

Students' Part – Time Work: An Implication Towards Students' Academic Performance

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ABSTRACT

This paper reports on the subject of higher education institution students undertake paid part time work while studying. A quantitative survey conducted among students of higher education institution in Pahang investigated several aspects of motives students to engage in part time work and their implication towards student academic performance. Structural Equation Modeling (SEM) has been used as statistical technique to test and estimate causal relationship between variable. The results provide an insight into the nature of work profile involves and the students' perceptions of paid part time work. The findings raise issues which are interest to academic and non-academic staff, students, employers and higher education institutions.

Keywords: Part-time work, students, higher education institutions, academic performance.

INTRODUCTION

The relationship between higher education and work has been extensively studied by economists and sociologists. While most of this research focuses on employment after higher education, less attention has been devoted to the experience of employment during higher education. University students involved in part-time employment have been the focus of studies in the UK for a number of years (Curtis and Lucas, 2001; Kelly, 1999; Lucas and Lammont, 1998; Watts and Pickering, 2000). Existing research focuses mainly on the United States and Great Britain because of the rising costs of attending higher education and a significant increase in student employment (Ehrenberg and Sherman, 1987; Horn and Malizio, 1998; NCES, 1994).

Despite the increase number of studies on part time employment, we found that only a few studies have focuses on Malaysia Context (Ibrahim, Freeman and Shelley2012;Ali, Yusuf and Ali2008). Thus, there is a need to examine the issues of paid part time employment in higher education on Malaysia context. Because of several limitations, our studies investigate the issues focusing on higher education in Pahang, Malaysia which we believe could be an interesting case for several reasons.

On the basis of past literature, we found various factors that may predict student motivation to work part time. Hence, we intend to replicate Expectancy Value Theory to predict student motivation to take part time work. On top of that, student participation in part time work will be tested as variable to predict perceived influence on student part time work towards their academic performance.

The paper was organized in four main parts. First we review the literature and advance a set of theory driven hypotheses. Second, we present the method, including sample and variables followed by the results of the empirical tests. We conclude with a broad discussion of the main results, pointing out avenues for future research, limitation and implications for theory and practice.

LITERATURE REVIEW AND HYPOTHESES

Student Motivation to Work Part Time

As suggested by Riggert, Boyle, Petrosko, Ash, and Rude-Parkins (2006), colleges and universities can no longer assume that the majority of students will be able to give their full-time attention to academic studies. Working part-time has long been a part of the university student experience. Although exact numbers of students working part-time are difficult to determine with a degree of accuracy, several studies have found that between 50 and 60 per cent of all full-time university students currently engage in some form of part-time employment.

From the perspective of the student, part-time work is often an introduction to the world of work and their experiences assist with both personal and career development. However, it has been argued that the world of work should be more closely linked with higher education, through both formal periods of supervised work experience or more informally through students' part-time experiences (Beard, 1995).

Anyanwu (1998) who identified that almost all Australian students work up to 30 hours per week in order to support their studies. In the UK, Watts and Pickering (2000) found that working part-time whilst studying full-time was an increasingly common phenomenon among students and while there were a variety of positive outcomes of working part-time, respondents generally viewed part-time employment as a necessity to survive in the contemporary higher education sphere.

Manthei and Gilmore (2005) found an overwhelming majority of students they surveyed were involved in part-time employment with eight out of ten students holding at least one job during term time for an average of 14 hours per week.

Because of the increasingly involvement of student in part time work, we interested to study the motivation factor that lead student to take part time work. Based on previous research, we decide to replicate expectancy value theory to measure student motivation to undertake part time work. Expectancy theory provides a general framework for assessing, interpreting, and evaluating employee behavior in learning, decision-making, attitude formation, and motivation (Chen and Lou, 2002).

Expectancy theory is a theory of the process of motivation. Rather than simply explaining what will motivate an employee, process theories define how motivation comes about. Process theories are, in effect, working models of the decision-making processes that individuals perform in order to determine whether they will be motivated to pursue a certain activity and sustain a certain level of productivity. Process theories help describe and explain how behavior is directed, energized, sustained, or stopped. While several process theories of motivation exist, one of the most respected theories of motivation among organizational and industrial psychologists is the process theory of expectancy.

The necessity for part-time employment whilst studying was emphasized in this study, previous study indicate several reason why student take paid part time employment while working. The issues of financial mention several time in research (Curtis and Williams, 2002; Holmes, 2008; Rochford, Connolly and Drennan, 2009) while several studies indicates that student take paid part time employment to enhance their experience, confident and skills (Ford, Bosworth and Wilson, 1995; Ferguson and Cerinus, 1996).

