Effect of Psycho-Social Shift Schedules on Family Life Among Kenya Airways Crew in Nairobi City County, Kenya

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Abstract

Kenya Airways flight crew shift work is perceived to profoundly impact the emotional, economic, social and temporal patterns of family life. The study investigated the effect of psycho-social shift schedules on family life among Kenya Airways crew in Nairobi City County, Kenya. The research was underpinned on the Social Exchange Theory while a case study design was employed. The research targeted a population consisting of 1085 employees from Kenya Airways operating in Embakasi. Both stratified and simple random sampling methods were used to choose 217 respondents for the research. Quantitative data was collected using questionnaires while qualitative data was gathered via interview guides. The Statistical Package for the Social Sciences was used to analyze quantitative data through descriptive statistics and regression analysis, whereas thematic analysis aided in the analysis of qualitative data. The research findings revealed that there existed a positive and significant correlation between shift schedules and family life of Kenya Airways crew as indicated by a beta coefficient of 0.668 (p < 0.05). The study concluded that psycho-social shift schedules significantly influenced family life among crew members, with shift pattern demands interfering with family time, frequency of shifts preventing attendance to family functions, and duration of shifts creating gaps between crew members and their children. The findings demonstrated that irregular work patterns, psychological stress from shift work, and social disruption from unpredictable schedules directly impact crew members' family relationships, spousal satisfaction, parent-child interactions, and overall family wellbeing. The study recommends that Kenya Airways should implement flexible shift scheduling practices that accommodate family responsibilities, optimize shift duration to prevent extended working hours that lead to family separation, and establish more predictable shift patterns that allow crew members to maintain consistent roles within their households while reducing work-family conflicts.

Keywords: *Psycho-Social Shift Schedules, Family Life, Kenya Airways, Nairobi City County, Kenya*

1.0 Background to the Study

Globally, psycho-social shift schedules significantly impact family dynamics, with the aviation industry experiencing rapid transformation over the past two decades operationally, technologically and economically. In the 21st century, shift work patterns and family life balance have become pressing concerns for both female and male crew members across varied career stages and different airline operations (Zivnuska & Whitten, 2012). Family relationships, parental responsibilities and personal wellbeing constitute significant aspects of crew members' lives, with failure to address the strain between these elements leading to conflicts with work obligations and multiple challenges. The balance between shift schedules and family life extends beyond managing flight duties and home responsibilities, encompassing individual psychological adaptation including time for social connections, personal recovery periods, and participation in family traditions and personal interests.

The psychological impact of shift schedules varies from one crew member to another given that individuals face different family circumstances, including marital status and dependent children. Family impact encompasses more than time spent with spouses and children, including psychological stress affecting social interactions like maintaining friendships, personal mental health care and spiritual practices. Researchers have established that psycho-social effects of shift work encompass the psychological and emotional energy crew members must balance between their professional duties and family responsibilities occurring in their personal lives. Airlines need to understand the psycho-social impact of shift schedules on crew family life as it affects crew retention, performance levels, safety standards, service quality, absenteeism and crew wellbeing.

Part of the challenges stem from psychological adaptation to irregular shift patterns and family role management as crew members attempt to balance both domains. Recently, studies have reported that airline crew members work more irregular hours compared to other transportation industry workers globally, consequently experiencing reduced family interaction time and taking fewer consecutive days off. This results from attempts to maintain professional obligations while managing family expectations, personal relationships and domestic responsibilities, contributing to decreased quality time with families and substantially reduced time available for meaningful family engagement or family decision-making due to unpredictable work schedules.

In developed nations, movement toward more efficiency-driven airline operations has led to the creation of regulatory frameworks governing crew scheduling practices, establishing minimum requirements regarding rest periods, maximum flight hours and maternity considerations. However, the implementation and enforcement of these regulatory frameworks has failed to address the psycho-social impact of shift work on airline crew families in terms of traditional relationship dynamics. Women comprise the majority workforce in cabin crew positions which are often subject to more irregular scheduling patterns, with scheduling disparities continuing to exist in many crew categories both in terms of seniority and position types, including non-standard working arrangements such as overnight flights and rotating shift patterns.

In Africa, studies demonstrate that men and women who work irregular hours like airline crew were more likely to experience psychological adjustment difficulties and perceive reduced control over their personal lives than those who maintained regular work schedules. The psychological effects of shift scheduling varied according to family structure, with married male crew members who worked rotating shifts being more likely

than their fixed-schedule counterparts to report relationship difficulties, while single male crew working irregular shifts reported challenges establishing long-term partnerships. In Kenya, many operational restructuring initiatives regarding crew scheduling practices tend to be implemented without considering family impact, with airline crew and their families often receiving minimal support from scheduling systems designed to optimize operations.

