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Content list available at: www.benthamopen.com/TOPSYJ/

DOI: 10.2174/1874350101811010171, 2018, *11*, 171-183

RESEARCH ARTICLE

# Mitigating Academic Distress: The Role of Psychological Capital in a Collectivistic Malaysian University Student Sample

Ryan Yumin Chua[1, 2,*], Yin Lu Ng[2] and Miriam Sang-Ah Park[1 ,3]

[1]*Jeffrey Cheah School of Medicine & Health Sciences, Monash University Malaysia, Subang Jaya, Malaysia*
[2]*Department of Psychology, HELP University, Kuala Lumpur, Malaysia*
[3]*School of Social and Health Sciences, Leeds Trinity University, Leeds, UK*

Received: July 6, 2018 Revised: September 15, 2018 Accepted: September 30, 2018

**Abstract:**

***Background:***

The emphasis of education within the collectivistic Malaysian culture has exposed Malaysian university students to high levels of academic stressors. The experience of stress that stems from the experience of such stressors can be positive (eustress) or negative (distress). However, the presence of adaptive abilities to academic stress may influence the experience of stress. The present study examines psychological capital as the adaptive ability to academic stress among a collectivistic Malaysian university student sample.

***Methods:***

This cross-sectional study was conducted with a total of 183 students from a university in Malaysia.

***Findings:***

Analyses showed that university students with high academic distress did not predict low academic performance; while, university students with high academic eustress predicted high academic performance. Psychological capital was found to mitigate the influence of academic distress on academic performance but not on the influence of academic eustress on academic performance.

***Conclusion:***

The study debunked the common misconceptions about academic stress. It highlighted that the experience of eustress and the presence of psychological capital may be an important resource for students' stress coping.

**Keywords:** Collectivism, Academic stress, Psychological capital, Malaysian university students, Distress, Eustress.

## 1. INTRODUCTION

Education plays a vital role in facilitating personal development and providing broader career and future opportunities. The great emphasis placed on education had led to an increased experience of stress. This is prevalent among university students where they were found to be exposed to high amounts of stressors [1 - 4]. They are exposed to a wide variety of academic stressors such as continuous evaluations through exams and tests, large amounts of course material to learn, limited time to review the learnt contents, unclear assignments, excessive homework to complete and student-teacher relationship [5 - 8]. The exposure to these stressors had led them to experience high levels of academic stress.

Academic stress is defined as the state of psychological tension brought upon from academic stressors (sources of

* Address Correspondence to this author at the Jeffrey Cheah School of Medicine & Health Sciences, Monash University Malaysia, Subang Jaya, Malaysia, Tel: +6016-3010320, E-mail: yumin.chua@monash/edu

potential stress) such as exams, homework, grades and future education [9 - 11]. The responses to these academic stressors can yield different types of stresses such as eustress (positive stress) and distress (negative stress) [12, 13]. The ways on how these academic stresses are perceived may differ according to one's interpretation of the stressor [12]. These interpretations may be influenced by different factors such as inherent cultural values and an individual's adaptive abilities during an experience of a stressful situation [14 - 16]. This has raised interest on how university students from different cultural orientations would interpret academic stress and adapt to such stressful situations.

### 1.1. Background of Study

Malaysia is a multicultural country which comprises people from various ethnicities such as Malay, Chinese and Indian [17]. Over the past decade, Malaysia has allocated a substantial amount of its finances and human resources to develop a 'world-class' higher education in the region [18]. Higher education institutions in Malaysia have become more competitive and have strived to improve its quality of education [19]. Furthermore, Malaysia is of a collectivistic culture which places high emphasis on academic success [14, 15]. This has inadvertently caused Malaysian university students to be exposed to high levels of academic stressors that could influence their experience of stress.

People from a collectivistic culture place high emphasis on interdependence, sociability and family integrity [20, 21]. They hold high standards for academic success as they believe that academic success plays an important role in determining one's success and is closely associated to their family's integrity [22 - 24]. For example, Chinese students from a collectivistic culture believe that they have to perform well academically as it is a source of pride to the family [25, 26]. They would put in extra efforts, such as spending high number of hours studying and completing homework to ensure that they would be able to perform well academically [27]. For them, the failure to perform well academically would mean that they have shamed and brought down the family's integrity [27, 28].

Furthermore, university students from a collectivistic culture believe that performing well academically is a symbol of filial piety to their parents, paying back for the care and nurturance given to them [25]. Furthermore, academic success could help them ensure financial security and job security and a better career achievement in the future [22, 29, 30]. These viewpoints which are instilled within the collectivistic culture may have important implications on the individual's environment and personal systems, which to a certain extent, influence the ways on how the individual behaves. Therefore, it can be postulated that the collectivistic culture may have an influence in the interpretation of academic stressors which would influence the individual's experience of stress.

