



Academic Achievement: It Is Not How Smart You Are, But How You Cope With Your Life And Manage Your Time

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ABSTRACT

Previous research suggests that contributing factors such as previous academic result, coping and time management can predict student success at the universities. The purpose of this study was to investigate the relationship between previous academic grades, coping and time management practices on academic achievement among undergraduate students from four of Malaysia public institutions for higher education. 551 university students completed a Time Management Questionnaire (TMQ), COPE Inventory and provided their self-reported high school grades and current Grade Point Average (GPA). Analysis of data from descriptive and inferential statistics was done. Results showed that previous academic grades and the practice of time management (short range planning and attitude toward time) have no direct effect on academic achievement. However, the use of coping strategies (problem focused and denial focused) and the practice of time management (long range planning) showed that there was a significant effect on Grade Point Average (GPA).

Indexing terms/Keywords

Previous academic result, time management, coping response, academic achievement.

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INTRODUCTION

The admission to public universities in Malaysia is basically based on high school or matriculation academic result. Traditionally, we tend to assume that students, who obtain excellent result during high school, will also perform outstandingly at the university. For example, Wilkinson, Zhang, Byrne, Luke, Ozolins, Parker & Peterson (2008) examined whether factors such as prior academic performance, admission tests, and interviews predict academic performance in a graduate medical school. Their results showed that these three factors explained 21.9% of variation in academic achievement. They also found that previous grade point average was significantly correlated with academic performance ($r = 0.47$), followed by interviews ($r = 0.12$) and admission test ($r = 0.07$). There are also substantial literatures concentrating on the effect of previous academic results on academic achievement at the university such as Bruinsma and Jansen (2007); Curtis, Lind, Plesh & Finzen (2007); Rochelle and Dotterweich (2007); and Yates and James (2006).

However, this assumption is not always true because not all of them remained as best students as what had been expected of them. Surprisingly, despite their excellent result when they were in high schools, there is a group of students who do not perform in their academic life at the university. According to Enns, Cox, Sareen & Freeman (2001), high school students who were once thought to be 'the best among the best' based on high school academic result, were found to be average or at risk students at the university. They suggested that every semester, there are few of them who show a drop in academic performance and obtain a grade point average of less than 2.00, being placed under probation or terminated by the university due to academic difficulties. This situation is often apparent early in a student's life as undergraduate at the university.

According to Morisano, Hirsh, Peterson, Pihl & Shore (2010), 25% of students who enrol in 4-year universities in the United States did not graduate because of academic problems, whereas, Belloc, Maruotti & Petrella (2010) reported that 15% of undergraduate students in Italy failed to complete their bachelor degree. Lassibille and Gómez (2008) found that 26% of first year students; 10% of second year students; 6% of third year students and 5% of final year students in Spain were dismissed because of academic problem. In Malaysia, it is reported that 1.5% (4800) of students from public universities, failed to complete their studies or being terminated due to academic difficulties (Utusan Malaysia 2009). As a result, not all of the students who further their studies at the university will earn their degrees or graduate from the university in the expected 4 years or within the given period of time.

Issues of Academic Achievement

Aluja and Blanch (2004) suggested that students who obtained low academic result does not mean that they are not smart enough or have low academic ability. The transition from school to university environment may have an impact on students' ways of life and how they perceive their academic world. For instance, life as high school students in Malaysia depends greatly on information, activities and efforts that were provided by their respective teachers. Students were spoon-fed by their teachers through extra classes, extensive use of reference books and intensive practice of answering previous examination questions. This situation happens because the school system in Malaysia is so focused on academic excellent and it requires students to give their fullest efforts so that they will be fully prepared to seat for Malaysian Certificate of Education (MCE). The consequences of failing to obtain excellent results in MCE may put at risk students' career choice and path in the future.

