

Effects of Academic Burnout on Study Engagement as moderated by Resilience and
Social support: A longitudinal study



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อิทธิพลของภาวะหมดไฟในการเรียนที่มีต่อความผูกพันในการเรียน โดยมีความสามารถในการฟื้นคืนพลังและการสนับสนุนทางสังคมเป็นตัวแปรกำกับ: การวิจัยแบบระยะยาว



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต
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สุชาติ เรืองศรี : อิทธิพลของภาวะหมดไฟในการเรียนที่มีต่อความผูกพันในการเรียน โดยมีความสามารถในการฟื้นคืนพลังและการสนับสนุนทางสังคมเป็นตัวแปรกำกับ: การวิจัยแบบระยะยาว. (Effects of Academic Burnout on Study Engagement as moderated by Resilience and Social support: A longitudinal study) อ.ที่ปรึกษาหลัก : ผศ. ดร.หยกฟ้า อิศรานนท์

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างภาวะหมดไฟในการเรียน ความผูกพันในการเรียน ความสามารถในการฟื้นคืนพลัง และการสนับสนุนทางสังคมภายใต้บริบทของการศึกษาในสังคมไทย อีกทั้ง ยังศึกษาอิทธิพลของภาวะหมดไฟในการเรียนที่มีต่อความผูกพันในการเรียน โดยมีความสามารถในการฟื้นคืนพลังและการสนับสนุนทางสังคมเป็นตัวแปรกำกับ หลังจากสถานการณ์ COVID-19 คลี่คลายและผู้เรียนได้กลับไปเรียนในห้องเรียนที่มหาวิทยาลัยอีกครั้งหนึ่ง ตลอดจน การวิจัยครั้งนี้ยังศึกษาอิทธิพลของการสนับสนุนทางสังคมในแต่ละรูปแบบที่มีต่อภาวะหมดไฟในการเรียน ความผูกพันในการเรียน และความสามารถในการฟื้นคืนพลัง

การวิจัยในครั้งนี้ มีการเก็บข้อมูลด้วยกันทั้งสิ้น 2 ครั้งเพื่อทดสอบสมมติฐาน โดยกลุ่มตัวอย่างในการวิจัยครั้งนี้ คือ นิสิตและนักศึกษาที่กำลังศึกษาอยู่ในระดับปริญญาตรี มีอายุระหว่าง 18 - 25 ปี และศึกษาอยู่ในพื้นที่กรุงเทพมหานคร โดยการเก็บข้อมูลในครั้งแรกมีกลุ่มตัวอย่างทั้งสิ้น 70 คน และการเก็บข้อมูลในครั้งที่ 2 มีกลุ่มตัวอย่างทั้งสิ้น 63 คน นอกจากนี้ การวิจัยครั้งนี้ทดสอบสมมติฐานด้วยการวิเคราะห์ค่าสหสัมพันธ์แบบเพียร์สัน และการวิเคราะห์การถดถอยเชิงเส้น

ผลการทดสอบสมมติฐานจากการเก็บข้อมูลในครั้งที่ 1 พบว่า ภาวะหมดไฟในการเรียนสัมพันธ์ทางลบกับความผูกพันในการเรียน ($r = -.374, p = .001$) และการสนับสนุนทางสังคม ($r = -.247, p = .039$) ในขณะที่ความผูกพันในการเรียนสัมพันธ์ทางบวกกับความสามารถในการฟื้นคืนพลัง ($r = .367, p = .002$) และความสามารถในการฟื้นคืนพลังสัมพันธ์ทางบวกกับการสนับสนุนทางสังคม ($r = .600, p < .001$) แต่ในการวิจัยครั้งนี้ไม่พบความสัมพันธ์ระหว่างภาวะหมดไฟในการเรียนและความสามารถในการฟื้นคืนพลัง ($r = -.103, p = .397$) ตลอดจนไม่พบความสัมพันธ์ระหว่างความผูกพันในการเรียนและการสนับสนุนทางสังคมด้วยเช่นกัน ($r = .147, p = .223$) อีกทั้ง ยังไม่พบบทบาทการเป็นตัวแปรกำกับของความสามารถในการฟื้นคืนพลัง ($b = 0.00, SE = 0.003, 95\% CI [-0.005, 0.005], \beta = 0.001, p = .990$) และการสนับสนุนทางสังคม ($b = -0.001, SE = 0.003, 95\% CI [-0.008, 0.005], \beta = -0.052, p = .637$) ในอิทธิพลของภาวะหมดไฟในการเรียนที่มีต่อความผูกพันในการเรียน

นอกจากนี้ จากการเก็บข้อมูลทั้ง 2 ครั้งและทำการวิเคราะห์สมมติฐาน พบว่า ภาวะหมดไฟในการเรียนจากการเก็บข้อมูลในครั้งแรกสามารถทำนายความผูกพันในการเรียนในเวลาต่อมาได้ เมื่อมีการสนับสนุนทางสังคมจากการเก็บข้อมูลในครั้งแรกเป็นตัวแปรกำกับ ($b = -0.008, SE = 0.003, 95\% CI [-0.014, -0.003], \beta = -0.290, p = .005$) แต่เมื่อความสามารถในการฟื้นคืนพลังจากการเก็บข้อมูลในครั้งแรกเป็นตัวแปรกำกับแล้วนั้นภาวะหมดไฟในการเรียนจากการเก็บข้อมูลในครั้งแรกไม่สามารถทำนายความผูกพันในการเรียนในเวลาต่อมาได้ ($b = -0.004, SE = 0.003, 95\% CI [-0.009, 0.001], \beta = -0.142, p = .106$)

อีกทั้ง การวิจัยในครั้งนี้ยังพบว่า การสนับสนุนจากครูมีอิทธิพลต่อภาวะหมดไฟในการเรียน ($\beta = -0.459, p < .001$) ความผูกพันในการเรียน ($\beta = 0.390, p = .006$) และความสามารถในการฟื้นคืนพลัง ($\beta = 0.303, p = .009$) ในขณะที่การสนับสนุนจากครอบครัวมีอิทธิพลต่อภาวะหมดไฟในการเรียน ($\beta = -0.374, p = .003$) และความสามารถในการฟื้นคืนพลัง ($\beta = 0.501, p < .001$) นอกจากนี้ การสนับสนุนทางสังคมจากเพื่อนก็มีอิทธิพลต่อภาวะหมดไฟในการเรียนด้วยเช่นเดียวกัน ($\beta = 0.261, p = .044$)

ผู้วิจัยคาดหวังว่าผลการวิจัยที่พบในครั้งนี้จะเป็นส่วนหนึ่งที่ช่วยให้บุคคลและส่วนงานที่เกี่ยวข้องกับการดูแลสุขภาวะของนิสิตและนักศึกษาได้ตระหนักรู้และเข้าใจถึงภาวะและปัจจัยที่สำคัญต่อการเรียนของผู้เรียน ตลอดจนอาจจะนำผลการวิจัยที่พบในครั้งนี้ไปเป็นส่วนหนึ่งในการริเริ่มสร้างสรรค์และปรับปรุงการออกแบบรูปแบบรายวิชาเรียนในอนาคต เพื่อเป็นส่วนหนึ่งในการช่วยส่งเสริมสุขภาวะที่ดีให้กับผู้เรียน

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Suchada Ruengesri : Effects of Academic Burnout on Study Engagement as moderated by Resilience and Social support: A longitudinal study. Advisor: Asst. Prof. YOKFAN ISARANON, Ph.D.

The purpose of this study was to examine the correlations between academic burnout, study engagement, resilience, and social support in the Thai education context. The study also aimed to investigate the effect of academic burnout on study engagement, moderated by resilience and social support after the transition from online learning to on-site learning due to the COVID-19 pandemic. Additionally, the study aimed to explore the effects of different types of social support on academic burnout, study engagement, and resilience.

The current study included two data gathering occasions for hypothesis testing. The participants were undergraduate students aged between 18 to 25 years old, those of which studied at educational institutions located in Bangkok, Thailand. The first data collection had 70 participants, whereas the second data collection included 63 participants. In addition, Pearson's correlation analysis and linear regression analysis were used in this study to investigate the hypotheses.

The analysis of the initial data collection revealed a negative correlation between academic burnout and study engagement ($r = -.374, p = .001$), as well as between academic burnout and social support ($r = -.247, p = .039$). On the other hand, study engagement showed a positive association with resilience ($r = .367, p = .002$). Resilience was found to be positively correlated with social support ($r = .600, p < .001$). However, no significant relationship was found between academic burnout and resilience ($r = -.103, p = .397$), as well as between study engagement and social support ($r = .147, p = .223$). Furthermore, the results indicated that there is no evidence for the moderating role of resilience ($b = 0.00, SE = 0.003, 95\% \text{ CI } [-0.005, 0.005], \beta = 0.001, p = .990$) and social support ($b = -0.001, SE = 0.003, 95\% \text{ CI } [-0.008, 0.005], \beta = -0.052, p = .637$) in the effect of academic burnout on study engagement.

The analysis of the dual data collections demonstrated that academic burnout at Time 1 could predict subsequent study engagement, with the moderation of social support at Time 1 ($b = -0.008, SE = 0.003, 95\% \text{ CI } [-0.014, -0.003], \beta = -0.290, p = .005$). However, when resilience at Time 1 acts as a moderator, academic burnout at Time 1 does not predict later study engagement ($b = -0.004, SE = 0.003, 95\% \text{ CI } [-0.009, 0.001], \beta = -0.142, p = .106$).

In addition, the findings indicated that support from teachers had an impact on academic burnout ($\beta = -0.459, p < .001$), study engagement ($\beta = 0.390, p = .006$), and resilience ($\beta = 0.303, p = .009$). While support from families was found to influence academic burnout ($\beta = -0.374, p = .003$) and resilience ($\beta = 0.501, p < .001$) among students. Furthermore, peer support had an effect on academic burnout ($\beta = 0.261, p = .044$) as well.

The researcher anticipated that the current findings would be one of the parts that facilitate stakeholders who are involved with students' well-being to be aware of and understand the factors and states that are important to students' learning. Furthermore, the findings might be used as part of the initial process to construct or modify the course design in the future to promote students' well-being.

Field of Study: Psychology

Student's Signature

Academic Year: 2022

Advisor's Signature

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Chapter 1

Introduction

Background and Statement of the Problem

Although university students have now been back to study on-site in the classroom or studying in a hybrid learning style which is a mix-study both online and on-site due to the limitation of the number of students after the rapid spread of the COVID-19 pandemic across the world, they might still have high levels of stress from online learning, according to Chula Student Wellness (CUSW). Past studies showed that the levels of students' stress and anxiety were as high as 74.9 percent (Bangkokbiznews, 2021). In detail, students' academic stress was found to be the most reported problem as the reason for seeking psychological help during the pandemic. More importantly, the continuity of this pandemic may cause long-term stress. This is because the uncertainty of the COVID-19 situation may lead to an increase in stress and academic burnout levels among students (Celik, 2021 as cited in TAŞÖREN & BURHAN, 2022). Moreover, a social distancing policy in the past 2 years might bring about a massive adjustment in each student in order to prepare themselves for on-site or hybrid learning and human interactions in their social groups again. It is possible that such adjustment in the learning process and knowledge acquisition could in turn be the cause of the students' stress and anxiety. This is evident from the past study of Pulido-Martos et al. (2012) which found that a lot of students' stress was associated with education.

Prior research found that when students were confronted with the stresses from learning for a long time, they had high tendency to experience academic burnout (Shin et al., 2012). To illustrate, the chronic stresses from learning can cause

emotional exhaustion (Lee et al., 2020) and when emotional exhaustion occurs, it can cause cynicism and inefficacy (Kim et al., 2015). In addition, a Mental Health Check-in survey recently found that students have academic burnout of about 16.67 percent which is three times higher than adult burnout (MATICHON ONLINE, 2021).

It is worth to note that academic burnout can lead to negative effects among students in various aspects, such as physical problems, low level of life satisfaction (Mokgele & Rothmann, 2014), depression (Kyeong, 2013), higher intention to drop out, and lower level of study satisfaction (Mostert & Pienaar, 2020). Such negative effects are closely related to students' psychological well-being. (Kyeong, 2013; Mokgele & Rothmann, 2014). In addition, when academic burnout occurs, it could yield to improper behaviors in students that might be related to students' performance (Schaufeli et al., 2002b; Wu et al., 2020)

Study engagement is one of the psychological factors which can promote academic performance. Schaufeli et al. (2002b) found that study engagement was positively correlated with academic performance. Moreover, Chase et al. (2014) found that study engagement could predict high school students' GPA. This has shown that students who engage in studying have higher chances to be academically successful. More importantly, Cole & Korkmaz (2013) also found that study engagement was positively associated with psychological well-being. and could be a potential factor that can elevate resilience (Malindi & MacHenjedze, 2012).

Resilience, a component of Psychological Capital, is an important variable for handling changes, problems, stresses, and uncertain situations. Cheng et al. (2020) found that resilience can be a protective factor which help protect students from developing depression symptoms after experiencing academic burnout. In addition,

Bittmann (2021) found that students with high resilience not only have higher average grades, but they also have higher life satisfaction and lower intention to drop out from the study than those with lower resilience. Besides, resilience was positively correlated with psychological well-being (Souri & Hasanirad, 2011). This suggests that resilience can enhance psychological well-being (Tan et al., 2021; Yu & Chae, 2020)

Social support is another factor that correlates with academic burnout, study engagement, resilience, and psychological well-being in students. Zhang et al. (2021) stated that social support can be another factor that help protecting students from academic burnout. This is because students who have social support will be satisfied their lives, and their satisfaction with life can also help decrease the level of academic burnout (Ye et al., 2021). Social support which came from various sources also has an effect on students' psychological well-being and academic motivation (Emadpoor et al., 2016). This is evident by the findings from Garcia-Reid et al. (2005) that demonstrated that support from friends, teachers, and family are positively associated with study engagement. Furthermore, support from families, schools, society, and peers can uplift levels of resilience (Stewart & Sun, 2004).

Based on the aforementioned preliminary literature review and the lack of research in Thai education context, this study thus aims to examine the effects of academic burnout on study engagement which might be moderated by resilience and social support among university students. Findings from the current study might be utilized for designing interventions to promote well-being in the future.