This is similar in the collectivistic Malaysian culture which regards academic success highly. In fact, Malaysian parents, especially from the Chinese and Indian families have high expectations from their children to perform well academically [14]. In this sense, they associate academic success to academic performance. Academic performance is defined as an individual's accumulated results throughout the entire university semester (through class activities, assignments and examinations) [31].

Acknowledging the views of the importance of academic success from the lens of a collectivistic Malaysian culture, it could be postulated that Malaysian university students are exposed to a wide variety of academic stressors. However, the ways on how these academic stressors are interpreted may lead to different types of stress experience [12, 13]. These experiences can be positive (eustress) or negative (distress) [13]. Eustress refers to the positive psychological response to a stressor which elicits positive outcomes such as the sense of fulfilment and exhilaration while distress refers to the negative psychological response to a stressor which leads to negative outcomes such as anxiety and anger [32, 33]. Selye [13] suggested that the reaction to stressors with positive emotions such as gratitude, hope and goodwill would most likely maximise the experience of eustress and minimize the experience of distress. Meanwhile, the reaction to stressors with negative emotions such as hatred, hopelessness and anger would lead to the experience of distress [12, 13]. To illustrate this empirically, in their study of eustress and health among nurses, had measured eustress based on positive psychological states of hope, meaningfulness and positive affect. Findings from this study suggest that eustress can be distinguished from distress. Further, the reaction to stressors positively or negatively may lead to the experiences of eustress and distress respectively [33].

Hence, individuals who respond to stressors with positive emotions would most likely experience eustress, while individuals who respond to stressors negatively would experience distress [12]. Given the wide variety of academic stressors experienced by university students in the collectivistic Malaysian culture, it is expected that university students who respond to academic stressors negatively would have poor academic performance [34, 35]. Meanwhile, university students who respond to academic stressors positively are expected to perform well academically. It is important to

examine eustress (*i.e.* positive interpretation of the stressor) among university students especially within the collectivistic Malaysian culture as these studies remain to be insufficient and scarce.

### 1.2. Mitigating Academic Stress

Though it is understood that the exposure to academic stressors may lead to different types of experience of stress, not all university students would succumb to the negative influences of the academic stress experienced. These university students may possess unique psychological abilities and traits that would assist them in the process of adapting to the academic stress experienced [16, 36, 37].

Psychological capital is defined as the positive psychological state of development in a person and is characterized by having high hope, optimism, resilience and self-efficacy [38, 39]. This concept is operationalized through the combination of hope, optimism, resilience and self-efficacy [40]. Hope refers to the motivational state in an individual that is derived from the interaction between an individual's goals, agency and pathways [41]. When experiencing an obstacle, an individual with hope would be motivated to overcome the obstacle by their sense of agency (goal-directed energy) [41]. Their sense of agency would supplement them with the willpower and determination to allocate the necessary energy to overcome the obstacle faced [41]. In that sense, hope may be a positive resource that protects individuals from negative perceptions of stress [42].

Meanwhile, optimism refers to the capabilities of an individual to look at the positive aspects of the events experienced [43, 44]. Individuals with high optimism would attribute the cause of positive events to be from their own abilities and values. These abilities and values would help boost their morale and self-esteem [44]. This would allow them to safeguard themselves from the negative perceptions of stressors such as guilt and self-blame and subsequently perceive the obstacle experienced as something manageable [39, 45]. Similarly, resilience, which refers to the individual's ability to bounce back from an adverse event and have a relatively positive outcome may help in protecting the individual from negative perceptions of stress [46]. Individuals who are resilient are emotionally stable when they are experiencing a stressor. They are able to adapt to changing demands and are willing to explore new environments [47]. Resilient individuals will be able to perceive a stressor to be positive in nature instead of distressful as they would be able to adapt to changing demands easily.

Self-efficacy, on the other hand, refers to the individual's confidence in his/her own capabilities to overcome any challenges [48]. People who are highly confident are able to persevere and overcome obstacles as they would be able to extend their motivation to put in extra effort to overcome the challenges experienced [48, 49]. Hence, individuals with high self-efficacy are able to adapt to the demands and responsibilities needed by them. Although hope, optimism, resilience and self-efficacy could all influence an individual's perception of stress separately, when these constructs are combined together, it would elicit a stronger relationship on performance and satisfaction than the individual components itself [16, 31, 38]. The combination of these constructs would form a composite concept which is reliable and robust [40].

