

**GRIT AS PREDICTOR OF PSYCHOLOGICAL
CAPITAL, FLOURISHING, SELF-RELIANCE
AND LIFE SATISFACTION AMONG
UNIVERSITY STUDENTS: THE ROLE OF
RESILIENCE AS MEDIATOR**

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AND LIFE SATISFACTION AMONG
UNIVERSITY STUDENTS: THE ROLE OF
RESILIENCE AS MEDIATOR**

by

SHAHLA OSTOVAR

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LIST OF ABBREVIATIONS

BFP	Big Five Personality
CBT	Cognitive behaviour Therapy
CD-RISC	Connor-Davidson Resilience Scale
CFA	Confirmatory Factor Analyses
CFI	Comparative Fit Index
CI	Consistency of Interest
EFA	Exploratory Factor Analysis
EI	Emotional Intelligence
FLO	Flourishing
FS	Flourishing Scale
GPA	Grade Point Average
Grit-O	Original Grit Scale
GS	Grit Scales
HREC	Human Research Ethics Committee
IHE	Integrated Holistic Education System
IQ	Intelligence quotient
IRB	Institutional Review Boards
LS	Life Satisfaction
MAS	Multidimensional Anxiety Scale
MCO	Movement control orders
MoH	Ministry of Health
OECD	Organisation for Economic Co-operation and Development
OPAH	Optimal performance and health
PAF	Principal axis factoring
PCA	Principal Component Analysis
PCQ	Positive Psychological Capital
PE	Perseverance of effort
PE	Positive emotions
PF	Physical functioning
PH	Physical health

POB	Positive organizational behavior
POS	Positive organizational scholarship
PsyCap	Psychological capital
PWB	Psychological well-being
RMSEA	Root Mean Square Error of Approximation
SE	Self-efficacy
SEA	South East Asia
SR	Self-regulation
SR	Self-reliance
SRI-II	Self-Reliance Inventory-II
SWB	Subjective well-being
LSS	Life Satisfaction Scale
TLI	Tucker-Lewis Index
US	United States
USMA	Military Academy
WB	Well-being
χ^2	Chi-Square

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**GRIT SEBAGAI PERAMAL MODAL PSIKOLOGI, BERKEMBANG,
BERDIKARI DAN KEPUASAN HIDUP DALAM KALANGAN PELAJAR
UNIVERSITI: PERANAN KETAHANAN SEBAGAI PENGANTARA**

ABSTRAK

Kajian ini mengkaji hubungan antara kecekalan (grit), yang ditakrifkan sebagai gabungan semangat dan ketekunan untuk matlamat jangka panjang, dengan pelbagai dimensi kesejahteraan, termasuk daya tahan, modal psikologi, berkembang maju, berdikari, dan kepuasan hidup dalam kalangan pelajar universiti. Penyiasatan ini mengambil kerangka teori penentuan-kendiri (self-determination theory) yang menekankan kepada kepercayaan individu tentang keupayaan dan motivasi mereka untuk mencapai matlamat. Kecekalan (grit) adalah selaras dengan motivasi pertumbuhan seperti yang dicadangkan oleh teori minda (mindset theory). Peserta kajian terdiri daripada 447 pelajar universiti yang berdaftar di sebuah universiti awam di Malaysia. Tiga ratus tiga puluh tiga (75.3%) orang terdiri dari perempuan, manakala 120 (26.4%) adalah lelaki. Kebanyakan peserta berusia antara 22 hingga 25 tahun (317; 69.9%), diikuti oleh mereka yang berusia antara 18 hingga 21 tahun (127; 28.1%). Instrumen yang digunakan dalam kajian ini termasuk Grit scale, Connor-Davidson Resilience scale, PsyCap Questionnaire (PCQ-12), Flourishing scale, Self-reliance scale (SRS), dan Life Satisfaction scale. Analisis faktor pengesahan (confirmatory) dan pekali kebolehpercayaan omega (ω) digunakan untuk menilai kebolehpercayaan dan kesahihan semua skala yang digunakan dalam kajian ini. Hasil kajian menunjukkan bahawa skala-skala secara konsisten dan tepat mengukur konstruk yang dikaji. Kajian ini menyiasat kesan langsung dan tidak langsung

(perantaraan) antara kecekalan (grit) dan dimensi kesejahteraan. Hasil kajian ini mengesahkan bahawa kecekalan (grit) adalah peramal signifikan kepada modal psikologi, berkembang maju, berdikari, dan kepuasan hidup. Keputusan kajian menunjukkan bahawa individu dengan tahap kecekalan (grit) yang lebih tinggi juga cenderung melaporkan tahap modal psikologi, berkembang maju, kebolehan berdikari dan kepuasan hidup yang lebih tinggi. Daya tahan berfungsi sebagai pemboleh ubah perantara antara kecekalan (grit) dan modal psikologi, berkembang maju, berdikari, dan kepuasan hidup. Hal ini menunjukkan bahawa kecekalan (grit) bukan hanya mempunyai kesan langsung tetapi juga boleh mempengaruhi pemboleh ubah dalam kajian ini melalui peranan perantara daya tahan. Kajian ini mempunyai beberapa implikasi teori dan praktis yang relevan kepada pelbagai pihak berkepentingan, termasuk penyelidik, kaunselor, ibu bapa, guru, pelajar, dan institusi pendidikan. Kajian lanjut perlu meneliti mekanisme khusus dan intervensi yang boleh memperkuat kecekalan (grit) dan seterusnya menyumbang kepada peningkatan kesihatan psikologi secara menyeluruh.

