it has neither advantages nor disadvantages, that is all just in your mind. If you have an equal partner, he will accept that. You can adapt yourself, there are so many possibilities. Our job gives us far more opportunities to plan our leisure time than other jobs.*” Overall, no generalizability can be made since the perception varies a lot among the participants and is subject to the personality.

The absence from home is regarded as an advantage as well as a disadvantage, depending on the personality. However, it is mainly seen as a major advantage for a relationship when not being together 24/7. It is described as “*joy of coming home again*” and as more exiting and interesting. Also, the fact of being able to have stories to tell when coming home is considered as positive.

However, this is only the view of the flying person, if it really is a threat or benefit for a relationship is also strongly dependent on the partner’s personality since jealousy or anxiety might play a role. Also, the partner back home must deal with all daily aspects at home alone, which is especially relevant when children are involved.

4.2.3 Children and flying

The interviewees have also been asked whether they have children and further if they therefore only work part-time. If the interviewee does not have children, he or she has been asked

about their experience and observations concerning their colleagues and a possible relationship between working part-time and having children.

In fact, all of the questioned individuals who have children responded that most of them fly part-time because of their kids. Especially, when the children are small flying part-time is seen as essential. However, when flying long-range only it is considered to be possible to fly full-time, as the days off in between the duties are longer. One flight attendant responded that she even switched to only flying short-range since her children have been born to not be too far away from home in case anything happens.

Also, concerning the observations of colleagues having children and working part-time it can be seen that it is considered completely normal that they do so. It is even stated by one interviewee who does not have own children *“I fly full-time myself and I do not have a family and to be honest, it is already too much for myself. I cannot even imagine doing my job full-time and having children. This does not work, it is unimaginable.”* These results show, that there really is a connection between flying part-time and having children, even though part-time is also often used to optimize work-life balance in general, regardless of having children or not.

When both parents work as pilot or flight attendant and have children together, not only part-time is an effect, but also the actual couple time suffers. One of the parents always must be with the children, in the meantime the other one is flying and then the other one is gone flying. However, this effect is not considered as negative for the children themselves, as they grow up like this from the beginning on.

4.2.4 From past to present -Job influences on life expectations

The interview partners were also asked to reflect a bit about their past relationships and expectations on life and to identify potential alterations. One focus has been put on relationships when starting to fly, which revealed an interesting effect. 14 of the interviewees have been in a relationship back than but are not together with the same person anymore except for one interviewee who still is. Most consider the job to be the reason for the ending of these relationships. In more detail, the most common identified issues are:

- Jealousy
- Combining a regular and irregular working life
- Adjustment to new job
- Absence from home
- Meeting new people
- Partners attitude towards job

However, the combination of two different jobs are considered to be the biggest issue and threat for a relationship when one partner is starting to fly. The absence from home creates

jealousy on different levels from the partner towards the crew member and therefore certain tensions start to rise. Furthermore, the fact that so many new people are met on a nearly daily basis is considered as highly influential for a relationship.

Another focus point has been whether an individual had an idea and a wish for a family or a relationship and if it changed since they started to fly. Further, also the participants have been questioned about if this had an influence on their job decision. The wish for having a family is not seen as a decisive criterion for the job, it is rather expected that it will work out somehow. Especially, through more experience it becomes clear that it definitely will work out as lots of colleagues are also able to have a family life.

When it comes to the fixed idea or vision of a family or relationship, it can be seen that often it did not exist when beginning to fly since they were *“simply too young to have a precise vision”*. For the ones who had such a vision from the beginning on age and the process of aging and getting more life experience. One male responded answered *“It would have been my dream to live or be married with the same partner for a longer period of time. This was not possible because flying changes you and your personality strongly.”* Other interviewees responded similarly and stated multiply that the job changed themselves as well as how they now view the world. However, for one respondent it is clear that meeting the right partner is the reason why her vision has changed. One aspect which is dominant concerns having children as many had the point of view that having kids with this job is impossible. This changed over time as they saw that it works for other colleagues. Interestingly, the youngest interviewee, who also flies the shortest, also shares this view and stated that *“I think that if I have kids, that I will stop flying.”*

When asking about starting to fly again the results are pretty clear, 14 out of 15 responded instantly that they would start flying again. The one who responded not to do the job stated that *“not because the job is not fun, but simply because of environmental and economical reasons which now just not seems so lucrative anymore.”* Nevertheless, the rest of interviewees described their job as extraordinary and very fulfilling. Another advantage is seeing the world whilst being on work and further strongly broadening an individual’s horizon. Further, especially the non-existent routine of duty hours as well as changing of colleagues is seen as unique and as another benefit. The interviews outcome leads to the conclusion that the work satisfaction is high among pilots and flight attendants and that the job has various advantages which apparently outweigh the disadvantages.

4.2.5 Jetlag and Fatigue

Another aim of the interviews was to identify the influence and effect of jetlag and fatigue on the social life of a flight attendant or pilot. Within the literature jetlag and fatigue is considered as very relevant, especially within the aviation industry simply due to the fact of safety aspects

of flying (Caldwell et al., 2009). However, the effect on the social life of it for a crew member is not a present topic.

Overall, the majority of interview partners stated that jetlag and/or fatigue do have an influence on their social life. A strong factor which has been identified by multiple participants is flying long-range. One participant even stated, *"When I come home from a long-range flight, I am completely exhausted and grumpy for three days and I am just arguing with my boyfriend"*. Further, the participants responded that especially in the beginning when they started to fly that they were *"...sleeping all day and being grumpy."* Nonetheless, it has been made clear through the interviews that flight experience provides individuals with knowledge how to best manage fatigue. However, on the other hand age has been identified as an influential characteristic as *"I figured through the years, the older you get, the longer it takes to recover from a long-range flight, as the jetlag leaves traces and you need longer periods for revitalization."* Multiple participants described their condition after a flight as a "delirium", nevertheless, the length of remaining in this state is dependent on the individual. However, the three participants which stated that there is no effect all admitted that *"I am lucky, my body deals very well with jetlag"*.

Nearly all stated that often their days off are not really days off, but rather must be used to either prepare their body for a flight or regenerate it from flying. For this, free time cannot be always used for social life. The interviewees also explained that sleeping in advance is a thing which is necessary to be able to perform properly for an early flight or a night-flight. Therefore, it can be seen that not only jetlag and fatigue after a flight, but also a planned sleeping schedule throughout the month for all kind of flights is necessary. Overall, this shows that sleep in general is a present topic for every single flight attendant or pilot to at least some extent. However, the exact amount of sleep needed, and handling of fatigue is dependent on the individual itself.

4.2.6 Work-Life Balance

This part focuses on the satisfaction and specific measures of an individual, as well as of an airline to create a balance for pilots or flight attendants between work and life. When asked about the perception of the current work-life balance overall satisfaction is detected.

This is not only because of the current corona situation, but all participants also considered the time before the spreading of the virus and responded positively towards work-life balance. One respondent answered, *"When working part-time great, without part-time it is nearly impossible to recover and be there for the family."* The aspect of working part-time is mentioned multiple times and is clearly seen as the main reason for being able to perceive satisfaction with work and life. Similarly, pilots who only fly long-range also respond satisfaction as they do not feel overworked even though they work full-time. On the other hand, pilots who fly short-

range only report a little dissatisfaction as they feel to work too much. Combining and managing all aspects is described as *“it is challenging, but possible. Everything is possible. It is all about planning and the right mindset.”*

Other participants also outlined the importance of time management and especially planning ahead. Besides working part-time, a healthy lifestyle is also identified as very common among crews. The healthy lifestyle includes doing sports and a healthy diet, but also getting enough sleep is specified. Furthermore, also socializing is of great importance with most individuals. One participant mentioned the importance of separating work and life in terms of not trying to be bothered about firm issues when having days off. Within literature most of the above gathered incentives are also mentioned, for instance time management, sleeping schedules, socializing (Levitt & Bor, 2003; Eriksen, 2018). Time management for example has been identified as most essential by the literature but also among real aircrew members.

Similar results have been identified among crew members when being on a layover. Sport, sleep and a healthy lifestyle appear to be the very essential. Sleeping on a layover and especially sleeping enough to be sharp before the flight home seems to belong to the routine of a pilot and a flight attendant. Besides that, when being on a layover sympathy towards colleagues is identified as the number one reason to either do something with the rest of the crew or remain alone on the layover. Furthermore, other factors influence the work-life balance on a layover such as the intensity of the duty before or the level of exhaustion plays a role but also determinants like the weather or the destination itself. Overall, the respondents present themselves as very adaptable towards the specific situation on a layover and the specific activities and incentives which come along with it. Therefore, no specific fundamental rule exists, but rather adaptable frameworks which are once more dependent on the individual's personality.

When being questioned about if it is perceived that an airline implements precise measures to ease work-life balance for its employees the opinions of the interviewees differ fundamentally. Some instantly respond no and some yes, also what exactly is identified as a measure differs strongly. The identified incentives an airline does for easing work-life balance satisfaction for their crews are the following:

- Flight requests
- Requested days off
- Collective agreement
- Offering part-time
- Internal health management
- Organization of private activities
- Discounted tickets

Upon the airlines of the interview partners flight requests and requested days off are very common, which means that the flight personnel have the opportunity to plan and influence their monthly duty schedule. Furthermore, when being in a relationship with another crew member, the duty plans can be matched within an internal system so that crew scheduling can take requests into consideration. However, the interviewees point out that not every request is always fulfilled by crew scheduling. The airlines offering of part-time work and providing its employees with a collective contract are also seen as measures. Austrian Airlines for instance apparently also offers an “internal health management which specifically deals with work-life balance”. Further explained, it deals with all kind of aspects like diet and sport and simply raises awareness. Within Austrian Airlines also various social clubs can be found which regularly organize events and activities for all pilots and flight attendants. Another big incentive within airlines is the offering of discounted staff tickets for themselves as well as their families. These can be used for example to take the partner on the flights and be able to spend more time together, however, they are often seen as simple goodies of the industry by the interviewees.

