



# The Role of Psychological Capital and Perceived Organizational Support on Work-Life Balance among Pilot

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**Abstract.** This research is based on the fact that the biggest factor causing aircraft accidents is human error, especially pilots. Previous research suggests that having a good work-life balance can reduce the rate of aircraft accidents caused by human factors. Many studies have examined how work-life balance is affected by psychological capital and organizational support, however, there is inconsistencies in terms of the result and there is no research investigating this three variables using pilot as participants. Therefore, the objective of this research is to investigate the impact of psychological capital and organizational support on work-life balance in pilots. There were 155 participants and this research adopted a non-experimental approach in which data was collected online. This study uses the Work Life Balance Scale, Psychological Capital Questionnaire, and Survey of Perceived Organizational Support as a measuring instruments. Data were analysed using linear and partial regression. The outcome from the partial regression analysis showed that psychological capital ( $t = 4.949$ ), organizational support ( $t = 6.326$ ) and the results of simultaneous regression testing ( $F = 28.237, p < 0.05$ ) shows that they affect work-life balance. Therefore it is evident that psychological capital and organizational support are the two important factors that influence work life balance.

**Keywords:** Work-Life Balance, Psychological Capital, Perceived Organizational Support, Pilot.

## 1 Introduction

The aviation industry, as the backbone of global connectivity, has experienced rapid growth in recent decades. Along with the increase in the number of flights, the challenges in maintaining aviation safety have also become more complex. Data from the Komite Nasional Keselamatan Transportasi (KNKT) shows an alarming trend of a significant 55% increase in the number of aviation accidents over the past three years, from 2021 until 2023 [1].

Federal Aviation Administration (FAA) stated that the reason behind the aviation accident can be categorized into three main roots. Firstly, weather factors contributed 13.2%. Secondly, aircraft factors contributed 27.1%. Then the FAA points out that the

dominant factor causing aviation accidents and incidents is human error, which contributes 66%. According to Civil Aviation Safety Regulation number 91.3, the pilot in command of the aircraft holds direct responsibility and serves as the ultimate authority in its operation. Human-caused aircraft accidents are most likely to be caused by pilots, so it can be concluded that pilots have a major contribution in aircraft accidents caused by human factors.

Regarding accidents caused by human factors, especially those involving pilots, Cahyo et al. [2] provide a solution by focusing on aspects of work-life balance in pilots. Work-life balance is referred to as a condition in which there will be an equilibrium between the personal and work domain [3]. According to Cahyo et al. [2], good work-life balance can reduce the level of aircraft accidents, because if pilots cannot implement work-life balance, they can be at risk of fatigue which can have a detrimental impact on work performance. Based on this, it is concluded that lacking of work life balance can cause the aircraft accident.

One of the factors that can play a role in work-life balance can be obtained from the interview results. The interviews revealed that pilots do not feel offended when they are reprimanded by their managers or the organization, as they see the reprimand as an opportunity to learn and grow. However, significant failure in flight can reduce pilots' confidence. This can negatively impact their ability to face future challenges. The phenomena revealed by the pilots during the interviews can be referred to as psychological capital. Psychological capital is reflects an individual's overall development as indicated by four main components, namely, (a) self-efficacy, , an individual belief of their ability to make the necessary efforts to obtain success in challenging situations; (b) optimism, which is an attribution style, in which individuals tend to precepted any event.[4]

Furthermore, (c) hope is a psychological concept that refers to positive motivation consisting of two main components: agency, which is a person's confidence in their ability to take required actions to gain their goals, along with their perception of the pathways or strategies available to achieve these goals; and (d) resilience, refers to how individual can get back on their feet [4].

Research related to the influence of psychological capital on work-life balance has been conducted previously. A study by Dayal [5] which examined Generation Z and Millennials representing various sectors in the workforce in India showed a significant effect ( $t = 4.680, p < .01$ ). However, this finding contradicts research conducted by Irawan and Hidayat [6] which showed no influence among 58 students from Faculty of Psychology, Islamic University of Sunan Gunung Djati Bandung who were involved in several activities outside lectures ( $t = 1.471, p > .05$ ).

