

Title:

The factors that influence the State of Readiness for Entrepreneurial Opportunities: A Case Study of Late-Career Professionals, Managers, Executives and Technicians (PMETs) in Singapore.

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## **DECLARATION**

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Date: 15 FEBRUARY 2021

### **STATEMENT 1**

This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used the extent and nature of the correction is clearly marked in a footnote(s). Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

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### **STATEMENT 2**

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## **ABSTRACT**

Singapore's population is fast-ageing, with people over 50 years old are projected to rise from 37.2% in 2020 to 46.4% by 2030. Countries that face similar ageing population demographics have seen a triggering of unsustainable dependency ratio. This impending trend needs urgent reviews of government policies on seniors, including advocating Entrepreneurship as a viable option. Past research has shown that those communities pushing for senior Entrepreneurship have benefited socially and economically.

Older workers like late-career PMETs are recognised to have possessed the necessary entrepreneurial competencies. These managers are presumed to have the proper personal dispositions and might have acquired a high level of technical and organisational skills, vast tacit knowledge and business experience, and a broad network of contacts during their career tenure. These unique inherent qualities give them a competitive advantage to be successful Entrepreneurs compared to their younger cohorts. Despite that, the conversion rate for late-career PMETs to Entrepreneurship remains low, contributed by both a lack of income insecurity and a self-perceived state of entrepreneurial readiness.

Thus, this research aims to determine the inherent factors influencing the perceived readiness of our Respondents to identify and exploit entrepreneurial opportunities. Findings will contribute to conceiving a self-assessable scorecard to assess the preparedness of late-career PMETs and assist in their transition to Entrepreneurship. It can also help trainers and educators develop appropriate curricula and pedagogies for more effective training interventions.

The study follows a thematic review of the literature and employs a quantitative survey on 384 purposefully selected samples of senior PMETs. Survey data collected through a digital questionnaire provided empirical findings that the inherent factors of Psychological and Human Capital do significantly influence the late-career PMET's state of readiness towards opportunities. Findings on Social Capital revealed that the intangible determinants such as network familiarity, shared cognition, shared trust and confidence are responsible for boosting network strength to influence the Respondents' perceived state of entrepreneurial readiness.

**Key Words:** Late-career PMETs, entrepreneurial opportunities, entrepreneurial alertness and cognition, entrepreneurial readiness.

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Conducting this research in the middle of the COVID-19 pandemic was tremendously challenging due to the mandatory restriction of public movements and fortified social distancing measures to reduce virus transmission. As such, I would like to acknowledge and thank those survey Respondents who accepted my request to complete the questionnaires in person. Their participation has contributed significantly to the invaluable data pool I am collecting. I sincerely hope that my work can help change the perception of senior Entrepreneurship in Singapore and encourage more late-career PMETs to step up and start a business to turn it into a thriving legacy for future generations of Singaporeans.

## DEDICATION

I want to firstly dedicate this research report to my beloved mother, who had inherited me the 'never give up' DNA and perseverance character trait. Sadly, she passed away at the ripe old age of 94 years on 15 September 2019. Mum has always been a stoic figure of great strength, fortitude and courage to me. Living through the horrendous period of World War 2, she incredibly overcame extreme destitution and hardship to survive through the three and half years of Singapore's Japanese occupation. Amazingly, she did live on to sing a total of four national anthems in her lifetime; Britain's, Japan's, Malaysia's and Singapore's. I have always admired her strong will and optimism in life with much admiration. She represented a generation of people who can battle on and turn whatever lemons life has thrown at her into tasty lemonade.

A second dedication goes to a late DBA classmate, Chin Kian Hoong, who sadly passed on when we were mid-way through the Research Methodologies module. It will undoubtedly be a different journey if he is still with us today to embark on stage-2 of this doctorate programme together. Chin never failed to impress me with his intellect, sharp-mindedness, and out-of-the-box thinking, which often convinced us of his views during team discussions. I missed his humble, helpful and jovial personality and will forever treasure those fond memories of him. His passing rings home a message that our time on earth is finite, which pushes me to do my utmost in all future endeavours while I still have the chance to do it.

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## ABBREVIATIONS

ACRA	Accounting and Corporate Regulatory Authority
ANOVA	Analysis of Variance
CBD	Central Business District
DOS	Department of Statistics, Singapore
DV	Dependent Variable
EFS	Entrepreneurship For Seniors
ESE	Entrepreneurial Self-Efficacy
GEDI	The Global Entrepreneurship and Development Institute
GEI	Global Entrepreneurship Index
GEM	Global Entrepreneurship Monitor
HC	Human Capital
IAL	Institute of Adult Learning
IEIS	Individual Entrepreneurial Intent Scale
IV	Independent Variable
KMO	Kaiser-Meyer-Olkin
LHZB	Lian He Zao Bao
NTUC	National Trade Union Congress
MOM	Ministry of Manpower, Singapore
OECD	Organisation for Economic Development and Cooperation
PC	Personal Cognitive
PDPA	Personal Data Protection Act, 2012
PMET	Professional, Manager, Executive and Technician
SEN	Singapore Entrepreneurs Network
SPH	Singapore Press Holdings
SPSS	Statistical Package for the Social Science
ST	Straits Times
S&I	Social and Interpersonal
TAFPE	Tripartite Alliance for Fair and Progressive Employment
UNWPP	United Nations World Population Prospects

# **1. CHAPTER ONE – INTRODUCTION TO RESEARCH**

## **1.1 BACKGROUND OF STUDY**

A free-market economy with bustling enterprises has long been the driving force behind Singapore's successful economic development, productivity and growth. However, after half a century of nation-building, a rapidly ageing population now pose serious threats to alter the island state's pillars of economic, societal and fiscal equilibrium to impact its future going forward.

### **1.1.1 The impact of ageing population demographics on Singapore's workforce**

The Singapore Department of Statistics (2020) reported an increase in residents above 50 years old from 20.7% in 2000 to 37.1% in 2020 (Appendix A). This trend will continue to climb upward to reach 46.4% and 54.8% in 2030 and 2050, respectively, based on the United Nations World Population Prospects (UNWPP) 2017 Report.

Like many developed nations globally, Singapore is undergoing what Bloom and Luca (2016) described as a dominant demographic phenomenon of an ageing population. The implication of such an impending 'Silver Tsunami' translates to an equally fast ageing workforce. The Singapore Ministry of Manpower (2019) projects the median worker age to rise from 40.6 years old in 2010 to 53.7 years old in 2050. This is notwithstanding that globalisation, digital transformation and the advent of industry 4.0 robotic manufacturing have been the leading causes of senior-level job displacements in recent years. Nearly 70% of the 9,090 resident workers laid off in 2015 were over 40 years old PMETs (refer to Appendix C - MOM Singapore, 8 December 2016). It was reported in The Straits Times on 27 August 2020, and the COVID-19 pandemic further exposes many of these workers to a greater risk of retrenchment and job losses (refer to Appendix D). The Straits Times on 2 March 2020 also reported that ageism remains a significant workplace concern even with current legislation that directly put that responsibility on employers. The misconception that older PMETs' advanced salary scale adds to higher operating costs was a significant reason. On top of that, many of these senior workers may possess employer-specific skills that will make them less re-employable when retrenched in any corporate restructuring or right-sizing exercise.

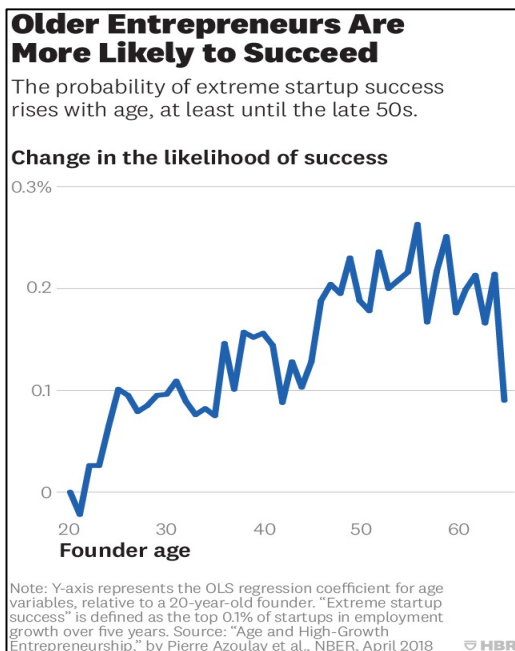
A high rate of unemployed seniors can create many social problems. Based on an independent 2019 research conducted by Lee Kuan Yew School of Public Policy (LKYSPP), about 40% of single seniors lack sufficient retirement savings even to meet the monthly basic standard of a living sum of \$1379 required in one of the most expensive cities in the world (See Appendix E). This data translates to a problematic state of affairs that 2 in 5 older Singaporeans do not have sufficient retirement funds to provide them with a basic living standard when they are old. Hence, an urgent solution is needed to look at this impending social problem. The issues of an ageing workforce, higher unemployment rate for senior workers, insufficient retirement funds, and rising dependency ratios have generated renewed interest in seniors' research and policy-making worldwide.

#### 1.1.2 Can senior Entrepreneurship be a panacea to Singapore's ageing workforce?

Like elsewhere globally, Entrepreneurs in Singapore are well-incentivised to pursue opportunity-driven innovations of new products and services, and this should promote more jobs creation and generate higher income for the local community (Raisal, Tarofder & Limudeen, 2021; Claudio & Pablo, 2020; GEM, 2020, Hessels & Naude, 2019). The World Bank (2020) ranked Singapore globally as the number two place on earth for its ease of conducting business. This accolade partly acknowledges the government's proactive approach to the ageing and well-being of its elderly population, including encouraging older PMETs to pursue business ownership (see Appendix F). Kautonen, Kibler and Minniti (2017), Zissimopoulos and Karoly (2007), Weber and Schaper (2004) and Curran and Blackburn (2001) all concurred that the promotion of Entrepreneurship is a viable option for seniors. Older Entrepreneurs can play a vital role in creating jobs and fuel further economic development and growth (Camba, 2020; Kautonen et al., 2017; GEM, 2017; OECD, 2012; Westhead, Wright & McElwee, 2011). It has become a big phenomenon worldwide because the benefits that these activities can bring to individuals and society as a whole has attracted considerable attention from policymakers, the business community, economists, academicians and researchers (Du & O'Connor, 2018). Hence, Fachinger (2019) urges governments to adopt a more inclusionary approach to allocate more grants, resources and other supports to encourage senior workers to transit to Entrepreneurship.

## 1.2 KNOWLEDGE GAP

Many researchers like Klimas, Czakon, Kraus, Kailer and Maalaoui (2021), Lee, Wiklund, Amezcua, Bae and Palubinskas (2021) and Bartik, Bertrand, Cullen, Glaeser, Luca and Stanton (2020) maintain that no matter what amount of hard work that Entrepreneurs put in, many of their ventures will still fail. OECD (2015) report claims that over 50% of all new startups worldwide close their businesses within the first five years of establishment. This rate should now be higher, given that COVID-19 lockdowns and border restrictions would undoubtedly hurt small businesses and their financials since early 2020 (OECD, 2020, 2021). However, it is interestingly to note that other studies have shown that seniors possess better chances of success in Entrepreneurship. Surveys conducted by Forbes (2019) and Dibeki and Aydin (2020) confirm that a higher success rate in Entrepreneurship comes from founders in the middle age group and beyond. These findings concurred an earlier study conducted by Age UK (2016) that claimed 70% of business ventures established by senior Entrepreneurs were still in operation well after five years of venture creation, compared to 28% of enterprises set up by younger Entrepreneurs. Another independent research by Azoulay, Jones and Kim (2019) explore the correlations between entrepreneurial success and founders' age, claiming that those between 50 and 60 years old specifically stand a better chance of succeeding in Entrepreneurship than their younger counterparts (see Figure 1 below).