**GRIT AS PREDICTOR OF PSYCHOLOGICAL CAPITAL, FLOURISHING,
SELF-RELIANCE AND LIFE SATISFACTION AMONG UNIVERSITY
STUDENTS: THE ROLE OF RESILIENCE AS MEDIATOR**

ABSTRACT

This study examines the association between grit, defined as the combination of perseverance of effort and consistency of interest for long-term goals, and various dimensions of well-being, including resilience, psychological capital, flourishing, self-reliance, and life satisfaction among university students. The investigation adopts self-determination theory framework, which emphasizes on individuals' beliefs about their abilities and motivation to achieve goals. Grit is aligned with growth motivation as proposed by the mindset theory. Participants were 447 university students enrolled at a Malaysian public university. Three hundred and thirty-three (75.3%) were females, while 120 (26.4%) were males. The majority of the participants were between 22 to 25 years old (317; 69.9%), followed by 18 to 21 years (127; 28.1%). Instruments employed in this study include Grit scale, Connor-Davidson Resilience scale, PsyCap Questionnaire (PCQ-12), Flourishing scale, Self-reliance scale (SRS), and Life Satisfaction scale. Confirmatory factor analyses and omega (ω) reliability coefficients were employed to assess the reliability and validity of all scales used in the study. The results indicated that the scales consistently and accurately measured the intended constructs. The study was investigated both direct and indirect (mediating) effects of grit and dimensions of well-being. The findings of this study confirmed that grit was significant predictor of psychological capital, flourishing, self-reliance, and life satisfaction. The results indicated that individuals with higher level

of grit were also likely to reported higher level of psychological capital, flourishing, self-reliance, and life satisfaction. Resilience as a mediating variable between grit and psychological capital, flourishing, self-reliance, and life satisfaction, indicating that grit not only has a direct impact on these variables but also impacts them through the mediating role of resilience. This study holds several theoretical and practical implications, relevant to various stakeholders, including researchers, counsellors, parents, teachers, students, and learning institutions. Further research should explore the specific mechanisms and interventions that can strengthen grit and consequently contribute to improved psychological health as a whole.

CHAPTER 1: INTRODUCTION

This study explores the relationship between university students' sense of grit, psychological capital, flourishing self-reliance, and life satisfaction, with resilience as the mediating variable. This chapter is divided into several sections: overview, problem statement, research objectives, research questions, hypotheses, significance of the study, definition of concepts, operational definitions, and scope of the study.

1.1 Overview

William James suggested a research plan that might include all areas of psychology in 1907. It established the groundwork for responding to two important questions: first, what are human beings' capacities, and second, how do people use their capacities? (James, 1907). The first question can now be answered thanks to advancements in psychology science. We currently have a lot of knowledge regarding IQ and other cognitive abilities, including how to assess them.

On the other hand, as James (1907) notes, we don't really understand why most people only use a small portion of their resources. We can now respond to the first query thanks to developments in psychological science. Until now, we have learned a lot about intelligence and other cognitive abilities, as well as how to assess them (Coenen, Nelson & Gureckis, 2019). People have traits that help them succeed in addition to their cognitive abilities. These traits include things like creativity, vigour, emotional intelligence, charisma, self-confidence, emotional stability, and other good traits (Chen & Cheng, 2023). For certain professions, some personality qualities appear to be more important than others. For example, extroversion can be crucial to a profession in sales, but it is irrelevant to a career in writing, which demands originality. Nevertheless, regardless of one's professional or occupational experience, some attributes could be necessary for success. According to several studies, one of

the personal qualities shared by the most influential leaders is grit (Nikolaus, et al., 2018). Duckworth (2007) proposed that the original meaning of grit refers to the meaning of grit. "For Why do individuals with the same talent achieve tremendous success?"

Numerous studies have been carried out, and research found that neither talent nor hard work can lead to high achievement. The only condition for success is persistent enthusiasm and perseverance, which are the keys to success (Duckworth et al., 2007). "Potential is not equal to fulfilling potential". Duckworth found that some students with higher talents, good mathematical understanding, and aptitude have good grades in the monthly school examinations. It's not as good as expected.

On the contrary, students who spend a lot of time understanding the principles of mathematics better than expected, so Duckworth (2009) found out that good talent and high aptitude do not guarantee high success at once. Duckworth conducted a series of studies on the West Point United States Military Academy in 2005 to predict which trainees could persist and complete the training in the course. Duckworth (2009) found that after rigorous training, there was no difference in school performance between those who stayed and those who left, and perseverance of effort and consistency of interest became reliable indicators that could further predict whether a student would pass the rigorous training.

