



**Faculty of Cognitive Sciences and Human Development**

**THE INFLUENCE OF GRATITUDE ON LEARNING  
ENGAGEMENT AMONG UNDERGRADUATE STUDENTS**

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**Bachelor of Psychology (Honours)**

**2022**

UNIVERSITI MALAYSIA SARAWAK

Grade:     A    

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Final Year Project Report

Masters

PhD

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**THE INFLUENCE OF GRATITUDE ON LEARNING ENGAGEMENT AMONG  
UNDERGRADUATE STUDENTS**

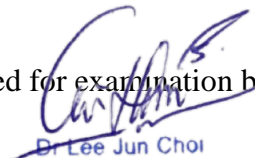
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## **ABSTRACT**

This study aimed to examine the influence of gratitude on learning engagement among undergraduate students at University Malaysia Sarawak (UNIMAS), Kota Samarahan, Sarawak. There are 112 data have been collected from students in different faculties. The instrument of this study can be used because it has been proven valid and reliable. This study has found that the influence of gratitude on learning among undergraduate students at UNIMAS is at a low level and cognitive engagement is the majority of learning engagement at UNIMAS. This study showed no significant difference in gratitude towards student learning engagement among undergraduate students at University Malaysia Sarawak (UNIMAS). Moreover, this study also discovered that there is a positive correlation between gratitude and student engagement, where the influence of gratitude has a positive impact on encouraging students to be actively engaged in their learning. Based on the analysis of the findings, it proved that the influence of gratitude is parallel to the involvement of learning, whereby if the students have high feelings of gratitude, their learning engagement also increases. To improve and enhance this study, future researchers are advised to conduct this research by covering the factors involved in stimulating students' express gratitude for their learning and its relevance to the three aspects of learning engagement.

***Keywords:*** *Gratitude, Learning Engagement, Undergraduate Students.*

## ABSTRAK

*Kajian ini bertujuan untuk mengkaji pengaruh kesyukuran terhadap penglibatan pembelajaran dalam kalangan pelajar sarjana muda di Universiti Malaysia Sarawak (UNIMAS), Kota Samarahan, Sarawak. Jumlah data yang telah dikumpulkan ialah sebanyak 112 daripada pelajar di fakulti yang berbeza. Instrument ini boleh digunakan kerana telah terbukti sah dan boleh dipercayai. Hasil dapatan kajian mendapati bahawa kesyukuran dalam kalangan pelajar prasiswazah terhadap pembelajaran di UNIMAS adalah berada di tahap yang rendah dan penglibatan kognitif merupakan penglibatan pembelajaran majoriti di UNIMAS. Dapatan kajian ini menunjukkan bahawa tidak terdapat perbezaan yang signifikan dari segi kesyukuran terhadap penglibatan pembelajaran antara pelajar sarjana muda di Universiti Malaysia Sarawak (UNIMAS). Selain itu, kajian ini juga mendapati terdapat perkaitan yang positif antara kesyukuran dengan penglibatan pelajar di mana pengaruh kesyukuran memberi impak positif dalam menggalakkan pelajar melibatkan diri secara aktif dalam pembelajaran mereka. Berdasarkan analisis dapatan kajian, membuktikan bahawa pengaruh kesyukuran adalah selari dengan penglibatan pembelajaran di mana sekiranya pelajar mempunyai perasaan kesyukuran yang tinggi, maka penglibatan pembelajaran mereka juga meningkat. Bagi menambah baik dan mempertingkatkan kajian ini, pengkaji akan datang dinasihatkan menjalankan kajian ini dengan mengambil kira faktor-faktor yang terlibat dalam merangsang rasa kesyukuran pelajar terhadap pembelajaran mereka dan kaitannya dengan tiga aspek penglibatan pembelajaran.*

**Kata kunci:** *Kesyukuran, Penglibatan Pembelajaran, Pelajar Prasiswazah.*



# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

This chapter discussed the influence of gratitude on learning engagement in terms of the background of the study, the problem statement, the conceptual framework, the research objectives, which consist of the general objectives and specific goals, research questions, research hypotheses, the definition of the term, the significance of the study and the scope of the study.

### 1.1 Background of Study

Engagement plays a crucial role in achievement and learning based on the numerous research regarding its role in the learning process. According to Sesmiyanti (2016), the influence of engagement can enhance students' learning ability. In higher education, student engagement has become more widely recognised as a critical component of high-quality teaching and learning (Ashwin & McVitty., 2015). A previous study of middle school students (Wonglorsaichon, Wongwanich & Wiratchai., 2013) has pointed out the effect of school engagement on academic achievement. It shows that students who demonstrated a high level of participation in their studies express good feelings and recognize the value of their studies. They also argue the critical role of engagement in inspiring students to strive for better in their studies, which results in their dedication to studying and lesson plans. It has proven that engagement is vital in ensuring the quality of learning. Therefore, it is necessary to delve into the factors involved in promoting and stimulating students' involvement in learning.

Gratitude becomes beneficial in education when learning is treated as a gift, the student's essential or foundational attitude (Wilson & Foster., 2018). Past study (Zhen, Liu,

Ding, Jiang, Jiang & Hong., 2019) has demonstrated that students who exhibit a high level of gratitude seem to be more appreciative of the kindness of others (e.g., teachers and classmates at school). It also can stimulate them to engage in repaying activities. This study also supported a previous study (Tian, Pi, Huebner & Du., 2016), which demonstrated that gratitude has a significant association with adolescent subjective well-being in schools. The presence of gratitude within students is seen to increase learning engagement, as shown by previous studies. Robustelli & Whisman (2018) have emphasized the importance of practising gratitude, which gives many positive outcomes for people who imply it in their life.

Gratitude is a feeling of appreciation for the individual who receives it from others and surroundings. According to Sansone & Sansone (2010), gratitude is the expression of one's appreciation for what is worth and relevant to them and a general feeling of thankfulness or appreciation. Emmons & Crumpler (2000) have argued the concept of gratitude as an emotion, a virtue, a moral sentiment, a motive, a coping response, a skill, and an attitude. They also stated it is an emotional state and an attitude toward life that is a source of human power in promoting one's personal and interpersonal well-being. This definition has explained that gratitude is more than a feeling of gratitude whereby it produces long-lasting positivity in individuals, significantly impacting their life and ensuring a good quality of life.

Numerous findings have proven that gratitude, one of the positive emotions, is advantageous for people because it does not only make them feel thankful for their life. Gratitude also enhances the individual spiritually (Loi & Ng, 2021), emotionally (Armenta, Fritz & Lyubomirsky, 2017), and physically (Hill, Allemand & Robert, 2013) when practising gratitude in life (Elosua, 2015). Positive feelings are advantageous to physical and mental health, enabling individuals to grow and thrive. Moreover, Sansone & Sansone (2010) has described that expressing gratitude, thankfulness, and appreciation produces a pleasant



experience that enhances one's overall wellbeing. Besides, experiencing gratitude can generate an optimistic attitude when facing obstacles in life by providing various reasons to be grateful (Sood, 2012). Therefore, it builds strength and resilience in a person despite going through various life challenges.

For instance, when students express gratitude for their studies, it makes the learning process more meaningful because it affects their emotions and learning ability to engage more passionately in learning and predict academic success. Hence, this research was conducted to examine the influence of gratitude on learning, divided into three aspects of engagement which are emotional, cognitive, and behavioural, among undergraduate students.

## **1.2 Problem Statement**

Students face various challenges, especially university students, as they experience more challenges such as cognitive challenges, becoming an active learner, coping with reading materials, instructional problems, language barrier, time management, the burden of assignments and cultural differences in higher education (Fook & Sidhu, 2015). If students are not engaged in their study, they may feel difficulty in their learning, which impacts the student's dedication or decision to drop out (Benraghda, Goudih & Ssekamanya, 2018). Many studies show the benefits of gratitude which provides multiple benefits to overall well-being and is linked with happiness as well as a great predictor of life satisfaction (Elosúa, 2015; Behzadipour, Sadeghi & Sepahmansour, 2019; Sun, Jiang, Chu & Qian, 2014; Kong, Ding & Zhao, 2014). These previous studies also supported by Wangwan (2014), that gratitude appears beneficial for young people's psychological health. However, after rigorous research related to this study, most studies about the relationship between gratitude and learning engagement have only been carried out on adolescents and primary schools.

Few studies have ever touched on the influence of gratitude on learning as a stimulator of student engagement among university students. Many researchers have not treated the influence of gratitude on learning engagement in much detail. Apart from studies by Jin and Wang (2019), Bono and Froh (2009), Wilson (2016) and Wilson and Foster (2018), far too little attention has been paid to the influence of gratitude on learning engagement among university students. On the other hand, most of the studies have focused on the association of gratitude with well-being, happiness, forgiveness, self-esteem, social support, and life satisfaction among university students (Kong et al., 2014; Safaria, 2014; Phing, 2016; Asif, Khalid, Ashraf, Khan & Pervaiz, 2018; Allan, Steger & Shin, 2013; Salvador-Ferrer, 2017; Bryne, 2020; Wood, Maltby, Gillett & Joseph, 2008).

Hence, the researcher wants to know whether gratitude as a positive emotion influences learning engagement among undergraduate students who experience many challenges in the university, primarily learning-related since online classes were conducted due to the COVID-19 pandemic that hit the rest of the world. The present study will investigate the influence of gratitude on learning engagement among undergraduate students at the University Malaysia Sarawak (UNIMAS).

### **1.3 Research Objectives**

#### **1.3.1 General Objective**

To determine the influence of gratitude on learning engagement among undergraduate students at the University Malaysia Sarawak (UNIMAS).

#### **1.3.2 Specific Objectives**

In the specific objective, the study aimed to address the following research objectives:

- 1) To identify the influence of gratitude on learning engagement among undergraduate students between different faculties.
- 2) To determine whether there is any significant difference in terms of gratitude on learning engagement between different faculties.
- 3) To determine the correlation between gratitude and learning engagement among undergraduate students.

#### **1.4 Research Questions**

The research questions are as follows:

- 1) Is there any influence of gratitude on learning engagement among undergraduate students between different faculties?
- 2) Is there any significant difference in terms of gratitude on learning engagement among undergraduate students between different faculties?
- 3) Is there any correlation between gratitude and learning engagement among undergraduate students?