Once the students further their studies at the university, they need to make adjustment to their way of life such as be able to study independently, change their way of learning, manage their time dan so on. Burton, Taylor, Dowling & Lawrence (2009) suggested that the first university year was a transition process for students to adapt their life at the university, learn new skills and experience different things. Academic environment at the university requires students to attend classes regularly, make their own notes and be committed in their studies. They can no longer depend totally on the extra classes or be spoon fed like they used to be when they were in high school. As university students, they are expected to be matured, be able to adapt to more challenging academic environment, meet the academic demand, be more perseverance and ready to be challenged intellectually.

Unfortunately, for some students, this transition from high school to university life, does not take place smoothly. These changes to academic life as university students have heightened more on academic success and competition and the pressure to outdo the rest. Students who have difficulty in adjusting to university surroundings may encounter academic difficulties and disruption in their daily life. Barefoot (2000), Lau (2003), Fike and Fike (2008), Lassibille and Gomez (2008) and Burton et al. (2009) suggested that the first year at the university plays a crucial period of time for new students because it is often made as a basic criteria to student academic retention in the future. They found out that most of the students who were having academic difficulties were first year students.



Palmer, O'Kane & Owens (2009) and Lawrence (2005) found that students, who were having problems in managing academic demands and felt overwhelmed to succeed at the university, finally left the university due to academic difficulties. For example, medical students who were not totally prepared to face the demanding and challenging academic requirements (Rush, Sanderson & Elmore 2005); students who did not have effective learning skills (Angrist, Lang & Oreopoulos 2008); and those who were having problems in learning and financial (Smith & Garton 2008), were at risk of failing at the start of their university studies. Bitsika, Sharpley & Hartley (2010) stated that the effect of academic demand and difficulties in adjustment to new surrounding at the university could also trigger psychological problems and jeopardize their academic achievement.

Contributing Factors of Academic Achievement

The predictors of academic success among undergraduates have been a major interest for many educational scholars. In general, there are several factors that are commonly recognized as contributors to academic performance such as previous academic result, time management and coping styles. Research related to the academic success of university students show that several factors such personality traits (Chamorro-Premuzic & Furnham 2003), time management (Britton & Tesser 1991), previous academic grades (Bridgeman, McCamley-Jenkins & Ervin 2000) and study habits (Aluja & Blanch 2004) have been associated with academic achievement.

Wolfe and Johnson (1995) found that high school grade point average (GPA) contributed 19% of the variance in college GPA. Zwick and Sklar (2005) showed that high school GPA and SAT score were found to jointly explain 22% of the variance in first-year college GPA. Ferguson, James and Madeley (2008) indicated that on average, previous academic performance accounts for 9% of the variance in overall performance at medical school. Even though previous academic result is positive and significantly related to academic achievement, it is not the only factor that can predict academic performance. Students who are having difficulties in academic may face problems due to factors such as time management and the ability to cope at the university.

Britton and Tesser (1991) theorized that student with well-developed time management practices would have higher college grades. They suggested that the differences among individual in practicing time-management are responsible for more intellectual accomplishment and a higher grade during their college years. Cemaloglu and Filiz (2010) found that there is a positive and significant relationship between time consumers and academic achievement ($r = .31$), followed by time planning ($r = .18$) and time attitudes ($r = .08$). They concluded that students who planned and used their time effectively tend to have an increase on the academic achievement. However, time attitude did not affect academic achievement at the same level as time planning and time consuming do.

DeBerard, Spielmans and Julka (2004) reported that coping was a significant predictor of academic achievement. They found that academic achievement of 204 university freshmen was explained by acceptance-focused coping ($\beta = -0.14$, $p < 0.05$) and escape-avoidance coping was found to correlates negatively ($r = -0.47$, $p < 0.05$) with their academic achievement. Abdullah, Elias, Uli & Mahyuddin (2010) demonstrated that coping strategies used by students explained 19% of the variance in academic achievement.

