Support Personnel In The Period Of University Downturn: What Are The Preferred Qualifications For Income Earning?

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Abstract

Over the past decade, universities all over the world have been in crisis due to a significant reduction in a number of students, greatly affecting university income. Both academic and support personnel were expected to take part in earning income for their institutions. This research article therefore aimed to study the preferred qualifications of support personnel, who were not expected to perform these duties much in the past in order to find out what qualifications make the personnel capable of earning income for their institutions. The data were collected from 364 support personnel of universities in the south of Thailand and were analyzed by using multiple regression. It was found that the first qualification was marketing skills, followed by motivational psychology, and salesmanship, respectively. These findings will be useful in the future recruitment of university support personnel in order to hire personnel who have the potential to help earn income for the universities.

Keywords: Support Personnel, Universities, Income, Preferred Qualifications

Background and Rationale

A large amount of empirical data indicates that universities around the world have been in a downturn and crisis for some time (Cochrane, 2021; Temmerman, 2021; Delbanco, 2022), especially when affected by COVID-19. Both the studies by Geiger (2010), a professor of Higher Education at Pennsylvania State University, and Bridget Terry Long, a professor of Education & Economics at Harvard University revealed the effects of the "Great Recession" of the global economy during 2007-2009 on the cost of living for households and a decrease in application for admission to higher education. The former president Northwestern University and the University of Oklahoma explained that major research universities also saw a 25-30% drop in applicant numbers (Bienen & Boren, 2010), resulting in the closure of 500 out of 4,500 US universities from 2007 to 2017. In 10 years or by 2027, another 2,000 universities are expected to be closed due to more online learning and a lower number of secondary school students (Christensen, 1997).

There were reports on the situation in Australia as of 2020 suggesting that an old and prestigious university like Monash had to lay off 277 personnel, while New South Wales University had to lay off 493 personnel (Vassiley, 2020). Overall, by the second half of the year, approximately 21,000 personnel of the

universities in this country will be laid off (Vassiley, 2020). The Mitchell Institute report, "Australian Investment in Higher Education," shows that although the income of Australian universities continued to grow in the past decade, the emergence of COVID-19 since

2020 has caused the income to decrease by approximately 6% and has no signs of improvement (Hurley & Van Dyke, 2020) up until this day (Marshman & Larkins, 2021) (Figures 1 and 2).

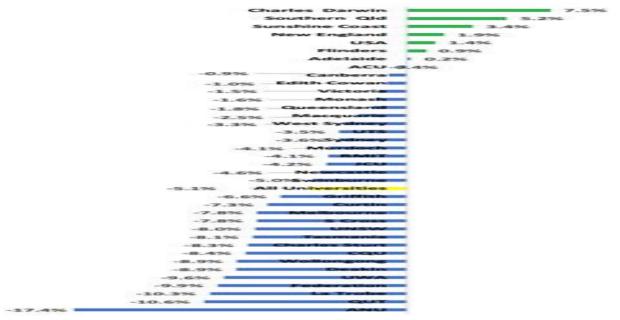


Figure 1 University income changes from 2019 to 2020

Source: Marshman & Larkins (2021)

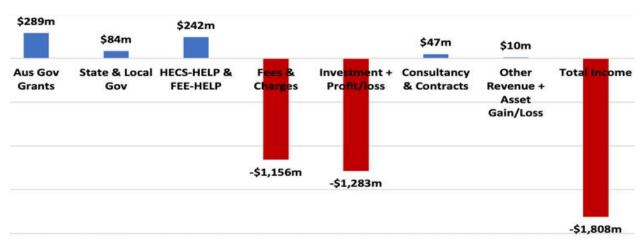


Figure 2 Sector-wide university income changes from 2019 to 2020 (\$ millions) Source: Marshman & Larkins (2021)

Universities in Thailand have also experienced the same situation as evident in a considerable decrease in a number of students in secondary schools (Ministry of Education, 2019). As a result, tuition fees and government subsidies have also decreased. Therefore, in the end, there may be an impact on the quality of education. The Office of the Higher Education Commission has tried to solve educational

quality problems by implementing university assessment criteria called EdPEx to assess seven categories (Office of the Higher Education Commission, 2015). There is a report of decrease in a number of students who are the source of tuition fee income used for educational management in the academic years 2015-2018-- 474,410, 408,586, 409,678, and 404,581 new undergraduate students,

respectively (Office of the Higher Education Commission, 2019).

