

COGNITIVE SCIENCES AND HUMAN DEVELOPMENT

Gratitude and Its Relationship to Resilience and Academic Performance among University Students

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ABSTRACT

This study examines the relationship between gratitude, resilience, and academic performance among students of a public university in Malaysia. One hundred and forty-six samples were obtained through a simple random technique (N=235). The survey employed GQ6 (Gratitude Questionnaire), Brief Resilience Scale (BRS), and self-reported grade-point average (GPA) as its measurement tools. Correlation analysis shows that gratitude has a high positive relationship with resilience and academic performance. Findings from the study support those of previous studies about the importance of gratitude in improving student's psychological resilience and academic performances. The study suggests that adopting a sense of gratefulness and appreciation helps students overcome challenges in their educational journey at university.

Keywords: gratitude, resilience, academic performance, positive emotion

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1 INTRODUCTION

In the current volatile, uncertain, complex, and ambiguous (VUCA) environment, organisations, including universities as higher educational institutions, continuously need to anticipate, react, and respond accurately to remain competitive (Hutasuhut, Adruce & Jonathan, 2021). Exacerbated by the Coronavirus pandemic in 2019 (COVID-19), the challenges faced by university students are getting tougher. They face escalated challenges in managing their assignments while demanding good grades in examinations and dealing with tight deadlines (Hashem et al., 2014). The prolonged movement limitations triggered by the COVID-19 pandemic has added uncertainty to various aspects of life, including the rapid change from face-to-face classes to online classes (Kuhfeld, 2020; Son, Hegde, Smith, Wang, & Sasangohar, 2020). Therefore, scholars are increasingly aware that students need to be skilful in controlling their cognition in dealing with their learning challenges, maintaining focus, and reducing stress (Duckworth & Allred, 2012; Wilson, 2016).

A growing number of studies have found that there is a link between gratitude and human wellbeing (Duckworth, Steen, & Seligman, 2005; Lazarus & Lazarus, 1994; Emmons & McCullough, 2003; Watkins, Cruz, Holben & Kolts, 2008; Wilson, 2016; Wood, Joseph, & Maltby, 2009). Gratitude is defined as an ability to identify and appreciate the benefits gained from others and a yearning to respond with positive actions. Gratitude guides students to have an elevated level of life satisfaction, which further increases the learners' academic performance (Clarkson, 2020; Diener & Emmons, 1984) and helps maintain a positive mindset when facing various challenges (Listiyandini, 2018). Students who practise gratitude tend to use positive coping strategies to handle academic stressors rather than avoiding them (Wood et al., 2007). The present study examines the correlation between gratitude and resilience among university students since gratitude practice can help increase their psychological resilience (Listiyandini, 2018) and the correlation between gratitude and academic performance (Carter et al., 2012). This study hypothesises a correlation between gratitude and resilience, and a correlation between gratitude and academic performance.

2 LITERATURE REVIEW

2.1 Gratitude

The word gratitude is derived from the Latin root "gratia", meaning grace, graciousness, or gratefulness (Emmons & McCullough, 2003). A growing number of studies have found that there is a link between gratitude and human well-being (Duckworth, Steen, & Seligman, 2005; Emmons, Lazarus & Lazarus, 1994; McCullough & Tsang, 2003; Watkins, Cruz, Holben & Kolts, 2008; Wilson, 2016; Wood, Joseph, & Maltby, 2009). These studies have inspired considerable interest among scholars to focus their studies on this topic. Some scholars agree that gratitude typically creates a positive emotional valence (Weiner, 1985). Gratitude has been conceptualised as a character strength that shows an ability to identify and appreciate the benefits gained from others and the urge to respond with positive action (Emmons & McCullough, 2003). Overwalle, Mervielde, & Schuyter (1995) explained gratitude as a pleasurable state related to positive emotions such as happiness, pride, and hope due to other people's actions or the goodness of

objects or situations. These pleasurable states are not caused by oneself. Moreover, research has also shown that gratitude improves life satisfaction (McCullough, Emmons, & Tsang, 2002), reduces aggression (DeWall, Lambert, Pond, Kashdan, & Fincham, 2012), and motivates prosocial behaviour (Bartlett & DeSteno, 2006; Tsang, 2006).

It is compelling that gratitude closely correlates with human well-being, particularly positive emotion, attitude, habit, and tendency to prosocial behaviour. Research from Diener (2000) and Schimmack (2003) have claimed that well-being involves cognitive and affective components, evaluating one's life positively and experiencing more positive than negative emotions. Gratitude enhances positive feelings for self and maintains a positive mindset when facing various challenges that improve appreciation of self (Listiyandini, 2018). People with grateful feelings also widen their social connections with others (Fredrickson, 2004).