The Perceived Influence of Student Part Time Work and Academic Performance
A variety of studies have examined the impact that part-time employment might have on full time students' studies. For example Manthei and Gilmore (2005) considered that working part time left less time than desired for study and Jogaratnam and Buchanan (2004) found that new students who were balancing a full time academic load along with a part-time job were likely to suffer from stress. Indeed it has been suggested that a combination of studying full time, working part-time and being in debt can have a detrimental effect in the physical and mental health of students and that the common method of addressing debt (i.e. increase hours worked), can create the perception of a negative effect on

academic performance (Carney, McNeish, and McColl, 2005).

Curtis and Shani (2002) determined that those students who worked part-time were more likely to miss lectures and felt that they could have achieved higher grades had they not been working. However in later research, Curtis (2005) found a majority of her (admittedly small) research sample considered there to be wholly positive outcomes of working part-time and that there was no conclusive relationship between the students' marks and their perceptions regarding their academic performance.

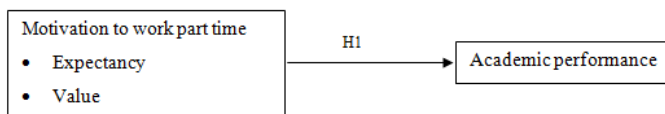
The previous notwithstanding, the issue concerning the impact of part-time work on student performance is relatively under researched and the effects of part-time working have been viewed from both a positive and negative perspective. Positively, it has been found that students might acquire personal transferable skills, enhanced employability and increased confidence in the world of work (Watts and Pickering, 2000), the negative effects on academic progress of full time students having to engage in part time employment on their studies (Watts and Pickering, 2000).

On the one hand, working during higher education could be viewed as a way to achieve independence from their family, to develop early knowledge about the 'labor market world' and to be socialized to job-related values (Davies, 1999; Stephenson, 1982). However, on the other hand, working during university studies may negatively affect academic results, increasing the risk of dropping-out, having a delayed graduation or achieving lower grades.

Previous research indicates ambiguous effect of part time work on academic performance, but results on negative effects variously discuss by researcher (Hasson, McKenna and Kenney, 2013; Triventi, 2014; Watts and Pickering, 2000; Watts, 2002; Darolia, 2014; Jacobson and Shuyler, 2013).

The Proposed Research Model and Hypotheses:

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On the basis of above literature review, we propose the following research hypotheses:

H1a: Expectancy motivation to work part time negatively influence academic performance.

H1b: Value motivation to work part time negatively influence academic performance

METHODOLOGY

A convenience sampling method was employed for this study. The sample was confined to students at higher education in Pahang. Survey approach was chosen because it provides quick, inexpensive, efficient and accurate means of assessing information about the population. Other research designs were not adopted because, first, manipulation of variables was not required as such experiment method was not appropriate. Second, there were not many studies have been done related to the research area, thus, secondary data approach alone was not sufficient.

The questionnaire was divided into 4 sections; section A, B, C and D. Part A was designed to obtain the demographic information of the respondents. Part B was designed to obtain information on employment status. The variables measured using a closed ended multiple choice format. Part C was design to measure motivation factor influence student part time work and Part D was design to measure perceived influence on academic performance. A 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) was used for Part C and D. For each statement, respondents were required to indicate their level of agreement to the statements. The statements measure constructs that are relevant in measuring Motivation Factor and Perceived influence on Academic Performance. Amongst the construct were 'expectancy motivation', 'value motivation' and 'academic performance'. The measure constructs were derived from Robinson (1999) and Ibrahim et. al, (2012).

The most suitable method for analyzing simultaneous relation is structural equation modeling. First, using SPSS, we summarization of the general characteristics of all respondents in terms of their demographic information and employment status. We carried out an exploratory and confirmatory factor analysis to assess how the variables were grouped. The variables least adjusted to our theoretical model were eliminated. We further verified the reliability of the constructs with Cronbach's α (Cronbach, 1951; Hair, Anderson, Tatham and Black, 1999).

As a second generation data analysis technique (Bagozzi and Fornell, 1982), SEM provides a powerful method for assessing a structural model and measurement model because of the minimal demands on measurement scales, sample size, and residual distributions (Chin, 1998). Handling both formative and reflective indicators, SEM can be used not only for theory confirmation, but also for suggesting where relationships might or might not exist and for suggesting propositions for later testing. In order to provide an adequate level of confidence in the study, a sample size of 400 students was targeted. However, only 366 questionnaires were returned which is equivalent to a response rate of 91.5%.