**FIGURE 1: Success rate of older Entrepreneurs (Azoulay, Jones and Kim, 2019)**

Dibeki and Aydin (2020), Azoulay et al. (2019), and Botham and Graves (2009) similarly accept that older Entrepreneurs tend to benefit from their embedded industry and market knowledge, tacit skills and business experience to identify market gaps for new products and applications compared to their younger counterparts. Their acknowledgement also concurs with Kautonen, Down and South (2008) that the older PMETs' established networks can help foster viable business relationships to gain access to new markets and capitals, especially during the critical business start-up and growth stage. To this, Maritz (2017) reasons that senior PMETs have the advantages of broader family, social and business nodes, all of which can provide them with the much needed psychological, emotional, financial and other business pillars of support. Also, seniors are likely to be in a better financial position as many might not have dependents to support this late life cycle stage. They are also more likely to have smaller housing mortgages to service, if any, or accumulate sufficient wealth through years of savings and investments.

There is currently not much knowledge and information that pertain to PMETs. Nevertheless, it is not an overrated assumption that PMETs potentially possess a valuable competitive advantage to become successful Entrepreneurs at this late-career stage. Most of them are likely to have spent much of their lives working in professional and managerial positions in Multinational Corporations (MNCs), Small Medium Enterprises (SMEs) and other formal organisations. Their vast work experience and accumulated capacities will surely help them in their transition to Entrepreneurship. However, despite this recognition, many older workers, including late-career PMETs, are reluctant to take up the Entrepreneurs' role. Research conducted by Bosma, Hill, Somers, Kelley, Levie and Tarnawa (2020) revealed a very sharp decline in entrepreneurial activities from Entrepreneurs beyond 50 years and older in most countries. Although it may be true that some part of the phenomenon may arise from valid concerns about income insecurity than the more stable and secure corporate employment and certainty of take-home salary (Curran & Blackburn, 2001), it may also be due to other reasons. Later findings from Kautonen et al. (2008) and Kautonen et al. (2017) claimed that some of this reluctance might be owing to a low-level self-perceived state of readiness to take on entrepreneurial opportunities.



### **1.3 RESEARCH GAP**

GEM (2020) defines Entrepreneurship as the activities an actively engaged person performs in starting or running a new business. Individual attribute differences like Motivation, self-confidence and acquired skills can significantly influence one's state of entrepreneurial readiness within the distinct conditions of their local environment (GEI, 2019). The Cambridge Dictionary defines a state of readiness as a psychological condition or mental state of being well-prepared for something. Codura, Saiz-Alvarez and Ruiz (2016) claim that when applied to Entrepreneurship, it points to the confluence of inherent capacities and capabilities that enable individuals to constantly observe and examine their environment to retain a high level of alertness to opportunities. Most individuals display different entrepreneurial behaviours regarding opportunity discovery and exploitation. Hence, the state of entrepreneurial readiness consists of comprehensive personality and behavioural patterns involving innate and accrued inferences that can be scientifically measured to lower the risk of starting a new venture.

This research relies on past literature to delve into established theoretical frameworks on how different individual qualities can help configure and influence a person's alertness and cognition for opportunity identification and exploitation. This includes psychological attributes, experience and skill attributes and sociological attributes. The knowledge spread across various topics, including demographic factors of age and gender; individual characteristics such as personality, character, attitude, mindset and Motivation. It also embraces Human Capital factors such as work experience, acquired knowledge, information and skills. Lastly, it also considers Social Capital factors like the ability to interact, tap 'inside-the-circle' knowledge, gather funding and resource supports and collaborate with others. With the findings from this research, the next step is to build a reliable tool that can estimate a late-career PMET's perceived state of readiness for Entrepreneurship. Hopefully, using such a self-assessed tool can boost overall confidence in successful business venturing.

#### **1.4 STATEMENT OF THE RESEARCH PROBLEM**

The issues of a global ageing workforce, coupled with an increase in dependency ratios, have created renewed interest in policy and research works of mature workers. Many authors, including Camba (2020), Kautonen et al. (2017), Weber and Schaper (2004), and Curran and Blackburn (2001), advocate for the promotion of Entrepreneurship as an option for this group of people. Hence, this heightens my interest to conduct this 'never-done-before' research on senior Entrepreneurship as a career option for late-career PMETs in Singapore.

The UK Institute of Directors (2017) reports that business acumen tends to improve with age, allowing founders to understand industry nuances better and capitalise on the networks and skills they built over their working lives. With this recognition, late-career PMETs who transit from a corporate career to nascent Entrepreneurs will stand an excellent chance to be successful business owners. However, many of them in Singapore are not attracted to take up Entrepreneurship as a late-career option, given their concerns on income security than corporate employment's more stable take-home salary.

Late-career PMETs transitioning to Entrepreneurship requires a shift in mindset that is not of any single characteristic but a whole group of thoughts and behavioural reactions combined (Camba, 2020). In particular, their inherent characteristics, attitude and mindset, Motivation, Self-Efficacy, acquirement of prior experience, tacit knowledge and skills, and networks of social and business connections can significantly impact both their alertness and cognition level towards entrepreneurial opportunities, all of which are critical for nascent Entrepreneurs (GEM, 2019; GEI, 2019).

At the present moment, there is a lack of a practical entrepreneurial screening framework to assess the readiness of potential late-career PMETs for successful Entrepreneurship in Singapore. As a result, it is therefore not easy to ascertain each individual's fitness and the type of entrepreneurial training necessary to bring them to the level of an effective and productive Entrepreneur.

## 1.5 RESEARCH PURPOSE AND OBJECTIVES

As mentioned in Section 1.2, published research findings worldwide reveal that more than 50% of all new ventures folded their operations within the first five years (Klimas et al., 2021; Lee et al., 2021; Bartik et al., 2020; OECD, 2020, 2015). This information concurs with the findings from Forbes (2019), Azoulay et al. (2019), and Age UK (2016) research that 70% of startups established by mature Entrepreneurs were still in operation after five years, there appears to be a disconnect between these reported facts compared to Curran and Blackburn (2001) and Hart, Anyadike-Dane and Blackburn (2004) studies. Many of these studies claim that senior survey Respondents in Australia tend to show disinterest in entrepreneurial activity compared to younger ones. Likewise, there is a need to determine what causes the low participation among late-career PMETs in Entrepreneurship here in Singapore. We also seek answers on whether a perceived low level of entrepreneurial readiness is why so many of them are not showing interest in Entrepreneurship despite the reported higher chances of success. Hopefully, the findings of this study will clarify the phenomena discourse on PMET entrepreneurial take-up rate in Singapore. We should also be able to identify the explicit type of psychological, human and social competencies required to prepare them to take the first step towards business ownership. With this understanding, we hope to provide all aspiring late-career PMETs with a workable framework to self-assess and validate their perceived state of readiness, boosting their confidence to take up the entrepreneurial journey and overcome potential challenges with success.

### 1.5.1 Research purpose

This research aims to understand better the phenomenon of late-career PMET Entrepreneurship in the Singapore context with primary research based on collected data to confirm the phenomena affecting their perceived readiness towards entrepreneurial opportunities. Findings can help us uncover hidden perceptions and expectation gaps, leading to the formulation of a valuable and practical self-assessment screening framework to help future late-career PMETs in their Entrepreneurship transitioning. While many socioeconomic, aptitude or intellectual factors challenge aspiring Entrepreneurs to be successful, none are more powerful than an individual's innate inherency and possessing intrinsic

confidence, Self-Efficacy and a sense of preparedness towards potential business opportunities.

### 1.5.2 Research objectives

The research's main objective is to determine whether late-career PMETs have a sufficient perceived state of readiness towards business opportunities. Our study will explore the following sub-factors of the Individual PMET's inherent Psychological Capital, Human Capital and Social Capital. Presently, no validated models can explain the challenges senior PMETs faced during their entrepreneurial transitioning, probably due to limited empirical studies being conducted on this topic so far. Without knowing what attributes work best or which variables have more significant impacts on seniors' transitioning to Entrepreneurship, its promotion can be highly ineffective.

As the study aims to comprehend the phenomenon of late-career PMET Entrepreneurship under the Singapore business context, quantitative research based on direct primary data collection from the PMETs will confirm the phenomena affecting their perception of personal entrepreneurial readiness for Entrepreneurship transitioning. Research findings can then help us uncover hidden perception and expectation gaps, designing a useful and practical self-assessment screening framework to help future late-career PMETs transition from their corporate careers to Entrepreneurship.

**Research Objective 1 (RO1):** To find out whether the inherent Psychological Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities

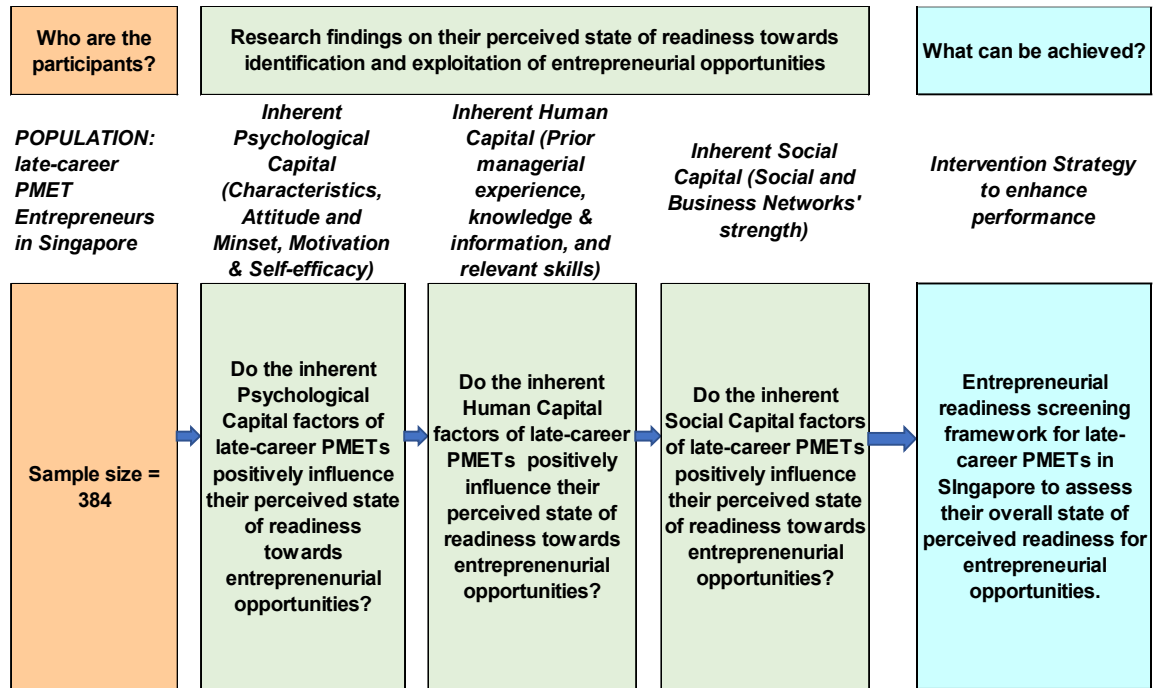
**Research Objective 2 (RO2):** To find out whether the inherent Human Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities

**Research Objective 3 (RO3):** To find out whether the inherent Social Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities

Therefore, the research objectives are to determine whether the inherent factors that late-career PMETs possess can significantly influence their perceived state of readiness to identify and exploit business opportunities. Our study will

explore the general state of our Respondents' state of entrepreneurial readiness based on their inherent psychological, human and Social Capital factors, which could also translate to their mental alertness and cognition for opportunity identification and exploitation, leading to the overall enhanced state of readiness for Entrepreneurship.

