

## **Relationship between University Readiness and Academic Achievement in a Sample of Undergraduate Students**

Mohammad Luqman Syafii Mohammad Sofian

Shukran Abd Rahman

Department of Psychology, International Islamic University Malaysia

luqmansyafii@gmail.com

The purpose of this research is to examine the level of university readiness among undergraduate university students in Malaysian Higher Learning Institutions (HLI); and to study the relationship between university readiness and academic achievement among undergraduate students in Malaysian Higher Learning Institutions. Data were gathered through responses to the University Readiness Scale, from the sample participants of undergraduate students of a Higher Learning Institution (HLI). The findings supported the research questions addressed in line with the research objectives. The average level of University Readiness of undergraduate students in the HLI is 77%,  $M=354$  ( $SD=34.55$ ). From the results, it was found that University Readiness predicts academic achievement of the undergraduate students in Malaysian HLI. The results of the study is expected to help HLIs to design appropriate interventions that could prepare students to be highly ready for university education, which in turn leads them to attain better academic achievement. A readier student will be able to acquire more competencies throughout their undergraduate program and will be able to compete healthily in the job market.

*Keywords:* university readiness, academic achievement, undergraduate students, Higher Learning Institutions.

## INTRODUCTION

Why do students pursue studies to higher education level? Welton and Martinez (2014) stated that parents' high expectations were the most significant factor for students to pursue higher education. Nonetheless, their readiness for higher education level remains an issue which has received a good extent of attention among researchers. This chapter introduces the research background of the present study and its problem statement. The chapter also explains the research objective and the significance of the research. The chapter further presents conceptual and operational definitions of the research variables involved in the present research.

By and large, going to tertiary level education is no longer a privilege, but a necessity to groom and develop individuals to become competitive to become and able to bare well in the increasingly dynamic world. Many initiatives, organizations and even foundations has been established to facilitate the provision of tertiary education. Even parents who wish for a better life for their children has saved up funds for the day when their kids go to college. Despite the efforts to avail tertiary education to young individuals, a pertinent issue that deserves attention is the readiness among the individuals to attend Higher Learning Institution (HLI). As such, university readiness is a vital issue in higher education nowadays for there are. numerous problems and various difficulties faced by higher education students, potentially linked to their lack of university readiness. The study conducted by Jansen and Meer (2012) stated that students' preparedness for post-secondary education is identified as one of the main factors affecting first-year attrition or study success. Jackson and Kurlander (2014) found that 50% of students of California State University who were ready for college education at the time of admission had shown higher level of likelihood to complete their four years of study. The researchers found that the completion rates at the University were about 53%, indicating that only about half of the graduates could complete their degree in 4

years. This shows that there is a high rate of dropouts among students at higher education level, a phenomenon which trigger a cause for concern to many parties due to the fact that dropping out will lead to several implications and expensive spending. The drop out students will be left with loan obligations, fewer job prospects, and a lifetime of lower earnings, (Leonard, 2013).

There have been various researches on university readiness among university students and its relationship with other variables, including parents' role in developing university ready children by Leonard (2013), and academic achievement (Jackson & Kurlaender, 2014). The latter had specifically studied the level of university readiness among first year students and its relationship with their academic achievement. The authors stated that on average, students who are university-ready had higher GPA than students who are not ready. Uy, Kim and Khuon (2016) supported this idea when they found out that the sample of South-East Asian American students who were university ready considered themselves among the high-achieving and confident on the academic knowledge and skills to do post-secondary coursework. Thus, it is believed that University Readiness plays an important role in predicting academic achievements.

