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Research Article

The Effects of Organizational Citizenship Behavior on Perceived Quality of Faculty Life: The Mediation Role of Perceived ICT Competencies

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Abstract: This study endeavors to explore the intricate relationship between organizational citizenship behavior and perceived quality of faculty life within the higher education sector in Palestine, with a specific focus on incorporating information and communication technology as a mediator in the link. The research encompasses a comprehensive examination of data collected from a sample of 355 faculty members affiliated with 11 universities in Palestine, employing both SPSS and Partial least squares structural equation modelling (PLS-SEM) using SmartPLS 4 software for analysis. The study findings revealed a substantial and direct impact of organizational citizenship behavior on both information and communication technology and perceived quality of faculty life. Also, establish a statistically significant association between information and communication technology and perceived quality of faculty life. Importantly, information and communication technology emerge as a partial mediator in the nuanced link. Moreover, this study contributes to the discourse surrounding the quality of life among faculty members in the higher education sector. It also sheds light on incorporating social criteria in higher education intuitions and emphasizes the potential of information and communication technology (ICT) to contribute to achieving university goals. Theoretical and practical implications are discussed.

***Keywords*:** organizational citizenship behavior, perceived quality of life, information and communication technology, higher education institutions

1. Introduction

Nowadays, there is no difference between work and personal life, as workers spend almost one-third of their lives at the workplace, consuming a significant amount of their time and efforts in seeking to create, enhance or promote positive well-being through building relationships, sharing their feelings and emotions with each other (Chandra & Mathur, 2021). This emphasizes the need for creating healthy workplaces. Therefore, studies have highlighted the significant impact of the organization's support for employees to experience work-life balance on the effectiveness of their organizational outcomes (Guest, 2002; Organ et al., 2005). On the other hand, it is suggested that people working in such harsh conditions would be more subjected to negative effects on their lives, which in turn will affect their outcomes at the workplace including their satisfaction and organizational commitment (Rehman et al., 2012). In Palestine, every

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aspect of life is extremely impacted by the unique circumstances, where the Palestinians are suffering from ongoing aggressive occupation measures, including human rights violations, unjust land confiscation, Settlement Expansion and displacement, checkpoints staffed by the occupation forces controlling the movement of people and goods from town to another and area to another, In addition, Israel controls all crossing points between the West Bank and Gaza, and between the West Bank and Jordan thus the world. Also the last war on Gaza; the siege imposed on the cities of the West Bank; and the frequent attacks on cities, villages and refuge camps caused death, injury, disability, imprisonment. Besides the financial crises resulting from this situation. (Ghandour et al., 2020; Qashou, 2022). Over and above the enduring impact of the consequences of last COVID-19 pandemic (Hamamra et al., 2021). One of the main sectors has effect by these multifaceted challenges is the education sector, particularly, higher education institutions. Navigating the education process in this kind of situation requires more understanding of the multifaceted field of physical, cognitive, and social health of individuals and thus studying the way they cope with harsh conditions.

The higher education sector as the production line that supplies other sectors is one of the most impactful in the nation's development and prosperity (Singh, 2015). In this case, the faculty members are considered to be the key element in this production line, as they are the source of knowledge that is necessary for society's development and the progress of the state and the globe (Atta & Khan, 2016). To do so, universities impose too much pressure on their faculty members, as they are always expected to perform their jobs better and go beyond expectations by practising helping behaviours for their organization and their peers, especially in times of crisis. These actions which go beyond the individuals' assigned are referred to as an organizational citizenship behavior (OCB) (Chandra & Mathur, 2021). To attain the standards and the quality of higher education, universities have to improve their working conditions to ensure faculty members' compliance. To proceed with this endeavor, the universities have to reduce level of stress among their faculty members by creating healthy workplace conditions to attain a higher level of quality of faculty life which in turn affects their performance (Subbarayalu & Al Kuwaiti, 2019). Although quality of life term is well-known in Western culture, yet, in Palestine, perceived quality of life (PQL) studies are lacking. Furthermore, research findings suggested that, due to the differences in conditions, cultures, and individual differences, it is not easy to apply the typical typology of education in every situation (Kowal et al., 2019). In the context of higher education in Palestine, where the complexity is clear, the transition in educational methods has witnessed a notable shift to online learning as an adaptive response. Therefore, studying how Palestinians cope with unstable political and economic situations is important for organizations to understand how to operate effectively and to improve the performance of their people under various circumstances (Khoury, 2021).