The flight crew at Kenya Airways operate on shift schedules according to a twenty-eight-day roster with working patterns partially regulated by the Kenya Civil Aviation Authority, where regulations are broad and work schedules can be implemented without fully considering crew members' personal psychological wellbeing and how this affects their family relationships. The scheduling patterns for airline crew deviate substantially from conventional office hours, being predominantly irregular and dependent on route assignments, including operations that may require extended layovers, obligations to work during holidays and weekends, and overnight flights that create separation from home. Therefore, the current study examined the effect of psycho-social shift schedules on family life among Kenya Airways crew, seeking to understand how irregular work patterns, psychological stress from shift work, and social disruption from unpredictable schedules impact crew members' family relationships and overall family wellbeing.

1.1 Statement of the Problem

Being a crew member might seem like a glamorous job and it has its perks like travelling around the world to exotic destinations, meeting high profile people in society, sleeping in the best hotels in the world and wearing tailor made uniforms (bespoke). Crew work schedule and rest time is regulated by Kenya Civil Aviation Authority and planned by KQ. A crew member's primary duty is safety of passengers and security. A crew member has a roster of 28 days that includes both long haul and short haul flights. Crew experience roster changes due to operations reasons, which may include unanticipated technical delays, air traffic delay and duty time required which should not exceed 15 hours. KQ crew are expected to work on off days depending on operational requirements. Besides, there has been no research on the impacts of crew work schedule on family life in Kenya. Therefore, this research examined the impact of flight crew work schedule on the life of family among Kenya Airways Crew in Nairobi City County, Kenya aiming to draw recommendations for the contextual challenges as well as the highlight the empirical gap. Thus, the current study examined the effect of psycho-social shift schedules on family life among Kenya Airways crew in Nairobi City County, Kenya. The study sought to understand how irregular work patterns, psychological stress from shift work, and social disruption from unpredictable schedules impact crew members' family relationships, spousal satisfaction, parent-child interactions, and overall family wellbeing within the context of airline operations.

1.2 Study Objective

To determine the effect of psycho-social shift schedules on family life among Kenya Airways Crew in Nairobi City County, Kenya.

2.0 Literature Review

The literature review was done in sections.

2.1 Empirical Review

According to Russell (2018), work done in shifts or shift work refers to a job schedule whereby the standard working hours of 8 a.m. to 5 p.m. are not adhered to or a work schedule that deviates from the standard week of working from Monday to Friday.

Organisations that are working internationally nowadays have embraced shift work because of different time zones. This then implies that organizations are offering services to their clients at a time that is most convenient and applicable to them. Hence, varied work schedules are put in place in efforts to reach organizations' clients globally. This has translated to employees having to move away from the traditional typical working hours of 8a.m to 5p.m to working at a specific time that is set by an organization. For example, if one is an employee working for a Kenyan firm whose clientele are in other parts of the world, there is a high likelihood that one will have to work odd hours in order to meet the clients' needs (Xiao & Cooke, 2017).

Whereas employees may enjoy a schedule that is flexible, it is disadvantaging in that it results to sleeping patterns that are unstable, rampant conflicts in relationships and one's health could be greatly impacted. Moreover, shift work may increase irritability and anxiety leading to a reduction in one's quality life, decreased levels of professionalism and general dissatisfaction. Besides, one's ability to manage domestic responsibilities is greatly affected. Taylor and Tyler (2020) concur that shift work allows individuals to enjoy working hours that are flexible; this enables them to attend to their personal responsibilities as well as gain freedom. Therefore, shift work if well utilized can enable individuals to run errands that ordinarily would have waited for one to attend to them over the weekends. In addition, when work is done in shifts, the working hours are less considering that they take into account enough time to relax and take a break (Lewis, Gambles & Rapoport, 2017).

Chen and Fernandes (2017) state that in comparison to other shift workers, flight attendants work with the most inconsistent and irregular schedule. Generally, work done in shifts makes it hard for one to balance work and personal life. Given that flight attendants have to work in shifts, it is vital then to embrace strategies that could help them balance personal and work life. Moreover, Ren and Foster (2019) aver that abnormally high complaints of fatigue and sleep disorders were reported among flight attendants. Equally, they reported high rates of gastrointestinal problems, cardiovascular diseases and dysfunctional reproductive systems. Ngo and Lau (2018) concur that flight attendants revealed to have suffered from high levels of fatigue. Hence, the health issue remained a major hinderance to flight attendants' ability to execute their job.

A study by Grzywacz (2011) recognises relationships between shift schedule and work-family balance. Nonetheless, literature that focuses mainly on shift schedule and work-family balance of male and female crew seems limited. Grzywacz and Marks (2010) argue that a flexible shift schedule is critical as it enhances a balance between family and work life of an employee. This is because in everyone's work, personal and work lives are the most vital domains and they positively correlate; hence, flexible shift schedules can lead to enhanced family time and improved organisational commitment (Tahmincioglu, 2015). However, Grzywacz and Marks (2010) as well as Grzywacz (2011) focused on frequency and duration aspects while the present study included the shift patterns and reviewed aspects that shift schedule influences.