Previous studies have examined the roles of psychological capital in the education setting and it was found that university students who possess high psychological capital were able to work as an adaptive ability to mitigate the negative influences of academic stress [16, 37] where the academic stressor is perceived to be more manageable [16]. They believe that they have sufficient resources (*i.e*. confidence in one's capabilities, ability to find alternative pathways) to manage the academic stressor experienced [16]. However, such studies were conducted within an individualistic context [16, 37]. In the Malaysian context that practices collectivistic cultural values, Malaysian university students may possess a variety of resources such as parental and family support in approaching an academic stressor [50]. Family members may play an active role to provide support (emotional support, assistance in assignments) to the university student to ensure that they perform well academically [50, 51]. For instance, if a university student struggles in completing an assignment; the presence of family members to provide help or guidance would help the university student complete the assignment [50]. The help and guidance provided could help improve their self-worth and self-efficacy. Furthermore, they would also be empowered with the knowledge that they would be able to seek assistance from their family members in overcoming academic stressors. Therefore, the assistance and support provided by family members may help them develop their psychological capital [16].

The development of the resources of psychological capital may work as an important asset that facilitates positive meaning-making of the stressors experienced [52]. The presence of the resources of psychological capital helps individuals understand the stressors in a positive manner. As Selye [13] highlighted, the experience of eustress and

distress would depend on the reaction to the stressors experienced. Therefore, university students who have high psychological capital may react to the stressors in a more positive manner; maximizing the experience of eustress and minimizing the experience of distress [13]. Hence, it can be postulated that high psychological capital would minimize the experience of distress; thus, reducing the negative influences of academic distress. Meanwhile, high psychological capital may lead to the maximization of the experience of eustress; thus, strengthening the positive effects of eustress.

### 1.3. Rationale of Study

As noted above, academic success is highly regarded within the collectivistic Malaysian culture [14]. The high emphasis on academic success within this collectivistic culture would lead to the exposure of high levels of academic stressors among university students [5 - 8]. This would inevitably lead to the experience of high levels academic stress. Though exposed to high levels academic stressors, the interpretation of these stressors may lead to different experiences of academic stress [12, 13]. As studies within the Malaysian collectivistic culture only emphasises on the experience of distress [34, 53, 54], it is essential to examine the experience of eustress within this unique setting. We predict that Malaysian university students who have high distress would have low academic performance while Malaysian university students who have high eustress would have high academic performance.

In addition, this study also aims to examine the roles of psychological capital as an adaptive ability to academic stress. As psychological capital may act as an important psychological ability and trait to assist the university student in adjusting to the academic stress experienced, we predict that university students who possess high levels of psychological capital will be able to adapt to the academic stress experienced. Hence, this study hypothesizes the following:

***Hypothesis*** 1: High levels of academic distress would predict low academic performance.

***Hypothesis*** 2: High levels of academic eustress would predict high academic performance.

***Hypothesis*** 3: Psychological capital would mitigate the relationship between academic distress and academic performance.

***Hypothesis*** 4: Psychological capital would strengthen the relationship between academic eustress and academic performance.

The insights obtained through the findings of this study would provide a better understanding on the types of academic stress experienced by the university students in a collectivistic Malaysian context. Secondly, it would highlight and debunk the common misconception that the experience of stress is only negative; but instead, the experience of stress could also be positive and beneficial. In addition, the findings from this study would also provide an overview on the importance of psychological capital within the education context in Malaysia. Proposals to improve educational success within the unique collectivistic Malaysian culture were also discussed.

## 2. METHOD

### 2.1. Preliminary Study

The measures used in the current study (The Distress Scale, Eustress Scale and Psychological Capital Questionnaire) was first adapted and tested in the Malaysian context as these measures were developed within the Western context. 35 undergraduate students who fulfil the inclusion criteria (second-year psychology undergraduate students) were recruited for the preliminary study to examine the validity of the measures. These students were different from the participants who participated in the actual study. The participants' feedbacks were taken into consideration and an academic expert who is the co-author of this paper was consulted to establish clarity and face validity of the reviewed questionnaire. Amendments were made to the questionnaire after the consultation. The changes to the statements is shown in the **Appendix** (Tables **A1**-**A3**).

