



Examining the Mediating Role of Job Satisfaction between Motivation, Organizational Culture, and Employee Performance in Higher Education: A Case Study in the Arab Region

Abdullah M. Al-Ansi^{1, 2*}, Mohammed Jaboo³, Ali Mohsin Salim Ba Awain⁴

¹ Faculty of Education, Tamar University, 55755 Tamar, Yemen

² Faculty of Economic and Business, Universitas Muhammadiyah Yogyakarta, 55183 Yogyakarta, Indonesia

³ Deputy Director of VC Office, Vice Chancellor's Office, Dhofar University, 211 Salalah, Sultanate of Oman

⁴ College of Economics and Business Administration, University of Technology and Applied Science, 611 Nizwa, Sultanate of Oman

* Correspondence: Abdullah Al-Ansi (abdullahalansi@umy.ac.id)

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Abstract: This study aimed to examine the correlation among motivation, organizational culture and employee performance and the mediation role of job satisfaction in higher education. A more productive and positive work environment was created by organizations by understanding the connection among these factors. This study provided valuable insight into how to create a culture of motivation and satisfaction to improve employee performance. 364 participants were selected from Yemeni and Omani universities, including academics and staff. A cross-sectional survey design was employed, with participants selected using stratified random sampling. Questionnaires were contributed online using emails and social media applications and analyzed by PLS-4. Results of Partial Least Squares Structural Equation Modeling (PLS-SEM) revealed that extrinsic motivation had a negative impact on employee performance while organizational culture had a significant positive impact in dynamic environment. Results also highlighted the positive role of job satisfaction represented by supervisor-employee engagement, incentives and promotion in enhancing performance in dynamic environment. Researchers recommended to aggressively increase job satisfaction and employee performance with extrinsic motivation in dynamic environment in Arabic region.

Keywords: Motivation; Organizational culture; Job satisfaction; Employee performance; Dynamic environment; Higher education

1. Introduction

Motivation and organizational culture are two key components of a successful business. A positive and motivated workforce has high performance, improved morale, and greater job satisfaction (Suchyadi, 2017). If an organization's culture focuses on recognizing the individual capabilities of its employees and rewarding them for their hard work, including incentives, competitive compensation packages (e.g. salary, health benefits, retirement packages), adequate feedback on performance improvement, emphasis on strong work ethics and excellent customer service (Arif et al., 2019; Isensee et al., 2020; Paais & Pattiruhu, 2020), this increases the productivity of employees and make them better engage in achieving the organization's mission, thus helping fuel their motivation to succeed.

Furthermore, employee performance is closely related to job satisfaction because a large part of their work attitude and motivation is heavily influenced by their satisfaction with the tasks at hand (Hajiali et al., 2022; Kuswati, 2020). Thus, when considering employee performance, managers mediate job satisfaction to make employees satisfied with their roles and responsibilities, by better communicating with employees, planning how to complete complex tasks the best, making continued employee development plans, and providing competitive salary packages for the best employees (Riyanto et al., 2021; Yandi & Havidz, 2022). Effectively mediating job

satisfaction plays a major role in helping organizations improve employee performance.

Although the impact of motivation and organizational culture on performance has been studied, the impact is expected to differ in dynamic environment. Many learning approaches have changed and new approaches have emerged during and after the Covid-19 pandemic, and the pandemic still has a noticeable impact on the learning environment (Al-Ansi, 2022). No research has studied the impact in dynamic environment, and this study filled the research gap. This study aimed to investigate the impact of motivation and organizational culture on both job satisfaction and employee performance, and the indirect impact of these variables on employee performance through job satisfaction. After the Covid-19 pandemic has become a new normal in educational institutions, some universities have been using mixed learning approaches during and after the pandemic. This study was conducted under this condition. Based on prior literature, this study tried to answer the following two main questions:

Q₁: Has the impact of motivation and organizational culture on job satisfaction and employee performance changed during and after the Covid-19 pandemic?

Q₂: Do motivation and organizational culture enhance employee performance through job satisfaction?