#### **1.5 Research Hypotheses**

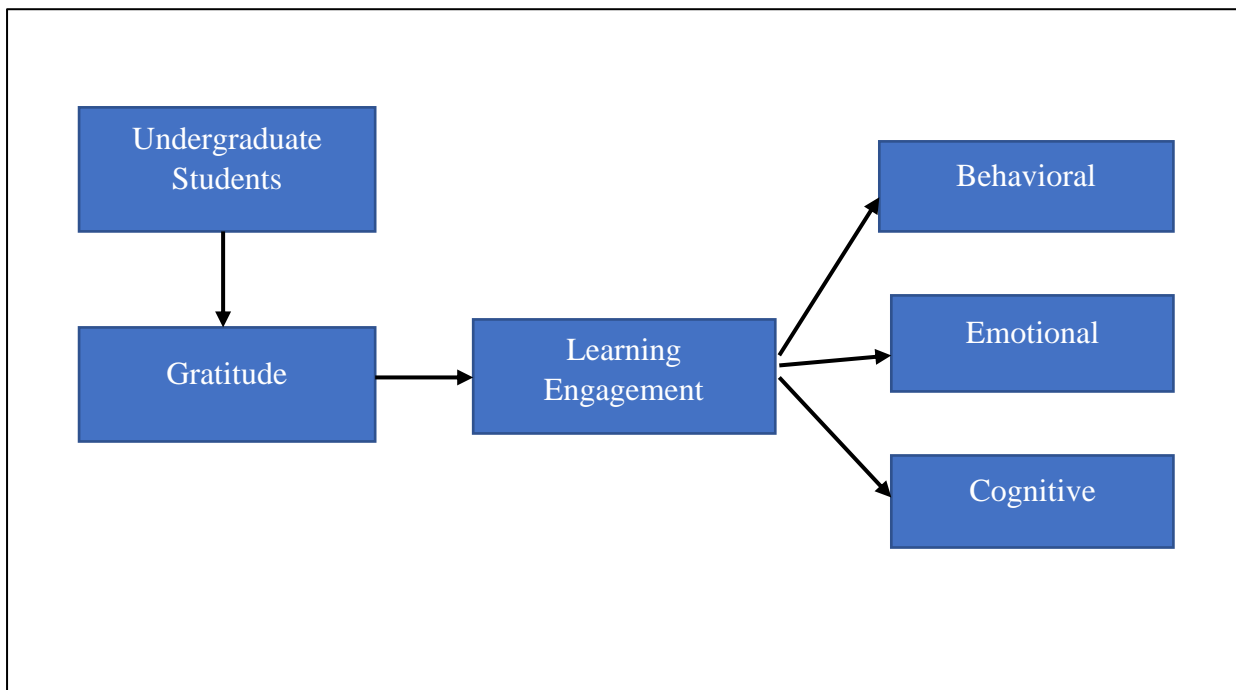
Based on research questions 2 and 3, the research hypotheses are as follows:

H<sub>a1</sub>: There is a significant difference in terms of gratitude on learning engagement among undergraduate students between faculties.

H<sub>a2</sub>: There is a correlation between gratitude and learning engagement among undergraduate students.

## 1.6 Conceptual Framework

This study aimed to examine the influence of gratitude on students' engagement in learning. The conceptual framework of this research is shown below in Figure 1. The independent variable of this study is undergraduate students and gratitude, while the dependent variable is learning engagement which consists of behavioural, emotional, and cognitive.



*Figure 1.0 Conceptual framework of the study*

## 1.7 Significance of Study

This study provided future researchers with a framework to investigate the influence of gratitude on learning by exploring the effects of gratitude, boosting well-being and stimulating interest and motivation to learn, which improves academic performance. The study offers some critical insights into the benefits of feelings of gratitude which impact learning engagement. The findings of this study could also benefit students in gaining a better understanding of

gratitude, which is necessary for learning context so that students perceive learning as an opportunity to increase their self-knowledge base and enhance self-efficacy.

Moreover, this study also explains the result of the findings, which are proven through this study and can be added to research to broaden understanding of the importance of practising oneself to be grateful. The research results are not only reserved for students, but every community member should cultivate and practice gratitude as a basic psychological need to improve life-long learning. People could nurture gratitude within themselves or in families, especially children, at an early age by practising it to generate a positive influence on their growth and life-long learning.

## **1.8 Definition of Terms**

In this study, several terms need to be defined

### **1.8.1 Gratitude**

**Conceptual Definition:** The appreciation of an individual when someone does something nice or helpful to him or her when they obtain something useful. (Bono & Froh, 2009).

**Operational Definition:** A person experiences more pleasant moods, satisfaction, happiness, and hope are linked to subjective well-being favourably, as are less envy, despair, and negative moods. (Bono & Froh, 2009).

### **1.8.2 Learning Engagement**

**Conceptual Definition:** Learning engagement can be defined as effective educational practices which increase participation both inside and outside of the classroom (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2007).

**Operational Definition:** Learning engagement can be operationally as the extent to which students' willingness and effort to participate in academic and non-academic related activities.

### **1.8.3 Behavioral Engagement**

**Conceptual Definition:** Assignment completion, grade point average, and extracurricular activities such as athletics are examples of visible student performance and behaviour (Jimmerson, Campos & Greif., 2003).

**Operational Definition:** Behavioral engagement can be operationally as the action of students to actively participate in the learning process, include classroom activities or discussions related to learning which can help students achieve positive academic outcomes (Fredricks, Blumenfeld & Paris, 2004).

### **1.8.4 Emotional Engagement**

**Conceptual Definition:** Student's sentiment for he or she education and individual within the school such as educators, administrators, and classmates. (Nguyen, Cannata & Miller, 2016).

**Operational Definition:** Emotional engagement can be operationally as students' feelings and thoughts on their learning which include teachers, peers, and the institutions, regardless of positive or negative reactions (Fredricks et al., 2004).

### **1.8.5 Cognitive Engagement**

**Conceptual Definition:** Students' utilization of complex learning techniques and active self-regulation (Reeve & Tseng, 2011).

**Operational Definition:** Cognitive engagement can be operationally as the extent to which a student's willingness to devote effort to learning involves mental efforts such as mastering difficult graded skills or comprehending complex ideas (Fredricks et al., 2004).

## **1.9 Summary**

In conclusion, this chapter briefly discusses the variables studied in this research. Each topic in the research introduction was fundamental to assist the researcher in performing this study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.0 Introduction

In this chapter, the researcher discusses past studies related to the focus of this study which is gratitude and learning engagement. The related models and theories were also included in this chapter.

#### 2.1 Gratitude

A large and growing of literature has explored the feelings of gratitude. Traditionally, it has been argued that gratitude can be an emotion, attitude, habit, moral virtue, personality characteristic, or coping reaction (Emmons & McCullough, 2003). The word gratitude is taken from the Latin root word "*gratia*" which means grace, graciousness, or gratefulness. The word itself is equal to the meaning of gratitude, which has to do with receiving help or kindness from others that makes the receiving individual feel a sense of appreciation (Furlong, Froh & Gonzalez, 2014). Grateful people value their lives more as they acknowledge the sense of thankfulness from their surroundings. Wilson & Foster (2018) has found that feeling appreciation drives the positive outcomes for the recipient in terms of mood, relationships, and learning. This view is supported by Emmons & McCullough (2003) argue for the influence of gratitude on life which brings a variety of positive outcomes such as gaining peace of mind, bringing joy, improving physical health, and bringing more satisfaction to personal relationships. They also suggest that throughout history and time, the expression of gratitude has changed and has been perceived as a basic psychological need and a desirable feature of a person's personality and social interaction. Based on this explanation, it can be concluded that gratitude is an attitude or disposition to react with feelings of gratefulness and not just a mere expression of gratitude.



Numerous studies have evaluated gratitude as an emotion or a trait whereby both have different specifications, although the two concepts are almost linked. The feeling of gratitude originates from positive personal outcomes within an individual that influence one's perception to acknowledge or appreciate person, things, and surroundings (Emmons & McCullough, 2003; Watkins, 2013). The evidence presented in these previous studies points out that people who have a high feeling of gratitude are people who notice and appreciate the goodness in their lives, although in simple pleasures and beauty, one can feel the positives from it due to the high dispositional gratitude within the individual.

Gratitude as an emotion refers to an experienced of feelings of gratitude. When the individual can acknowledge the benefits, it gives awareness to the individual of the goodness of the gift that an individual has received from one's surroundings and when people insist that good things happen to them (Watkins, 2013; Froh & Bono, 2008). Gratitude as a trait refers to a generalized inclination to identify and express gratitude for other people's generosity in the beneficial experiences and outcomes that one gets (Emmons, Tsang & McCullough, 2002).

McCullough et al. (2002) note in their study that the gratitude disposition has four facets: intensity, span, frequency, and density. The researcher explained that the word "facets" describes the nature of gratitude, which coexists where these elements occur simultaneously. The first facet is intensity. A person who has experienced a pleasant event is expected to feel more passionately grateful than someone who does not have an unpleasant experience. Frequency is a second element to consider. A person with a grateful nature may express appreciation repeatedly throughout the day, and gratitude can be evoked with the smallest treat or action of kindness compared to a less thankful person.

The third facet is known as span, which refers to the number of life conditions present in a people's life that make them feel grateful at a given moment. This grateful nature affects a person's perception of their surroundings, which makes them more appreciative for their life such as their family, work, health, and other goodness. The last facet is called density. Dispositionally grateful individuals may name a variety of persons whom one expresses thankful for a single favourable result happened. In contrast, an individual who is less inclined to appreciate may be thankful to only fewer people for the same result.

There are various ways people can express and feel gratitude. In the psychology literature, numerous studies have attempted to explain various factors that influence an individual's gratitude experience, including personality, gender, and cognitive factors. A previous study by McCullough et al. (2002) has shown that those who were grateful were constantly more sociable, pleasant, and less neurotic than people who were not grateful. Similar to the recent study (Szcześniak, Malinowska, & Kroplewski, 2019), agreeableness had the most outstanding and most significant standardised regression value as a personality predictor of gratitude accompanied by openness and extraversion while neuroticism was negatively correlated with gratitude.

In terms of cognitive factors, some researchers have been investigating the cognitive appraisals of gratitude which include the perception of intentions of the benefactor, the recipient's perception of the value of the gift or favor as well as the recipient's level of belief in free will (e.g. MacKenzie, Vohs & Baumeister, 2014; McCullough et al., 2002). Apart from that, the studies on gender factors in experienced gratitude have found that women were more likely to have high levels of gratitude than men (Roa-Meggo, 2017; Kashdan, Mishra, Breen & Froh, 2009; Agnieszka, Katarzyna & Sandra, 2020). Other researchers have found that males are more grateful than women (Khan & Singh, 2013). A recent study by Rydh (2019) found no

gender differences in trait gratitude, suggesting that gender differences in gratitude are influenced by customs, cultural background, life experiences, and beliefs. These factors might impact their characteristics as well as the surroundings in which they live and socialize. Other than that, the feelings of gratitude are also influenced by a person's situation.

Culture is also influential to evokes an expression of gratitude. The role of parents is influential on their child's gratitude experience and the environment a person grows up and lives in (Allen, 2018). Gratitude is not innate but can be developed (Bono, Emmons & McCullough, 2004). The consistent effort by close companions such as caregivers, parents, teachers, and friends, can instil a grateful attitude in youngsters. (Sood, 2012). Overall, the influence of gratitude has been extensively studied which shows the power of gratitude to the individual when having gratitude.

### **2.1.1 Benefits of Gratitude**

Gratitude is one of the positive emotions that, based on theory, can expand an individual's cognition and behavior, and allow the construct of psychological and social resources (Fredrickson, 2004). According to Froh & Bono (2008), people will quickly and frequently experience and shows gratitude when they are high in the trait of gratitude. Gratitude is a virtue that leads to a continuous appreciation throughout situations and times (Lopez & Synder, 2011). Several authors have reported analyses on the association of gratitude with psychological well-being (Hasemeyer, 2013; Sood, 2012; Tian et al., 2016; Sansone & Sansone, 2010). Experiencing gratitude in life has been identified as a significant contributing factor that drives happiness as it enables individuals to be more focused on the positive aspects in their lives, which leads to higher life satisfaction (Behzadipour et al., 2018). It has been demonstrated by McCullough et al. (2002) that positive emotions and life satisfaction are

higher in thankful individuals, while experienced negative emotions are lower like despair, anxiety, and jealousy.