### 2.2. Actual Study

#### *2.2.1. Participants*

183 second-year undergraduate psychology students from a university in Malaysia were recruited. Second-year

undergraduate students were recruited because they were expected to experience academic stress which stems from academic stressors (as compared to first year students who may experience non-related academic stressors such as adjusting to university life) [55]. The participants were recruited through a non-probability convenience sampling method and were recruited through the distribution of sign-up sheets in their classes. These participants had a mean age of 20.85 years (*SD* = 1.51) with participants' age ranging from 19 years to 32 years old. The participants' age is not normally distributed with skewness of 3.48 (*SE* = .18) and kurtosis of 18.58 (*SE* = .36). 25.68% (*n* = 47) of them were males while 74.32% (*n* = 136) were females. In terms of their ethnicity, 75.96% (*n* = 139) were Chinese, 13.66% (*n* = 25) were Indians, 4.37% (*n* = 8) were Malays and 6.01% (*n* = 11) were of other/mixed ethnicity (*i.e.*, Kadazan, Iban).

### *2.2.2. Measures*

The demographic questionnaire used in the current study was a self-generated questionnaire. Participants were required to report their student ID, gender, age, race and email address.

The participants distress and eustress were measured using the Academic Distress Scale and Academic Eustress Scale. The Academic Distress Scale was used to measure distress. This measure was adapted from the Distress Scale [56]. The scale is reliable as it yielded Cronbach's alpha scores of .91. The Academic Distress Scale consists of seven statements. The participants' academic distress levels were determined based on a six-point Likert scale with one being, "*False*" and six being "*Very True*". The scores were totalled and were divided according to the number of items in the scale to obtain the mean scores of the participant's distress. High mean scores obtained in the Academic Distress Scale would indicate high distress.

Meanwhile, the Academic Eustress Scale was used to measure eustress. The Academic Eustress Scale was adapted from the Eustress Scale [56]. The scale is reliable as it yielded a Cronbach's alpha score of .81. The Academic Eustress Scale contains fifteen items in which ten of the items measure eustress while five of the items were filler statements (scores were excluded). The participants' academic eustress levels were determined based on a six-point Likert scale with one being, "*False*" and six being "*Very True*". Similar to the Academic Distress Scale, the scores obtained in this scale were totalled and divided according to the number of items in the scale to obtain the mean scores of the participants' academic eustress. High mean scores obtained in the Academic Eustress Scale would indicate high eustress. It is important to note that the Academic Distress Scale and Academic Eustress Scale used in the study were different sets of questionnaires. Separate measures were used to measure the participants' interpretation and level of distress and eustress.

Psychological capital was measured using the adapted version of Psychological Capital Questionnaire [57]. The questionnaire is reliable as it yielded a Cronbach's alpha of .90. Findings from the preliminary study had shown that the statements in the adapted version of the Psychological Capital Questionnaire were suitable. The adapted version of Psychological Capital Questionnaire consists of 24 items which encompasses the following four factors, self-efficacy, hope, resilience and optimism. Each of the factors in Psychological Capital are measured by six items. The total scores obtained from the questionnaire were divided to obtain the mean scores of the participant's psychological capital. High mean scores obtained in the adapted version of the Psychological Capital Questionnaire would indicate high psychological capital.

The participants' semester's academic performance was measured based on their Grade Point Average (GPA) for the current semester.

### *2.2.3. Procedure*

The questionnaires were created on Qualtrics (an online platform which allows the gathering of data). The questionnaires were shared with the participants who were recruited *via* the distribution of sign-up sheets in their classes. As the participants were expected to experience high levels of academic stress in preparation of the final examination, they were directly emailed the Qualtrics link which contains the Demographic Questionnaire, Academic Distress Scale, Academic Eustress Scale and Psychological Capital Questionnaire two weeks prior to the commencement of the final exams as they are expected to experience high levels of academic stress due to the deadlines of assignments and final exams . The participants' semester Grade Point Average (GPA) were obtained from the administrator in the Department of Psychology with the students' explicit permission at the beginning of the new semester. The participants' student ID was used to identify their GPA.

## 3. RESULTS

### 3.1. Descriptive Analyses

The means, standard deviations, correlations and reliability coefficients are presented in Table **1**. Based on the analyses conducted, there are no significant differences between the mean scores of male and female and their academic distress ($t$ (181) = -1.61, $p > .05$), academic eustress ($t$ (181) = -.94, $p > .05$), and psychological capital ($t$ (181) = -.67 $p > .05$). Furthermore, analyses have shown that there are no significant differences between the mean scores of the participants ethnic groups and their academic distress ($F$ (3, 179) = .30, $p > .05$), academic eustress ($F$ (3, 179) = .47, $p > .05$) and psychological capital ($F$ (3, 179) = 1.93, $p > .05$). Descriptive data indicated that students reported high scores for academic distress ($M$ = 3.76, $SD$ = .94), academic eustress ($M$ = 3.86, $SD$ = .71), psychological capital ($M$ = 4.00, $SD$ = .64), and academic performance ($M$ = 3.06, $SD$ = .48). All the measures used in the current study (Academic Distress Scale, Academic Eustress Scale and Psychological Capital Questionnaire) yield a Cronbach's alpha value higher than .85. In addition, reliability analysis had also shown that the adapted version of the Psychological Capital Questionnaire, which consists of all the four factors, yielded a Cronbach's alpha of .69. Hence, the questionnaires used within the current context are reliable. The findings of the correlation analyses are presented in Table **1**.