Most of the mentioned incentives on an organizational level have been listed through literature as well, which indicates that airlines are aware of certain measures and also try to implement those. However, the perception of these incentives is rather distinctive and often seen as rather critical from its employees and gives the impression that it is often taken for granted. Another view was presented through on interviewee who stated that *“It is not the job of the airline to provide work-life balance, this is my personal job.”*. This statement is clearly refuted by the literature which states that it is about the combination of an individual and organizational level.

4.3 Evaluation and interpretation of online surveys

4.3.1 Descriptive analysis

As already mentioned, the link to the survey has been distributed solely to aircrew members. The pie chart below indicates the gender distribution of the online survey among pilots and flight attendants. In Figure 13 it can be seen that it is quite equally distributed, 56 women and 47 men participated in the survey, which makes a total of 103 responses. The exact percentages are 54.4% and 45.6%.

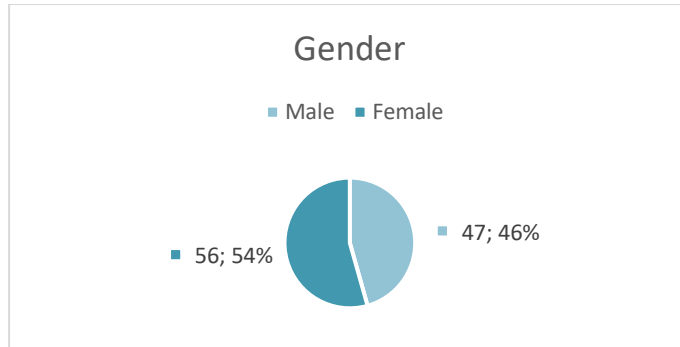


FIGURE 13 GENDER DISTRIBUTION

There has not been a favorable age group to be questioned, however the indicated age range goes from 18 to over 65. This is because the minimum age of a flight attendant is 18 and 65 is the maximum age of a flight attendant for actively flying. However, these values differ a little bit for the cockpit as 21 is the minimum age for a commercial pilot. The age group of over 66 years has been added in case retired aircrew members get the survey. However, there have been zero responses by the lowest and highest possible age group. The reason for not having a specific focus age group is that experience varies a lot and therefore more factors and needs can be investigated. When it comes to the age distribution among the participants, it can be seen that most responses come from people between 26 and 30 years, which have been 27 respondents. The results from Figure 14 show, that most of the participants are rather young and between 20 and 40 years old and make up 72 individuals out of the 103.

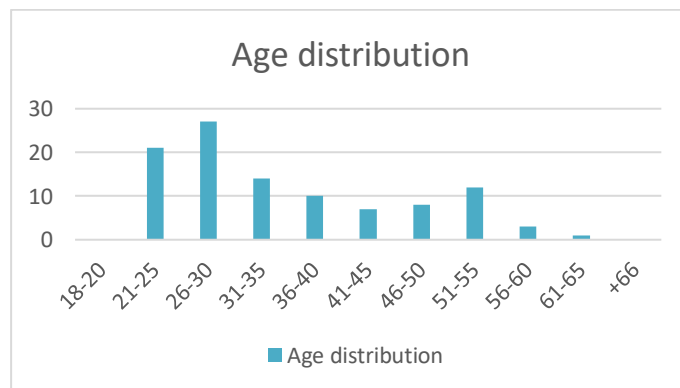


FIGURE 14 AGE DISTRIBUTION

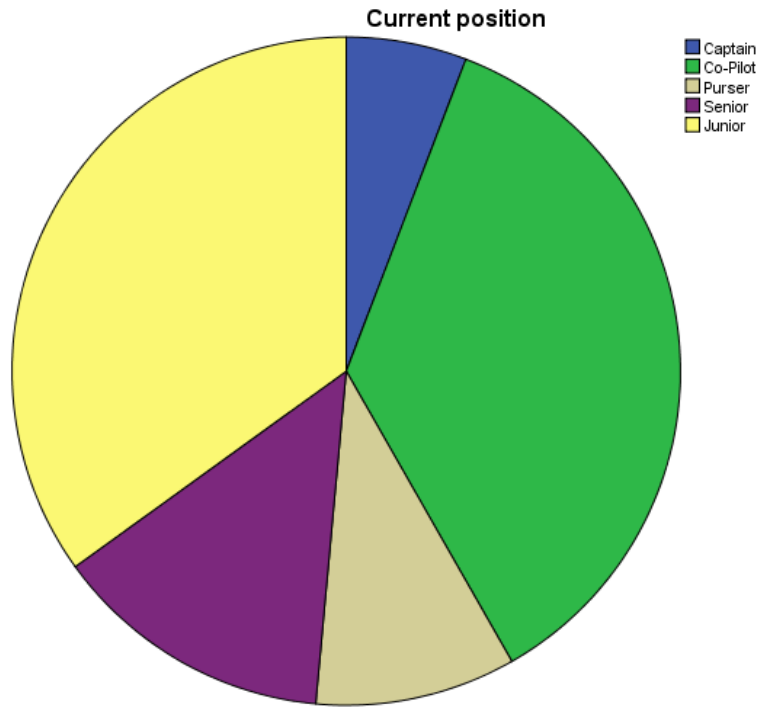


FIGURE 15 JOB POSITION DISTRIBUTION

Figure 15 indicates the current job position distribution among the participants. Five different options have been available which are captain and co-pilot for the cockpit and purser, senior and junior for the cabin crew. From the 103 participants, 43 are from the cockpit and 60 from the cabin. Compared to the fact of how many more flight attendants exist in the world, compared to the number of pilots, the results are considered to be quite equally distributed. 62 indicate that they fly short- and long-range, 35 only short-range and 6 long-range only.

Table 2 Airline Distribution

Airline	Number of respondents
Austrian Airlines	61
Lufthansa	28
Eurowings Europe	6
Swiss	1
Condor	1
Middle East Airlines	6

Table 2 summarizes and presents the different airlines which have been reached. Over the half of all respondents fly for Austrian Airlines and the next majority is reached by Lufthansa. Austrian Airlines, Lufthansa, Eurowings Europe, Swiss and Condor all belong to the Lufthansa Group and are situated in German speaking countries but are actively flying to all over the world. Therefore, the results of the research are mainly representative for the German speaking regions. Somehow, the survey also got a handful of responses from Middle East Airlines, which is actually located in Lebanon.

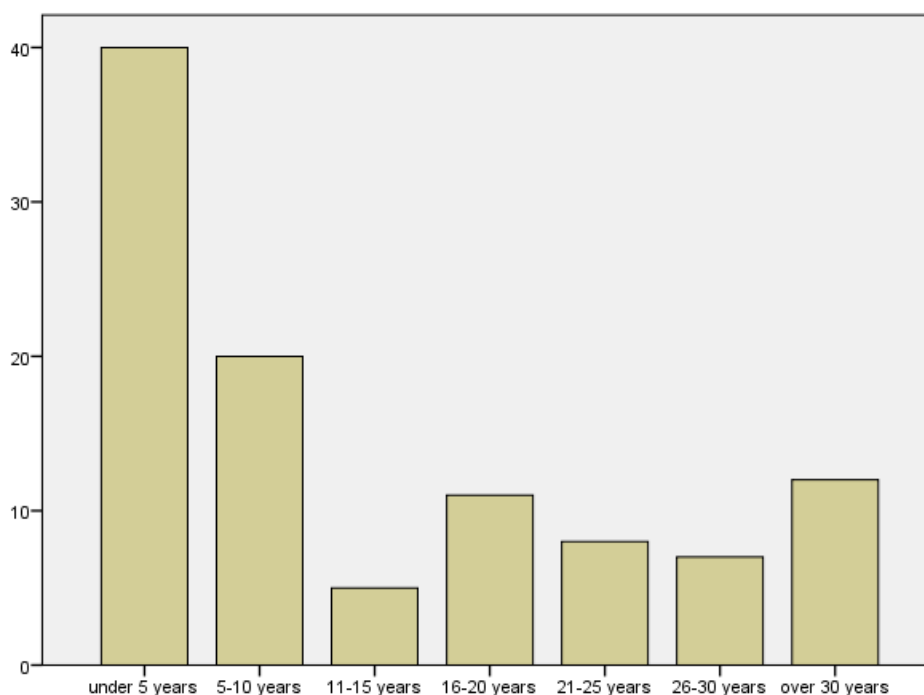


FIGURE 16 YEARS OF EMPLOYMENT

The graph in Figure 16 above illustrates the distribution of the years of employment of the survey participants. Most fly under five years (40 respondents) and are followed by people flying between 5 to 10 years (20 respondents). However, also 12 individuals have over 30 years of flight experience.

Also, the current relationship status has been analyzed and shows that 48.5% currently are in a relationship, 28.2% are married and 23.3% are single. Among the ones being in a relationship, the length of these partnerships lay between only a few months to 35 years. The amount of people being in a relationship for less than a year lay at only 7.6%, therefore, the rest of 92.4% are in a relationship for multiple years. This high result is seen as positive towards the research since many of the questions focus specifically on relationships and it is estimated that a certain expertise is given in this field. Further, 72.8% (75 respondents) reported to have no children and only 27.2% (28 respondents) do have children. This might be due to the fact of the rather young age level of the participants.