1.1 Dynamic Environment

The Covid-19 pandemic caused unprecedented disruption to the traditional learning environment (Garad et al., 2021), with most educational institutions forced to change their curricula online. As the world gradually reopens, the new "post-Covid" learning environment is significantly different. Both public and private schools and universities now need to take into account social distancing measures, which necessitates smaller classes and more distance between teachers and students. In addition, contact tracing systems need to be set up alongside improvements in ventilation and sanitization routines. Education authorities should also consider innovative approaches, such as improved digital infrastructure and blended learning strategies (combining online learning with occasional physical presence) for a successful transition of remote education. All these changes mean that there's a lot of work ahead for educational institutions when planning for the post-Covid education. But after adequately preparing all stakeholders, now educators can ensure their safe return to the classrooms.

In addition, organizations have been increasingly advised to review and adapt their environments to achieve optimal employee performance and job satisfaction. The needs and expectations of employees and the nature of work have changed significantly in recent years. To ensure productive outcomes, managers should pay close attention to both physical working environment and any cultural or social norm developing within a team. Where appropriate, employers should also consider providing training to improve the skills of employees and then increase their job satisfaction, thus maximizing the potential of the organization.

2. Literature Review

2.1 Motivation and Employee Performance

Employee motivation is an important factor in the workplace, because it affects the commitment level, energy, and innovation of employees. Motivated employees are more productive than unmotivated ones (Girdwachai & Sriviboon, 2020), and those involved in goal setting may be more motivated (Alnoor et al., 2020). Intrinsic rewards, such as recognition and rewards, have been found to be positively correlated to work performance, while extrinsic rewards, such as income, are also motivating factors for some employees (Manzoor et al., 2021). Employee motivation is beneficial for both employers and employees. For employers, motivated staff are more productive and contribute to more revenues. For employees, motivation increases job satisfaction, improves morale and a sense of accomplishment (Paais & Pattiruhu, 2020). Employers should strive to encourage employee motivation through intrinsic rewards, such as recognition and rewards, as well as extrinsic rewards, such as money or other incentives.

Furthermore, intrinsic motivation is an important factor of employee performance. Evidence has shown that employees who are intrinsically motivated, such as a sense of accomplishment or the satisfaction of contributing to the organization, increase their performance, including productivity and quality of work (Hassi et al., 2021; Twalib & Kariuki, 2020). In addition, intrinsic motivation reduces turnover rates, because employees feel more committed to their work and are less likely to become disappointed (Shareef & Atan, 2019). Organizations looking to improve employee performance should foster intrinsic motivation by offering meaningful recognition, providing autonomy in decision-making roles, or creating career development opportunities for employees. By focusing on intrinsic motivators and investing in personnel development initiatives, organizations create a more committed workforce, thus ultimately helping achieve long-term success.

On the other hand, extrinsic motivation boosts employee performance through good working conditions, noble policies, security, and reliable relations among peers (Yusuf, 2021). Extrinsic motivation is also tangible, arises from outside of an individual, and can be identified by rewards meted out by the employer. On the contrary, intrinsic motivation is intangible and comes from within an individual, and employees perform well when they

feel interested and pleased in their jobs (Chien et al., 2020). Extrinsic motivation has positive relationships with turnover intention and burnout, but a negative correlation with work performance. Intrinsic motivation encourages employees to do things for their own satisfaction rather than external rewards. Based on this literature, the first hypothesis was formulated as follows:

H₁: Motivation has a positive impact on employee performance in dynamic environment.

H_{1a}: Extrinsic motivation has a positive impact on employee performance.

H_{1b}: Intrinsic motivation has a positive impact on employee performance.

2.2 Organizational Culture and Employee Performance

Organizational culture has a tremendous influence on employee performance and engagement (Fidyah & Setiawati, 2020; Indiyati et al., 2021). A positive organizational culture empowers employees to be innovative and productive, and provides clear direction, consistent feedback, job satisfaction, fair compensation, work/life balance, attractive benefits and reward opportunities (Soomro & Shah, 2019). Conversely, a negative organizational culture results in low morale among employees, who may become demotivated with their jobs and less likely to contribute to organizational success. Ultimately, organizations with a culture focusing on employee well-being tend to acquire better results, combined with higher-level engagement from their workforce. In conclusion, there is a direct link between organizational culture and employee performance. A positive corporate culture has shared beliefs that align with the organization's mission and values, which leads to increased employee engagement, productivity, and loyalty (Jufrizen et al., 2021).