Previous Academic Result

Evans and Fancy (2012) defined previous academic result as one or some combination of various indices, such as secondary school results or ranking (overall or in specific subjects), the score on some form of scholastic aptitude test, school recommendations, and other relevant experience or submitted folio of work. McKenzie and Schweitzer (2001) suggested previous academic result as a significant predictor of academic achievement at university level. For the purpose of this study, previous academic result was measured by the grades that the students earned in their MCE. Although students were allowed to seat for more than nine courses, only the top nine grades were used as indicator of previous academic result. These nine grades were later transformed into high school grade point average. For example, a student with an "A+" or "A", would have a 4.0 point for that particular course; "A-" = 3.7; "B+" = 3.3; "B" = 3.0; "B-" = 2.7; "C+" = 2.3; "C" = 2.0; "C-" = 1.7; "D" = 1.0 and "F" = 0.0.

Coping Responses

Lazarus and Folkman (1984) defined coping as the person's constantly changing cognitive and behavioural efforts to manage the internal and external demands of a transaction that is appraised as taxing or exceeding our resources. Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen (1986) elaborated further the definition of coping based on three main features i.e., process oriented, contextual and making no priori assumption. First, coping is viewed as process oriented which, it is concerned with what the person actually thinks and does in a stressful environment. This approach is different from trait approach which, emphasized on what the person usually does in the stressful situation. Second, coping is regarded as contextual because it depends on individual evaluation of the stressful surrounding that actually happened and the actions that will be used to manage the demanding issues, problems or conditions. Third, coping is not about



what constitutes a negative or positive coping. Coping is about in the persons' determinations to be able to overcome stressful situation regardless whether their efforts are successful or not.

Lazarus (1993) theorized that coping has two major functions i.e., problem-focused and emotion-focused. According to Folkman and Lazarus (1985), in general, people used problem-focused coping when they are dealing with stressful environment and they have the capability to change or alter such challenging conditions that are placed on them to a better situation. On the other hand, emotional-focused coping is likely to be used when people perceive there is nothing they can do to change the stressful conditions which may cause distress either psychologically, physically, mentally or spiritually. In order to control their emotions that was triggered by the threatening or challenging situation, they used emotional-focused coping to normalize their emotions when they come upon the stressful events. However, Parker and Endler (1996) introduced a third category of coping function i.e., avoidant coping. This type of coping reflects negative responses to stressors such as denial, drug taking, and mental disengagement. Even though some people tend to use this form of coping as an immediate way to manage their demanding situation, it is not the effective way to cope with threatening issue nor will it lead to constructive outcomes in any situation.

In this study, coping was defined as a process of controlling stressful event by changing the demanding situation to a better condition, normalizing the negative feelings resulting from stressful experience or avoiding the nerve-wracking situation with undesirable action.

Time Management

Claessens, Van Eerde, Rutte & Roe (2007) defined time management as behaviours that aim at achieving an effective use of time while performing certain goal-directed activities. This definition highlights that the use of time is not an aim in itself and cannot be pursued in isolation. The focus is on some goal-directed activity, such as performing a work task or an academic duty, which is carried out in a way that implies an effective use of time. Francis-Smythe (2006) summarized time management as the self-controlled attempt to use time in a subjectively efficient way to achieve outcomes through setting and prioritizing goals, planning and scheduling tasks, and monitoring progress both against the schedule and of task completion, in an iterative process, in order to accommodate changing goals and priorities.

Britton and Glynn (1989) stated that time management practices were intended to maximize intellectual productivity. Britton and Tesser (1991) expanded the time management conceptual further by categorizing time management into three factors i.e., short-ranged planning, long-ranged planning and time attitudes. The first factor, short-range planning, requires students to plan in advance, either within the day or within the week. For example, students have a clear idea of what they want to do on daily basis by spending time at the beginning of each day writing a list of goals, a to-do list, and a schedule on how and when to implement their goals. They will also plan of what they want to accomplish during the next week by setting priorities based on the planning lists that they have made earlier. The second factor is long-range planning. Students who used long-range planning are more likely to think of their goals in the long run and usually set their goals for the entire semester. They are well organized in their work habits, keep track of important dates on a single calendar and meticulously carry out their plans as scheduled. Although their tests are not imminent, they will review their notes regularly. They will work on their major assignments as soon as possible and do not wait until the last minute to finish them. The third factor is the time attitude. Students who have positive time attitude used their time constructively and feel accountable of how they spend their time. They have a strong sense of control over the time they used and give a higher priority on their academic work rather than grooming. They are capable of declining others' request when people ask them to do things or unprofitable activities that would interfere with their academic work.