A comprehensive diagram of the research objectives overview is shown in Figure 2 below.

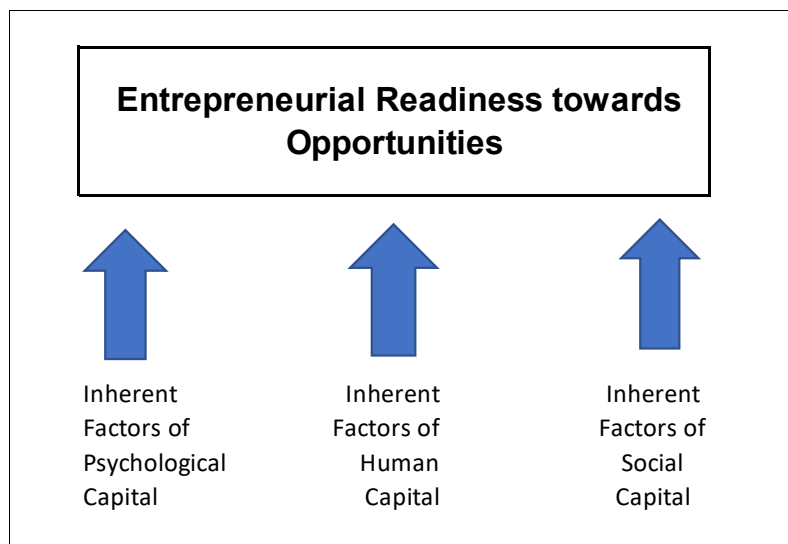


*Scope of Research*

**FIGURE 2: Research Objective Overview (Source: Researcher's own work)**

## 1.6 RESEARCH QUESTIONS

The state of entrepreneurial readiness consists of a confluence of comprehensive personality and behavioural patterns and capabilities involving both innate and accrued inferences that enable them to sustain constant alertness and cognition towards their environment for opportunities (Codura et al., 2016). Therefore, our research questions should answer whether the inherent factors of each respective pillar of Psychological, Human and Social Capital positively influence the perceived state of readiness towards the identification and exploitation of entrepreneurial opportunities (refer to Figure 3).



**FIGURE 3:** *The inter-relationships between the three pillars of Entrepreneurial Readiness towards Opportunities*

*(Source: Researcher's own work)*

In conducting the research, we will find answers to these three specific research questions:

**Research Question 1 (RQ1):** Does the inherent Psychological Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?

**Research Question 2 (RQ2):** Does the inherent Human Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?

**Research Question 3 (RQ3):** Does the inherent Social Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?

## 1.7 SCOPE OF RESEARCH

This research topic calls for in-depth exploration and synthesis based on the underpinning theories relating to:

- (1) Entrepreneurship (Schumpeter, 1934,1942),
- (2) Senior Entrepreneurship (Kautonen et al., 2017; Kautonen et al., 2008; Curran & Blackburn, 2001),
- (3) Entrepreneurial alertness and cognition to opportunities (Kirzner, 1973; Venkataraman, 1997), and
- (4) The inherent factors that can influence the state of entrepreneurial readiness (Kirzner, 1973; Venkataraman, 1997; Ruiz, Ribeiro and Coduras, 2016).

Quantitative measurements are then embedded into selected variables extracted from these theories under respective categories of Psychological Capital, Human Capital, and Social Capital as outlined in the research's scope and boundaries.

### **Influence of inherent Psychological Capital of late-career PMETs on their perceived state of readiness to identify and exploit entrepreneurial opportunities**

The test here is to ascertain the types of inherent Psychological Capital factors that can positively influence late-career PMETs' identification and exploitation of business opportunities.

### **Influence of inherent Human Capital of late-career PMETs on their perceived state of readiness to identify and exploit entrepreneurial opportunities**

The test here is to find out the types of inherent Human Capital factors that can positively influence late-career PMETs' discovery, recognition and exploitation of business opportunities.

### **Influence of inherent Social Capital of late-career PMETs on their perceived state of readiness to identify and exploit entrepreneurial opportunities**

The test here is to ascertain the types of inherent Social Capital factors that can positively influence late-career PMETs' discovery, recognition and exploitation of business opportunities.

## 1.8 SIGNIFICANCE OF THE RESEARCH

This research's main contribution is to gather together all the fragmented literature on Entrepreneurship (Shahneaz, Amin & Eni, 2020) and the contributing factors that claim to influence the Entrepreneur-Opportunity relationship, especially those related to identifying and exploiting entrepreneurial opportunities. All the identified theoretical approaches, innate character traits, learned cognition and attitudes, and social networking factors have merits in determining entrepreneurial behaviours. However, they are also narrowly focused on specific aspects of the complex phenomenon of senior Entrepreneurship (Azoulay et al., 2019).

The ability to recognise opportunities can provide significant benefits that remain firm and competitive in an ever-changing environment (Kim, Choi, Sung & Park, 2018). Today, there is no comprehensive framework to accurately assess the state of entrepreneurial readiness of late-career PMETs towards entrepreneurial opportunities. As such, this research ultimately wants to collect enough empirical evidence to support the development of a reliable tool for such self-assessment. Research findings that provide answers to the research question and sub-questions will help late-career PMETs qualify their perception of an individual's entrepreneurial readiness and boost overall confidence when acting on their business venturing intentions and transitioning. Many research in the past focused on the Entrepreneurs' characteristics as predictors of success. Such research involves studying the personality traits to engage in more in-depth studies of their characteristics, attitudes and mindsets, and mental cognition (Baron, 1998; Mitchell, Smith, Seawright & Morese, 2000; Baum, Locke & Smith, 2001), and inherent enterprise human and Social Capitals. While there are studies today that focus on entrepreneurial capacity testings, most are not based on direct, rigorous scientific grounding to measure the level of entrepreneurial readiness. There should be a balance between focusing too much on the Entrepreneur and the opportunity itself.

The proposed entrepreneurial readiness screening will be a composed all-rounder self-assessment screening hybrid framework to evaluate the psychological and cognitive preparedness of aspiring late-career PMETs for Entrepreneurship. The Psychological Capital readiness screening will evaluate individual personality traits, character strengths, and mindset consistent with running a business. The Human and Social Capital readiness screening aims

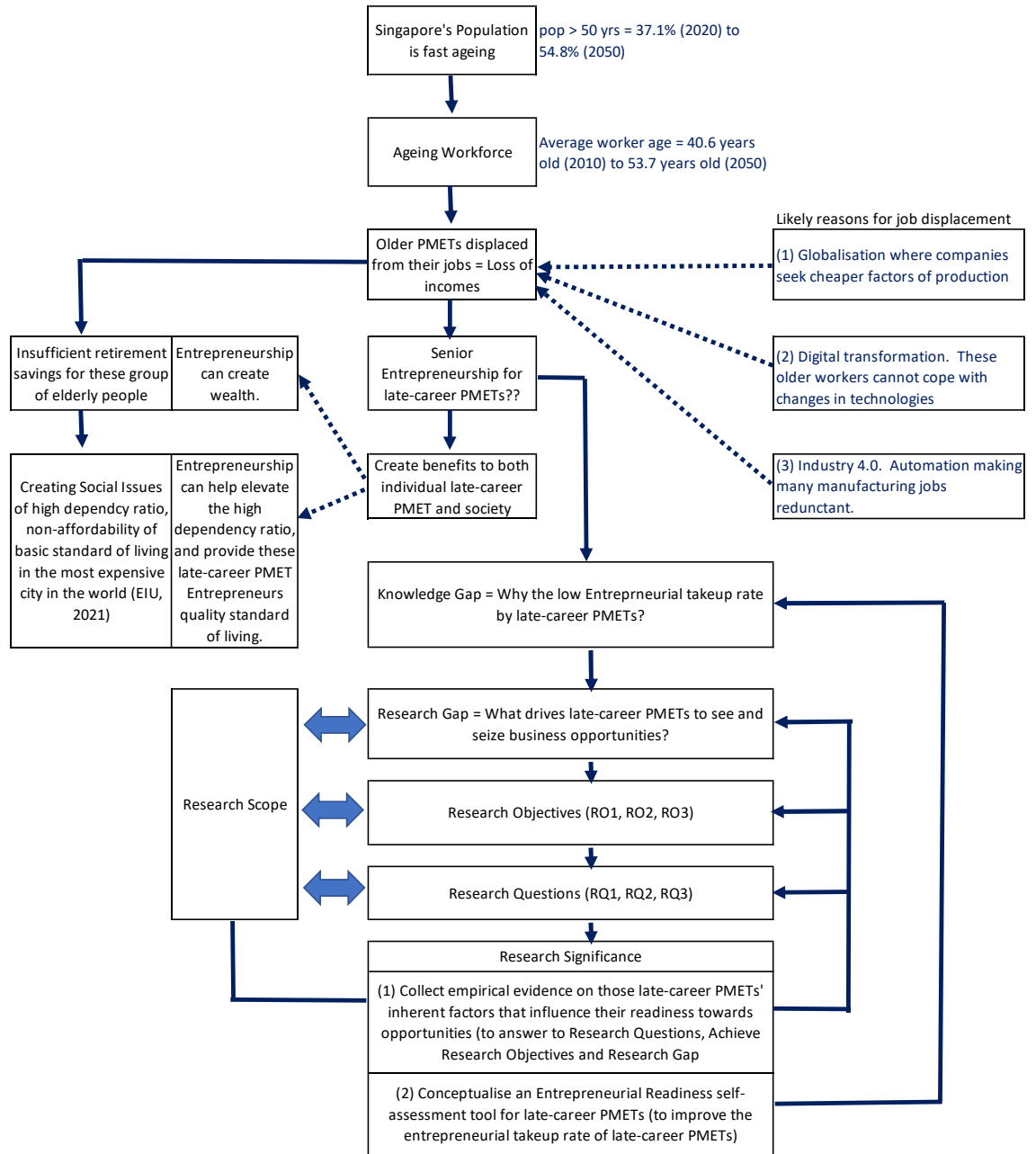


to determine if the incumbent perceives himself as having the personal capacity and operations management readiness to seize business opportunities.