Although some studies have investigated the seven different dimensions of organizational culture and its relationships with performance and other variables, this study focused on two dimensions, aggressiveness and outcome orientation, because they are more related to dynamic environment. Aggressive culture in the workplace has a positive impact on employee performance if it is managed correctly. This culture encourages employees to be proactive and take initiatives, resulting in improved productivity and efficiency (Yue & Thelen, 2023). Employees are more likely to feel motivated when they are given the opportunity to innovate and challenge themselves, because the chance of success inherent in this type of environment is greater (Singh et al., 2019). Furthermore, by promoting competition among staff, such as incentives or rewards schemes, team members are encouraged to strive to achieve higher-level excellence while facilitating better collaboration among them. Although it's important for organizations to foster an aggressive culture that fosters ambition, it should be balanced between rewarding risk-taking and penalizing destructive behavior (Davison et al., 2020). Additionally, managers should model appropriate behaviors and create an environment in which all employees feel safe, respected and valued so they can thrive in their roles.

Furthermore, outcome orientation is a type of work motivation, which highly motivates employees by outcomes rather than extrinsic rewards (Wu et al., 2019). This manifests as a focus on meeting deadlines and goals, or competing with peers to achieve higher-level performance. Outcome orientation is linked to improved employee performance, because it creates an environment of challenge and self-improvement that encourages employees to reach the best possible results (Soomro & Shah, 2019). The focus on excellence may lead to increased job satisfaction and workplace happiness, which contributes to higher overall productivity of teams. Additionally, well-defined outcome standards help set expectations for employee performance, helping managers ensure consistency across all team members. Based on this literature, the second hypothesis of research was formulated as follows:

H₂: Organizational culture has a positive impact on employee performance in dynamic environment.

H_{2a}: Aggressive approach has a positive impact on employee performance.

H_{2b}: Outcome orientation style has a positive impact on employee performance.

2.3 Job Satisfaction and Employee Performance

Job satisfaction is an essential tool for enhancing employee performance. It is linked to increased productivity, with content employees more productive than their unhappy peers (da Cruz Carvalho et al., 2020). When employees are satisfied with their jobs, they are more likely to be productive, engaged and willing to make extra efforts. Research has shown that satisfied and engaged employees are more likely to stay with the company, which reduces turnover, increases retention and decreases expenditure (Alromaihi et al., 2017; Badrianto & Ekhsan, 2020; Berliana et al., 2018; Inuwa, 2016). However, job satisfaction alone is not enough to ensure employee performance. Other factors, such as clear goals, management support, and adequate compensation, also play a role. When employees feel appreciated, supported, and properly compensated, they are more likely to be motivated and productive.

Furthermore, supervisors and co-workers play an important role in creating job satisfaction and ensuring that employees are comfortable and satisfied in their environment. Supervisors provide development opportunities for employees and feedback on their performance. They also focus on creating an environment where employees feel safe, respected, and valued (Orgambídez-Ramos & de Almeida, 2017). Studies have found a strong correlation

between job satisfaction and employee performance (Kosec et al., 2022). Research has determined that positive workplace satisfaction boosts productivity, with the performance of unhappy workers less productive than that of their content colleagues. Additionally, studies have confirmed that work performance is correlated to life and job satisfaction for employees in sedentary jobs, and there are relationships between job performance and job satisfaction of individuals working in some industries (Riyanto et al., 2021). Furthermore, some studies have indicated that the happier the employees are with their jobs, the better their job performance (Badrianto & Ekhsan, 2020).

In addition, job satisfaction is an integral factor in successfully assessing employee performance within any professional organization. It has a direct influence on how hard both supervisors and workers are willing to work, how content they feel and ultimately the quality of their output. Through programs, such as career planning and promotion initiatives, supervisors help create a sense of job security, which promotes engagement and inspires commitment of employees, thus enhancing their performance in the long run (Rinny et al., 2020). Prior studies have also revealed that flexibility and autonomy are linked to higher motivation levels and improved work performance and quality, demonstrating the impact of job satisfaction on employee productivity and results (Schall, 2019). Based on this literature, the third hypothesis was formulated as follows:

H₃: Job satisfaction has a positive impact on employee performance.

H_{3a}: Behaviors of supervisors and co-workers have a positive impact on job satisfaction.

H_{3b}: Incentives & promotion have a positive impact on job satisfaction.

