CHAPTER II

THEORETICAL BACKGROUND

This section provides the insight of theories that were chosen as the grounds of the study. The students' engagement and high academic achievement as the main idea of the research and gender differences in learning chosen as the distinction.

A. Students' Engagements

Students commonly have a sense of what is most suitable and right for them that will affect their performance to be better, in the process they conduct the students' engagement. common observation across the research shows that engagement is often intertwined with academic motivation. Motivation refers to students' inclination, energy and drive to learn and achieve while engagement represents the observable behaviors that reflect this energy and drive (Eccles, 2016; Reschly & Christenson, 2012). "Student engagement is a multidimensional construct, and it includes behavioral, cognitive, and emotional engagement components" (Krause & Coates, 2008). Students engagement as mentioned above refers to an action that students take to reflect their motivation, Engagement has generally been defined as the physical and psychological energies students themselves devote to educationally purposeful activities that will lead to desired outcomes (Astin, 1984; Hu & Kuh, 2002). The engagement in this research highlights "Cognitive engagement and Social engagement" as the criterion of success in achieving a high score.

For the last decade, the study of students' engagement has found that there are four most used engagements used to measure and to predict the students outcomes, which have been highlighted in the previous paragraph. The first one is Behavioral engagement, according to Krause & Coates (2008) Behavioral engagement refers to active participation in school, lessons and classroom activities (e.g., Appleton, Christenson, Kim, & Reschly, 2006; Fredricks et al., 2011). Behavioral engagement is a variety of behaviors related to the university experience, such as studying, joining clubs, and attending classes are the effectiveness of this engagement. Second is cognitive engagement involves the values students hold about their education, cognitive engagement measured to the level of personal investment and involvement in learning and learning tasks (Appleton et al., 2006; Fredricks et al., 2011; Martin, 2007; Voelkl, 2012). and their opinions about their university, other students, faculty. Third is emotional engagement which includes variables such as how enjoyable the students feel their experience is, Emotional engagement refers to positive and negative reactions to school, lessons, and relationships with teachers and peers. The last one is social engagement, in this study is the activities of social interest with a learning orientation, such as being part of a study group and contacting other students and instructors to discuss class materials engagement. Social engagements here are measured by using Witkow, O'neel, and Fuligni (2012) study which displays students' reports of having friends in college, participating in academic activities with friends, extracurricular activities, and also the living of the students.

1. Cognitive Engagement

The idea of capturing engagement this way was influenced by Dweck and Leggett (1988) as cited by Greene (2015) who found that "students with learning goals in addition to planning specific hypothesis-testing strategies and monitoring their outcomes, they also instructed themselves to exert effort or to concentrate and then monitored their level of effort or attention" (p. 258). Our effort item is also consistent with how Fredricks et al. (2004) defined cognitive engagement when they wrote, "Cognitive engagement draws on the idea of investment; it incorporates thoughtfulness and willingness to exert the effort necessary to comprehend complex ideas and master difficult skills" (p. 60). Finally, Fredricks and McColskey (2012) noted that something like effort (e.g., doing extra work) is one of the ways that cognitive engagement is measured in the literature.

Appleton et al. proposed "A measure of cognitive and psychological engagement that is focused on "students' perceived competence, personal goal setting, and interpersonal relationships" (Appleton et al., 2006, p. 431 As cited in Allyson Barlow et al, 2020). There are the difference between the cognitive and behavioral engagement, in order to make it less confusing the researcher tried to describe the difference between the two engagements, Sesmiyanti (2016) in her study stated that based on Blumenfeld and Paris (2004), identify dimensions to student engagement, as discussed below:

a. Behavioral engagement: Students who are behaviorally engaged would typically comply with behavioral norms, such as attendance and involvement, and would demonstrate the absence of disruptive or negative behavior

b. Cognitive engagement: Cognitively engaged students would be invested in their learning, would seek to go beyond the requirements, and would relish challenge.