Time management in this study was defined as the ability to control and manage the time in effective way, setting and prioritizing goals, planning and scheduling how to achieve the goals, and finally monitoring a plan to make it happen.

METHODOLOGY

The Purpose Of The Study, Data Collection And Analysis

The first goal of this study is to examine whether previous academic result, coping and time management practices are predictive of academic achievement of undergraduate students. The second goal of this study is to examine the differences in the level of these factors among students with low and high GPAs. The results from this study may be used to help students to understand how their intellectual ability, time management and coping skills can aid them to perform better academically if adequate guidance on improvement is provided efficiently.

This study utilized a cross-sectional survey design and was conducted by administering a questionnaire to 1306 undergraduate students from four of Malaysia public institution for higher education. Data collection in this study was on done for several weeks due to time constraint and accessibility to the students. Since the participation in this study was voluntary, 629 students had returned the questionnaires, and 551 of them were proper to analyze. The questionnaire



consisted of four pages back to-back, with 87 items to obtain descriptive data. 333 (60.4%) of the students indicated that they received scholarship and 218 (39.6%) of them were on study loan. Students reported their previous academic result and current grade point average (GPA) at the time they completed the questionnaire. In terms of previous academic grades, 277 (50.3) of the students obtained excellent results in Malaysian Certificate of Education (MCE), 252 (45.7%) of them received good results and 22 (4%) of the students were considered as having fair results. GPA was the primary indicator of academic performance (dependant variable) and was measured on a scale ranging from 0 to 4. The respondents in this study came from various courses such as health sciences, engineering, social science, science and technology and management.

Instruments

27-item Time Management Questionnaire (TMQ) was used to measure time management practices and 60-item COPE Inventory was used to measure coping responses of undergraduate students. Both of the instruments were administered to 551 subjects who consisted of 118 female and 333 male undergraduate students. The TMQ and COPE Inventory were administered in a designated room and it took 25 minutes to complete both of the instruments. The TMQ has 5-point Likert scale and the responses under each item consist of *always*, *frequently*, *sometimes*, *infrequently* and *never*. A 5 point was assigned to answer "always" at positive items, and 1 point was assigned to answer "always" at negative meaning items. The higher values on the TMQ indicate a better time management practices. The COPE Inventory has 4-point Likert scale and the responses under each item consist of *I usually don't do this at all*, *I usually do this a little bit*, *I usually do this a medium amount* and *I usually do this a lot*. For each item, 1 point was assigned to answer "I usually don't do this at all" and 4 point was assigned to answer "I usually do this a lot". The higher values on the COPE Inventory suggest the type of coping responses students engage during a given period of time.

Data Analysis

Data gathered were analysed using the Statistical Package for Social Sciences (SPSS) version 16. Descriptive statistics specifically the M and SD were used to determine the levels of time management, coping responses and previous academic result of the participants. In addition, regression analysis was conducted to test a model showing which of these three factors (time management, coping and previous academic result) could predict academic achievement significantly. Analysis of variance (ANOVA) was used to evaluate the differences in the level of these factors among students with low, average and high GPAs.

RESULTS

We tested whether students' time management, coping responses and previous academic result have direct significant effect on academic achievement among undergraduate students. Regression analysis was conducted to test time management, coping responses and previous academic result as predictor of academic achievement. Table 1 shows the mean scores, standard deviation and Cronbach's alpha for time management, coping responses and previous academic result. The Cronbach's coefficient alpha values for scales measuring short-ranged planning (0.776), long-ranged planning (0.761), attitude toward time (0.635), problem focused coping (0.864), emotion focused coping (0.849), and avoidant focused coping (0.824) indicated acceptable reliability.