4.3.2 Conflicts within relationships

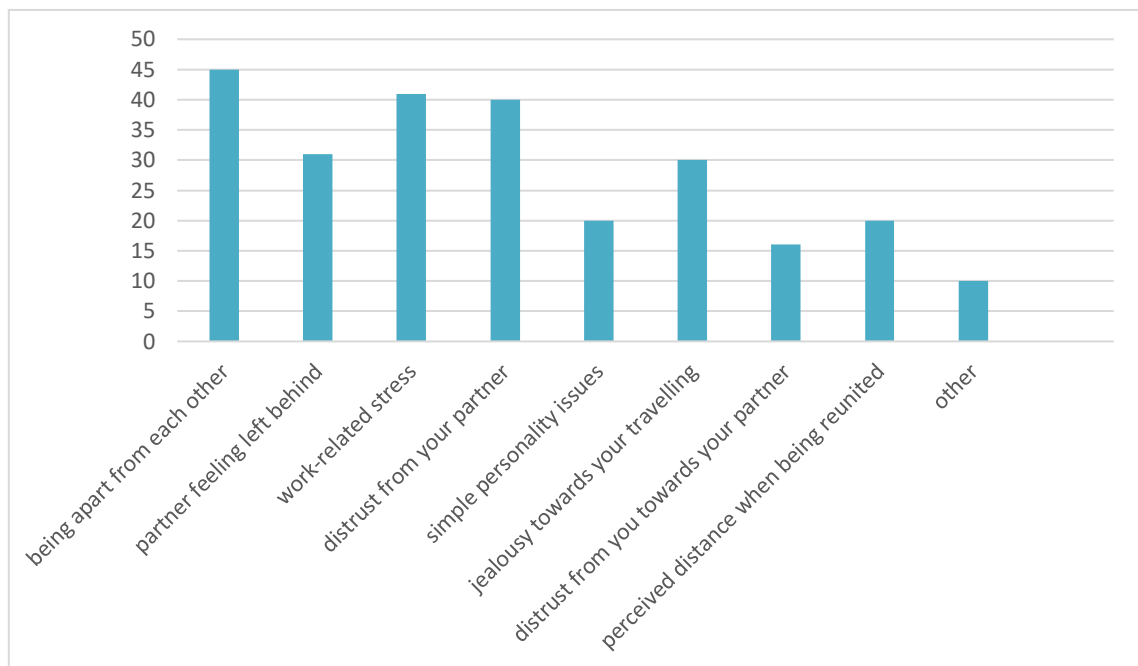


FIGURE 17 CONFLICT ISSUES

The survey asked the participants to identify their most common relationship issues (represented in Figure 17) and conflicts with their partners. As the graph above indicates, the most common issue is the physical separation of each other. Interestingly, only a small number of participants feels a distance when being back together again. Simple personality issues are also perceived as less common and relevant than for example work-related stress or physical separation. The chart shows that distrust from the partner is considered higher than from the crew member towards the partner back home. This is further displayed when being specifically asked if distrust is perceived towards the partner back home.

4.3.3 Relationships

The interviews indicated a tendency towards relationships among crew members, however, this is not significantly further confirmed through the conducted survey. Only 36.9% of respondents has been or is in a relationship with another crew member. Regardless, whether an individual had or has a relationship with a colleague or not, *“understanding for the job”* is identified by 85.4% as the primary reason of ease for such a partnership. Further, roughly a quarter of respondents also sees a benefit in *“being able to work together”*. 16.5% also confirmed that the *“irregularities give the relationship the spirit.”* Especially, the needs and the given understanding are highlighted through the survey.

The interviews already indicated that usually the partner has to adapt him or herself more, which is also displayed through the survey and confirmed by 69.9%. This is caused through

irregular duty hours of the crew member, however, these are overall seen as beneficial for a relationship rather than threatening. In fact, 70.9% (73 respondents) see it positive and only 29.1% (30 respondents) have a negative attitude towards this issue. Table 3 below shows the most identified threats and benefits of irregular work hours.

TABLE 3 BENEFITS & THREATS OF WORK IRREGULARITY

Benefits	Threats
No routine	Absence of communication when being apart
Adventurous	Different rhythms
Different topics to talk about	Trust issues
When both irregular working hours = more free time together	Finding time together
Flexibility	Jetlag
Anticyclical life	No planning possible
Makes relationship more exciting	Long time apart
Gives space to the relationship	Zero stability
More appreciation when being together again	Missing of key moments
Less routine	Being tiered

The positive attitude towards the work irregularities is also in accordance with the outcome of the interviews. Also, the mentioned specific threats and benefits are similar.

4.3.4 Unfaithfulness

As jealousy towards unfaithfulness has been mentioned multiple times during the interviews, this topic has been addressed in the online survey. First, the participants are questioned about their observations of their colleagues towards their unfaithfulness and then about their own. The results are quite differing, 87 individuals state that they know that one of their colleagues has been unfaithful on a layover to their partner back home, where only 16 stated that they have not experienced this. However, when asking about their own unfaithfulness only 20 admit to it and 83 deny it. The results towards the colleagues is considered as representative as there is no reason to lie about this. However, concerning the other outcome it appears to be

not that representative since the other values are so much higher, therefore, it is expected that the true value must lay somewhere in between.

Also, one hypothesis has been posed towards this topic: *Male crew members are more likely to be unfaithful on a layover*. In order to test this, a Pearson χ^2 test is run in SPSS including a cross table as precise reference.

TABLE 4 CROSS TABLE GENDER AND UNFAITHFULNESS OF SELF

		UNFAITHFULNESS OF SELF		TOTAL
		YES	NO	
GENDER	FEMALE	10	46	56
	MALE	10	37	47
TOTAL		20	83	103

In fact, results from the collected data show an equal distribution (see Table 4) as exactly 10 men and 10 women admit having cheated on their partner. As the sample size is over 60 participants, the results are interpreted towards Pearson χ^2 which comes to .662. The Cramer's V test amounts to 0.043 which indicates a weak relationship between gender and the unfaithfulness of the self. Similar it is displayed through the p-value of Fisher one tailed test, which is .424 and therefore way larger than 0.05 and therefore is regarded as not significant and the hypothesis is refuted.

4.3.5 Work-related stress and colleagues

Working as a crew member, regardless if in the cockpit or in the cabin, is a very team-oriented job. Further, the colleagues are constantly changing, therefore also the perceived bond with colleagues has been put into question. Even through the new compilation of crews before every flight, 66% perceive a strong bond with their colleagues. Furthermore, the research shows that 72.8% of respondents even consider that their colleagues minimize their work-related stress. This result indicates that there really must be a strong bond among crews and that the in the interviews described "type" of person who flies is a thing.

As indicated one hypothesis set up is: *There is a significant effect of feeling a bond with colleagues and reducing work-related stress*. For this, a cross-table and chi-squared test is performed which comes to a significant level of .002. Therefore, there is a significant relation be-

tween feeling a strong bond with colleagues and they therefore minimizing work-related stress.

4.3.6 Work-life balance

The survey participants have also been questioned about their current work-life balance satisfaction, the results are indicated in Figure 18. It shows that the level of satisfaction among crew members is pretty high. 57.3% are satisfied and additional 25.2% are even very satisfied. 3.9% are unsatisfied and 13.6% are barely satisfied, nonetheless, the specific reasons for the dissatisfaction cannot be determined through this research. Further, it is unclear if the respondents focused on their normal daily lives and flights or on the corona virus situation to rate their satisfaction.

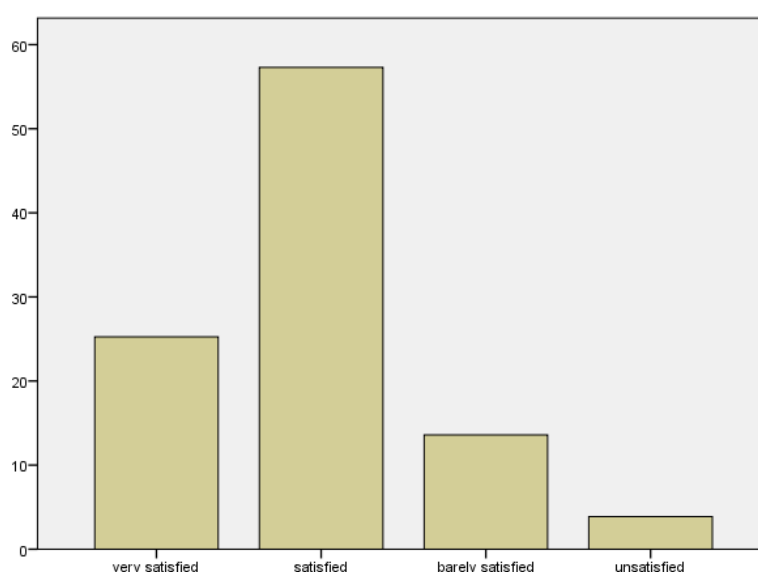


FIGURE 18 WLB SATISFACTION

Another point of interest within this research was to identify a pattern between cockpit and cabin crew and the satisfaction with work-life balance. As there is no indication for a certain outcome a two-tailed test is performed, and the according hypotheses are:

- There is no difference between cabin and cockpit regarding the work-life balance satisfaction
- There is a difference between cabin and cockpit crew regarding the work-life balance satisfaction

To test this, an independent group comparison test is performed in SPSS. After splitting the file, the histogram showed a possible normal distribution and the one-sample Kolmogorov-Smirnov test showed an outcome of p equaling .000 which indicates that it is a significant deviation as p is <0.001 and therefore a Mann-Whitney U-test is performed. After unsplitting the file again, the test is performed. The most important results include the mean ranks and the p -value. The mean rank for the cockpit lays at 50.64 and for the cabin attendants at 52.98. The

lower value of the cockpit indicates a higher work-life balance satisfaction compared to the colleagues of the cabin. However, this can again be relativized through the lower number of people (43 cockpit and 60 cabin crew) and can overall be seen as rather similar.

When it comes to the Mann-Whitney-U-test concerning the job position and WLB satisfaction the p-value is .661 which is larger than 0.05 and therefore there is no significant difference between the job position and the satisfaction with WLB. As a result, the null hypothesis was retained, as no difference between cabin and cockpit regarding the work-life balance satisfaction was confirmed.