Gratitude positively impacts well-being internally and externally over a long period (Rydh, 2019). Besides, negative affect and trait gratitude showed a negative relationship. Some studies (Emmons & McCullough, 2003; Lopez & Synder, 2011) have demonstrated consistent results on the influence of gratitude, whereby experienced gratitude effectively increases the positive effect on a person that leads to one's willingness to offer help or emotional support to others. A previous study outlines that people with more robust dispositions of gratitude are more likely to be involved in prosocial or reciprocal activities as they are more compassionate, forgiving, helpful, and supporting (McCullough et al., 2002).

Another benefit of gratitude is people who experience higher gratitude have higher resilience which makes them maintain effort when facing an obstacle in life as they acknowledge the benefits of those challenges, which for them it can help them to grow (Zainoodin, Hutasuhut, Abu Bakar & Nurul Wardhani, 2021; Wilson, 2016; Lasota, Tomaszek & Bosacki, 2020). Besides, individuals who experience a high level of gratitude tend to have greater life satisfaction linked to more resources such as social support (You, Lee, Lee & Kim, 2018). According to Allen (2018), people are happier, more satisfied with their lives, less materialistic, and more resilient when they feel more grateful. According to previous studies (Lopez & Synder, 2011; Hasemeyer, 2013), gratitude can dominate a person's whole view of life even though the source of gratitude is not present. Kong et al. (2014) examined the effects of social support and self-esteem on gratitude and life satisfaction among undergraduate students. Their findings show that people experiencing gratitude are more likely to receive more sources of social support than others which leads to an increase in self-esteem and satisfaction in their lives.

Emmons and McCullough first investigated gratitude interventions (2003) has pointed out that experiencing more feelings of gratitude can improve psychological functioning. In their study, three investigations were conducted, each with different intensity of the intervention, measures, and samples. Participants were divided into three groups, groups with detailed their problems, groups with reasons for appreciation, and groups with everyday happenings. Participants in the first trial kept weekly journals over nine weeks. They need to report occurrences in their journals based on the group to which they were allocated. Aside from the journals, they also were asked to report on their weekly health. The findings revealed that gratitude the gratitude group had markedly better well-being compared to the other two groups, which proposed that gratitude is more helpful in enhancing well-being.

Another major study (Sztachanska, Krejtz, & Nezlek, 2019) has shown that gratitude interventions are effective for women with breast cancer in increasing their daily functioning. Based on the study's results, they found that compared to women who did not write down their reasons for being grateful every day with women who did, those who did express their gratitude were shown to have improved everyday functioning. The effect of gratitude gives them more focus on positivity than negativity in everyday life, keeping them strong and having faith in their life. Hence, gratitude brings meaning to one's life by summing life as a gift.

Gratitude motivates people to commit to the essential life domains by improving health, work, and relationships (Armenta et al., 2017). Furthermore, it can lead to self-improvement and positive changes for people. Since experienced gratitude is enjoyable and pleasant it makes gratitude seen as motivating and energized (R A, Emmons & Crumpler, 2000). A study by R A, Emmons & Crumpler (2000) discovered that when individuals embrace gratitude, they feel more enthusiastic and inspired, stimulating them to proceed toward their objectives. According to Froh & Bono (2008), gratitude is positively related to optimistic, positive affect and predicts

satisfaction towards schools and families that are a source of social support, and it has no correlation with negative affect.

## **2.2 Learning Engagement**

In the field of education, engagement refers to the student's contribution to their learning. In the context of education, engagement refers to students devoting their focus and energy to educationally purposeful activities. The preparation in the self in terms of emotional, social, and intellectual due to curiosity stimulates one's willingness to learn more and participate (Abla & Farumeni, 2019).

Franklin (2005) has proposed the points of student's attributes who are engaged in learning which include,

- 1) Pay attention, listen intently, and make eye contact with the instructor.
- 2) Respond to instructor cues.
- 3) Examine, reflect, brainstorm, or participate in debate forums.
- 4) Actively collaborate with one another or with the instructor.
- 5) Make decisions or solve problems by asking and answering questions.
- 6) Actively participate in-class activities (or offer to do so).
- 7) Display an open and honest body language which appropriate (comfortable, smiles, or laughter).

Delfino (2019) defined engagement as a student who is actively involved throughout meaningful learning. Students' engagement ensures the quality of learning, which in turn provides better results for students' academic achievement. According to Murray, Mitchell, Gale, Edwards & Zyngier (2004), engagement is crucial because it encompasses significant

educational goals other than accomplishment. Besides, it is vital to enhance the value of lifelong learning that will benefit them throughout their life.

Olson & Peterson (2015) stated that there are multidimensional in the concept of student's engagement as each student does not have the same level or aspect of engagement throughout their progress in school. A study found a significant positive relationship between motivation and learning achievement (Lastri, Kartikowati & Sumarno, 2020). Motivation can be conceptualized as a student's tendency to act in certain ways, energizing and leads to learning, working successfully, and attaining potential (Martin, 2012). Motivation can inspire students to work toward their objectives, improve their performance, and participate in their learning (Armenta et al., 2017).

Researcher Jin & Wang (2019) has demonstrated in their study that there is a positive relationship between learning engagement and basic psychological needs which shown that the importance of fulfilling the basic psychological needs of students whereby it able to elevate the probability of inducing self-motivation, also known as intrinsic that influences students' enthusiasm in learning which in turn makes students understand and felt the importance of learning to them. These foster an exalted level of engagement in learning.

This study was supported by Mariza (2016), which shows a positive relationship between motivation and engagement. People with a high level of motivation can lead to greater satisfaction, making them more engaged in activities. Students actively involved with learning are seen to be more successful academically and less likely to quit school (DeVito, 2016). In contrast to disengaged students, the researcher argues that disengaged students show less interest in taking part in learning activities and extracurricular events, struggling to concentrate

on their home tasks. There also were slight connections between class activities, personal attentiveness, and real situations.

A study from Delfino (2019) on students at Partido State University identifies student engagement by measuring behavioral, cognitive, and emotional aspects. The results of the study found that most university students experience behavioral engagement whereby obtained good grade results encourage them to strive to focus on their learning. This study shows the relationship between engagement and motivation, which is interrelated. Engagement is a broad concept but many researchers used three predominant: cognitive, emotional, and behavioral (Fredricks et al., 2004; Archambault & Dupéré, 2016; Jimerson et al., 2003). The engagement model proposed by Fredricks et al. (2004) described engagement as a multidimensional construct through three interrelated dimensions (behavioral, emotional, and cognitive).

Meanwhile, a previous study by Ben -Eliyahu, Moore, Dorph & Schunn (2018) shows a contradiction with Fredricks et al. (2004) whereby each component (behavioral, emotional, cognitive) of the engagement is not interrelated with each other. Therefore, they conceptualize the three components separately but related. They argue that a person likely to be behaviorally active will not necessarily be actively involved in the cognitive and emotional and vice versa. They also stated that individual could engage emotionally without thinking about the learning task.

### **2.2.1 Behavioral Engagement**

In their study, Fredricks et al. (2004) stated that behavioral engagement can be explained in three ways. The first aspect is positive behaviours shown by students while at school, such as following school rules, adhering to school norms, and avoiding engaging in disruptive behaviors (Fredricks et al., 2004; Nguyen et al., 2016; Pagán, 2018). The second



aspect is student involvement in learning and academic tasks. The involvement of students is assessed by the extent of students' efforts to learn, understand, focus on learning, and contribute to academic's activities (Fredricks et al., 2004; Nguyen et al., 2016; Pagán, 2018). The last aspect is students' participation in school-related activities (e.g., extracurricular activities) (Fredricks et al., 2004; Audas & Willms, 2001). In general, it refers to observable acts of students towards their learning activities which allow them to gain benefits or positive outcomes from it. These behaviors frequently involve positive emotions such as enthusiasm, interest, satisfaction, joy, energy, and dignity (González, 2015), which influence student engagement. Academic success is positively correlated with this dimension (García-Pastor, 2021).

### **2.2.2 Emotional Engagement**

In terms of emotional engagement, many researchers have defined student's perception of their learning as either positive or negative reactions (González et al., 2015; Fredricks et al., 2004), which in turn influence their reactions to the stimulus within the environment by developing cognitive and behavioral responses (Kuchinski-Donnelly & Krouse, 2020) based on how their attachment to school. They also stated that emotional engagement predicts psychological well-being in learning circumstances. A previous study (Lawson & Lawson, 2013) classified emotional engagement into two categories: the level of student's affective responses in their studies, such as pleasure, absorption, contentment, and anxiety during academic activities. The next category is the extent of students' feelings of belonging, recognition, and connectedness with their peers, teachers, and the school, which inspire them to be more engaged in learning. García-Pastor (2021) has suggested that this commitment dimension impacts a student's effort and learning tactics.

### **2.2.3 Cognitive Engagement**

Cognitive engagement is the involvement of students' internal investment or inner psychological qualities to learn, understand, and master knowledge or skills as an effort to learn, which can be promoted in their academic work (Cooper, 2014). According to Gonzalez et al. (2015), the involvement of student's psychological investment of mental energy when carrying out academic-related activities. It also covers the amount of time and effort students are willing to devote to the activity (Sesmiyanti, 2016). According to García-Pastor (2021) characterized, cognitive engagement in learning as the mental effort of students in terms of focus and ability to persist in learning over a long period and the application of cognitive and metacognitive methods during the learning process to comprehend and master related knowledge and abilities. A previous study (Ekici & Inel Ekici, 2021) notes that cognitive dimensions encompass students' application of deep learning methods and the intentional modulation of cognitive processes for learning.

### **2.2.4 The Outcome of Learning Engagement**

Previous studies have associated learning engagement with academic achievement (Glaphathi, Dissanayake, Welgama, Somachandara, Weerarathna & Pathirana, 2019; Syed & Awang, 2017). Students who are more engaged in the classroom show more commitment and dedication to learning as they are aware of the importance of learning itself (Wonglorsaichon et al., 2013), increase student personal growth (Strayhorn, 2008), show more positive behaviors and attitudes, (Smith, Sheppard, Johnson & Johnson, 2005) invest a lot of energy and effort in learning and able to reduce student discipline problems (Salleh, Desa & Tuit, 2013). Engagement in learning is vital for learners to be actively involved in their studies, whereby it can encourage student performance (Senior, Bartholomew, Soor, Shepperd, Bartholomew & Senior, 2018; Martin & Bolliger, 2018; Benraghda et al., 2018). Students who are engaged

commit further to their performance, participate in further school activities and create methods to aid in their resilience and self-regulation of their learning processes (Klem & Connel, 2004).