Moreover, the phenomenon related to psychological capital, the researcher also found another phenomenon from interviews with pilots, namely that the pilot's family can be given free tickets to travel to the city or country they want as a form of appreciation from the organization for the hard work the pilot has done. In addition, pilots also feel valued by the organization through the provision of rewards in the form of days off, and for the majority of pilots who are married, they use these days off to spend time with their families. It can be said that the organisation shows a strong commitment to the pilots in providing adequate support. The behaviour expressed in the interview can

be referred to as perceived organisational support. According to Rhoades and Eisenberger [7] organizational support is a unidimensional concept that describes employees' cognitive evaluation of how much the organisation taking care the well being of its employee.

Research on the impact of perceived organisational support on work-life balance has been studied previously. Helen et al. [8] stated that there is an impact between organisational support on work-life balance in 312 civil servants in the State of Nigeria ( $t = 4.918, p < .001$ ). However, this study contradicts the research conducted by Luturlean et al. [9] which claimed that there was no impact between perceived organizational support towards work-life balance ( $t = .098, p > .01$ ).

Research on the influence of psychological capital and perceived organizational support has been widely studied, but the results still show inconsistencies. Until now, there have not been many studies that comprehensively examine the role of these two factors simultaneously in influencing work-life balance. In addition, no previous study has specifically examined this three variables together using pilot as their participants. Therefore, this study was conducted

The interrelated of these three variables can be explained by the theory by Hobfoll et al. [10] conservation of resources theory is based on the well-being of individuals depending on their ability to obtain and maintain resources, as emphasized by the resource conservation theory, which assumes that such resources are crucial for survival and overall well-being. Based on resource conservation theory, individuals will maintain and increase their resources. When individuals possess high psychological capital and adequate perceived organizational support, they feel their resources are secure and fulfilled. This leads them to have more energy to achieve work-life balance. Then, researchers formulated research hypotheses, namely (a) psychological capital has an impact on balancing life and work; (b) perceived organizational support has an effect to balancing life and work; and (c) psychological capital and Perceived organizational support have a role on work-life balance among pilots.

## 2 Method

This research adopted a non-experimental quantitative approach which employed a snowball sampling. This research was conducted online using a Google Form questionnaire that had been compiled and disseminated through social media platforms, such as WhatsApp and Instagram, to pilots who met the requirements for participants. The sample in this study totaled 155 pilot. The snowball sampling was used for this study with the requirement of (a) having a profession as a pilot; (b) having worked for the same airline for one year; (c) having an active flight license; and (d) having a minimum of 2000 flying hours.

All items were translated into Indonesian language diversified by previous studies [11;12;13]. In addition, the items of this instrument were translated by involving expert judgement to ensure accuracy and cultural context appropriateness.

In this reserach, the work-life balance was measured using the Work Life Balance Scale (17 items) proposed by Fisher et al. [14]. The work-life balance variable has four

dimensions. The first dimension is work interference with personal life (WIPL) (5 items). One example of an item is “Pekerjaan saya berdampak negatif pada kehidupan pribadi saya.”. The second dimension is Personal Life Interference With Work (PLIW) (6 items). One example of this item is “Kehidupan pribadi saya memengaruhi kinerja saya di tempat kerja secara negatif.”. The third dimension is Work Enhancement of Personal Life (WEPL) (3 items). One example item is “Apa yang saya lakukan di tempat kerja membantu saya menghadapi tantangan pribadi dan masalah di rumah.”. And the fourth dimension is Personal Life Enhancement of Work (PLEW) (3 items). One example of an item is “Aktivitas dalam kehidupan pribadi saya memberi energi dan meningkatkan suasana hati saya di tempat kerja.”. Researchers conducted reliability tests on each dimension, the reliability of the four dimensions was 0.869 (WIPL), 0.781 (PLIW), 0.769 (WEPL), and 0.838 (PLEW). All items will be answered by participants using Likert scale of five points, with 1 being never and 5 being very often.