In recent decades, the concept of OCB has changed the organizations' perspective that increasing organizational effectiveness requires not just driving individual task performance but also should be combined with increasing their OCB (Yusnita et al., 2021). Harvey et al. (2018) argue that OCB is a fundamental and "necessary prerequisite for effective collaboration" as it "facilitates the functioning of the formal organization". It was also found that individuals who practice OCB would be more energetic in helping themselves and their peers in such bad conditions at work (Vu et al., 2022). Despite the empirical findings of a prior study indicating that helping individuals in face-to-face interactions is the most effective at workplace behaviour, still, certain actions remain important, in which some other behaviors and activities at workplace indirectly shape the individuals' behaviors towards the benefits of the organizations (Podsakoff et al., 2000). One of these concepts is OCB, as OCB practices might positively or negatively affect the individuals'' behaviors and attitudes (Allen & Rush, 1998; Bergeron, 2007; Podsakoff et al., 2009). Individuals who engage in OCB might receive recognition, and opportunities for promotion, however, some individuals who engage in OCB activities negatively perceive it as overload work that leads to more time and effort consuming, which might cause high pressure on them, which in turn disturb their work-life balance, mainly among employees who lack support from their organization (Bolino et al., 2015).

Therefore, in the higher education sector, the competence of faculty members determines the effectiveness level of any educational institution, thus, they have emphasised the importance of improving the universities' system to enhance the capabilities of their faculty members (Al Kuwaiti et al., 2019). To understand the level of competence in faculty members, certain individuals and organizational issues should be studied to promote the faculty members' behavior and attitudes (Atta & Khan, 2016). Continuing in this vein, Kleih and Kübler (2014) suggested that communication competency positively influences the individuals' perception towards their quality of life. They postulate that an individual's sense of self-sufficiency, and satisfaction about their own competences, would significantly affect their

perception of quality of life. Additionally, Studies have suggested a positive and significant relationship between a person's perceived optimism level and perceived quality of life (Ong et al., 2006). Furthermore, individuals with higher self-esteem and perceived self-efficacy would have a higher perceived quality of life (Arnold et al., 2006; Bartoces et al., 2009). For years, literature has underscored the significance of information and communication technology (ICT) as a key determent for all aspects of human life, and a the most of job qualifications (Medsker et al., 1994). Which, the individuals' skills in using technological means for communicating and collaborating with others; participating in problem solving with creativity and critical thinking, as well as practising digital citizenship have become more obvious (Alnasib, 2023; Çebi & Reisoğlu, 2020; Reisoğlu et al., 2020). Thus, to provide valuable insights that explain how the perceived ICT competences foster positive individuals outcomes, this research seeks to contribute to the understanding of how OCB and Perceived ICT competences, guided by developmentally appropriate theories, interact to shape the perceived quality of life among faculty members amidst in such condition distinct challenges posed by post-covid-19 pandemic, different types of crises, and the ongoing conflicts in Palestine.

2. Literature review

2.1 *Organizational citizenship behavior (OCB)*

OCB has received the attention of scholars due to its influential role in creating a dynamic workplace and achieving the organizational effectiveness. Scholars defined OCB as the individuals' discretionary behaviors which are not specified in their job description, or employment contracts (Konovsky & Organ, 1996; Podsakoff et al., 2014). Additionally, Organ (2018) define OCB as the individuals'' voluntary actions that exceed the expected role stated in their job descriptions towards assessing their colleagues and contributing to organizational success. Organ (1988) was the pioneer who introduced the initial typology of OCB, proposing five distinct types including altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. This classification inspired Podsakoff et al. (2000), to develop a proposal of seven distinct types of OCB, namely, helping behavior, self-development, individual initiative, organizational compliance organizational loyalty, sportsmanship, and civic virtue. These groups of behaviors clarifying the individuals' who participate in OCB are mostly socially responsible citizenship, tending to assist their colleagues, and generating innovative ideas for the sake of improving organizational operations (Podsakoff et al., 2018). In the literature, OCB is a concept that has been described in many ways. Many descriptions and definitions exist regarding what OCB entails. For example, Sikhondze et al. (2024) described OCB as the participation of employees in extra-role behaviors beyond the role specified in their job discerptions, for instance, assisting their colleagues in performing their tasks, taking more responsibilities, and paying more attention to the welfare of their organizations. In this case, employees are presented with the opportunity to either perform the formal tasks required in their job descriptions, or put more effort and time into taking care of others, increasing innovation, and exerting positive behaviors and attitudes leading to positive outcomes for the sake of organizational effectiveness.

Theoretically, social exchange theory proposes that individuals engage in reciprocal relationships, with the expectation of receiving benefits or rewards for their efforts (Blau, 1968). In the organizational settings, employees who participate in OCB activities anticipate receiving compensation for their actions in the form of recognition, support, or assistance from peers or supervisors in the future. Furthermore, social learning theory emphasizes the role of observation and modelling in shaping behavior (Bandura, 1985). In the core of this, through positive reinforcement employees observe and emulate their colleagues, especially, those who engage in OCB actions to benefit their peers and organizations. Moreover, job characteristics model emphasizes the effect of job design on employee performance, as enriching jobs with autonomy, a variety of competencies, and task meaningfulness would encourage employees to engage in actions that allow them for personal and professional growth (Taylor, 2015), and OCB, given its nature and role, is considered one of the most influential concepts to ensure the achievement of this goal (Podsakoff et al., 2000). The literature encompasses numerous studies exploring the impact of OCB on individuals, teams and organizational outcomes, such as, OCB was found to be playing a significant role in forming organizational culture and increasing the organizational performance. Studies suggested that the actively engaged employee in OCB actions, positively affects the work environment through encouraging cooperation among team members, and contributing the productivity augmentation (Organ & Ryan, 1995). In addition, OCB was found to be associated with job satisfaction, organizational

commitment, and job performance (Podsakoff et al., 2000). Hence, this study hypothesizes:

H1: OCB is directly related to PQL among faculty members in the higher education institutions.