**Table 1. Correlation Analysis. Means, Standard Deviations, and Correlations (N = 183).**

| – | – | Mean | SD | # of Items | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Age | 20.85 | 1.51 | 1 | - | -.02 | -.06 | .15* | -.26*** |
| 2 | Distress | 3.76 | .94 | 7 | -.02 | **(.86)** | -.19* | -.15* | -.04 |
| 3 | Eustress | 3.86 | .71 | 10 | -.06 | -.19* | **(.85)** | .63*** | .27*** |
| 4 | Psychological Capital | 4.00 | .64 | 24 | .15* | -.15* | .63** | **(.91)** | .21** |
| 5 | Academic Performance | 3.06 | .48 | 1 | -.26*** | -.04 | .27** | .21** | - |

*Note.* Reliability coefficients are shown in parentheses. * $p < .05$, ** $p < .01$, *** $p \leq .001$.

### 3.2. Main Analyses

Simple linear regression analyses were conducted to examine hypothesis 1 and hypothesis 2. Gender and ethnicity were controlled in the linear regression analyses. High academic distress was found to be a non-significant predictor of academic performance, $\beta$ = -.03, $t$ = -.41, $p > .05$. Therefore, hypothesis 1, high levels of academic distress would predict low academic performance was rejected. The regression analysis is presented in Table **2**.

**Table- 2. Distress in predicting Academic Performance (N = 183).**

| Variable | *B* | SE *B* | *β* | *t* |
|---|---|---|---|---|
| Constant | 3.40 | .22 | - | 15.71*** |
| Gender | .14 | .08 | .12 | 1.72 |
| Ethnicity | -.23 | .06 | -.30 | -4.25*** |
| Distress | -.02 | .04 | -.03 | -.41 |
| *F* | 7.05*** | | | |

*Note.* * $p < .05$, ** $p < .01$, *** $p \leq .001$.

Meanwhile, high academic eustress was found to be a significant predictor of academic performance, $\beta$ = .24, $t$ = 3.54, $p \leq .001$. Hence, hypothesis 2, high levels of academic eustress would predict high academic performance is supported. The regression analysis is presented in Table **3**.

**Table 3. Eustress in predicting Academic Performance (N = 183).**

| Variable | *B* | SE *B* | *β* | *t* |
|---|---|---|---|---|
| Constant | 2.70 | .25 | - | 10.78*** |
| Gender | .11 | .08 | .10 | 1.49 |
| Ethnicity | -.22 | .05 | -.29 | -4.18*** |
| Eustress | .16 | .05 | .24 | 3.54*** |
| *F* | 11.63*** | | | |

*Note.* * $p < .05$, ** $p < .01$, *** $p \leq .001$.

To examine the roles of psychological capital as a moderator for the relationship between academic distress on academic performance and the relationship between academic eustress on academic performance, hierarchical multiple

regression analyses were conducted. Gender and ethnicity were also controlled in the hierarchical multiple regression analyses. Findings from the hierarchical multiple regression analysis suggest that psychological capital is a significant moderator of the relationship between academic distress and academic performance, $\beta = .18$, $t = 2.63$, $p < .01$. Therefore, hypothesis 3, psychological capital would mitigate the relationship between academic distress and academic performance is supported The regression analysis is presented in Table **4**.

**Table 4. Distress moderated regression results for predicting Academic Performance (N = 183).**

| – | Model 1 | | | | Model 2 | | | | Model 3 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Variable** | ***B*** | **SE *B*** | ***β*** | ***t*** | ***B*** | **SE *B*** | ***β*** | ***t*** | ***B*** | **SE *B*** | ***β*** | ***t*** |
| Gender | .13 | .08 | .12 | 1.69 | .12 | .08 | .11 | 1.53 | .11 | .08 | .10 | 1.52 |
| Ethnicity | -.24 | .06 | -.30 | -4.30*** | -.26 | .05 | -.34 | -4.85*** | -.25 | .05 | -.32 | -4.66*** |
| Distress | - | - | - | - | .01 | .04 | .01 | .20 | .01 | .04 | .02 | .22 |
| PC | - | - | - | - | .19 | .05 | .25 | 3.61*** | .20 | .05 | .27 | 3.90*** |
| Distress X PC | - | - | - | - | - | - | - | - | .13 | .05 | .18 | 2.63** |
| $R^2$ | .11 | | | | .17 | | | | .20 | | | |
| $F$ for change in $R^2$ | 10.54*** | | | | 6.61** | | | | 6.89** | | | |
| $F$ | 10.54*** | | | | 8.90*** | | | | 8.74*** | | | |