Literature review

Study engagement

Study engagement is one of the most popular psychological variables in education context. Several studies found that study engagement is positively related to academic achievement in students in both school and university. For example, Abubakar et al. (2017) found that study engagement was positively associated with satisfying academic outcomes. Similarly, Chase et al. (2014) found that study engagement could be a GPA predictor in high school students. In addition, Xerri et al. (2018) also found that study engagement could raise academic achievement in higher education.

Study engagement has been studied for more than 70 years (Groccia, 2018). It was first studied in the 1930s by Ralph Tyler who explored the effect of time that students spent studying and doing assignments on academic performance (Axelson & Flick, 2010). In the initial studies, researchers mostly focused on exploring a sense of being part of the study which might promote desirable behavior and help to increase academic success (Parsons & Taylor, 2011)

Even though study engagement has been studied broadly, there is still a lack of an obvious definition for study engagement (Alrashidi et al., 2016; Axelson & Flick, 2010; Lester, 2013). Besides, researchers coined many terms for explaining study engagement such as academic engagement (e.g. Alrashidi et al., 2016; Ayala & Manzano, 2018; Ugwu et al., 2013), student engagement (e.g. Abubakar et al., 2017; Mokgele & Rothmann, 2014; Skinner & Pitzer, 2012), school engagement (e.g. Chase et al., 2014; Estell & Perdue, 2013; Garcia-Reid et al., 2005), study engagement (e.g. Ouweneel et al., 2011; Salanova et al., 2010; Slåtten et al., 2021), and learning

engagement (e.g. Alemayehu & Chen, 2021; Daumiller et al., 2021; Wu et al., 2020). Although researchers used different vocabulary, all the terms above usually indicate the students' characteristics which showed their involvement and identification for being part of their study and activities (Alrashidi et al., 2016). Moreover, those characteristics also showed students' engagement in their learning

In general, study engagement could refer to the signs of commitment and effort both physical and mental to study and study-related activities whether in or out of the classroom. Study engagement may also be defined as students' intention, voluntary, and attention to participating in school activities including a sense of being part of the school (Axelson & Flick, 2010; Chapman, 2002; Kuh, 2003; Kuh, 2009). Given study engagement has durable characteristics, it is related to emotion and cognition in students (Schaufeli et al., 2002a). In addition, study engagement is a dynamic process that relies on the interaction between other factors in students, both individual and environmental. (Abubakar et al., 2017; Fredricks et al., 2004). Hence, study engagement can express in various ways like cognitive, affective, and behavioral (Groccia, 2018)

In sum, study engagement consists of three components, which are vigor, dedication, and absorption (Manzano, 2002 as cited in Ayala & Manzano, 2018; Martínez et al., 2003 as cited in Fernández-Martínez et al., 2017; Schaufeli et al., 2002a; Schaufeli et al., 2002b). The first component is vigor, vigor refers to students' physical and mental energy to apply to learning. Besides, it may also refer to voluntariness to put these resources for studying, doing assignments, and participating in academic activities; moreover, students can maintain levels of their own resources at a higher level even if they must confront study-related difficulties (Ayala & Manzano, 2018; Schaufeli et al., 2002a; Schaufeli et al., 2002b). The second

component is dedication, which refers to students' sense of connectedness and identification between themselves and studying. Such sense includes feeling eager to participate in learning activities. Student with dedication would recognize that their studying is meaningful, important, and can challenge their own competencies and limitations (Ayala & Manzano, 2018; Salmela-Aro, 2017; Schaufeli et al., 2002a; Schaufeli et al., 2002b). The last component is absorption which refers to students' concentration to study till students feel being part of studying and study-related activities. Absorption may also refer to students' obsession toward studying (Ayala & Manzano, 2018; Salmela-Aro, 2017; Schaufeli et al., 2002b).

Many studies have found that study engagement can be beneficial to students' learning life. To be more specific, engagement that students have in their studying can raise learning capacity (Alrashidi et al., 2016). Likewise, Schaufeli et al. (2002b) found that study engagement was positively correlated with academic performance. Furthermore, Students who have higher levels of study engagement will have better academic performance than students with lower levels of study engagement. More importantly, if students are highly engaged in their studying which leads to high academic performance and success in academics, they will acknowledge that they have higher academic competency and feel like they are part of their studying more and more (Skinner & Pitzer, 2012). Abubakar et al. (2017) stated that study engagement can be used to predict both learning and personal development. Furthermore, Skinner & Pitzer (2012) also stated that the engagement which students have toward their studying and school including other institutes is one of the protective factors for themselves, especially in students who tend to have lower academic performance and tend to drop out from education.

Study engagement and all its components were negatively correlated with dropout intention but positively correlated with academic satisfaction (Truta et al., 2018). Furthermore, Mokgele & Rothmann (2014) found that study engagement was positively correlated with life satisfaction and negatively associated with physical illnesses. Moreover, study engagement can be used to predict students' life satisfaction as well. Cazan (2015) also found that study engagement was positively correlated with self-efficacy and intrinsic goals in learning as well. This is consistent with the findings from Wu et al. (2020) who found that study engagement was a mediator in the relationship between both extrinsic and intrinsic motivations and academic performance. In addition, study engagement can promote the students' capital for learning every semester and along with the study pathway. (Skinner & Pitzer, 2012).

Motivation is another factor that is related to study engagement. Schunk & Mullen (2012 as cited in Martin et al., 2022) stated that motivation can enlarge engagement in doing anything. Consistent with the past research by Wu (2019) which found that study motivation has a positive effect on study engagement and study outcome. According to Saeed & Zyngier (2012), motivation toward study is critical and must occur in students before they will engage with their studies. Furthermore, intrinsic motivation was positively related to study engagement as well (Siu et al., 2014). Besides, if students have intrinsic motivation toward their studies, they will engage with their studies more than students who lack intrinsic motivation (Saeed & Zyngier, 2012). However, a previous study discovered that students who are experiencing learning stress or perceived high stress have a lower level of intrinsic motivation toward studies or a lack of motivation (Lyndon et al., 2017). In addition, if students lack motivation, they tend to be confronted with severe psychological distress (Baker, 2004).

As mentioned earlier, students were confronted with high levels of stress during the COVID-19 pandemic, and they tend to face stress continually from lots of adaptation and preparation for on-site and hybrid learning. Stress that happens with students might lead to diminish motivation toward their learning lives, which might affect the decline of study engagement and the rise of academic burnout as well.

Ugwu et al. (2013) found that study engagement was negatively correlated with academic burnout. Likewise, Abreu Alves et al. (2022) found that study engagement can be viewed as a protective factor that can relieve the effect of developing academic burnout on intention to drop out. Moreover, Skinner & Pitzer (2012) stated that study engagement is the process which can help to promote abilities to cope with the challenges and obstacles in students' life and learning, meaning that study engagement can increase levels of resilience that can help the student to defeat the academic difficulties and become engaged with learning again.

Estell & Perdue (2013) found that support from family, peers, and teachers was positively correlated with study engagement. Furthermore, support from various sources can affect different dimensions of study engagement. For example, peer support was related to the affective dimension while family support was associated with study engagement in the behavioral one. Likewise, Salanova et al. (2010) found that study engagement was a mediator in the relationship between support and difficulties in the study and future academic performance. To illustrate, If students acknowledge that they have sufficient support and confront a little difficulty, they tend to have satisfying academic performance in the future.

Academic Burnout

The term "burnout" was first established by Freudenberger in 1974 (Kim et al., 2015) for explaining stress from working (Moneta, 2011). A large number of researchers found that burnout might occur in the workers who work in human services jobs and caregiving jobs (Maslach et al., 2001; Schaufeli et al., 2002b). However, burnout has nowadays been an important variable studied in numerous contexts such as work context (e.g. Artz et al., 2022; Bakker & Costa, 2014; Leiter & Maslach, 2003; Swider & Zimmerman, 2010), education context (e.g. Cazan, 2015; Fernández-Castillo et al., 2021; Kwan, 2022; Madigan & Curran, 2021; Schaufeli et al., 2002b), sport context (e.g. Coakley, 1992; Gomes et al., 2017; Raedeke et al., 2002), etc.

Maslach et al. (2001) stated that burnout is a psychological syndrome that occurs in response to stress from work. Moreover, burnout is psychological distress which can be induced or caused by stress (Zhang et al., 2021). Burnout consists of three components which are emotional exhaustion, cynicism, and inefficacy. The first component is emotional exhaustion which refers to feeling exhausted both physically and mentally from work, feeling strained, and reflecting the continuous tiredness from hard work. The emotional exhaustion stage occurs from having an overabundant workload. The second component of burnout is cynicism. Cynicism refers to a worker's response to work with negative feelings, ignorance, and seclusion from work. Furthermore, cynicism includes a decline of interest in work and a reduction of confidence in work and organization. The last component is inefficacy which refers to the perception of workers that they assess themselves as inaptitude to work and cannot complete the assignment within the due date. Such inefficacy includes the worker's perception that they lack success (Maslach et al., 2001; Moneta, 2011; Salmela-Aro et al., 2009).

Similar to burnout, Academic burnout is a psychological syndrome that occurs in response to a long time and continually strains and difficulties from studying (Lee & Lee, 2018; Salmela-Aro et al., 2008; Xie et al., 2019). To be more specific, academic burnout derives from resource deficiency to use in the studying process and not being able to meet the student's needs about studying life and success (Kiuru et al., 2008). When students are confronted with academic burnout, they might feel exhausted both physically and emotionally from having high academic demands, cynical toward their studies and assignments. In addition, they might also feel that they are inadequate as a student and incompetent at studying (Schaufeli et al., 2002a; Yu & Chae, 2020)

Academic burnout is a multidimensional construct like job burnout. It comprises three components, which are emotional exhaustion, cynicism, and inefficacy (Lee & Lee, 2018). Emotional exhaustion is an emotional component that refers to feeling depleted both physically and emotionally due to the accumulated study-related stress; besides, having extreme study demands but lack the resources to handle those demands. Emotional exhaustion can lead to a drop in interest to complete study-related assignments (Kim et al., 2015; Lee et al., 2020; Lin & Huang, 2014; Madigan & Curran, 2021; Schaufeli et al., 2002a). Another component of academic burnout is cynicism. Cynicism is a cognitive component which refers to having negative attitudes and negative responses toward the study. Cynicism also refers to a loss of interest in assignments, a decline of enthusiasm and attention to study including considering studying and assignments as being worthless (Kim et al., 2015; Lee et al., 2020; Madigan & Curran, 2021; Salmela-Aro et al., 2009; Schaufeli et al., 2002a). The last component is inefficacy. Inefficacy is a cognitive component which refers to students recognizing that they are incompetent at studying or perceiving their learning ability is gradually declining. It also includes referring

themselves as academically unsuccessful (Lee et al., 2020; Lin & Huang, 2014; Salmela-Aro et al., 2009).

Burnout can be studied in an educational context because the study characteristics resemble the job characteristics. To illustrate, learning has compulsory activities and assessments like jobs such as class attendance, assignments, and examinations (Leupold et al., 2020; Salmela-Aro et al., 2008). Furthermore, learning activities are related to students' stress as Pulido-Martos et al. (2012) found that a lot of students' stress was associated with education. Students' stress can come from various ways such as academic workload from various subjects, frequent examinations, learning competition with friends, and having terrible relationships with peers, teachers, or families (Moneta, 2011).

When students are confronted with learning-related stresses for a long time, they can accumulate the stresses to a large amount which can bring about academic burnout (Moneta, 2011; Shin et al., 2012). Moreover, if the students have a shortage of study resources and cannot cope with their study-related problems, they tend to face study-related stresses. Such study-related stresses can turn to academic burnout (Amelia, 2022). To illustrate, the chronic stresses from learning cause emotional exhaustion (Lee et al., 2020), and when emotional exhaustion occurs, it can cause cynicism and inefficacy (Kim et al., 2015). In addition, a lack of study resources and study demands are related to academic burnout (Mokgele & Rothmann, 2014) and lots of academic assignments can influence academic burnout in students too (Amelia, 2022).

Moreover, academic burnout can lead to negative effects on students in various aspects whether it be physical problems, mental problems, or academic

performance. Mokgele & Rothmann (2014) found that academic burnout could lead to physical health problems and lower levels of life satisfaction. Furthermore, academic burnout could also decrease levels of study and life satisfaction (Wang et al., 2022) and psychological well-being (Kyeong, 2013; Mokgele & Rothmann, 2014) but increase the intention to drop out (Mostert & Pienaar, 2020).

It is worth noting that academic burnout was negatively related to academic achievement and performance (e.g. Schaufeli et al., 2002b; Wu et al., 2020; Yang, 2004). Madigan & Curran (2021), who did Meta-Analysis research, found that academic burnout could lead to poor academic achievement in school, college, and university students. This suggests that emotional exhaustion, cynicism, and inefficacy, which are components of academic burnout, have an impact on academic achievement. To illustrate, Emotional exhaustion leads to a drop in interest in assignments because students feel exhausted. While cynicism leads to negative reactions toward studying such as deliberately overlooking the study, avoiding doing the assignments, secluding from social groups like teachers and friends, and neglecting to look for help or support about studying from social groups as well. Furthermore, inefficacy, which refers to self-assessment as incompetent to study, brings about improper behaviors in studying that might worsen the academic achievement (Madigan & Curran, 2021).

Past research which examined the relationship between academic burnout and resilience found that academic burnout was negatively correlated with resilience (Fernández-Castillo et al., 2021; Kwan, 2022; Smith & Emerson, 2021; Wang et al., 2022; Yu & Chae, 2020). When students are confronted with excessive academic burnout, it can lead to a decline in resilience levels and affect students' psychological well-being as well (Yu & Chae, 2020). Moreover, Fernández-Castillo et al. (2021) found that students with high levels of resilience would show less

academic burnout than those with lower levels of resilience. Thus, resilience could be a crucial psychological factor which can lead to boosting psychological well-being and resilience can help students resist academic burnout from study-related stress as well (Yu & Chae, 2020).