The readiness screening framework can gauge the perceived state of entrepreneurial readiness to identify potential individuals for Entrepreneurship. It can also ultimately assess the gap that late-career PMETs face and the necessary individual ability to bridge the perceived performance gap and encourage their commitment to drawing up plans to carry out the entrepreneurial intentions (Codura et al., 2016). A systematic descriptive coding can then provides late-career PMETs with a self-assessed rating of their entrepreneurial readiness. Hopefully, it would enable aspiring Entrepreneurs to succeed in their entrepreneurial endeavours and transition. Just as Kim et al. (2018) put it, one of the critical significances of this research is to inspire future researchers to expand on its insights and empirically test more ways in which the Entrepreneur-Opportunity Nexus can integrate into venture creations growth processes.

## 1.9 CHAPTER SUMMARY ON INTRODUCTION TO RESEARCH

To arrive at this research topic of interest, a quick mind-mapping process was performed to identify the research problem and objectives. A sample of this mind-mapping diagram is shown in Figure 4 below.



**FIGURE 4: Mind-mapping chart of Research ideas**

The chapter starts by giving a brief introduction to the background behind the research problem. A quick rundown then followed to uncover the research gap to ascertain whether late-career PMETs are reluctant to take on Entrepreneurship

because they lack perceived entrepreneurial readiness. This discussion leads us to identify the potential knowledge and research gap of research interest to determine the inherent factors that could influence the state of preparedness. Table 1 below summarises the discussion covered in this chapter on other topics, including the research problem statement, research objectives, research scope, and research significance.

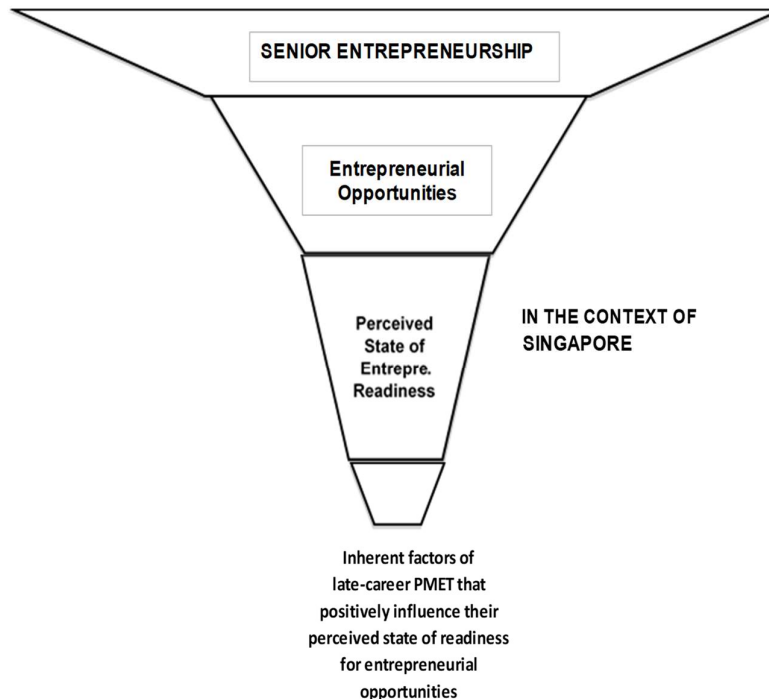
**Table 1: Summary of Chapter One**

<b>Background to Study</b>	The issues of an ageing workforce, higher unemployment rate for senior workers, insufficient retirement funds and rising dependency ratios worldwide have created renewed interests in seniors' research and policy makings. This includes the promotion of entrepreneurship as a viable option for this group of seniors.
<b>Knowledge Gap</b>	Many studies in the past have shown that senior possess better chances of success in entrepreneurship. However, many late-career PMETs in Singapore are reluctant to take up Entrepreneurs' role despite such emerging recognitions.
<b>Research Gap</b>	Late-career PMETs transitioning to entrepreneurship requires a shift in mindset that is not of any single characteristic, but a whole group of thoughts and behavioural reactions combined
<b>Research Problem</b>	At the present moment, there is a lack of a useful and practical entrepreneurial screening framework to assess the readiness of potential late-career PMETs for successful entrepreneurship in Singapore.
<b>Research Objectives</b>	To find out whether the inherent Psychological, Human and Social Capitals of late-career PMETs have positive influences on their perceived state of readiness towards entrepreneurial opportunities (RO1, RO2, RO3)
<b>Research Questions</b>	RQ1 - Does the inherent Psychological Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?
	RQ2 - Does the inherent Human Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?
	RQ3 - Does the inherent Social Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?
<b>Research Scope</b>	Quantitative measurements of feedback from 384 over 50 years old PMET respondents in Singapore using a digital Survey Monkey questionnaire.
<b>Research Significance</b>	To gather together fragmented literature on factors that claim to influence the Entrepreneur-Opportunity Relationship
	Results from Research can be used to construct a entrepreneurial readiness screening framework for late-career PMETs in Singapore.

## 2 CHAPTER TWO - REVIEW OF LITERATURE

The subject of Entrepreneurship is composed of various studies covering a broad spectrum of non-homogeneous topics (Shahneaz et al., 2020). We drew on the rich and cross-disciplinary theoretical base to form our understanding of the topic and our theoretical framework. It is thus imperative that this literature review covers diverse entrepreneurial specialisations and explore their interrelationships with a systematic review of journal articles on original underpinning theories and their developments as published by subsequent authors over the years. The main objective is to improve knowledge and clarity on original underlying ideas and follow their evolution over time. From there, conceptual themes were developed to frame this research.

Sources of literature used include Science Direct, Emerald insights, JSTOR, EBSCO and Research Gate. At the same time, there will be a concurrent search of the national archives of MOM, ACRA and DOS for published secondary data. The ensuing organised materials help guide the study into a funnel of relevant scopes of interest, as shown in Figure 5.



**FIGURE 5: Funnel of domain knowledge through literature search (Source: Researcher's own work)**

## 2.1 LATE-CAREER PMET ENTREPRENEURS

Many researchers like Walmsley and Nabi (2020), Camba (2020), GEM (2017), Kautonen et al. (2017) and Kautonen et al. (2014) have previously conducted extensive research on Senior Entrepreneurship. Kautonen et al. (2008) firmly believe that participating in Entrepreneurship by seniors can help eradicate some of the social and economic problems created by the high unemployment and insufficient retirement savings of older workers in many countries, Singapore included.

However, the emerging topic of late-career PMET Entrepreneurship is not well discussed in most current literature. As most PMETs perform managerial functions throughout their careers, studying the nexus of what these people can offer to business opportunities is valid and relevant. Hart et al. (2004) and Curran and Blackburn (2001) reckon that older PMETs would have spent many years working in professional or senior managerial positions in their late-career stage; they probably possess ready intrinsic qualities and business venturing capabilities. Analysing the connection between Entrepreneurs and opportunities might clarify how personal attributes contribute to the discovery of opportunities, the acquisition and organisation of resources, and the setting of entrepreneurial strategy to exploit them.

However, a point to note is that business owners, not managers, are usually committed to identifying and exploiting untapped business opportunities. These behaviours can largely be explained by the capital involvement and distinctive differences between employees' and business owners' attitudes and mindsets. Entrepreneurs will take risks to initiate and develop ideas to raise capital to fund the newfound business entity (Cuervo, Ribeiro & Roig, 2007). On the other hand, managers tend to be more conservative, risk-averse, and will mostly make rational decisions to create and maintain enough competitive advantages to keep their jobs (Astebro, Herz, Nanda & Weber, 2014). Their key strengths are in administration, management and control of scarce resources efficiently. That is to say; Entrepreneurship calls for emphasises on opportunity exploration, discovery and exploitation, while managers or PMETs are more acquainted with the exploitation of business opportunities and the overall running of the business venture at some point in time.

## 2.2 ENTREPRENEURIAL OPPORTUNITIES

Many works of literature claim the pursuit of opportunities as the primary driver of Entrepreneurship. Shane (2003) describes it as an organised activity involving the discovery, evaluation and action on newly found prospects to launch innovative products and services, creating new marketplaces and production processes that were previously not in existence. McMullen and Shepherd (2006) shared this point of view, adding that Entrepreneurs are constantly attracted to opportunities they believe the profits are worth pursuing. Dahlqvist and Wiklund (2012) also agree with this argument and further claim that the uneven spread of knowledge, information, and resources is why these opportunities are difficult to be identified.

The Oxford Dictionary describes the opportunity as a point when circumstances make it possible to act on something. This definition appears to contradict Schumpeter (1934), who insists that instead of waiting for the opportune moment to arrive, the Entrepreneur should create the circumstance through inventions to disrupt market equilibrium and surface new business opportunities. However, Schumpeter did not elaborate on what actions to take on the options. Later, Venkataraman (1997) countered that unprecedented circumstances would result in the possible amalgamation of beliefs, visions, and action plans to develop not-yet-in-existence products, services, and markets. Although the theoretical concepts between Schumpeter (1934) and Venkataraman (1997) differ in creating innovation vis-a-vis the result of unmet products and services, they both serve to generate new economic values for underserved and unexploited demands.

Over the years, many researchers have attempted to clarify the forming of entrepreneurial opportunities, but their answers remain vague. Opinions differ, and there were vigorous debates on whether opportunities pre-exist or sit quietly in a corner waiting for someone to find them (known as the Identification Theory of Opportunity). Sarasvathy et al. (2003) claim that entrepreneurial opportunities are recognised, purposefully discovered or intentionally created. Shane (2003) stressed that by focusing on the business environment, the alert individuals might spot demand or supply-driven opportunities due to modified market structures, industries and consumption patterns caused by slight regulatory interventions. He was also adamant that technological changes can disturb the existing market equilibrium and present new opportunities. Smith, Matthews and Schenkel (2009)

supported this view that it is possible to create opportunities through new production processes or adjustments in the production volume or quality. The Creation Theory of Opportunity comprehensively discusses these actions to bring new methods or method-result relationships to the market. Another broader interpretation by Baron (2006) views opportunities as new ways to generate underexploited economic value. He opined that they must contain the three essential characteristics of economic values: feasibility to profit, the newness of idea, and satisfy desirability and acceptability in the market.