H2: OCB is directly related to perceived ICT competences of faculty members in higher education institutions.

2.2 *Perceived quality of life (PQL)*

The initial conceptual model that examined how organizational work affects PQL considered PQL as affective beliefs of individuals about the status of their life (Rice et al., 1985). PQL was also defined by Liao (2014) as the way individuals perceive and value their lives. In which they evaluate their experience in life including their overall happiness, satisfaction with different aspects of life. PQL according to (Teoli & Bhardwaj, 2023), is an individuals' assessment of their life situation, within a frame of culture and individual values, standards, self-esteem, apprehensions, aspirations, and expectations. Furthermore, another prominent global framework in PQL is the American approach which highlights the individuals' well-being, measured by their perceptions of their needs, satisfaction, expectations, views, satisfaction, and lifestyle (Karimi & Brazier, 2016). Regarding the impact of different factors on PQL, Lorant et al. (2003) suggested, that there is a strong association between socioeconomic inconsistencies and depression. Therefore, individuals economically in a bad situation are more exposed to mental health issues than they who live in better situations. A threatening environment might cause an observable amount of depression, anxiety, and stress within the general public (Patel & Patel, 2020). For example, social isolation, low income, and inadequate health care complicate the consequences, making the mental health issues worse (Pfefferbaum & North, 2020). Organizational development is not only limited to physical resources and infrastructure, but it depends mostly on human capital, including knowledge, experience, skills, and social or ethical competencies, such as OCB (Kowal et al., 2019).

In the context of higher education, the profession of education is considered one of these jobs with high stress that may negatively influence the overall mental health of educators, especially in unstable conditions such as the time of COVID-19. This has led education institutions to think about the mental health and well-being of teaching staff by studying the phenomena. A recent study on the PQL among the university teachers (Lakhotia, 2020), suggested that there is a positive impact of Perceived PQL of teachers on their emotional intelligence, which in turn, leads to their professional development. Furthermore, Toraman et al. (2020), have examined three subscales of PQL scale that they employed in their study namely students' satisfaction with faculty, faculty members and student relationships. The results of the study revealed that the three subscales were positively related to deep approach to learning, cognitive flexibility and academic achievement, which emphasize the importance of using deep and flexible learning approaches that allow one to carry out a range of activities, which contribute to a higher level of academic achievement (Toraman et al., 2020). Interesting findings of an empirical study by Lee et al. (2008) indicated that the level of education has a significant impact on the assessment of effect of the ICT on PQL. Individuals with high qualifications perceive ICT as an important element of their quality of life, regardless of where they live. Thus, this study proposes the following hypothesis:

H3: perceived ICT competences are directly related to PQL among faculty members in higher education institutions.

2.3 *Perceived ICT competences*

In any modern organization, ICT has become the foundation of managing the daily organizational operations and facilitating communication among the people of the organization. Over time, ICT has been defined in numerous ways. For example, ICT is defined by Kennewell et al. (2002), as the set of technological tools that are used to process and transmit knowledge. ICT was also defined by Asabere et al. (2012) as "the tools, processes, equipment, and facilities that provide an environment for generating, transmitting, processing, storing, and disseminating information in any form". Furthermore, Yunus et al. (2013), described ICT as technological tools and resources used for communication, creation, distribution, and management of information. Accordingly, the term ICT represents a wide range of hardware and software tools and technologies, including computers, mobile phones, the internet, and various software applications that were designed and employed for the storage, recovery, transition, and processing of the information (Rahayu & Sukardi, 2020). In addition, in organizational settings, ICT facilitates communication and supports the decision-making process (Talebian et al., 2014). ICT enables organizations to improve resource allocation, advance service delivery, and

adapt to rapid changes in market trends (Brynjolfsson & Hitt, 2000). It also helps organizations simplify processes and procedures, improve efficiency, and thus achieve a competitive advantage (Ramola, 2020).

In the educational context, ICT has become integral to various educational practices (Bay et al., 2021). It has dramatically driven the transition of the educational paradigm from traditional to innovative approaches (Benedek & Molnár, 2014; ElSayad, 2023; Li, 2022).