Past research also found that academic burnout was negatively associated with study engagement (Cazan, 2015; Mokgele & Rothmann, 2014; Schaufeli et al., 2002a; Schaufeli et al., 2002b). When students feel burned out, they will go through exhaustion both physically and mentally, viewing studying as meaningless, and being less enthusiastic toward studying and the assignments. All of these symptoms are the responses to chronically study-related stress and lack of both studying resources and support. In addition, academic burnout also leads to a decline in efforts and carefulness toward their academic performance which relates to a drop in study engagement and learning motivation as well (Mokgele & Rothmann, 2014).

Past studies also showed that academic burnout is negatively correlated with social support (Ye et al., 2021; Zhang et al., 2021). Ye et al. (2021) found that social support could alleviate academic burnout since students with social support could seek help and guidance to deal with academic burnout more easily than those who have less. Likewise, Ye et al. (2021) also found out that students who have social support would expand positive perception of their lives which could bring about life satisfaction and lessen academic burnout. Furthermore, a good environment and receiving proper support will encourage students to have a positive attitude toward their studies and can lessen academic burnout as well (Amelia, 2022). Consistently, Zhang et al. (2021) also found that subjective support or perceived understanding, acceptance, and support, can protect students from stress and diminish the

tendency for academic burnout, as well as seeking and using help from social support.

Resilience

Everyone, whether young or old, is used to confronting situations which are full of difficulties, complications, and challenges to their potential. The ability to step over those problems with good responses and adjustments are responses and adjustments to the difficulties in their lives which are known as 'resilience' (Atkinson et al., 2009; Vella & Pai, 2019). Resilience has been studied since the 1970s. The initial studies about resilience were studied in the child development context. To illustrate, researchers studied resilience in children who were fostered in an unsuitable environment for development and growth (Coronado-Hijón, 2017; Masten, 2001) and the initial studies endeavored to explore the protective factors for preventing people from stress (Fletcher & Sarkar, 2013). However, resilience studies were later broadened to other contexts such as education context (e.g. Bittmann, 2021; Etherton et al., 2022; Ríos-Risquez et al., 2018; Sabouripour & Roslan, 2015), work context (e.g. Chitra & Karunanidhi, 2021; Hudgins, 2016; Ogińska-Bulik & Michalska, 2021; Yu & Lee, 2018), and disaster or trauma events context (e.g. Chen et al., 2020; Friedberg & Malefakis, 2018; Gori et al., 2021)

As resilience was studied widely, researchers defined it in several ways. Although there were many resilience definitions, the mutual characteristics in those definitions were confronting adversity events and defeating adversity with a proper adaptation which lead to better outcomes (Fletcher & Sarkar, 2013; Vella & Pai, 2019; Rutter, 2006). Thus, resilience could refer to the competency to recover, preserve mental status, and remain in physical activities normally after facing challenging

situations which bring about stresses and troubles in their lives (Jacelon, 1997; Russo et al., 2012). Besides, resilience also refers to abilities to deal with challenging and difficult events (Sabouripour & Roslan, 2015) by using mental processes and positive behavior responses along with using both physical and mental resources as little as possible to deal with problems, so that these important resources are not totally exhausted when used for coping with those difficulties (Fernández-Martínez et al., 2017; Fletcher & Sarkar, 2013). Furthermore, the responses were conducive to people defeating the challenges in their lives and brought about positive consequences (Vella & Pai, 2019). In addition, resilience also refers to abilities to reform difficulties to be an occasion for developing themselves (Gillespie et al., 2007). Thus, resilience and growth after facing adversity are the basis of positive psychology (Atkinson et al., 2009).

It is worth noting that many researchers have various perspectives on resilience. Some viewed it as a personal characteristic that exhibits the capability to handle the hardships which are the causes of suffering (Iacoviello & Charney, 2020); while others viewed it as a characteristic to show competency to recover from troubles one came across (Kwek et al., 2013). Nonetheless, few researchers viewed resilience as a dynamic process that occurs in people for promoting proper adaptation and assisting people to overcome adversity situations (Gillespie et al., 2007; Luthar et al., 2000). Gillespie et al. (2007) stated that one can develop resilience across a lifetime, hence resilience is not a fixed trait.

Resilience consists of cognitive and behavioral components (Iacoviello & Charney, 2020). The characteristics of resilience are self-efficacy, hope, and active coping skills, optimism, cognitive flexibility, social support, physical activity, and personal moral compass (Gillespie et al., 2007; Iacoviello & Charney, 2020). All of

these characteristics assist people to manage faults and failures rather than being stuck with the feeling of regret and hopelessness (Luthans et al., 2014). Furthermore, how difficult the situation was will help enhance the levels of resilience as well (Gillespie et al., 2007). When people are faced with problems and stuck with them, people who have higher levels of resilience will try to seek new solutions for the problems. Besides, they will be confident that they have enough potential to overcome this adversity and will appraise their resources and seek help from their social support to defeat the problems (Luthans et al., 2014).

Masten (2001) stated that resilience is a phenomenon that is related to the adjustment process in humans. If this process functions normally, when humans are confronted with challenges, this adjustment process will lead to ability development and growth in a person. On the other hand, if the process is flawed, it can lead to problems such as mental health issues.

Education is full of challenges and obstacles which are sporadically coming to challenge students' abilities. If students have enough protective factors, they tend to adjust themselves to a challenging environment and problems from studying easily. They also tend to have higher levels of resilience than the students who have fewer protective factors (Kwek et al., 2013). Resilience, thus, is an important factor for handling stresses and other problems which occur with students. Besides, it could also help raise students' performances (Sabouripour & Roslan, 2015). Likewise, Bittmann (2021) found that high resilience students' grades were better than the ones who have lower resilience. Moreover, high resilience students had higher life satisfaction and lower intention to drop out.

Past research also found that resilience was positively related to psychological well-being (Souri & Hasanirad, 2011; Yu & Chae, 2020). Tan et al. (2021) stated that enlarging resilience could help alleviate the negative consequences from the environment which induce stresses to students like the COVID-19 pandemic. Moreover, those stresses can negatively influence students' psychological well-being. Consistent with the finding of Yu & Chae (2020) who found that resilience is an important factor to expand psychological well-being, Kwek et al. (2013) also found that students who have higher resilience have high self-esteem.

Wang et al. (2022) also found that resilience worked as a mediator in the relationship between academic burnout and life satisfaction. In particular, students who have high levels of resilience also show lower levels of academic burnout. Additionally, they tend to have higher life satisfaction as well. This is because high resilience students can adapt to the challenging environment and defeat the study-related stresses and problems. Moreover, success over difficulties can relieve the psychological impacts of academic burnout. This success enlarges students' life satisfaction as well (Wang et al., 2022). Furthermore, Cheng et al. (2020) stated that resilience is a psychological asset that can protect students from developing study-related stresses and academic burnout that can lead to depression.

Interestingly, past research showed that resilience was positively correlated with study engagement (Romano et al., 2021). Ahmed et al. (2018) found that students with higher resilience had extended levels of study engagement; moreover, students' resilience toward their studies could be used as a predictor for forecasting study engagement as well. Stewart & Sun (2004) also found that both adult support and friend support significantly affected resilience. In addition, the levels of resilience in students can extend even more if they receive support from adults in various

contexts like home, school, friends, and society. This is consistent with the findings from Wilks (2008) who found that social support was positively related to resilience; furthermore, peer support moderated the relationship between learning-related stresses and resilience.

Social Support

Social support is one of the most popular variables to study in the psychological field. Social support, which is an external factor, is known as an important variable to promote the individual's ability for handling events that tend to cause lots of stress (Taylor, 2011). It was admitted as a positive factor that can bring about a positive outcome in human lives. For example, Arslan (2018) found that social support was positively associated with psychological well-being in students, and social support can alleviate the negative consequences of social exclusion in students which can lead to worse mental health status as well. This is consistent with the findings from Szkody et al. (2021) who found that both perception and acceptance support were positively correlated with healthy mental status, although the data in the research was collected during the COVID-19 pandemic which might lead to the expansion of an individual's stress and tend to unhealthy mental status.

Cobb (1976) stated that social support started when humans were living in the mother's uterus; moreover, social support happened across a human's lifespan. Furthermore, social support will expand from family to support from friends, schools, universities, workplaces, and other social groups that people are part of. Consistently, Taylor (2011) who stated that receiving support started at the beginning of life which includes hereditary characteristics as well.

Social support was studied for a long time. In the initial studies, researchers often studied social support in the context of risks and problems with physical and mental health. After that several studies brought the conclusion which was accepted widely that if people lack social support, they will be at risk and tend to confront lots of mental problems from social support deficiency (Alsubaie et al., 2019; Schwarzer et al., 2004). Moreover, social support is also known as the factor which is helpful for the patient's treatment of both physical and mental illnesses (Pearson, 1986).

Social support refers to support that people recognize and receive in case they require and ask for support. Besides, social support can come from various sources such as family, friends, significant people, schools, the workplace, and other social groups. Furthermore, social support can be expressed in various types whether it be material and financial support, mental health support, emotional support, guidance support, and other forms (Cobb 1976; Gottlieb & Bergen, 2010; Schwarzer et al., 2004; Shumaker & Brownell, 1984; Wills, 1991 as cited in Taylor, 2011). Moreover, social support was viewed as a process that occurred in the relationship between people (Cohen et al., 2001).

Social support has been studied for a long time, thus social support was identified with diverse characteristics and contradictions in each research. However, popular characteristics were regularly used to explain social support were emotional, instrumental, informational, and appraisal support (Langford et al., 1997)

There are other words that are similar and overlap in meaning with social support. These words are social networks and social integration; but actually, these three words are distinct (Gottlieb & Bergen, 2010). Sometimes, social support was

viewed as meaning along with social networks and social integration as well (Schwarzer et al., 2004). And social networks are occasionally viewed as a sequence of having social support (Langford et al., 1997). In general, social support is a result of relationships between humans (Gottlieb & Bergen, 2010).

One of the popular opinions about social support is that social support acts as a buffer or a factor that can alleviate negative outcomes that might happen from facing troubles and challenges (Cohen & Wills, 1985; Lakey & Cohen, 2000). To illustrate, Szkody et al. (2021) found that social support can act as a buffer factor in the relationship between COVID-19 worry and psychological status in case people were quarantined for a short period.

Alarcon et al. (2011) stated that social support can lead to discovering other new choices for handling problems. Because people who are surrounded by support tend to receive various suggestions which can be applied to solve the problems effectively (Alarcon et al., 2011). Furthermore, Cobb (1976) stated that social support can assist people in properly adjusting and dealing with uncertain events and changes. Consistent with the past research which showed that if people have social support, when they are confronted with difficult times and challenging situations, social support will be the capital for helping people to cope with stress from difficulties and challenges (Schwarzer et al., 2004).

Alsubaie et al. (2019) found that support from family and friends can be used as a quality of life predictor in the psychological dimension, while support from important people and friends can predict the quality of life in the social dimension. Furthermore, social support was negatively correlated with strong depression and anxiety symptoms as well (Qi et al., 2020). Consistent with the findings from Shi

(2021) who found that social support was negatively correlated with stress and depression. Furthermore, Shi (2021) also found that social support acts as a moderator in the association between stress and depression. Besides, social support was positively related to life satisfaction as well (Ye et al., 2021). Huang & Zhang (2022) found that social support was positively associated with life satisfaction and positive emotions; even when the samples were in a situation that was full of stress. Likewise, social support can promote psychological well-being in adolescents by enhancing self-esteem as well (Poudel et al., 2020)

Besides, social support is beneficial for study life as well. To illustrate, Emadpoor et al. (2016) found that social support, whether from family, friends, or an important person was positively related to good psychological health and students' motivation toward the study. Furthermore, social support was negatively associated with academic burnout. To illustrate, students, who have high levels of support, tend to be satisfied with their lives which can relieve academic burnout as well (Ye et al., 2021). Not only does social support make students aware they were supported, comprehended, and accepted by people surrounding them, but the support they can seek when needed also suppresses students' academic burnout progress (Zhang et al., 2021).

In addition, social support was positively correlated with resilience (Muyor-Rodríguez et al., 2021). Besides, Stewart & Sun (2004) found that support from adults in family and friends was positively related to students' resilience. Moreover, support from parents, teachers, and friends was positively associated with students' engagement in their studies as well (Garcia-Reid et al., 2005). Consistent with the findings from Xerri et al. (2018) who found that the relationship between students with both classmates and teachers can enlarge study engagement.

Conceptual framework

This research framework is based on the Conservation of Resources Theory (COR theory). The COR theory not only mentions people's resources but also mentions the consequences of resource management in personnel as well.

Resources refer to everything that people see as meaningful and valuable; furthermore, resources include everything that people make an effort to preserve and attain as assets. Resources can be anything whether it be objects, conditions, personal characteristics, and energies (Hobfoll, 1989).

Besides, the Conservation of Resources Theory talks about stress in individuals. Stress can occur from 3 situations that are related to individuals' resources. The 3 situations are 1) people are at risk or tend to lose their resources 2) people are confronted with resource depletion and 3) people put their resources to do something but they didn't receive anything in return for their resource investment (Hobfoll, 1989). In addition, Halbesleben et al. (2014) stated that the Conservation of Resources Theory is related to dynamic processes. To illustrate, individuals' resources always oscillate.

Alarcon et al. (2011) stated that burnout is a sequence of continuous resource depletion while engagement is a sequence of having and receiving adequate resources. Furthermore, social support is viewed as one of the resources for individuals (Alarcon et al., 2011). Likewise, resilience is one of the resources as well (Bardoel & Drago, 2021).

Moreover, if people engage in doing something, they tend to act for enhancing and acquiring additional resources. Having abundant resources can enlarge

alternative solutions to cope with troubles that might happen in the future, whereas people struggling with burnout that continually lose their resources for a long time tend to deal with problems with unhealthy solutions. Furthermore, unhealthy solutions can increase burnout levels as well (Alarcon et al., 2011) due to the fact that burnout has the characteristic of a cycle (ten Brummelhuis et al., 2011)

Resilience is a process that happens within a person, while social support is an external factor. Both resilience and social support can affect people as well. Furthermore, resilience and social support can relieve academic burnout and enlarge study engagement. As findings from Ahmed et al. (2018) found, students with high levels of resilience tend to develop study engagement, and students who have high resilience tend to express lower levels of academic burnout as well (Wang et al., 2022). Furthermore, Zhang et al. (2021) found that social support that students have or seek when needed can eliminate academic burnout. In addition, Garcia-Reid et al. (2005) discovered that support from the social groups around students was related to engagement toward their studies.

