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Effect of Organizational Support in Terms of Training, Autonomy, and Technology on Work Engagement at Private Universities in Bangkok, Thailand

Liqian Yang[1], Stamford International University, Thailand

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Abstract

With rapid changes in technology, working styles in universities have also changed from traditional face-to-face to online and hybrid teaching. This study focused on the work engagement of faculty and staff at three private universities in Bangkok. The focus of the investigation was on how organizational support, in terms of training, autonomy, and technology, influenced the work engagement of faculty and staff in adopting new working styles. A self-administered questionnaire was used in the study. Valid questionnaire responses (N = 329) received were subjected to ordinal linear regression analysis. The results obtained indicated that organizational support in terms of training, autonomy, and technology was positively associated with work engagement (p = .009, .009, and .000 respectively). It is suggested that the universities need to provide sufficient training, autonomy, and technological know-how to their faculty and staff to help them transition to new ways of working smoothly. Finally, some managerial implications from the study are provided.

Keywords: *Training, autonomy, technology, work engagement, working innovations*

Introduction

With the development of technology, teaching and working styles in universities are changing, especially in the post-pandemic era. Teachers have more tools to assist their students in learning. Teaching styles have changed from traditional face-to-face to hybrid, online, or other technology dependent styles. Likewise, university staff also use high-tech systems to complete tasks more effectively, such as class scheduling, course offerings, library systems, and remote working duties. Moreover, the rapid development of artificial intelligence, particularly ChatGPT, is forcing teachers and staff to adjust their teaching and working styles. The impact of technology and new working styles may change the work engagement of teachers and staff, especially for elderly and senior employees. Since they might not easily adapt to the rapid, dynamic, and changing environment, organizational support is important to help them adapt and adjust to new ways of working.

Work engagement has been widely discussed in the business and management fields: for example, in areas such as human resource management (Jaeyoung et al., 2020), strategic management (Biggs et al., 2014), leadership management (Amor et al., 2020), and job satisfaction and performances (Bayona et al., 2020). Moreover, many scholars have studied organizational support and work engagement (Yang et al., 2023). Previous researchers commonly have found that organizational support and organizational resources impacted employees' work engagement (Yang et al., 2023).

Despite the findings from the previous studies, there has been limited research on organizational support and work engagement in universities and the education sector. The aim of the present research was to investigate how organizational support, in terms of training, autonomy, and technology, affected the work engagement of teachers and staff in adopting new ways of working in the private university sector. Another objective was to investigate how new working styles has changed the work engagement of faculty members and university staff in these organizations. Therefore, the study can fill this research gap and provide some suggestions and ideas relevant for private universities.

[1] Author's email address: liqianyanglee@hotmail.com

Literature Review

Work Engagement

Work engagement is defined as a favorable, sufficient, and energizing mental state associated with one's occupation, and is characterized by vigor, dedication, and absorption (Bakker & Demerouti, 2008). Different researchers in their studies have come to similar conclusions, namely, that higher levels of employee engagement lead to better performance, with positive behaviors and attitudes observed in their work (Mazzetti et al., 2023). In universities, making sure that faculty members are engaged happily in their teaching and working is the key to delivering high-quality teaching outcomes.

Organizational Support

Perceived organizational support refers to employees' "global beliefs" about how much the organization values their contributions and cares about their well-being (Eisenberger et al., 1986). More recently, perceived organizational support has been defined as a type of cooperation or help required to do a task effectively (To & Huang, 2022). Organizational support was identified as one of the most important characteristics within organizations that should be carefully managed. According to Hameed et al. (2019), organizational support can be both tangible and intangible. Tangible organizational support involves providing such resources as working facilities, equipment, and instruments. Intangible organizational support could involve the support of supervisors and co-workers, and the facilitation of interaction in social networks.

Training is one of the most important organizational support characteristics, especially for new employees. It is also required when the organization develops new systems or employees transition to new positions. Moreover, it was also found that training can relieve employees' stress and nervousness due to uncertainty about their new roles and tasks. Additionally, Bakker and van Wingerden (2021) found that perceived organizational support, self-efficacy, and training were positively related to work engagement. In the context of new ways of working, faculty members and staff need to adapt to using new technology or alternative ways to conduct their work. This might involve using hybrid or online teaching methods. Training them on how to use the new systems and getting them familiar with and used to using the new system or working styles would enable them to improve their work engagement. Therefore, the following hypothesis was proposed:

H_1*:* Organizational support, in terms of training, is positively related to work engagement in private universities in Thailand.