### **STATEMENT OF PROBLEM**

Though this is in line with Jackson and Kurlaender (2014) who found that there is a relationship between readiness and academic achievement, there seems no study has been conducted to look at the relationship between academic achievement and readiness among university students, let alone in Malaysia. Search in database shows that although there are numerous researches of university readiness, the researches were conducted outside Malaysia, and mostly use high school students as sample, suggestive of a need to conduct

such study to understand the same issue in the country. Most of research targeting university students were conducted in United States of America (Welton & Martinez, 2014; Jackson & Kurlaender, 2014) and others were in England (Uy et al., 2016), Australia and Netherlands (Jansen & Meer, 2012) but Malaysia. The above issues warrant for a research to study the level of university readiness among university students, and its relationship with their academic achievement in Malaysia since the absence of this research in HLI in Malaysia's setting.

### **RESEARCH QUESTIONS**

The present research is conducted to study if there is a relationship between university readiness and academic achievement among university students. The research aims to answer the following research questions:

1. What is the level of university readiness among undergraduate university students in Malaysian Higher Learning Institutions?
2. To what extent does university readiness predict academic achievement among undergraduate students in Malaysian Higher Learning Institutions.

### **RESEARCH OBJECTIVES**

The research is conducted to measure the level of university readiness among undergraduate university students in Malaysian Higher Learning Institutions; and to study the relationship between university readiness and academic achievement among undergraduate students in Malaysian Higher Learning Institutions.

## **SIGNIFICANCE OF THE RESEARCH**

The research study could provide information on the issue related to university readiness among undergraduate students in Higher Learning Institutions. It can also be a source of information for the higher learning education to have a good foundation on the understanding of university readiness among undergraduate students in Malaysia. The study is significant to be conducted because if this research finds the positive relationship between university readiness and academic achievements, we can further study on the factors that can help students to be prepared for university.

The results of the study will be able to help HLIs to design appropriate interventions that could prepare students to be well prepared for university education, which in turn leads to their better academic achievement. A readier student will be able to acquire more competencies throughout their undergraduate programme and be able to compete healthily in the job market.

## **LITERATURE REVIEW**

This chapter presents the review of literature on research which studied the level of university readiness among students in HLIs, and its relationship with academic achievement. The review is expected to shed light on the trend of university readiness in other HLIs, and its roles in predicting students' academic achievement. The first section of this chapter discusses the past research about university readiness among students while the second section presents the previous findings on the relationship between university readiness and academic achievement.

*University Readiness among University Students*

Welton and Martinez (2013) studied the extent of college readiness among students in 20 Latino high school seniors from two high schools. Both high schools served a student population that was predominantly from lower income backgrounds. Jansen and Meer (2011) conducted a cross-national study on students' perceived readiness for university. In this study, two universities' students were selected as the target group which were University of Otago, New Zealand and the University of Groningen, Netherland. The sample for this study is consisted of 1,948 students, 1,490 from the University of Groningen and 458 from the University of Otago. They used The Readiness and Expectations Questionnaire (REQ) to study the university readiness. The result shows that there was significant difference in in the percentages of students who felt well-prepared or ill-prepared by secondary institution. Groningen students were reported higher in the percentage of well-prepared.

A study was conducted by Uy et al. (2016) on Southeast Asian American students in a 4-year public university in New England, United States of America proposed a research question on how prepared do Southeast Asian American students feel for college? This study was conducted a survey via focus group discussion in collecting the data. They found that majority of the Southeast Asian American students reported that in general, they felt that they are academically prepared for college.

### *Relationship Between University Readiness and Academic Achievement*

Jackson and Kurlander (2014) conducted a longitudinal study on the first-time freshmen at the nation's largest public 4-year post-secondary system. Their aim of the research was to study the extent to which different indicators of college readiness predict short-term and long-term college success? Based on the study, less than half of total students at California State University were ready for college at the time of entry. Another finding from this study was, college-ready students had, on average, a GPA that is 0.2 grade points

higher than students who were not ready. They also reported that college ready students were 6.1 percentage more likely to proceed to their second year. The study prove that university or college-ready students will have higher level of academic achievement than the students who do not.

Jensen and Meer (2012) found that the motivational element for good accomplishment is students' perceived preparedness for university. In a study on the perceived preparedness among university students and high school students in New Zealand and Netherland, they found that there was significant difference between the two samples in that university students reported higher level of perceived preparedenes, an important motivational factor for their good performance.