From the literature review including the conceptual framework, this research proposes to study the effects of academic burnout on study engagement which is moderated by resilience and social support; therefore, our study has 9 hypotheses thus:

Hypothesis 1: Academic burnout (T1) would show a negative correlation with study engagement (T1)

Hypothesis 2: Academic burnout (T1) would show a negative correlation with resilience (T1)

Hypothesis 3: Academic burnout (T1) would show a negative correlation with social support (T1)

Hypothesis 4: Study engagement (T1) would show a positive correlation with resilience (T1)

Hypothesis 5: Study engagement (T1) would show a positive correlation with social support (T1)

Hypothesis 6: Resilience (T1) would show a positive correlation with social support (T1)

Hypothesis 7: Resilience (T1) would moderate the effects of academic burnout (T1) on study engagement (T1)

Hypothesis 8: Social support (T1) would moderate the effects of academic burnout (T1) on study engagement (T1)

Hypothesis 9: Academic burnout (T1) could predict study engagement (T2) with the moderating effect of resilience (T1) and social support (T1)

Research Variables

Independent variable: Academic burnout

Dependent variable: Study engagement

Moderator: Resilience and Social support

Purposes of the Study

1. To investigate the correlation between academic burnout, study engagement, resilience, and social support in the Thai education context.
2. To investigate the effects of academic burnout on study engagement which is moderated by resilience and social support after adaptation from online learning to on-site learning at the campus, due to the COVID-19 pandemic.

3. To investigate the effects of each type of social support on academic burnout, study engagement, and resilience

The conceptual and operational definitions of this research

1. Academic burnout refers to psychological symptoms that occur in response to long-term stresses and difficulties in learning; besides, academic burnout will be expressed by 3 characteristics which are emotional exhaustion, cynicism, and inefficacy. In this study, burnout participants refer to participants who have a higher overall score on the academic burnout scale which was developed from School Burnout Inventory (SBI) by Salmela-Aro et al. (2009) and add other questions by the researcher. A higher overall score indicates a higher level of academic burnout.
2. Study engagement refers to the signs of devotion to both physical and mental resources toward studying; including, intention, willingness, attention, and involvement that students think, feel, and express toward studying and other activities which are related to studying. Study engagement will show 3 characteristics which are vigor, dedication, and absorption. In this study, participants who engaged with the study refer to participants who have a higher overall score on the study engagement scale which was developed by Klincumhom (2013) and higher overall score indicates a higher level of study engagement.
3. Resilience refers to the competence to rise after being confronted with situations that are full of hardship, challenge, and strain; furthermore, resilience also refers to individuals' ability to protect their own resources and turn challenges and difficult events to develop themselves. In this study, participants who have high levels of resilience will have a higher overall score on the resilience scale which was developed by Disro (2008).

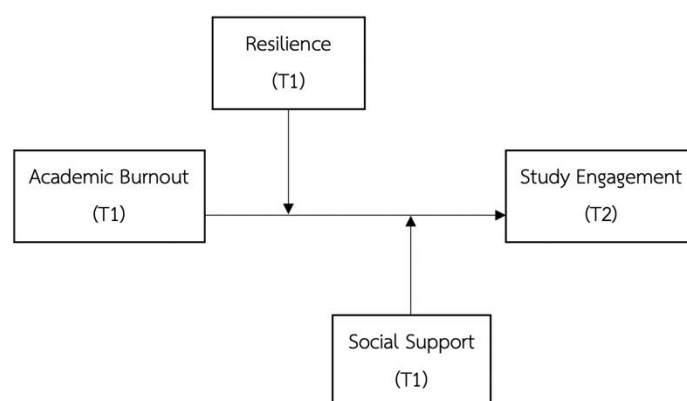
4. Social support refers to the perception and acquiring resources and support from social groups in which individuals are members of the groups. In addition, support can come from various sources whether it be family, friends, schools, teachers, coworkers, significant people, and others. In this study, participants who have high social support will have a higher overall score on the social support scale which was developed by Yamwong (2012).

Research Benefits

1. Understand the relationship between academic burnout, study engagement, resilience, and social support in the Thai education context after the major changes in learning styles due to the COVID-19 pandemic.
2. Application of the research findings to design policies or defensive and protective measures for promoting students' well-being in the future.

Figure 1

Conceptual research model



Chapter 2

Methodology

This present study is a longitudinal study that aims to examine the relationship between academic burnout, study engagement, resilience, and social support in the Thai education context. Because students need to adjust themselves and confront challenges again due to the transition from online to onsite study. Furthermore, this study focuses on exploring the effects of academic burnout on study engagement, which moderated by resilience and social support.

Participants

The target samples in this study were undergraduate students who studied in Bangkok, Thailand. The researcher used G*Power to calculate the required sample for this study. The calculating process in the program uses an effect size (Cohen's d) of 0.13, which is a moderate effect size (Cohen, 1988) with 0.80 of power. The result of the calculation showed that the proper sample size for the present study is 63 undergraduate students. The sample size was 63 undergraduate students due to concerns about the study design, which was a longitudinal study, and the dual collection of data, which made it difficult to get individuals to respond twice. However, data for this study was collected twice, with the first response comprising 70 participants and the second response including 63 participants due to the fact that 7 participants from the first response did not complete the survey for the second time.

In addition, this study used convenience and snowball sampling to collect the data from the participants. The inclusion criteria for participation in this study are as follows:

1. Participants are undergraduate students.
2. The participant's university campuses are based in Bangkok, Thailand.
3. Participants' ages are between 18 - 25 years old.

Measures and Materials

The present study used online surveys to collect the data. The survey consists of 5 sections which are demographic information, academic burnout scale, study engagement scale, resilience scale, and social support scale. The details of each section are as follows:

The first section: Demographic Information

This part consists of the consent form and demographic data, which are age, gender, year level, faculty, name of educational institutions, GPAX, students' living styles, email for contact, participants' learning styles in this semester (online, on-site, or hybrid style), and the identification code for each participant.

The second section: Academic Burnout Scale

The researcher developed scales for measuring academic burnout levels by developing the measurement from School Burnout Inventory (SBI) by Salmela-Aro et al. (2009) which comprises 9 questions. To illustrate, the researcher translated the questionnaires from the School Burnout Inventory into Thai. The back-translation technique, used to verify the quality of the translated scale, was employed to recheck the translated scale. Furthermore, to accurately assess students' academic burnout levels within the Thai education context, the researcher added 11 additional questionnaires to evaluate the students' burnout level inclusively.

After developing the scale, the researcher sent the scale to three professionals to be tested for content validity using an Index of Item Objective Congruence (IOC) investigation, which obtained a score of .60 for the developed scale. The researcher then implemented the experts' recommendations for additional scale improvement and prepared to set up the scale for data collection to assess the scale's quality.

The researcher collected the data from 168 undergraduate students aged between 18 and 25. Following that, the researcher assessed the quality of the scale by examining its reliability and validity. To illustrate, the Cronbach's alpha coefficient was applied to investigate the reliability, and the Second Order Confirmatory Factor was utilized to investigate the construct validity of the scale.

The analysis results revealed that the developed scale's Cronbach's alpha coefficient was .93. Additionally, the Second Order Confirmatory Factor analysis revealed that the developed scale had the statistics values as follows $\chi^2 = 142.44$, $df = 121$, $RMSEA = .03$, $SRMR = .06$, and $CFI = .99$. In addition, this scale consists of 20 items that measure academic burnout through 3 components: emotional exhaustion, cynicism, and inefficacy.

This scale was rated on a 7-point Likert-type scale ranging from 1 to 7. To illustrate, 1 refers to completely disagrees and 7 refers to strongly agree. Examples of the questionnaires on this scale are ‘ฉันรู้สึกล้าจนจดจ่อกับการเรียนได้น้อยลงกว่าเดิม’, ‘ฉันรู้สึกว่าความสามารถในการเรียนของตนเองลดลงเมื่อเทียบกับเมื่อก่อน’, and ‘ฉันรู้สึกเหนื่อยสะสมกับการเรียนเป็นอย่างมาก’

The third section: Study Engagement Scale

Study engagement scale was developed by Klincumhom (2013) who adjusted this scale by developing and adapting from Utrecht Work Engagement Scale (UWES) which was originally developed by Schaufeil & Bakker (2006). This study engagement scale consists of 16 items and separates components of study engagement into 3 types which are vigor, dedication, and absorption. Furthermore, the Cronbach's alpha of this scale was .90

This scale was rated on a 7-point Likert-type scale ranging from 1 to 7. To illustrate, 1 refers to completely disagrees and 7 refers to strongly agree. Examples of the questionnaires on this scale are ‘ฉันมีร่างกาย แรงใจในการเรียนอย่างเต็มที่’, ‘ฉันพยายามที่จะทำให้ได้ตามเป้าหมายในการเรียนที่วางไว้’, and ‘เวลาเรียนฉันรู้สึกเวลาผ่านไปอย่างรวดเร็ว’

The fourth section: Resilience Scale

Resilience scale was translated and developed from State-Trait Resilience Inventory by Hiew et al. (2000). This resilience scale was developed by Disro (2008). The researcher selected 28 items that evaluated state resilience to use in the present study. The Cronbach's alpha of this scale was .73

This scale was rated on a 7-point Likert-type scale ranging from 1 to 7. To illustrate, 1 refers to completely disagrees and 7 refers to strongly agree. Examples of the questionnaires on this scale are ‘ฉันมีคนที่ฉันยึดเป็นแบบอย่าง’, ‘ฉันมีความภาคภูมิใจในตนเอง’, and ‘ฉันมีพลังใจเพียงพอที่จะต่อสู้กับปัญหาและอุปสรรคต่าง ๆ’

The fifth section: Social Support Scale

Social support scale was developed by Yamwong (2012). This scale was developed and adapted from The Climate Questionnaires by Deci (2000), The Perceptions of Parents Scales by Grolnick et al. (1997), The Multidimensional Scale of Perceived Social Support by Zimet et al. (1988), and Perceived Social Support from Friends Scales by Procidano & Heller (1983). The full scale had the Cronbach's alpha of .76 and this scale compose of 30 items.

This scale was rated on a 7-point Likert-type scale ranging from 1 to 7. To illustrate, 1 refers to completely disagrees and 7 refers to strongly agree. Examples of the questionnaires on this scale are ‘ฉันรู้สึกได้รับความไว้วางใจจากอาจารย์’, ‘เมื่อเผชิญปัญหา พ่อแม่จะรับฟังความคิดเห็นและให้คำปรึกษากับฉัน’, and ‘ฉันได้แนวคิดดี ๆ เกี่ยวกับวิธีการเรียนและการทำสิ่งต่าง ๆ จากเพื่อน’

Procedure

When the Institutional Ethical Review Board approved this research, the data collection began. The researcher recruited participants by using convenience and snowball sampling by announcing the details of participation in this research and asking participants to send this research survey to their peers. Furthermore, the researcher announced research details via online platforms like Facebook and Instagram.

At the beginning of the survey, participants received all of the details about this study, like the objectives, research procedure, benefits, and level of risk or concern associated with participating in this research. Furthermore, participants were informed that they could withdraw from this research at any time and that the

results of this research would be included in the overall result, so they could not be identified. In addition, the researcher and advisor were the only people who had access to the responses of participants for data analysis purposes. When this study is completed, all of the data will be replaced with other data that is unrelated to the responses of the participants, and the data will be deleted. After participants have read all of the details, they would need to give permission to collect the data from their responses to show that they are volunteering to join this research. In addition, participants need to fill out an identification code, which comes from the first letter of each individual's first name and surname, including the last five digits of their phone number, for matching the data for statistical analysis afterwards. For example, if the participant's name is "Somsri Monday" and her phone number is "0987654321," her identification code will be "SM54321".

This research asked participants to answer the survey twice. To illustrate, after participants finish the first response, the researcher sent the second response survey link 4 weeks after the participants finish the first response. In addition, the data collection took about 25 to 30 minutes each time. The first survey took place before the final examination week, which is nearly the end of April 2023, and the second survey took place after students had already completed their final examinations, which is about the end of May or the beginning of June 2023. The reason for the time gap between the two surveys in this study was due to the limitations of the Thai universities' semester characteristics and the effort to eliminate confounding variables. To illustrate, one semester in Thai universities will take around 4 – 5 months, and at the beginning of the new semester, students might try to adjust themselves, and academic burnout might not happen due to students not being overwhelmed by too many assignments and the examination. Furthermore, if participants had high levels of academic burnout, the researcher contacted them via

email and recommended that they seek advice from a psychologist or psychiatrist. After the data collection process was done, the researcher analyzed the data and drew conclusions.

Data analysis

The data from the current study was analyzed using Jamovi, which is a statistical program. Pearson's correlation analysis was employed to examine the relationships between the variables. In addition, Linear regression analysis was utilized to explore the effects of academic burnout on study engagement in Time 1, with resilience and social support in Time 1 serving as moderators. Furthermore, Linear regression analysis was applied to assess the predictive role of academic burnout on study engagement by using academic burnout in Time 1 as a predictor and resilience and social support in Time 1 as moderators. Moreover, Linear regression analysis was employed to examine the effects of each type of social support in Time 1 on academic burnout, study engagement, and resilience in Time 1.

Chapter 3

Results

The data were gathered twice from undergraduate students studying in Bangkok, Thailand. Pearson's correlation analysis and linear regression analysis were used to examine the hypotheses. The statistical analyses were divided into four sections:

1. Demographic Characteristics
2. Descriptive Statistics
3. Hypothesis Testing
4. Additional Analysis

1. Demographic Characteristics of Participants

This study consists of responses from 70 undergraduate students who met the inclusion criteria. The average age of the participants was 21.414 ($SD = 1.346$). 71.429% of participants ($n = 50$) were female. Furthermore, the majority of them studied in the second year, accounting for 32.857% ($n = 23$), 25 participants studied in the Faculty of Science, comprising 35.714%, and the majority of them studied at Chulalongkorn University, accounting for 48.571% ($n = 34$). The GPAX of the participants averaged 3.252 ($SD = 0.383$). 48 participants (68.571%) lived with their families. Furthermore, 38 participants were studied in a hybrid learning style consisting of 54.286%, as demonstrated in Table 1. However, some individuals did not complete the second survey for the second time; the total number of participants who participated in this research twice was 63 undergraduate students.