*Note*. PC = Psychological Capital. Distress and PC were centered at their means. * $p < .05$, ** $p < .01$, *** $p \leq .001$.

Meanwhile, psychological capital was found not to be a significant moderator of the relationship between academic eustress and academic performance, $\beta = -.15$, $t = -1.69$, $p > .05$. Hence, hypothesis 4, psychological capital would strengthen the relationship between academic eustress and academic performance was rejected Table **5**.

**Table 5. Eustress moderated regression results for predicting Academic Performance (N = 183).**

| – | Model 1 | | | | Model 2 | | | | Model 3 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Variable** | ***B*** | **SE *B*** | ***β*** | ***t*** | ***B*** | **SE *B*** | ***β*** | ***t*** | ***B*** | **SE *B*** | ***β*** | ***t*** |
| Gender | .13 | .08 | .12 | 1.69 | .11 | .08 | .10 | 1.49 | .11 | .08 | .10 | 1.49 |
| Ethnicity | -.24 | .06 | -.30 | -4.30*** | -.24 | .05 | -.31 | -4.49*** | -.24 | .05 | -.31 | -4.38*** |
| Eustress | - | - | - | - | .10 | .06 | .14 | 1.57 | .09 | .06 | .13 | 1.47 |
| PC | - | - | - | - | .12 | .07 | .16 | 1.79 | .20 | .08 | .26 | 2.44* |
| Eustress X PC | - | - | - | - | - | - | - | - | -.10 | .06 | -.15 | -1.69 |
| $R^2$ | .11 | | | | .07 | | | | .01 | | | |
| $F$ for change in $R^2$ | 10.54*** | | | | 7.91*** | | | | 2.85 | | | |
| $F$ | 10.54*** | | | | 9.63*** | | | | 8.35*** | | | |

*Note*. PC = Psychological Capital. Eustress and PC were centered at their means. * $p < .05$, ** $p < .01$, *** $p \leq .001$.

## 4. DISCUSSION

This study provides an understanding of the roles of psychological capital in mitigating the effects of academic tress and the types of academic stress experienced by university students in the Malaysian collectivistic culture. The findings imply that high levels of academic distress do not predict low academic performance while high levels of eustress predict high academic performance. Furthermore, psychological capital is found to mitigate the relationship between academic distress and academic performance but not for the relationship between academic eustress and academic performance. These findings provide a unique overview on the interpretation and views of academic stress and academic success within a Malaysian collectivistic culture.

Contrary to the findings from the study which suggest that high levels of distress would predict low levels of academic performance [34], the results from the current study revealed that high levels of academic distress do not necessarily predict low academic performance. Such findings may be unique only within a Malaysian collectivistic culture as academic success is regarded highly among Malaysian families. As Hung [24] and Triandis [20] highlighted, people from a collectivistic culture emphasizes the interest of the group over their individual interests. Therefore, these students may push themselves beyond their comfort zones, in order to protect the interest of the group. They would disregard their individual interests even if the decision may not be favourable to them. Despite experiencing high levels of academic distress, they would put in extra effort even to ensure that they will be able to attain a good academic performance.

Another plausible explanation for the inconsistent findings could be attributed to the parental and family support of

the university students' academic life [50]. Family members may play an active role by providing adequate guidance and support (*i.e.*, emotional support, assistance in assignments) to the university student to ensure that they perform well academically [50, 51]. Furthermore, as it was previously highlighted by Triandis [20] people from a collectivistic culture place high emphasis on interdependence, sociability and family integrity. They believe that performing well academically would help determine one's success and increase their family's integrity [22 - 24]. Due to the emphasis placed on academic success by the culture, they may seek the support from their family members to ensure that they are able to perform well academically.