Some traits work together to allow one to be called educated (Organisation for Economic Co-operation and Development (OECD), 2018). To be considered educated, one must know the subject matter, theories, and facts relevant to their specialty and the general walk of life. On the other hand, education is never enough. Such abilities include social skills, problem-solving, perseverance, self-control, and critical thinking. Individuals are unable to contribute to society and attain success

(Coman et al., 2020). These characteristics have been grouped as non-cognitive abilities, widely explained as people's patterns of thought, feelings, and behaviour that may develop throughout their lives (Borghans et al., 2008; Kautz & Heckman, 2014).

The attainment of success in life is significantly influenced by the ability to withstand challenges, setbacks, and failures. Individuals demonstrating perseverance in the midst of adversity are more likely to achieve their objectives and ultimately succeed. On the contrary, those who easily give up or succumb to discouragement when confronted with setbacks may fall short of realizing their full potential. Resilience, as outlined by Sisto et al. (2019), refers to the capability to endure stress and adversity while sustaining regular psychological and physical functioning (PF) through adaptive means.

It is a developmental phenomenon that enables individuals to cope with and recover from temporary mental illness resulting from unexpected contingencies (Fletcher & Sarkar, 2013). Resilience is a successful coping mechanism that involves flexibility, finding new ways, adapting to environmental changes, and quickly recovering after the elimination of stress factors (Sisto et al., 2019). Resilience is a personal quality that predicts developmentally appropriate outcomes in individuals under threat. It involves the use of personal advantages and resources to resist actively and overcome adversity. Resilience has been described as both an outcome and a process and has been used to refer to both individuals and communities (Köhne, Engert & Rosendahl, 2023). Self-efficacy, optimism, hope, and resilience are the four main elements of psychological capital, often known as PsyCap. An individual's self-efficacy is defined as confidence in their capacity to carry out an activity or accomplish a goal (Luthans, 2017). Resilience is the ability to adapt and recover from adversity, setbacks, and challenges. Resilience, broadly defined as the capacity to

maintain or regain mental well-being after facing adversity, encapsulates the very essence of grit. Resilient individuals demonstrate the capability to "bounce back" from negative experiences, showcasing perseverance in the face of setbacks and failures. The study implicitly suggests that individuals with higher levels of grit, by virtue of their resilience, are more likely to persist through challenges, ultimately contributing to the achievement of their goals and, consequently, success in life.

Self-efficacy, optimism, hope, and resilience are the four main elements of psychological capital, often known as PsyCap. An individual's self-efficacy is defined as confidence in their capacity to carry out an activity or accomplish a goal (Luthans, 2017). Resilience is the ability to adapt and recover from adversity, setbacks, and challenges. Higher levels of PsyCap have been linked to greater work engagement, job satisfaction, and improved job performance, according to research (Yao et al., 2022). In the academic context, students with higher levels of PsyCap are more likely to succeed academically and experience greater well-being (Datu & Valdez, 2019).

Flourishing is a multidimensional concept that encompasses various aspects of optimal human functioning, including positive emotions, engagement, meaning, positive relationships, and personal growth (Huppert & So, 2013). It is the pinnacle of psychological end-states and a central idea in studies of positive psychology. It is linked with health and well-being in childhood and adulthood. It is associated with lifestyle medicine pillars, person-environment fit, and family resilience (Lianov et al., 2019).

Self-reliance is the capacity of a person to rely on themselves for their needs and wants rather than depending on others or external factors (Gross et al., 2020). It is a concept that is important in various contexts, including education, disaster recovery, entrepreneurship, and public policy (Gross et al., 2020). Self-reliance involves taking

responsibility for one's own life and choices. It is also linked to behavioral concepts, as it involves the ability to proceed with an activity regardless of the environment (Keizer et al., 2019; Triandis & Gelfand, 1998).

According to one's own criteria and expectations, life satisfaction is an individual's overall assessment of their life (Neumann-Böhme et al., 2021). It is a multidimensional concept that is influenced by various factors, including mental health, physical health, social support, and personal circumstances (Wu et al., 2022). Life satisfaction is closely associated with well-being, happiness, and positive psychological characteristics and is negatively connected with negative outcomes, for instance, depression and anxiety (Liu et al., 2023).

Students should be raised in an environment that promotes non-cognitive development (Agarwal & Arya, 2021). This includes fostering a belief in the student that their actions are significant, having adults around them who believe in their abilities, and providing support for them to grow at their own pace and achieve success in every facet of life (Duckworth et al., 2007). Supporting students in developing non-cognitive abilities, attitudes, emotions, methods, and behaviours improves their learning, academic performance, and well-being (García, 2016; 2014; Frantz et al., 2022).

According to the body of literature, grit is an important predictor of academic and job success, self-confidence, and well-being (Li et al., 2018). Grit is characterised as a special quality of perseverance of effort and consistency of interest for long-term goals in the broad sense of tenacity and resolve (Morell et al., 2021). Individuals with grit will regard problems or frustrations as challenges and are more prone to positive emotions, while individuals without grit will regard personal problems as harmful emotions (Duckworth et al., 2007). Grit is the capacity to persevere through setbacks

and challenges to maintain commitment and interest throughout time (Duckworth et al., 2014).