Omar and Yunus (2010) assert that females are socialized from a very young age to be strongly affiliated to family and to childcare responsibilities as a consequence ,of the conventional gender-role ideology as opposed to males. This implies that the females require flexible shifts that allow more rest time. For working females who are married, the responsibility is greater as they suffer from time conflicts and role strain due to the dual commitments to the family and to employment. As earlier discussed, factors related to one's

job are more likely to influence the determination of one's work causing interferences to marital life, while factors related to family will also strongly influence and even interfere with one's work (Chawla & Sondhi, 2011). Although female crew are overcoming this stereotype, their efforts to curb this discrimination are often thwarted by social conventions that are deeply entrenched dictating that women are generally expected to play a role that supports that of the males (Omar &Yunus, 2010). The reviewed studies, (Omar & Yunus, 2010; Chawla & Sondhi, 2011; Omar & Yunus, 2010) however used junior staff who are subordinate while the current study sampled captains, first officers, flight attendants, senior flight attendants and flight purser as the respondents.

According to Greenhaus (2012), the most fundamental ingredients in everyone's life is work and family; therefore, it is of necessity that appropriate coping mechanism are adopted to enhance work and family balance. The coping mechanism adopted by a male or a female employee affects their wellbeing and overall feelings about their lives. Similarly, Kinnunen (2015) and Weisse (2012) believe that institutions can reap massive advantages and enhance their productivity if they promote best work and family coping mechanisms which have flexible shift working hours. All this is achievable when there are deliberate efforts to focus on positive emotions like optimism, happiness, getting involved and work engagement, which are linked closely to the performance of a company (Perry-Smith & Blum, 2013). The study by Greenhaus (2012) used census as the sampling method; as such, the small sample would not allow for the findings to be generalized. On the other hand, Kinnunen (2015) and Weisse (2012) used snowballing sampling technique limiting the generalizations of findings to the research's targeted population. The current research used simple random sampling; therefore, allowing the application of the findings to the target population.

Organ and Ryan (2010) found that flexible shift schedules improved the workers' psychological and physical wellbeing and enhanced job satisfaction. Therefore, it can be argued that work schedules that lack flexibility but lay very high work demands can make employees suffer from decreased levels of energy and fatigue, increased levels of cholesterol, obesity and high blood pressure. Bruck and Sutton (2015) as well as McDonald (2012) further established that institutions that aimed to minimize work-family conflicts by putting in place family and work life balance initiatives not only increased work satisfaction and productivity among female and male employees, but also improved their levels of family life satisfaction leading to greater wellbeing. Thus, employee happiness leads to more productivity given that it closely affects family life and work satisfaction (Ntuara, 2013). Bruck and Sutton (2015) as well as McDonald (2012) targeted families as respondents while the current study targeted KQ employees as respondents.

Grzywacz and Marks (2010) posit that there is need for organisations to take cognizance of the significance played by employees' coping mechanisms and put in place work schedules that are flexible because these factors are closely linked to work commitment, staff retention and motivation, which affect directly the productivity of organisations and their overall general performance. Therefore, individuals' coping mechanism have a two-way interrelated benefit. First, employees gain higher levels of job satisfaction and better health whereas employers benefit from decreased absenteeism, increased levels of motivation, decreased turnover rates, higher performance and productivity (Morgan, 2009). The studies by Grzywacz and Marks (2010) as well as Morgan (2009) failed to conduct reliability and validity while the current study ensured that the data collection instruments' reliability and validity was ensured.

Frone (2010) is of the view that there are many ways to draw work shifts and share job responsibilities; he alludes to two models; the island model and the twin model 2. In the island model, all employees share one position; however, they perform different aspects of that job. The island model can be appropriate when an employee and his/her job partner have different skills. As for the twin model 2, all employees share one position and perform all the tasks but, the work is done on different days (Mount & Jamison, 2015). In most of the instances, employees within organizations work the same number of hours. Therefore, work and life balance initiatives put up by organizations impact directly the employees and their employers. Subsequently, not only is job satisfaction enhanced but also work productivity and the employees' engagement (Greenhaus & Beutell, 2011). The study by Frone (2010) was conducted in Canada while Mount and Jamison (2015) was done in Greece, these are countries regarded as first world; thus, the results may not be generalized to the Kenyan context. The present research was conducted in Kenya, a third world country, to generate findings that can apply to the context in country.

Moffett (2008) argues that organizations which provide flexible working shifts which take into consideration the psychological wellbeing of employees (work-role fit, job enrichment); safety measures (supportive workers and manager relations) and have availed resources are more likely to have employees who are engaged. Thus, retention and employee engagement are enhanced when a balance is struck between work and life. When the management of organizations demonstrates awareness of employees' unique needs and recognizes individual differences within them, then it becomes easy for them to surmount the challenges of increased diversity in their workforces and put in place mechanisms that enhance work-life balances and sound practices to address diverse groups of employees (Kelloway & Barham, 2014). The above findings only show how employees shift schedule influence work life leaving the element of gender which is male and female comparison in relation to work life. The current research addressed the gender effect on work and life balance.
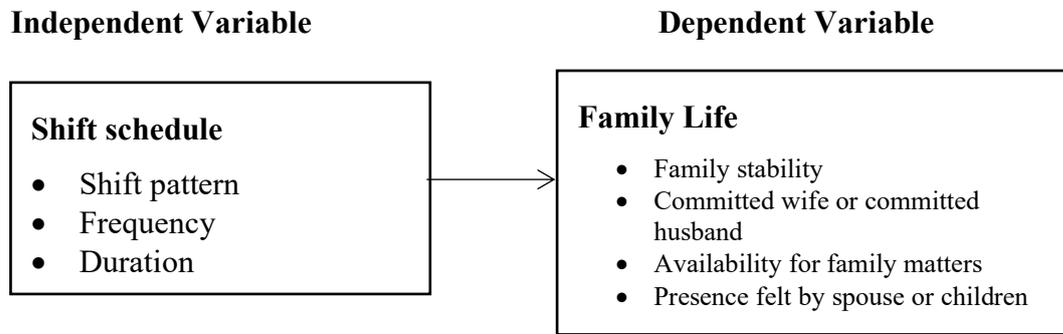
2.2 Theoretical Framework