This dramatic effect of OCB on education transition exists due to the potential of ICT in meeting the individual learning needs through providing intensive and diversified learning materials; ensuring educational accessibility and thus educational equality, increasing individuals' autonomy and, and improving lecturers' professional development (Briones, 2018; Li, 2022). Empirical studies emphasized that, the effectiveness of using ICT in education contingents on perceived ICT competencies within educators and students (Góktaş et al., 2009; Naji, 2017). Furthermore, ICTs are more likely to improve educational processes in terms of increasing the possibilities for educator to meet the individual differences among their students; and augmenting the information by diversifying the resources (Alemu, 2015; Liesa-Orús et al., 2020). In an educational context, involving ICTs in the education process was found to be more effective in improving the quality, and developing the individuals' creative and intellectual thinking, than traditional teaching methods based on textbox and blackboards. Which highlights the importance of transmitting from traditional teaching methods to technology-based learning (Eryansyah et al., 2019; Habibi et al., 2020). Thus, this highlights the importance of integrating ICT education and the necessity for the enhancement the ICT competencies of both educators and learners (Guillén-Gámez & Mayorga-Fernández, 2020).

The implications of ICTs cannot be attained, in any context, by relying only on the tools and infrastructure; it requires individuals who can cope effectively with these tools (Zhdanov et al., 2023). In this case, the higher education institutions anticipate that their faculty members will take on the responsibility of acquiring the necessary competences that enable them to effectively deal with ICT-based learning tools to ensure the success of their operations. In professional settings, ICT competencies mean employees are aware, knowledgeable, skilled, and able to employ ICT tools including, software applications, and digital platforms (Brown & Warschauer, 2006; Warschauer & Ware, 2006). ICT competencies include knowledge about the ICT tools, as well as, skills on how to use them in communication, digital content creation, and the ability to manage the digital resources (Niyazova et al., 2023). In higher education settings, ICT competency is crucial for academic staff, as it empowers them to gain knowledge and engage in both hybrid and distance learning with innovative teaching methods. It is also considered a practical measurement necessary for universities to evaluate the proficiency levels among their faculty members in dealing with ICT, and they can evaluate how much they are equipped to move from traditional education methods to innovative ones, thus setting the proper educational policies that determine the to what extent they can integrate ICT in their teaching methods (Ramola, 2020). Thus this study proposes:

H4: PQL mediates the link between OCB and PQL among faculty members in higher education institutions.

Figure 1. presents the proposed the theoretical model of this study, which includes both the direct, and mediated links among the model constructs.

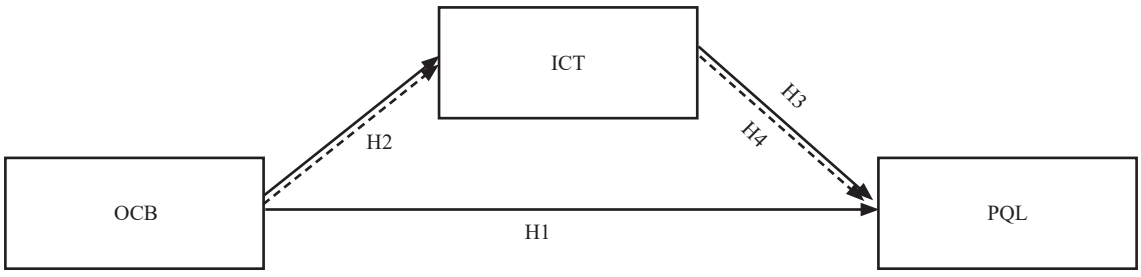

Figure 1. Theoretical Model

3. Research methodology

3.1 *Research design*

As suggested by Hair (2007), for study amid theory testing, rather than theory building, a quantitative approach is suitable. Furthermore, the unit of the analysis for this study was individuals' level who are faculty members working in higher education institutions in Palestine. A cross sectional questionnaire survey was employed to test the study model. The questionnaire is related to faculty members' perceptions toward (i) their OCB, (ii) ICT usage, and (iii) PQL. The three variables involved in the current study were measured with the scale adopted and adapted from previously established scales, and tested in several past empirical researches. The survey items were measured by employing interval nominal and ratio scales. The survey items were measured with an interval scale based on a five-point Likert scale.

This study employed a random selection technique as this study aimed at obtaining preliminary information about the links (direct, and indirect) between the constructs used in this study, instead of generalizing the research's findings. This technique is suitable for this study as all of the selected universities in the Palestinian context have demonstrated similarities in terms of their characteristics and functioning. As suggested by the rule-of-thumb the sample size of the study to be 10 respondents or more, for each formative indicator of a scale, or 20 respondents or more for each arrow directing to certain latent variable (Henseler et al., 2009), thus, the sample size of this study consist of 500 Palestinian faculty members employed in 11 Palestinian universities, using online survey approach assisted by Google Forms. The data were collected between August and September 2023. The forms returned were 355 indicating that 71% of the sent forms.

3.2 *Consent to participate*

Informed consent was obtained from all participants by proceeding with the survey after reviewing the email information. The author attests that participants were aware of the study's purpose, potential risks, and benefits. The author also emphasizes the voluntary nature of participation, confidentiality measures, and participants' right to withdraw at any time.

3.3 *Data analysis*

Data analysis in this study was performed in two stages. The first stage was conducted by SPSS 25 for data preparation including dealing with the missing data, and checking the normality and the outliers. As well as, the demographic information analysis.