### **2.2.5 Drives of Learning Engagement**

Learning engagement is influenced by various factors such as learning motivation, learning interest, family environment, and learning models (Lastri et al., 2020). This view is partially supported by Olson & Peterson (2015), who stated that motivation, continuum, connectedness, and parent engagement are the components that elicit and facilitate participation among students in learning. The result of the recent study involving students from Taiwan's higher education institutions (Alemayehu & Chen, 2021) proved that the relationship between motivation and learning engagement is positively significant, pointing out that motivation had a direct influence on learning engagement.

The results of a case study conducted by DeVito (2016) showed factors involved in student engagement as shown below

- 1) Interaction between student-educator,
- 2) Level of academic difficulty,
- 3) Supportive environment,
- 4) Support from social support,
- 5) Active involvement in learning activities, communication, collaboration, and fulfilling educational experience.

Each of the five criteria clusters were shown to impact students' enthusiasm to participate in learning activities and their opinion towards the value of learning to a greater or lesser degree. According to Smith et al. (2010), the collaboration between school administrators, teachers, and parents is necessary for students' socio-emotional development by not just

emphasizing academic achievement alone. Besides, student intentions to engage in academic activities are also included in student engagement drives, which are influenced by solid reasons and positive global motives that allow engagement behavior to be reinforced (Tani, Gheith & Papaluca, 2021). A large study by Ko, Park, Yu, Kim, and Kim (2016) has demonstrated that learning engagement is considerably enhanced by the university environment, student-faculty interaction, and class activity.

## **2.3 Related Theories and Model**

### **2.3.1 The Broaden-and-Build Theory**

Barbara Fredrickson has proposed a model related to positive emotions known as the Broaden-and-Build theory, which explains how experiencing positive emotions such as happiness, affection, contentment, and interest able to expand people's momentary thought-action repertoires that serve to help build from sources of physical and intellectual into sustainable resources which is social and psychological (Fredrickson, 2004). She argues that positive emotions allow humans to engage in various behavior because positive emotions do not need a tendency to act like negative ones.

Positive emotional experiences allow humans to use various possible cognitions and behavior in response to emotional stimuli. Moreover, positive emotions not only provide a stimulus to the physical but also stimulate the cognitive that will then influence the action. Hence, positive emotions are linked to our behavior. Tugade, Fredrickson & Feldman Barrett (2004) stated that a source in the context of this theory is a reference to anything a person uses to formulate a schema. Those resources are used to achieve something like social networks, abilities, or skills.

According to the Broaden-and-Build theory, when experiencing positive emotions, it is most likely that the source can be obtained. Gratitude is one of the positive emotions that present when the beneficiary (individual) acknowledges the kindness of the help or gift he or she received from the benefactor (a person) or other sources had led the recipient to reciprocate the kindness through various possible responses to repay the kindness back which directly brings more positivity vibes to the recipient (Fredrickson, 2004).

The Broaden-and Build theory can be used to explain the influence of positive emotions such as gratitude can expand human focus and cognition, reduce negative emotional stimuli, encourage consequential personal resources, increase resilience, develops greater well-being in the future, and a critical aspect in human development (Fredrickson, 2004). To conclude, gratitude is beneficial for well-being, which is also essential in influencing learning engagement.

## **2.4 Previous Findings**

### **2.4.1 The Relationship between Gratitude and Learning Engagement**

A study by Wilson (2016) explored the effect of practising gratitude, which positively impacts students' ability to concentrate on learning and stay resilient when facing difficulties in the learning process in college students. An intervention group of 50 students was given a reminder to practice gratitude through a text message once or twice individually throughout the semester, while the control group did not receive it. The results of this study show that students in the intervention group practising gratitude three times a week showed an increase in experiencing gratitude, increased their focus on learning, and were able to survive when faced with difficulties throughout the semester. They also reported that throughout practising gratitude, they found that they can experience a positive and calm attitude, reduce stress, have

a high concentration in study, and be more motivated to do their best when felt challenged in learning.

Researchers conduct gratitude intervention on students has found that student's engagement can be increased more effectively through gratitude intervention. A previous study by Hasemeyer (2013) has claimed that the higher trait of gratitude is correlated to better academic outcomes as the student is confident with their ability to perform well at school. A study by Callaghan (2015) proved the effect of gratitude on students' feelings, thoughts, and involvement in school among primary school students.

In their study, Zhen et al. (2019) also signify the positive relationship between gratitude and academic engagement. Students who experience gratitude tend to feel and acknowledge the kindness received from their environment (e.g., teachers and classmates in schools) that inspire them to recompense behavior. It strengthens the sense of belongingness within students, which consequently boosts student satisfaction with school (Wood et al., 2010) and encourages students to engage in learning activities (Zhen et al., 2019).

Their research, carried out among primary students in China to determine the multiple mediating models involving the role of gratitude, has found that gratitude had a direct and positive effect on academic engagement. According to Wilson & Foster (2018), in the process of learning, a learner may experience gratitude as a sense of joy or pleasure. This standard show of thankfulness may be as simple as "I like learning" in this case, the learner able to sense a benefit, although from an obscure or unknown source. By comparison, gratitude for the value received is more concrete, whereby the learners see and recognise the value. Thus, it can make students be more engaged in learning for the long term.

In their research finding, a previous study by Benraghda et al. (2018) has confirmed that adapted and engaged students learn better and show the best prospective outcomes in their academic performance. It can be concluded that the higher students engaged in their learning, their academic achievement also increased. Higher academic achievement is predicted by the level of student engagement from three aspects, which are cognitive, behavioral, and emotional.

## **2.5 Summary**

This chapter provides an overview of the concept of variables used in this study. This chapter also discusses further study-related theories and previous research to support the objectives and hypotheses of this study.

## CHAPTER 3

### METHODOLOGY

#### 3.0 Introduction

This chapter discussed the research methodology used in this study in terms of the research design, the research location, population and sample details, the research instrument used for this study, pilot study, data collection procedures, and data analysis procedures.

#### 3.1 Research Design

Quantitative design is research that deals with quantifying and analyzing variables to get the results. Quantitative design employs statistical tools in analyze numerical data to answer questions such as who, how much, what, where, when, how many, and how (Apuke, 2017). According to Babbie (2010), quantitative research using numerical data that has been analyzed to conclude a group of individuals or explicate a specific event. The research design to conduct this analysis involved quantitative and cross-sectional surveys.

According to Setia (2016), a cross-sectional study is an observational study in which the researcher studies the outcomes and simultaneously provides exposure to participants in the study. The researcher does not adjust the exposure status in an observational study (Setia, 2016). A cross-sectional design was applied to measure the population which is studied. The researcher chose this survey as it is appropriate for the researcher to potentially collect many samples in a brief period and is inexpensive. According to Wang & Cheng (2020), it can be used to generate hypotheses and may give data on the prevalence of outcomes and exposures that can be used to guide other research designs. For this study, the researcher used an adapted questionnaire from previous researchers to measure the influence of gratitude on learning



engagement among undergraduate students. The questionnaire was distributed to the respondents who were the subject of this study to gather relevant data.

### **3.2 Research location, Population, and Sample**

#### **3.2.1 Location**

The target location for data collection of this study is the University of Malaysia Sarawak (UNIMAS), which is in Kota Samarahan, Sarawak. University Malaysia Sarawak (UNIMAS) is chosen as the location to perform this study because it is one of the largest universities in Sarawak and has a larger number of students. The obtained data process was also more accessible for a researcher than other institutions in the Kota Samarahan area. The questionnaires have been distributed to University Malaysia Sarawak undergraduate students (UNIMAS).

#### **3.2.2 Population**

Students from University Malaysia Sarawak (UNIMAS) were selected as this study's population. For the target population for this study, there are ten faculties available in UNIMAS which consist of Faculty of Cognitive Science and Human Development, Faculty of Social Sciences and Humanities, Faculty of Economics and Business, Faculty of Language and Communication, Faculty of Medicine & Health Science, Faculty of Resources Science and Technology, Faculty of Applied and Creative Arts, Faculty of Engineering, Faculty of Built Environment, and Faculty of Computer Science and Information Technology. In total, there were 14,412 undergraduate students selected as a population for this study. Thus, the researcher obtained a considerable number of samples from this broad group.

### **3.2.3 Sample**

A sample is a group of people, objects, or items representing a large population to be used in measurement (Bhardwaj, 2019). Sampling procedures and sample size determination are the most important in applying statistical studies to detect essential effects or associations to draw valid and generalized conclusions (Ajay & Micah, 2014). Since the researcher conducted the study on a large group population, the sample size will be determined for electing the number of observations to be included in the sample. According to Ajay & Micah (2014), sampling is the selection of an individual subset taken from a population to assess the characteristics of the entire population. For this research, the researcher decided to use convenience sampling, the non-probability sampling method. Through these sampling procedures, subjects which are easily accessible or available to the researcher will be chosen.

The researcher distributed the questionnaire survey to undergraduate students in UNIMAS, whereby the researcher could access and contact the respondents. Students who responded to the questionnaire were based on their volunteerism. Besides, this type of sampling procedure is appropriate for gathering data because it is more ideal and potentially be used in collecting data from large populations faster without incurring any cost (Ajay & Micah, 2014; Bhardwaj, 2019). The determination of sample size to be used in this research refers to Krejcie and Morgan's table (1970). The suggested minimum sample size appropriate for this study is 375 as shown below:

**Table 3.0: Table for Determining Sample Size from Given Population by Krejcie & Morgan (1970).**

| N   | S   | N    | S   | N     | S   |
|-----|-----|------|-----|-------|-----|
| 10  | 10  | 220  | 140 | 1200  | 291 |
| 15  | 14  | 230  | 144 | 1300  | 297 |
| 20  | 19  | 240  | 148 | 1400  | 302 |
| 25  | 24  | 250  | 152 | 1500  | 306 |
| 30  | 28  | 260  | 155 | 1600  | 310 |
| 35  | 32  | 270  | 159 | 1700  | 313 |
| 40  | 36  | 280  | 162 | 1800  | 317 |
| 45  | 40  | 290  | 165 | 1900  | 320 |
| 50  | 44  | 300  | 169 | 2000  | 322 |
| 55  | 48  | 320  | 175 | 2200  | 327 |
| 60  | 52  | 340  | 181 | 2400  | 331 |
| 65  | 56  | 360  | 186 | 2600  | 335 |
| 70  | 59  | 380  | 191 | 2800  | 338 |
| 75  | 63  | 400  | 196 | 3000  | 341 |
| 80  | 66  | 420  | 201 | 3500  | 346 |
| 85  | 70  | 440  | 205 | 4000  | 351 |
| 90  | 73  | 460  | 210 | 4500  | 354 |
| 95  | 76  | 480  | 214 | 5000  | 357 |
| 100 | 80  | 500  | 217 | 6000  | 361 |
| 110 | 86  | 550  | 226 | 7000  | 364 |
| 120 | 92  | 600  | 234 | 8000  | 367 |
| 130 | 97  | 650  | 242 | 9000  | 368 |
| 140 | 103 | 700  | 248 | 10000 | 370 |
| 150 | 108 | 750  | 254 | 15000 | 375 |
| 160 | 113 | 800  | 260 | 20000 | 377 |
| 170 | 118 | 850  | 265 | 30000 | 379 |
| 180 | 123 | 900  | 269 | 40000 | 380 |
| 190 | 127 | 950  | 274 | 50000 | 381 |
| 200 | 132 | 1000 | 278 | 75000 | 382 |

Note: “N” for population size

“S” for sample size

### **3.3 Instruments**

An instrument is a measurement tool used to collect relevant data to measure something from the study's subjects. The researcher used a self-report questionnaire to obtain data regarding gratitude's influences on learning engagement among undergraduate students. In the questionnaire survey, the researcher measures the involved variables by using two assessment tools to study the influence of gratitude on learning engagement among undergraduate students and the relationship between the variable. The researcher used an adapted questionnaire as the instrument of this study and modified the items in the questionnaire to the learning context that corresponds to this study's focus.