The individual characterized by grit exhibits a trajectory toward success reminiscent of a marathon runner, harnessing endurance as a key asset. This gritty individual demonstrates unwavering commitment, remaining steadfast in their pursuit without succumbing to the demoralizing effects of failure. Grit has been linked to gender (see Flaming and Granato, 2017). Males and females differ in their levels of grit (see Christensen and Knezek, 2014; Aswini and Amrita, 2017) and age (Cupitt and Golshan, 2015). Many people were struck by the accomplishments of colleagues or peers who, despite not appearing as gifted as others initially, demonstrated a steadfast commitment to their goals (Duckworth et al., 2014).

On the contrary, many people were surprised to learn that those who were extraordinarily talented did not hold the top positions in their professions (see Duckworth et al., 2007). Grit and all the other psychological traits linked to achievement in life are influenced by genes and experience (Zhou, 2023). Grit, on the other hand, is a combination of genetic, educational, behavioural, psychological, and subjective well-being elements rather than being caused by a specific gene or psychological feature (Kevenaar et al., 2023). Numerous studies have been conducted on psychological and subjective well-being (SWB), which includes flourishing, happiness, and life satisfaction (Disabato, Goodman & Kashdan 2019). There have been several attempts to frame this idea, concentrating on either emotional or cognitive, objective or subjective well-being components (e.g., Marsh et al., 2019; Kahneman & Krueger, 2006; Tappolet and Rossi, 2015; Voukelatou et al., 2021).

This study set out to look into the domains of grit's predictive power on university students' resilience, psychological capital (PsyCap), flourishing, self-reliance, and life

satisfaction. It also looked at how resilience mediates the link between grit and these advantageous psychological effects. The findings suggest that individuals with low levels of grit are more likely to experience discouragement, have a tendency to quit easily, and exhibit weak impulse control, leading to reduced resilience, psychological capital states, flourishing, self-reliance, and life satisfaction (see Sansone, Wiebe, & Morgan, 1999). This study aimed to create a measuring model by linking grit to the five-factor model in order to add to the body of literature while exploring the non-linear relationship between grit and resilience, psychological capital (PsyCap), flourishing, self-reliance, and life satisfaction. Determining the nature of this relationship, whether linear or non-linear, might help us comprehend the relationship between grit and achievement in life. Additionally, these findings have implications for selection processes, as a more thorough comprehension of the connection between grit, positive psychology facets, and individual well-being may shed light on its utility in such contexts. In the end, this study adds to the increasing corpus of grit research by highlighting the significance of helping university students build both grit and resilience in order to improve their psychological well-being and overall success.

1.2 Problem Statement

The problem statement discusses issues related to the targeted population and the research gaps associated with studies on grit.

Challenges Faced by University Students in Malaysia

First, with the modifications and advancements in the field of education and lifestyle today, university students in Malaysia are required to look far ahead. University students face diverse challenges before and after graduation, from personal

to academic to social. Depending on family, friends, and culture, only some students feel more successful and satisfied with their life (Diener & Diener, 1995; Hofstede, 1984; Triandis & Gelfand, 1998). The rest of university undergraduate students are exposed to hyper-competitive environments and stressful life events that can significantly impact their psyche, including their cognitive and non-cognitive abilities. Although attending university can have positive outcomes, such as developing subject knowledge, it can also be a negative experience due to the chronic pressure of fulfilling academic requirements. In addition to the negative psychological impacts, students who feel neglected may also experience social isolation, which can further exacerbate feelings of loneliness, depression, and anxiety. These feelings can ultimately lead to poor academic performance, as students may struggle to concentrate, retain information, and engage with their coursework (liu et al., 2022).

Moreover, the stress and pressure of academic expectations can lead to burnout, a condition marked by physical, mental, and emotional tiredness (Emerson, Hair, Jr & Smith, 2023). Reduced motivation, cynicism, and a diminished sense of personal accomplishment can all be symptoms of burnout, all of which can hinder students' ability to achieve their goals and realize their full potential (Maslach & Leiter, 2016).

A study by Wang et al. (2020) highlighted significant moderate to severe psychological impacts and anxiety among the Malaysian university student's population. Sharma et al. (2020) reported heightened stress and anxiety among Indian medical students. McGonagle (2020) found similar patterns in the prevalence of depression and anxiety. Previous studies have consistently indicated that university students face a heightened risk of mental health issues, stress, anxiety, and depression compared to the general population (Wong et al., 2023). This trend has been documented globally, including in the UK, US, and Malaysia (Brown, 2018).