63 Participants, who responded to the survey twice, had an average age of 21.540 years ($SD = 1.354$). Most participants were female, accounting for 73.016% ($n = 46$). Furthermore, most of them were studying in the second year, comprising

33.333% (n = 21) of the total sample. Additionally, 38.095% of participants (n = 24) were enrolled in the Faculty of Science, while 46.032% (n = 29) were studying at Chulalongkorn University. The average GPAX score of the participants was 3.223 ($SD = 0.387$). Moreover, 66.667% of participants (n = 42) reported living with their families. Many participants' learning styles were hybrid learning, accounting for 53.968% (n = 34), as shown in Table 2.

Table 1
Demographic Characteristics of Participants (N=70)

Demographic Characteristics	Frequency	Percent (%)
Age		
19	3	4.286
20	15	21.429
21	24	34.286
22	13	18.571
23	9	12.857
24	5	7.142
25	1	1.429
Gender		
Male	15	21.429
Female	50	71.429
LGBTQ	5	7.142
Year Level		
First year	1	1.429
Second year	23	32.857
Third year	19	27.143
Fourth year	21	30.000
Fifth year	4	5.714
Sixth year	2	2.857

Table 1*Demographic Characteristics of Participants (N=70) (continued)*

Demographic Characteristics	Frequency	Percent (%)
Faculty		
Science	25	35.714
Psychology	15	21.429
Education	6	8.571
Others	24	34.286
University		
Chulalongkorn University	34	48.571
King Mongkut's University of Technology Thonburi	17	24.286
Kasetsart University	7	10.000
Others	12	17.143
Living Styles		
Living at home with family	48	68.571
Living at a dorm with peers	9	12.857
Living at a dorm alone	8	11.429
Others	5	7.143
Learning Styles		
Online	1	1.429
On-site	31	44.286
Hybrid	38	54.286

Note. The data from 70 participants was analyzed in order to examine hypotheses 1 to 8.

Table 2*Demographic Characteristics of Participants (N=63)*

Demographic Characteristics	Frequency	Percent (%)
Age		
19	3	4.762
20	10	15.873
21	22	34.921
22	13	20.635
23	9	14.286
24	5	7.937
25	1	1.587
Gender		
Male	14	22.222
Female	46	73.016
LGBTQ	3	4.762
Year Level		
First year	1	1.587
Second year	21	33.333
Third year	15	23.810
Fourth year	20	31.746
Fifth year	4	6.349
Sixth year	2	3.175
Faculty		
Science	24	38.095
Psychology	12	19.047
Education	5	7.937
Others	22	34.921

Table 2

Demographic Characteristics of Participants (N=63) (continued)

Demographic Characteristics	Frequency	Percent (%)
University		
Chulalongkorn University	29	46.032
King Mongkut's University of Technology Thonburi	16	25.397
Kasetsart University	6	9.524
Others	12	19.047
Living Styles		
Living at home with family	42	66.667
Living at a dorm with peers	9	14.286
Living at a dorm alone	7	11.111
Others	5	7.937
Learning Styles		
Online	1	1.587
On-site	28	44.444
Hybrid	34	53.969

Note. The data from 63 participants was analyzed in order to examine hypothesis 9.

2. Descriptive Statistics of Academic Burnout, Study Engagement, Resilience, and Social Support

Descriptive Statistics of Variables in Time 1 (N=70)

The average Academic Burnout of participants was 4.691 ($SD = 1.164$) while average Study Engagement of participants was 3.819 ($SD = 0.817$). Furthermore, the

average Resilience was 4.979 ($SD = 0.730$), and the average Social Support was 5.071 ($SD = 0.654$), as shown in Table 3.

Descriptive Statistics of Variables in Time 1 and Time 2 ($N=63$)

Firstly, in the first response (T1), the average Academic Burnout of participants was 4.753 ($SD = 1.064$), and in the second response (T2), it was 4.226 ($SD = 1.007$). Furthermore, the average Study Engagement of participants in the first response (T1) was 3.845 ($SD = 0.754$), while it was 3.950 ($SD = 0.795$) in the second response (T2). Moving on, the average Resilience in the first response (T1) was 5.004 ($SD = 0.725$), and it was 5.002 ($SD = 0.631$) in the second response (T2). Finally, the average Social Support in the first response (T1) was 5.065 ($SD = 0.680$), and it was 4.927 ($SD = 0.609$) in the second response (T2), as demonstrated in Table 4.

Note: The researcher calculated descriptive statistics for each variable based on a range of 1 to 7 because the scales in this study were graded on a 7-point Likert-type scale ranging from 1 to 7 for ease of reading and interpretation.



3. Hypothesis Testing

The present study consists of three parts of hypotheses regarding the relationships between variables, the moderating effects of resilience and social support on the effect of academic burnout on study engagement, and the predictive role of academic burnout on study engagement, with resilience and social support acting as moderators. The specific details of the hypothesis testing are outlined below:

The relationship between academic burnout, study engagement, resilience, and social support

From the analysis results presented in Table 3, it indicated that academic burnout (T1) had a significant negative association with study engagement (T1) ($r = -.374, p = .001$), and social support ($r = -.247, p = .039$). However, there is no significant association between academic burnout (T1) and resilience (T1) ($r = -.103, p = .397$). On the contrary, study engagement (T1) had a significant positive correlation with resilience (T1) ($r = .367, p = .002$), but it was not significantly related to social support (T1) ($r = .147, p = .223$). Furthermore, there was a significant positive correlation between resilience (T1) and social support (T1) ($r = .600, p < .001$) as well. These findings supported Hypotheses 1, 3, 4, and 6, while Hypotheses 2 and 5 were not supported.

Table 3

Correlation between variables, Arithmetic Mean, and Standard Deviation (N=70)

Variables	1	2	3	4
1. Academic burnout (T1)	-			
2. Study engagement (T1)	-.374**	-		
3. Resilience (T1)	-.103	.367**	-	
4. Social support (T1)	-.247*	.147	.600***	-
<i>M</i>	4.691	3.819	4.979	5.071
<i>SD</i>	1.164	0.817	0.730	0.654

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

Table 4

Correlation between variables both Time 1 and Time 2, Arithmetic Mean, and Standard Deviation (N=63)

Variables	1	2	3	4	5	6	7	8
1. Academic burnout ¹	-							
2. Study engagement ¹	-.366**	-						
3. Resilience ¹	-.019	.293*	-					
4. Social support ¹	-.280*	.104	.617***	-				
5. Academic burnout ²	.514***	-.109	-.120	-.306*	-			
6. Study engagement ²	-.234	.635***	.207	-.070	-.219	-		
7. Resilience ²	-.100	.245	.620***	.450***	-.155	.451***	-	
8. Social support ²	-.248*	-.159	.341**	.625***	-	.047	.437***	-
<i>M</i>	4.753	3.845	5.004	5.065	4.226	3.950	5.002	4.927
<i>SD</i>	1.064	0.754	0.725	0.680	1.007	0.795	0.631	0.609

Note. ¹Time 1, ²Time 2

* $p < .05$, ** $p < .01$, *** $p < .001$

The moderation effect.

This section will present the statistical analyses examining the moderating role of resilience (T1) and social support (T1) in the effect of academic burnout (T1) on study engagement (T1).

Hypothesis 7: Resilience (T1) will moderate the effects of academic burnout (T1) on study engagement (T1)

The analysis examined the moderating role of resilience (T1) on the effects of academic burnout (T1) and study engagement (T1), with academic burnout and resilience being mean-centered. The regression model accounted for a significant proportion of variance ($R^2 = .249$, $F(3,66) = 7.279$, $p < .001$). The results revealed a negative correlation between academic burnout (T1) and study engagement (T1) when controlling for resilience (T1) ($b = -0.191$, $SE = 0.060$, 95% CI [-0.311, -0.070], $\beta = -0.340$, $p = .002$). Additionally, resilience (T1) exhibited a positive association with study engagement (T1) when controlling for academic burnout (T1) ($b = 0.212$, $SE = 0.069$, 95% CI [0.074, 0.350], $\beta = 0.332$, $p = .003$).

Further analysis explored the moderating effect of resilience (T1), indicating that changes in resilience do not diminish the effects of academic burnout on study engagement ($b = 0.00$, $SE = 0.003$, 95% CI [-0.005, 0.005], $\beta = 0.001$, $p = .990$), as shown in Table 5. Therefore, the results did not support the 7th Hypothesis based on the available data.

Hypothesis 8: Social support (T1) will moderate the effects of academic burnout (T1) on study engagement (T1)

The study explored the moderating role of social support (T1) on the effects of academic burnout (T1) and study engagement (T1), with academic burnout and social support being mean-centered. The regression model accounted for a significant proportion of variance ($R^2 = .146$, $F(3,66) = 3.754$, $p = .015$). The results revealed a negative association between academic burnout (T1) and study engagement (T1) when controlling for social support (T1) ($b = -0.198$, $SE = 0.066$, 95% CI [-0.330, -0.066], $\beta = -0.353$, $p = .004$). Additionally, when controlling for academic

burnout (T1), social support (T1) does not show a significant association with study engagement (T1) ($b = 0.040$, $SE = 0.078$, 95% CI [-0.116, 0.196], $\beta = 0.060$, $p = .609$)

Further analysis explored the moderating effect of social support (T1) demonstrated that changes in social support do not alleviate the effects of academic burnout on study engagement ($b = -0.001$, $SE = 0.003$, 95% CI [-0.008, 0.005], $\beta = -0.052$, $p = .637$), as indicated in Table 6. As a result of the information on hand, the results did not support the 8th Hypothesis.

Table 5

Regression coefficient of the investigation on the effects of academic burnout (T1) on study engagement (T1) as moderated by resilience (T1)

Effect	Estimate	SE	95% CI		p
			LL	UL	
Intercept	61.102	1.390	58.327	63.876	< .001
Academic burnout ¹	-0.191	0.060	-0.311	-0.070	.002
Resilience ¹	0.212	0.069	0.074	0.350	.003
Academic burnout ¹ x Resilience ¹	0.000	0.003	-0.005	0.005	.990

Note. ¹Time 1

Table 6

Regression coefficient of the investigation on the effects of academic burnout (T1) on study engagement (T1) as moderated by social support (T1)

Effect	Estimate	SE	95% CI		p
			LL	UL	
Intercept	60.934	1.517	57.906	63.962	< .001
Academic burnout ¹	-0.198	0.066	-0.330	-0.066	.004
Social support ¹	0.040	0.078	-0.116	0.196	.609
Academic burnout ¹ x Social support ¹	-0.001	0.003	-0.008	0.005	.637

Note. ¹Time 1

The predictive role of academic burnout on study engagement with the moderating effect of resilience and social support

Hypothesis 9: Academic burnout (T1) can predict study engagement (T2) with the moderating effect of resilience (T1) and social support (T1)

The results of multiple regression analysis about the effect of academic burnout (T1) on study engagement (T2) as moderated by resilience (T1), with academic burnout and resilience mean-centered ($R^2 = .430$, $F(4, 58) = 10.929$, $p < .001$). The analysis revealed that when resilience (T1) was considered a moderator and controlled study engagement (T1), academic burnout (T1) did not significantly predict study engagement (T2) ($b = -0.004$, $SE = 0.003$, 95% CI [-0.009, 0.001], $\beta = -0.142$, $p = .106$), as illustrated in Table 7.

The results of multiple regression analysis about the effect of academic burnout (T1) on study engagement (T2) as moderated by social support (T1), with academic burnout and social support mean-centered ($R^2 = .479$, $F(4, 58) = 13.311$, $p < .001$). The analysis revealed that when social support (T1) was considered a moderator, academic burnout (T1) exhibited a significant predictive ability for study engagement (T2) ($b = -0.008$, $SE = 0.003$, 95% CI [-0.014, -0.003], $\beta = -0.290$, $p = .005$). However, when controlling for social support (T1), academic burnout (T1) does not show a significant association with study engagement (T2) ($b = 0.020$, $SE = 0.063$, 95% CI [-0.107, 0.147], $\beta = 0.034$, $p = .753$). Similarly, when controlling for academic burnout (T1), social support (T1) does not show a significant correlation with study engagement (T2) ($b = 0.017$, $SE = 0.062$, 95% CI [-0.107, 0.141], $\beta = 0.027$, $p = .784$), as exhibited in Table 8.

Furthermore, the moderation analysis revealed that increasing social support acts as a moderator in the effect of academic burnout (T1) on study engagement (T2) ($b = -0.008$, $SE = 0.003$, 95% CI [-0.014, -0.003], $\beta = -0.290$, $p = .005$). However, when individuals have high social support (+1 *SD*), there is no significant association between academic burnout (T1) and study engagement (T2) ($b = -0.153$, $SE = 0.082$, 95% CI [-0.317, 0.011], $\beta = -0.256$, $p = .067$). Whereas, Individuals who had inadequate social support (-1 *SD*) had a significant correlation between academic burnout (T1) and study engagement (T2) ($b = 0.193$, $SE = 0.092$, 95% CI [0.009, 0.377], $\beta = 0.324$, $p = .040$), as demonstrated in Figure 2.

Based on the data, Hypothesis 9 received partial support.