Gratitude will not arise naturally to some. However, it can be developed with practice and a certain level of reflection (Froh, Miller, & Snyder, 2007; Wilson, 2016). Past research has focused on gratitude practices that increase individual ability to be more thankful, such as gratitude journals (Emmons & McCullough, 2003) and gratitude conversation (Listiyandini, 2018). A study from Emmons & McCullough (2003), Seligman (2012), and Duckworth et al. (2005) stated that gratitude journaling would become more effective if the person emphasis on gratitude for people instead of things, take time to appreciate the blessings, and stay open to surprises in their lives.

2.2 Gratitude and its Relationship to Resilience in Learning

The American Psychological Association (APA) defines resilience as the process of adjusting when facing difficulty or stress. Masten et al. (1990) defined resilience as the process and consequence of successful adaptation regardless of challenging situations. Further, Masten (2001) stated that resilience had been defined as good outcomes despite severe threats to transformation or development. Gratitude will enhance positive emotions and a pleasant state (Emmons & McCullough, 2003; Walker & Pitts, 1998). In the educational context, resilience is the skill to succeed academically despite tricky situations (Surtherland, 2005; Windle, 2011).

Moreover, from a longitudinal perspective, resilience is well-defined as the ability to bounce back from hardship and go on with life (Netuveli et al., 2008). Resilient individuals will have the capacity to respond flexibly and effectively when facing a difficult situation (Reivich & Shatte, 2002). In sum, resilience is a skill to overcome any difficulties or challenging problems that create stress, as the person can bounce back and continue in their lives and grow.

Listiyandini (2018) claimed that resilience lets students cope with various stresses and problems ahead of study life and eventually avoid the psychological distress that may affect their mental and physical health in negative ways. It is further supported by a recent study conducted at Georgia Southern University, demonstrating that gratitude enhances psychological resilience, the ability to thrive under challenging situations (Teh, 2019). Individuals practising gratitude perceive their hardship as a steppingstone toward their goal. Thus, it will lead them to a positive direction as gratitude can improve their coping skills with a growth mindset of resilience (Duckworth et al.,

2007). To enhance resilience among students who come from various backgrounds, it is essential to understand their backgrounds, such as families, organisations, communities, and cultures (Southwick et al., 2014). Southwick et al. (2014) even claimed that one of the essential things that can be done to enhance resilience is promoting healthy family and community environments, which will allow the individuals to have natural defence systems to build and operate effectively and correctly. A healthy family and community environment is a supportive family and community that provides emotional support, economic well-being and increases overall health (Southwick et al., 2014).

2.3 Gratitude and its Relationship with Academic Performance

Clarkson (2020) states that gratitude, as a positive emotion, plays a vital role in academics. Besides that, many more studies link the positive impact of gratitude on cognitive, emotional, and social aspects to support student academic performance. Ashby and Isen (1999) found that gratitude can increase dopamine levels in the brain, which affects the expansion of cognitive space and further increases the accessibility of positive information in memory. This finding aligns with research conducted by Fredrickson (2004), which claims that gratitude will stimulate more creative thinking and encourage student involvement in learning. Furthermore, Wood et al. (2010) explained that gratitude has a relationship with academic competence that can affect students' self-efficacy and satisfaction with their performance in school. In addition, Zhen et al. (2021) stated that gratitude would lead students to get more positive information to complete learning tasks and even increase the level of academic self-efficacy. Gratitude has a significant and positive role in intellectual engagement (Zhen et al., 2021). Therefore, there is a relationship between gratitude and academic engagement, leading to successful academic performance (Caraway et al., 2003).

It is interesting to note that Froh et al. (2011) and Wood et al. (2010) argued that with gratitude, students could deal with social relationships at school, become more competitive in academics, and maintain their mental health. Other studies also supported the claim that gratitude is positively related to seeking social support (Faeq, 2016). Qin et al. (2015) highlighted how students would use their social support to sustain themselves and seek help when facing difficulties. Qin et al. (2015) also said that students would develop positive coping strategies and do their best to solve problems instead of dwelling on problems and falling into depression. Grateful students endured stressful events well by seeing things on the bright side and getting along well with others, contributing to their mental well-being (Qin et al., 2015). Gratitude helps students deal with problems with positive coping skills, which enable students to blend into the school environment academically, interpersonally, and mentally, which is beneficial for their adjustment to the school setting and increases their sense of belonging to the school (Swanson, Valiente, Lemery-Chalfant, & O'Brien, 2011; Qin et al., 2015).