2.4 Motivation and Job Satisfaction

Motivation and job satisfaction are closely intertwined elements of the workplace. Research has found a positive correlation between motivated and satisfied employees, and employers who provide an engaging and rewarding working environment for their staff have obtained greater productivity levels, better job performance, greater loyalty, less absenteeism and improved business outcomes (Astuti et al., 2020; Rivaldo, 2021). To increase motivation in employees, employers and supervisors ensure their work is stimulating and meaningful while at the same time offering incentives (e.g., bonuses or rewards) and flexible work arrangements with better work/life balance, recognizing employee contributions, creating a culture of open communication and making them in charge of tasks and processes (Ali & Anwar, 2021; da Cruz Carvalho et al., 2020). Increased job satisfaction likewise leads to greater motivation, because employees strive for higher achievements when their efforts are recognized and they feel valued and respected. In conclusion, both motivation strategies as well as increased job satisfaction have many advantages for businesses across all sectors.

Furthermore, job satisfaction and motivation are related but distinct concepts. Job satisfaction is an individual's emotional response to his/her current job condition, while motivation is the driving force to pursue and satisfy one's needs (Roos & Van Eeden, 2008). Job satisfaction can be increased through managing the things valued by employees, such as monetary rewards, peer recognition, awards, personal growth and self-satisfaction (Hitka et al., 2021). On the other hand, motivation can also be increased by providing adequate opportunities for employees to realize their full potential (Sudiardhita et al., 2018). Creating a work environment that is conducive to both motivation and job satisfaction is essential in ensuring employee productivity and engagement. A motivated employee is likely to be more productive, engaged at a higher level, and more committed to his/her job. Although many studies have investigated the relationships between motivation and jobs satisfaction, this study concentrated on intrinsic and extrinsic motivation and job satisfaction, including the roles of supervisors and co-workers, incentives and promotion. The fourth hypothesis was formulated based on these limitations as follows:

H₄: Motivation has a positive impact on job satisfaction.

H_{4a}: Intrinsic motivation has a positive impact on supervision and co-worker engagement.

H_{4b}: Intrinsic motivation has a positive impact on incentives and promotion.

H_{4c}: Extrinsic motivation has a positive impact on supervision and co-worker engagement.

H_{4d}: Extrinsic motivation has a positive impact on incentives and promotion.

2.5 Organizational Culture and Job Satisfaction

Organizational culture is of vital importance when considering job satisfaction. A strong organizational culture reflects the values and beliefs of the organization, which positively impacts employees by encouraging a sense of belonging (Belias & Koustelios, 2014), which leads to better performance, collaboration, and job satisfaction due to increased mutual understanding. Organizations strive to create an inclusive culture that encourages organizational innovation and supports employee growth and development. Furthermore, rewarding employees for their achievements in a fair manner also contributes to job satisfaction because it shows appreciation for their efforts (Hitka et al., 2021). In addition, when organizations foster a positive cultural environment, this helps foster job satisfaction among employees and create a productive work environment beneficial for all parties involved.

Prior studies have found that organizational culture is positively correlated to job satisfaction (Belias & Koustelios, 2014; Janićević et al., 2018; Tsai, 2011), and that organizations with positive work environments are

more likely to have higher employee satisfaction (Sapta et al., 2021). Organizational culture refers to the attitudes and behaviors adopted by employees of an organization, which affect its function and total well-being (Soomro & Shah, 2019). Moreover, factors, such as manager's behaviors, clan and adhocracy cultures, market and hierarchy cultures, and other aspects of organizational climate, all influence job satisfaction (Tran, 2021).

In addition, aggressiveness in an organizational culture has a large impact on job satisfaction, with multiple potential outcomes (Chipunza & Malo, 2017). Prior studies have indicated that aggressive environments lead to reduced collaboration and innovation, whereas non-aggressive atmospheres are correlated to more team-oriented activities, improved communication and creativity within the working environment (Rasool et al., 2021). However, it is important for managers to create and maintain an appropriate level of aggressiveness, because too little assertiveness leads to low productivity due to unorganized or lackadaisical processes, while too much aggression may foster a toxic workplace which fails to encourage camaraderie among staff (Liu et al., 2021; Lu et al., 2022). By effectively regulating aggression to create balanced cultures, organizations are able to provide employees with high-level job satisfaction while improving collaborative practices between peers.