The sources of the university's income include general government subsidies allocated annually, property fund donated to the universities, funds established by the government or universities, income and benefits from university fees, education fees, remuneration, penalties, service fees, income and other benefits from funds or joint investment and from university property, or benefits arising from the use of state property including the land owned by universities and other income (Prince of Songkla University, 2016).

Although the number of students and the amount of tuition fee have decreased, other expenses, especially personnel remuneration, remain the same. As universities have many channels to earn income, support personnel with reduced roles in coordinating with teachers and students due to a decline in student numbers should take this opportunity to help the university earn income through the channels permitted by law. Therefore, this study aims to

identify the qualifications of support personnel who will be successful in earning income for the university through various channels. The results will be used for determining support personnel qualifications, which serves as a guideline for recruiting support personnel who are able to help earn income other than tuition fees for universities.

Literature Review

University income earning methods

Typical university sources of income include government assistance, fees from students, and others, and may vary in details and proportions from country to country or even among universities in the same country. For example, in the case of the University of Colorado Boulder and the University of Washington in 2015, the student tuition fee of the former accounted for 44%, while the latter accounted for only 20% (American Academy of Arts & Sciences, 2016), while for a UK university like the University of Sussex (2022), student tuition fee accounted for nearly two-thirds (Figure 3).



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Figure 3 Where our money comes from Source: University of Sussex (2022)

For Thailand, the sources of income of public universities are defined in writing in the law as can be found in the statutes of universities. For example, the Prince of Songkla University Act, Section 15 stipulates that the sources of income of Prince of Songkla University consists of 1) general subsidies allocated by the government on an annual basis, 2) money and assets donated to the university, 3) funds established by the government or the university, and income or benefits from the said fund, 4) fees, education fees, compensation, penalties and various service fees of the university, 5) income or benefits derived from investments or joint ventures and from the property of the university, 6) income or benefits from the state property that the university is governing, supervising, using, or procuring including land owned by the university; and 7) other incomes or interests. (Prince of Songkla University, 2016) Banphot Wirunrat (2020) gave an example of income-earning activities that university personnel can take part, consisting of 7 activities: 1) organizing training to earn registration fees, 2) organizing bowling, boxing, and concerts to earn income from ticket 3) donation, 4) public fees. relations encouraging people to study at Prince of Songkla University, 5) making products of each faculty to sell and earn money, 6) provision of services such as research, study, consultation, etc., 7) presenting works and asking for a budget from private and government agencies (Banphot Wirunrat, interview, 20 December 2020). However, the research of Laddaporn Sukkeawfa and Pathummath Youngyoot (2014) indicated that the university's criteria should be applied to improve the university's rules, regulations, and announcements in order to facilitate future practice. In addition, research by Ploenpis Julphunthong, Soontaree Duangthip, Choocheep Putthaprasert, and Yupadee Panaraj (2014) suggested that outsiders, who are academic service recipients, found that personnel in the organization can apply their knowledge usefully and the overall need for academic services is at a high level. of Moreover, the research Pattamon Ruangwittayawut (2018) indicated that the process of administration of academic services to society does not correspond to the needs of society, which is in line with the research by Awapa Chanthasatrassami and Pussadee Ponsaram (2019).