To address these challenges, the Malaysian Integrated Holistic Education System (IHES) can prioritize building a positive and supportive learning environment that fosters personal growth, resilience, and well-being (Che Abdul Hamid & Puspa Liza, 2022). The implementation of an enhanced educational framework in Malaysia's Institutes of Higher Education System (IHES) could encompass various strategies grounded in scientific principles. These strategies may involve the integration of mindfulness practices, provision of mental health resources, and facilitation of extracurricular activities aimed at fostering social connections and personal development. Additionally, educators and policymakers can play a pivotal role in cultivating a growth mindset among students, underscoring the significance of effort, perseverance, and resilience in attaining success. Through the cultivation of a culture that prioritizes learning and growth, the Malaysian IHES has the potential to empower students to surmount challenges, embrace novel undertakings, and accomplish meaningful objectives that harmonize with their values and aspirations. Consequently, conducting rigorous studies focused on comprehending the mechanisms through which challenges can be effectively addressed becomes imperative in this context. Such studies will provide valuable insights to further refine and optimize educational interventions within the IHES, promoting holistic development and well-being among its student population.

The COVID-19's Effect on Malaysia

Second, the COVID-19 epidemic increases the risk of mental health. Even before the pandemic, the mental health of higher education students was becoming a rising concern, with an increasing number of students having mental health issues (Hubble & Bolton, 2020). Numerous studies have examined the pandemic's effects on

university students' mental health and the variables associated with higher levels of suffering. Movement control orders (MCO) associated with the COVID-19 epidemic resulted in an upsurge in mental health difficulties among Malaysians in 2020. A survey carried out by the Centre Throughout the MCO period discovered that 48% or 45% of participants reported high levels of anxiety and depression, respectively (<https://www.centre.my/post/mco-and-mental-health-living>).

Unsurprisingly, emotional support hotline services have increased significantly in Malaysia. In 2020, there was a 40% increase in the number of callers expressing suicidal thoughts compared to the previous year (34%). Additionally, Ministry of Health (MoH) hospitals treated 465 cases of suicide attempts. Furthermore, according to the MoH, an average of 30 people per month (a total of 266 individuals) lost their lives to suicide. The reasons for terminating his or her life included debt problems, family and marriage problems, relationships, and pressures (such as work and life pressures). The rising frequency of emotional distress (such as depression and anxiety) seems to have grown increasingly concerning in light of the present pandemic.

Amidst the ongoing COVID-19 pandemic, the evolving quarantine conditions are reshaping people's lifestyles. A pertinent question arises: what role does personality play in these transformations? The impact of COVID-19 on Malaysia has presented formidable challenges to the well-being of university students (Sundarasan et al., 2020). Elements like social isolation, sudden shifts in learning environments, and uncertainties about the future have led to heightened stress, anxiety, and a decline in mental health among the student population. As universities adapt to remote learning and implement safety measures, recognizing and addressing the intertwined well-being factors becomes paramount for supporting the overall health and resilience of

Malaysian university students in these unprecedented times (Farhan, Arifai, & Yusof, 2021; Fauzi et al., 2021; Husin et al., 2022; Wong et al., 2023). The prevalence of moderate to severe depression, anxiety and stress among university students are 53.9%, 66.2% and 44.6%, respectively (Wong et al., 2023). While grit and resilience are crucial constructs, their specific exploration in the context of the COVID-19 pandemic in Malaysia remains an untouched area of study. Hence, nowadays, Malaysian students need to be more positive cognitively, with emotion and behaviour. Conducting further research on protective factors that can mitigate the susceptibility to mental health issues amidst significant life stressors, such as a pandemic, is of paramount importance.

The predictability of wellbeing based on non-cognitive skills is under-explored

Success is a complex phenomenon studied extensively across various research fields, including psychology, education, and business. Despite significant advancements in our understanding of success, why some people succeed more than others remains a topic of interest and debate (Von Culin, Tsukayama, & Duckworth, 2014). One commonly held assumption is that intelligence is a critical predictor of success. However, recent research has challenged this notion, suggesting that other personal characteristics and skills, known as non-cognitive skills, may also play an essential role in determining success (Duckworth, 2016).

These abilities contain perseverance, motivation, self-control, and emotional intelligence. Some studies have shown that individuals with high intelligence quotient (IQ) scores may not necessarily perform better or achieve tremendous success than those with lower IQ scores (Hochanadel & Finamore, 2015; Kannangara et al., 2018). This phenomenon is explained by the fact that IQ primarily measures cognitive abilities such as reasoning, problem-solving, and critical thinking but does not account

for non-cognitive skills (Urvashi & Anita, 2017). Non-cognitive abilities are crucial for success, as shown in various contexts, including education and the workplace (Duckworth et al., 2016). For example, students with strong non-cognitive skills are more likely to succeed academically. At the same time, employees with high emotional quotients are more propensity succeed in their careers.

Furthermore, individuals must be prepared in their families, schools, universities, and workplaces to function in society and achieve success (Li., Pu & Liao, 2022). Cultivating non-cognitive skills plays a crucial role in this preparation, allowing individuals to cope with adversity, adapt to changing circumstances, and effectively manage interpersonal relationships (Singh & Singh, 2022).