On the other hand, outcome orientation is a type of organizational culture that emphasizes results over processes, based on the belief that outstanding performance should be achieved and measured to achieve success (Soomro & Shah, 2019). This type of culture is often associated with job satisfaction because employees feel motivated when their worth has been proved by successful outcomes. Outcome orientation also enables employees to take ownership of their work by setting clear goals and objectives, and the resulting motivation facilitates deeper engagement and commitment (Loong Lee & Chong, 2019). Furthermore, such an environment frequently nurtures growth opportunities because it allows managers to reward high-achieving individuals who have exceeded expectations. On the whole, outcome-oriented cultures lead to increased job satisfaction because they provide a platform for employees to be excellent and successful. Based on the literature, the fifth hypothesis of research was formulated as follows:

H₅: Organizational cultural has a positive impact on job satisfaction.

H_{5a}: Aggressiveness has a positive impact on supervision and co-worker engagement.

H_{5b}: Aggressiveness has a positive impact on incentives and promotion.

H_{5c}: Outcome orientation has a positive impact on supervision and co-worker engagement.

H_{5d}: Outcome orientation has a positive impact on incentives and promotion.

In conclusion, Figure 1 illustrates the framework of this study, including the main hypotheses that motivation and organizational culture were used as predictors of employee performance with job satisfaction as mediator.

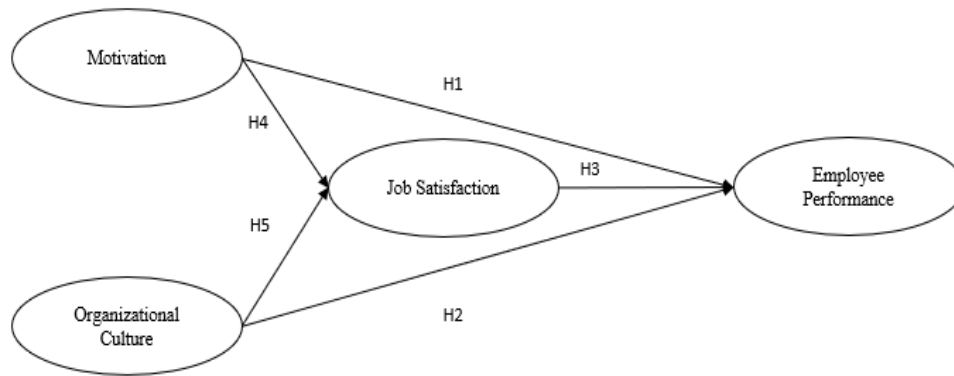


Figure 1. Study framework

3. Methods

3.1 Participants

This study was conducted in higher educational institutions with reference to the opinions of lecturers and staff about their motivation, job satisfaction and performance. The sample size of this study consists of 364 academics and staff of Yemeni and Omani universities. The surveys were constructed in Google drive and distributed online through social media and emails. Characteristics of participants are illustrated in Table 1.

3.2 Measures

Questionnaires included four parts. To measure intrinsic and extrinsic motivation model of Kovach (1987), Wiley (1997), Harpaz (1990) and Lindner (1998), 10 items were adopted with five for each, while organizational culture, including two dimensions of aggressiveness and outcome orientation, had six items from prior studies,

including Schein (1985), Hofstede & Bond (1984), and Hofstede et al. (1990). For the dimensions of job satisfaction, this study concentrated on the behaviors of supervisors and co-workers (Babin & Boles, 1996), intensives and promotions (Li & Lambert, 2008) with five items for each dimension. The fourth part included the dimension of employee performance with seven items (Islam & bin Mohd Rasad, 2006). These questionnaires were revised again to be more suitable for this study, and can be further clarified and processed where required to ensure the effectiveness of questions.

Table 1. Demographics of Sample

Measure	Item	Frequency	Percentage
Gender	Female	112	30.7%
	Male	252	69.3%
Position	Academic	226	62%
	Staff	138	38%
	Bachelor	164	45%
	Master	102	28%
	Ph.D.	98	27%
Qualification	Less than 5	112	30.8%
	5-10	85	23.4%
	11-15	106	29%
	More than 15	61	16.8%
Years of experience	Yemen	215	59%
	Oman	149	41%

3.3 Outer Model Analysis

Before testing hypotheses, data was processed to ensure validity and reliability, factor loading and model fit. Therefore, PLS-SEM 4 was used to analyze data.

3.3.1 Fornell-Larcker criterion

By conducting Fornell-Larcker criterion, discriminant validity of measurement models was processed. Table 2 illustrates the results, indicating that square roots of AVE (in bold) is greater than other constructs. This criterion ensured that a construct measure was empirically unique and represented phenomena of interest (Hair et al., 2010).