3.3.1 *Preliminary data analysis*

For the data accuracy, data was gathered by Google form thus, there were no out-of-range values detected in the data. Regards the outliers, after deleting both, the univariate and multivariate outliers, 333 cases were considered as usable data for this study. Testing the normality suggested that the variables did not deviate from normality; and therefore, there was no need for adjustments, such as data transformation. Last, in this study, all the items in the independent variables were adopted from existing theories that test the impact of OCB on PQL. In terms of the graphical methods, the researcher examined the scatterplots, which showed a clear linear pattern. Therefore, a non-linearity problem was not detected in this study. Finally, the result of the testing of the homogeneity of variance, indicated that there is no homoscedasticity in this current study. For the second stage, SmartPLS 4.0 was used to analyze both the reliability and validity of measurement and structural models; also for hypothesis testing.

3.3.2 *Demographic profile of respondents*

The respondents' characteristics of the 333 are the total number of valid surveys presented in Table 1. The data shows the respondent presented a diversified academic community, as the respondents were chosen from 11 universities in Palestine. A significant percentage was from Al-Quds Open University (21.6%), followed by Al-Istiqlal University

and Al-Quds University (16.5%,15.3%) respectively. With regards to the gender, males constituted 79.6% of the respondents. Respondents who are above 50 years old represent 43.2% of the whole respondents followed by those who fall within the 40-50 were 36.6%, this justifies why a significant percentage of them with extensive experience. As majority of respondents (53.8%) have accumulated more than 15 years of experience in the field of teaching. About the academic rank of the faculty members, 43.1% of faculty members were assistant professors, 26.3% were lecturers, 15.3% were associate professors, and 9.6% were full professors.

Table 1. Results of demographic information

		Frequency	Percent
Gender	Female	68	20.4
	Male	265	79.6
Age	23-30	7	2.1
	> 30-40	60	18
	> 40-50	122	36.6
	> 50	144	43.2
Marital status	Married	300	90.1
	Single	24	7.2
	Divorced	6	1.8
	Widowed	3	0.9
University affiliations	Al-Aqsa University	17	5.1
	AL-Azhar University	6	1.8
	Al-Istiqlal University	55	16.5
	Alnajah University	33	9.9
	Al-Quds Open University	72	21.6
	Al-Quds University	51	15.3
	Arab American University	21	6.3
	Berzit University	14	4.2
	Gaza University-Gaza	5	1.5
	Hebron University	33	9.9
	Islamic University of Gaza	10	3
	Palestine Technical University	16	4.8
Academic title	Teacher	18	5.4
	Lecturer	88	26.3
	Assistant Professor	144	43.1
	Associate Professor	51	15.3
	Professor	32	9.6
Years of experience	< 2	7	2.1
	2 to 5	17	5.1
	> 5-7	35	10.5
	> 7-10	57	17.1
	> 10-15	38	11.4
	> 15	179	53.8
	Total	333	100

4. Result of the main analysis

4.1 *Measurement model result*

To assess the reliability of the indicators, outer loadings of each indicator should be greater than 0.70. Therefore, it is suggested that indicators with outer loadings between 0.40 and 0.70 should be considered for removal only if it leads to improving the composite reliability and average variance extracted (AVE) (Hair et al., 2011). In this study, the results of the indicators loadings show that 13 indicators loading for OCB and PQL were below .70, the researcher had deleted them. This was done in order to increase the AVE of the particular constructs. Table 3, indicates that the majority of factor loadings for the remaining items exceed the minimum threshold of 0.70.

To evaluate the reliability of the measurement model, Cronbach's alpha (α), factor loading, and composite reliability (CR) were employed. Table 2 shows that Cronbach's alpha values for the constructs varied between 0.864 and 0.962, while the composite reliability values were all above the minimum requirement of 0.700. That are 0.88, 0.91and 0.91 for ICT, OCB, and PQL respectively. Hence, this indicates that all three reflective constructs of the study have a high level of internal consistency reliability.

Regarding to convergent and discriminant validity assessment, Table 2 shows the AVE values for the three study constructs were greater than 0.50, the suggested value of acceptable convergent validity. The AVE values are 0.621, 0.544, and 0.507, for ICT, OCB and PQL respectively. Therefore, the measures of the three constructs have a high level of convergent validity; which means that more than half of the variances of the indicators can be explained by their respective latent variables. Table 2, also indicates that the AVE square root of each construct was greater than the correlation coefficients of that construct with the other constructs. For example, the reflective construct of OCB has a value of (0.738) for the square root of its AVE; which was compared with all correlation values in the row of ICT. Thus, discriminant validity had been established.

Table 2. Descriptive data, inter-construct correlations and the square root of AVE

	AVE	Cronbach's alpha	Composite reliability	ICT	OCB	PQL
ICT	0.621	0.962	0.88	(0.788)		
OCB	0.544	0.895	0.91	0.620	(0.738)	
PQL	0.507	0.864	0.91	0.497	0.441	(0.712)

Note: The number in parenthesis is the square root of the average variance extracted (AVE)

Additionally, Table 3 shows that indicator ICT1 recorded the highest value for the loading of its corresponding construct ICT (0.838). All cross-loadings with other constructs recorded low values of 0.481 OCB, and 0.356 with PQL. Thus, discriminant validity had been established.