In an organization, perceived autonomy plays an important role in motivating employees in their work. Ryan and Deci (2006) defined autonomy as self-regulation and it entails exercising free will and experiencing the power of decision. Based on the self-determination theory, autonomy is exemplified by having the strongest possible level of reflection to support one's actions (Gagné & Deci, 2005). Autonomy empowers people to choose their own activities. When motivation is built on autonomy, it is more linked with personal goals, beliefs, and interests, and it eventually leads to intrinsic motivation (Van Dorssen-Boog et al., 2020). This is the case in the education industry, especially in universities. The management team should give enough autonomy to faculty members since they produce and transfer knowledge to the students. The main scales to measure teaching performance are teaching outcomes and learning outcomes. Additionally, with the new ways of working, faculty and staff need to adjust and know which way is best and most suitable for them to teach and work. The methods, tools, and styles that they use to teach students might differ, especially with different majors and courses. They might also need to design different teaching methods based on different levels of student abilities and backgrounds. At this point, faculty members should have enough perceived autonomy to manage their courses. Hence, the researcher proposed the following hypothesis:

H_2: Organizational support in terms of autonomy is positively related to work engagement in private universities in Thailand.

With the rapid development of technology, organizations also need to transition new technologies so that modern methods and applications are available. The goal of investigating technology

acceptance is to understand how people's views influence both their intentions to use technology and their actual usage of it. The extensive adoption of new tools and devices has made it more important than ever to understand the factors that can affect how people react to new technologies (Molino et al., 2020). Therefore, promoting technology acceptance among employees is also crucial. Molino et al. (2020) found that information training is positively associated with technology acceptance, and technology acceptance is positively related to work engagement. The faculty members and staff who work in universities need to learn frontier technology, adapt it, and introduce it to students. This is especially relevant in majors like IT, design, and science where rapid advances have been experienced. It makes universities and organizations consider supporting technology and related facilities. Therefore, the following hypothesis has been proposed:

H_3: Organizational support in terms of technology is positively related to work engagement in private universities in Thailand.

Methodology

Sample and Data Collection Procedures

According to FreeApply (2023), there are sixty universities and colleges in Bangkok, and twenty-seven of them are private universities (UniversitiesintheWorld, 2023). The present study focused on three private universities in Bangkok. The researcher contacted these private universities, targeting their faculty members and staff as potential participants. After introducing the purpose of the study, permission from these universities was received to collect data from their employees. A self-administered questionnaire was distributed to the participants, and a convenience sampling method was applied. Both an online survey and a hard-copy survey were used to collect data. The researcher collected the email addresses of faculty and employees at the three private universities, as well as walking into the universities to distribute a hard copy of the questionnaires. A screening question was asked at the beginning of the questionnaire "Are you currently working in a private university?" If the screening answer was "Yes," then the respondent was able to complete the questionnaire. A total of 1,000 questionnaires were distributed. Three hundred and thirty-six responses were received; seven responses contained missing data, yielding 329 valid completed questionnaires (a 32.9% response rate). Respondents' characteristics and demographics are summarized in Table 1.

Table 1 *Descriptive Characteristics of Participants*

Factors	Categories	Frequency	Percentage
Gender	Male	162	49.2
	Female	167	50.8
Age	18–25 years old	22	6.7
	26–35 years old	146	44.4
	36–45 years old	40	12.2
	46–55 years old	56	17.0
	56–65 years old	57	17.3
	66–75 years old	6	1.8
	> 76 years old	2	0.6
Job Tenure	< 1 year	56	17.0
	1–3 years	113	34.3
	3–5 years	64	19.5
	5–7 years	24	7.3
	7–10 years	41	12.5
	> 10 years	31	9.4

Measurement and Data Analysis

The study questionnaire was developed based on previous studies. The scales used had already been tested and confirmed by previous researchers. Hence, the validity and reliability of the responses received were ensured (Slattery et al., 2011). The measurement scale of training was developed based on Brown and Mitchell (1991), which included four items, such as "sufficient training [is] provided by my university." The autonomy measurement scale developed was based on Sekhar et al. (2018) and included three items, such as "I have the autonomy to decide when to start and finish tasks at my university." The technology measurement scale was developed according to the Molino et al. (2020) study, which included four items. An example of the information asked was: "Technologies are easy to use and [are] useful." The measurement scale for work engagement was developed based on Salanova et al. (2003), which included six items, such as "I feel happy when I am working intensely." All the latent variables' scales were measured on a Likert five-point scale. This ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Apart from that, some control variables that might also influence respondent work engagement were included such as age, gender, and job tenure.