Table 2. Fornell-Larcker criterion

Variables	EP	ExM	Inc. & P	InM	OC Aggr	OCOO	Sup & Co
Employee performance	0.631						
Extrinsic motivation	0.405	0.719					
Incentives & promotion	0.674	0.450	0.704				
Intrinsic motivation	0.529	0.588	0.467	0.736			
OC aggressiveness	0.674	0.569	0.553	0.594	0.779		
OC outcome orientation	0.728	0.548	0.606	0.630	0.785	0.724	
Supervision & co-worker	0.645	0.575	0.566	0.504	0.675	0.668	0.778

3.3.2 Construct reliability and validity

Further analysis was conducted to examine the reliability and validity among variables. To be reliable, Cronback's alpha should be more than 0.7 and consistent to measure these variables (Straub et al., 2004). Table 3 illustrates that Cronback's alpha reliability coefficient is greater than 0.70 while composite reliability is also acceptable (Koul et al., 2017). In addition, average variance extracted (AVE) is more than 0.5 for all variables, which means that more constructs were explained than errors.

Table 3. Reliability and validity analysis

Reliability and validity	Cronbach's alpha	Composite reliability	Composite reliability	AVE
Employee performance	0.739	0.804	0.800	0.509
Extrinsic motivation	0.768	0.829	0.838	0.517
Incentives & promotion	0.751	0.799	0.828	0.506
Intrinsic motivation	0.784	0.830	0.853	0.542
OC aggressiveness	0.870	0.876	0.902	0.606
Outcome orientation	0.816	0.853	0.866	0.524
Supervision & co-worker	0.825	0.623	0.802	0.514

3.4 Outer Loadings

Outer factor loading analysis was conducted to ensure how well questions represented variables in this study. Factor loading over 0.7 was recommended (Vinzi et al., 2010). Table 4 shows the outer loading factor for all items used in this study is above 0.7 and acceptable, except the sixth item of employee performance (EP6) and the sixth item of organizational culture dimension, outcome orientation (OCOO6).

Table 4. Outer factor loading

	EP	EXM	Ince. &Pro.	INM	OC Aggr.	OCOO	S &CO
EP1	0.765						
EP2	0.747						
EP3	0.706						
EP4	0.700						
EP5	0.761						
EP6	0.697						
EP7	0.735						
EXM1		0.822					
EXM2		0.778					
EXM3		0.817					
EXM4		0.746					
EXM5		0.767					
INM1				0.778			
INM2				0.859			
INM3				0.830			
INM4				0.793			
INM5				0.783			
JSP1			0.791				
JSP2			0.763				
JSP3			0.787				
JSP4			0.820				
JSP5			0.821				
JSS1							0.714
JSS2							0.727
JSS3							0.763
JSS4							0.829
JSS5							0.855
OCA1					0.706		
OCA2					0.835		
OCA3					0.794		
OCA4					0.791		
OCA5					0.811		
OCA6					0.727		
OCOO1						0.831	
OCOO2						0.748	
OCOO3						0.742	
OCOO4						0.748	
OCOO5						0.841	
OCOO6						0.686	

3.4.1 Model fit

By conducting Bollen-Stine bootstrapping procedure (Bollen & Stine, 1992; Yuan & Hayashi, 2003), the final data processing step was executed to check model fit. The results in Table 5 indicate that the difference between correlation matrix implied and empirical correlation matrix is small. According to Lohmöller (1989), values of Chi-square and NFI also represent a good model fit with more than 90% NFI.

Table 5. Bootstrap-based test (model of goodness fit)

	Saturated model	Estimated model
SRMR	0.078	0.078
d_ULS	5.855	5.882
d_G	1.815	1.826
Chi-square	2225.213	2230.419
NFI	0.950	0.953

4. Results and Discussion

4.1 Hypotheses Testing

SEM-PLS 4 was adopted to measure the impact of motivation and organizational culture on employee performance. The analysis results included three parts, namely, R test, path coefficient analysis and total indirect effect.

4.1.1 R square

Results in Table 6 explain R^2 for two-stage analysis. The R square for employee performance is 0.648, which means motivation, organizational culture and job satisfaction explain 64% of employee performance. The second and third R squares were related to job satisfaction, and two dimensions with different values were explained by motivation and organizational culture.