Time Management

In assessing the students' time management using the TMQ, the results showed that the mean score for short-ranged planning was 24.2 ± 5.8 , long-ranged planning was 36.4 ± 7.2 , and attitude toward time was 21.7 ± 4.2 . Majority of the students indicated that they used short-ranged planning (64.6%), long-ranged planning (61.8%) and attitude toward time (59.4%) moderately. A small percentage of students stated that they were highly users of short-ranged planning (18.3%), long-ranged planning (21.1%) and attitude toward time (24.3%). Less than one fifth of the respondents said that they used short-ranged planning (17.1%), long-ranged planning (17.1%) and attitude toward time (16.3%) minimally (Table 1).

**Table 1. Mean, Standard Deviations and Students' Responses to Dimensions of Time Management, Coping Responses and Previous Academic Result**

Variable	M	SD	Cronbach's Alpha	Level of Variable	Response Rate (%)
Short Range Planning	24.2	5.8	0.776	High	101(18.3)
				Moderate	356(64.6)
				Low	94(17.1)
Long Range Planning	36.4	7.2	0.761	High	116(21.1)
				Moderate	341(61.8)
				Low	94(17.1)
Attitude Toward Time	21.7	4.2	0.635	High	134(24.3)
				Moderate	327(59.4)
				Low	90(16.3)
Problem Focused Coping	59.3	8.7	0.864	High	98(17.8)
				Moderate	366(66.4)
				Low	87(15.8)
Emotion Focused Coping	60.4	8.8	0.849	High	92(16.7)
				Moderate	362(65.7)
				Low	97(17.6)
Avoidant Focused Coping	56.6	8.9	0.824	High	97(17.6)
				Moderate	364(66.1)
				Low	90(16.3)
MCE	3.4	0.45	-	Excellent	89(16.2)
				Average	371(67.3)
				Fair	91(16.5)

Analysis of variance (ANOVA) was used to examine the differences in the level of time management practices among students with low, average and high GPAs. Levene's test of equality of error variances was conducted and the p-value for short-ranged planning = .111, p-value for long-ranged planning = .709, and p-value for attitude toward time = .075. Based on these results, the three p-values were shown to be greater than $\alpha = 0.01$. Since the results failed to reject the null hypothesis, the variances appeared to be equal and the samples in this study were said to be random or independent. The results were further analyzed and showed that there were significant differences ($p < 0.001$) in the short-ranged planning, long range planning and attitude toward time levels between the high, average and low GPA students (Table 2). The results showed that there were significant differences on short-ranged planning [$F(2, 548) = 7.815, p < 0.001$], long-ranged planning [$F(2,548) = 16.658, p < 0.001$] and attitude toward time [$F(2,548) = 4.738, p < 0.05$] for high, average and low achievers.



Table 2. Differences in Time Management, Coping Responses and Category of Students (GPA)

Variable		Sum of Squares	df	Mean Square	F	Sig.
Short-ranged planning	Between group	516.556	2	258.278	7.815	0.000
	Within group	18111.270	548	33.050		
	Total	18627.826	550			
Long-ranged planning	Between group	1654.195	2	827.097	16.658	0.000
	Within group	27208.430	548	49.650		
	Total	28862.624	550			
Attitude toward time	Between group	166.247	2	83.124	4.738	0.009
	Within group	9614.806	548	17.545		
	Total	9781.053	550			
Problem Focused Coping	Between group	2315.746	2	1157.873	16.021	.000
	Within group	39605.652	548	72.273		
	Total	41921.397	550			
Emotion Focused Coping	Between group	2226.371	2	1113.186	15.113	.000
	Within group	40363.168	548	73.655		
	Total	42589.539	550			
Avoidant Focused Coping	Between group	1044.960	2	522.480	6.789	.001
	Within group	42176.521	548	76.964		
	Total	43221.481	550			

Next, Post Hoc Multiple Comparisons test (Bonferroni) was calculated to determine which means are similar and which means are different (Table 3). Based on the result, it can be said that students who frequently used short-ranged and long-ranged planning have higher GPA than students with moderate or minimal usage of short-ranged and long-ranged planning. Average students with GPA of 2.50 to 3.49 were found to have better attitude toward time than students with GPA of less than 2.50, while there was no differences in attitude toward time between high achievers and average students.