In this study, ordinal linear regression was used to analyze the data. The data were tested initially for normality, validity, reliability, and multicollinearity. After that, relevant correlations and coefficients were determined.

Results

The normality distribution test was first applied. Kurtosis and skewness are scales that measure normal distribution. According to D'Agostino (2017), the kurtosis and skewness figures ideally range from -1 to +1; if the values are outside of this range, it indicates that the data might not be normally distributed. In this study, kurtosis and skewness ranged from -0.985 to 0.709, which is within the suggested range. The detailed information gathered is displayed in Table 2. These results indicated that it was acceptable to proceed with the validity test.

Convergent validity and discriminant validity are criteria that display validity tests. Zikmund et al. (2013) recommended that the factor loadings should be greater than .50 to satisfy the convergent validity requirement. In this study, the factor loadings ranged from .494 to .764. One question from work engagement section was below the figure and was eliminated. For the discriminate validity test, Zikmund et al. (2013) suggested that each value produced for the latent variable's average variance extracted (AVE) should be greater than the values returned for other latent variable squared correlations. Table 3 shows the detailed AVE values obtained. The data indicated that all latent variable AVE values were greater than other squared correlations. Therefore, both convergent validity and discriminate validity were satisfied.

The reliability test was also another important factor that needed to be tested. Cronbach's alpha and composite reliability tests are criteria that measure reliability. Joe et al. (2019) recommended that Cronbach's alpha should be greater than .70 in order to satisfy the reliability requirements. On the other hand, Hair et al. (2017) suggested that the coefficient value of composite reliability should be greater than .70. Table 3 shows that all Cronbach's alpha values were greater than .70; in fact, the lowest was .737 (technology). All coefficient values of composite reliability were also greater than .70. Therefore, the reliability of the respondents' data was substantiated.

The multicollinearity test also needed to be applied. The variance inflation factor (VIF) is a scale to measure and diagnose whether the latent variables had multicollinearity problems. According to Hair et al. (2007), the VIF should be lower than 3.30; if the VIF is higher than the threshold, it indicates that there might be a potential multicollinearity problem. However, based on Eberl (2010), it is suggested that the VIF value should be less than 5.0 since some latent variables have high correlations. Hence, if the VIF value is greater than 5.0, it means that there are potential multicollinearity problems. In this study, the VIF values ranged from 1.054 to 3.325, which were for gender and autonomy (Table 3). The VIF values obtained were lower than Eberl's (2010) suggestion. Therefore, no major multicollinearity problems occurred in this study.

Table 2 *Normality Distribution Test Results*

Feature	Excess Kurtosis	Skewness
Gender	-2.011	0.031
Age	-0.802	0.549
Job tenure in the organization	-0.727	0.657
Training 1	-0.005	-0.821
Training 2	0.240	-0.910
Training 3	-0.985	-0.532
Training 4	-0.391	-0.511
Autonomy 1	-0.464	-0.723
Autonomy 2	0.696	-0.977
Autonomy 3	0.233	-0.960
Technology 1	-0.132	-0.584
Technology 2	0.603	-0.385
Technology 3	0.551	-0.932
Technology 4	0.709	-0.985
Absorption 1	-0.124	-0.723
Absorption 2	0.344	-0.452
Absorption 3	-0.501	-0.683
Absorption 4	-0.690	-0.448
Absorption 5	-0.198	-0.898
Absorption 6	0.602	-0.579

Table 3 *Correlations, Square Roots of Average Variance Extracted, and Variance Inflation Factor*

Variables	GED	AGE	JT	TRN	AUT	TEC	WE	Cronbach's Alpha	CR Coefficient	VIF
GED	(1)							N/A	N/A	1.054
AGE	.045	(1)						N/A	N/A	1.289
JT	-.020	.469***	(1)					N/A	N/A	1.297
TRN	-.011	.053	.092	(.765)				.763	.849	2.909
AUT	-.096	.044	.047	.780***	(.834)			.779	.872	3.325
TEC	-.155	.033	.069	.724***	.748***	(.770)		.737	.835	2.797
WE	-.095	.048	.073	.615***	.636***	.666***	(.675)	.747	.827	N/A

Note. CR = Composite reliability, GED = Gender, JT = Job tenure, TRN = Training, AUT = Autonomy, TEC = Technology, VIF = Variance inflation factor, WE = Work engagement. *** $p < .01$; square roots of average variance extracted of the latent variables are displayed in parentheses.