2.4 The Broaden-and-Build Theory

The broaden-and-build theory proposed by Barbara Fredrickson explains that positive emotions such as joy, contentment, pride, and love, extend people's momentary thought-action repertoires, which helps them create enduring functional physical, intellectual, social, and psychological resources (Celestine, 2021; Fredrickson, 2001, 2004). Positive emotions can increase awareness and responses to events, along with helping to strengthen psychological resilience and coping abilities (Cuncic, 2021). Fredrickson (2004) mentioned that gratitude is one of the positive feelings that can expand one's momentary thought-action repertoires, allowing one to produce personal resources and improve well-being. Gratitude creates long-term resources, such as expressing appreciation and social bonds useful in challenging times (Fredrickson, 2004). When a person is dealt with a tough time limiting the range of possible behaviours and thoughts, gratitude might help them cope with negative emotions and regain cognitive flexibility (Fredrickson & Levenson, 1998). People tend to be more cheerful and energetic, and their positive emotions facilitate upward cycles that help them cope with hardship (Fredrickson, 2004). Moreover, research conducted by Reschly et al. (2008) claimed that the broaden-and-build theory of positive emotions led students to participate in academic activities and led to broadening student formation of thoughts and actions (Fredrickson, 2004). Therefore, it has been proven that keeping a positive attitude and having pleasant emotions during times of stress protects one's well-being (Folkman, 1997), which usually refer as resilience.

3 METHODOLOGY

The study was conducted using a quantitative study approach. A survey was created on Google Form because it was deemed the best option to reach the target population due to the pandemic restrictions. Furthermore, most students have been studying online since March 2020.

The population of this study was full-time enrolled students (N=235) from one faculty in a public university in Malaysia. One hundred and forty-six samples were obtained through simple random technique, ranging from those in Year 1 until Year 4. The survey consisted of the Gratitude Questionnaire (GQ-6) to measure levels of gratitude, the Brief Resilience Scale (BRS) to measure levels of resilience, and the self-reported grade-point average (GPA) as the measurement tools for academic performance. The GQ-6 questionnaire consisted of six items, and each was scored on a 7-point scale (1 symbolises "strongly disagree" and seven indicates "strongly agree") (Zhen et al., 2021). A study from McCullough et al. (2002) shows that the GQ-6 has alpha scores between .82 and .87 which proposes that the questionnaire has good internal reliability. The Brief Resilience Scale (BRS) consists of 6 items, and each was scored on a 5-point scale (1 represents "strongly disagree" and 5 indicates "strongly agree") (Smith et al., 2008). BRS is seen as a reliable and valid scale for measuring resilience among students in Malaysia, as the alpha score was .93, indicating that the scale has good reliability (Amat, Subhan, Jaafar, & Johari, 2014). Self-reported Grade Point Average (GPA) was categorised into a seven-point scale, where the participants asked about their GPA over the last semester. Pearson Correlation was used to measure the relationships between gratitude and resilience and gratitude and academic performance.

4 FINDINGS

4.1 Sampling and Population

A total of 146 respondents from one faculty of a public university in Malaysia was involved in the survey. Section A is about the demographic of the respondents with the detail shown in Table 1. Table 1 shows the highest frequency of gender, which is 121 out of 146 respondents or 82.88% representing females, while 25 out of 146 respondents or 17.12% is male. Table 1 also shows that 89 respondents (60.96%) are Malay, 18 respondents (12.23%) are Chinese, 18 respondents (5.48%) are Indian, and 31 respondents (21.23%) are from other races. As for their year of study, table 1 shows that the highest frequency of the respondents is year 2 with 55 respondents (37.67%), followed by year 1 with 36 respondents (24.66%), year 3 with 29 respondents (19.86%) and 11 of the respondents (17.81%) are from year 4.

Demographic characteristics	Frequency	Percentage (%)
Gender		
Male	25	17.1
Female	121	82.9
Race		
Malay	89	61.0
Chinese	18	12.3
Indian	8	5.5
Others	31	21.2
Year of study		
Year 1	36	24.7
Year 2	55	37.7
Year 3	29	19.9
Year 4	26	17.8

Table 1. Demography of the samples

The current study results revealed that gratitude has a significant relationship with resilience among the respondents. The findings show that there exists an elevated level of gratitude that reflects an elevated level of resilience.

Correlations			
		Mean gratitude	Mean resilience
Mean gratitude	Pearson Correlation	1	.700**
	Sig. (2-tailed)		.000
	Ν	146	146
Mean resilience	Pearson Correlation	.700**	1
	Sig. (2-tailed)	.000	
	Ν	146	146
**. Correlation is si	ignificant at the 0.01 level (2-taile	d).	

Table 2. Correlation between Gratitude and Resilience.