Table 7

Regression coefficient of the investigation on the predictive role of academic burnout (T1) on study engagement (T2) with the moderating effect of resilience (T1)

Effect	Estimate	SE	95% CI		Stand. Estimate	p
			LL	UL		
Intercept	63.013	1.256	60.498	65.527	0.000	< .001
Academic burnout ¹	0.010	0.064	-0.118	0.138	0.017	.874
Resilience ¹	0.033	0.066	-0.099	0.165	0.053	.617
Study engagement ¹	0.657	0.117	0.423	0.890	0.623	< .001
Academic burnout ¹ x Resilience ¹	-0.004	0.003	-0.009	0.001	-0.142	.106

Note. ¹Time 1

Table 8

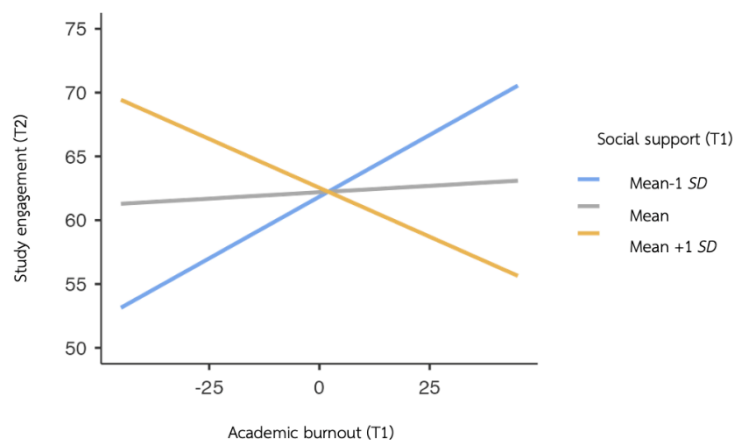
Regression coefficient of the investigation on the predictive role of academic burnout (T1) on study engagement (T2) with the moderating effect of social support (T1)

Effect	Estimate	SE	95% CI		Stand. Estimate	p
			LL	UL		
Intercept	62.192	1.246	59.697	64.686	0.000	< .001
Academic burnout ¹	0.020	0.063	-0.107	0.147	0.034	.753
Social support ¹	0.017	0.062	-0.107	0.141	0.027	.784
Study engagement ¹	0.647	0.108	0.432	0.863	0.614	< .001
Academic burnout ¹ x Social support ¹	-0.008	0.003	-0.014	-0.003	-0.290	.005

Note. ¹Time 1

Figure 2

The simple slope analysis of the moderating role of social support (T1) in the effects of academic burnout (T1) on study engagement (T2)



4. Additional Analysis

Furthermore, the researcher conducted simple regression analyses to examine the effects of each type of social support (T1) on academic burnout (T1), study engagement (T1), and resilience (T1).

The results revealed that teacher support (T1) had a negative effect on academic burnout (T1) ($\beta = -0.459, p < .001$). However, teacher support (T1) exhibited positive effects on both study engagement (T1) ($\beta = 0.390, p = .006$) and resilience (T1) ($\beta = 0.303, p = .009$). In contrast, peer support (T1) did not have a significant effect on study engagement (T1) ($\beta = -0.158, p = .242$) or resilience (T1) ($\beta = 0.213, p = .058$). However, it demonstrated a positive effect on academic burnout (T1) ($\beta = 0.261, p = .044$). Whereas family support (T1) had a negative effect on academic burnout (T1) ($\beta = -0.374, p = .003$). Besides, family support demonstrated a positive effect on resilience (T1) ($\beta = 0.501, p < .001$), but it did not show any significant effects on study engagement (T1) ($\beta = 0.088, p = .496$), as demonstrated in Tables 9 to 11.

Table 9

Regression coefficient of the effects of each type of social support (T1) on academic burnout (T1)

Effect	Estimate	SE	95% CI		Stand. Estimate	p
			LL	UL		
Intercept	144.760	20.262				< .001
Teacher support ¹	-0.959	0.273	-0.719	-0.198	-0.459	< .001
Family support ¹	-0.782	0.257	-0.619	-0.129	-0.374	.003
Peer support ¹	0.652	0.318	0.007	0.516	0.261	.044

Note. ¹Time 1

Table 10

Regression coefficient of the effects of each type of social support (T1) on study engagement (T1)

Effect	Estimate	SE	95% CI		Stand. Estimate	p
			LL	UL		
Intercept	45.068	11.911				< .001
Teacher support ¹	0.457	0.160	0.117	0.663	0.390	.006
Family support ¹	0.103	0.151	-0.169	0.344	0.088	.496
Peer support ¹	-0.221	0.187	-0.425	0.109	-0.158	.242

Note. ¹Time 1

Table 11

Regression coefficient of the effects of each type of social support (T1) on resilience (T1)

Effect	Estimate	SE	95% CI		Stand. Estimate	p
			LL	UL		
Intercept	41.947	15.402				.008
Teacher support ¹	0.556	0.207	0.077	0.529	0.303	.009
Family support ¹	0.920	0.195	0.289	0.713	0.501	< .001
Peer support ¹	0.467	0.242	-0.007	0.434	0.213	.058

Note. ¹Time 1

Chapter 4

Discussion

The researcher conducted data analysis to test the hypotheses using Pearson's correlation analysis to examine the relationships between variables. Also, regression analysis was used to examine the role of resilience and social support as moderators in the effect of academic burnout on study engagement and to see if academic burnout could be used to predict study engagement with resilience and social support as moderators. Furthermore, the study explored the impact of different types of social support on academic burnout, study engagement, and resilience.

This research comprised 9 hypotheses, and the analysis results supported 5 of these hypotheses. In the subsequent discussion, the researcher will present the findings, organizing them according to each respective hypothesis.

Hypothesis 1: Academic burnout (T1) would show a negative correlation with study engagement (T1)

The analysis results revealed a significant negative association between academic burnout (T1) and study engagement (T1), providing support for the first hypothesis. Specifically, students with higher levels of academic burnout were found to have lower levels of study engagement, and vice versa. These findings are consistent with previous research that reported a negative correlation between academic burnout and study engagement (Barratt & Duran, 2021; Singh et al., 2021; Wang et al., 2021).

Academic burnout is commonly found among students who have experienced prolonged academic stress (Shin et al., 2012). On the other hand, study engagement reflects a state in which students exhibit a high level of interest and enthusiasm for their studies. Engaged students tend to experience a sense of happiness and a willingness to actively participate in and complete study-related activities. Moreover, engaged students possess abundant personal resources, both physical and mental, which they willingly dedicate to their studies (Axelson & Flick, 2010; Chapman, 2002; Kuh, 2003; Kuh, 2009; Singh et al., 2021). In addition, engaged students demonstrate readiness to exert effort towards their studies and possess resilience to overcome study-related obstacles. These characteristics contribute to a reduced likelihood of experiencing academic burnout compared to students with lower levels of study engagement (Barratt & Duran, 2021).

Assunção et al. (2020) proposed that when individuals experience a decrease in engagement in activities, they were previously energized and involved in, this may transform into a state of exhaustion and disinterest, leading to reduced effectiveness in performing those activities. This suggests that a decline in levels of engagement can potentially result in burnout (Assunção et al., 2020; Singh et al., 2021).

Hypothesis 2: Academic burnout (T1) would show a negative correlation with resilience (T1)

The analysis results indicate that there is no association between academic burnout (T1) and resilience (T1). This finding is inconsistent with previous research that has explored the relationship between academic burnout and resilience, which consistently reported a negative relationship between these two variables (Cheng et

al., 2020; Emerson et al., 2023; Fernández-Castillo & Fernández-Prados, 2021; Wang et al., 2022; Yu et al., 2020).

During the data collection period for the initial responses, which was near the end of the semester and overlapped with the pre-final examination period, students commonly faced multiple study-related stresses. These stresses stem from various factors such as unfinished assignments, exam preparation, midterm exam results, and self-imposed expectations. When students experience high levels of stress related to their studies, they are more likely to encounter academic burnout (Shin et al., 2012). Furthermore, previous research has demonstrated an increasing tendency in levels of academic burnout among students as the academic year progresses (Fernández-Castillo & Fernández-Prados, 2021; Rudman & Gustavsson, 2012; Watson et al., 2008). Additionally, Yu et al. (2020) have found that excessive academic demands are significant triggers for academic burnout.

Moreover, it is important to consider that a significant proportion of the participants in this study have transitioned back to studying in the classroom, either through fully onsite learning or hybrid learning combining onsite and online instruction. This change in the type of study could be associated with varying levels of academic burnout among students due to the fact that some students prefer online learning; getting them get back to traditional learning could be the reason for academic burnout. As the findings from Jackson and Konczosné Szombathelyi (2022), who found that students who have been studying online for an extended period and then transitioned back to onsite learning tend to experience higher levels of academic burnout due to the recall and desire to study online, like during the COVID-19 pandemic. To further understand and analyze this aspect, future research

could consider collecting data on students' desire to study online as an additional factor.

Hence, the factors mentioned above can collectively contribute to a higher likelihood of students experiencing academic burnout. These factors can affect students regardless of their individual levels of resilience.

Hypothesis 3: Academic burnout (T1) would show a negative correlation with social support (T1)

The data analysis revealed a negative relationship between academic burnout (T1) and social support (T1). Specifically, students with higher levels of academic burnout tend to have lower levels of social support, while those with lower levels of academic burnout exhibit higher levels of social support.

This finding is consistent with previous research that has consistently shown a negative correlation between academic burnout and social support. (Barratt & Duran, 2021; Cheng et al., 2020; Kim et al., 2018; Ye et al., 2021).

Abreu Alves et al. (2022) conducted a study involving medical students and found that insufficient support was associated with academic burnout. Additionally, satisfaction with social support was found to be a predictor of academic burnout, as social support facilitates positive self-evaluation among individuals (Ye et al., 2021). Based on previous findings, it can be inferred that adequate social support serves as a protective factor against academic burnout in students. When individuals receive support from their family, peers, teachers, or school, they are more likely to seek

help or receive appropriate advice when facing study-related problems or stress, including academic burnout (Ye et al., 2021).

Furthermore, Kim et al. (2018) found that students who perceived lower levels of social support from significant others were more likely to experience academic burnout compared to those with higher levels of social support. Additionally, students who lacked or received insufficient social support faced difficulties coping with and resolving the problems they encountered. Notably, support from teachers or the school had a stronger association with academic burnout compared to support from family or peers (Kim et al., 2018). When students lack adequate social support to seek help or receive advice on problem-solving, they may resort to maladaptive coping strategies, which are known to be associated with academic burnout (Abreu Alves et al., 2022).

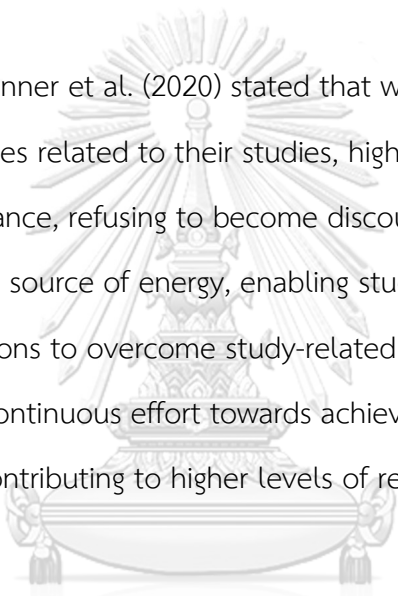
Hypothesis 4: Study engagement (T1) would show a positive correlation with resilience (T1)

The results of the study revealed a positive correlation between study engagement (T1) and resilience (T1). Specifically, students with higher levels of study engagement also exhibited higher levels of resilience.

These findings are consistent with previous research investigating the relationship between study engagement and resilience, which has consistently shown a positive association between these variables (Kotera et al., 2021; McKeering et al., 2021; Romano et al., 2021).

Barratt & Duran (2021) conducted a study and found that students who possess positive personal attributes such as resilience, hope, optimism, and self-efficacy tend to exhibit higher levels of study engagement. This finding is consistent with the results of a study by Romano et al. (2021), which demonstrated that students with high levels of resilience are more likely to engage in their studies, even when faced with challenging situations that require significant effort, both physically and mentally.

Furthermore, Skinner et al. (2020) stated that when students confront challenging circumstances related to their studies, highly engaged students exhibit resilience and perseverance, refusing to become discouraged or give up easily. Study engagement serves as a source of energy, enabling students to confront problems and actively seek solutions to overcome study-related obstacles. Moreover, study engagement fosters a continuous effort towards achieving goals and solving problems, ultimately contributing to higher levels of resilience among students.



Hypothesis 5: Study engagement (T1) would show a positive correlation with social support (T1)

The analysis results indicate that there is no relationship between study engagement (T1) and social support (T1). This finding contradicts previous research findings that consistently reported a positive association between study engagement and social support (Estell & Perdue, 2013; Gutiérrez et al., 2017; Siu et al., 2021).

Study engagement is a psychological variable that is influenced by a multitude of factors, encompassing both internal student factors and external

environmental factors. These factors interact and relate to the level of study engagement (Abubakar et al., 2017; Fredricks et al., 2004).

The collected data revealed that the majority of participants lived at home with their families. Furthermore, nearly all of the students have returned to onsite study, either through full-time onsite attendance or a hybrid style. This interesting data suggests that participants are required to commute between their homes and the university in order to participate in classroom-based learning. Besides, it is worth noting that transportation in Bangkok, particularly during rush hours, faces significant challenges. The city's road infrastructure is strained as certain roads are blocked or have reduced capacity due to ongoing skytrain construction and road maintenance projects. Moreover, Bangkok has long struggled with chronic transportation issues. These traffic problems result in extensive traffic congestion, causing fatigue among road users, including students who commute between their homes and the university. When students experience fatigue, it may potentially lead to a decline in their levels of study engagement. Corresponding to a study conducted by Zhuang et al. (2023), which revealed a negative association between fatigue and study engagement.

The aforementioned reasons are associated with a decline in study engagement, regardless of whether the majority of participants reside at home with their families or experience varying levels of social support.

Hypothesis 6: Resilience (T1) would show a positive correlation with social support (T1)

The analysis showed that resilience (T1) was positively correlated with social support (T1), indicating that students with higher levels of resilience are more likely to have higher levels of social support and vice versa.

This finding is consistent with previous research that has also demonstrated a positive relationship between resilience and social support (Muyor-Rodríguez et al., 2021; Warshawski, 2022; Wilks, 2008).

Adequate social support can facilitate students in seeking advice and finding effective ways to cope with study-related problems (Alarcon et al., 2011). Similarly, Mai et al. (2021) found that during the COVID-19 pandemic, which presented numerous difficulties and challenges, students who perceived high levels of social support were more likely to employ creative solutions compared to those with lower levels of perceived support. In contrast, students with lower social support tended to utilize negative and ineffective coping strategies rather than positive and creative coping strategies.