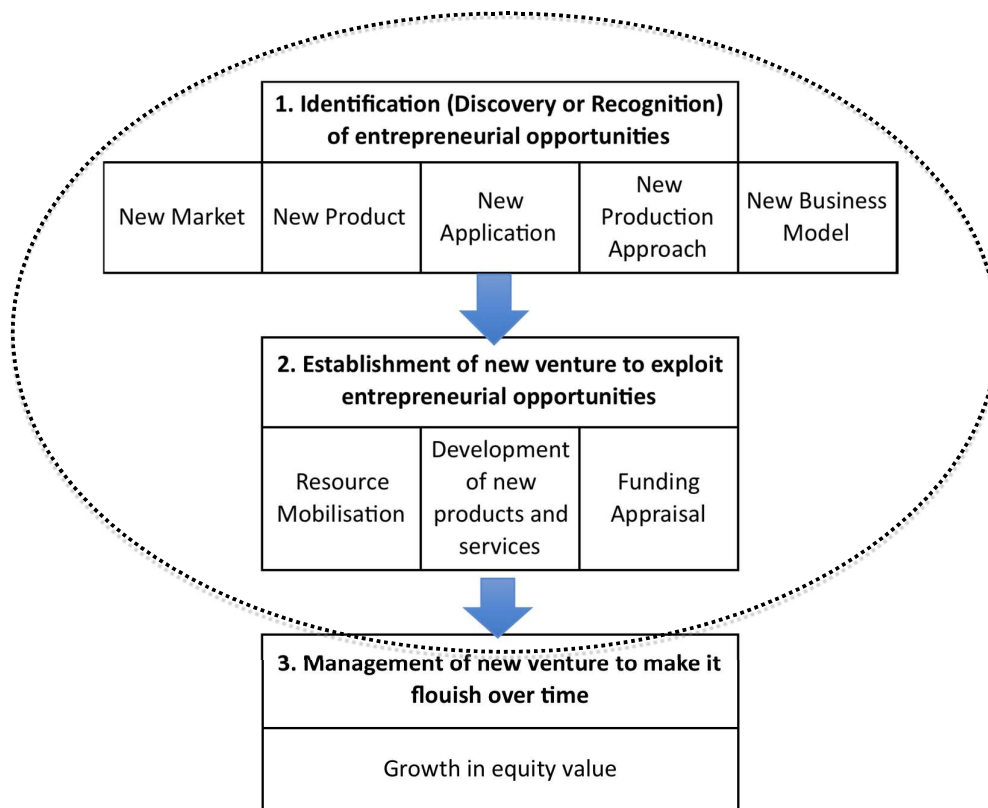
According to Shane and Venkataraman (2000), Entrepreneurship cannot occur without the emergence of both an opportunity and an innovative alert person appearing at the same time to take action on that opportunity. It is thus imperative to explain Entrepreneurship by taking into account both the nexus of enterprising individuals and the availability of entrepreneurial opportunities. Only an entrepreneurial person can establish a new entity or organisation to realise those identified lucrative opportunities. A more recent definition of Entrepreneur by OECD (2015) strives to achieve balance and alignment among all the existing theories. It describes Entrepreneurship as a new business venture, with its setup process and activities leveraging all enterprise human activities. These include the assembly of unique bundles of creativity, innovative capabilities and accessible resources to seek out market opportunities, managing the business operation in a continually evolving and uncertain market environment, and the sustainable creation of enterprise value. That is to say that the term Entrepreneur is beyond setting up a business venture. It is also about ensuring new opportunities to keep the enterprise sustainable and prosperous. Therefore, the Entrepreneur must possess the necessary skills to discover, recognise, select, and convert the right emerging opportunities into future successful ventures. Incumbent firms and Entrepreneurs need an in-depth understanding of how opportunities are considered valuable by the market (Ding 2019) can be identified and what factors influence the opportunity recognition process. Entrepreneurs can increase the likelihood that profitable opportunities can be found with a clear understanding of the factors that influence the opportunity recognition process (Ferreira, Fernandes & Kraus, 2019).

Given the alertness to disequilibria, the Entrepreneur must perform the entrepreneurial act despite uncertainty. Shane and Venkataraman (2000) would counter that the very act of taking advantage of any discovered opportunities is the

primary and most critical entrepreneurial activity by far. This discussion shifts the focus to the Entrepreneur's attributes in spotting and acting on options instead of differentiating Entrepreneurs from non-Entrepreneur.

Making the right business decisions can bring substantial gains to the firm's profit, growth, and competitive positioning (Davidson & Honig, 2003). In other words, successful Entrepreneurship only happens when a proper and appropriately executed process is in place. It is especially true for those involving the three specific activities of opportunity recognition and discovery (Schumpeter, 1934, 1942; Kirzner, 1973); the establishment of a new venture to exploit those opportunities (Venkataraman, 1997), and the management of the unique experience to make it flourish over time (Shane & Venkataraman, 2000) as shown in Figure 6.

**Elements of Research Focus – The Identification and Exploitation of Entrepreneurial Opportunities**



**FIGURE 6: Opportunity-related activities in Entrepreneurship (Source: Schumpeter, 1934, 1942; Kirzner, 1973; Venkataraman, 1997; Shane and Venkataraman, 2000)**



## 2.3 STATE OF ENTREPRENEURIAL READINESS

Ruiz et al. (2016) denote entrepreneurial readiness as a confluence of internal composition that allows individuals to competently observe and analyse their surroundings to embark on the process of business venturing. Both Kizner (1973) and Venkataram (1997) claim that an individual's level of opportunity-related alertness and cognition can influence the Entrepreneur's perceived entrepreneurial readiness. These components can directly affect the Entrepreneur's capacity and behaviours in identifying and exploiting emerging business opportunities and the success of other entrepreneurial endeavours (Urban, 2020). Each of these topics was discussed below in detail by Daniel, Adeel and Botelho (2021), Vlacic, Gonzalez-Loureiro and Eduardsen (2020), Sharma (2019), Neneh (2020) and Sasseti, Marzi, Cavaliere and Clappei (2018).

### 2.3.1 Opportunity-related Entrepreneurial Alertness

Daniel et al. (2021) contend that one should view the concept of entrepreneurial alertness from the perspectives of an individual's mental, intellectual and perception capacity, together with skills possessed by the Entrepreneur. Sharma (2019) managed to identify the core components of the alertness construct, namely sensing and searching information, cognitive judgement ability, personality factors (like creativity, positivism and tenacity), Self-Efficacy factors (like knowledge and experience), and social networks, all of which can influence the perception of business opportunities. Entrepreneurial alertness is at the heart of the entrepreneurial process because there will be no Entrepreneurship without without an identified viable business opportunity (Diandra & Azmy, 2020). Neneh (2020) claims that entrepreneurial alertness is relevant in discovering opportunities and has a significantly positive relationship with entrepreneurial intentions and take-up rate.

It is essential to underline that entrepreneurial alertness is considered the most critical psychological factor in recognising entrepreneurial opportunity (Chavoushi, Zali, Valliere, Faghih, Hejazi & Dehkordi, 2020). It is also related to other entrepreneurial competencies, such as creativity, proactivity, empathy, and dealing with uncertainty and risk to influence the process of new venture creation (Daniel et al., 2021; Bacigalupo, Kampylis, Punie & Brande, 2016).

Kirzner (1973) claims that business opportunity often involves sensing inefficiency gaps and tapping the unserved market and product needs before others. Nevertheless, the essence of Kirzner (1999)'s idea of the Entrepreneur is not merely to introduce innovative products or make production more cost-efficient but to be the first being alerted to profit opportunities before others. Kirzner (2009) views Entrepreneurs as individuals with a unique personal disposition with vast prior experience and an endowed schema hardwired to a high level of alertness towards their environment. They are more sensitive towards objects, occurrences, developments and patterns of marketplace behaviour and trend. These insights enable the Entrepreneur to effectively recognise and act on any 'out-of-the-blue' opportunities surfacing from the shifting market environment.

Kaish and Gilad (1991) concur with Kirzner's (1973) claim that alert individuals are constantly scanning the environment for unanticipated windows of opportunities. Over the years, authors like Shane (2000; 2003), Ardichvili, Cardozo and Ray (2003) and Baron (2006) would continue to advance new perspectives on this subject. Many of these authors focused on the pillars of psychological, sociological and business management factors that form the antecedents of entrepreneurial alertness to business opportunities. Venkataraman (1997) proposes that this involves the Entrepreneur learning and improving several cognitive capabilities such as information processing and pattern recognition skills to recognise an opportunity when it shows up. Ardichvili et al. (2003) pledge that entrepreneurial alertness is necessary for opportunity recognition and discovery; the one with the highest alertness level will spot them first. As such, Entrepreneurs often place great attention towards the advent of technologies or impending changes within a specific industry or market, as having advanced knowledge and information on new market determinants can often alert one to new opportunities (Corbett, 2007).

### 2.3.2 Opportunity-related Entrepreneurial Cognition

According to Santoso, Junaedi, Priyanto and Santoso (2021), people who are alerted to opportunities will not necessarily have business ideas. To possess an Entrepreneurship ability like this, the Entrepreneurs must possess a certain level of entrepreneurial cognition to assess those opportunities for feasible profits, turnover, market, and sustainability. The concept of entrepreneurial cognition has

been widely studied to describe how Entrepreneurs think and behave (Sasseti et al., 2018). Entrepreneurial cognition pertains to 'the knowledge structures that people use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation and growth' (Vlacic et al., 2020).

Individuals vary in their cognitive frame due to their different lifestyles and work experience in a particular occupation or industry (Baron & Ensley, 2006). Their cognitive styles are key determining factors of individual entrepreneurial behaviour, demonstrated by their attitude towards the information that they come across. Research by Kickul, Gundry, Barbosa and Whitecanack (2009) reveals that individuals' cognitive panache dramatically influences how they approach, frame and resolve business problems. Such mental schemata can enable them to organise better and interpret information regarding new opportunities, resulting in logical actions to change prices, quantities, and qualities. Vlacic et al. (2020) acknowledge Busenitz and Barney (1997) research that individuals utilise cognitive knowledge structure to assess and evaluate opportunities to arrive at judgements and decisions on venture creations for opportunities growth. Lewin (2015) then tried to unpack this entrepreneurial-opportunity concept into a three-component framework that would come back to incorporate Kirzner (1973)'s approach to Entrepreneurship. This framework credits the Entrepreneur as an alert individual who can evaluate necessary resource-inputs projected outputs and then take the required actions to create value.

Venkataraman (1997) advocates that every Entrepreneur needs to possess unique information-processing skills to take advantage of an emerging business opportunity. Each person holds a different mental codification of experience that can cause variation in the way prospects are searched and exploited. Research by Riding and Rayner (1998) examines whether gathered knowledge and information about a situation could have a bearing on cognition. Their relationship was confirmed by Gaglio and Katz (2001). Both argue that the ability to form clarity of situational understanding allows one to see the patterns and relationships in the information received to integrate them into his existing viewpoint and outlook.

## 2.4 ENTREPRENEURIAL OPPORTUNITY IDENTIFICATION

Entrepreneurship does not always begin with the creative concept for a new product, service, or process. It often starts with the Entrepreneur's alertness to identify an opportunity (Baciu, Vîrga & Lazar, 2020; Diandra & Azmy, 2020; Shane, 2000). Many scholars in the past, such as Kirzner (1979), Stevenson and Jarillo (1990) and Venkataraman (1997), advocated that opportunity identification involves the ownership of a unique information-processing skill that is considered the most important among all entrepreneurial activities. Shane and Venkataraman (2000) share the same opinion by hailing opportunity recognition skills as one of the most critical Entrepreneurship components. They acknowledge that such skills help Entrepreneurs be alerted to potential opportunities and support them to develop ideas towards turning these opportunities into real successful ventures. This claim was similarly shared by Santoso et al. (2021) and Gaglio and Katz (2001). They further that any opportunity identification would not be possible without the cognitive engine that drives entrepreneurial alertness. However, it also raises many questions on how individuals connect the dots to identify opportunities.

### 2.4.1 Recognition theory of entrepreneurial opportunities

Going back to Diandra and Azmy (2020)'s claim that there will be no Entrepreneurship without identifying a viable business opportunity, the question is how the Entrepreneur will find one. The Entrepreneur must first recognise the opportunity presented before him to propose an attractive business proposition and scrutinise its prospective economic value. These include thorough market research to understand how their potential product or service provides value to a customer and whether the amount a customer is willing to pay, which reflects the value of the product or service to the customer, exceeds the costs to provide that value, product, or service to the customer (Santoso et al., 2021).