4.3.7 Work-life balance at home and on a layover

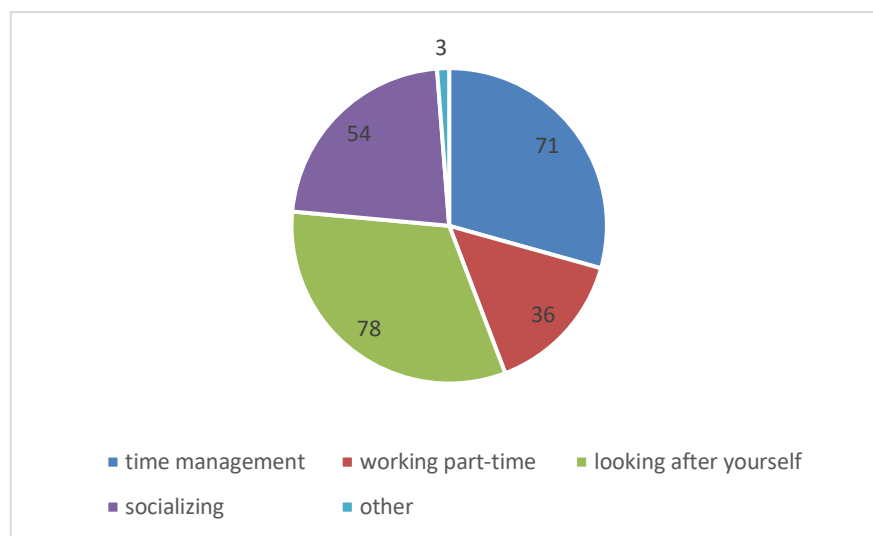


FIGURE 19 WLB INCENTIVES

The results (summarized through Figure 19) of the survey agree with the stated literature, where time management is seen as essential for this occupational group. Working part-time is a further incentive used by individuals to achieve balance between work and life. The interviews showed that working part-time is seen as first necessity as soon as children are involved and only secondly as implementation for general work-life balance. This fact is further confirmed through the survey, when specifically asking about a relation between children and working part-time. 75.7% of the respondents stated that they see a connection between these two factors. However, also a combination of socializing and treating yourself are seen as incentives on an individual level. One participant also indicated through "other" that sleep management is an important personal measure.

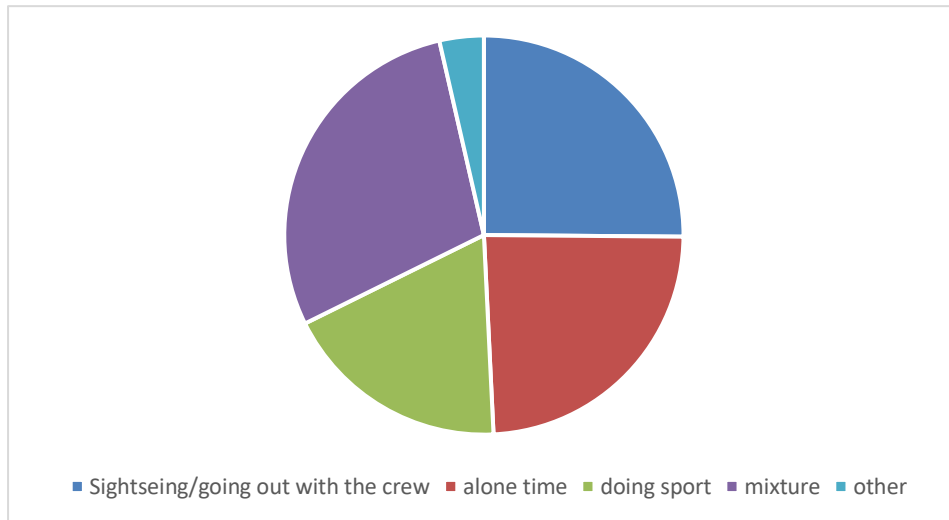


FIGURE 20 WLB ON A LAYOVER

As stated in Figure 20, sightseeing or going out with the crew are nearly as popular as staying alone on a layover, this once more shows that personal incentives are strongly dependent on an individual's personality. A healthy lifestyle is also tried to be followed through trying to do sport or finding healthy food at the destination. Under the option "other", participants further indicated the importance of rest on a layover. Further, also flying to destinations where friends can be met is seen as a work-life balance optimization. However, these personal incentives can be seen as very individual and once more very dependent on the situation itself.

Regardless of being at work or at home, socializing is seen as necessary for an individual's work-life balance and shows that social contacts are of great importance for a personal well-being. Further, time for self is also prominent according to the research, which indicates that a human being needs its social contacts as well as lone time.

4.3.8 Work-life balance measures by an airline

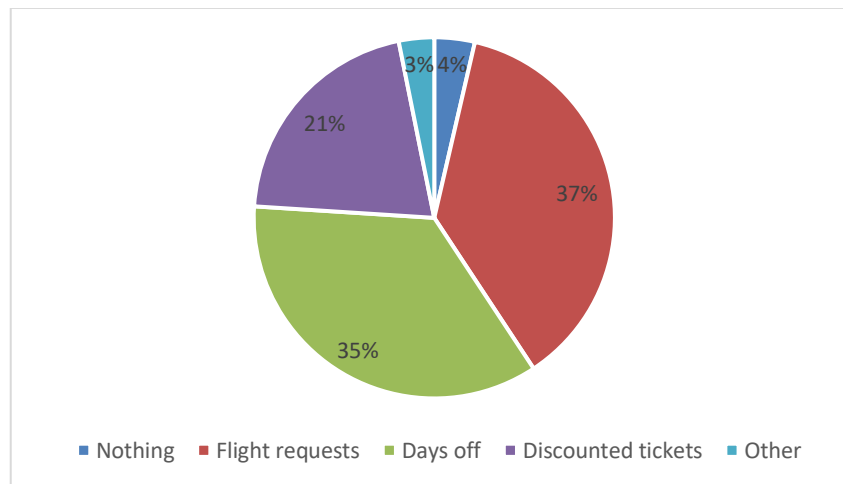


FIGURE 21 WLB MEASURES BY AN AIRLINE

The pie chart (Figure 21) above indicates the distribution of incentives offered by an airline and the extent to which pilots and flight attendants perceive them as work-life balance friendly. Granting flight requests and days off are considered as most relevant incentives, but also discounted flight tickets are often seen as valuable measures. Further, the participants also indicated long layovers and the airline's consideration towards special days off for childcare or a funeral as measures. However, also a small percentage does not perceive any of these measures as initiative towards work-life balance and one participant even indicated that they try to reduce all of the mentioned aspects. All of these incentives have been mentioned through the literature and can therefore be seen as relevant for the real airline world.

4.3.9 Jetlag and Fatigue

Once more the issue of jetlag and especially fatigue in general is investigated, as it is presented as a relevant issue through literature which has already been confirmed via the interviews. When being specifically asked "Do you think jetlag and fatigue have an effect on your social life?" and the possible answers are only "yes" or "no" the following outcome can be seen in Figure 22.

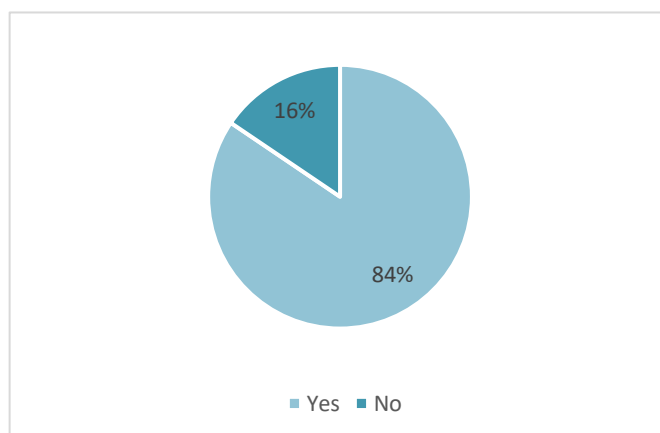


FIGURE 22 EFFECT OF JETLAG OR FATIGUE

These 84% are even getting higher when asking if a certain event needed to be cancelled because of fatigue or the need to sleep. 94.2% of the participants confirmed that this had been the case already. This result is considered as significant and therefore relevant and confirms again, that sleep, fatigue and jetlag are a daily factor faced by aircrew members, which does not only influence their work life, but also influences their social life.

4.4 Evaluation of Control Group

The survey of the control group of air traffic controllers reached 20 participants and is summarized in Table 5 below. Of these 20, 15 are male and five are female, which makes the distribution 75% and 25%. This is relatively unequally distributed but can be traced back to the fact that this industry is still rather male dominated. Also, concerning the employer no large variety can be seen, as usually every country has only one air traffic control firm. Accordingly, 19 out of the 20 respondents work for the Austrian Austro Control, one respondent is from the German Deutsche Flugsicherung.

TABLE 5 AGE DISTRIBUTION OF AIR TRAFFIC CONTROLLERS

Age range	Frequency	Percent
21-25	5	25%
26-30	5	25%
31-35	2	10%
36-40	1	5%
41-45	5	25%
46-50	1	5%
51-55	1	5%
Total	20	100%

Table 5 indicates the age distribution of the control group which is relatively young as half of the participants are between 21 and 30. Like with the focus group, none of the respondents selected the youngest age range (18-20) nor the highest one (over 65), but neither the one before (56-60). The young average age is also reflected within the years of experience as 60% have up to only 10 years of experience (see Figure 23).

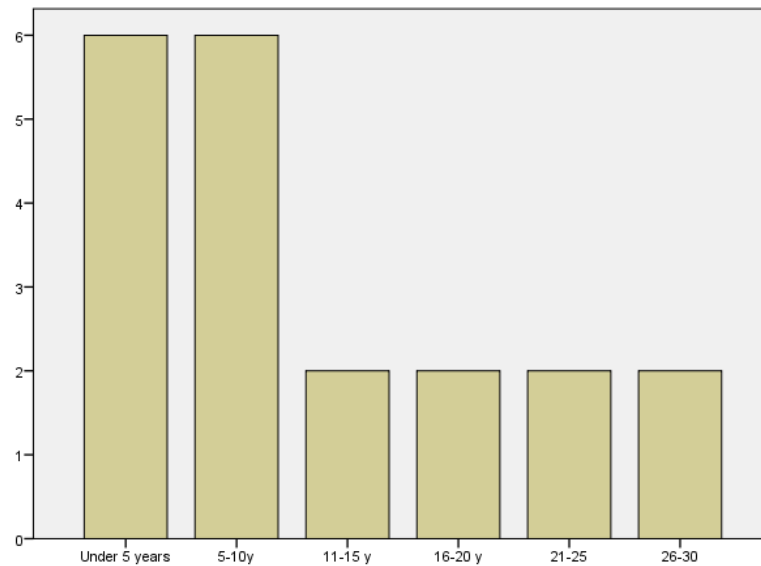


FIGURE 23 JOB EXPERIENCE

TABLE 6 RELATIONSHIP STATUS AIR TRAFFIC CONTROLLERS

Relationship status	Frequency	Percent
Single	3	15%
In a relationship	8	40%
Married	9	45%
Total	20	100%

Among the relationships no equal distribution can be seen, there are only 15% who are single, whereas 85% are in a relationship, as summarized in Table 6. However, this is seen as a benefit for the research because many questions solely focus on partnerships. The lengths of these relationships vary a lot as some go from under a year to up to 29 years. In general, the relationships have a median of 5 years of length of relationship.