Therefore, an expanded comprehension of the function of non-cognitive abilities in wellbeing is essential for individuals, educators, employers, and policymakers. Such knowledge can inform the development of interventions and programs that encourage the growth of non-cognitive skills, particularly in those who may lack these skills due to environmental or other factors (Hoerr, 2013). While intelligence is undoubtedly a critical factor in determining academic success, it may not be the only predictor. Non-cognitive skills, such as perseverance, motivation, and emotional intelligence, may also play a crucial role. Therefore, it is necessary to explore the connection between these abilities and success further, to promote the development of these skills, and to create a more equitable society where success is not limited to those with high IQs (Hoerr, 2013). This study, are interested in understanding the dynamics of non-cognitive (such as grit and resilience) factors in the context of a collectivist culture like Malaysia and their implications for individuals' overall wellbeing.

Most of the existing grit research has been conducted in Western contexts

In recent years, the idea of "grit" has become more significant as a predictor of success in job, school, and other facets of daily life. However, the majority of the current grit research has been done in Western nations, and the impact of cultural factors on grit remains largely unexplored. Cultural variations can markedly influence the expression of grit and its association with psychological outcomes. Specifically, a collectivist cultural setting prioritizes the needs of a group or community over individual interests. It is incorporating the various cultural values inherent in collectivist cultures. In a collectivist cultural setting (such as Malaysia) (Hasan & Khaiyom, 2019), individuals often find a strong sense of belonging and identity within their community or group (Sumari et al., 2020). Cooperation and harmony are highly valued, with an emphasis on collaboration towards shared goals and mutual support. Decision-making processes typically involve consensus-building and consideration of how choices will affect the collective as a whole (Sumari et al., 2020).

The current study examines how grit, and wellbeing are related in a collectivist cultural setting, namely Malaysia. It is not clear whether this finding holds true in collectivist settings, despite prior studies demonstrating a beneficial relationship between grit and psychological outcomes in individualistic cultures. Individuals who prioritise harmonious interactions and connections have an interdependent self-construal, according to Markus and Kitayama's (1991) theory of independent and interdependent self-construal. In collectivist civilizations, the preferences of other individuals are more common. As a result, grit may take different forms and have different values in collectivist cultures.

Limited research describes how grit, resilience, student PsyCap, flourishing, self-reliance, and life satisfaction interact and contribute wellbeing in collectivist cultures,

particularly in Malaysia. Furthermore, cultural factors may significantly impact the manifestation of grit and its relationship with success. Datu, Yuen & Chen (2017) noted that grit's manifestation differs depending on cultural settings, and grit may not have universal value across cultures. Additionally, Aycan (2005) reported that in high-distance and collectivist cultures, recruiting and selection processes and performance evaluations are based on "soft criteria" such as interpersonal abilities and are handled unstructured and unsystematic.

Empirical studies indicate that Malaysian society leans more towards collectivism than individualism. Individuals demonstrate improved performance and efficacy in group settings, attributed to their strong sense of cohesion (Ahmad, Ab Hamid & Azizan, 2018). However, little study has looked at the connection between grit and success in Malaysia, particularly in a society where collectivism is valued. Therefore, additional study is required to comprehend achievement with various amounts of grit in collectivist cultures and how student PsyCap, flourishing, self-reliance, and life satisfaction contribute to wellbeing in such contexts.

The aim of this study was to explore how grit functions as a predictor for overall well-being among university students in Malaysia. Through an examination of the relationships between grit, psychological capital, flourishing, self-reliance, and life satisfaction, with resilience acting as a mediator, our goal was to gain comprehensive insights into the role of grit in shaping various aspects of students' overall well-being. This research delves into how grit influences well-being within a collectivist cultural context, specifically in Malaysia, investigating the manifestation and significance of grit in collectivist cultures and its contributions to student psychological capital, flourishing, self-reliance, and life satisfaction. Cultural factors may significantly impact the manifestation of grit and its relationship with cultural aspects may

influence in collectivist cultures. Therefore, more study is required to comprehend the key role of grit and other non-cognitive abilities in well being in collectivist cultural contexts.

Prior research has discovered a positive connection between grit and optimal psychological outcomes in Western contexts. Social and cultural factors may significantly impact grit and wellbeing. Therefore, it is essential to consider the cultural context in which grit is valuable. Cross-cultural psychology research has highlighted that assumptions taken for granted in Western countries may not necessarily apply to other diverse cultures (Kundu, 2016). Despite this, the majority of an earlier study on grit was done in the United States (Lam & Zhou, 2019). Our research seeks to understand how cultural influences may affect the relationship between grit and achievement in life in non-Western contexts. Specifically, this study examined how grit affects well-being in Malaysia, a collectivist society.

Given the non-universal manifestation of grit, more investigation is required to fully understand its impacts on success in life with varying degrees of resilience and grit in collectivist contexts (Datu, Yuen & Chen, 2018). Our study seeks to fill this gap by describing how grit and resilience affect students' psychological capital (PsyCap), flourishing, self-reliance, and life satisfaction. By doing so, this study provided a better understanding of how to support and encourage students to realize their potential and achieve meaningful goals in a collectivist society like Malaysia.