The inventories used for this study were Gratitude Questionnaire (GQ-6) adapted from McCullough et al. (2002) and Utrecht Work Engagement Scale (UWES-9S) adapted from Schaufeli et al. (2002). The questionnaire survey was divided into sections: Section A, Section B, and Section C, according to the inventories used. This questionnaire survey was available in the English language. The instructions and conditions were stated on the first page of the form to inform the participants before they agreed to answer this questionnaire. Participants were also reminded that their participation in the study was voluntary; if they wished to withdraw, they could do so. Participants were given sufficient time to answer this questionnaire. The researcher's contact information was also included in the form if the participants have any inquiries regarding this study.

### **3.3.1 Instrument Structure**

#### **3.3.1.1 Section A: Demographic**

This section contains the respondent's background, gender, age, study year, and faculty names. There are four items asked in this section regarding the respondent's background.

#### **3.3.1.2 Section B: Gratitude**

In this section, the gratitude level was assessed using The Gratitude Questionnaire-6 Question (GQ-6) in the short version. This questionnaire is a self-report with six items for measuring the presence of gratitude in a person in terms of the tendency to recognize, respond, and experience gratitude (McCullough et al., 2002). The items in this questionnaire were adapted and modified according to the current study context. Each item is changed, and "in my learning" is added to each statement. The total results obtained ranged from 6 to 42. A high score indicates a high level of gratitude. The questionnaire displays a significant positive to optimism, life satisfaction, hope, spiritual and religiousness, forgiveness, empathy, and prosocial behavior. The Cronbach's alpha is estimated from 0.76 to 0.90, indicating good internal reliability (McCullough et al., 2002).

#### **3.3.1.3 Section C: Learning Engagement**

The Utrecht Work Engagement Scale (UWES-9S), in a short version from Schaufeli et al (2002), was used to measure learning engagement among undergraduate students. This questionnaire is a self-report which has nine items. The nine items measure consist of three features of engagement to assess vigor (behavioral engagement), dedication (emotional engagement), and absorption (cognitive engagement). Initially, UWES has 24 items, with nine items for vigor and eight for dedication, and absorption items are added. After performing a psychometric assessment, several items in this questionnaire were eliminated, resulting in 17

items of UWES. In this study, all the assessment items were adapted and modified to measure learning engagement among undergraduate students at UNIMAS. In the context of students, each item is changed related to learning. The previous study used this assessment by modifying the items in this questionnaire into student versions, showing a strong internal reliability of 0.89 (Carmona-Halty, Schaufeli & Salanova, 2019).

**Table 3.1: The Components and Criteria of the Questionnaire Sections**

| <b>Sections</b> | <b>Items</b> | <b>Measures</b>            | <b>Content/Sources</b>                       |
|-----------------|--------------|----------------------------|--|
| A               | 4            | Demographic of Respondents | Age, Gender, Year of Study and Faculty Name. |
| B               | 6            | Gratitude                  | Adapted from McCullough et al. (2002).       |
| C               | 9            | Learning Engagement        | Adapted from Schaufeli et al (2002)          |

For the current study questionnaire, there were 15 closed-ended questions for a combination question in Section B and Section C. The answers selected by the respondents in the questionnaire were recorded using a 7-point Likert Scale type. The 7-point Likert Scale ranges from 1 (strongly disagree) to 7 (strongly agree). Respondents were asked to choose the answer they prefer and appropriate by rating scale from 1 (strongly disagree) to 7 (strongly agree) to describe their feelings on each statement.

### **3.4 Data Collection Procedures**

#### **3.4.1 Primary Data**

Primary data is obtained through the questionnaire of this study which was distributed to respondents consisting of undergraduate students at the University Malaysia Sarawak (UNIMAS) who were randomly selected to answer the questionnaire. Through questionnaires, the desired and valuable data can be collected from the sample for this study. The following questionnaire consists of three sections: demographic, gratitude, and learning engagement.

#### **3.4.2 Secondary Data**

Secondary data refers to data collected through sources from third parties to strengthen the findings of this study with the support and comprehensive understanding of theories and research issues that have been discussed and studied. The medium used for the process of reviewing and acquiring information and data that are appropriate and relevant to this study is electronic media. Many secondary data sources, including journals, articles, the thesis of last year's students, websites, and other published media, are more easily accessible.

### **3.5 Pilot Study**

A pilot study is a small-scale study conducted before performing a large-scale study to examine the research protocol used in the study to analyze its feasibility. Before performing a large-scale study, this pilot study is an initial step that needs to be carried out to analyze its validity (In, 2017). Small-scale studies were conducted to measure the validity to avoid any adverse consequences of the large-scale study (Thabane, Ma, Chu, Cheng, Ismaila, Rio, Robson, Thabane, Giangregorio & Goldsmith, 2010). Once the researcher has a clear picture of his or her study in terms of topics, questions, techniques involved, ways that can be applied, and how the study schedule flows then perform pilot study is necessary.

Pilot study are beneficial for researchers as it helps the researcher to detect if there are any flaws and ambiguities that exist in any question. It also warns the researcher if there are items that cause discomfort to the respondent regarding the content of the item in the questionnaire. This step is crucial to prevent respondents from getting a threatening effect because of the question and avoid misunderstanding the meaning. Hence, the researcher can make improvements in the measurement process of this study to improve the accuracy of information from respondents. This pilot study also checks the reliability of the data collected from the survey by using the reliability coefficient known as Cronbach Alpha.

### **3.6 Validity**

According to Edwin (2019), validity is the extent to which the instrument used is appropriate to measure what needs to be measured. If the measuring instrument's reliability is high, it indicates that the measurement is valid and suitable for use in the study. The extent to which measuring tools for quantitative studies are accurate (Heale & Twycross, 2015). Validity is divided into four types: construct validity, face validity, content validity, convergent discriminant validity, and criterion-related validity (Edwin, 2019). Validity is measured in this study is the empirical evidence which is the results of this study were obtained from the analysis of questionnaires involving statistical techniques (Edwin, 2019).

Confirmatory factor analysis (CFA) was used to check study's validity. The researcher adapted the questionnaires used as an instrument in this study. Therefore, this instrument needs to test before being conducted in the main study to check if it is suitable and relevant for the local population. According to Hoyle (2000), hypotheses about similarities between variables will be tested through a statistical procedure, the confirmatory analysis factor (CFA). The Confirmatory Factor Analysis (CFA) helps the researcher test a model the researcher thought was a good approach to a specific phenomenon or concept (Sarmiento, 2019).



### **3.7 Reliability**

According to Heale & Twycross (2015), reliability refers to the extent to which the instruments used in a study consistently obtain similar results. Reliability also refers to the repetition of study results whereby each time the respondent completes a given instrument twice, the results are the same as the previous results, which makes the data to be reliable (Edwin, 2019). Consistency, accuracy, repeatability, and reliability are essential elements that are considered in measuring reliability (Chakrabartty, 2013, as cited in Mohajan, 2017). Reliability also measures the extent to which the assessment tools used in the study are free of errors and produce stable results (Mohajan, 2017). Internal consistency reliability is used to test homogeneity on items within that scale or size (De Vellis, 2016, as cited in Mohajan, 2017).

The Cronbach alpha coefficient is most used to measure internal consistency (Taherdoost, 2016). According to Taherdoost (2016), the reliability coefficient is between 0 and 1, whereby the high reliability is at a value of 1 while the 0 indicates very low reliability. Therefore, reliability should have values greater than 0.9, which is considered to have high internal consistency reliability, 0.8 or 0.7 is also considered good and acceptable. Social Science Statistical Package (SPSS) version 22.0 was used to conduct a reliability test on the instrument used in this study. The values of each the Cronbach alpha for each instrument item are as shown in Table 3.2 below,

**Table 3.2: Alpha Coefficient for Each Section in the Questionnaire**

| <b>Section</b> | <b>Variables</b>    | <b>Number of Items</b> | <b>Cronbach's Alpha Value</b> |
|----------------|---------------------|------------------------|-------------------------------|
| B              | Gratitude           | 6                      | 0.930                         |
| C              | Learning Engagement | 9                      | 0.906                         |

n= 30

### **3.8 Data Analysis Procedures**

The data collected is analyzed and interpreted using the means of self-report questionnaire using Statistical Package for the Social Sciences (SPSS) version 22. Two types of data analysis were used to interpret the data, which are descriptive and inferential statistics.

#### **3.8.1 Descriptive Data Analysis**

Descriptive statistics are used to describe the relationships between variables used on a sample or population in the form of data summaries in an organized way (Kaur, Stoltzfus & Yellapu, 2018). Descriptive statistics is an essential first step when conducting a study by calculating one variable at a time before initiating data analysis (Patel, 2009; Kaur et al., 2018). Descriptive statistics commonly describe the variables used in the study. The collected data is usually presented in summary, either in the form of a table or graph. A frequency table was used to summarize the data to see the differences between the retrieved data. The data in section A is presented briefly through a statistical descriptive.

### **3.8.2 Inferential Data Analysis**

According to Kuhar (2010), inferential statistics are primarily used to make comparisons or differences between selected samples that represent the larger subject population. Generalizations about the populations of subjects based on data collected in the research. He also stated that the statistical inferential is also used as an explanation of a situation or phenomenon, which is fundamentally different from descriptive statistics to conclude based on what is the main study. The statistical inferential method uses statistical hypotheses to test the relationship between independent and dependent variables in this study. Two statistical inferential methods are involved in this study: Kruskal-Wallis Test and Spearman Correlation Analysis.

#### **3.8.2.1 Kruskal Wallis test**

Kruskal Wallis test is a non-parametric test used to determine if there is a significant difference on a continuous dependent variable by comparing the means of an independent variable with more than two groups. This test is considered equivalent to the One-way Variances (ANOVA). The Kruskal Wallis test was used when ANOVA some assumptions were not met. In the Kruskal Wallis test, the assumption of data is normality distributed, unlike in ANOVA. To determines whether there is any significant difference between the variables. The significance level is compared with the p-value to assess the null hypothesis. The null hypothesis is rejected if the significance level is less or equal to 0.05. When the significance level is more than 0.05, the null hypothesis fails to be rejected. Therefore, it can be concluded that all the variables are equal.