Motivation

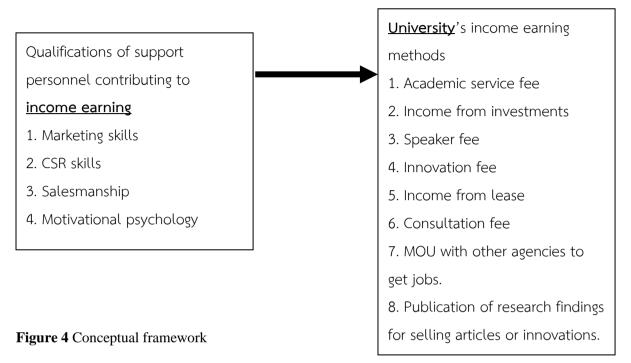
Michael Domjan (Domjan, 1996, p. 199) defines motivation as the condition of increasing a person's behavior, action or activity to make this person deliberately act in order to achieve the desired goal. Meanwhile, Anita E. Woolfolk (Woolfolk, 1995, p. 130) defines motivation as an intrinsic state in which a person is urged to act purposefully and continuously.

Herzberg's Two Factors Theory (Herzberg 1959, p. 45-49, cited in Yupinthorn Chotisuk, 2005, pp. 16-17) is a theory known as the Motivation Hygiene Theory. Herzberg formulated the theory by studying the causes of job satisfaction and job dissatisfaction among engineers and accountants at a Fitchburg plant. Herzberg calls it "Motivator Factors." It is directly related to the intrinsic motivation caused by the job content, such as the success of the job, respect and recognition, motivational factors that create a person's liking and appreciation for one's own achievements and abilities. If these factors are met, it will motivate the operator to work hard to the best of his/her ability and increase the work efficiency.

Qualifications of University Support Personnel

Usually, income earning is in the form of value chain, which consists of origin, midway, and destination. The origin includes preparation of raw materials, equipment, guidelines, methods, and knowledge in order to prepare for production or services; the midway includes production or services; destination includes marketing and sales by delivering products or services to buyers (Office of the National Economic and Social Development Council, 2017; Porter, 1980). In reality, to carry out the origin, midway, and destination activities, those who will help earn money need to serve as a marketer to increase demands for products, serve as a salesperson, and must be able to motivate others using psychology. They also need to understand the CSR system or have participated in CSR activities with the Value Chain system. In other words, when products are manufactured or sold to generate profits, some of such profits will be returned to society through the process of CSR activities.

From the above literature, this research therefore hypothesized that qualifications of support personnel affect income earning for the university. The conceptual framework is as follows – the independent variable is the qualifications of the support personnel, and the dependent variable is income earning methods:



Research Methodology

This is quantitative research using a survey. The methods for conducting this research are as follows:

The population used in the research was support personnel of a public university in southern Thailand classified by field of work, such as general administration officers, academics, and higher education academics. The sample size used in the study was 364 people determined by Krejcie & Morgan's table (Krejcie & Morgan, 1970) at an error of 0.05 and the use of accidental random sampling.

The research instrument was questionnaire, which is divided into three parts. The first part is about personal information, which is in the form of multiple-choice closed-ended questions of seven items, namely affiliation gender, age, educational level, status, income, and work experience. The second part is about income earning experience, which consists of 20 items of 5-point rating scale, where 5 means highest experience, 4 means high experience, 3 means moderate experience, 2 means low experience, and 1 means lowest experience. The third part involves income earning methods, which is in the form of 11 items of 5-point rating scale, where 5 means

highest experience, 4 means high experience, 3 means moderate experience, 2 means low experience, and 1 means lowest experience. For validation of the instrument used in the research, the researcher brought the questionnaire to three experts with expertise in the research subject to verify the content, language, and conformity with the research objectives, with the IOC value of 1.00 and the Cronbach's Alpha Coefficient of .70 or higher. The content on income earning experience had the Cronbach's Alpha Coefficient of .968, while the content on income earning methods had the Cronbach's Alpha Coefficient of .957, which were at an excellent level (Nunnally, 1978).