Table 3. Loading and cross-loading of indicators

	ICT	OCB	PQL
ICT1	0.737	0.481	0.356
ICT10	0.838	0.533	0.447
ICT11	0.824	0.429	0.370
ICT12	0.809	0.402	0.360
ICT13	0.788	0.504	0.412

Table 3. (cont.)

	ICT	OCB	PQL
ICT14	0.815	0.475	0.387
ICT15	0.731	0.549	0.444
ICT16	0.771	0.479	0.397
ICT17	0.791	0.482	0.412
ICT2	0.779	0.489	0.365
ICT3	0.767	0.559	0.421
ICT4	0.785	0.454	0.375
ICT5	0.828	0.479	0.364
ICT6	0.739	0.458	0.312
ICT7	0.790	0.483	0.346
ICT8	0.835	0.513	0.439
ICT9	0.761	0.481	0.400
OCB10	0.447	0.684	0.274
OCB11	0.478	0.731	0.327
OCB13	0.504	0.810	0.381
OCB2	0.473	0.793	0.353
OCB3	0.420	0.709	0.330
OCB6	0.462	0.762	0.378
OCB7	0.551	0.743	0.327
OCB8	0.354	0.667	0.258
OCB9	0.384	0.729	0.271
PQL12	0.249	0.144	0.626
PQL16	0.265	0.299	0.681
PQL17	0.309	0.395	0.758
PQL18	0.258	0.226	0.699
PQL2	0.449	0.401	0.746
PQL20	0.302	0.241	0.691
PQL3	0.492	0.357	0.753
PQL6	0.374	0.331	0.729

4.2 *Evaluation of the structural model*

The second stage, SmartPLS 4 was employed for structural model assessment and hypothesis testing.

4.2.1 *Model quality assessment*

Table 4 displays the outcome of the structural model test with regard to both coefficients of determination (R^2) and prediction variance (Q^2) of the study constructs. It shows that R^2 values for the endogenous latent variables that are ICT and PQL were 0.368 and 0.275 respectively, indicating that the model is fairly explained. With regards to Q^2 values, it is

suggested the Q^2 values were significantly above zero Q^2 to prove the model's predictive relevance. The result in Table 4 indicates the higher Q^2 Predict value for ICT (0.368) indicating that the model is relatively more successful in predicting the variance in ICT compared to PQL. The moderate Q^2 Predict value for PQL (0.172) indicates that the model has some ability to predict PQL, even though the prediction is not as strong as in the case of ICT.

Table 4. Coefficients of determination (R^2) and prediction variance (Q^2)

Construct	*R*-square	*R*-square adjusted	Q^2 predict
ICT	0.384	0.382	0.368
PQL	0.275	0.271	0.172

4.4.2 *The effect sizes (f^2)*

The results shown in Table 5 indicate that a moderate (f^2) of 0.112 of the variance in PQL is explained by ICT. This reveals. While the (f^2) of 0.624 indicates that approximately 62.4% of the variance in ICT is explained by OCB. This suggests the strong influence of OCB on ICT. However, the (f^2) of 0.040 suggests that approximately 4% of the variance in PQL is explained by OCB, signifying a comparatively minimal effect size.

Table 5. Result of effect sizes (f^2)

	f-square
ICT -> PQL	0.112
OCB -> ICT	0.624
OCB -> PQL	0.040

4.3 *Hypothesis testing result*

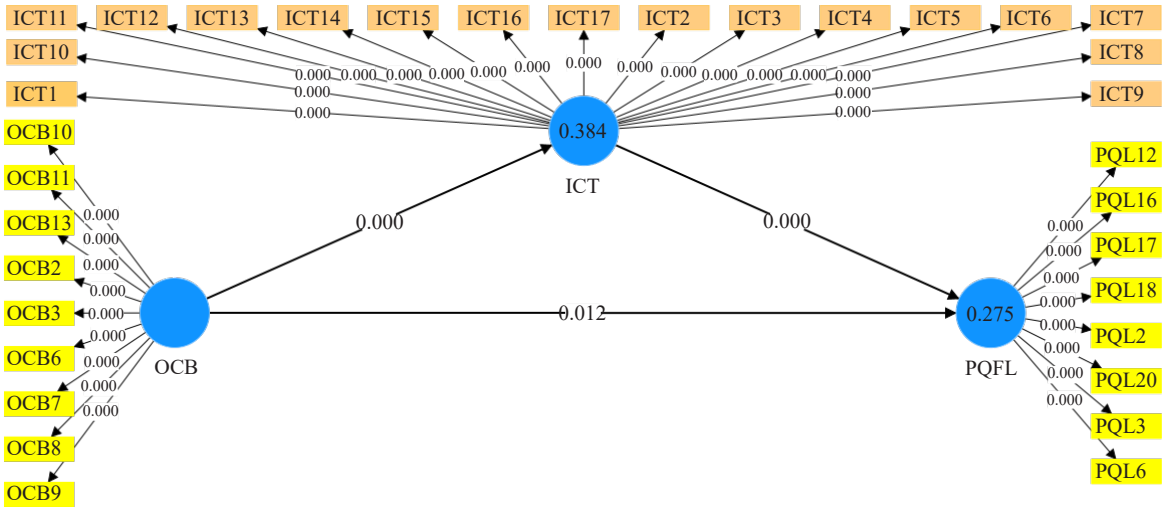

Figure 2. Results of the structural model

The associations between constructs in the proposed model were tested in two stages. Firstly, testing the direct links between the study's constructs; then, examining the mediation effect of ICT. Figure 3 shows the SmartPLS result for structural model.