Gaertner and McClarty (2015) conducted a study which found that the likelihood of completing 4-year university academic success can be forecasted by university readiness.

They used American College Testing (ACT) to measure university readiness. In their study, they select K-12 high school students as their sample. In present study, the sample were undergraduate students of HLI.

	Where the research was conducted	Instruments/S cale	Variables measured	Sample	Findings
.					
					-Lastly, students, on average, maintained a 2.75 GPA in their first year at a CSU.
	Phitsamay S. Uy, Sue J. Kim, Chrisna Khuon (2016) England				-Survey and Focus Group. -College readiness. Southeast Asian American college students in a 4-year public university in New England. -The majority of the South East Asian American college students reported they generally feel academically prepared for college.

-They also reported having the expected attitudes and behaviors to succeed in postsecondary education.					
Gaertner, M. N., & McClarty, K. L. (2015).	USA	-ACT SAT  -Cumulative GPA	-College-readiness -College outcomes	-High school students (longitudinal study).	- Likelihood of completing 4-year university academic success can be forecasted by university readiness.

## METHOD

### *Participants*

This research adopted purposive sampling method to engage 201 undergraduate students of International Islamic University Malaysia to participate in this study. The participants who had been selected were the 1st year undergraduate students. They are in their second semester of studies during the data collection time. The participants were sampled from different faculties in International Islamic University Malaysia Gombak Campus consisting of 7 faculties which were 11 (5.5%) from Architecture, 41 (20.4 %) from Engineering, 19 (9.5%) from Information and Communication, 17 (8.5%) from Education, 73 (36.3%) from Islamic Revealed Knowledge and Human Sciences, 15 (7.5%) from Law and 25 (12.4%) from Economics and Management Sciences.

### *Research Design*

The study adopted a cross-sectional design to identify the relationship between University Readiness and academic achievement of 1st year 2nd semester undergraduate students of IIUM. The data collection in this study was collected through survey method.



## *Measures*

### University Readiness Scale (URS)

University Readiness Scale (URS) (Shukran, 2016) was used to study the University Readiness. This scale was developed to measure 5 domains which are cognitive, academic skills, student's contextual awareness, academic abilities and student's self-awareness. The response's type was Likert scale that ranges from strongly disagree to strongly agree. There are 92 items in total. This scale has tested with internal consistency which the score of the reliability  $\alpha = .95$  which is preferable. URS has shown good internal consistency with a value of Cronbach's alpha coefficient reported of .95, above the cut off point for a good value of internal consistency ( $> 0.80$ ) (Guilford, 1965).

### Academic Achievement

Academic achievement was identified via self-report from the students about their academic achievement in the form of Grade Point Average (GPA). Face validity was conducted by piloting the scale to 5 respondents. The participants were asked about the scale including writing mistakes and spelling error, the researcher found one major issue which the number of items for the scale is too many which are 92 items in total.

## *Data Collection Procedure*

Informed consent form (refer to Appendix A) was distributed to the participants as an agreement to participate in the study. In this study, the researcher used a number of approaches to reach to the participants. The participants filled in the informed consent and they have to state their CGPA which reflects their academic achievement. After the agreement had been achieved, the participants continued by responding to the University Readiness Scale. The scale was collected right after the participants finished answering. Token was given as an appreciation for participating in the study. In facilitating the data

collection process, the researchers had been assisted by several enumerators who were appointed to coordinate the survey at different faculties.

### *Data Analysis*

The data collected in the study were analyzed using IBM SPSS 22 version. In measuring the level of UR, the researcher had analyzed the descriptive statistics to gauge each respondent's score on the UR Scale. The researchers divided the level of readiness into three levels which are low (92-153), medium (154-306) and high (307-460). The researchers used linear regression to determine whether there is relationship either University Readiness predicts academic achievement among the undergraduate students. The finding has enabled the researcher to answer a research question that checks if university readiness predicts academic achievements of university students.