In addition, Cobb (1976) emphasized that social support plays a crucial role in facilitating individuals' adjustment and coping with changes, obstacles, and ambiguous situations. The findings and conclusions of previous research allow us to make the assumption that when students can effectively adapt to challenging situations and overcome obstacles with the assistance of social support, it contributes to the development of their resilience as well.

Hypothesis 7: Resilience (T1) would moderate the effects of academic burnout (T1) on study engagement (T1), and Hypothesis 8: Social support (T1) would moderate the effects of academic burnout (T1) on study engagement (T1)

The analysis of the data revealed that neither resilience (T1) nor social support (T1) acted as moderators in the relationship between academic burnout (T1) and study engagement (T1). However, the analysis did identify a negative association between academic burnout (T1) and study engagement (T1) when controlling for levels of resilience (T1). Conversely, a positive association was observed between resilience (T1) and study engagement (T1) when controlling for levels of academic burnout. Furthermore, the analysis demonstrated a negative relationship between academic burnout (T1) and study engagement (T1) when controlling for levels of social support (T1). However, there was no significant relationship between social support (T1) and study engagement (T1) when controlling for levels of academic burnout (T1). The current findings showed that whether students have high or low levels of resilience and social support, there is no effect of academic burnout on study engagement.



One plausible explanation for this research finding is related to the significant workload and numerous study-related tasks that students must manage. The data collection for the first responses occurred during a critical period, namely the pre- and between-final examination period, which is the period that students are faced with multiple academic obligations. As commonly acknowledged, during the weeks leading up to examinations, students are required to undertake various activities, including test preparation, assignment completion, active participation in class, and seeking additional support for challenging subjects. These demanding circumstances

imply that students are confronted with a high volume of study demands and responsibilities.

The tasks and responsibilities that students must complete before the final examination period, as well as the pressure associated with upcoming exams, can significantly contribute to their experience of stress, anxiety, and academic burnout. As the findings from Salmela-Aro and Upadyaya (2014) discovered a significant relationship between the demands of studying and subsequent academic burnout. Furthermore, Cazan (2015) demonstrated a positive correlation between anxiety specifically related to examinations and the occurrence of academic burnout as well.

Hence, when students are confronted with high study demands during the final examination period, along with the accompanying stress and anxiety related to tests, it is possible for both highly resilient and less resilient students to experience elevated levels of stress and academic burnout.

Another factor that could potentially explain the current findings is students' perception of study demands. As previously mentioned, during the final examination period, students become aware of the numerous tasks and responsibilities they need to fulfill in relation to their studies. This heightened awareness of study demands may contribute to a decline in the levels of study engagement among participants. The findings of Xerri et al. (2018), who reported a negative correlation between perceived workload and study engagement, support this. Similarly, Robins et al. (2015) found a negative relationship between workload and students' engagement in their learning.

To illustrate, during the preparation for the examination week, students become aware of the multitude of tasks they need to complete, which can have an impact on their levels of study engagement. This effect on study engagement may be observed regardless of whether students have high or low social support. To be more specific, the overwhelming workload and time constraints leading up to the exams may contribute to a decline in study engagement among students.

Hypothesis 9: Academic burnout (T1) could predict study engagement (T2) with the moderating effect of resilience (T1) and social support (T1)

The results of the study revealed that academic burnout (T1) had a predictive effect on study engagement (T2) when social support (T1) was considered a moderator. However, when resilience (T1) was considered a moderator, academic burnout (T1) did not have a significant predictive effect on study engagement (T2). Therefore, the findings provide partial support for hypothesis 9.

The analysis results revealed a negative predictive relationship between academic burnout (T1) and study engagement (T2) when social support (T1) was considered as a moderator. Specifically, higher levels of academic burnout were associated with lower levels of study engagement in the subsequent period.

This finding aligns with previous research conducted by Salmela-Aro and Upadyaya (2014), who found that prior academic burnout among students can serve as a predictor of engagement with schoolwork one year later. Similarly, Rudman and Gustavsson (2012) conducted a study on nursing students and observed that levels

of academic burnout among these students could predict their engagement and preparation to perform in their professional roles after graduation.

Several previous studies have demonstrated a negative association between academic burnout and study engagement (Barratt & Duran, 2021; Singh et al., 2021; Wang et al., 2021). Students experiencing academic burnout may feel exhausted, develop negative attitudes towards their studies, and doubt their own capabilities as learners, contributing to feelings of fatigue. Furthermore, fatigue was negatively associated with academic burnout (Zhuang et al., 2023). Additionally, academic burnout has been found to be negatively correlated with social support (Cheng et al., 2020; Kim et al., 2018). Specifically, students with higher levels of social support tend to experience lower levels of academic burnout compared to those with lower levels of social support. When students are faced with numerous academic tasks and responsibilities, having sufficient resources and support from their social support can help them effectively manage these challenges and reduce the likelihood of experiencing academic burnout (Ye et al., 2021). Considering these findings, it can be inferred that academic burnout and social support, acting as moderators, jointly predict study engagement in the future.

Furthermore, through additional analysis of simple slopes with social support as a moderator revealed that participants with low social support tended to exhibit low study engagement when experiencing low academic burnout, and high academic burnout when displaying high study engagement. One plausible explanation for this finding could be attributed to the participants' educational backgrounds, as the majority of them were enrolled in top universities in Thailand. Studying at prestigious institutions might subject them to significant pressures, and they may inherently possess a strong drive for academic involvement. Consequently, this finding suggests

that even in the absence of adequate social support, participants may still demonstrate low or high study engagement depending on their levels of academic burnout, indicating a complex burnout-engagement relationship like a hate-love relationship.

The results indicate that academic burnout and resilience, when acting as moderators, do not jointly predict study engagement in the future. The data collection period, during which students might have experienced rising stress levels and academic burnout as a result of the accumulation of academic responsibilities, may have had an impact on this finding. As the semester progresses, students may accumulate higher levels of burnout towards the end of the semester (Fernández-Castillo & Fernández-Prados, 2021; Rudman & Gustavsson, 2012; Watson et al., 2008). This could explain the lack of relationship between academic burnout, resilience, and their combined effect on study engagement.

Strengths and Limitations

In the Thai education context, previous research has predominantly utilized cross-sectional data collection methods, collecting data from participants only once. The practice of collecting data from participants multiple times is relatively uncommon due to various limitations. However, in this study, the researcher collected data from participants on two occasions, enabling the examination of changes in the levels of academic burnout and study engagement over time. This longitudinal approach provides valuable insights into the dynamic process of changes in these two factors, which are highly relevant to the learning experience.

Furthermore, this study specifically examined the influence of different types of social support on academic burnout, study engagement, and resilience in the context of students transitioning back to in-person classroom learning after a period of online learning during the COVID-19 pandemic. The findings revealed that teacher support significantly affected on both academic burnout and student engagement. Furthermore, teacher and family support affect resilience, while peer and family support impact academic burnout. The findings suggest that the support students received was crucial in influencing and defending their well-being. More importantly, the outcomes of this study imply that it can be used to guide the development of activities aimed at assisting students and enhancing their general well-being, both physically and mentally.

Moreover, this study developed an academic burnout scale to evaluate students' burnout levels in the context of Thai education. The developed academic burnout scale, which measures academic burnout across three components: emotional exhaustion, cynicism, and inefficacy, is consistent with the findings of Bresó et al. (2007). According to the findings of Bresó et al. (2007), the academic burnout scale that measures academic burnout through three components and evaluates the last component as "inefficacy" can measure academic burnout more effectively than efficacy with back score calculation. Besides, the utilization of a developed academic burnout score prior to the development of this research may result in copyright costs associated with the scale's usage.

However, it is essential to acknowledge the limitations of this study. To begin, the sample size is relatively small, with 70 respondents participating first and 63 participants completing the survey twice. This small sample size may limit the generalizability of the findings, as the majority of participants were from autonomous

universities and in their second and fourth years of study. However, it is important to emphasize that, due to the fact that this study was designed as a longitudinal study, it was challenging to track participants who completed the survey twice. Therefore, caution should be exercised when drawing conclusions about undergraduate students studying in Bangkok, Thailand, based on these results.

Another limitation is related to the timing of data collection. The data collection process took place towards the end of the semester, which coincided with the final examination week. This timing may introduce confounding factors, such as fatigue accumulated throughout the semester and the academic year, anxiety related to exams, and participants' varying intentions to participate in the study. These factors could potentially influence the results and should be taken into consideration when interpreting the findings.

The final limitation relates to the difficulty of collecting data through an online platform and online advertising. Participants' inability to focus while taking part in this study may have been a result of factors that prevented them from completing the survey.

Chapter 5

Conclusion

This research aims to examine the impact of academic burnout on study engagement, taking into consideration the moderating roles of resilience and social support. Additionally, the research seeks to predict study engagement by jointly considering academic burnout while viewing resilience and social support as moderators. Furthermore, the study also investigates the effects of different types of social support on academic burnout, study engagement, and resilience. The research consists of 9 hypotheses, which are as follows:

Hypothesis 1: Academic burnout (T1) would show a negative correlation with study engagement (T1)

Hypothesis 2: Academic burnout (T1) would show a negative correlation with resilience (T1)

Hypothesis 3: Academic burnout (T1) would show a negative correlation with social support (T1)

Hypothesis 4: Study engagement (T1) would show a positive correlation with resilience (T1)

Hypothesis 5: Study engagement (T1) would show a positive correlation with social support (T1)

Hypothesis 6: Resilience (T1) would show a positive correlation with social support (T1)

Hypothesis 7: Resilience (T1) would moderate the effects of academic burnout (T1) on study engagement (T1)

Hypothesis 8: Social support (T1) would moderate the effects of academic burnout (T1) on study engagement (T1)

Hypothesis 9: Academic burnout (T1) could predict study engagement (T2) with the moderating effect of resilience (T1) and social support (T1)

Data collection commenced once the research received approval from the Institutional Ethical Review Board. The researcher collected data twice. The participants will be the same in both phases. The first phase of data collection consisted of 70 participants; however, some participants from the first phase did not respond to the second phase, so the participants who completed the survey twice were 63 undergraduate students aged between 18 and 25 studying in Bangkok, Thailand. The data collection process utilized an online survey consisting of five sections: demographic information, the academic burnout scale, the study engagement scale, the resilience scale, and the social support scale.

Upon completion of the data collection phase, the researcher proceeded to analyze the data. The statistical program Jamovi was employed to examine the relationships between variables. In addition, the researcher utilized the general linear model module within Jamovi to analyze the moderating roles of resilience (Time 1) and social support (Time 1) in the relationship between academic burnout (Time 1) and study engagement (Time 1). Besides, the linear regression module was utilized to predict study engagement in Time 2 by considering academic burnout in Time 1 as a predictor and resilience and social support in Time 1 as moderators. The same module was also used to investigate the effects of different types of social support in Time 1 on academic burnout, study engagement, and resilience in Time 1.

The results are indicated as follows:

1. Academic burnout (T1) had a significant negative association with study engagement (T1) ($r = -.374, p = .001$)
2. Academic burnout (T1) had no association with resilience (T1) ($r = -.103, p = .397$)
3. Academic burnout (T1) had a significant negative association with social support ($r = -.247, p = .039$)
4. Study engagement (T1) had a significant positive correlation with resilience (T1) ($r = .367, p = .002$)
5. Study engagement (T1) had no association with social support (T1) ($r = .147, p = .223$)
6. Resilience (T1) had a significant positive correlation with social support (T1) ($r = .600, p < .001$)
7. Resilience (T1) did not act as a moderator in the effect of academic burnout on study engagement ($b = 0.00, SE = 0.003, 95\% \text{ CI } [-0.005, 0.005], \beta = 0.001, p = .990$)
8. Social support (T1) did not act as a moderator in the effect of academic burnout on study engagement ($b = -0.001, SE = 0.003, 95\% \text{ CI } [-0.008, 0.005], \beta = -0.052, p = .637$)
9. When resilience (T1) was considered a moderator, academic burnout (T1) did not significantly predict study engagement (T2) ($b = -0.004, SE = 0.003, 95\% \text{ CI } [-0.009, 0.001], \beta = -0.142, p = .106$). While social support (T1) was considered a moderator, academic burnout (T1) exhibited a significant predictive ability for study engagement (T2) ($b = -0.008, SE = 0.003, 95\% \text{ CI } [-0.014, -0.003], \beta = -0.290, p = .005$).

Research Implications

According to the findings of the study, there is a significant association between academic burnout and study engagement. The findings show that teacher support has an effect on both academic burnout and study engagement, implying the significance of supportive contacts with teachers in shaping students' study-related experiences. Furthermore, the findings show the impacts of family and teacher support on resilience, which is a personal resource that facilitates individuals in adjusting to and overcoming problems they face along their academic journey. Besides, peer and family support have an impact on academic burnout in students. The findings also show a link between academic burnout and social support, as well as the relationship between study engagement and resilience. Besides, the findings indicate an association between resilience and social support as well.

The implications of these findings can benefit for stakeholders involved with students' well-being to be aware of and understand the significant elements that are related to and vital to students' learning experiences. Furthermore, this finding may be used to emphasize that the teacher is the most critical person in the students' learning experience, so this finding may be used as initial evidence for starting to develop the teacher's course outline that facilitates a positive atmosphere among teacher and students, as well as among students. Alternatively, these findings may be utilized to kick off a creative event that enables teachers to interact with students, such as talking or giving guidance to students early on in the semester or near the end of the semester to help students solve problems, which involves actively listening to the students' problems, worries, or needs.

Future Directions

Future research can indeed benefit from expanding the participant pool to include a more diverse range of backgrounds and characteristics. By collecting data from participants with varying genders, year levels, faculties, types of universities, and academic performance backgrounds, researchers can obtain a more comprehensive understanding of the relationships being studied. The variety of data will enhance the generalizability of the findings and allow for more effective deductions and conclusions to be drawn.

Furthermore, future research may conduct longitudinal studies that span the entire semester and include multiple data collection times, which will provide a more comprehensive understanding of the patterns and changes in academic burnout, study engagement, resilience, and social support among students. By collecting data at different time points, such as at the beginning of the semester, before and after midterm examinations, and before and after final examinations, researchers can capture the fluctuations and dynamics of these variables throughout the academic term. This will contribute to a clearer understanding of how these factors evolve over time and how they may interact with each other.