Coping Responses

The mean score for coping responses were as followed: problem focused coping was 59.28 ± 8.73 , emotion focused coping was 60.39 ± 8.79 , and avoidant focused coping was 56.62 ± 8.86 . In general, majority of the respondents indicated that they used problem focused coping (66.4%), emotion focused coping (65.7%) and avoidant focused coping (66.1%) moderately. A small percentage of students stated that they frequently used problem focused coping (17.8%), emotion focused coping (16.7%) and avoidant focused coping (17.6%) as their coping responses to stressful environment. Less than one fifth of the respondents said that they slightly used emotion focused coping (15.8%), emotion focused coping (17.6%) and avoidant focused coping (16.3%) as their coping responses to demanding situation (Table 1).



Analysis of variance (ANOVA) was used to examine the differences in the level of time management practices among students with low, average and high GPAs. Levene's test of equality of error variances was conducted and the p-value for problem focused coping = .736, p-value for emotion focused coping = .654, and p-value for avoidant focused coping = .500. Based on these results, the three p-values were shown to be greater than $\alpha = 0.01$. Since the results failed to reject the null hypothesis, the variances appeared to be equal and the samples in this study were said to be random or independent. The results were further analyzed and showed that there were significant differences ($p < 0.001$) in the problem focused coping, emotion focused coping and avoidant focused coping levels between the high, average and low GPA students (Table 2). The results showed that there were significant differences on problem focused coping [$F(2,548) = 16.021, p < 0.001$], emotion focused coping [$F(2,548) = 15.113, p < 0.001$] and avoidant focused coping [$F(2,548) = 6.789, p < 0.001$] for high, average and low achievers.

Next, Post Hoc Multiple Comparisons test (Bonferroni) was calculated to determine which means are similar and which means are different (Table 3). Based on the result, it can be said that high achievers used the combination of problem focused, emotion focused and avoidant focused coping than average and low achievers.

Previous Academic Results

The descriptive statistics of previous academic result (MCE) showed that mean score was $3.4 \pm .45$. Majority of the students were categorized as average students (67.3%), a small percentage of students were considered as high achievers (16.2%) and less than one fifth of the respondents were regarded as low achievers (16.5%) (Table 1).

To establish the relationship among the variables involved in the model, a correlation was conducted to determine the pair of variables that are significantly related (Table 4). Short-ranged and long-ranged planning was positively and significantly correlated with problem, emotion and avoidant focused coping and grade point average. Attitude toward time was positively and significantly correlated to problem and emotion focused and grade point average, but did not significantly correlated to avoidant focused coping. All three dimensions of coping responses are positively correlated to grade point average. The correlations are all significant at .01 (**) and .05 (*) level of significance.

Table 3. Post Hoc Multiple Comparisons in Time Management and Category of Students (GPA)

	(I) GPA	(J) GPA	MD (I-J)	SE	Sig.	95% Interval Confidence	
						Lower Bound	Upper Bound
Short-ranged planning	1	2	-.44689	.68815	1.000	-2.0994	1.2056
		3	-2.35152*	.72752	.004	-4.0985	-.6045
	2	1	.44689	.68815	1.000	-1.2056	2.0994
		3	-1.90463*	.54740	.002	-3.2191	-.5901
	3	1	2.35152*	.72752	.004	.6045	4.0985
		2	1.90463*	.54740	.002	.5901	3.2191
Long-ranged planning	1	2	-1.3023	.84345	.369	-3.3277	.7231
		3	-4.4975*	.89170	.000	-6.6388	-2.3562
	2	1	1.3023	.84345	.369	-.7231	3.3277
		3	-3.1952*	.67093	.000	-4.8063	-1.5840
	3	1	4.4975*	.89170	.000	2.3562	6.6388
		2	3.1952*	.67093	.000	1.5840	4.8063
Attitude toward time	1	2	-1.5130*	.50139	.008	-2.7170	-.3090
		3	-.8940	.53008	.277	-2.1669	.3789
	2	1	1.5130*	.50139	.008	.3090	2.7170
		3	.6190	.39884	.364	-.3387	1.5768
	3	1	.8940	.53008	.277	-.3789	2.1669
		2	-.6190	.39884	.364	-1.5768	.3387
Problem focused	1	2	-2.74366*	1.01762	.022	-5.1873	-3.000