The linear regression was used to assess the relationship between university readiness and academic achievement among first year second semester undergraduate students of IIUM Gombak Campus.

## **FINDINGS**

Faculty	N	Percent (%)	GPA				Mean UR			
			Min	Max	Mean	SD	Min	Max	Mean	SD
Architecture	11	5.5	2.70	3.63	3.22	.304	293	410	357	38.29
Engineering	41	20.4	1.94	3.86	3.17	.390	293	410	352	32.77
Information, Communication and Technology	19	9.5	1.92	4.00	3.20	.465	273	377	349	25.17

Education	17	8.5	2.77	3.74	3.21	.308	265	410	346	45.26
Islamic Revealed Knowledge and Human Sciences	73	36.3	2.00	4.00	3.20	.390	276	440	361	35.65
Law	15	7.5	2.60	3.64	3.12	.321	311	405	356	35.16
Economics and Management Sciences	25	12.4	2.80	3.73	3.19	.370	296	412	348	30.25

### *Relationship Between University Readiness and Academic Achievement*

A linear regression was used to predict CGPA based on University Readiness. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

Based on the tables given, we can start evaluating the model. By referring to Model Summary Table, the value of Adjusted R Square is .218. This value explains 21.8% of the variance in CGPA. This evaluation use Adjusted R Square because of the small sample size. The significance value is .000 and this really means that  $p < .0005$  thus it is significant. Based on this evaluation, the result of this study is statistically significant.

### **DISCUSSION, RECOMMENDATION AND CONCLUSION**

The topic of university readiness has been investigated in many previous studies. However, it remains under-explored, especially among undergraduate students in Malaysian HLIs. From the results obtained, it was revealed that there is significance result that university readiness predicts academic achievement.

The first research question was answered which the level of UR among undergraduate university students in Malaysian Higher Learning Institutions. The researcher divided the level of readiness into three levels which are low (92-153), medium (154-306) and high (307-460). The mean or average of University Readiness among undergraduate students in HLI is (M=354) or 77%. This shows a high level of University Readiness among undergraduate university students in HLI. Based on Table 1, the level of readiness from all faculties are high which shows a good value.

The second research objectives had led to the acceptance of research hypothesis in that there is significant relationship between university readiness and academic achievement among the undergraduate students. The university readiness has, thus, been found to predict HLI students' academic achievement. There was a study support his finding which is the study conducted by Jackson and Kurlaender (2014) which they found that college-ready students obtained GPA 0.2 higher than those who are not ready, and this shows that college ready students will perform better and obtain better achievement than students who are not ready. Besides, Jensen and Meer (2011) believed that the motivational element for good accomplishment is students' perceived preparedness for university. Hence, this reflects that university readiness predicts academic achievement.

When ANOVA was tested to the data set Faculty and University Readiness, the result shows that there is no significant difference of university readiness across different faculty with value  $p = .67$ , thus  $p > .05$  which can be understood that no significant difference occurs. It shows that all students despite from different faculty, they respond almost the same.

In order for further improvement, the researchers would recommend to increase the number of the sample in order to get a preferable data that can have a better and high generalizability to the population. Perhaps that further research can be conducted by selecting other undergraduate students of HLI in Malaysia.

In conclusion, university readiness is a vital topic that should be concerned on nowadays. In order for the betterment for the students to be the better product for university, they have to be prepared for the university. Their grades reflect their achievement, and this will affect the employability of the students after leaving the university. Based on this study, it is proven that University Readiness predicts academic achievement. Indeed, tertiary education level is very important as the foundation for the undergraduate students either to be in the job market or continue the educational journey to the post-graduate level of study. Thus, the educational system of HLI institution in Malaysia should produce products that are good in academic achievements and also in social skills so that they can compete in the job market healthily. The findings obtained can draw a conclusion that the educational system must seek for solution for students who are not ready for the university and provide solutions or interventions for this group.