The difference between Behavioral and Cognitive engagements here can be seen as Behavioral engagement focus on how the students involve themselves with the class activities with positive conduct or norms, while cognitive engagements described as how the students engage themselves individually into the learning process by putting a value in learning and effort to increase the ability.

the most commonly studied is behavioral engagement (Lawson and Lawson 2013). Cappella, Kim, Neal and Jackson (2013) stated that "behavioral engagement is the observable act of students being involved in learning; it refers to students' participation in academic activities and efforts to perform academic tasks (Fredricks et al. 2004; Suarez-Orozco et al. 2009). Research indicates behavioral engagement is directly and strongly associated with academic performance (Archambault et al. 2009; Hughes et al. 2008)". Meanwhile Appleton (2006) proposed that Cognitive engagement In summary, measuring cognitive engagement is relevant because "there is an overemphasis in school practice on indicators of academic and behavioral engagement. Such overemphasis ignores the budding literature that suggests that cognitive associated with positive learning outcomes (Fredericks et al., 2004; National Research Council & Institute of Medicine, 2004), are related to motivation (Reeve et al., 2004; Russell et al., 2005), and increase in response to specific teaching strategies" (Cadwallander et al., 2002; Marks, 2000; Reeve et al., 2004). More recent reviews of this literature resulted "in a tripartite

conceptualization that included a cognitive (e.g., self-regulation, learning goals, investment in learning) subtype (Fredericks et al., 2004; Jimerson et al., 2003) and was consistent with theories proposing fundamental needs of autonomy, competence, and relatedness (e.g., Connell & Wellborn, 1991 as cited in Appleton 2008).

This study used cognitive engagement by Appleton because the theory fits more with the research, as the method also included the behavioral theory Fredericks proposed on how the engagement is measured by the effort of performing academic tasks.

2 Social Engagement

Academic motivation is consistently and positively associated with multiple forms of engagement (Patrick, 2007). Study examined whether college social engagement helps explain change in identification from high school to college according to college type. In this study, college social engagement is measured through participants' reports of having friends in college, participating in academic activities with friends such as studying and sharing class notes, and participating in school based extracurricular activities. Living at home with parents is also tested as an indicator of social engagement as it reflects fewer opportunities for engagement. (Witkow, 2012).

Generally, the "positive social relationships students develop with their classmates and their instructors have positive effects on academic performance in university students (Zhao & Kuh, 2004; Witkow, O'Neel, & Fuligni, 2012), and it

increases motivation in middle school and high school student populations" (e.g., Altermatt & Pomerantz, 2003; Wentzel, McNamara-Barry, & Caldwell, 2004 as cited in Mouzakis, 2017). Therefore, developing social networks and collaborating with peers is beneficial to academic outcomes. This theory proved that social engagement will positively affect the students performance by increasing their motivation, having people around to affect them is count as important factor in getting high achievement and learning outcomes, The findings of Mouzakis (2017) study showed that "academic and social engagement are strongly related to each other, This is may be because the academic and social engagement measures are assessing how involved students are with their academics and their social life, respectively".

The research so far has found how those engagements affect the students outcomes, by using those engagements theories the researcher tried to explore how those engagements performed by the high achievement students as its focus, this research only use cognitive and social engagements as those two engagements can used to see how the students performed inside/outside the classroom. The goal of focusing on the cognitive engagement are we could see how they plan or use a strategy for their learning which later will be shown on their behavior, and by using the social engagement we can see how the students interact with others and how people around them affect their learning, as mentioned above that engagement performed based on their motivation, so the two engagements chosen because the researcher wanted to see the students' motivation has driven them to perform their social engagement and cognitive engagement in learning, both types of

engagements they performed have made them able to achieve high learning achievement.

B. Academic Achievement

In order to know that the students have become a successful learner, the students' ability is measured through academic achievement. The academic achievement shows performance outcomes that indicate a student's accomplishment of specific goals, specifically in school, college, and university (Crede, et al., 2015). The performance outcomes measured by using students' GPA as Khosrow-pour M. found that GPA is used by most of the tertiary institutions as a classical summary measure of the academic performance of their students. It is considered as an appropriate measurement because it provides greater insight into the relative level of performance of individuals and different groups of students (as cited in Hamza 2019). (Wood, et al., 1994), Found that there are close relationships between self-esteem and a high level of academic achievement.

This research tries to get a deeper insight on how the academic achievement intertwined with the Students engagement and achievement goals. Achievement goals are conceptualized as cognitive representations that guide engagement in achievement-related settings (Elliot, 2005; Elliot & Hulleman, 2017). This concept leads the researcher to conduct how far the relation shows on the high achieve students, while there is still little research that tries to get a deeper analysis towards how those elements measured the college students' performance.