coping		3	-5.84900*	1.07584	.000	-8.4325	-3.2655	
		2	1	2.74366*	1.01762	.022	.3000	5.1873
		3	-3.10534*	.80948	.000	-5.0492	-1.1615	
		3	1	5.84900*	1.07584	.000	3.2655	8.4325
		2	3.10534*	.80948	.000	1.1615	5.0492	
		Emotion focused coping	1	2	-3.30459*	1.02731	.004	-5.7715
Emotion focused coping		3	-5.90082*	1.08608	.000	-8.5089	-3.2928	
		2	1	3.30459*	1.02731	.004	.8377	5.7715
		3	-2.59624*	.81718	.005	-4.5586	-.6339	
		3	1	5.90082*	1.08608	.000	3.2928	8.5089
		2	2.59624*	.81718	.005	.6339	4.5586	
		Avoidant focused coping	1	2	-.6813	1.05013	1.000	-3.2031
Avoidant focused coping		3	-3.3726*	1.11021	.007	-6.0386	-.7066	
		2	1	.6813	1.05013	1.000	-1.8404	3.2031
		3	-2.6912*	.83534	.004	-4.6972	-.6853	
		3	1	3.3726*	1.11021	.007	.7066	6.0386
		2	2.6912*	.83534	.004	.6853	4.6972	

Table 4. Correlation of the Factors of Time Management, Coping Responses and Grade Point Average

	Problem Coping	Focused Coping	Emotion Focused Coping	Avoidant Focused Coping	GPA
Short Range Planning	0.425**		0.361**	0.130**	0.185**
Long Range Planning	0.402**		0.387**	0.168**	0.262**
Attitude Toward Time	0.088*		0.098*	0.062	0.086*
GPA	0.250**		0.240**	0.157**	-

Table 5 contains the results of a stepwise-entry linear multiple regressions in which each of the three predictors were used to predict GPA. Results indicated the regression model was statistically significant ($F = 20.724$; $df = 3, 547$; $p < .001$) and accounted for 10.2% of total variance in GPA. In sum, this regression model verifies that at least 10.2% of variance in undergraduates GPA can be predicted via the three variables (long range planning, problem focused and denial focused coping).

Table 5. Stepwise-entry linear regression predicting academic achievement from time management and coping responses

Variables	beta	t
Long range planning	.182	4.098 *
Problem focused coping	.158	3.531 *
Denial focused coping	.095	2.276 *

* $p < 0.05$

DISCUSSION

The results of the present study did not support previous investigations that showed there were significant effects of previous academic result on academic achievement (Bridgeman et al. 2000; McKenzie & Schweitzer 2001). The result showed that previous academic result was not a predictor and has no significant effect on academic achievement. This result suggests that regardless whether students used to have excellent, average or poor academic result during high



schools, it cannot predict or has no influence on their grade point average when they are at the university. This means that irrespective of previous academic results, students should no longer perceive that being excellent students in the past would last forever. Students should realize that life as undergraduate students is not always on the bright side. Even though they used to be excellent students during high schools, some of them are not totally prepared to confront with academic demands and pressure at the university (Rush et al. 2005). Other factors such as the inability to cope with the demand, to adjust the academic environment and to manage the time or study materials for tests may lower the students' GPA.

Additional results revealed that short-ranged planning and attitude towards time were not predictors and have no significant effect on academic achievement. In other words, regardless of whether students practiced short-ranged planning of time management or have positive or negative attitude towards time, these two variables are not significant factors that can predict or influence academic achievement of students. Short-ranged planning required students to plan and schedule in advance of what they want to do on daily or weekly basis. However, if their plans and schedules were too tight or not flexible, they might not be able to implement or accomplish their goals. Students with positive attitude toward time will usually use and spend their time productively, regulate the time they used, have sense of urgency on academic work and capable of rejecting others' request or unprofitable activities that would interfere with their academic work. Nevertheless, being too rigid towards time may cause stress and affect their academic achievement.