This study delves into the impact of cultural influences on the connection between grit and wellbeing in a non-Western setting. The primary objective of our investigation was to explore how grit functions as a predictor for overall well-being

among Malaysian university students. By scrutinizing the relationships between grit, psychological capital, flourishing, self-reliance, and life satisfaction, with resilience serving as a mediator, research sought to obtain comprehensive insights into the multifaceted role of grit in shaping various aspects of students' overall well-being. Furthermore, this research contributes to a nuanced understanding of how grit and resilience shape educational performance in collectivist societies. Additionally, this study aspires to play a role in developing effective student success techniques within this specific cultural context.

Few studies on grit and well-being factors in Collective Cultures

Sixth, positive psychology has gained popularity recently, focusing on enhancing positive characteristics to improve well-being and performance (Seligman, 2011; Seligman & Csikszentmihalyi, 2000). However, few studies examine how grit affects well-being in South East Asia (SEA: Datu, 2021; Nguyen et al., 2019; Tangmunkongvorakul et al., 2022) and collectivist cultures. Grit and resilience, the ability to persist through challenges to achieve goals, have gained attention in the literature. While a number of studies have looked into the connection between grit and academic success, findings are inconsistent. According to certain research, grit and academic performance go hand in hand. Still, no research has thoroughly investigated how grit relates to resilience, psychological capital (PsyCap), flourishing, self-reliance, and life satisfaction in Malaysian university contexts.

Researchers have chosen resilience as a mediating variable to examine the association between grit and various well-being indicators in order to fill this vacuum in the literature. In order to overcome obstacles and preserve competence, enthusiasm, and tenacity, one needs resilience. Furthermore, resilience may mediate the effects of personality traits on university students' well-being. However, few empirical studies

have examined the components that encourage grit in adults, especially in the Malaysian university system. It is not clear if grit is related to university students' well-being.

Limitations Measurement in Measuring Non-Cognitive Skills/ Grit

The measurement and study of non-cognitive skills (such as grit, PsyCap and self-reliance) have received increasing attention from researchers. However, there is a relative scarcity of data on this topic, and this can be explained by a number of variables, including terminological fuzziness and measurement difficulties. Additionally, there aren't enough fundamental and applied studies in this field, which hinders our ability to comprehend non-cognitive skills and how they affect people on a daily basis.

One commonly used instrument for assessing non-cognitive abilities is the grit scale, which is widely used in Western contexts. However, its use in other cultures is limited, and its psychometric characteristics need to be evaluated in non-Western societies, such as Malaysia. It is very crucial, given that the manifestation of non-cognitive abilities, including grit, may differ depending on cultural contexts.

Furthermore, most studies on grit have focused on overall grit rather than studying each domain of grit separately. Recent research suggests that the perseverance of effort and consistency of interest domains of grit have a strong predictive influence on psychological outcomes when reviewed independently. However, these domains may not be universal in their manifestation, further highlighting the need for cultural context to be considered when looking at non-cognitive skills.

Additional investigation is required to understand better non-cognitive skills and their impact on individuals' daily lives, including their well-being and success in various

domains. Additionally, it is crucial to consider the cultural context in which these skills are studied and to evaluate the psychometric characteristics of commonly used instruments in non-Western societies. By doing this, we can learn more about non-cognitive abilities and how to assist people in reaching their potential and attaining their goals.

1.3 Research Objectives

By examining the connections between grit and resilience, psychological capital (PsyCap), flourishing, self-reliance, and university student life satisfaction, the current study explores a topic that has received little attention. To ascertain whether a non-linear model fits better than the linear model, the current study will specifically examine the relationship between grit and Resilience (RE), Psychological capital (PsyCap), Flourishing (FLO), Self-reliance (SR), and student life satisfaction (LS). It is critical to determine whether grit and wellbeing follows a linear or non-linear connection.

The study seeks to investigate several ideas:

- 1- To examine the direct prediction of grit towards resilience among Malaysian university students.
- 2- To investigate the direct prediction between grit and psychological capital (PsyCap) among Malaysian university students.
- 3- To investigate the direct prediction between grit and flourishing among Malaysian university students.
- 4- To examine the direct prediction between grit and self-reliance among Malaysian university students.

- 5- To investigate the direct relationship between grit and life satisfaction among Malaysian university students.
- 6- 9- To investigate the mediating effect of resilience on the relationship between grit and psychological capital (PsyCap), flourishing, self-reliance and life satisfaction among Malaysian university students.

1.4 Research Questions

RQ 1. To what extent can grit predict resilience among university students?

RQ 2. To what extent can grit predict psychological capital (PsyCap) among university students?

RQ 3. To what extent can grit predict flourishing among university students?

RQ 4. To what extent can grit predict self-reliance among university students?

RQ5. To what extent can grit predict life satisfaction among university students?

RQ6-RQ9. To what extent does the mediating effect of resilience influence the relationships between grit and psychological capital (PsyCap), flourishing, self-reliance, and life satisfaction among Malaysian university students?