The theory of entrepreneurial opportunity recognition involves high cognition and pattern recognition of multifaceted arrays of complex environmental situations, past and present unfolding of events and upcoming or looming trends (Baron & Ensley, 2006). Baron (2006) claims that the process of seeing some underlying rational links of unrelated events is known as pattern recognition. Many of the developed patterns and trends are already out there. However, it will be the alert

Entrepreneurs who can cognitively connect the dots to comprehend the situation and recognise the new opportunities.

The recognition theory articulates that the Entrepreneur needs to recognise the opportunity drivers and piece the supply and demand puzzle together to find a better way to allocate scarce resources and optimise their utilisation (Sarasvathy, Nicholas, Ramakrishna and Venkataraman, 2003). Many authors have emphasised that the concept of correct opportunity recognition of business potential is the starting point to successful Entrepreneurship (Kirzner, 1973, 1979, 1999, 2009; Shane et al. 2000, 2003; Davidsson & Honig, 2003; Ucbasaran, Westhead & Wright, 2009). Having the alertness and cognition to filter out noises in the market environment to see such opportunity clarities often leads to colossal profiting for the Entrepreneur and an enhanced market positioning.

#### 2.4.2 Discovery theory of entrepreneurial opportunities

Much has been discussed on whether the opportunity is an objective reality or exists all along. The discovery theory maintains that opportunities exist regardless of whether there are entrepreneurial actions or not. Business prospects lie everywhere, just waiting for the right alert individuals who have the correct cognitive thinking to expound them (Shane & Venkataraman, 2000; Share, 2003).

Sarasvathy et al. (2003) claim that the opportunity discovery theory suggests that the market's supply or demand side can produce an opportunity for the Entrepreneur to fill. However, these authors concluded that this ability's core is not entirely about spotting a product to buy or sell but more about their knowledge and ability to assemble resources to produce one. This perspective allows Entrepreneurs to move away from focusing on discussing possibilities and opens an opportunity for entrepreneurial discovery (Ardichvili et al., 2003). Such entrepreneurial capabilities is an antecedent to successful Entrepreneurship.

A person's prior knowledge base can immediately discover market potentials that others cannot notice (Kirzner 1973; Venkataraman, 1997). However, McMullen & Shepherd (2006) argue that most Entrepreneurs are often unsure of what to look for themselves. The reason is that industry and market changes can result in exogenous competitive imperfections, causing new opportunities to surface (Alvarez & Barney, 2007). Chandler and Lyon (2005) elucidate alertness as the

ability that Entrepreneurs possess, allowing them to know where to find the required information to form situational awareness and interpretation better than others (Brigham, DeCastro & Shepherd, 2007). Part of these information processing abilities may be from their prior knowledge base and information pool, thus triggering instant recognition of the value of newly received information.

2.4.3 Creation of entrepreneurial opportunities is not taken into our consideration

Apart from the recognition and discovery theories, another argument claims the formation of entrepreneurial opportunities constructed by sudden changes purposely introduced into an industry or a market. Individuals' ability enables them to correctly interpret the environment and take quick actions to create new firms and products for unserved markets (Hill & Levenhagen, 1995).

The creation theory of opportunities claims that instead of staying alert to discover entrepreneurial opportunities in the market due to changes in market forces or consumer trends, the entrepreneur should take a proactive stance to create one instead. Founders can create these emergent business potentials as they respond to and manage the entrepreneurial process's uncertainties (Alvarez & Barney, 2007). The creation theory also denotes that business opportunities can be purposefully created by an individual's specific actions, such as searching for new, untested raw material (Sarasvathy, 2001, 2005). These activities require different entrepreneurial skills and abilities that are not part of our research scope. Instead, our focus will be more on the recognition and discovery aspects.

## 2.5 ENTREPRENEURIAL OPPORTUNITY EXPLOITATION

It is a known fact that every entrepreneurial venture must have sufficient capital, equipment, facilities and know-how (i.e. accounting and finance, operations management, legal and compliance). However, these resource needs change over the different phases of a venture. Hence, successful entrepreneurial efforts require mobilising a wide array of resources quickly and efficiently. In fact, during the exploitation phase, high entrepreneurial alertness and cognition are essential factors that can impact the venture success (Daniel et al., 2021; Chavoushi et al., 2020). At this stage, the alert Entrepreneur must maintain cognitive awareness and clarity over the value and priority of the resources ready to support its next period of venture development and growth (Santoso et al., 2021). These include the following tasks mentioned below:

### 2.5.1 Making judgements and decisions in uncertainty to exploit entrepreneurial opportunities

Knight (1921) first highlights the difference between risk and uncertainty. He claims that 'uncertainty' calls for a situation where outcomes are unknown, whereas 'risk' describes a situation where the probabilities of results are acknowledged, and a success factor is assigned. He proposed that the Entrepreneur must strive to make correct judgements and decisions amidst the uncertainty of Entrepreneurship. Knight (1921) was convinced that entrepreneurial profits would emerge when the Entrepreneur can correctly predict the future prices of production factors and take actions to acquire them in anticipation of the market's future state.

Past authors reckoned that entrepreneurial opportunities are the outcomes of the manager's interpretation of the prospective business environment that significantly bears their cognitive predispositions (Hambrick & Mason, 1984). Prahalad and Bettis (1986) argue that managers' pre-existing knowledge of their business could induce them to develop a mental model for their business operations within its environment. Managers' use this dominant logic as an information funnel to search, filter, and construe new meanings from existing market information for their decision-making.

Empirical evidence has shown that the diversity in top management's alertness and cognition level affects their agreement in interpreting the

organisational and competitive environment. These disuniformities can constrain or facilitate determined executive actions toward building dynamic capabilities. Kor and Mesko (2012) claim that any explanation of solid dynamic capabilities will be incomplete without understanding how managers perceive, process, and interpret new information when making strategic decisions. Tang, Kacmar and Busenitz (2012) introduce judgment as a critical constituent of entrepreneurial alertness, focusing on assessing up-to-the-minute information on market development before deciding on whether it reflects a lucrative opportunity to take.

#### 2.5.2 Valuation of critical resources to exploit entrepreneurial opportunities

Hambrick and Mason (1984) contend that managers carry their job-related experience as part of their cognitive make-up. Levitt and March (1988) suggest that previous work in specific firms and industries can offer managers an opportunity to develop learned strategic and cognitive beliefs regarding their external environment and internal circumstances. Such acquired knowledge structures and mental codifications of past experiences can influence how they perceive and interpret resources and environmental factors (Kiss & Barr, 2015), resulting in their altered beliefs and views on market opportunities.

According to Adner and Helfat (2003), cognition is also central to understanding a firm's specific actions toward building dynamic capabilities. They are directly attributable to the sense and decision-making based on the limited availability of complete information to respond to situational changes in the business environment within their firm's resource capacity. Over time, these varied cognitions shape the organisational decision-making on developing necessary 'market sensing' capabilities to seize new opportunities and efficiently transform whatever resources available from the existing base (Teece, 2007).

Tripsas and Gavetti (2000), however, cautioned that top managers' cognition could sometimes impair their valuation of resources for the exploitation of opportunities. Entrepreneurial cognition exemplifies a person's beliefs and psychological frame of mind, which plays a vital role in perceiving industry business potentials and own firm's resources (Adner & Helfat, 2003). Gavetti (2005) argues that the manager's cognitive modelling of their strategic decision problem limits their ability to identify all available options and induces them to estimate the expected



outcomes of different decision options. These views resonate with Teece (2016), who noted that top managers face difficulty changing their beliefs and knowledge structures over time. It risks causing mental models and modes to become highly rigid and inflexible in response to the fast-changing external environment, affecting their overall sensing and seizing capabilities. This observation is consistent with other research highlighting the differences between novice and expert Entrepreneurs in developing sensing and seizing capabilities. (Ucbasaran et al., 2009).

## **2.6 THE INFLUENCE OF INHERENT PSYCHOLOGICAL CAPITAL ON THE STATE OF READINESS TOWARDS OPPORTUNITIES**

Shahneaz et al. (2020) correctly assert that the domain of Entrepreneurship is dotted across various paradigms. They contend that entrepreneurial intention and the propensity to it require intricated insights from the lens of a psychological approach. Baciú et al. (2020) claim that since individuals differ in their tendencies and abilities to engage in tasks involving the recognition and exploitation of opportunities, these activities thus become a function of personal Psychological Capital composition. Personality traits, personal dispositions and character attributes, motivations, and belief in oneself play a prominent role in influencing and shaping entrepreneurial activities. The psychological framework is also very effective in explaining the selected output of a service or product and rationalising strategies (Shwetzzer, Maritz & Nguyen, 2019).

Several past research on Entrepreneurship has methodically reported on the relationships between personality traits and entrepreneurial behaviours. Literature that focuses on psychological aspects argue that Entrepreneurs possess distinctive characteristics that predispose them to act entrepreneurially, and their actions are the products of profiling influences. For example, Hornaday (1982) came up with 42 innate traits commonly associated with the Entrepreneur's personality. Such arguments infer that Entrepreneurs are born rather than nurtured. However, some scholars are starting to show scepticism about the lack of consistent empirical evidence associating personality traits to entrepreneurial success. Below are some discussions of their arguments.

It was not until the 1980s that the emergence of literature on the cognitive modelling of human behaviour presented an alternative view to counter those advocating the prevalence of entrepreneurial personality. Gartner (1988) directly challenged the personality traits theorists in support of Entrepreneurs' distinctiveness in their actions. He counters that focusing on 'Who' an Entrepreneur is a wrong approach, suggesting to look at 'What' actions taken by Entrepreneur instead. This argument shows that Gartner (1988) agrees with Schumpeter (1934) definition that organisational creativity and innovations broadly define an Entrepreneur. He also disapproved of the search for unique entrepreneurial personalities, which he claims bear little differentiation between Entrepreneurs' and non-Entrepreneurs. Similarly, Dollinger (1995) argues that those who hold deep faith in the trait theory did not provide sufficient empirical evidence to explain why

many people display entrepreneurial personalities but are not Entrepreneurs. It was Wickham (2006) who rightfully reckoned that the trait approach alone is not enough basis for judging whether a person possesses enough entrepreneurial attributes or not.

According to Smith and Smith (2000) and Sexton (2001), Entrepreneurs and Venture Capitalists have long regarded that the Entrepreneurs' characteristics contribute significantly to their success. This measure has since been used in studies to explicate who will start or not start a business. Recent research by Stewart and Roth (2001, 2004) and Rauch and Frese (2007) have also attempted to provide more objective evidence for the predictive validity of character traits concerning business ownership. Their focus is on exploring contingencies that may affect the magnitude of such a relationship. Hence, this development prompts our research to look beyond inherent entrepreneurial characteristics, attitude, and mindset, to include other intrinsic measurements such as entrepreneurial Motivations and entrepreneurial Self-Efficacy levels. Notably, Kirzner (1973), Venkataraman (1997) and Douglas (2009) all agreed that the Entrepreneur is more alert to grasp market potentials and opportunities better than one who is not, and it is critical to look at those factors can affect their mental state of alertness and cognition in viewing opportunities.