60% also indicate that their partner also has an irregular job and indicate the following as possible reasons why irregularities of both could be of advantage:

- Understanding of irregularities (15 out of 20)
- No routine (12 out of 15)
- The irregularities give the relationship the “spirit” (2 out of 20)
- More time together during the week (1 out of 20)

When it comes to children, only 30% if them do have children, but however 55% of the participants of the control group displays that also among them having children indicates part-time work.

When being questioned about fatigue 70% declared that it has an effect on their social life. Even more, 80%, stated that they even had to cancel an event because of their fatigue.

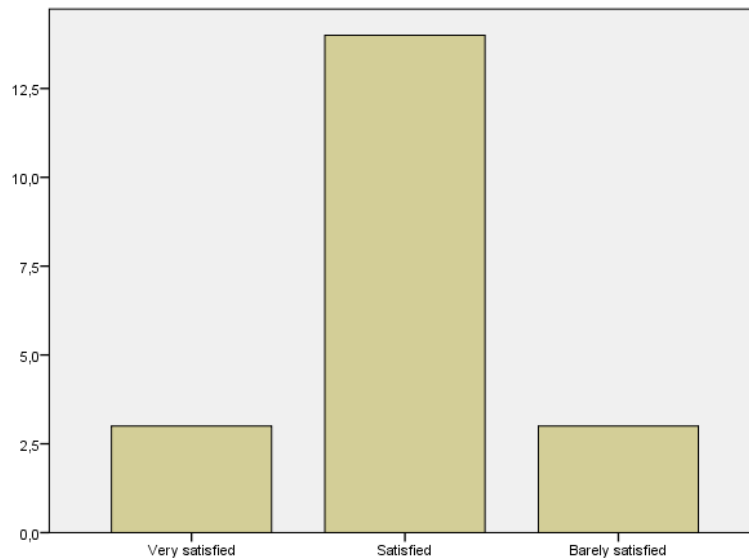


FIGURE 24 WOK-LIFE BALANCE AIR TRAFFIC CONTROLLERS

Figure 24 shows the satisfaction of air traffic controllers, no participant indicated to be not satisfied at all. 70% are satisfied and 15% are even very satisfied. However, as the sample size is rather small it is doubtful how representative this result is. To achieve work-life balance, air traffic controllers consider “*looking after yourself*” as most important (75%), which is followed by “*time management*” (55%). Further, also “*socializing*” is considered as essential for WLB, however, “*working part time*” is only considered as work-life balance measure by 15%.

Measures for work-life balance by the company:

- Nothing (50%)
- Requested days off (50%)

- Benefits (20%)
 - Extra free days before holiday
 - Good holiday arrangement
 - Parental advantages
 - Self-managed timetables

4.5 Differences between focus group and control group

The first thing which should be pointed out, that the sample size is quite unequal, as there are five times more responses from crew members than from air traffic controllers (103 versus 20). For both job groups working part-time is an indicator when having children. However, only the focus group strongly considered working part-time as measure for WLB. A reason for this might be that air traffic controllers have better work hour regulations and therefore do not have the strong need for part-time.

Looking at the effect of fatigue concerning their shift-works, both groups indicate very strongly that their social life is affected by it. Regardless of this, the two groups are both highly satisfied with their overall work-life balance.

As already mentioned in chapter 4.3.3, 70.9% of the conducted crew members have a positive attitude towards their work irregularities. Similarly, among air traffic controllers 65% also consider irregular duty hours as a benefit, 25% as a threat and 10% state that they consider it threatening and beneficial equally. However, a larger variety of positive aspects have been mentioned by the flight personnel, which might be due to the fact of the smaller sample size. A specific difference is definitely that far less air traffic controllers consider the irregular duty hours as giving the relationship “the spirit”. This might be because that by the end of the day they are able to come home and are not in a hotel on the other side of the world. Both groups consider the given flexibility and not having a routine as beneficial. The control group of air traffic controllers perceives that they have less family time due to their working hours. However, it should be acknowledged that the perception is and always will be dependent on the individual itself.

4.6 Discussion / Conclusion / Summary

The research presented an interesting pattern, that apparently relationships among colleagues really is a thing. However, in qualitative research, relationships with colleagues are considered as easier, but in quantitative research they are not. A reason for this could be that interview partners are not equally distributed or that sample size simply too small. However, “understanding for the job” is within both researches the prominent reason why such a relationship is

considered easier to maintain. Furthermore, being in a relationship with someone of the same firm can be seen as a benefit for the relationship, however as soon as children are involved, it is harder to maintain the partnership as the focus lays more on the children than on the partner.

Working part-time is being considered as very essential for being able to balance work and life, which has also been shown through the interviews as well as the online survey. However, through literature working part-time is considered as possible incentives but is never stressed as this important as it is made clear through research. Further, also research clearly showed the necessity of working part-time as soon as children are involved. Therefore, children have an extreme effect on an individual's life and its work-life balance, which is however not stressed out to this extent by the literature.

Furthermore, the duty plans are considered as essential for a flight attendant's or pilot's life. As they are always only valid for one month the work-life balance for this month is dependent on it. These are special irregularities which can be more extreme sometimes and are not only influencing the work life but also the private life of an individual. Within this job work-life balance is seen as highly relevant for the individual performance and therefore also the safety on board.

The conducted qualitative research pointed out that the investigated issues are strongly dependent on an individual's personality. However, the quantitative research allowed to draw more generalizable conclusions, rather than the identification of personality differences, which is a positive side effect of the larger sample size.

5 FINAL CONCLUSION

Literature showed that work-life balance has become important and a daily issue in all kind of life aspects over the last decades. It has been and still is subject to various changes like the development of family structures which led to new structures and possibilities within families as well as the workplace. Maintaining a satisfying work-life balance is seen as a two-way job between an individual and his employer, this has also been revealed through the research in the aviation industry. Pilots and flight attendants do have a special job which does not only include shiftwork but also not being able to come home after every workday.

Besides the main research question, also various smaller ones have been presented in the beginning of the thesis. One of them aimed to define and present an understandable definition of work-life balance. Work-life balance is a subjective term and cannot be described objectively, as it is perceived differently by every single person, but essentially stands for balance between the work and the life sphere of an individual. Also, the effect of the irregular work hours of an aircrew member has become very clear through the conducted research. Especially, sleep and fatigue in general do have an influence on the social life and often lead to the cancellation of events or parties.

When it comes to relationships of aircrew members it can be seen that a certain amount is in a relationship with another crew member. However, the overall sample size is too small to be able to declare a tendency towards such a relationship. Relationships in general do not work differently than others among people with regular work hours. These relationships might simply need a little more effort and a higher level of adaptation from both partners will be necessary. However, relationships with an airliner have to face other factors like the irregular duty hours, the effects of absence from home and more distrust when being apart from each other. Therefore, a higher effort of organizing and planning ahead will be necessary to be able to make use of the time together more effectively. The exact amount of adaptation will vary and be also dependent on the partner's personality as well as job.

Another research aim and question focused on incentives by the airline's management as well as possible measures of the individual crew member to create work-life balance. There are numerous measures which airlines can imply, but it depends on the specific airline which ones are exactly offered. These incentives include, flight and days off requests, part-time or discounted tickets for example. However, it should also be in the airline's interest to raise awareness and inform about work-life balance itself. The conducted primary research showed that the individual perception plays a role to which things are considered as measures and which things are considered as rather granted. On an individual level, research showed that the list of possibilities is long. Crew members can and should plan and manage its time on a layover as well as back home well. Further, also socializing, maintaining a healthy lifestyle, focusing on itself are mentioned through literature as well as the study. Literature also indicates the im-

portance of informing friends and family about all the downsides of the job as well as providing them with the monthly flight schedule to integrate them. However, precise planning and managing time are the most crucial measures for an individual pilot or flight attendant.

Through these smaller research questions, the main research question can be answered, which was: *“Maintaining a satisfying work-life balance and relationship depends on the personality and not on the job.”* Literature is continuously underlining that the perception of work-life balance is strongly dependent on the exact personality of an individual. This is further confirmed through the conducted primary research. Each presented incentive as well as perception is always subject to the individual’s personality and current personal situation. This is especially the case when focusing on relationships, as there also a second personality has to be considered. Therefore, this research comes to the final conclusion that being satisfied and able to balance work and life will always need different kinds of incentives, depending on the character and the specific circumstances which the individual faces.

5.1 Future research

This current research can be seen as beginning for a more in-depth investigation into work-life balance in the aviation industry. Work-life balance is a very broad term, therefore specific focus can be put on different issues. For instance, the amount of work-related stress within this job or the effect of fatigue on flights could be targeted.

These further analyses could be broadened up to a way larger sample size to get a more representative outcome and to really be able to generalize throughout the aviation industry. Further, this could create a more reliable outcome, especially if also the interviews would be done anonymously, since people might be able to be more honest about their issues. However, for this thesis the research is expected to be reliable. The survey is reliable since it has already been anonymous. Similarly, the results of the conducted interviews are also considered as reliable, as the interviewees knew that their name is not shown, and a certain level of trust has been created between the researching interviewer and the participants.

A possibility for future research would be for airlines to investigate towards the current work-life balance and the perception of it internally. As a result, an airline has the chance to identify possible issues and can then imply countermeasures, which might increase employee satisfaction overall.

The current study tried to address numerous issues concerning work-life balance and therefore leaves room to investigate certain specific areas more. These aspects of interest might target crew rostering approaches or crew dynamics itself.

Moreover, future research could also focus on gender differences among work-life balance within airlines.