### 3.8.2.2 Spearman's Correlation Coefficient

Spearman Correlation Coefficient measures the strength and direction of the monotonic relationship between paired data. Spearman's correlation is a non-parametric test and is a substitute for Pearson correlation. Unlike the Pearson correlation, assumptions of normality are not considered in the Spearman correlation. The Spearman correlation test's interpretation is similar to the Pearson correlation, where correlation can exist between -1 and 1. The degree to which shows a perfect correlation is when the value of  $r$  is close to 1, which indicates that if there is a change to one variable, the other variables will also change, either increasing (positive) or decreasing (negative). To determine the relationship between these two variables, the Spearman correlation coefficient rho ( $r_s$ ) is used as an indicator. The value taken by " $r_s$ " is in the range of -1 to +1, determining the relationship between the variables. The positive value of " $r_s$ " implies a perfect correlation of the variable, while the negative value of " $r_s$ " displays a perfect negative correlation of the variable, and the zero value of " $r_s$ " shows there is no correlation between the variable. The closer " $r_s$ " to zero, the weaker the relationship between the variable.

### 3.9 Summary

In this chapter, the researcher has described the methodology process, including the research design, location, population, and sample. The instrument structure and procedure of collected and analyzed data were also discussed as well as the reliability and validity of this study. This methodology is vital to ensure the procedure of collecting and analyzing data is acceptable.

## **CHAPTER 4**

### **FINDINGS AND DISCUSSION**

#### **4.0 Introduction**

This chapter discusses the findings of this research based on the analysis of data collected in the targeted population relating to the focus of this research: the influence of gratitude on learning engagement among undergraduate students. This chapter included the data analysis, which are the normality test, descriptive analysis of the demographic of the respondents, reliability analysis in the actual study, confirmatory factor analysis, the Kruskal Wallis, and the Spearman correlation coefficient. An overall summary of research findings is also discussed at the end of this chapter.

#### **4.1 Demographic Data of The Respondents**

In the questionnaire of this study, the demographic characteristics involved are gender, age, year of study, and the faculty name. Among the targeted sample population, the researcher obtained a total of 112 respondents, which is useable. The researcher was able to collect data set of answers from five faculties which are the Faculty of Cognitive Science and Human Development, Faculty of Economics and Business, Faculty of Language and Communication, Faculty of Medicine & Health Sciences, and Faculty of Social Science and Humanities out from ten faculties in UNIMAS. The questionnaire of this study was distributed online through the dissemination of Google Form via various social media platforms to reach the students, which is convenient and appropriate with current situations whereby most classes are still conducted virtually. Table 4.0 below displays a summary of the description analysis.

**Table 4.0 The Summary of Frequency and Percentage of Demographic Characteristics.**

| <b>Demographic</b>                                 | <b>n</b> | <b>%</b> |
|--|----------|----------|
| Gender   |          |          |
| Male   | 42       | 37.5     |
| Female   | 70       | 62.5     |
| Age  |          |          |
| 19-21  | 20       | 17.9     |
| 22-24  | 77       | 68.8     |
| 25 and above                                       | 15       | 13.4     |
| Year of Study                                      |          |          |
| 1 <sup>st</sup> Year                               | 16       | 14.3     |
| 2 <sup>nd</sup> Year                               | 29       | 25.9     |
| 3 <sup>rd</sup> Year                               | 62       | 55.4     |
| 4 <sup>th</sup> Year                               | 5        | 4.5      |
| Faculty  |          |          |
| Faculty of Cognitive Science and Human Development | 34       | 30.4     |
| Faculty of Social Science and Humanities           | 29       | 25.9     |
| Faculty of Economics and Business                  | 13       | 11.6     |
| Faculty of Language and Communication              | 17       | 15.2     |
| Faculty of Medicine & Health Sciences              | 19       | 17.0     |

n=112

Table 4.0 above is presented the descriptive analysis in Section A of the questionnaire. The respondent's demographic characteristics were gender, age, year of study and faculty name.

As displayed in the table above, the gender of the respondents with a high number of responses was female, with a total of 70 participants (62.5%), while from the male are 42 participants (37.5%).

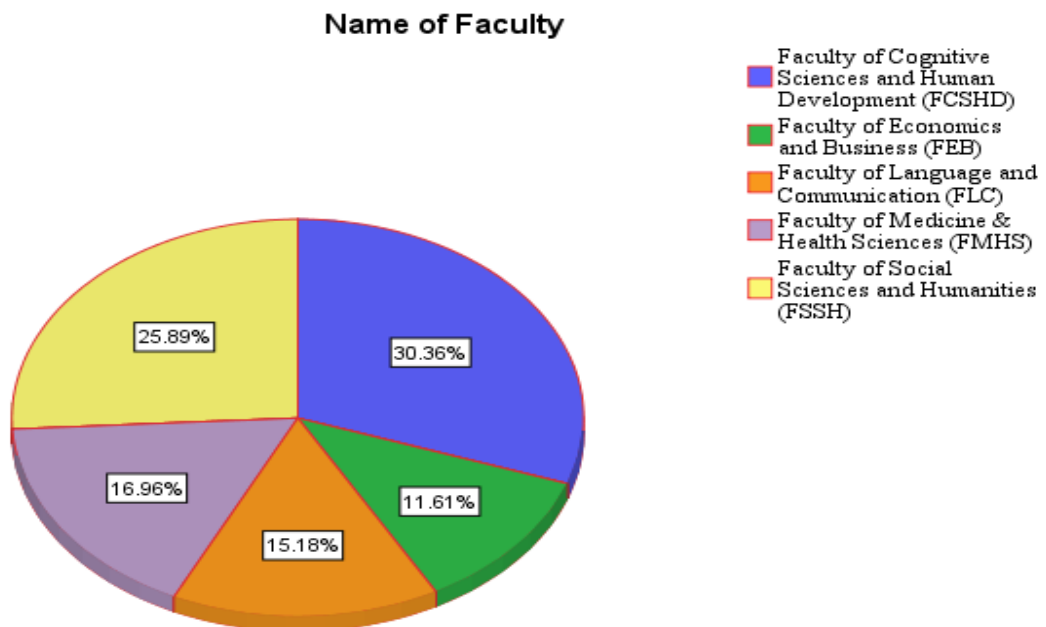
The majority of respondents to this questionnaire were from the 22 to 24 age group with 77 participants (68.8%), followed by age group 19 to 21, 20 participants (17.9%), and age group 25 and above with 15 participants (13.4%).

Respondents with high frequency were from third-year students which had 62 participants (55.4%), whereas the rest were from second-year students with 29 participants (25.9%), and first-year students with 16 participants (14.3%). The minority of respondents is fourth-year students, with 5 participants (4.5%).

The highest number of respondents were from the Faculty of Cognitive Science and Human Development (FCSHD) with 34 participants (30.4%) meanwhile, participant from the Faculty of Social Science and Humanities (FSSH) is 29 (25.9%). The respondent from the Faculty of Economics and Business (FEB) is 13 participants (11.6%), followed by the Faculty of Language and Communication (FLC) had 17 participants (15.2%), and the Faculty of Medicine & Health Sciences (FMHS) is 17.0% which is 19 participants.

**Figure 4.0 Respondent’s Faculties.**

The chart below presents the percentage of the respondent’s faculties.



## 4.2 Normality Test

The normality test was conducted to evaluate the results of the data analysis of two variables used in this questionnaire to determine whether the data set is normality distributed or not. Therefore, the variable is evaluated by using the Shapiro -Wilk's test. The result of the Shapiro -Wilk's test shows the  $p=0.000$ ,  $p<0.05$  was not significant for each variable with a Kurtosis value for items in gratitude variable are  $-0.930$  with a Skewness of  $-0.770$ . For the learning engagement variable, a Kurtosis value is  $-.0929$  and a Skewness of  $-0.587$ . It shows that the variable was negatively skewed and not normality distributed. Since the data confirmed that it is not normality distributed, the non-parametric tests were used for the following analysis.

## 4.3 Reliability Test of Instrument in Actual Study

The reliability test measures the consistency, accuracy, and repeatability of the items in instruments (Chakrabartly, 2013, as cited in Mohajan, 2018). The Cronbach's alpha is used as a benchmark to measure the reliability.

**Table 4.1 Reliability Test Results of Instrument.**

| Section | Variables                         | Number of Items | Cronbach's Alpha Value |
|---------|-----------------------------------|-----------------|------------------------|
| B       | Gratitude Questionnaire           | 6               | .925                   |
| C       | Learning Engagement Questionnaire | 9               | .900                   |

n=112

As stated in Table 4.2 above, for Section B, the gratitude questionnaire with six items showed the Cronbach's alpha was 0.925, while the learning engagement questionnaire in Section C, which contained nine items, showed the Cronbach's alpha value of 0.900. Overall, the Cronbach's alpha values in this study indicated an excellent internal value of consistency



above 0.70, supported by Pallant (2001) stated that the Cronbach's alpha value above 0.60 is viewed as acceptable and has high reliability. Based on the results of the reliability test, it can be concluded that the items in this study are relevant to use because it is consistent and reliable. Hence, it can be used for further analysis.

#### 4.4 Validity Test

Validity test is to determine the characteristics of the items in variables are measure what is intended to be measured. The factor analysis technique used to check this study's validity is confirmatory factor analysis (CFA). According to Sarmento (2019), confirmatory factor analysis (CFA) is used to test whether a model used is a good approach to represent a specific phenomenon or concept. Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity were used to examine the variable for the goodness of data. As a result, the KMO's value is achieved an acceptable value of 0.60, and Bartlett's Test of Sphericity was tested statistical significance, which lower than 0.05.

**Table 4.2 Factor Analysis Result**

| Measures               | Items | Factor Loadings | KMO   | Bartlett's Test of Sphericity | Eigen Value | Variance Explained |
|------------------------|-------|-----------------|-------|-------------------------------|-------------|--------------------|
| Gratitude              | 6     | 0.638-<br>0.789 | 0.892 | 530.123<br>(P=0.000)          | 4.522       | 75.367             |
| Learning<br>Engagement | 9     | 0.145-<br>0.829 | 0.946 | 936.584<br>(P=0.000)          | 6.419       | 71.325             |

As stated on Table 4.2 above, gratitude had a 0.892 KMO's value, and learning engagement was 0.946. The findings show that the KMO values for each variable used in this

analysis exceed the appropriate standard value of 0.60. Bartlett's Test of Sphericity for both variables shows a p-value of 0.000. Besides, all of the variables have a greater Eigen value than 1: gratitude with 4.522 and learning engagement with 6.419.

Next, the factor loading for each item of the variable exceeds the acceptable standard value of 0.40 except for the items in learning engagement, item 5 with 0.145. It indicates that there was an inverse relationship between factor and variable. Overall, all the variables are suitable for this study as all the variables have passed the appropriate level of validity analysis according to the Hair et al. (1998) research model.

#### **4.5 Analyses on The Influence of Gratitude on Learning in Different Faculties.**

As stated in Table 4.3 below, descriptive statistics were used to identify the influence of gratitude on learning among undergraduate students in different faculties at UNIMAS.

