The Association Between Self-Regulation and Procrastination Among Private University Students in Malaysia

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Academic procrastination is prevalent among university undergraduates and it affects students' well-being and academic performance. Procrastination has become a concerning phenomenon in recent years and is not taken seriously. As self- regulation is one of the predictors of academic achievement among undergraduates it is often linked to procrastination. Thus, this study aimed to investigate if there are gender differences in self- regulation and procrastination and whether there is a relationship between self- regulation and procrastination among 287 undergraduates from four different private universities in Malaysia. Data were collected using self-report survey with convenience sampling method. The Short Self- Regulation Questionnaire (Carey, Neal, & Collins, 2004) was used to measure self-regulation while procrastination was measured using Tuckman Procrastination Scale (Yockey, 2016). Results of t-test analyses showed that there is no significant gender difference in both self-regulation and procrastination. Moderate significant negative relationship was found between self-regulation and procrastination. Hence the findings reflect that self-regulation could predict procrastination where students with high self-regulation will tend to procrastinate less. Therefore, self-regulation strategies and interventions should be taught to undergraduates in order to further enhance their self-efficacy as well as to have intrinsic motivation to be more goal-directed which could be aimed to reduce academic procrastination.

Keywords: gender, procrastination, private university undergraduates, self- regulation.

At this current fast paced world, education or knowledge is an important channel used as a measuring tool for excellence. In Malaysia, parallel to Vision 2020 to produce dynamic citizens, tertiary institutions worked very hard to strengthen human capital and reinforce knowledge based economy (Tham, 2013). Pursuing education in tertiary institutions requires precise effort and attention from the learners. Self-interest, personal motivation and punctuality are important criteria needed to pursue academic achievement. However, there were many cases in which students missed these criteria. As such, students failed to regulate learning and it is known as academic procrastination (Santrock, 2011).

Procrastination has been frequently known as a maladaptive behavior that impedes successful academic experiences and further affects competency in knowledge and skill acquisition in tertiary education (Van Eerde, 2003). In a simpler note, procrastination is an act of postponing to initiate, to do or to complete a task that one intends to complete within a specific timeframe (Wolters & Corkin, 2012). Academic procrastination has become very common among students. Recent study reveals that most of the Malaysian university students admitted that they are procrastinators (Fatimah, Lukman, Khairudin, Shahrazad, & Halim, 2011). A study found that Asian students who hold strong to collectivistic values and engaged in avoidance

coping style might experience stress thus distracting them from their academic tasks (Kim, Alhaddab, Aquino & Reema Negi, 2016). In Malaysia, where the people still practice collectivistic values, procrastination phenomenon in academic field might seems to be too common.

One of the most frequently associated factors with procrastination is poor self-regulation. Self-regulation is the ability to drive goal-directed behavior and to achieve long-term goals by delaying short-term gratification (Carey, Neal, & Collins, 2004). Self-regulation is also one of the predictors of academic achievement for students (Stadler, Aust, Becker, Niepel, & Greiff, 2016). According to Self Determination Theory (STD), self-regulation is associated with high motivation. It is generally agreed that students with high motivation are more likely to experience positive academic outcomes and well-being as they practice good self-regulation (Deci & Ryan, 2012).

Evidences from previous study such as Kandemir (2014) showed significant negative correlation between self-regulation and procrastination. This is in line with existing literatures results which suggested that procrastination is linked to weak self-regulation (Ferrari, 2001; Park & Sperling, 2012). Examining the link between self-regulation and procrastination therefore helps to uncover what motivates or demotivates students in learning, thus reducing the procrastination phenomenon among students.