Meanwhile, high academic eustress was found to predict high academic performance. The current study provides a clearer understanding of the construct of academic eustress, particularly on how it relates to an individual's academic performance. Although Malaysian university students were exposed to a wide variety of academic stressors, those who interpret the academic stressors to be positive were found to exhibit eustress and subsequently have high academic performance. This finding suggests that in a collectivistic Malaysian context, the interest of the group is emphasized over the individual interest. It can be postulated that the culture which emphasizes interdependence, sociability and family integrity may instead act as a factor that influences the university students' interpretation of stress as eustress. The support provided by the family may help the university student develop psychological capital as well as view the academic stressors as something manageable; thus viewing the stressor as something positive. Through this, it can be acknowledged that the experience of stress does not necessarily have to be negative; instead, it could be positive where it can be beneficial and helpful in achieving academic success.

The current study also highlights the importance of psychological capital (psychological state of development with high hope, optimism, self-efficacy and resilience) [38, 39] as an adaptive ability to academic stress. In this study, psychological capital was found to mitigate the relationship between academic distress and academic performance. Such findings suggest that psychological capital has the potential to alleviate or shape the ways on how university students appraise and define the academic stressors experienced. In addition, psychological capital could work as an adaptive ability to mitigate the effects of academic stressors and subsequently improve academic performance. However, psychological capital does not strengthen the relationship between academic eustress and academic performance, as it was shown in the results of this study.

It can be postulated that university students who experienced high levels of academic eustress may have already been working at their optimum level of productivity and effectiveness [56]. Since these students have already been working at their optimum level because of the experience of eustress, the presence of psychological capital may not have any additional influence on their productivity and effectiveness.

### 4.1. Implications

Unlike previous studies, which mainly examined the relationship between academic distress and academic performance [34, 53, 54], this study explored how academic performance can also be predicted by the positive experiences of stress within the Malaysian collectivistic culture. As little to no research has been conducted on the construct of eustress among university students [56], the current study provides an insight into the construct of academic eustress particularly within the educational context. Furthermore, the findings from this study provides an insight that the experience of academic stress does not necessarily have to be negative only. In addition, this study has also provided an indication on how cultural beliefs and values may have a pervasive influence on one's interpretation of academic stress. This finding suggests that the interpretation of academic stress can be sensitive according to the cultural contexts examined.

Another important implication derived from this study is the importance of psychological capital within the educational context. Since psychological capital is found to mitigate the negative influences of academic distress to facilitate a positive outcome, it could be an invaluable adaptive ability in responding to academic stressors. This finding shows that psychological capital is able to influence the adaptation of university students in an experience of negative academic events such as exams and homework, is itself a worthy piece of information that could be used for the designing of specific intervention methods to promote psychological capital among university students such as micro-intervention sessions to develop the individual aspects of psychological capital factors [58]. Such intervention methodologies would be helpful and beneficial for university students to overcome the negative influences of academic distress. In addition, training university students to develop high levels of psychological capital may also assist them in developing more optimistic appraisals that would be essential in assisting them to adapt to other future stressful events. Therefore, such trainings may be beneficial for these students even after they have left and completed their studies.

### 4.2. Limitations and Suggestions for Future Studies

Several limitations in the current study should be noted. Firstly, the researchers recognized that the self-reported nature in data collection may be susceptible to response bias issues. Measuring the participant's academic stress levels from multiple informants could be helpful in overcoming this limitation. Furthermore, the participants recruited in the current study were only required to be Year 2 undergraduate Psychology students. However, the participants that participated in this study had an age range of 19 years to 32 years. The scores obtained from the questionnaires may be meaningfully different from a 19 year old student and a 32 year old student. Future studies could explore the possible differences between younger and older students in relation to their psychological capital.

The current study also employed a cross-sectional design which only examined the influences of academic stress on academic performance in a particular semester. It is undeniable that it was possible to predict the relationship between academic stress and academic performance; however, the researchers are unable to identify whether the participants' academic performance was acually influenced by the experience of academic stress. To overcome this, we suggest that future studies could leverage the effectiveness of a multi-wave study and a longitudinal study. For instance, a longitudinal diary method which requires the participants to note down and report their stress levels over a period of time would allow the researchers to draw better inferences and develop a better understanding on the relationship between academic stress and academic performance.

## CONCLUSION

This study provides an overview of the roles of psychological capital in mitigating the effects of academic stress within a collectivistic Malaysian culture. Findings from this study have provided evidence that high academic distress does not necessarily lead to poor academic performance and high academic eustress predicts high academic performance. In addition, this study provides a valuable insight into the importance of psychological capital in mitigating the negative influences of academic distress on academic performance. As such, the current study provides a preliminary observation on the importance of psychological capital within the education context and future research might investigate this phenomenon in greater detail.

## ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study was approved by the Ethics Review Board of HELP University, Malaysia.