Besides, collecting data on academic burnout and study engagement is challenging, so future research may be conducted through the process. In which the researcher walks into the classroom to collect data with participants rather than advertise data collection through an online platform to avoid confounding factors that may occur while participants are participating in the research, such as concentration on answering the survey or a factor that may interrupt participants during the survey.

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จุฬาลงกรณ์มหาวิทยาลัย
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Appendix

จุฬาลงกรณ์มหาวิทยาลัย
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The survey sample for this study

การเก็บข้อมูลในการวิจัยนี้เป็นส่วนหนึ่งของวิทยานิพนธ์ระดับมหาบัณฑิตที่จัดทำโดยนางสาว สุชาดา เรืองศรี คณะจิตวิทยา จุฬาลงกรณ์มหาวิทยาลัย โดยมีผู้ช่วยศาสตราจารย์ ดร.หยกฟ้า อิศรานนท์ อาจารย์ประจำคณะจิตวิทยา จุฬาลงกรณ์มหาวิทยาลัย เป็นอาจารย์ที่ปรึกษาการวิจัยในครั้งนี้

การวิจัยในครั้งนี้มีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างภาวะหมดไฟในการเรียน ความผูกพันในการเรียน ความสามารถในการฟื้นคืนพลัง และการสนับสนุนทางสังคมในบริบท การศึกษาสังคมไทย ตลอดจนศึกษาอิทธิพลของภาวะหมดไฟในการเรียนที่มีต่อความผูกพันในการเรียนที่ถูกกำกับโดยความสามารถในการฟื้นคืนพลังและการสนับสนุนทางสังคม อีกทั้ง เพื่อศึกษา อิทธิพลและประเภทของการสนับสนุนทางสังคมที่มีต่อภาวะหมดไฟในการเรียน ความผูกพันในการเรียน และความสามารถในการฟื้นคืนพลัง

การดำเนินการเก็บข้อมูลสำหรับการวิจัยในครั้งนี้เป็นการเก็บข้อมูลแบบออนไลน์ที่จะ ดำเนินการเก็บข้อมูลด้วยกันทั้งสิ้น 2 ครั้งผ่านการตอบแบบสอบถามออนไลน์ โดยระยะห่างในการ ตอบแบบสอบถามทั้ง 2 ครั้ง คือ 1 เดือน ซึ่งการตอบแบบสอบถามในแต่ละครั้งนั้นจะใช้เวลา ประมาณ 25 – 30 นาที

การเข้าร่วมงานวิจัยในครั้งนี้มีความเสี่ยงที่จะเกิดกับตัวท่านอยู่ในระดับที่ต่ำมาก ทั้งนี้คำตอบ และข้อมูลของท่านจะถูกเก็บเป็นความลับ มีเพียงคณะผู้วิจัยและอาจารย์ที่ปรึกษาเท่านั้นที่เข้าถึงได้ นอกจากนี้ ในการรายงานผลขั้นสุดท้าย ข้อมูลผลการวิจัยจะถูกนำเสนอในลักษณะของภาพรวมของ ผู้เข้าร่วมการวิจัยทั้งหมด อีกทั้ง ข้อมูลรายบุคคลของท่านจะถูกเก็บเป็นความลับสูงสุด นอกจากนี้ ท่านสามารถถอนตัวออกจากการเข้าร่วมการวิจัยครั้งนี้ได้ทุกเมื่อ โดยไม่จำเป็นต้องชี้แจงแก่ผู้วิจัย หรือหากแม้ท่านตอบแบบสอบถามเสร็จสิ้นแล้ว แต่รู้สึกไม่สบายใจที่จะให้ข้อมูล ท่านสามารถติดต่อ ผู้วิจัย เพื่อแจ้งยกเลิกการเข้าร่วมวิจัยได้ทุกเมื่อ อีกทั้ง หากมีข้อคำถามใดที่ท่านไม่ต้องการตอบ ท่าน สามารถข้ามคำถามข้อเหล่านั้นได้โดยเสรีโดยจะไม่มีผลกระทบต่อตัวท่านใด ๆ ทั้งสิ้น

ทั้งนี้ หากผู้เข้าร่วมวิจัยท่านใดที่ตอบแบบสอบถามแล้วมีคะแนนการตอบแบบสอบถามใน ส่วนของมาตรวัดภาวะหมดไฟที่อยู่ในระดับที่สูง ผู้วิจัยจะดำเนินการติดต่อกลับหาท่านผ่านอีเมลที่ ท่านได้แจ้งไว้ และหากเกิดผลกระทบอันเนื่องมาจากการเข้าร่วมวิจัย ขอให้ท่านแจ้งมายังผู้วิจัย หรือ ถ้าท่านเป็นนิสิตที่กำลังศึกษาอยู่ที่จุฬาลงกรณ์มหาวิทยาลัยสามารถเข้ารับการศึกษาจากผู้เชี่ยวชาญ

ที่ศูนย์สุขภาพทางจิต จุฬาลงกรณ์มหาวิทยาลัย โทร. (02) 218-1171 หรือ
www.chulawellness.com แต่ถ้าท่านเป็นนิสิตหรือนักศึกษาที่ศึกษาในสถานศึกษาอื่น ๆ ท่าน
 สามารถรับคำปรึกษาหรือคำแนะนำจากสายด่วนสุขภาพจิตของกรมสุขภาพจิตได้โดยโทร 1323 และ
 เมื่อเสร็จสิ้นการวิจัยแล้ว ข้อมูลที่เกี่ยวข้องกับผู้เข้าร่วมวิจัยทั้งหมดจะถูกทำลายด้วยวิธีการที่
 เหมาะสม เช่น การบันทึกข้อมูลทับด้วยข้อมูลชุดอื่น ๆ และการลบไฟล์ข้อมูลคำตอบทิ้งหลังจบการ
 วิจัย

หากท่านมีข้อสงสัยประการใดเพิ่มเติมเกี่ยวกับการวิจัยนี้หรือหากท่านต้องการแจ้งยกเลิกการ
 เข้าร่วมการวิจัยสามารถติดต่อได้ที่ผู้วิจัย นางสาวสุชาดา เรืองศรี Email :
6570048938@student.chula.ac.th และผู้ช่วยศาสตราจารย์ดร.หยกฟ้า อิศรานนท์ อาจารย์ที่
 ปรึกษาที่คณะจิตวิทยา จุฬาลงกรณ์มหาวิทยาลัย ตึกบรมราชชนนีศรีศตพรรษ ชั้น 8 Email :
yokfah.i@chula.ac.th

ท่านยินยอมที่จะเข้าร่วมการวิจัยนี้หรือไม่

- ยินยอมที่จะเข้าร่วมการวิจัยนี้
- ไม่ยินยอมที่จะเข้าร่วมการวิจัย

คำถามคัดกรองผู้เข้าร่วมการวิจัย

1. ท่านกำลังศึกษาอยู่ในระดับปริญญาตรีใช่หรือไม่
 - ใช่
 - ไม่ใช่
2. มหาวิทยาลัยที่ท่านกำลังศึกษาอยู่นั้น อยู่ในจังหวัดกรุงเทพมหานครใช่หรือไม่
 - ใช่
 - ไม่ใช่
3. ท่านมีอายุอยู่ระหว่าง 18-25 ปีใช่หรือไม่
 - ใช่
 - ไม่ใช่

ส่วนที่ 1 แบบสอบถามคุณลักษณะประชากรทั่วไป

โปรดตอบคำถามดังต่อไปนี้

1. รหัสของผู้เข้าร่วมการวิจัย

คำชี้แจง ขอให้ท่านกรอกตัวอักษรภาษาอังกฤษตัวแรกของชื่อ และตัวอักษรภาษาอังกฤษตัวแรกของนามสกุลเป็นตัวพิมพ์ใหญ่และตามด้วยเบอร์โทรศัพท์ 5 ตัวท้าย ตัวอย่างเช่น ชื่อ Somsri Monday เบอร์โทร 0987654321 รหัสของการเข้าร่วมการวิจัยของนายสมชาย คือ SM54321

.....

2. อีเมล

.....

3. เพศ

- ชาย
- หญิง
- LGBTQ
- อื่น ๆ

4. อายุ

.....

5. คณะ

.....

6. ระดับชั้นปี

.....

7. มหาวิทยาลัยที่ท่านกำลังศึกษาอยู่

.....

8. เกรดเฉลี่ยรวม (GPAX) ในภาคการศึกษาที่ผ่านมา

.....

9. รูปแบบการพักอาศัยในปัจจุบัน

- อยู่บ้านกับครอบครัว
- อยู่บ้านคนเดียว
- อยู่หอพักคนเดียว
- อยู่หอพักกับเพื่อน
- อื่น ๆ



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10. ในภาคการศึกษานี้ วิชาที่ท่านได้ลงทะเบียนเรียนไปมีการเรียนในรูปแบบใดบ้าง (ตอบได้มากกว่า 1 ข้อ)

- เรียนที่มหาวิทยาลัย (on-site) 100 %
- เรียนออนไลน์ (online) 100 %
- เรียนแบบผสมผสาน (hybrid) ระหว่างเรียนที่มหาวิทยาลัยและช่องทางออนไลน์



ส่วนที่ 2 มาตรฐานภาวะหมดไฟในการเรียน

คำชี้แจง

ขอให้ท่านพิจารณาข้อความที่ละข้อแล้วเลือกคำตอบที่ตรงกับตัวท่านมากที่สุดเพียงตัวเลขเดียว

ในแต่ละข้อ โปรดตอบทุกข้อ โดย

- | | | |
|---|---------|-----------------|
| 1 | หมายถึง | ตรงน้อยที่สุด |
| 2 | หมายถึง | ตรงน้อยมาก |
| 3 | หมายถึง | ตรงค่อนข้างน้อย |
| 4 | หมายถึง | ตรงปานกลาง |
| 5 | หมายถึง | ตรงค่อนข้างมาก |
| 6 | หมายถึง | ตรงมาก |
| 7 | หมายถึง | ตรงมากที่สุด |

ตัวอย่างข้อคำถาม

ข้อความ	1	2	3	4	5	6	7
1. ฉันรู้สึกล้าจนจดจ่อกับการเรียนได้น้อยลงกว่าเดิม							
2. ฉันรู้สึกว่าความสามารถในการเรียนของตนเองลดลงเมื่อเทียบกับเมื่อก่อน							
3. ฉันรู้สึกเหนื่อยสะสมกับการเรียนเป็นอย่างมาก							

ส่วนที่ 3 มาตรฐานวัดความผูกพันในการเรียน

คำชี้แจง

ขอให้ท่านพิจารณาข้อความที่ละข้อแล้วเลือกคำตอบที่ตรงกับตัวท่านมากที่สุดเพียงตัวเลขเดียว

ในแต่ละข้อ โปรดตอบทุกข้อ โดย

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|---|---------|-----------------|
| 1 | หมายถึง | ตรงน้อยที่สุด |
| 2 | หมายถึง | ตรงน้อยมาก |
| 3 | หมายถึง | ตรงค่อนข้างน้อย |
| 4 | หมายถึง | ตรงปานกลาง |
| 5 | หมายถึง | ตรงค่อนข้างมาก |
| 6 | หมายถึง | ตรงมาก |
| 7 | หมายถึง | ตรงมากที่สุด |

ตัวอย่างข้อคำถาม

ข้อความ	1	2	3	4	5	6	7
1. ฉันมีแรงกาย แรงใจในการเรียนอย่างเต็มที่							
2. ฉันพยายามที่จะทำให้ได้ตามเป้าหมายในการเรียนที่วางไว้							
3. เวลาเรียนฉันรู้สึกใช้เวลาผ่านไปอย่างรวดเร็ว							

ส่วนที่ 4 มาตรฐานความสามารถในการฟื้นคืนพลัง

คำชี้แจง

ขอให้ท่านพิจารณาข้อความทีละข้อแล้วเลือกคำตอบที่ตรงกับตัวท่านมากที่สุดเพียงตัวเลขเดียว

ในแต่ละข้อ โปรดตอบทุกข้อ โดย

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|---|---------|-----------------|
| 1 | หมายถึง | ตรงน้อยที่สุด |
| 2 | หมายถึง | ตรงน้อยมาก |
| 3 | หมายถึง | ตรงค่อนข้างน้อย |
| 4 | หมายถึง | ตรงปานกลาง |
| 5 | หมายถึง | ตรงค่อนข้างมาก |
| 6 | หมายถึง | ตรงมาก |
| 7 | หมายถึง | ตรงมากที่สุด |

ตัวอย่างข้อคำถาม

ข้อความ	1	2	3	4	5	6	7
1. ฉันมีคนที่ฉันยึดเป็นแบบอย่าง							
2. ฉันมีความภาคภูมิใจในตนเอง							
3. ฉันมีพลังใจเพียงพอที่จะต่อสู้กับปัญหาและอุปสรรคต่าง ๆ							

ส่วนที่ 5 มาตรการสนับสนุนทางสังคม

คำชี้แจง

ขอให้ท่านพิจารณาข้อความที่ละข้อแล้วเลือกคำตอบที่ตรงกับตัวท่านมากที่สุดเพียงตัวเลขเดียว

ในแต่ละข้อ โปรดตอบทุกข้อ โดย

- | | | |
|---|---------|-----------------|
| 1 | หมายถึง | ตรงน้อยที่สุด |
| 2 | หมายถึง | ตรงน้อยมาก |
| 3 | หมายถึง | ตรงค่อนข้างน้อย |
| 4 | หมายถึง | ตรงปานกลาง |
| 5 | หมายถึง | ตรงค่อนข้างมาก |
| 6 | หมายถึง | ตรงมาก |
| 7 | หมายถึง | ตรงมากที่สุด |

ตัวอย่างข้อคำถาม

ข้อความ	1	2	3	4	5	6	7
1. ฉันรู้สึกได้รับความไว้วางใจจากอาจารย์							
2. ฉันสามารถแสดงความคิดเห็นกับอาจารย์ขณะเรียนได้อย่างเปิดกว้าง							
3. ฉันคิดว่าอาจารย์ยอมรับในความสามารถทางการเรียนของฉัน							

VITA



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CHULALONGKORN UNIVERSITY