The result of this study also showed that emotional focused coping was not a predictor and has no significant effect on academic achievement among the undergraduate students. This result suggested that students may find that using emotional-focused coping was only useful when they perceived that there was nothing they could do to change the stressful conditions. In order to normalize their emotions, students used emotional focused coping to overcome the distress so that they could go on with their life. This result also suggested that other possible factors may have lowered the power of time management (short range planning and attitude towards time) and coping response (emotional focused coping) on academic achievement.

However, the results of this study showed that there were significant effects of long-ranged planning of time management and coping responses (problem focused and avoidant focused) on academic achievement. The results indicated that long range planning, problem focused and avoidant focused coping response can predict and have significant effects on academic achievement. Students who used long range planning of time management, problem focused and denial focused coping responses in their daily life can improve their academic achievement at the university by 10.2%.

This study has established a new understanding of time management, previous academic result and coping response in predicting variance on academic achievement. It highlighted the importance of long-ranged planning of time management on academic achievement. It is essential for students to reflect and set their goals in the long run so that they have a clear idea of what they need to do and carry out their plans as scheduled. Students who practiced long-ranged planning usually do not procrastinate until the last minute to study for their examination or submit their assignments. These characteristics may help students to be well prepared in meeting with academic challenges at the university and help them to have higher grades.

As predicted, students who used problem focused coping were capable of dealing and changing the stressful environment to a better situation. This ability may help students to adapt and adjust their daily life to new experience with low resistance and insignificant stress. Having a piece of mind may help students to focus on their study and motivate them to give their fullest effort to achieve good grades in examinations. Surprisingly, avoidant focused coping was found to be a significant predictor for academic achievement even though the regression weight was small ($\beta = 0.095$, $p < 0.05$). The result suggested that students addressed the problem underlying the academic stressors by engaging in strategies such as denial, distancing, and mental disengagement. Even though this type of coping response is not the effective way to cope with stressful situation, students may still use it as an immediate way to manage their challenging issues and feel relief even for a short period of time. Both of these results suggested that there is a need to use different coping responses depending on what types of issues students are facing.

CONCLUSIONS AND SUGGESTIONS

This study has provided evidence that students' time management (long-ranged planning) and coping responses (problem focused and avoidant focused) has a significant impact on their academic achievement in university. Without a doubt, good time management practices can help students to plan their academic work and run their daily life routine smoothly. However, there are times when students planned their time too perfectly; it makes their life difficult and stressful due to inability to adapt to the changes that happened around them either too sudden or fast. As a result, they tend to feel tensed, worried and overwhelmed with their daily routine which may have negative impact especially on their academic achievement.



Given that long-ranged planning of time management, problem focused and denial focused coping response can predict academic achievement, the finding might help university counsellors to teach time management and coping skills and encourage students to use these skills effectively in their daily life. It would be helpful especially for new students to learn and practice the use of time management skills and coping strategies to overcome stressful events in their daily life at the university. They should also be warned that being an excellent student in high school does not guarantee them to be excellent in the university if they did not practice effective time management and coping skills. Hopefully, by providing the knowledge of effective time management and coping skills to students, it will help students to encounter their worries in academic life and aid them to excel at the university. Even though short-ranged planning, attitude toward time and emotional focused coping were not significant predictors of academic achievement, students may still use any of them as tools to ease their daily life at university.

For future research, it would be interesting to examine the effect of specific coping strategies such as taking control (problem focused coping), praying (emotional focused coping) and denial (avoidance focused coping) on academic achievement. It will also be beneficial to investigate the effect of gender differences on coping strategies and how the relationships between gender differences and coping strategies have an impact on academic performance. Perhaps, future study may want to explore the role of time management and coping skills as mediator between other psychological factors to academic performance. Since this study used a cross sectional approach, future study may want to employ longitudinal method to examine students' decision making on coping responses when they are in stressful situation.

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