Table 6. R square statistics

	R-square	R-square adjusted
Employee performance	0.657	0.648
Incentives & promotion	0.398	0.388
Supervision & co-worker	0.542	0.535

4.2 Path Analysis

Table 7 illustrates the path analysis of direct impact of motivation and organizational culture on both job satisfaction and employee performance in addition to the impact of job satisfaction on employee performance.

Table 7. Path coefficient analysis

	STDEV	T statistics	P values
Extrinsic motivation -> Employee performance	0.055	3.027	0.002
Extrinsic motivation -> Incentives & promotion	0.068	1.684	0.092
Extrinsic motivation -> Supervision & co-worker	0.069	3.502	0.000
Intrinsic motivation -> Employee performance	0.048	1.768	0.077
Intrinsic motivation -> Incentives & promotion	0.081	0.895	0.371
Intrinsic motivation -> Supervision & co-worker	0.063	0.155	0.877
OC aggressiveness -> Employee performance	0.072	2.253	0.024
OC aggressiveness -> Incentives & promotion	0.089	1.579	0.114
OC aggressiveness -> Supervision & co-worker	0.082	3.747	0.000
Outcome orientation -> Employee performance	0.085	3.651	0.000
Outcome orientation -> Incentives & promotion	0.096	4.019	0.000
Outcome orientation -> Supervision & co-worker	0.078	3.861	0.000
Supervision & co-worker -> Employee performance	0.069	2.900	0.004
Incentives & promotion -> Employee performance	0.058	5.463	0.000

Results in Table 7 revealed that intrinsic motivation had an insignificant positive impact ($p > .05$) on employee performance, while extrinsic motivation has a significant positive impact ($p < .05$) on employee performance, which denied H_{1a} and accepted H_{1b} . Both organizational culture dimensions, i.e., aggressiveness and outcome orientation, had a significant positive impact on employee performance with $p < .05$, which confirmed H_{2a} and H_{2b} . Furthermore, job satisfaction obtained through supervision and co-worker behavior and incentives and promotions had a significant positive impact on employee performance with $p < .05$, which also confirmed H_{3a} and H_{3b} , respectively. Further analysis was conducted to examine the impact of motivation and organizational culture on job satisfaction, and the results showed that intrinsic motivation had an insignificant positive impact ($p > .05$) on both supervision & co-worker and incentives & promotion, while extrinsic motivation had a significant positive impact ($p < .05$) on supervision & co-worker, and insignificant positive impact on incentives & promotion with $p > .05$, which did not support H_{4a} , b & c but supported H_{4d} . Finally, the impact of organizational culture on job satisfaction through aggressiveness and outcome orientation was analyzed. The results showed that aggressiveness had a significant impact on supervision & co-worker ($p < .05$) and an insignificant impact on incentives & promotion with $p > .05$, while outcome orientation had a significant impact on both supervision & co-worker and incentives & promotion with $p < .05$, which confirmed H_{5a} , c & d and did not support H_{5b} .

4.3 Total Indirect Effect

In addition, indirect impact of motivation and organizational culture dimensions were measured as part of the

analysis. Table 8 illustrates that indirect impact of extrinsic motivation is significant with $p < .05$ while intrinsic motivation impact on employee performance is insignificant ($p > .05$). Aggressiveness and outcome orientation of organizational culture also have significant indirect impact on employee performance with $p < .05$. This indirect impact was measured through the mediation role of job satisfaction.

Table 8. Total indirect effect

	Original sample	TIE	STDEV	T statistics	P values
Ext-Moti -> EP	-0.067	0.085	0.032	2.675	0.007
INT-Moti -> EP	0.097	0.021	0.031	0.674	0.501
OC-Aggr -> EP	0.065	0.106	0.042	2.507	0.012
OCOO -> EP	-0.134	0.184	0.046	4.010	0.000

4.4 Discussion

Although many prior studies have investigated the relationships among motivation, organizational culture and employee performance (Jufrizen et al., 2021; Paais & Pattiruhu, 2020; Pallawagau, 2021; Widarko & Anwarodin, 2022), this study used two dimensions of motivation (intrinsic and extrinsic) and organizational culture (aggressiveness and outcome orientation). These dimensions were chosen based on their huge role in dynamic environment during and after the Covid-19 pandemic. In addition, this study incorporated job satisfaction as mediator to emphasize the importance of acceptance and engagement of employees when they worked online in higher education sector. Academic and staff needed to be motivated and ready for unexpected change of learning environment due to the pandemic. This study revealed important thoughts different from motivation and satisfaction in working environment.