FINDINGS

Sample

A total of 366 responses were obtained. Out of this return rate, 5 questionnaires were invalid or incomplete, 172 respondents are never involved in part time

employment and thus were rejected and not been analysed. Therefore, only 189 respondents who undertake part time work are valid to be analysed.

The number of female respondents was more than the male respondents. There was 61.4% females as compared to 38.6% males in this sample. The female respondents outnumbered male by 22.8%. Majority of the respondents which represented 51.3% were between 21 to 25 years old. With regards to Faculty, majority of respondents were from Faculty of Business Management representing 64.6% of the total respondent. Majority of the respondent were involved working as shop/sales assistant presenting 41.8%. 15.9% of the total respondents'works as a waitress and 14.3% involved with their family business.

Factor Analysis

Factor analysis was conducted to identify the underlying constructs that were deemed important in determining the overall level of motivation factor and influence on academic performance. Principal component analysis was used as the method of extraction. After a factor analysis and depuration according to the analysis correlation matrix, to the factor and Cronbach's α value (Cronbach, 1951) variable M11V, M8V, M5V, M14V, M17V, M13V and M20V had smaller score than 0.5 and were not considered (Bagozzi and Yi, 1988). For dependent variable, factor analysis had been proceed to some corrections. Variable I10N, I11N, I12N, I13N, I14P and I15P were removed and not considered. For all factors, the Cronbach's α value was greater than 0.6 showing that the analysis is adequate. Table 1, thus showing good results for the factor created.

Table 1 : Summary of Factor Analysis

Variable	Construct	Items	Factor Analysis	Cronbach's α
IV (MO)	XP	M4EX	One factor 76.71 percent of the variance explained	0.873
		M2EX		
		M10V		
		M3EX		
		M6EX		
		M7EX		
		M1EX		
		M9V		
		M12EX		
		M18V		
	VA	M15V	One Factor 5.05 percent of the variance explained	0.592
		M16EX		
		M19V		

DV (AC)	PI	I2P	One Factor	0.885
		I1P	74.16 percent of the variance explained	
		I3P		
		I4P		
		I5P		
	NI	I7N	One Factor	0.850
		I8N	14.71 percent of the variance explained	
		I6N		
		I9N		

Structural Model Testing

The overall model fit summary for the proposed research model can be seen from Table 2. The test of overall model fit resulted in a χ^2 value of 524.803 with 207 degree of freedom and probability value of 0.000. The p-value being significant indicates the absolute fit of the model is desirable.

Typically, researchers also report a number of fit statistics to assess the relative fit of the data to the model. Descriptive fit statistics compare a specified model to a baseline model, typically the independence model, in an attempt to demonstrate the superiority of the proposed model. Jaccard and Wan (1996) recommend the use of at least three fit tests. We report goodness-of-fit index (GFI), the adjusted GFI (for sample size) (AGFI), the Tucker-Lewis index (TLI), and the comparative fit index (CFI). The GFI, TLI and the CFI compare the absolute fit of a specified model to the absolute fit of the independence model. The greater the discrepancy between the overall fit of the two models, the larger the values of these descriptive statistics. Research by Gerbing and Anderson (1992) identifies the CFI as one of the most stable and robust fit indices. We also report root mean square error of approximation (RMSEA), which measures the discrepancy per degree of freedom (Steiger and Lind, 1980). The GFI should be at or above 0.90 (Hoyle, 1995), while the AGFI should be at or above 0.80 (Chin and Todd, 1995). The CFI statistic should be at or above 0.90 (Hoyle, 1995), but a CFI above 0.95 is considered to be an exceptional fit (Hoyle, 1995). TLI is more restrictive, and requires a value of 0.95 or above (Hu and Bentler, 1999).

Finally, RMSEA should be below 0.10 (Browne and Cudeck, 1993), but has also been suggested to represent a very good fit if below the more restrictive threshold of 0.08. Having established the relative adequacy of the model's fit, it is appropriate to examine individual path coefficients corresponding to our hypotheses. Because of our value AGFI is less than 0.9, we make some modification based on suggestion by Modification Indices table produce by SEM. Table 3 show the global confirmatory factor analysis and the several depurations with respective re-specifications. After several confirmatory analyses, RMSEA value reached

0.06, CFI = 0.921 and NFI =0.839. Hence, we conclude that our model has an acceptable fit.