The current study results have shown that gratitude has a significant relationship with resilience among psychology students, meaning that an elevated level of gratitude reflects an elevated level of resilience. Resilience is the skill to succeed academically despite inconvenient situations (Surtherland, 2005; Windle, 2011). It is the ability to bounce back from hardship and go on with life (Netuveli et al., 2008). Therefore, resilience is a skill to overcome any difficulties or challenging situations that create stress. Students with an elevated level of gratitude can encounter a problem and see it positively as their minds and hearts are filled with positive emotion. When they feel grateful, their body tends to become more open to new experiences, allowing them to face the risk without running away from it (Bakali, 2019). As a result, they can overcome the problems with a positive coping strategy without overstressing their minds and bodies. Resilient students could cope with various stresses and problems and their study life and eventually avoid the psychological distress that may negatively affect their mental and physical health (Listiyandini, 2018). The resilient individual will have the capacity to respond flexibly and effectively when facing a difficult situation (Reivich & Shatte, 2002).

The study has also evidenced that gratitude has a significant relationship with academic performance among university students, meaning that an elevated level of gratitude reflects an elevated level of academic performance.

Correlations				
Mean gratitude	Pearson Correlation	Mean gratitude 1	Gpa .751**	
	Sig. (2-tailed)		.000	
	Ν	146	146	
GPA	Pearson Correlation	.751**	1	
	Sig. (2-tailed)	.000		
	Ν	146	146	
**. Correlation is s	ignificant at the 0.01 level (2-ta	uiled).		

Table 3. Correlation between Gratitude and Grade-Point-Average (GPA).

Gratitude as a positive emotion plays a vital role in academics (Clarkson, 2020; Zhen et al., 2021). This study also supports the stated hypothesis that gratitude is positively related to students' academic performance. It shows that students who imply gratitude in their life will be more engaged in an educational setting, such as academic self-efficacy and academic emotions (Clarkson, 2020; Zhen et al., 2021). Social factors, such as teacher-student relationships, could also foster learning motivation in student engagement (Hughes et al. 2008; Roorda et al. 2011; Zhen et al. 2021). Gratitude helps students in academic performance (Caraway et al. 2003; Carter et al. 2012; Linnenbrink-Garcia & Pekrun (2011).

In terms of physiological and cognitive impact, Ashby and Isen (1999) found that gratitude can increase dopamine levels in the brain, which affects the expansion of cognitive space, and further increases the accessibility of positive information in memory. This finding aligns with research conducted by Fredrickson (2004), which claims that gratitude will stimulate more creative thinking and encourage student involvement in learning. These previous researches are aligned with the current study in that they are synonymous in claiming that gratitude plays a vital role in academic performance. Gratitude has a significant and positive role in academic engagement (Clarkson, 2020; Zhen et al., 2021).

5 DISCUSSION

While the world is fighting the COVID-19 pandemic, the students, whether they are ready, are being forced to adapt quickly to online learning with uncertainty into significant aspects of life. Hence, the multiple stressors could increase students' stress, anxiety, and even depressive thoughts. These recent changes require them to be resilient to survive in their academic life. Gratitude helps students to see and accept reality in a more positive way and go through the situation.

The broaden-and-build theory of positive emotions is truly relevant in explaining gratitude and its relationship to resilience and academic performance. This study support KARDAŞ and Yalcin's

(2020) findings that positive emotions improve resilience by allowing people to stay strong and resourceful while facing challenges. They are likely able to think more creatively and flexibly to handle challenges. Gratitude as positive emotions extends people's momentary thought-action repertoires, which helps them create enduring functional physical, intellectual, social, and psychological resources. Positive emotions significantly increase resilience (Cohn, Fredrickson, Brown, Mikels & Conway, 2009). Gratitude as a positive emotion becomes an essential precursor of academic engagement (Zhen et al., 2021). Therefore, the broaden-and-build theory by Fredrickson (2004) can explain the phenomenon that gratitude will lead to broad student formation of thoughts and actions.

6 CONCLUSION

The study strengthens previous findings, which claimed students who practise gratitude in their lives would have a broader cognitive lens to see a situation from a positive perspective. Gratitude helps students face reality, deal with various challenges, and cope with the problem that further makes them successful in their academic performances. Practising gratitude throughout university life, particularly during a crisis like COVID-19, will enhance their cognitive function, enabling better memory, more creativity, and building resilience. Therefore, based on the benefits of practising gratitude found in this study, developing an intervention program toward cultivating gratitude among university students is recommended. The university management can cultivate gratitude daily by practising a gratitude journal and embedding it into the curriculum. Course instructors may also consider implanting gratitude practices in classes to enhance students' focus and resilience in learning. These gratitude practices can be done by providing activities such as writing a gratitude journal on good things that occur daily. By cultivating this practice and becoming a habit, students will realise that they have valuable items that make them feel grateful and appreciate more, even a minor thing that happens in their lives. They can see something that previously they may often take for granted. Lastly, for the recommendation on future research, it is recommended to conduct further research into the variables and the mediating factors between gratitude and resilience and gratitude and academic performances. Study in the broader population is also strongly encouraged.

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