6 BIBLIOGRAPHY

- Alam, M. (2015). Cockpit learning in power distant cockpits: The interaction effect of pilot's interdependence and inclination to teamwork in airline industry. *Journal Of Air Transport Management*, 42, 192-202. doi: 10.1016/j.jairtraman.2014.10.003
- Alitalia Training Academy. Cabin Crew Course. Retrieved 2 May 2020, from <http://www.flytraining.it/en/flight-training/cabin-crew-courses/cabin-crew-course.html>
- ATAG. (2018). *Global Fact Sheet* [Pdf]. Retrieved from https://www.aviationbenefits.org/media/166713/abbb18_factsheet_global.pdf
- ATAG. (2020). Facts & figures. Retrieved 20 March 2020, from <https://www.atag.org/facts-figures.html>
- Ballard, T., Corradi, L., Lauria, L., Mazzanti, C., Scaravelli, G., & Sgorbissa, F. et al. (2004). Integrating qualitative methods into occupational health research: a study of women flight attendants. *Occupational And Environmental Medicine*, 61(2), 163-166. doi: 10.1136/oem.2002.006221
- Ballard, T., Romito, P., Lauria, L., Vigiliano, V., Caldora, M., Mazzanti, C., & Verdecchia, A. (2006). Self perceived health and mental health among women flight attendants. *Occupational And Environmental Medicine*, 63(1), 33-38. doi: 10.1136/oem.2004.018812
- Blunsdon, B., Blyton, P., Reed, K., & Dastmalchian, A. (2006). Introduction. Work, Life and the Work-Life Issue. In P. Blyton, B. Blunsdon, K. Reed & A. Dastmalchian, *Work-Life Integration: International Perspectives on the Balancing of Multiple Roles* (pp. 1-16). New York: Palgrave Macmillan.
- Bor, R., Field, G., & Scragg, P. (2002). The mental health of pilots: An overview. *Counselling Psychology Quarterly*, 15(3), 239-256. doi: 10.1080/09515070210143471
- Bosmans, G., Bakermans-Kranenburg, M., Vervliet, B., Verhees, M., & van IJzendoorn, M. (2020). A learning theory of attachment: Unraveling the black box of attachment

- development. *Neuroscience & Biobehavioral Reviews*, 113, 287-298. doi: 10.1016/j.neubiorev.2020.03.014
- Bryman, A., & Bell, E. (2007). *Business Research methods* (2nd ed.). Oxford: Oxford University Press.
- Cabin crew initial safety training | UK Civil Aviation Authority. Retrieved 2 May 2020, from <https://www.caa.co.uk/Commercial-industry/Airlines/Cabin-crew/Training/Cabin-crew-initial-safety-training/>
- Caldwell, J., Mallis, M., Caldwell, J., Paul, M., Miller, J., & Neri, D. (2009). Fatigue Countermeasures in Aviation. *Aviation, Space, And Environmental Medicine*, 80(1), 29-59. doi: 10.3357/ase.2435.2009
- Cento, A. (2009). *The airline industry. Challenges in the 21st Century*. Heidelberg, Germany: Physica-Verlag.
- Chen, C., & Chen, S. (2012). Burnout and Work Engagement Among Cabin Crew: Antecedents and Consequences. *The International Journal Of Aviation Psychology*, 22(1), 41-58. doi: 10.1080/10508414.2012.635125
- Chen, P., & Li, Y. (2014). Occupational Health and Safety. In A. Day, K. Kelloway & J. Hurrell, *Workplace Well-being - How to build psychologically healthy workplaces* (pp. 75-94). West Sussex: John Wiley & Sons, Ltd.
- Connell, R. (2005). Work/Life Balance, Gender Equity and Social Change. *Australian Journal Of Social Issues*, 40(3), 369-383. doi: 10.1002/j.1839-4655.2005.tb00978.x
- Cooper, C., & Bevan, S. (2014). Business Benefits of a Health Workforce. In A. Day, K. Kelloway & J. Hurrell, *Workplace Well-being - How to Build Psychologically Healthy Workplaces* (pp. 27-49). West Sussex: John Wiley & Sons, Ltd.
- Creswell, J. (2007). *Qualitative inquiry & research design* (2nd ed.). Thousand Oaks: SAGE.
- Creswell, J. (2014). *Research design* (4th ed.). Los Angeles: SAGE Publications.
- Day, P., & Ryan, D. (1997). Flight Attendant Rostering for Short-Haul Airline Operations. *Operations Research*, 45(5), 649-661. doi: 10.1287/opre.45.5.649

- De Cieri, H., Holmes, B., Abbott, J., & Pettit, T. (2005). Achievements and challenges for work/life balance strategies in Australian organizations. *The International Journal Of Human Resource Management*, 16(1), 90-103. doi: 10.1080/0958519042000295966
- Dennis, N. (2005). Industry consolidation and future airline network structures in Europe. *Journal Of Air Transport Management*, 11(3), 175-183. doi: 10.1016/j.jairtraman.2004.07.004
- Diamantopoulos, A., & Cadogan, J. (1996). Internationalizing the market orientation construct: an in-depth interview approach. *Journal Of Strategic Marketing*, 4(1), 23-52. doi: 10.1080/09652549600000002
- Díaz-Ramírez, J., Huertas, J., & Trigos, F. (2014). Aircraft maintenance, routing, and crew scheduling planning for airlines with a single fleet and a single maintenance and crew base. *Computers & Industrial Engineering*, 75, 68-78. doi: 10.1016/j.cie.2014.05.027
- Doganis, R. (2002). *Flying off course* (3rd ed.). London: Routledge, Taylor & Francis Group.
- Doyle, A. (2020). How Many Hours a Week Is Considered Part-Time Employment?. Retrieved 7 June 2020, from <https://www.thebalancecareers.com/what-is-a-part-time-job-2062738>
- Drobnič, S., & Guillén, A. (2011). *Work-life balance in Europe*. Houndmills, Basingstoke Hampshire: Palgrave Macmillan.
- Duxbury, L., & Higgins, C. (2006). Work-life Balance in Canada: Rhetoric versus Reality. In P. Blyton, B. Blunsdon, K. Reed & A. Dastmalchian, *Work-Life Integration: International Perspectives on the Balancing of Multiple Roles* (pp. 82-112). New York: Palgrave Macmillan.
- Edralin, D. (2012). Innovative Work-Life Balance Strategies of Filipina Entrepreneurs: New Evidence from Survey and Case Research Approaches. *Procedia - Social And Behavioral Sciences*, 57, 201-208. doi: 10.1016/j.sbspro.2012.09.1175

- Emslie, C., & Hunt, K. (2009). 'Live to Work' or 'Work to Live'? A Qualitative Study of Gender and Work-life Balance among Men and Women in Mid-life. *Gender, Work & Organization*, 16(1), 151-172. doi: 10.1111/j.1468-0432.2008.00434.x
- Erdamar, G., & Demirel, H. (2013). Investigation of Work-family, Family-work Conflict of the Teachers. *Procedia - Social And Behavioral Sciences*, 116, 4919-4924. doi: 10.1016/j.sbspro.2014.01.1050
- Eriksen, C. (2016). How Cabin Crew Cope With Work Stress. In R. Bor & T. Hubbard, *Aviation Mental Health - Psychological Implications for Air Transportation*. New York: Routledge.
- Eriksen, C. (2018). *Managing Work and Relationships at 35,000 Feet: A Practical Guide for Making Personal Life Fit Aircrew Shift Work, Jetlag, and Absence from Home*. Routledge.
- European Commission. (2012). EUR-Lex - 32012R0290 - EN - EUR-Lex. Retrieved 2 May 2020, from <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1473408020778&uri=CELEX:32012R0290>
- Fagan, C., & Walthery, P. (2011). Job Quality and the Perceived Work-Life Balance Fit between Work Hours and Personal Commitments: A Comparison of Parents and Older Workers in Europe. In S. Dronbič & A. Guillén, *Work-Life Balance in Europe: The Role of Job Quality* (pp. 69-94). Basingstoke: Palgrave Macmillan.
- Ferla, M., & Graham, A. (2019). Women slowly taking off: An investigation into female underrepresentation in commercial aviation. *Research In Transportation Business & Management*, 31, 100378. doi: 10.1016/j.rtbm.2019.100378
- Fink, G. (2017). Stress: Concepts, Definition and History☆. *Reference Module In Neuroscience And Biobehavioral Psychology*. doi: 10.1016/b978-0-12-809324-5.02208-2
- Fit for Work team. (2015). Benefits of Working [Blog]. Retrieved from <https://fitforwork.org/blog/benefits-of-working/>
- Ford, J., Henderson, R., & O'Hare, D. (2014). The effects of Crew Resource Management (CRM) training on flight attendants' safety attitudes. *Journal Of Safety Research*, 48, 49-56. doi: 10.1016/j.jsr.2013.11.003

- Foster, D., & Ren, X. (2014). Work–family conflict and the commodification of women's employment in three Chinese airlines. *The International Journal Of Human Resource Management*, 26(12), 1568-1585. doi: 10.1080/09585192.2014.949821
- Franke, M., & John, F. (2011). What comes next after recession? – Airline industry scenarios and potential end games. *Journal Of Air Transport Management*, 17(1), 19-26. doi: 10.1016/j.jairtraman.2010.10.005
- Gambles, R., Lewis, S., & Rapoport, R. (2006). *The myth of work-life balance: The Challenge of our Time for Men, Women and Societies*. Chichester, England: John Wiley & Sons.
- Geber, S. Z. (1996). *How to Manage Stress for Success*. AMACOM, American Management Association.
- Ginnett, R. (2019). Crews as Groups: Their Formation and Their Leadership. In B. Kanki, J. Anca & T. Chidester, *Crew Resource Management* (3rd ed., pp. 73-102). Elsevier.
- Glanz, K., & Schwartz, M. (2008). Stress, Coping and Health Behaviour. In K. Glanz, B. Rimer & K. Viswanath, *Health Behaviour and Health Education - Theory, Research and Practice* (4th ed., pp. 211-236). San Francisco: Jossey-Bass.
- Green, P. (2014). The work-life balance – How Cabin Crew get it right!. Retrieved 24 May 2020, from <http://www.cabincrew.com/career-advice/the-work-life-balance-how-cabin-crew-get-it-right/1155>
- Greenhaus, J., & Beutell, N. (1985). Sources of Conflict Between Work and Family Roles. *Academy Of Management Review*, 10(1), 76-88. doi: 10.5465/amr.1985.4277352
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work–family balance and quality of life. *Journal of vocational behavior*, 63(3), 510-531.
- Gruber, J. (2020). Austrian Airlines vor Flotten- und Personalabbau. Retrieved 28 April 2020, from <https://www.austriaviation.net/detail/austrian-airlines-vor-flotten-und-personalabbau/>
- Guest, D. E. (2002). Perspectives on the study of work-life balance. *Social Science Information*, 41(2), 255-279.