#### 2.6.1 The 'Must-have' entrepreneurial characteristics that are imperative to the identification and exploitation of entrepreneurial opportunities

Results from a recent study conducted by Pirhadi, Soleimanof and Feyzbakhsh (2021) shed light on how character strengths may have varying relationships with different dimensions of entrepreneurial alertness. Their study involves how character strengths can affect different dimensions of entrepreneurial alertness. These include opportunities scanning, making associations and connections, evaluation and judgment.

The decision to venture into business and be a business owner is a personal choice, and the inherent qualities of the person making that decision will inevitably impact the company and the business enterprise's future (Baciu et al., 2020). Over the past four decades, there have been many proposals to investigate what specific character traits prompt individuals to sign up for Entrepreneurship and keep them

on their chosen path. Many of these studies choose to focus on the 'must-have' traits of Entrepreneurs or those distinctive traits that create entrepreneurial success. According to Åstebro et al. (2014), Knight (1921)'s book on Risk, Uncertainty, and Profit was probably the first rigorous research conducted on Entrepreneurs' personalities that are different from business managers. With the rise of start-ups in the 2000s, journal articles on entrepreneurial personalities enjoyed a resurgence, coupled with many new theoretical frameworks published to advocate that certain right traits are good predictors of successful Entrepreneurship. However, the pursuance of exploring the prevalence of Entrepreneurs' characteristics versus other populations continues to offer little explanation or correlation to entrepreneurial intention, performance and business survival and growth (Baron, 2004).

However, emotionally stable Entrepreneurs are more likely to find entrepreneurial success and have a higher chance of expanding the business. Timmons and Spinelli (2007) claim that successful Entrepreneurship is not because of the Entrepreneur's personal skills level or background of experience but by his personality type and intrinsic characteristics. According to Banicki (2017), positive entrepreneurial characters refer to a unique range of personal qualities encompassing the right attitudes, emotions, feelings, thinking patterns upholding correct morals and beliefs that will make the person stand out from all the others. Their ability to tolerate ambiguous situations, bear calculated risks, and continuously seek feedback on performance are certain traits for successful Entrepreneurship.

(i) Level of Positivism

Kuratko and Hodgetts (2007) claim that Entrepreneurs must have a 'can-do' attitude, and they should not relent to problems but find ways to circumvent them head-on. Carver and Scheier (2003) contend that highly optimistic individuals usually exhibit the confidence to approach challenges with enthusiasm and persistence. Such is the exceptional ability demonstrated by people who see things in different lights, allowing them to spot business opportunities when most other people can only see problems.

It is best summed up by Hmieleski and Baron (2009) that Positivism is the mix of optimism, the willingness to take some risk and an undefiable determination and perseverance that together create a positive entrepreneurial mindset that is gravitating toward sustainable entrepreneurial activities with successful outcomes.

Furthermore, those Entrepreneurs embedded with such positive perspectives stand to visualise a more optimistic vision when identifying a business opportunity and show more confidence and commitment in drawing support to exploit one.

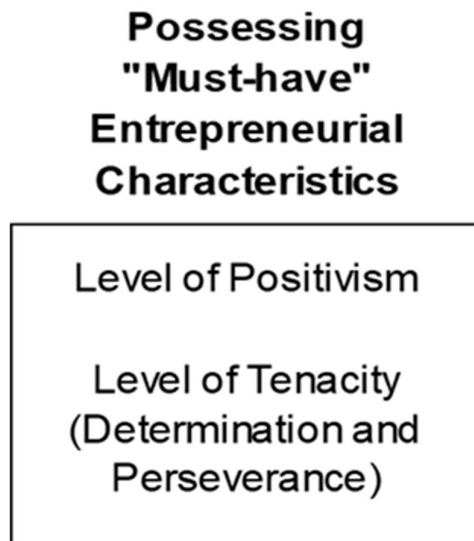
(ii) Level of Tenacity

Tenacity is resilient in the face of pressure, adversity, and temporary failure (Portuguez & Gómez, 2021). The Oxford dictionary uses both the characteristics of determination and perseverance to describe Tenacity. The aspect of determination is often referred to as a person's mental toughness and resolve to recover quickly from setbacks. Similarly, perseverance is a common adjective for someone who has the mental strength to continue with a specific task even when faced with insurmountable discouragements, challenges, oppositions, hardships, or even failures. GEI (2019) claims that Entrepreneurs possess a unique ability to make their visions a reality, and to get things done, they would go over, under and around obstacles to make them happen. Similar qualities dedicated to tenacity were highlighted in the EU (2016) EntreComp conceptual model to encourage nascent Entrepreneurs to stay focused and not give up despite pressure, adversity, and setback.

Determination and perseverance involve the Entrepreneur to sustain energy and drive to lead goal-directed actions despite facing obstacles (Shamir, House & Arthur, 1993; Locke, 2000). It is a 'must-have' Entrepreneurship trait because, in most business start-ups, the initial stage is full of formidable challenges, including barriers to resources, capital and markets (Gartner, Gatewood, & Shaver, 1991). Although there is no available empirical evidence to prove the effects of Tenacity on entrepreneurial performance, Markman, Baron and Balkin (2001) contend that their study shows that inventors who started their businesses have a higher Tenacity than those who chose to work for established organisations. Entrepreneurs who hold stubbornly to their goals increases their chance of start-up survival and success (Timmons, 1999).

In fact, the combination of persistence and effort increases task performance achievement. Timmons (1999) counters those Entrepreneurs who persistently hold onto their goals and refuse to give up no matter how difficult the situation stands a chance of start-up survival and success. Tenacity can also be a direct predictor of subsequent venture growth, as a tenacious person believes that their efforts will

bring them their well-deserved rewards (Maritz, Zolin, DeWaal, Fisher, Perenyi & Eager, 2015). This unwavering resoluteness requires self-discipline and Motivation to single-mindedly put in the effort to remain engaged in specific activity over the long-term (Dweck, Walton & Cohen, 2014). Thus, we hypothesised that this trait directly predicts venture success and subsequent growth.



**FIGURE 7: Components of Entrepreneurial Characteristics**  
*(Source: Researcher's own work)*

2.6.2 Attitude and mindset that are inclined to identify and exploit entrepreneurial opportunities

The Merriam-Webster dictionary defines 'Mindset' as a 'mental inclination' or 'mental attitude'. It is made up of the sum of knowledge, beliefs, and attitude held by a person that predicts his reaction to the onset of information received (Thum, 2012). The entrepreneurial mindset is responsible for success and failure among Entrepreneurs in Entrepreneurship research (Moore, McIntyre & Lanivich, 2021). Jena (2020) argued that an entrepreneurial mindset is associated with the profound cognitive phenomena that reflect the inimitable commitment of entrepreneurial activities (Saptono, Wibowo, Narmaditya, Karyaningsih & Yanto, 2020). An entrepreneurial mindset is a set of beliefs, thought processes, and ways of viewing the world that drives entrepreneurial behaviour. Typically, Entrepreneurs firmly believe it is possible to improve their situation and live life on their terms. They also believe in their ability to learn, grow, adapt, and succeed.

According to Koh (1996), some of the fundamental psychological attitudes and mindsets relevant to Entrepreneurship include a high tolerance for ambiguity and risk, Self-Efficacy, and the Motivational need to achieve and control. For example, most Entrepreneurs have a specific entrepreneurial mindset towards some of these items, giving them the inclination to discover, assess and exploit opportunities often overlooked by the mass majority of people (McGrath & MacMillan, 2000). We will cover both risk propensity and ambiguity tolerance under Attitude and Mindset, leaving the Motivational drivers under entrepreneurial Motivation and personal confidence under the topic of entrepreneurial Self-Efficacy.

(i) Level of Ambiguity Tolerance

An ambiguous situation is when there is not enough information to structure it confidently and having to make decisions when the outcome of that decision is uncertain, when available information is partial or ambiguous, or there is a risk of undesirable outcomes (Portuguez & Gomez, 2021).

It presents a challenge to the decision-maker as it eliminates the ability to apply standard rationalisation approaches, such as those based on calculating the objective expected values of alternative actions (Arend, 2020). A person's level of ambiguity tolerance is displayed by his approach towards an unclear status where data and information are not readily available. Tolerance for ambiguity is among the essential components of entrepreneurial mentality and the basis for effective business career growth (Peschl et al., 2020). Thus, embracing ambiguity is an attitude and mindset that those with a greater entrepreneurial inclination will exhibit (Sexton & Bowman, 1985). Mitton (1989) claims that most Entrepreneurs operate best in an uncertain environment because of their eagerness to take on the unknown and seek out the uncertainty in the hope of finding values and profits. They often find ambiguous situations exciting and challenging and maintain reasonable control of their emotions to make sound judgements and decisions amidst the instability, uncertainty and unpredictabilities (Pereira, 2007). Only individuals who inhibit this attribute will filter out the noises to see a more cognitive clarity of potential business opportunities presented before them (Venkataraman, 1997). That is why the EU (2016) Entrepreneurship Competence Framework considers that making decisions under uncertainty, ambiguity, and risk is vital for Entrepreneurs.

(ii) Level of Risk Propensity

Another critical attribute of an Entrepreneur is risk-taking, and it is this element that differentiates a self-employed Entrepreneur from an employee (Muhajid, Mubarik & Naghavi, 2019). Fear of failure is one of the key obstacles to a startup. According to GEDI (2019) findings, individuals' or enterprises' aversion to risk can retard participation and growth of nascent Entrepreneurship. A low Risk Propensity level would mean a high fear of failure, which would deter starting a business (GEDI, 2019). For example, Saiz-Alvarez, Coduras and Roomi (2020) researched Saudi Arabia and confirmed the correlation between risk propensity to business venturing. About 50% of the population surveyed pointed to fear of failure as a factor that prevents them from setting up their businesses.

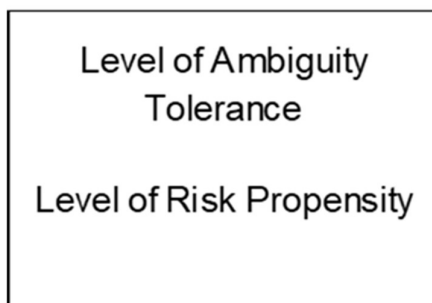
Knight (1921) was the first to associate risks to Entrepreneurship in his proposal that Entrepreneurs must have the correct attitude and shrewdness toward preempting uncertainties to either price or diversify them away in pursuit of profitability. Later literature on Risk Propensity would follow two themes; one holds the notion that risk-taking comes under innate personal predisposition, while the other relates risk to the entrepreneurial functions of situational risk assessment and risk-taking (Kahneman & Tversky, 1979). Most past studies on this subject favour the first notion (e.g., Brockhaus, 1980; Stewart, Watson, Carland & Carland, 1998) that it depends mainly on the individuals' attitude than their situation.

According to Brockhaus (1980), Risk Propensity captures the augmented attitude of subjecting oneself to behaviours and actions that carry detrimental or reward consequences related to the probability of failure or success. In other words, it orientates a person's attitude toward an amount of stake to place in decision-making (Sexton & Bowman, 1985) with some goals in sight. Khilstrom and Laffont (1979) first developed a prevalent model that predicts risk-averse people to become paid employees while those more willing to take risks will strive to become Entrepreneurs. Mill (1984) supported this claim suggesting that risk-bearing is a crucial factor distinguishing Entrepreneurs from managers. Stewart and Roth's (2001) study indicate that Entrepreneurs' pursuance of venture growth places them at higher risk propensity than most managers, who are probably more risk-averse by their contentment with just being able to provide enough for their family.