For data analysis, as this is a quantitative research, interpretation criteria for rating scales of income earning experience and income earning methods is as follows: the mean score of 4.21-5.00 means highest experience; the mean score of 3.41-4.20 means high experience; the mean score of 2.61-3.40 means moderate experience; the mean score of 1.81-2.60 means low experience; the mean score of 1.00-1.80 means lowest experience.

Research Result

Personal Information

The results showed that most of the samples belong to the field of science and technology, accounting for 36%; female, accounting for 72.8%; aged 31-40 years, accounting for 40.1%; having a bachelor's degree, accounting for 65.1 %; single, accounting for 52.7%; earning income ranging between 15,00025,000-baht, accounting for 47.8%; 10 years of work experience or more, accounting for 41.2%.

The level of income earning experience of the university support personnel

Table 1 summary of the mean, standard deviation, and the level of qualifications of support

personnel in the university, classified by aspect

Qualifications				
	Mean	Standard deviation	Level	Rank
1. Marketing skills	2.26	1.10	Low	3
2. CRS skills	2.22	1.16	Low	4
3. Salesmanship	2.33	1.10	Low	2
4. Motivational psychology	2.64	1.13	Moderate	1
Overall income earning experience	2.36	1.12	Low	

From Table 1, overall, the sample group had a low level of qualifications of university support personnel at 2.36, which can be put in descending order as follows: First, motivational psychology was at a moderate level, with the mean score of 2.64; second, salesmanship was at a low level, with the mean score of 2.33; third, marketing skills was at a low level, with the mean score of 2.26; fourth, CSR skills was at a low level, with the mean score of 2.22.

The level of income earning methods of university support personnel

Table 2 summary of the mean, standard deviation, and the level of participation in income earning

of support personnel in the university

Income earning methods	Opinion level			
	Mean	Standard deviation	Level	Rank
1. Academic service fee	1.94	1.01	Low	4
2. Income from investments	2.34	1.18	Low	2
3. Speaker fee	1.77	1.06	Lowest	7
4. Innovation fee	2.44	0.96	Low	1
5. Income from lease	1.82	1.08	Low	6
6. Consultation fees	1.74	1.05	Lowest	8
7. Income from MOU with other agencies	1.90	1.14	Low	5
8. Income from research publication	1.96	1.16	Low	3
Overall income generation approaches	1.92	1.14	Low	

From Table 2, overall, the sample group had a low level of experience in income earning, with the mean score of 1.92. First, the innovation fee was at a low level, with the mean score of 2.64; second, income from investments was at a low level, with the mean score of 2.34; third, income from research publication was at a low level, with the mean score of 1.96; fourth, academic service fee was at a low level, with the mean score of 1.94; fifth, income from MOU with other agencies was at low level, with the mean score of 1.90; sixth, income from lease was at a low level, with the mean score of 1.82; seventh, speaker fee was at a low level. with the mean score of 1.77; eight, consultation fee was at the lowest level, with the mean score of 1.74.

Results of Hypothesis Testing

Research hypothesis testing used multiple regression analysis to calculate variable coefficients. The analysis of multiple regression equations is a study of the relationship of independent variables and dependent variables to analyze the variables that influence the dependent variables.

From testing the correlation coefficients between the variables studied, it was found that the correlation coefficients were between .559-.816, which was an appropriate correlation and not too high, i.e., not more than .90 (Aroian & Norris, 2001), indicating that all the variables were suitable for influence analysis. Most of them were statistically significant at the .01 level, and no variables were found to have a high correlation problem (Multicollinearity) as shown in Table 3.