The social exchange theory by Yeh (2014) guided this research, providing a framework for understanding how psycho-social shift schedules affect family life among Kenya Airways crew. The theory posits that within an organization, employees exhibit negative or positive behaviors in response to the treatment given by their employers, with the central tenet being the norm of reciprocity. According to Kossek and Ozeki (2013), when there exists a strong social exchange relationship between employer and employees, it maintains positive working relationships that elicit high levels of job satisfaction and commitment, directly impacting how shift scheduling practices influence family life outcomes. The theory establishes a correlation between work demands and family responsibilities, taking into consideration the different roles that crew members fulfill. The theory acknowledges the 'triple role' burden that falls upon employees, particularly women, as they carry out their specific roles and responsibilities within both work and family contexts while managing societal expectations. In the context of airline crew shift schedules, this theory explains how irregular work patterns create imbalances in the exchange relationship between work demands and family obligations (Chawla & Sondhi, 2011). The theory addresses both strategic and practical needs of crew members in managing shift schedules and family life. Strategic needs refer to fundamental issues like work-life equity and personal development, while practical needs address immediate necessities that enable crew members to fulfill

their assigned roles both at work and home. The Social Exchange Theory was particularly relevant to this research as it examined how psycho-social shift schedules create reciprocal effects between work scheduling practices and family life quality, explaining why certain shift patterns lead to family disruption while others support work-family balance among Kenya Airways crew members.

2.3 Conceptual Framework

Figure 1 illustrates the relationship between independent and dependent variables.

Independent Variable   **Dependent Variable**

Shift schedule
• Shift pattern
• Frequency
• Duration

Family Life
• Family stability
• Committed wife or committed husband
• Availability for family matters
• Presence felt by spouse or children

Figure 1: Conceptual Framework

3.0 Research Methodology

The study employed a case study design to examine the relationship between work schedules of Kenya Airways (KQ) crew and their family life, targeting 1,085 KQ employees comprising 655 males and 430 females across five categories: captains (239), first officers (248), flight attendants (333), senior flight attendants (81), and flight pursers (184), all having young families with school-going children, conducting long-haul flights, and possessing over two years of service experience. Using Kish Leslie's (1965) recommendation of 20% sampling for populations above 200, the study selected 217 participants (131 males and 86 females) distributed proportionally across all crew categories. Data collection utilized questionnaires for junior crew and interview schedules for senior crew, with instruments pre-tested on 12 participants (5% of sample size) and validated through supervisor guidance, achieving 78% reliability using Cronbach's Alpha. The study obtained necessary permits from NACOSTI (license number NACOSTI/P/19/1509) and Kenyatta University Graduate School, employed four trained research assistants, and analyzed quantitative data using SPSS version 22 with multiple linear regression and ANOVA, while qualitative data underwent content analysis according to common themes. Ethical considerations included voluntary participation, informed consent, confidentiality through coding, and assurance that data would serve research purposes only.

4.0 Presentation of Findings and Discussions

The presentation of findings and discussions were done in sections.

4.1 Response Rate

A total of two hundred and seventeen (217) questionnaires were distributed to the sampled KQ female and male employees by the researcher and her assistants. Out of these, 180 were fully filled and returned which represented 83% response rate which was considered excellent for data analysis and generalizations of findings to the target population. This

high response rate was attributed to the clear explanation that was given to the respondents by the researcher before embarking on the administration of questionnaires. Further, the researcher herself administered the questionnaires; therefore, she oversaw the collection of the filled questionnaires when airborne.

4.2 Demographic Information of Respondents

The research gathered data on the respondents' various demographic characteristics, namely; age, gender, education and department. The importance was to comprehend the bio data of the participants and get information for all the categories in order to understand the participants' behaviours and experiences for data verification purposes. The findings are outlined in the following sub-sections.