After testing the validity, reliability, and multicollinearity, the next step was to undertake a multiple regression analysis and apply the coefficient hypothesis test. The results are displayed in Table 4 and Figure 1. The data presented show that Hypotheses 1, 2, and 3 were all supported. The beta coefficients of training (β = .129, p = .009), autonomy (β = .127, p = .009), and technology (β = .315, p = .000) were all positive, which means that organizational support in terms of training, autonomy, and technology were positively related to work engagement. Moreover, the p-values were all less than .05, indicating that training, autonomy, and technology were statistically significantly related to work engagement. Besides the latent variables, the control variables were gender (β = -.012, p = .733), age (β = .003, p = .817), and job tenure (β = .004, p = .736). Since the p-values of control variables were all greater than .05, this meant that gender, age, and job tenure were not significantly related to work engagement. In addition, the R^2 value was equal to .501, and the adjusted R^2 value was equal to .492. This indicated that organizational support in terms of training, autonomy,

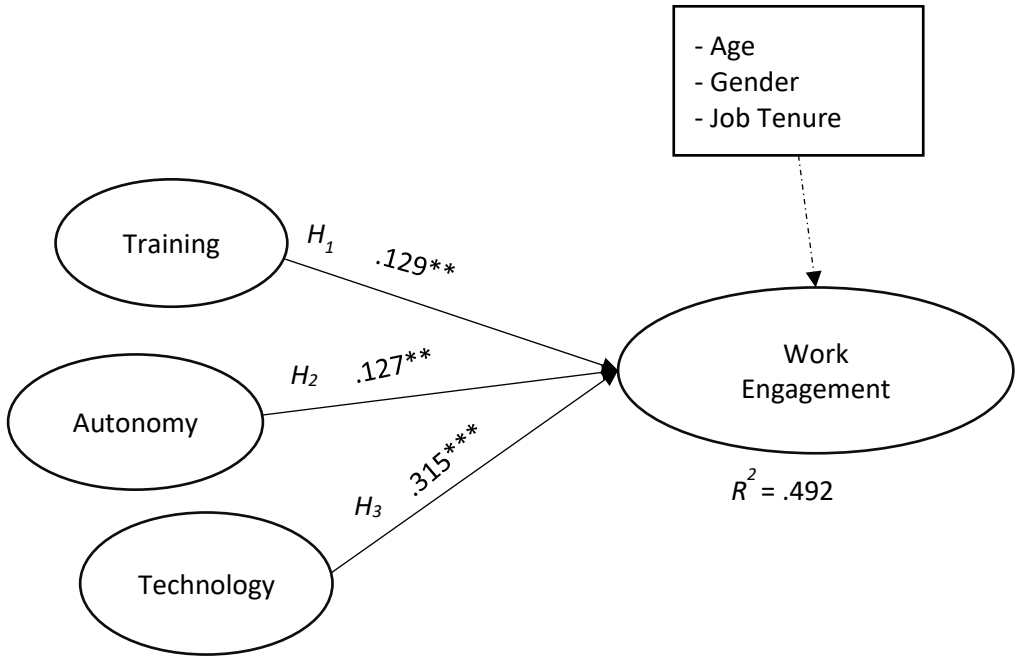
technology, and control variables could explain and predict 49.2% of the faculty members and staff's work engagement according to the model adopted.

Table 4 *Hypotheses Testing Results*

H	Feature	Non-Standard. Coefficients		Stand. Coeff.	*t*	Sig.	95% Confidence Interval for β		Collinearity Statistics	
		β	*SE*	β			Lower Bound	Upper Bound	Tolerance	VIF
	(Constant)	1.954	0.148		13.159	.000	1.661	2.246		
	Gender	-.012	0.034	-.014	-0.342	.733	-.079	.056	.949	1.054
	Age	.003	0.014	.010	0.231	.817	-.024	.031	.776	1.289
	Job tenure	.004	0.012	.015	0.338	.736	-.020	.028	.771	1.297
H_1	Training	.129	0.049	.177	2.637	.009	.033	.226	.344	2.909
H_2	Autonomy	.127	0.048	.189	2.631	.009	.032	.222	.301	3.325
H_3	Technology	.315	0.052	.398	6.049	.000	.213	.418	.358	2.797

Code. H = Hypotheses

Figure 1 *Hypotheses Testing Results*



Note. ** $p < .05$, *** $p < .001$

Discussion and Recommendations

In this research study, organizational support theory was applied and it was found that organizational support in terms of training was positively associated with work engagement. The finding is consistent with Bakker and van Wingerden's (2021) study. They used a quasi-experimental method to compare the differences between training intervention groups and non-training intervention groups and their respective influences on work engagement. It was found that intervention groups that received training had a significant positive influence on workers' work engagement.