The Psychological Capital Questionnaire (PCQ-24) measuring instrument proposed by Luthans et al. [4] was implemented to measure psychological capital in this research. The PCQ-24 measuring instrument consists of 21 positive items and 3 negative items. Psychological capital variables have four dimensions. The first dimension is self-efficacy (6 items). One example of a self-efficacy dimension item is “Saya dapat menemukan solusi untuk masalah yang berdampak jangka panjang.”. The second dimension is hope (6 items). One example of a hope dimension item is “Terdapat berbagai cara untuk menyelesaikan masalah apapun.”. The third dimension is resilience (5 items). One example of a positive resilience dimension item is “Saya biasanya menyelesaikan kesulitan di tempat kerja dengan berbagai pendekatan.” and an example of a negative item is “Saya merasa kesulitan untuk pulih setelah mengalami kegagalan.”. And the fourth dimension is optimism (6 items). One example of a positive item of the optimism dimension is “Saya percaya bahwa saya akan menghadapi masa depan pekerjaan saya dengan optimis.”. and an example of a negative item is “Dalam pekerjaan ini, saya merasa segala sesuatu tidak berjalan sesuai dengan harapan saya.”. When researchers conducted a reliability test, two items from the optimism dimension were not reliable so the items were eliminated. After the researchers conducted the reliability test again, the reliability of the four dimensions was 0.845 (self-efficacy), 0.851 (hope), 0.719 (resilience), and 0.750 (optimism). All of these items will be answered by participants implementing a four-point Likert scale, which is 1 strongly disagree and 6 strongly agree.

The Survey of Perceived Organizational Support Scale (SPOS) measuring instrument proposed by Eisenberger et al. [15] was used to measure perceived organizational support in this study. The SPOS measuring instrument consists of 8 positive items. The organizational support variable is unidimensional. One of the items is “Organisasi bangga dengan pencapaian saya di tempat kerja.”. The reliability of the SPOS measure is 0.791. Each item will be rated by participants on a seven-point Likert scale, ranging from 1 which is strongly disagree to 7 which is strongly agree.

### 3 Result

Table 1 Depicted the demographic of research participants.

**Table 1.** Demographics of Participants

No	Categories	Percentage %	
1	Age (years)	20-30	14.3
		31-40	24
		41-50	18.2
		51-60	35.5
		61>	7.8
2	Gender	Male	99.4
		Female	0.6
3	Employment Status	Permanent	38.7
		Contract	61.3
4	Ranks	Captain	76.1
		First Officer	23.2
		Second Officer	.7
5	Years of service (years)	1-10	43.9
		11-20	23.2
		21-30	11.6
		>31	21.3
6	Flight license	Active	100
		Inactive	0
		<2000	2.6
7	Flight hours (hours)	2001-5000	17.4
		>5000	80
		20-30	14.3

Kolmogorov-Smirnov test shows that all variables have a p value > .05, allowing the conclusion that the data in this study follows a normal distribution.

**Table 2.** Mean of Work-Life Balance, Psychological Capital, and Perceived Organizational Support

Variable	Mean	Std. Deviation	Interpretation
Work-Life Balance	3.68	.534	High
Psychological Capital	4.74	.543	High
Perceived Organizational Support	3.94	1.155	High

Researcher proceeds to analyze the data by conducting descriptive tests which resulted in an average score for each variable. The descriptive test results for each variable (Table 2) showed that the pilots had a high average work-life balance score ( $M= 3.68$ ), a high average psychological capital score ( $M= 4.74$ ), and a high average perceived

organizational support score ( $M= 3.94$ ). Therefore, it can be concluded that the average participant in this research has a high level of all the variables that were used in this study.