4.2.1 Age

The study determined the participants' age. Age was considered important because flight crew family life is affected differently across age groups. Further, the job of flight crew depends on the age of a person before they are employed in the airline. The research's findings are shown in Figure 2 below.
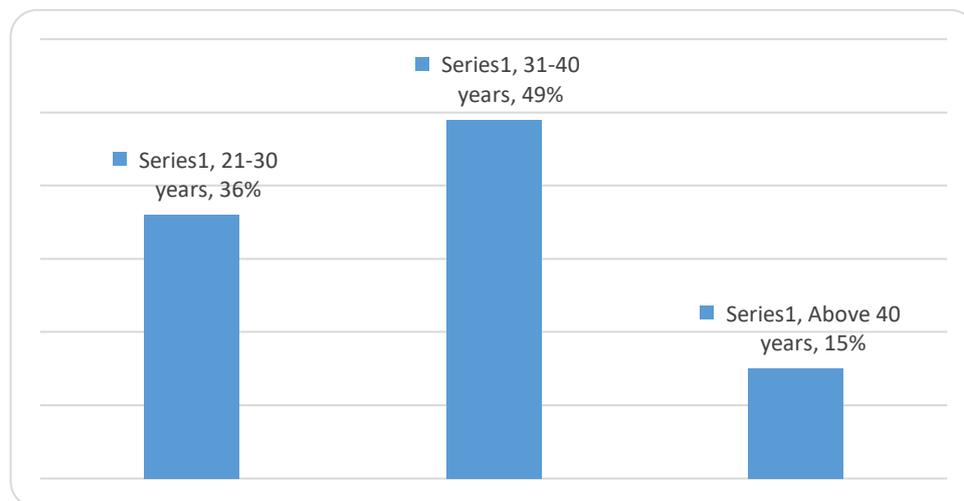
Figure 2: Age Group

Figure 2 findings indicated that majority of the study participants at 49% were aged between 31- 40 years while the minority (15%) were 40 years and above. Moreover, the findings indicated that slightly more than one third (36%) of the study participants were aged between 21-30 years. This implies that Kenya Airways prefers employing flight crew who are below 40 years. This could also be explained from the fact that older crew members are faced with limited flexibility on work schedules. At the age of 21- 40, there's a likelihood to be affected by work schedule on family life since the families are still young. Avanson (2019) argues that most Kenyans usually consider marriage when they are in their mid to late twenties having completed their education or having stabilized themselves financially. They could also be reluctant to adapt to changed demands of modern organization (Riach, 2011). Therefore, the research's findings concur with those of Evanson (2019) and Riach (2011) that the flight crew due to their youthful age bracket are highly likely to experience imbalances of work schedule and life balance.

4.2.2 Gender

Moreover, the research aimed to establish the respondents' gender. This was considered important as family life of female and male flight crew is influenced differently by the airline's crew work schedules. Second, with the gender consideration, the research sought to ensure that both female and male respondents had equal and fair representation in the research. Thus, Table 1 below indicates the findings on gender representation.

Table 1: Gender of Respondents

Gender	Frequency	Percentage
Male	121	67
Female	59	33
Total	**180**	**100.0**

Source: Research data (2020)

The data indicated the gender gap amongst the respondents as two-thirds (67%) of them were males while females constituted 33%. This suggests the active promotion of male flight crew in the Kenya Airways. Such a tendency can be a sign of the persistence of the traditional gender roles and prejudices: this fact may indicate a gender-dependent perception of the type of job. A study from Germain, Herzog, and Hamilton (2012) points out that this rigid adherence to the heteronormative standards can be the reason of hierarchy formation in which women are the least represented in positions of authority and more often assigned roles like flight attendants. Hence, these findings obviously reveal a gender bias occurring on account of socially held perceptions of women's role and stereotypes associated with jobs. However, the current study showed a contradiction with Germain et al., (2012) study as the male gender dominated the flight crew section.

4.2.3 Respondents' Education Levels

The research aimed to document the respondents' levels of education, which was considered important because it is a prerequisite for any career development in Kenya. At KQ, the minimum requirement for employment is the Kenya Certificate of Secondary Education while an undergraduate degree is always an added advantage. Moreover, KQ jobs under study entail dealing with different people from different cultures (Africans, Europeans, Indians etc) hence, one must possess effective communication skills and the ability to address issues professionally as they arise. Similarly, formal education enhances fluency in communication, which is key for flight crew. Table 2. below presents the findings on the education levels of the study participants.

Table 2: Respondents Education Levels

Level of Education	Male		Female	
	F	%	F	%
KCSE	24	19.83	9	15.25
Diploma	63	52.07	32	54.24
Bachelor's Degree	34	28.10	18	30.51
Total	**121**	**100**	**59**	**100**

Source: Research Data (2020)

The results indicated that over half (52.07%) of the male study participants had a diploma as their highest education level while the minority (19.83%) male respondents had the Kenya Certificate of Secondary Education. Moreover, the findings showed that more than half (54.24%) of the female study participants had diplomas while the minority (15.25%) of the females had Kenya Certificate of Secondary Education. This implies that the minimum qualification needed to be employed as a flight crew in Kenya Airways is Kenya Certificate of Secondary Education in any of the relevant fields. The finding is in tandem with Aguinis and Kraiger, (2009); Bartel, (1994) and Curtis et al., (2012) who established that performance of employees, quality of service and customer satisfaction increased with their level of education and subsequent training offered.