4.3.1 *Testing the direct effects*

As shown in Figure 2, the value and the significance level of the direct paths between variables are explained in the structural model. Results suggested that all three direct paths are statically significant at the level of 0.001. The relationships of OCB with ICT and PQL, as well as the relationships between ICT and PQL, were supported. The results shown in Table 6 supported H1; which states that OCB is significantly associated with PQL. The support was demonstrated by the results that show a path coefficient of 0.216, which was statistically significant at 0.001 (t-value of 2.507 > 1.64). The results further supported H2 which states that OCB is significantly associated with ICT. For this support, the path coefficient of 0.620 was statistically significant at the 0.001 (t-value of 12.821 > 1.64). Similarly, the results also demonstrated that the link between ICT and PQL (H3), with coefficients of 0.363 was also statistically significant at 0.001 (t-value of 5.245 > 1.64).

Table 6. Results of direct hypothesis testing

Hypotheses	Standard deviation	Path coefficient	T statistics	P values	Result
H2: OCB -> ICT	0.048	0.620	12.821	0.000	Accepted
H3: OCB -> PQL	0.086	0.216	2.507	0.012	Accepted
H1: ICT -> PQL	0.069	0.363	5.245	0.000	Accepted

4.3.2 *Testing the indirect and the mediation effect*

The links between OCB and PQL (H1); OCB and ICT (H2); and ICT and PQL (H3) were statistically significant. Consequently, that might give an empirical indication for the existence of a partial mediation role of ICT in the link between OCB and PQL. Table 7 shows that the standard deviation of 0.045 indicates an average amount of variability in the mediated link between OCB and PQL. Moreover, T statistics value of 4.962 is associated with a p-value of 0.000, suggesting a statistically significant mediation relationship. Thus, it suggests a strong level of confidence in the said relationship. Hence, H4, stating that OCB affects PQL through ICT is statically accepted.

Table 7. Indirect and mediating effects

Hypothesis	Standard deviation	T statistics	P values	Confidence intervals	
				Lower	Upper
H4: OCB -> ICT -> PQL	0.045	4.964	0.000	0.142	0.320

To evaluate the mediation effect, Table 7 revealed that the value of 0.320 represents the estimated mediation effect of ICT Usage in the link between OCB and PQL. It indicates that a substantial impact of OCB on PQL is explained by ICT Usage. The confidence interval (0.142 to 0.320) explains the range of the actual mediation effect.

5. Discussion and implications

5.1 *Discussion*

The findings of the study revealed that faculty members' engagement with OCB initiatives has a significant and positive impact on their PQL through mechanisms of perceived ICT competences. It means, that by fostering a culture of enhancing cooperation; encouraging mutual support, and shared responsibility among the academic community, both universities and their faculty member can benefit from OCB to enhance faculty members' assessment of their ICT competences, and thus, affect their perceptions of their life quality which in turn will contribute in achieving the organizational objectives. In line with the suggestions of (Podsakoff et al., 2000), the findings of this study, indicate the faculty member who engages in OCB, including helping his or her colleagues in dealing with issues related to ICT during the online learning, would contribute to creating a positive social exchange environment. Consequently, participating in OCB would create a culture of sharing knowledge as well as individuals will learn from each other's experiences and expertise, and thus, they will feel more confident in their competence in using the technology (Harvey et al., 2018; Srivastava et al., 2006). In this case, will provide a good opportunity for faculty members to learn and gain experience from each other which in turn will affect the level of their ICT competences as they experience mutual support and assistance in coping with technology-related issues or sharing knowledge about ICT tools (Organ & Ryan, 1995). The argument is also supported by Bandura's (1985) social learning theory, which proposes that individuals learn by direct experience and from observing each other and through direct experience. Moreover, the findings of this study are in line with the findings of previous research, which emphasized the importance of ICT competencies in navigating the complexities of the digital age. Individuals with strong ICT competencies would be more effective in coping with the technological advancements, and thus contribute to organizational operation (Livingstone & Helsper, 2007; Wong & Looi, 2010).