**Table 3.** Correlation of work-life balance, psychological capital, and perceived organizational support

	Work-Life Balance	Psychological Capital	Perceived Organizational Support
Work-Life Balance	1	.371	.455
Psychological Capital	.371	1	.285
Perceived Organizational Support	.455	.285	1

The Pearson Correlation analysis results shows that all the results are significant

**Table 4.** Partial Linear Regression Test Results

Model	<i>Standard Error</i>	<i>Standardized</i>	<i>t</i>	<i>p</i>
Psychological Capital to Work-Life Balance	.051	.371	4.949	.000
Perceived Organizational Support to Work-Life Balance	.071	.455	6.326	.000

The partial linear regression analysis results indicate that psychological capital affects work-life balance significantly positively, with a significance value ( $p$ ) of .000,  $< 0.05$ . Similarly, the partial linear regression analysis regarding the impact of perceived organizational support on pilots' work-life balance also shows a significant positive effect, with a significance value ( $p$ ) of .000  $< .05$ .

**Table 5.** Simultaneous Linear Regression Test Results

Model	<i>Standard Error</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
Psychological Capital and Perceived Organizational Support to Work-Life Balance	.051	.371	4.949	28.237	.000

The results of the simultaneous linear regression analysis demonstrated a significant relationship between psychological capital, perceived organizational support, and work-life balance ( $p < .05$ ).

## 4 Discussion

The result demonstrate that psychological capital has an impact on work-life balance among pilot. The result is in line with a study by Dayal [5] who found a significant influence between psychological capital and work-life balance. Besides that, the outcome also shows that perceived organizational support has a significant role in work-life balance among pilot. The result in consistent with research conducted by Helen et al. [8] which states that there is an affect between perceived organizational support on work-life balance.

Furthermore, this research shows that psychological capital and perceived organizational support together play a significant influences in pilots work-life balance. These findings align with Rhoades and Eisenberger, in Wu & Nguyen [16], when there is a high level of psychological capital, a person will feel they are supported by the organization. This indicates that their sense of organizational support is enhanced by their confidence in engaging positively at work [17].

The results show that there is an impact on work-life balance by psychological capital and perceived organizational support. Based on reference [18], psychological capital is an internal factor, while Li et al. [19] explains that perceived organizational support is an external (environmental) factor. This means that the results of this study show that work-life balance is influenced by both internal and external factors. Therefore, this finding can be linked to one of the most famous debates in psychology, which is the debate between “nature” and “nurture.” Nature refers to the innate aspects or genetic factors, while nurture relates to the surrounding factors that shape one's behavior. The nature vs. nurture debate is a long-standing debate in the history of psychology, which questions whether behavior is more influenced by genetic (nature) or environmental (nurture) factors. However, there is now agreement that human behavior is influenced by the interaction of these two factors, where internal and external factors contribute dynamically to the formation of behavior [20]. Therefore, the findings of this research, shows that work-life balance is influenced by psychological capital (internal factors) and perceived organizational support (external factors), provide empirical evidence supporting the balance between nature and nurture in explaining human behavior.

Although this study proves that psychological capital and perceived organizational support are important factors affecting work-life balance, there are limitation to be considered. Namely, data collection was conducted online, which may affect the quality of responses from participants, given the limitations in controlling the survey completion environment.

## 5 Conclusion

From the findings of this study, it can be determined that psychological capital and perceived organizational support, both individually and collectively, significantly affecting work-life balance among pilots.

After conducting research on pilots, researchers found two suggestions, namely theoretical and practical advice. For theoretical advice, future research can examine more deeply by including other factors such as cultural factors, considering that Indonesia has a relatively high level of collectivism [21]. For practical advice, the researcher suggests that companies can provide better support to improve employee well-being by creating a training to develop pilots' psychological capital. With this training, it is expected that pilots can improve their ability to maintain work-life balance more effectively, so that the quality of their performance remains optimal. In addition, organizations can arrange flight schedules in a more flexible and structured manner to help pilots achieve a better balance between personal and professional life.

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