Table 2: Model Fit Summary for Proposed Research Model

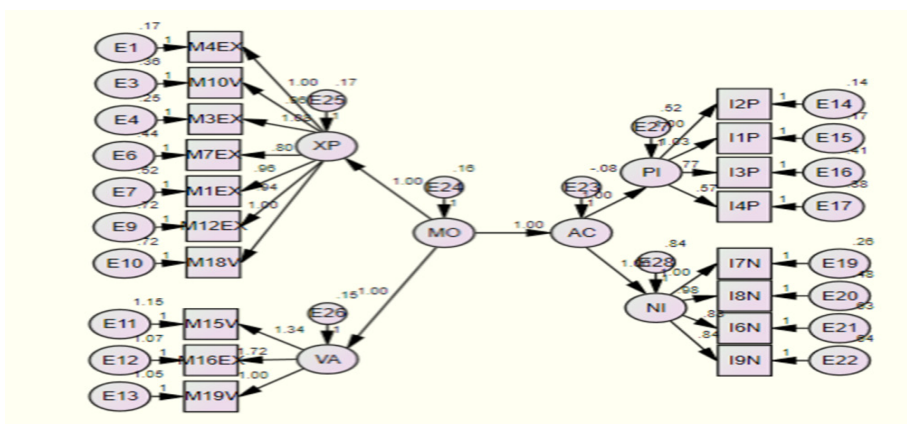
Fit Index	Model	Recommendation
χ^2	524.803	N/A
Df	207	N/A
P	0.000	N/A
χ^2/df	2.535	N/A
GFI	0.801	>0.90
AGFI	0.756	>0.90
Comparative fit index (CFI)	0.833	>0.90
Tucker-Lewis index (TLI)	0.814	>0.90
Root mean square error of approximation (RMSEA)	0.090	<0.08

Table 3: Global Confirmatory Factor Analyses

Model	χ^2	P	df	CFI	RMSEA	NFI	Re-specification
Confirmatory 1	399.400	0.000	187	0.875	0.078	0.791	M6EX removed
Confirmatory 2	355.545	0.000	168	0.880	0.077	0.798	M2EX removed
Confirmatory 3	302.120	0.000	150	0.893	0.073	0.811	I5P removed
Confirmatory 4	236.578	0.000	133	0.921	0.064	0.839	M9V removed

With the re-specification, the model fits better to the data matrix. Figure 1 is the Final Model of Motivation towards Academic Performance.

Figure 1: Final Model



DISCUSSION AND LIMITATION

The purpose of this paper was to analyse the impact of students' part time work on academic performance. The results of the research provide support for the model shown in Figure 1 and for the hypotheses presented by the paths among the model constructs. First, the results provide empirical evidence for the significant role of the expectancy motivation and value motivation to undertake part time work on academic performance.

The main finding of this paper is to show that expectancy motivation have coefficients value 0.386 with p-value 0.000. Value motivation have coefficients value 0.467 with p-value 0.000. Based on Guilford (1956), coefficients value below 0.3 is very low relationship, coefficients value 0.30 to 0.5 is low relationship, coefficients value 0.5-0.7 is high relationship and above 0.7 is very high relationship. Thus, this finding indicates that expectancy and value motivation have low relationship. The analyses discussed above have successfully tested and supported the hypotheses. The first hypotheses, H1a: Expectancy motivation to work part time negatively influence academic performance; is supported since its regression significance level is less than the selected level of 0.05 and the correlation analysis show a low relationship. For second hypotheses H1b: Value Motivation to work part time negatively influence academic performance; is also supported since its regression significant level is 0.000 and the correlation analysis show a low relationship. Our results is coinciding with previous study that present part time work have negatively influence academic performance (Triventi, 2014; Hasson et al, 2013; Jacobson & Shuyler, 2013). The discussion above summarize in the table 4 below:

Table 4: Path Coefficient and Hypotheses Testing

Hypotheses	Relationship	Standard Coefficients	p-value	Supported
H1a	Expectancy Motivation to work part time negatively influence academic performance.	0.386	0.000	Yes
H1b	Value Motivation to work part time negatively influence academic performance	0.467	0.000	Yes

Any conclusions drawn from this study can be tentative as they are limited by the nature of the sample which was relatively small and self-selecting and by the fact that the effects which have been identified are based on the students' perceptions alone. This study was confined to student in Pahang only. Student from other parts of the country were excluded from the research due to time and cost constraints. Consequently, the study is subject to the limitations and possible biases that exist when only a few geographic areas, which may not represent total students. Despite these limitations, this research paper serves as an important study into the higher education in Malaysia particularly for students who undertake

part time work. Further research can be conducted with a better formulated and in depth survey so as to yield more representative results.

CONCLUSIONS

One of the aims of this study was to contribute to the debates in the wider academic community surrounding the issues of students' part time work. It would appear that the student who undertakes part time work is increasingly complex the nature of higher education today due to various reasons. Finding to emerge from this study call for a re-evaluation of the frameworks used to understand better this issues.

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