- Guo, Y., Mellouli, T., Suhl, L., & Thiel, M. (2006). A partially integrated airline crew scheduling approach with time-dependent crew capacities and multiple home bases. *European Journal Of Operational Research*, 171(3), 1169-1181. doi: 10.1016/j.ejor.2005.01.024
- Haar, J., Russo, M., Suñe, A., & Ollier-Malaterre, A. (2014). Outcomes of work–life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. *Journal Of Vocational Behavior*, 85(3), 361-373. doi: 10.1016/j.jvb.2014.08.010
- Hakim, C. (2005). Sex Differences in Work-Life Balance Goals. In D. Houston, *Work-Life Balance in the 21st Century* (pp. 55-79). Houndmills: Palgrave Macmillan.
- Hanlon, P. (2007). *Global airlines*. 3rd ed. Oxford: Butterworth-Heinemann.
- Hart, R. (2010). *Working Time and Employment*. Routledge. (Original work published 1987).
- Harvey, G., Finniear, J., & Greedharry, M. (2019). Women in aviation: A study of insecurity. *Research In Transportation Business & Management*, 31, 100366. doi: 10.1016/j.rtbm.2019.05.001
- Heathfield, S. (2018). A Look at Shift Work and Employees Who Work in Shifts. Retrieved 6 June 2020, from <https://www.thebalancecareers.com/shift-work-1918258>
- Homan, W. (2002). Stress Coping Strategies for Commercial Flight Crewmembers. *Journal Of Aviation/Aerospace Education & Research*. doi: 10.15394/jaaer.2002.1592
- Houston, D. (2005). Introduction. In D. Houston, *Work-Life Balance in the 21st Century* (pp. 1-10). Houndmills: Palgrave MacMillan.
- Hughes, J., & Bozionelos, N. (2007). Work-life balance as source of job dissatisfaction and withdrawal attitudes. *Personnel Review*, 36(1), 145-154. doi: 10.1108/00483480710716768
- IATA. (2020). *Airlines Financial Monitor* [Ebook]. Retrieved from <https://www.iata.org/en/iata-repository/publications/economic-reports/airlines-financial-monitor---march-2020/>
- IFALPA. (2013). *Cruise Relief Pilots* [Ebook]. Retrieved from <https://www.ifalpa.org/media/2135/14pos11-cruise-relief-pilots.pdf>

- Initial Cabin Crew - BAA Cabin Crew Training. Retrieved 2 May 2020, from <https://baacabincrew.com/cabin-crew-training/initial-cabin-crew/>
- Kalliath, T., & Brough, P. (2008). Work–life balance: A review of the meaning of the balance construct. *Journal Of Management & Organization, 14*(3), 323-327. doi: 10.1017/s1833367200003308
- Karatepe, O., & Kim, T. (2020). Investigating the selected consequences of boreout among cabin crew. *Journal Of Air Transport Management, 82*, 101739. doi: 10.1016/j.jairtraman.2019.101739
- Kim, Y., & Park, H. (2014). An Investigation of the Competencies Required of Airline Cabin Crew Members: The Case of a Korean Airline. *Journal Of Human Resources In Hospitality & Tourism, 13*(1), 34-62. doi: 10.1080/15332845.2013.807393
- King, J. (2005). Research Review: Work-Family/Family-Work Conflict. *International Journal Of Leadership Studies, 1*(1), 102-105.
- King, N., Horrocks, C., & Brooks, J. (2019). *Interviews in qualitative research* (2nd ed.). London: SAGE.
- Kolander, C. (2019). Flight and Cabin Crew Teamwork: Improving Safety in Aviation. In B. Kanki, J. Anca & T. Chidester, *Crew Ressource Management* (3rd ed., pp. 407-420). Elsevier.
- Korczak, D., Huber, B., & Kister, C. (2010). Differential diagnostic of the burnout syndrome. *GMS health technology assessment, 6*, Doc09. <https://doi.org/10.3205/hta000087>
- Levitt, O., & Bor, R. (2003). Air Travel and Implications for Relationships. In R. Bor, *Passenger Behaviour* (pp. 66-81). Aldershot: Ashgate.
- Lewis, S., & Cooper, C. (2005). *Work-life integration – Case Studies of Organisational Change*. Chichester: Wiley.
- Lockwood, N. R. (2003). Work/life balance. *Challenges and Solutions, SHRM Research, USA*.
- Lunau, T., Bambra, C., Eikemo, T., van der Wel, K., & Dragano, N. (2014). A balancing act? Work–life balance, health and well-being in European welfare states. *European Journal Of Public Health, 24*(3), 422-427. doi: 10.1093/eurpub/cku010

- Makó, S., Szabo, S., Tobisová, A., Pilát, M., Socha, L. & Vajdová, I. (2018). WIZZ AIR CABIN CREW TRAINING. *CER Comparative European Research 2018*.
- Malhotra, N. (2010). *Marketing research: An Applied Orientation* (6th ed.). New Jersey: Pearson Education.
- Marshall, P. (2001). *Two jobs, no life*. Toronto: Key Porter Books.
- Mathes, B., Timpano, K., Raines, A., & Schmidt, N. (2020). Attachment theory and hoarding disorder: A review and theoretical integration. *Behaviour Research And Therapy*, 125, 103549. doi: 10.1016/j.brat.2019.103549
- Moen, P., & Yu, Y. (2000). Effective Work/Life Strategies: Working Couples, Work Conditions, Gender, and Life Quality. *Social Problems*, 47(3), 291-326. doi: 10.1525/sp.2000.47.3.03x0294h
- Moreno, S. (2011). Tensions between Work, Family, and Personal Life in Spanish Dual-Income Couples. In S. Dronbič & A. Guillén, *Work-Life Balance in Europe: The Role of Job Quality* (pp. 69-94). Basingstoke: Palgrave Macmillan.
- Morse, J., & Bor, R. (2016). Psychiatric Disorders and Syndromes among Pilots. In R. Bor & T. Hubbard, *Aviation Mental Health - Psychological Implications for Air Transportation*. New York: Routledge.
- Munn, S. (2013). Unveiling the Work–Life System. *Advances In Developing Human Resources*, 15(4), 401-417. doi: 10.1177/1523422313498567
- Munn, S. L., Rocco, T. S., Bowman, L., & van Loo, J. B. (2011). *Work-life research and the representation of sexual minorities*. Paper presented at the 7th International Critical Conference, Naples, Italy.
- Nam, T. (2013). Technology Use and Work-Life Balance. *Applied Research In Quality Of Life*, 9(4), 1017-1040. doi: 10.1007/s11482-013-9283-1
- Nevile, M. (2001). Understanding who's who in the airline cockpit: pilot's pronominal choices and cockpit rules. In A. McHoul & M. Rapley, *How to Analyze Talk in Institutional Settings: A Casebook of Methods* (pp. 57-71). New York: Continuum.

- Novak, A., Badanik, B., Brezonakova, A. and Lusiak, T., 2020. Implications of Crew Rostering on Airline Operations. *Transportation Research Procedia*, 44, pp.2-7.
- O'Connell, J. (2019). The Role of the Different Airline Business Models. *Air Transport: A Tourism Perspective*, 125-141. doi: 10.1016/b978-0-12-812857-2.00010-5
- Ohrnberger, J., Fichera, E., & Sutton, M. (2017). The relationship between physical and mental health: A mediation analysis. *Social Science & Medicine*, 195, 42-49. doi: 10.1016/j.socscimed.2017.11.008
- Orasanu-Engel, J., & Mosier, K. (2019). Flight and Cabin Crew Teamwork: Improving Safety in Aviation. In B. Kanki, J. Anca & T. Chidester, *Crew Resource Management* (3rd ed., pp. 139-183). Elsevier.
- Orlady, L. (2010). Airline Pilot Training Today and Tomorrow. In B. Kanki, R. Helmreich & J. Anca, *Crew Resource Management* (2nd ed., pp. 469-491). Elsevier.
- Patton, M. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks: Sage.
- Physical health - EUPATI. (2015). Retrieved 6 June 2020, from <https://www.eupati.eu/glossary/physical-health/>
- Poelmans, S., Kalliath, T., & Brough, P. (2008). Achieving work–life balance: Current theoretical and practice issues. *Journal Of Management & Organization*, 14(3), 227-238. doi: 10.1017/s1833367200003242
- Reis, H. (2001). Relationship Experiences and Emotional Well-Being. In C. Ryff & B. Singer, *Emotion, Social Relationship, and Health* (pp. 57-85). New York: Oxford University Press.
- Richards, P., Cleland, J., & Zuckerman, J. (2016). Psychological Factors Relating to Physical Health Issues: How Physical Factors in Aviation and Travel Affect Psychological Functioning. In R. Bor & T. Hubbard, *Aviation Mental Health - Psychological Implications for Air Transportation*. New York: Routledge.
- Rigg, R., & Cosgrove, M. (1994). Aircrew wives and the intermittent husband syndrome. *Aviation, space, and environmental medicine*, 65(7), 654–660.