5.2 *Implications*

5.2.1 *Theoretical implications*

This study examined the mediation effect of ICT in the relationships between PQL and OCB among faculty members in higher education institutions in Palestine. The present findings have certain theoretical implications, in which, this research broadens the scope of inquiries into faculty members' PQL in a conflict zone, such as Palestine, while most of the research studied the quality of life, work-life balance and quality of work-life have been carried out in comparatively stable countries. By employing the PQL Scale, this study clarifies how the integration of both OCB and perceived ICT competences in distance learning influences the individuals' perception of the quality of life, among faculty members working in higher education institutions amidst the multifaceted context of Palestine. Furthermore, the contributions of the results can be considered from two basic aspects. First, in this study, OCB and perceived ICT competences are discussed as the antecedents of PQL. While, to the researcher's knowledge, there is no study in the literature that examined this association. Therefore, this study has a novel contribution to the body of knowledge with regard to faculty members' behavior and skill towards their PQL. Thus, the results of this study draw attention to the importance of the OCB activities and ICT competences to enhance the employee satisfaction of their life which in turn will affect their performance.

5.2.2 *Practical implications*

This study's findings yield practical implications for the field of higher education. Particularly, it offers valuable insights for university administrators seeking to comprehend faculty members' perspectives on their OCB, ICT competences, as well as their levels of PQL. Consequently, universities should not only prioritize the enhancement of professional appraisal to elevate the OCB and ICT competences of their faculty members but also consider their perception of the quality of their life. Higher education institutions can gain competitive advantages by leveraging the capabilities of their human capital. With regards to the importance of OCB, Higher education institution should encourage their faculty members to engage in OCB activities, as these activities would provide them with a wide range of skills, meaningful and identity, autonomy, and feedback, which in turn will affect their motivation, satisfaction, and thus their perception of quality of life. The managerial implications of OCB within the higher education institutions,

particularly regarding its impact on PQL through employees' perceived ICT competencies, can provide the university leaders with valuable suggestions, such as they should prioritize the organizational culture that encourages OCB among faculty members by valuing and appreciating the OCB activities taken by their faculty members.

Leadership of higher education institutions also have to seek feedback from their academic staff and involve them in strategic planning and decision-making processes, these actions would also enhance their overall sense of well-being and job satisfaction. Furthermore, in this study, the author identified that perceived ICT competences have partially mediated the effect of OCB on PQL, therefore, it seems that investing in enhancing the faculty members' ICT competences is vital for increasing the level of PQL which might assist in boosting their level of satisfaction and performance, which in turn increase the whole university performance. In view of that, Leadership of higher education institutions can improve their faculty perception of their ICT competences by providing them with opportunities to develop their ICT competences, which would positively impact their PQL. Therefore, leaders of higher education institutions may pay more attention to the influential role of ICT competences among their faculty members, and seek to implement training programs designed for their academic staff to provide them with professional development opportunities focusing on ICT-based learning tools and applications. To do so, universities should increase their investment to create modern ICT infrastructure and tools to facilitate faculty members' training and competences development. Universities have better include the ICT competency in the performance appraisal process, so they can track faculty members' progress, and identify the training needs in this regard, which helps university when and how to interfere.

5.3 *Limitations and further directions*

This study also suffers from some limitations. First, the data gathered for this study all the data were self-reported, which might cause concerns about the existence of mono-method bias and percept-percept inflated measures. Since OCB, PQL and Perceived ICT Competencies construct were in one survey and gathered from the same individuals, common method variance might have inflated the link among these variables. For example, faculty members were asked to assess their engagement in OCB activities at their universities, their perception of their ICT competences as well as, assess their perception of the quality of their lives, accordingly, they might exaggerate their responses, which might affect the data quality. However, this should not certainly affect the results of this study, as, the data analysis has been well prepared and showed moderate value for all research constructs. Accordingly, the author suggests future research using both, longitudinal designs and data from several sources such as self-report and supervisor or peer assessment of OCB and ICT competences.

Second, this research focuses on faculty members working in higher education institutions in Palestine; while the research model is not limited to faculty staff it is also important to other administrative employees who are working in this sector. Thus, future research may also expand the population to different job occupation. Furthermore, Palestinians in different sectors are also suffering from the harsh conditions in Palestine, which may also affect their perception towards their quality of life, therefore, to get a clear understanding of the phenomena, further research may examine similar models in different contexts in Palestine. Besides, to increase the generalizability of the results obtained, since the respondents were all from higher education institutions, the results of this study might not be applicable to other sectors. Therefore, studying different settings other than the higher education sector may also assist with the generalizability of the results.

Third, the data were gathered at one point in time, it is possible, for instance, that the perceived ICT competencies may also serve as an antecedent to OCB, or the employee with a high level of PQL may engage more in OCB, and consequently have more positive perceptions of their ICT competences than those with a low level of PQL. This is a situation that might result in invalid causal inference. Accordingly, to address the issue of causality, future researchers might be interested in replicating this study in a longitudinal design, so they could determine causal link is likely to be constant. Also, this study examined the links between OCB, ICT competences and PQL using a quantitative method, which allows for only to some extent weak interpretation especially on the PQL. Therefore, Future research may employ mixed methods research using both cross-section surveys and interviews to gain better understanding of this relationships.

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Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Conflict of interest

The authors declare no competing financial interest.

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