## HUMAN AND ANIMAL RIGHTS

No animals/humans were used for studies that are the basis of this report.

## CONSENT FOR PUBLICATION

All the study participants provided written informed consent.

## CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

## APPENDIX

**Table A1. Amendment to Distress Scale**

| Item No. | Original Statement | Amended Statement |
|---|---|---|
| 1 | I generally view myself as being stressed during the school year. | I generally view myself as being stressed during the *university* year. |
| 3 | My friends see me as someone who is often stressed about school. | My friends see me as someone who is often stressed about *studies*. |
| 4 | I experience period of academic stress at least once a week. | I experience *periods* of academic stress at least once a week. |
| 5 | My family sees me as someone who is often stressed about school. | My family sees me as someone who is often stressed about *university*. |

*Note.* Changes are in italics.

**Table A2. Amendment to Eustress Scale**

| Item No. | Original Statement | Amended Statement |
|---|---|---|
| 2 | How often do you deal successfully with irritating academic hassles? | How often do you deal successfully with academic hassles *(e.g., difficult assignments, high numbers of in-class quizzes)*? |
| 7 | In general, how often are you able to successfully control the irritations in your academic life? | In general, how often are you able to successfully control *unpleasant experiences* in your academic life? |
| 10 | In general, how often are you unable to control the way you spend your time on schoolwork? | In general, how often are you unable to control the way you spend your time on *your studies*? |
| 15 | How often do you feel that stress for an exam has a positive effect on the results of your exam? | How often do you *feel that stress has apositive effect* on the results of your exam? |

*Note.* Changes are in italics.

**Table A3. Amendment to Psychological Capital Questionnaire**

| Item No. | Original Statement | Amended Statement |
|---|---|---|
| 2 | I feel confident in representing my work area in meetings with management. | I feel confident in representing my *assignment group* in meetings with *lecturers*. |
| 3 | I feel confident contributing to discussions about the organization's strategy. | I feel confident contributing to discussions about *class/group assignments*. |
| 4 | I feel confident helping to set targets/goals in my work area. | I feel confident helping to set targets/goals in my *studies*. |
| 5 | I feel confident contacting people outside the organization (e.g., suppliers, customers) to discuss problems. | I feel confident contacting people *outside university (e.g., parents, relatives)* to discuss problems. |
| 6 | I feel confident presenting information to a group of colleagues. | I feel confident presenting information to a group of *course mates*. |
| 7 | If I should find myself in a jam at work, I could think of many ways to get out of it. | If I should find myself in a jam *in studies*, I could think of many ways to get out of it. |
| 8 | At the present time, I am energetically pursuing my work goals. | At the present time, I am energetically pursuing my *academic* goals. |
| 10 | Right now I see myself as being pretty successful at work. | Right now I see myself as being pretty successful *academically*. |
| 11 | I can think of many ways to reach my current work goals. | I can think of many ways to reach my current *academic goals*. |
| 12 | At this time, I am meeting the work goals that I have set for myself. | At this time, I am meeting the *academic* goals that I have set for myself. |
| 13 | When I have setback at work, I have trouble recovering from it, moving on. | When I have a setback in *studies*, I have trouble recovering from it, moving on. |
| 14 | I usually manage difficulties one way or another at work. | I usually manage difficulties one way or another in *studies*. |
| 15 | I can be "on my won," so to speak, at work if I have to. | I can be "on my own," so to speak, *in my studies* if I have to. |
| 16 | I usually take stressful things in work in stride. | I usually take stressful things in *studies* as challenges. |
| 17 | I can get through difficult times at work because I've experienced difficulty before. | I can get through difficult times in *studies* because I've experienced difficulty before. |
| 18. | I feel I can handle many things at a time at this job. | I feel I can handle many things at a time in *studies*. |
| 19 | When things are uncertain for me at work, I usually expect the best. | When things are uncertain for my *studies*, I usually expect the best. |
| 20 | If something can go wrong for me work-wise, it will. | If something can go wrong for *my studies*, it will. |
| 21 | I always look on the bright side of things regarding my job. | I always look on the bright side of things regarding my *studies*. |
| 22 | I'm optimistic about what will happen to me in the future as it pertains to work. | I'm optimistic about what will happen to me in the future as it pertains to my *studies*. |
| 23 | In this job, things never work out the way I want them to | In *my studies*, things never work out the way I want them to. |
| 24 | I approach this job as if "every cloud has a silver lining." | I approach my *studies with the attitude that something positive will always turn out no matter how difficult it might be.* |

*Note.* Changes are in italics.

## ACKNOWLEDGEMENTS

Declared none.

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