Table 3 Comparative examination of the differences in income earning experience and income earning methods of university support personnel

Source of variation	SS	Df	MS	F	p-value
Regression	186.016	4	46.504	208.728	.000**
Residual	79.984	359	.223		
Total	266.001	363			

Remarks: n = 364 *p-value < .05, **p-value < .01

The researcher analyzed the regression equation by using the Enter method. In this research, the variables were determined in the study as follows: The dependent variables were income earning methods of the university support personnel (Y) and independent variables were marketing skills (X1), CSR skills (X2), salesmanship (X3), and motivational psychology (X4). The results of the analysis are shown in Table 4.

Table 4 Variables affecting income earning methods of university support personnel

Model	Unstandardized		Standardized	t-test	p-value	
Wodel	Coefficients		Coefficients	t tost	p varue	
	В	Std.	Beta			
		Error				
Constant value (Constant)	159	.078		-2.048	.041*	
Marketing skills (X1)	.381	.058	.404	6.623	.000**	
CSR skills (X2)	.019	.034	.026	.564	.573	
Salesmanship (X3)	.219	.047	.241	4.690	.000**	
Motivational psychology (X4)	.239	.035	.266	6.879	.000**	
$R = 0.836 R^2 = 0.699 Adjusted R^2 = 0.696 Durbin-Watson = 1.866$						

Remarks: *p-value < .05, **p-value < .01

From Table 4, Durbin-Watson = 1.866 is shown, and it is found that the qualifications that affect the participation in income earning of support personnel in the university are divided into 3 aspects: marketing skills (X1), salesmanship (X3), and motivational psychology (X4), with statistical significance at the 0..05 level. The predictive variables were used to create the following equation:

Y = -.159 + 0.381 X1* + 0.219 X3* + 0.239 X4*

From the regression equation, the income earning experience predictive variables, namely marketing skills (X1), salesmanship (X3), and motivational psychology (X4) were able to predict the income earning methods of university support personnel by 69.90%, and the rest were variables other than the ones used in the study, which can be described as follows.

For marketing skills (X1), the coefficient was 0.381, meaning that when the qualifications of personnel on marketing skills

increase by 1 unit, income earning of support personnel in the university will increase by 0.381 units.

For salesmanship (X3), the coefficient was 0.219, meaning that when the qualifications of personnel on salesmanship increase by 1 unit, income earning of support personnel in the university will increase by 0.219 units.

For motivational psychology (X4), the coefficient was 0.239, meaning that when the qualifications of personnel on motivational psychology increases by 1 unit, income earning of support personnel in the university will increase by 0.239 units.

Conclusion and Discussion

Overall, it was also found that support personnel of public universities in Thailand have a low level of qualifications to earn income and participation in earning income for their universities. Testing the relationship of the two variables also shows that preferred qualifications of support personnel participate in earning income for the university consists of three elements, arranged in descending order from most to least as follows: marketing skills, motivational psychology and salesmanship. Annandale (2012), executive of Ouadrant Consultants, UK strategy and marketing consultant company, proposed that research is another key source of university income, particularly in a situation filled with financial pressures for more than a decade. A university that will be able to grab this opportunity needs a good marketing team, which consists of support personnel. This is also in line with Domjan (1996, p. 199) and Woolfolk (1995, p. 130), who found that motivation can motivate people to pursue desired and persistent behaviors towards goals. It is also consistent with Kotler and Armstrong (1991, p. 661), who found that personnel who perform well must have a strong desire to make sales.

Therefore, universities that want to survive need to pay attention to these qualifications of the support personnel by encouraging them to be marketers, motivated, and salespeople, not just to promote income from research, but from other activities as well. Also, in staff recruitment, the preferred qualifications of personnel should be

determined, namely 1) marketing skills, 2) motivational psychology, and 3) salesmanship. Also, all existing support personnel should take part in training on marketing, motivational psychology, and salesmanship. In addition, KPI or KOR should be set for all personnel to participate in income earning for the university. Meanwhile, currently active support personnel must urgently acquire such knowledge and experience and begin to participate in income earning for the university.

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