Regarding hypotheses testing, the study results revealed that generally motivation had a partial significant impact on employee performance while organizational culture and job satisfaction had a full significant impact, which confirmed the main hypotheses H_1 partially, H_2 and H_3 . Furthermore, H_4 and H_5 were confirmed partially as well. Many of prior studies support these results, including (Irwan et al., 2020; Wahjoedi, 2021; Yanti & Sanny, 2019). Figure 2 illustrates the inner model analysis and partial impact on job satisfaction and employee performance.

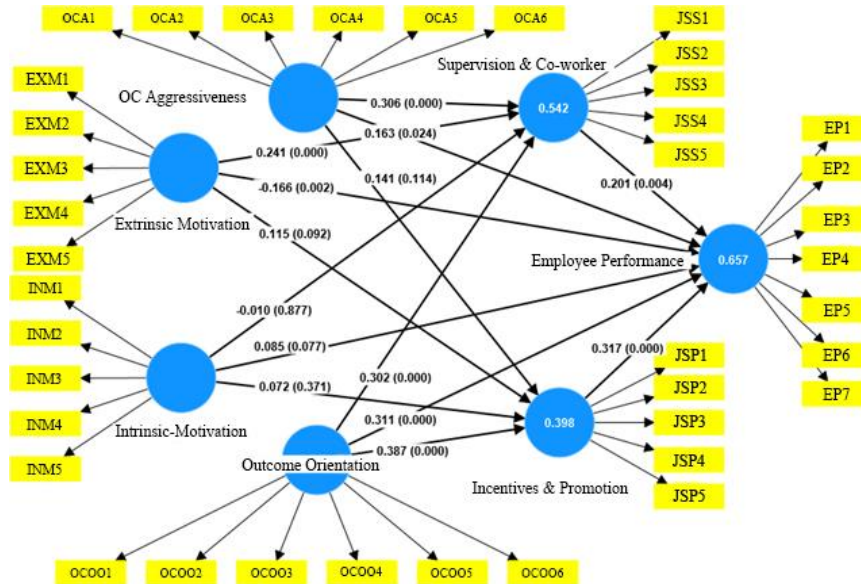


Figure 2. SEM-PLS analysis (inner model)

Furthermore, results highlighted an important issue related to job satisfaction in dynamic environment, i.e., extrinsic motivation was more important than intrinsic motivation. Extrinsic motivation was represented by increase of incentives, motivation of supervisors and more engagement with co-workers through social media and interactive platforms during the Covid-19 pandemic (Al-Ansi, 2022). Learning environment became more flexible and attractive in new normal after the pandemic, and many educational methods used during the pandemic are still in use and preferable for many lecturers and staff (Al-Ansi, 2021). Another important result of this study was emphasizing the positive role of outcome orientation on both job satisfaction and employee performance, which was significant in both cases, indicating that the focus should be in outcome than effectiveness in dynamic

environment. In addition, aggressive behaviors of managers during the crisis led to a negative impact on incentives and promotion, which have not been discussed to knowledge of researchers in this study.

5. Conclusion

This study highlighted the impact of intrinsic and extrinsic motivation, organizational culture aggressiveness and outcome orientation on supervision and co-worker engagement, incentives and promotion and employee performance in dynamic environment. Study of educational environment was a good example of dynamic environment because the pandemic had a significant impact on the learning environment. Results revealed that extrinsic motivation, organizational culture aggressiveness and outcome orientation had a significant impact on supervision and co-worker engagement and employee performance. While intrinsic motivation had an insignificant impact on supervision and co-worker engagement, incentives and promotion and employee performance. Furthermore, extrinsic motivation, organizational culture aggressiveness and outcome orientation had an insignificant impact on incentives and promotion. Another important result was that the impact of extrinsic motivation on employee performance was negative.

In general, results revealed that motivation had a partially negative impact on employee performance. While both organizational culture and job satisfaction had a significant positive impact on employee performance in dynamic environment. Furthermore, motivation was not correlated to incentives and promotion but extrinsic motivation was correlated to supervision and co-worker engagement. These results gave a clear answer to research questions that prior theories and research outcomes were different in dynamic environment. Results recommended that the best approach was to aggressively increase job satisfaction and employee performance with extrinsic motivation in dynamic environment.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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