- Sanlorenzo, M., Wehner, M., Linos, E., Kornak, J., Kainz, W., & Posch, C. et al. (2015). The Risk of Melanoma in Airline Pilots and Cabin Crew. *JAMA Dermatology*, *151*(1), 51. doi: 10.1001/jamadermatol.2014.1077
- Saunders, E. (2019). 6 Causes of Burnout, and How to Avoid Them. Retrieved 5 June 2020, from <https://hbr.org/2019/07/6-causes-of-burnout-and-how-to-avoid-them>
- Smith, J., & Coyle, V. (2020). Interpretative phenomenological analysis. In E. Lyons & A. Coyle, *Analysing Qualitative Data in Psychology* (pp. 35-50). London: SAGE.
- Sommer, K. (2014). Pilot training: What can surgeons learn from it?. *Arab Journal Of Urology*, *12*(1), 32-35. doi: 10.1016/j.aju.2013.08.011
- Stone, R., & Babcock, G. (1988). Airline Pilot's Perspective. In E. Wiener & D. Nagel, *Human Factors in Aviation* (pp. 529-560). Elsevier.
- Szosland, D. (2010). Shift work and metabolic syndrome, diabetes mellitus and ischaemic heart disease. *International Journal Of Occupational Medicine And Environmental Health*, *23*(3). doi: 10.2478/v10001-010-0032-5
- Tsaur, S., Hsu, F., & Kung, L. (2020). Hassles of cabin crew: An exploratory study. *Journal Of Air Transport Management*, *85*, 101812. doi: 10.1016/j.jairtraman.2020.101812
- Vasigh, B., Fleming, K., & Tacker, T. (2013). *Introduction to Air Transport Economics* (2nd ed.). Surrey: Ashgate Publishing Limited.
- Wallace, F. (2019). The Mental Health of Pilots and the Importance of Work-Life Balance – Aeronautics. Retrieved 24 May 2020, from <https://aeronauticsonline.com/the-mental-health-of-pilots-and-the-importance-of-work-life-balance/>
- Watanabe, K., Tanaka, E., Watanabe, T., Tomisaki, E., Ito, S., Okumura, R., & Anme, T. (2019). Social relationships and functional status among Japanese elderly adults living in a suburban area. *Public Health*, *179*, 84-89. doi: 10.1016/j.puhe.2019.09.016
- Wensveen, J. (2011). *Air Transportation* (7th ed.). Surrey: Ashgate Publishing Limited.
- Whitley, A. (2020). How Coronavirus will forever change airlines and the way we fly. Retrieved 28 April 2020, from <https://www.bloomberg.com/news/features/2020-04-24/coronavirus-travel-covid-19-will-change-airlines-and-how-we-fly>

- Yan, S., & Chang, J. (2002). Airline cockpit crew scheduling. *European Journal Of Operational Research*, 136(3), 501-511. doi: 10.1016/s0377-2217(01)00060-1
- Yan, S., Tung, T., & Tu, Y. (2002). Optimal construction of airline individual crew pairings. *Computers & Operations Research*, 29(4), 341-363. doi: 10.1016/s0305-0548(00)00070-8
- Yildiz, B., Gzara, F., & Elhedhli, S. (2016). Airline crew pairing with fatigue: Modeling and analysis. *Transportation Research Part C: Emerging Technologies*, 74, 99-112. doi: 10.1016/j.trc.2016.11.002
- Zheng, C., Molineux, J., Mirshekary, S., & Scarparo, S. (2015). Developing individual and organizational work-life balance strategies to improve employee health and wellbeing. *Employee Relations*, 37(3), 354-379. doi: 10.1108/er-10-2013-0142

APPENDICES

Appendices contain material that is too large for inclusion in the text or would interrupt the flow of the presentation if it were to be cited in detail. Such texts include the minutes of a meeting, questionnaires, interview outlines and records and the like. References to material in the appendix are indicated by the word appendix and a capital letter beginning with A in the reference sequence in the text. Each appendix begins on a new sheet.

Appendix 1: Questionnaire for online survey of focus group

- Please select your gender:
 - Female
 - Male
 - Other:
- Please select your age range:
 - 18-20
 - 21-25
 - 26-30
 - 31-35
 - 36-40
 - 41-45
 - 46-50
 - 51-55
 - 56-60
 - 60-65
 - 66+
- What is your occupation?
 - Pilot
 - Captain
 - Co-pilot
 - Cabin Attendant
 - Purser
 - Senior
 - Junior
- Which airline are you flying for?
 - Open:
- How long have you been flying?
 - Under 5 years
 - 5-10y
 - 11-15 y
 - 16-20 y
 - 21-25
 - 26-30
 - Over 30 years
- What do you fly?
 - Short-range
 - Long-range
 - Both
- What is your marital status?
 - Single
 - In a relationship
 - Married

- Other:
- If you are in a relationship, how many years have you and your partner been together?
 -
- If you are in a relationship, does your partner also fly?
 - Yes
 - No
- Do you have one or more children?
 - Yes
 - No
- If children are involved, do you think it is necessary that one partner at least works part time so it can be balanced? (If you do not have children yourself, what is your perception concerning your colleagues?)
 - Yes
 - No
- Have you ever been in a relationship with another flight attendant or pilot?
 - Yes
 - No
- Overall, do you think that being in a relationship with a partner with the same profession is easier than with someone who is not?
 - Yes
 - No
- For which reasons could you imagine that it might be easier?
 - Understanding for the job
 - Being able to work together
 - The irregularities give the relationship “the spirit”
 - Other:
- Did your job ever influence the ending of a relationship of yours?
 - Yes
 - No
- If yes, please shortly indicate why (distrust, irregularity, etc.)
 -
- Are you aware that a colleague of yours has/have cheated on their partner whilst being on duty?
 - Yes
 - No
- Did you ever cheat on your partner when you have been on duty?
 - Yes
 - No
- Do you think that due to your job it is harder to maintain a relationship?
 - Yes
 - No
- What would you identify as common conflict issues between you and a partner:
 - The fact of being apart from each other
 - Your partner feeling left behind
 - Work-related stress (from either one of you)
 - Distrust from your partner towards you and your absence from home
 - Simple personality issues

-
- Envy of your partner towards you being all over the world
 - Perceived distance when being reunited again
 - Other:
 - Do you feel distrust towards your partner about what he or she is doing at home when you are gone flying?
 - Yes
 - No
 - Do you feel that your job requires more flexibility and commitment from your partner when it comes to duties in your household?
 - Yes
 - No
 - Overall, do you think that your irregular duty hours benefit or threaten your relationship more?
 - Benefit
 - Please indicate why/how:
 - Threat
 - Please indicate why/how:
 - Other:
 - Do you think jetlag and fatigue have an effect on your social life?
 - Yes
 - No
 - Did you ever have to cancel an event or party because you needed to sleep either before or after your duty?
 - Yes
 - No
 - Do you feel you have a strong bond with your colleagues?
 - Yes
 - No
 - Do your colleagues contribute to minimize work-related stress for you?
 - Yes
 - No
 - How satisfied are you with your current work-life balance?
 - Very satisfied
 - Satisfied
 - Barely satisfied
 - Unsatisfied
 - What do you personally consider as essential to maintain a satisfying work-life balance?
 - Time management
 - Working part-time
 - Looking after your self
 - Socializing
 - Other:
 - How do you manage your time off on a layover in order to maintain your balance? (multiple choice)
 - Sightseeing/going out with crew
-

- Alone-Time
- Doing sport
- Mixture
- Other:
- What does your company do in order to ease you a work-life-balance?
 - Nothing
 - Flight requests
 - Days off
 - Discounted tickets
 - Other:

Appendix 2: Questionnaire of online survey for focus group

- Please select your gender
 - Female
 - Male
 - Other:
- Please select your age range
 - 18-20
 - 21-25
 - 26-30
 - 31-35
 - 36-40
 - 41-45
 - 46-50
 - 51-55
 - 56-60
 - 60-65
 - 66+
- For which company are you an air traffic controller?
 - Open:
- How long have you been doing this job?
 - Under 5 years
 - 5-10y
 - 11-15 y
 - 16-20 y
 - 21-25
 - 26-30
 - Over 30 years
- What is your marital status?
 - Single
 - In a relationship
 - Married
 - Other:
- If you are in a relationship, how many years have you and your partner been together?
 -
- If you are in a relationship, does your partner also have a job with irregular working hours?
 - Yes
 - No
- Overall, do you think that being in a relationship with a partner with also irregular duty hours is easier than with someone who does have a 9 to 5 job?
 - Yes
 - No
- For which reasons could you imagine that it might be easier?
 - Understanding for the irregularities

- No routine
- The irregularities give the relationship “the spirit”
- Other:
- Do you have one or more children?
 - Yes
 - No
- If children are involved, do you think it is necessary that one partner at least works part time so it can be balanced? (If you do not have children yourself, what is your perception concerning your colleagues?)
 - Yes
 - No
- Do you think that due to your job it is harder to maintain a relationship?
 - Yes
 - No
- What would you identify as common conflict issues between you and a partner:
 - The irregular working hours
 - Work-related stress (from either one of you)
 - Simple personality issues
 - Other:
- Do you feel that your job requires more flexibility and commitment from your partner when it comes to duties in your household, since you are not always available?
 - Yes
 - No
- Overall, do you think that your irregular duty hours benefit or threat your relationship more?
 - Benefit
 - Please indicate why/how:
 - Threat
 - Please indicate why/how:
 - Other:
- Do you think that fatigue has an effect on your social life?
 - Yes
 - No
- Did you ever have to cancel an event or party because you needed to sleep either before or after your duty?
 - Yes
 - No
 -
- Do your colleagues contribute to minimize work-related stress for you?
 - Yes
 - No
- How satisfied are you with your current work-life balance?
 - Very satisfied
 - Satisfied
 - Barely satisfied
 - Unsatisfied

- What do you personally consider as essential to maintain a satisfying work-life balance?
 - Time management
 - Working part-time
 - Looking after your self
 - Socializing
 - Other:
 - Other:
- What does your company do in order to ease you a work-life-balance?
 - Nothing
 - Requested days off
 - Benefits:
 - Other:

Appendix 3: Interview schedule

Date	Gender	Airline
27.02.2020	Female	Austrian Airlines
02.03.2020	Male	Austrian Airlines
03.03.2020	Female	Austrian Airlines
04.03.2020	Male	Austrian Airlines
05.03.2020	Female	Austrian Airlines
11.03.2020	Female	Austrian Airlines
08.04.2020	Female	Austrian Airlines
09.04.2020	Female	Austrian Airlines
11.04.2020	Male	Eurowings
13.04.2020	Female	Austrian Airlines
15.04.2020	Female	Austrian Airlines
18.04.2020	Male	Austrian Airlines
21.04.2020	Female	Austrian Airlines
21.04.2020	Male	Eurowings
03.06.2020	Female	Austrian Airlines