**Table 4.3 Descriptive Results of The Influence of Gratitude on Learning in Different Faculties.**

| Faculty Name                                      | Mean         | N          | Std. Deviation |
|---|--------------|------------|----------------|
| Faculty of Cognitive Sciences & Human Development | 32.55        | 34         | 7.727          |
| Faculty of Economics & Business                   | 31.23        | 13         | 9.566          |
| Faculty of Language & Communication               | 30.47        | 17         | 9.741          |
| Faculty of Medicine & Health Sciences             | 30.68        | 19         | 8.347          |
| Faculty of Social Sciences & Humanities           | 32.44        | 29         | 8.390          |
| <b>Total</b>                                      | <b>31.74</b> | <b>112</b> | <b>8.437</b>   |

The first objective of this study was to examine the influence of gratitude on learning among undergraduate students in different faculties. Table 4.0 above shows that students from the Faculty of Cognitive Sciences and Human Development have the highest mean scores of gratitude on learning compared to other faculties (Mean= 32.55, SD=7.727) followed by students from the Faculty of Social Sciences and Humanities with 32.44 (SD=8.390), Faculty of Economics and Business with 31.23 (SD=9.566) and Faculty of Medicine & Health Sciences with 30.68 (SD=8.347). The lowest mean of gratitude scores were from the Faculty of Language and Communication, which recorded 30.47 (SD=9.741).

The overall mean student gratitude scores on learning in UNIMAS is 31.74 out of 42 (SD=8.437). The scoring was based on the Gratitude Questionnaire (GQ-6) score whereby it was divided into the following categories, scores total of 6-35 indicate low levels of gratitude, scores total of 36-40 indicate moderate levels of gratitude, and scores total of 41-42 indicates high levels of gratitude (McCullough et al., 2002). This findings suggest that the influence of gratitude is not the influential role in stimulating learning engagement among undergraduate students in UNIMAS. There are other role that motivate students to engage with their study. To conclude, the influence of gratitude on learning among undergraduate students in UNIMAS is at a low level.

#### **4.6 Analyses on The Learning Engagement in Different Faculties.**

As stated in Table 4.4 below, descriptive statistics were used to identify the learning engagement among undergraduate students in different faculties in UNIMAS.

**Table 4.4 Descriptive Result of The Learning Engagement in Different Faculties.**

| Faculty   | Behavioral |       | Emotional |       | Cognitive |       | n   |
|---|------------|-------|-----------|-------|-----------|-------|-----|
|   | M          | SD    | M         | SD    | M         | SD    |     |
| Faculty of Cognitive Sciences & Human Development | 4.951      | 1.206 | 4.941     | 1.824 | 5.264     | 1.622 | 34  |
| Faculty of Economics & Business                   | 4.076      | 1.722 | 4.564     | 2.118 | 4.384     | 1.556 | 13  |
| Faculty of Language & Communication               | 4.019      | 1.853 | 4.098     | 1.843 | 4.843     | 1.495 | 17  |
| Faculty of Medicine & Health Sciences             | 4.052      | 1.944 | 4.280     | 1.656 | 4.578     | 1.791 | 19  |
| Faculty of Social Sciences & Humanities           | 4.988      | 1.132 | 4.965     | 1.751 | 5.183     | 1.465 | 29  |
| Total   | 4.565      | 1.128 | 4.663     | 1.818 | 4.961     | 1.592 | 112 |

Next, to examine the learning engagement among undergraduate students in different faculties. As shown in the table above, cognitive engagement shows to have the highest means among the three aspects of engagement which is 4.961 (SD = 1.592) then, followed by emotional engagement with 4.663 (SD = 1.751) and behavioral engagement with means of 4.565 (SD = 1.128). Students from the Faculty of Cognitive Sciences and Human Development, Faculty of Language and Communication, Faculty of Medicine & Health Sciences, and Faculty of Social Sciences and Humanities have higher cognitive engagement in their learning

compared to emotional and behavioral engagement. In comparison, students from the Faculty of Economics and Business recorded high in emotional engagement compared to cognitive and behavioral engagement in their study.

The results of this study suggested that cognitive engagement is a critical aspect and major influence in the overall learning engagement, as stated by Barllow et al. (2020). Learning engagement among undergraduate students in UNIMAS is more into cognitive, which boosts them to learn, understand, and acquire knowledge and skills (Cooper, 2014). It also included the amount of time and effort students are willing to devote to the activity (Sesmiyanti, 2016). In contrast, students from the Faculty of Economics and Business had a strong affection for their learning, affecting their engagement in their studies. To be concluded, the learning engagement of four faculty in UNIMAS is cognitive, while one faculty is emotional engagement.

#### **4.7 Hypotheses Testing**

The statistical analysis used to test the hypotheses of this study was a non-parametric test, Kruskal Wallis H test and Spearman Correlation Analysis since the normality distribution for each variable was violated. This statistical analysis was carried out by using Social Science Statistics Package (SPSS) version 22.0.

##### **4.7.1 Analyses the Differences in Terms of Gratitude on Learning Engagement Between Faculties.**

The Kruskal Wallis H test was used to determine whether there is a statistically significant difference between the faculties in terms of gratitude on learning engagement. In order to evaluate the difference in terms of gratitude on learning engagement among

undergraduate students in different faculties, the following hypothesis is developed based on objective 2 of this study.

**H<sub>a1</sub>:** There is significant difference in terms of gratitude on learning engagement between faculties.

**Table 4.5 Means in Terms of Gratitude on Learning Engagement Between Faculties.**

| Test Statistics <sup>a,b</sup> |       |
|--------------------------------|-------|
| Gratitude                      |       |
| Chi-Square                     | 3.082 |
| df                             | 4     |
| Asymp. Sig.                    | .544  |

a. Kruskal Wallis Test

b. Grouping Variable: Faculty Name

Based on the table above, the findings of the study revealed that there is no significance difference in terms of gratitude on learning engagement among undergraduate students,  $H(4) = 3.082$ ,  $p=0.544$  which is greater than 0.05. It implies the insignificant differences in terms of the influence of gratitude towards learning engagement among undergraduate students in UNIMAS. This finding might be because each faculty obtain scores total of gratitude on learning are within an approximately similar range (30-32). To conclude, the hypothesis based on objective 2 of this study is rejected.

#### 4.7.2 Relationship between Gratitude and Learning Engagement Among Undergraduate Students.

The Spearman Correlation Analysis was used to determine the correlation between the independent variable (gratitude) and the dependent variable (learning engagement). Through the Spearman Correlation Analysis, the hypothesis based on objectives 3 of this study ( $H_{a2}$ ) were tested.

**H<sub>a2</sub>:** There is a positive correlation between gratitude and learning engagement among undergraduate students.

**Table 4.6 Correlation between Gratitude and Learning Engagement.**

| Variable            | n   | Gratitude | Learning Engagement |
|---------------------|-----|-----------|---------------------|
| Gratitude           | 112 | -         | .827**              |
| Learning Engagement | 112 | .827**    | -                   |

\*\*P < 0.01.

Table 4.4 above demonstrated a correlation between gratitude and learning engagement which  $r_s=0.827$ ,  $p=0.000$ . As the significance p-value is below 0.05, it indicates a relationship between gratitude and learning engagement. This finding suggests that the correlation between gratitude and learning engagement is positively significant. The strength of the association between the variable is strong according to the value of the Spearman correlation coefficient,  $r_s=0.827$  which proves that the relationship between gratitude and learning engagement tend to move in the same direction. Therefore, the hypothesis based on objective 3 of this study is accepted.

This finding aligns with Callaghan's (2019) study, which signifies gratitude's positive influence on students' feelings, thoughts, and involvement in their school. In general, the influence of gratitude promotes students to engross in learning activities (Zhen et al., 2019). Undergraduate students in UNIMAS feel grateful for their learning, encouraging them to engage in learning actively. In other words, gratitude's influence impacts learning engagement among undergraduate students in UNIMAS. If students experience a high level of gratitude, their learning engagement will also increase. Based on the result, it can be concluded that an elevated level of gratitude reflects an elevated level of learning engagement among undergraduate students in UNIMAS. A previous study by Wilson (2016) has pointed out that practising gratitude can increase students' ability to concentrate on learning and be more motivated to strive in learning despite feeling challenged.

Wilson & Foster (2018) found that feelings of gratitude can evoke joy or pleasure in the learning process, making the learner sense the benefit of learning. It also induces a long-term learning engagement as long as they imply gratitude in their life. As stated by R A et al. (2000), experienced gratitude is enjoyable and pleasant which makes gratitude seen as motivating and energized for grateful people. Since the influence of gratitude is seen as motivating, it can inspire students to work toward their objectives, improve their performance, and participate in their learning (Armenta et al., 2017).

Apart from that, the findings of this hypothesis were also supported by the Broaden-and-Build theory, with a clear and relevant explanation of gratitude and its relation to learning engagements, whereby positive emotions can expand human focus and cognition. The influence of positive emotions not only provide a stimulus to the physical but also stimulate the cognitive that will then influence the action. Therefore, the influence of gratitude promotes a positive mindset which makes them perceive the importance of learning. To conclude, the



findings of this study are consistent with past studies and related theory, which proves that there is a positive correlation between gratitude and learning engagement among undergraduate students in UNIMAS. The higher the student's feelings for their learning, the more they engage in their learning. Delfino (2019) has claims that students' engagement ensures the quality of learning, which in turn provides better results for students' academic achievement.

#### 4.8 Summary of Findings

The following table 4.5 lists the descriptions of the results of the study hypotheses. Based on the table below, one hypothesis was rejected, and the other was accepted.

**Table 4.7 The Overall Summary of the Result of Hypotheses Testing.**

| Hypotheses      | Statement of Hypotheses   | Data Analysis Techniques | Result  |
|-----------------|---|--------------------------|---|
| H <sub>a1</sub> | There is a significant difference in terms of gratitude on learning engagement between faculties.     | Kruskal Wallis test      | H <sub>a1</sub> is rejected.<br>H (4)=3.082<br>p=0.544<br>(p>0.05)<br>Not significant         |
| H <sub>a2</sub> | There is positive correlation between gratitude and learning engagement among undergraduate students. | Spearman Correlation     | H <sub>a2</sub> is accepted.<br>r <sub>s</sub> =0.827<br>p=0.000.<br>(p< 0.05)<br>Significant |

#### 4.9 Conclusion

This chapter has discussed the entire procedure of analysing the data gathered from the actual study. There are two types of data analysis to interpret the data: descriptive and inferential. Descriptive data was a summary of respondents' characteristics, while inferential

analysis was used to assess the variables' significant differences and the association's nature. The inferential analysis used was the Kruskal Wallis H test and Spearman Correlation. The findings of this study were also presented in the following chapter.

## **CHAPTER 5**

### **LIMITATION, IMPLICATION, RECOMMENDATION AND CONCLUSION**

#### **5.0 Introduction**

This chapter discusses four parts which include the summary of the findings that have been analyzed from the previous chapter, implications, limitations of this study, recommendations, and the last part concludes that the entire of this research has been well presented.

#### **5.1 Summary of the Study**

This study examined the influence of gratitude on learning engagement among undergraduate students based on the courses taken by students in UNIMAS. Hence, five faculties were selected as the population sample for this study which consists of the Faculty of Cognitive Science and Human Development (FCSHD), Faculty of Social Science and Humanities (FSSH), Faculty of Economics and Business (FEB), Faculty of Language and Communication (FLC), and Faculty of Medicine & Health Sciences (FMHS). This study required a total of 375 respondents however, since the questionnaires were distributed online through various social media platforms to reach students due to the COVID-19 condition, the researcher was able to obtain a total of 112 responses from five faculties were used for further analysis.