Amidst many university students today, academic procrastination has been prevalent despite the gender of individuals. Earlier gender based studies on procrastination stated that females procrastinate more frequently in colleges compared to males (Rodarte-Luna & Sherry, 2008). Meanwhile, there are literatures which state that procrastination is common among male students (Balkis & Duru, 2009; Prohaska, Morrill, Atiles & Perez, 2000). On the other hand, Özer (2011) found insignificant difference between male and female students on academic procrastination. The present study attempts to further investigate the mixed evidences on gender effect on procrastination among university students. To fill this gap, the objective of this study is to investigate the relationship between self-regulation and academic procrastination among Malaysian private university students. Effect of some demographic variable such as gender on self-regulation and procrastination was also examined.

Method

Participants and Procedure

A total of 287 private university students located in Peninsular Malaysia participated in this study. The locations of the study were four private universities in Malaysia. The age ranged from 18 to 26 years old (M= 20.01, SD= 1.46). More than half of the respondents were male (50.5%). Majorities of the respondents were Chinese (76%), followed by Indian (16.4%), Malay (4.5%) and other ethnicities (3.1%).

The respondents were recruited using convenience sampling method. The respondents were briefed the purpose of the study, private and confidentiality issues and they were asked to state their willingness to be the participants in this study. Respondents were required to respond to two assessments, Tuckman Procrastination Scale (TPS) and Short Self-Regulation Questionnaire (SSRQ). The paper and pencil survey took about 15 minutes to complete.

Measures

Students' procrastination was measured using Tuckman Procrastination Scale (Tuckman, 1991). TPS is one of the most

common assessment scale used in assessing academic procrastination (Yockey, 2016). TPS consists of 16-item measures with 4-point Likert scale ranging from 1 (that is not me for sure) to 4 (that is me for sure). Among the 16 items, 4 of them are reversed score items. Total scale was computed, with high score indicates higher level of procrastination. The Cronbach's alpha for the scale was .804.

Short self-regulation questionnaire (SSRQ) was used to measure students' level of self-regulation with 31-item scale. Established by Carey, Neal & Collins (2004), it contains 14 reversed score items. Empirical evidences support the relevance of SSRQ in addiction study (Lopez-Torrecillas, Garcia, Garcia, Izquierdo, & Sanchez-Barrera, 2000) The respondents were asked to rate on 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) and sum of the score was calculated. The 31 items measure factors such as monitoring, decision making, learning from mistakes, perseverance, self–evaluation, creativity and mindful awareness. Higher scores obtained in SSRQ indicate higher level of self-regulation. The Cronbach alpha for the scale was .825 which indicates good reliability.

Results

The result of correlation analysis indicates a significant negative correlation between self-regulation and procrastination (r= -.59, p< .001). This finding reflects students who have better self-regulation tend to procrastinate less than those who have less self-regulation.

Results revealed that males and females were not significantly different in both procrastination and self-regulation (see Table 1). However, by comparing the mean, males scored higher in both variables than females.

Table 1

Differences in Procrastination and Self-Regulation by gender (n=287)

Variable	Male				Female					
	M	*SD*	*Min.*	*Max.*	*M*	*SD*	*Min.*	*Max.*	*t*	*p*
Procrastination	38.71	6.83	19	57	38.18	6.29	22	55	.68	.49

Discussion

This study revealed that there was no significant gender difference in self-regulation among university undergraduates. This is consistent with the research findings of Cloete, Botha and Breytenbach (2012) where there was no gender difference in self-regulation and psychopathology among a group of South African university students. Similarly Simmerman and Kitsantas (2014) in their study on self-discipline, self-regulation and academic achievement found no significant gender difference among the variables. Grestsdottir et al. (2014), in their comparative study of participants from Germany, France and Ireland also found that there was no gender difference in self -regulation among university students in France and Germany but not among the Ireland participants where there was a significant gender difference in self -regulation. These contradictory findings may be attributed to the different age group, ethnic and cultural background of the participants. Other contributing factors may include individual self-regulating factors such as study hours, intrinsic motivation, self-efficacy, beliefs

and the delay of gratification (Herndon & Bembenutty, 2016).