4.2.4 Respondents' Distribution by Department

The research also required the study participants to indicate their departments which determined work schedule. The findings are presented in Table 3.

**Table 3: Respondents' Distribution by Department**

Category	Male		Female	
	F	%	F	%
Captains	4	2	2	1
First officers	23	13	9	5
Flight attendants	16	9	38	21
Senior flight attendants	31	17	41	23
Flight purser	5	3	11	6
Total	**79**	**44**	**101**	**56**

Source: Research data (2020)

The findings indicate that 23% and 17% of the female and male respondents respectively were in the senior flight attendants' department. This was followed by flight attendants at 30%, first officers at 18% and flight purser at 9%. Finally, the findings showed that the captains' department had the least number at 3%. The captain is the one in charge of the whole plane. The job involves a lot of planning and sometime overwhelming especially if they are few. Thus, more work has to be completed. This contributes to conflict on family life. The result could be explained from the fact that it takes a relatively longer period of time to train and become a captain; hence, the fewer numbers unlike the training for flight attendants. Secondly, the finding is attributed to the volume tasks required to be performed by the flight attendants' departments which necessitates more employees in the said department.

4.2.5 Number of Working Years

The research aimed to establish the number of years the respondents had worked for Kenya Airways. This variable was considered important because flight crews' schedule depends on work experience, which in turn influences work and family life. The findings of the study are presented in Figure 3
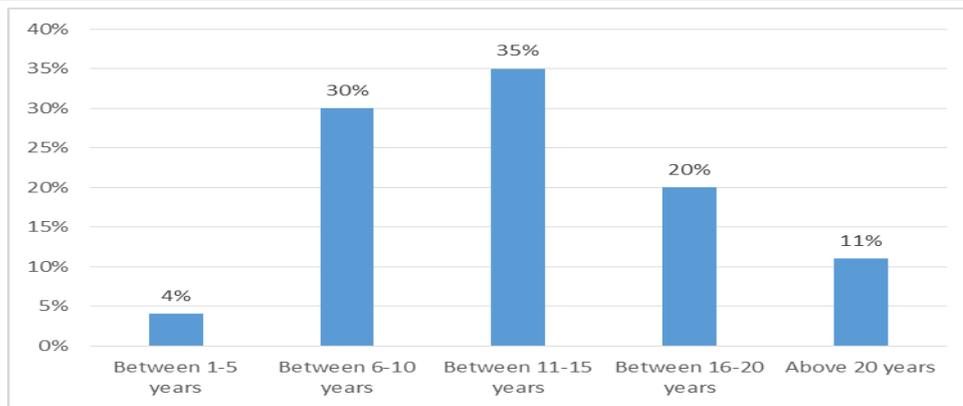
Figure 3: Number of Working Years

Figure 3 results revealed that slightly more than one third (35%) of the study participants had worked at Kenya Airways for a period that ranged from 11 to 15 years while slightly less than one third (30%), had worked for a period that ranged from 6 to10 years. The findings further revealed that one fifth (20%) of the study participants had worked for 16-20 years. Finally, the results showed that slightly more than one tenth (11%) had worked for period of more than 20 years while 4% had worked between 1 – 5 years. This implied that most of the flight crew at Kenya Airways had attained more than five years' experience at time of research; thus, they were familiar with the work schedules. Similarly, Reed and Datmalchiam (2014); Arthur and Rousseau (2011) indicate that adopting the right coping mechanisms has a direct impact on one's vitality, happiness, self- actualization, passion, optimism as well as improved employee satisfaction which eventually leads to high employee retention. This could be seen at KQ since most of the flight crew had worked for more than 6 years.

4.3 Psycho-Social Shift Schedules and Family Life

The study's objective two established the influence of psycho-social shift schedules on family life among Kenya Airways crew. Consequently, the views of the study participants were sought on items measured on a five-point Likert scale whereby 5= strongly agree, 4= agree, 3= neutral, 2= disagree and 1=strongly disagree. The researcher used standard deviation and the mean to analyse responses. Accordingly, a mean of 3.50-5.00 meant that the participants were in agreement with the statement whereas a range of 1.00-1.49 meant disagreement to the given statement. Moreover, a mean of 1.00-1.49 implied strongly disagree; while 1.50-2.49 represented disagree; 2.50-3.49 indicated neutral; 3.50-4.49 represented agree and 4.50-5.00 represented strongly agree (Joshi, Kale, Chandel, & Pal ,2015). The findings are presented in Table 4.

Table 4: Respondents Responses on Psycho-Social Shift Schedules and Family Life

		N	Mean	Std. Deviation
1	Shift pattern demands interference with family time	180	4.00	1.214
2	Frequency of my shifts are in such a way that they never make me to attend to family functions as a result of my work schedule	180	3.60	1.273
3	Duration of my shift have resulted to a family gap between myself and my children	180	3.50	1.318

Source: Data from the research (2020)

Table 4 findings indicated that the item on shift pattern demands interference with family time had a mean of 4.00 and standard deviation of 1.214 respectively. The finding implies that majority of the respondents agreed that shift pattern demands interfered with family time. The findings are attributed to the emergency calls that Kenya Airways can make to the flight crew when they are even off duty. The findings also showed that the item on frequency of shifts were in such a way they never made flight crew to attend family functions due to work schedule, it had a mean of 3.60 and 1.273 as the standard deviation. The finding meant that most flight crew agreed that the rate of shifts interfered with their attendance of family gatherings. The findings are attributed to the congested shift schedules which left flight crew with no time to attend family functions.