This study has three objectives to determine, as stated in chapter 1. The main objective is to identify the influence of gratitude on learning engagement among undergraduate students in different faculties. The study's results indicate that each faculty scored a similar influence of gratitude on their learning. The findings also show that students in these five faculties have low gratitude for their learning, and gratitude is not the influential factor in making them engaged

in their learning. In terms of learning engagement, there are three elements contained in the learning engagement questionnaire to be assessed which are behavioral (vigor), emotional (dedication), and cognitive (absorption). The study results found that cognitive engagement is the highest score among students in the five faculties than the other two elements, emotional and behavioral. Therefore, an excellent cognitive engagement can facilitate learning to master knowledge and skills.

Next, the second objective of this study aimed to determine whether there is any significant difference in terms of gratitude on learning engagement between different faculties. According to the findings of the Kruskal Wallis test, there is no significant difference in terms of the influence of gratitude on learning engagement between the five faculties. This result can be seen in the first objective, whereby each faculty has the same score in the assessment of gratitude on learning engagement. It can be concluded that the second objective is rejected.

To determine the relationship between gratitude and learning engagement as stated in objective 3 of this study, the Spearman correlation coefficient was conducted and found that the relationship between gratitude and learning engagement is moving in a positive direction. Students who have a feeling of gratitude for their learning make them appreciate their learning more because they recognize the importance of learning. This feeling of gratitude motivates them to do their best in learning. The results of objective 3 also supported that influence of gratitude is positively related to learning engagement.

## **5.2 Limitations of Study**

There are some limitations in the process of conducting this study. Firstly, this research only focused on the influence of gratitude on learning engagement among undergraduate students, which was only performed among students in UNIMAS. This study involved

undergraduate students on different faculties in UNIMAS as a target population however, the researcher was able to gather data set of answers from five faculties only as representative of generalized undergraduate students in UNIMAS due to the difficulty of reaching students from other faculties. The findings of the study is restricted in UNIMAS only as the nature of the students in UNIMAS might be different from other universities in terms of culture. Therefore, the results of this study are only qualified to represent the population of undergraduate students in UNIMAS.

Next, this study did not cover the factors involved in stimulating the sense of gratitude among undergraduate students on their learning that motivate them to keep learning. This study only focuses on the presence of the influence of gratitude in students' learning that encourages students to be more involved in their study and the direct effects of gratitude on learning engagement. Therefore, this study result does not provide a detailed explanation of factors that make students express their gratitude in learning. In addition, this research collects data in a cross-sectional method.

Besides that, this study uses closed-ended questionnaires to obtain data from respondents therefore, the information obtained is not too in-depth to know more about the influence of gratitude on learning engagement. Furthermore, this questionnaire requires honesty from the respondent because it is a self-report, which makes the results of the data obtained entirely rely on the respondent. In addition, the researcher also had difficulties gathering the primary data due to limited access to journals or articles related to the study.

### **5.3 Implication of the Study**

The findings in this study have contributed to the understanding of gratitude's influence, which serves as positive emotions that impact learning engagement. The following are the implications of this study.

#### **5.3.1 Implications to knowledge**

This study has proven the relationship between the influence of gratitude on learning engagement among students despite taking different courses. Students who express gratitude for their learning are directly encouraged them to be more engaged with their learning. As discussed in this study, gratitude is described as positive emotion that is beneficial to encouraging and strengthening learning engagement. Hence, this study can help provide knowledge to the community on the importance of cultivating the value of gratitude in their lives, primarily in the context of learning to make the learning more meaningful. In addition, fostering gratitude might work as a teaching technique to increase learning engagement in the future.

Many studies focused on the moderating roles that can increase student engagement in learning, such as the learning environment and support from parents, teachers, and peers. Nevertheless, only a few studies related to the influence of gratitude have been mentioned as a motivator of learning engagement. Therefore, this study has provided an in-depth literature review to the readers, especially students, on the importance of gratitude in learning which might help students keep motivated despite facing various challenges in their studies. Apart from that, this study also provides awareness and better insight to readers, especially students, to practice gratitude in life because it not only positively shapes the physical, mental, and spiritual but also helps improve their productivity in learning. Moreover, this study proves a

positive relationship between the influence of gratitude on learning engagement that could be found after this study was conducted.

#### **5.4 Recommendations**

Several suggestions can be used for future researchers who wish to research the influence of gratitude on learning engagement. Firstly, it is recommended that the study need to expand the population sample by not only focusing on one university only. Students from all universities in Malaysia should be included as a sample population in replicating this study. Thus, it is possible that the result taken from various universities in Malaysia might yield different results. Future researchers are encouraged to use large samples to obtain more accurate and robust study results and findings. Besides, it helps to get more information related to this study.

Next, future researchers should include the factors that make students feel gratitude for learning in this study. This way will get more information to understand the drive behind students' feelings of gratitude for learning that makes them acknowledge the importance of learning. Therefore, future researchers are recommended to conduct quantitative and qualitative research methods to gather detailed information from respondents about this study. In-depth interviews with respondents by asking questions related to the focus of the study might help the researcher gain better insight in explaining this study rather than analyzing obtained data from the quantitative method.

Besides, the instruments used for this study need to be improved and updated with the latest instrument related to these variables to ensure the questionnaire is suitable for the current context and norms of university students. For this study, GQ-6 was used to measure undergraduate students' gratitude. Although this instrument has good internal consistency, the

instruments to measure gratitude are still limited. Therefore, perhaps future researchers can construct and use more reliable gratitude scales. Moreover, the survey questionnaire also needs to be improved regarding the language and layout of the questions. This is to ensure the respondent can understand each of the questions asked so that the respondent can answer in a precise manner.

## **5.5 Conclusion**

This chapter has summarized this study from the summary of this study, the limitations of the study, recommendations to future researchers in order to improve this study to improve further the understanding related to this study and the conclusion of this study. This study also includes the implications of this study in terms of implications to knowledge. This study also proves the relationship between the influence of gratitude and learning engagement, which is supported by the study's findings and many previous studies.



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[3](#)

**APPENDIX**  
**MATERIALS/INSTRUMENT**



**UNIVERSITI MALAYSIA SARAWAK**  
**Faculty of Cognitive Sciences and Human Development**  
***BACHELOR OF PSYCHOLOGY WITH HONOURS***

***TITLE OF TOPIC: The Influence of Gratitude on Learning Engagement among Undergraduate Students***

Greetings. I am a third-year Psychology student from University Malaysia Sarawak (UNIMAS). I am currently conducting a final year project entitled “The Influence of Gratitude on Learning Engagement among Undergraduate Students”. These questionnaires are divided into three sections

Section A: Demographic

Section B: Gratitude Questionnaire

Section C: Learning Engagement Questionnaire

It should take no longer than 10 minutes to answer all the questions. The information and results of this questionnaire is specifically for academic purposes. All the information obtained will be kept as confidential for this research. Besides, your participation in this survey is voluntary and you have the right to withdraw from this study at any time during study.

If there are any inquiries regarding this study, feel free to contact me through [71049@siswa.unimas.my](mailto:71049@siswa.unimas.my). Your participation will greatly contribute to the success of the research. Your response to this survey are highly appreciated. Thank you.





THE INFLUENCE OF GRATITUDE ON LEARNING ENGAGEMENT AMONG  
UNDERGRADUATE STUDENTS

**Section A: Demographic**

- 1) Age  19-2  
 22-24  
 25 and above

- 2) Gender  Male  
 Female

- 3) Year of Study  1<sup>st</sup> Year  
 2<sup>nd</sup> Year  
 3<sup>rd</sup> Year  
 4<sup>th</sup> Year

4) Faculty Name

- Faculty of Cognitive Sciences and Human Development  
 Faculty of Social Sciences and Humanities

- Faculty of Economics and Business
- Faculty of Language and Communication
- Faculty of Medicine & Health Sciences
- Faculty of Resources Science and Technology
- Faculty of Applied and Creative Arts
- Faculty of Engineering
- Faculty of Built Environment
- Faculty of Computer Science and Information Technology

**Section B**

**Gratitude in Learning Questionnaire**

Read each statement carefully and decide how well the statement describe you. Please choose the scale which best describe your feelings.

Degree of Agreement

| <b>1</b>                 | <b>2</b>        | <b>3</b>                 | <b>4</b>       | <b>5</b>              | <b>6</b>     | <b>7</b>              |
|--------------------------|-----------------|--------------------------|----------------|-----------------------|--------------|-----------------------|
| <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Slightly Disagree</b> | <b>Neutral</b> | <b>Slightly Agree</b> | <b>Agree</b> | <b>Strongly Agree</b> |

| No | Statement   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|---|---|---|---|---|---|---|
| 1. | I have so much in my learning to be thankful for.   |   |   |   |   |   |   |   |
| 2. | If I had to list everything that I felt grateful for my learning, it would be a very long list. |   |   |   |   |   |   |   |
| 3. | When I look at my learning, I don't see much to be grateful for.                                |   |   |   |   |   |   |   |
| 4. | I am grateful to a wide variety of people throughout my learning.                               |   |   |   |   |   |   |   |

|    |  |  |  |  |  |  |  |  |
|----|--|--|--|--|--|--|--|--|
| 5. | As I get older, I find myself more able to appreciate the people, events, and situations that have been part of my learning. |  |  |  |  |  |  |  |
| 6. | Long amounts of time can go by before I feel grateful to my learning.  |  |  |  |  |  |  |  |

### Section C

#### Learning Engagement Questionnaire

Read each statement carefully and decide how well the statement describe you. Please choose the scale which best describe your feelings.

Degree of Agreement

|                          |                 |                          |                |                       |              |                       |
|--------------------------|-----------------|--------------------------|----------------|-----------------------|--------------|-----------------------|
| <b>1</b>                 | <b>2</b>        | <b>3</b>                 | <b>4</b>       | <b>5</b>              | <b>6</b>     | <b>7</b>              |
| <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Slightly Disagree</b> | <b>Neutral</b> | <b>Slightly Agree</b> | <b>Agree</b> | <b>Strongly Agree</b> |

| No | Statement  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|---|---|---|---|---|---|---|
| 1. | When I am doing my work as a student, I feel bursting with energy. |   |   |   |   |   |   |   |
| 2. | I feel energetic and capable when I am studying or going to class. |   |   |   |   |   |   |   |
| 3. | I am enthusiastic about my studies.                                |   |   |   |   |   |   |   |
| 4. | My studies inspire me.   |   |   |   |   |   |   |   |
| 5. | When I get up in the morning, I feel like going to class.          |   |   |   |   |   |   |   |
| 6. | I feel happy when I am studying intensely.                         |   |   |   |   |   |   |   |
| 7. | I am proud of my studies.  |   |   |   |   |   |   |   |
| 8. | I am immersed in my studies.                                       |   |   |   |   |   |   |   |
| 9. | I get carried away when I am studying.                             |   |   |   |   |   |   |   |

*Scoring procedure:*

*Vigor* =1, 2, 5

*Absorption* =6, 8, 9

*Dedication* =3, 4, 7