Although there was no significant gender difference in self-regulation but our study showed a negative correlation between self-regulation and procrastination. This indicated that individuals with higher level of self-regulation will exhibit lower level of procrastination. This result is consistent with previous studies. Kandemir (2014) found that students with positive self-regulation, self-efficacy, life satisfaction and hope had higher academic achievement and lower level of procrastination. It was suggested that students who practiced good self-regulation coped better with their academic studies by utilizing more effective learning strategies to understand their tasks (Park & Sterling, 2012). Ozer, Callaghan, Bokszczanin, Ederer, & Essau (2014) revealed that self-regulation has direct effect on procrastination. This is also supported by Wolters and Benson (2013) in their study where it was found that the more the students used the self-regulated motivational strategies the lower was their academic procrastination. A recent study on self-regulation among Facebook users revealed individuals with low self-control would procrastinate by spending their time on the social media (Meier, Reinecke & Meltzer, 2016) as they failed to regulate and inhibit themselves from succumbing to temptation when facing a boring tasks (Dewitte & Schouwenburry, 2002).

Time management is an influential factor in self-regulation. Thibodeaux, Deutsch, Kitsantas and Winsler (2017) in their study showed that there is a relationship among first year college students' time use, academic self-regulation and academic achievement. Students generally planned and spent less time on academic than socializing and work obligation in their first semester of study. Additionally, self-efficacy for self -regulation also significantly predicts the negative impact of procrastination. Self-efficacy which is the belief of one's capabilities to succeed in a task has been found to be one of the strongest factors in predicting performance (Klassen, Krawchuk, & Rajani, 2008). Besides self-efficacy, self-belief is also important for self-regulation practices. Self-belief is the trust in one's capability to self-regulate. Studies showed that there was a negative relationship between self-efficacy and procrastination (Karacaoglu & Kaplan 2016). According to Scheier et al. (2006), purpose is also closely tied to self-regulation as it helps an individual to identify what an individual want to achieve and how best to pursue it and follow through with action. The study by Vazeou-Nieuwenhuis, Orehek, and Scheief (2017) also revealed that purpose mediated the link between self-regulation and people satisfaction with life.

This study has several limitations as it focused on gender and other demographic variables such as religion, ethnicity and culture which might influence self-regulation and procrastination were not given due consideration. Different culture may influence the individual's attitudes toward self-belief and purpose. Second, the result cannot be generalized as the study only involved undergraduates of four private universities. Undergraduates of public universities may be exposed to different learning environmental cultures which could influence their self-regulation and procrastination. Third, using convenience sampling method for data collection did not provide equal opportunity for all the undergraduates of the four private universities to participate in the study thus the sample may not be representative of the population. To understand the influence of self -regulation on procrastination on university students, future research may include participants from public and other private universities. It would be worthwhile for future study to examine the influence of cultures on self-regulation. Additionally, longitudinal

study will be more effective in revealing the determinant effects of self- regulation on procrastination.

Implication

The results of this research serve as solid statistical evidence that poor self-regulation result in high procrastination among students. In order to overcome the effect of procrastination and to improve self-regulation among tertiary education students some actions need to be taken. It is suggested to create awareness of negative consequences of procrastination among the students through in-campus programs or talks. Additionally university administrators should organize more platforms to enhance students' self-regulation by organizing workshops which students are taught self-regulated learning strategies where the individuals learn how to plan, evaluate and reflect on the learned materials. Students be guided to see themselves with the self-efficacy and goal directed motives that will encourage them to generate expectations which help in the pursuing of their academic goals. The result of our study also indicates that procrastination can be eliminated by enhancing students' self-regulation.

Conclusion

Self-regulation and academic procrastination among students are major concern of parents and educators. Procrastination may cause stress and anxiety as one is constantly thinking of the tasks which need to be completed. The postponement of chores and assignments might lead to the lack of time to complete them. As studies have shown that self-regulation is a strong predictor of academic procrastination, students need to learn goal directed motivation interventions such as goal priming, nudges and situational cues which might lead to goal directed behavior .

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