1.5 Hypotheses

In this study, the following hypotheses will be composed:

1.5.1 Direct Hypotheses

H1. Grit and its subscales have positive direct effects on Malaysian university students' resilience.

H2. Grit and its subscales have positively predicted direct effects on Malaysian university students' psychological capital (PsyCap).

H3. Grit and its subscales should positively predict direct effects on Malaysian university students flourishing.

H4. Grit and its subscales have positively predicted direct effects on Malaysian university students' self-reliance.

H5. Grit and its subscales have positively predicted direct effects on Malaysian university students life satisfaction.

1.5.2 Indirect Hypotheses

H6-H9. Resilience mediates grit and psychological capital (PsyCap), flourishing, self-reliance, and life satisfaction in Malaysian university students.

1.6 Significance of the Study

This study is important and supported for a number of reasons. By addressing current knowledge gaps, this study seeks to provide various contributions. Considering the limited number of investigations that examined the links among study variables (grit, resilience, psychological capital, self-reliance, flourishing, and life satisfaction), this study would broaden the current literature. This research sought to add to the increasing body of knowledge that admissions decisions should give more weight to non-cognitive factors.

Enhance students grit and well-being during the pandemic and post-pandemic

As emphasized in the problem statement, the pandemic has brought unprecedented changes in the lives of university students, such as online learning, social isolation, financial hardships, and uncertainties about the future (Broner et al., 2022). Prior studies have shown how crucial it is to focus on building grit and resilience in university students, especially in the face of trying situations like the COVID-19 pandemic that is currently affecting Malaysia (Sundarasan et al., 2020). The current study adds to the corpus of knowledge already available on strategies for enhancing the psychological well-being of university students during times of adversity. Prioritizing the development of grit and resilience can help students in several ways. First, it can enhance their psychological capital, which refers to their positive psychological development and growth. Second, it can promote their flourishing, a positive and fulfilling life experience. Third, it can improve their self-reliance, which refers to their ability to rely on their own abilities and resources to achieve their goals. Finally, it can enhance their life satisfaction, which refers to their overall life evaluation.

It is important to highlight that growing in grit and resilience is a continuous process rather than a one-time occurrence. This investigation will furnish valuable insights into the means by which students can sustain their resilience amidst the challenges posed by a pandemic. The importance of this study rests in its ability to guide the creation of evidence-based interventions meant to support college students' psychological wellbeing in the face of difficulty.

Therefore, should incorporate activities and interventions promoting grit and resilience development in regular counselling sessions. These activities can include goal-setting exercises, mindfulness practices, self-reflection, and self-affirmation

exercises. Furthermore, different students must participate in different phases of the interventions, including the pilot and survey study phases. Guarantees that the interventions are equitable and impartial across a broad spectrum of students without favouring any specific group. Additionally, it identifies potential issues or challenges in the intervention, which can then address before implementation.

Prioritizing the development of grit and resilience in university students can significantly impact their overall well-being and life satisfaction, especially during times of crisis such as the COVID-19 pandemic. Incorporating grit and resilience development activities and interventions in regular counselling sessions can aid students in acquiring the abilities and frame of mind necessary to overcome obstacles and accomplish their goals. It is important to ensure that different students participate in different phases of the interventions to promote diversity and identify potential issues.

Enhancing non-cognitive skills

This study investigated non-cognitive abilities, with a specific focus on grit and related variables, which carries significant scientific importance. By exploring the capacity of these abilities to predict success, this research seeks to advance our understanding of their role and implications. The anticipated findings hold immense potential for educators, researchers, governments, and societies, both in Malaysia and other countries. They are poised to provide invaluable insights into the nature of grit and offer guidance for the development of comprehensive curricula that target non-cognitive skills. Such insights can catalyze advancements in educational systems and societal frameworks, fostering the holistic development and accomplishments of

individuals. Furthermore, this study's outcomes may contribute to the broader field of non-cognitive abilities research, enriching the existing knowledge base and facilitating evidence-based practices. In summary, this investigation is poised to make substantial contributions to the scientific community and have tangible implications for education, research, policy-making, and society as a whole.

Valuable insights into cultivating grit are available for educators, counsellors, and researchers.

Grit has become an increasingly popular topic of discussion in education as educators and researchers recognize its importance in promoting student success, well-being, and mindset. According to research by Dweck (2006), those who have a growth mindset are more likely to persevere despite difficulties and setbacks and to see failures as chances for improvement. These findings are useful for health professionals. Practitioners in various contexts, including clinical, educational, and organisational settings, can assist people in safeguarding their mental health and instruct them on how to foster a positive feedback loop of flourishing, and wellbeing (Unanue et al., 2019). They can achieve this by emphasizing the significance of grit and resilience and providing guidance on fostering these qualities (Wang, 2021).

Understanding how to cultivate grit in students can assist them in developing the persistence and resilience required to achieve academic success. Researchers will have a global standard of achievement thanks to additional measurements of university students' performance in assessing grit and its components. The findings will also suggest that university counsellors and mental health professionals should