Finally, results in Table 4 showed that the statement on duration of shift had resulted to a family gap between flight crew and their children with a mean of 3.50 and standard deviation of 1.318. The finding implied that most flight crew agreed with the statement. The finding could be attributed to a lot of time spent by flight crew away from their children due to frequent shifts on the work schedule. The findings on Table 4 agreed with the qualitative findings collected through interviews with senior inflight crew. For example, key informant noted that;

> Long hours on duty negatively affected my family life. Due to staff shortage at Kenya Airways, we have to do more shifts. You see, sometimes my schedule starts at 8:00am and ends at 4pm; and in case I am on night shift I start at 6:00 pm which ends the next day at 8:00am. This is the time my children and husband are off to school and work respectively; hence I go to an empty house. I might start a shift at 1:00pm and come back at 10:00pm, again to find my husband and children asleep (K.I, 61, O.I 02.08.2019).

This narrative indicates that shift schedule influences crew leaving them with no adequate time for their children. Considering staff shortage results to congested schedules, it is indeed a crisis. It also leaves them with little time for family functions.

Further, respondents were in agreement that work and family formed very significant elements of everyone's life. It was observed that many adopted coping mechanisms which equally influenced their wellbeing and overall feelings about their lives. For example, a key informant reported that;

> This job is very good for women only when they are yet to give birth to children or when their children are grown-ups. In between child birth and grown-up children, women are impacted upon very negatively as they do this work. I have heard of many grievances usually by women on how this schedule has affected them as they try to balance their care towards their children and the work rather than positive ratings about this work. Because of these constraints, have seen instances whereby, some career-oriented women postpone or avoid pregnancy altogether because of this kind of job (K.I 30, O.I 18.06.2019).

The above narratives showed that even though the flight crew job was good for women, it affected both the married and those who had young children, as well as the singles. Sadly, it was noted that a lot of women had to forgo family life as they concentrated on their jobs. Further, the findings indicated that some women had to forgo family life and concentrate on their jobs. This narrative is attributed to the congested work schedule and high responsibilities for flight crew, especially when they are airborne.

Another key informant had this to say;

> On busy days, I stay long before going home. When I eventually go home, often the children are asleep as it is late, sometimes having gone for long without proper meals or baths. The house could also be in a big mess given that house helps don't do perfect work without supervision. Often, I feel conflicted as I try to fit in both lines (K.I 8, O.I 02.04.2019).

The findings showed that flight crew hardly have enough time for their families as most of the time they are forced to be away due to their demanding jobs. The findings are attributed to the long haul flights which sometime require flight crew to spend time in other countries and therefore making it difficult to be with their families.

The narratives are in tandem with other studies. For instance, a study by Xiao and Cooke (2017) indicate that flight crew workers are often subjected to working odd hours as they serve the needs of their clients. Similarly, Chen and Fernandes (2017) note that in comparison to other shift workers, flight crew workers are more likely to work in most inconsistent and irregular times; therefore, it is hard for them to strike a balance between their work and personal lives. This study also corroborates Ren and Foster (2019) and Ngo and Lau (2018) who indicate that flight attendants reported abnormally high complaints of fatigues and sleep disorders as a result of sleep patterns that are irregular. In addition, the results are in congruence with the findings of a research by Omar and Yunus (2010) which found that for working females who are married, they suffered more from time conflict and role strain because of their dual commitments to both family and employment.

Table 5: Family Life

	Mean	Std. Deviation
I ensure that I set achievable work targets so as to have ample time with my family	3.30	1.031
Frequent communication with supervisors is ensured that will make them feel the need for my extra time with my family	3.65	.988
Divorce rate	3.60	.754
Unfaithfulness	3.60	1.046
Drug abuse like alcohol	3.70	.923
Depression	3.50	1.100
Lateness to report at work	3.55	1.191
Absenteeism	3.65	1.182
Sick days	3.40	.940
Engagement in criminal activities	3.80	1.152
Diminished performance	3.90	1.021
Insomnia	3.45	1.504
Total	**34.8**	**11.801**
Average	**3.66**	**1.072**

Source: Research data (2020)

Diminished performance, engagement in criminal activities, drug abuse like alcohol, absenteeism, divorce rate, unfaithfulness and lateness to report at work had increased in relation to gender imbalance in work to a greater extent as indicated by the mean scores of 3.90, 3.80, 3.70, 3.65, 3.60 and 3.55 respectively.

Respondents ensured that they set achievable work targets so as to have ample time with their family had increased in relation to gender imbalance in work to a moderate extent as indicated by mean scores of 3.50, 3.45, 3.40 and 3.30 respectively.