The present study also found that organizational support, in terms of autonomy, was positively related to work engagement. Malinowska et al. (2018) investigated job autonomy in relation to work

engagement at an international outsourcing company in Poland. They found that job autonomy was positively associated with employees' work engagement. Meanwhile, it also was found that job autonomy increased intrinsic motivation. Additionally, the study indicated that organizational support in terms of technology was positively related to work engagement. Molino et al. (2020) undertook research on technology acceptance and work engagement in an Italian company. The respondents were white-collar and blue-collar workers. They found that no matter whether white-collar or blue-collar workers were involved, technology was strongly related to their level of work engagement. Our results point in the same direction.

The present study added more supporting evidence to indicate how important organizational support is to work engagement, especially in the areas of training, autonomy, and technology. This applies not only to business and industry, but also to the higher education field. In the context of new ways of working, universities should help faculty members and staff to transfer easily from the traditional working style to new working styles. This applies to the introduction of different teaching systems, remote online meeting programs, and collaboration programs. Training is the best way to let faculty and staff know how to use and apply these new systems in their work. Training can help them release their frustration and nervousness, especially when older employees who are not familiar with or comfortable with the new approaches are involved. Therefore, universities can hold different themed training sessions and seminars. Moreover, universities might also be able to exchange their training seminars to introduce new and trendy programs. After training, feedback and evaluation of the training results are also important. Universities can collect feedback and suggestions from faculty and staff to know how the training sessions helped them in order to improve future programs. Universities could also offer training to their staff, such as sensitizing them to becoming service minded so as to better assist lecturers and students. Universities can also encourage their staff to develop their knowledge and work on higher degrees for their career development. For example, some staff members might become teaching assistants.

Besides that, providing job autonomy to faculty and staff members is also important. Lecturers teach different courses and introduce knowledge to students. Teaching and learning outcomes are the main criteria to measure teaching quality. Giving autonomy to the lecturers to design the best way to help students learn and absorb knowledge is important. It also helps to promote and develop innovation and creativity. Meanwhile, job autonomy is also important for university staff. They provide services to lecturers and students to make the teaching and learning run more smoothly regarding such matters as class scheduling, classroom arrangements, accessing library books or databases, and completion of necessary paperwork. Universities could provide more autonomy and flexibility to the staff to facilitate their work in these areas.

Additionally, technology is also a crucial factor in the new ways of working. After the COVID-19 pandemic, many universities adjusted their teaching methods from face-to-face to online or hybrid teaching. Technology is fundamental to online and hybrid teaching. Meanwhile, the approaches to examinations, class participation, and grading should also be changed when the teaching method is changed to online or hybrid modes. It is important for universities to upgrade their technology and operational systems to support a dynamic work environment. On the university staff side, universities could upgrade the course scheduling system and classroom booking system and allow them to work or collaborate online. This might help university staff to work more efficiently and effectively. All of the above-mentioned suggestions may help faculty and staff to perceive the presence of organizational support and see how valuable it is. Eventually, this will help to improve their work engagement.

Limitations and Suggestions for Further Study

This study had some limitations. First, it only focused on three private universities in Bangkok, so the data obtained may not be applicable to explain work engagement in other universities, in other cities, and particularly in public universities. Therefore, further studies could use the model developed to test these variables in other universities that are located in different cities or countries. Moreover,

it might also be possible to compare the differences between private universities and public universities.

Second, the present researcher only applied quantitative research methodologies in the investigation. Hence, more detailed information about the lecturers and staff members' feelings and thoughts were unknown. Future research could apply mixed methods approaches to interview respondents and gain a deeper understanding of their perspectives and thoughts. Third, this study only tested the effects of training, autonomy, and technology on the work engagement of lecturers and staff who worked in private universities in Bangkok. There might be other factors that influence their work engagement that were not tested for in this study. Therefore, further studies could test more factors to see whether other aspects also influence work engagement.

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