These findings were in line with Bukachi (2010) who found that, in Kenya, more complex structural reorganisations of working practises, which affect continuous production systems tend not to be implemented by companies. As a result, production workers and their families often experience fewer benefits from these initiatives and are still expected to shape family life around production requirements. Recent economic meltdowns as well increased levels of competition have forced organisations to perform and in turn, they force their employees to increase their productivity. Many people have felt the pressure of having to work very long hours which has led to increased levels of stress, decreased quality living, and a general reduction of people's effectiveness (Iverson & Derry, 2011).

Philipsen and Bostic (2010) add that there are always problems whenever employees seek to strike a balance between work and family life. That, this is a problem that many workers from varied institutions have to contend with and the main issue being, a balance between the two. Given this scenario, there is always a neglect of one at the expense of the other. Employees often complain of how difficult it is to maintain a balance between personal and

work lives. Therefore, this problem should be approached with a lot of caution. Often, there is need to live harmoniously with one's family and work effectively as this enables individuals meet their families' needs. This then calls for appropriate coping mechanisms that would enable individuals to balance work and family life. Moreover, people should be trained and enlightened on how this balance can be achieved. Therefore, balancing work and family life is key within organizations if increased productivity is to be achieved.

4.4 Regression Analysis

To determine the magnitude and significance of the relationship between psycho-social shift schedules and family life among Kenya Airways crew, regression analysis was conducted. This statistical approach enables the quantification of how shift schedule variations influence family life outcomes while establishing the statistical significance of this relationship. Table 6 presents the regression coefficients results

Table 6: Regression coefficients results

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	6.431	.812		7.920	.000
Shift schedule [X]	0.668	.213	.512	3.136	.029

Basing on the results of the regression analysis in Table 6, the regression model was;

$$Y = 6.431 + 0.668 \, X$$

The regression equation demonstrates that when shift schedule is held constant at zero, family life of KQ crew maintains a baseline value of 6.431. The research results revealed that a unit change in shift schedule leads to a 0.668 change in the family life of KQ crew. The shift schedule coefficient of 0.668 indicates a positive relationship, suggesting that changes in shift scheduling practices directly affect family life outcomes among airline crew members. The standardized beta coefficient of 0.512 demonstrates that shift schedule is a substantial predictor of family life, representing a moderate to strong effect size. The statistical significance of this relationship is confirmed by the p-value of 0.029, which falls below the conventional significance threshold of 0.05. This finding establishes that the correlation between shift schedule and family life among KQ crew is statistically significant, providing empirical evidence that shift schedule significantly influences family life outcomes. These findings align with previous research by Cortese et al. (2010), who established a positive significant relationship between quality of life and shift schedules among nurses in the UK. The results also corroborate Greenhaus et al. (2011), who found a significant positive association between shift schedules and quality of life in working populations. The consistency of these findings across different occupational contexts strengthens the evidence that psycho-social shift schedules have measurable effects on family life, regardless of the specific work environment. The regression analysis provides strong empirical support for the hypothesis that psycho-social shift schedules significantly affect family life among Kenya Airways crew, with practical implications for airline scheduling policies and crew welfare management.

5.0 Conclusion

The study concludes that psycho-social shift schedules significantly influence family life among Kenya Airways crew members. The findings demonstrate that shift scheduling practices serve as a substantial predictor of family life quality, with changes in shift schedules directly affecting family life experiences among crew members. This relationship underscores the critical importance of flexible shift scheduling in enhancing work-family balance, given that work and family domains constitute the most vital aspects of individuals' lives and their satisfaction levels are inherently interconnected. The study establishes that well-structured shift schedules can lead to enhanced family time, improved psychological wellbeing, and stronger organizational commitment among airline crew, while poorly managed scheduling practices contribute to family disruption, missed family functions, and strained parent-child relationships. These findings provide empirical evidence that airlines must prioritize family-supportive scheduling policies to ensure crew welfare and maintain operational effectiveness, as the demanding nature of irregular shift patterns creates substantial challenges for crew members attempting to balance their professional responsibilities with family obligations and personal relationships.

6.0 Recommendations

The study recommends that Kenya Airways should implement comprehensive shift schedule reforms focusing on three critical dimensions: shift pattern, frequency, and duration to enhance work-family balance among crew members. The airline should establish more predictable shift patterns that allow crew members to plan family activities and maintain consistent roles within their households, while reducing the frequency of emergency calls and last-minute schedule changes that disrupt family functions and create gaps between crew members and their children. Additionally, Kenya Airways should optimize shift duration to prevent extended working hours that lead to family separation, ensuring that crew members have adequate recovery time between flights to engage meaningfully with their families. The organization should develop flexible working arrangements that accommodate childcare responsibilities and dependent care needs, while addressing work overload issues that compromise employees' ability to fulfill their family obligations. Furthermore, Kenya Airways should adjust internal policies to include employee-accommodative strategies such as advance scheduling notifications, family-friendly roster arrangements, and support systems that enable crew members to balance their professional duties with personal responsibilities.

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