Åstebro et al. (2014) explain Risk Propensity as a utility function to explain why risk-averse people are more willing to do regular work with lesser but stable income. On the other hand, those high in Risk Propensity (less risk-averse) tend to be more attracted to riskier ventures like Entrepreneurship, where gain can be much higher if successful. This explains why so many are still willing to start a business when it is clear that over 50% of all start-ups are no longer in operation after year six, with about 75% of the Entrepreneurs left with no equity on hand (Klimas et al., 2021; Lee et al., 2021; Bartik et al., 2020). Thus, the individual's Risk Propensity level plays a deciding role in entrepreneurial entry decisions (Caliendo et al., 2009).

**Possessing  
the Right  
Entrepreneurial  
Attitude and Mindset**



**FIGURE 8: Components of Entrepreneurial Attitude and Mindsets**  
(Source: Researcher's own work)

2.6.3 Possessing strong entrepreneurial Motivation

Murnieks, Klotz and Shepherd (2020) claim that research on entrepreneurial Motivation has evolved into distinctive theoretical silos isolating specific motives over each venture development instead of acknowledging that most Entrepreneurs traverse through their entrepreneurial journey driven by multiple types of Motivation. Using an earlier explanation by Turner (1995), Motivation involves a constellation of cognitive and non-cognitive aspects. The cognitive make-up consists of assessing benefits driving the strategic undertakings, while non-cognitive considers personal beliefs, values, perceptions and interests towards business opportunities. Motivation can manifest into opportunities identification by exploring existing

problems and driving actions in starting a new venture to exploit an opportunity. Although Motivational traits have proven to be an excellent predictor to filter out potential individuals for Entrepreneurship (Shane & Venkataraman, 2000), it is still impossible to predict performance and success within a margin of accuracy. In exploring the successful entrepreneurial mindset, it is essential to understand how Motivational characteristics can encourage individuals to become Entrepreneurs or why some individuals are better at it than others (Collins, Hanges & Locke, 2004). Gredler, Broussard and Garrison (2004) argue that Motivation drives people to act on something and is the reason for many underlying behaviours. For example, entrepreneurial Motivation is a critical factor in sustaining Entrepreneurs' energy creativity and pushing them to work long hours to fulfil their dreams.

There are many ways that an Entrepreneur may be motivated into Entrepreneurship. The common ones are listed below as:

(i) 'Pull' Motivation

Jinjiang, Nazari, Yingqian and Ning (2020) quantified that 'Pull' Motivation is mainly opportunities-based Entrepreneurship whereby venture activities are initiated by a promise of profits or other personal gains. They are often presented as opportunities and market gaps, stimulating the future Entrepreneur to take on positive challenges (Godany, Machova, Mura & Zsigmond, 2021). As Amit and Muller (1995) phrase it, individuals who are 'Pull' Entrepreneurs are motivated by business opportunities and the implications they bring to them. The 'pull' argument advocates that seniors can become natural Entrepreneurs because of their vast business exposure, work experience, and extensive social and business contacts networks. DeNoble and Singh (2003) postulate this group as rational individuals who see Entrepreneurship as career progression which can increase personal wealth. They suggest that one of the pulling factors is giving them a chance to do something great, like introducing a new business idea to the market. A choice career will allow better time management between family and work (Kibler, Wainwright, Kautonen & Blackburn, 2011; Curran & Blackburn, 2001) while providing additional income to support a particular lifestyle level (Walker & Webster, 2007). Senior Entrepreneurship also facilitates social inclusivity, prolonging careers, and generates employment opportunities for other old workers (Kautonen et al., 2017, Kautonen et al., 2008). Some of these seniors could have been

incubating an idea for a long time but do not have the opportunity to turn it into a viable business due to specific personal, family, institutional, cultural constraints, or a combination of all (Soto-Simeone & Kautonen, 2020).

(ii) 'Push' Motivation

In the same vein, 'Push Entrepreneurs' are people 'pushed' into Entrepreneurship under adverse circumstances they find themselves in (Godany et al., 2021). It may be due to dissatisfaction with their current situation caused by constrained job prospects, stagnant income levels, lack of work autonomy, or job insecurity. Other age-related workplace biases and discriminations in hiring practices, fringe benefits, training and development, or promotion prospect can also 'force' seniors to consider Entrepreneurship as a possible career option. Ramesh (2020) suggests that necessity Entrepreneurship is more common in developing economies due to a lack of employment opportunities and limited avenues for earning income for older workers.

DeNoble and Singh (2003) call them reluctant Entrepreneurs forced to start their own business due to a lack of other options within a short time. Entrepreneurship becomes a viable option for senior PMETs to resume their economic activities and financial well-being with insufficient wealth to retire early. However, although there is a positive relationship between unemployment and Entrepreneurship, it lacks clarity. It is often characterised by ambiguity as empirical research evidence, according to Cueto et al. (2015), comes primarily from secondary data from published government reports. For example, Carree (2002) found that one of the key push factors of business ownership is 'lagged unemployment'. Wood, Davidson and Fielder (2013) attempt to explain this phenomenon by suggesting that it may be due to an unemployed person not giving full desirability and feasibility evaluation into the risk factors of business venturing at a point of desperation. The study conducted by Godany et al. (2021) also confirmed that 'pull' Entrepreneurs are generally more successful than 'push' Entrepreneurs.

(iii) 'Need for Achievement' Motivation

Personal characteristics such as the need for achievement is a common factor often brought up in research on entrepreneurial Motivation (Shwetzter et al., 2019). The GEM (2020/2021) global report reveals from its findings that higher

proportions of men agree with the Motivations 'to build great wealth' and 'to continue a family tradition'. McClelland (1985) pointed out that people motivated by a high achievement need will probably set up their business instead of looking into other careers. McClelland faces criticisms from other researchers as his argument opined that improving upon one's need for achievement could boost the chances of a business accomplishment. While his findings face questionable validity, those who support his claim and gathered empirical evidence based on this factor found a high need for achievement to predict Entrepreneurship entry. Shaver and Scott (1991) were adamant that this Motivation drives new venture creation. The reason is that these individuals desire to be successful achievers consequently drives them to start looking for business challenges to prove themselves and to others (Koh, 1996). The 'need for achievement' Motivational theory postulates that it motivates people to seek challenges and be satisfied when their accomplishments are recognised. Such an explanation seems to be congruent with seeking new business opportunities, where the eventual take-off of a new venture reward the Entrepreneurs highly with great satisfaction (Shane et al., 2003).

(iv) 'Need for Affiliation' Motivation

A 'need for affiliation' motivated person tends to hold on to cordial relationships with other people. Their Motivation is mainly driven by having close personal associations that give them a sense of belonging (McClelland, 1961). Individuals with a high need for alliance want would naturally invest more time and resources to advance and protect social connections (Parveen, Faiz, Khan, Siddique & Safdar, 2020). Those who like to socialise and long to build harmonious relationships would favour work that provides significant personal interactions. It is thus not wrong to assume that those driven by such Motivation seek to be cherished and accepted by others. Parveen et al. (2020) claim that such Entrepreneurs are likely less influential because they will try to make decisions that would not agonise others whenever possible. Hence, a low 'need for affiliation' Motivation driven by the Entrepreneur is probably better from this perspective.

(v) 'Need for Power' Motivation

McClelland and Boyatzis (1982) argued that the 'need for power' Motivation is critical because it indicates the individual's desire to influence others. Their study

reveals that such people are often motivated to build their power base and will not hesitate to use their given authority or established reputation to inspire others toward their goals. McClelland and Burnham (2003) share the above view, noting that some are attracted to Entrepreneurship because they desire to control and influence the very people around them to their ideas without resorting to coercion or an authoritarian management style.

(vi) 'Need for Independence and Control' Motivation

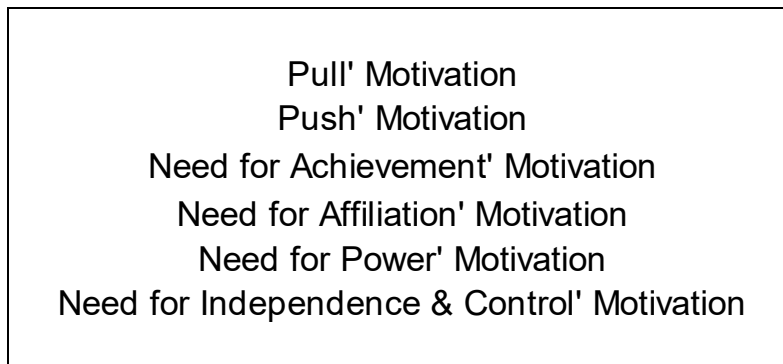
Soto-Simeone & Kautonen (2020) claim that many individuals seek entrepreneurship because it gives more autonomy of work and flexibility of time to seek better work-life balance. A recent survey conducted in Canada also shows that one of the top reasons seniors ventured into businesses is because it provides more autonomy and control of work and lifestyle (CERIC, 2018). Independence and autonomy are the self-directing expectations that come together with a better locus of control (Rotter, 1966). This term also reflects an individual's perceptions toward a generalised belief that one can have some level of control over affairs and how rewards are distributed (Pervin, 1980). The desire for independence and an internal locus of control are standard Motivational drivers in Entrepreneurs (Shwetzzer et al., 2019).

Those rated high on internal locus of control believe that their efforts and actions are solely responsible for achieving success or impending failure. According to Brockhaus (1974) and Venkatapathy (1984), controlling is one of the most dominant Motivational factors described by those who turn to Entrepreneurship. Borland (1974) compared this need to the other Motivations described by McClelland (1961). Furthermore, he boldly claims that the individual's Motivational need to be in a driver's seat better predicts whether he intends to be an Entrepreneur. However, Brockhaus and Nord (1979) argue that past studies failed to prove noticeable variances in the locus of control desired by Entrepreneurs versus Managers. Only a study by Begley and Boyd (1987) showed that business owners who are not deeply involved in their venture start-ups are typically less motivated by the internal locus of control than those who actively participate in the early-stage start-up. This behaviour is likely because those Entrepreneurs who are deeply involved in running the business want complete control of the company and be personally responsible for its outcome. Entrepreneurs are unlikely to risk their

own money for business venturing if they do not believe in their ability to influence the outcome (Muller & Thomas, 2001). This mindset includes taking full responsibility for their actions and not blaming others in the face of failure.

Hence, the need for more independence and control highlights the intrinsic Motivation for more influence, flexibility and control over personal time, family and work (the business). This idea appears attractive to those contemplating seeking a combination of all the above aspects (Uddin & Kanti 2013).

### **Possessing a high level of Entrepreneurial Motivation**



**FIGURE 9: Components of entrepreneurial Motivation**  
(Source: Researcher's own work)

#### 2.6.4 The impacts of entrepreneurial Self-Efficacy on entrepreneurial opportunities

Self-Efficacy refers to an individual's belief in performing goal-oriented tasks to achieve personal targets (Barbaranelli, Paciello, Biagioli, Fida & Tramontano, 2019; Newman, Obschonka, Schwarz, Cohen & Nielsen, 2019). Chien-Chi, Sun, Yang, Zheng and Li (2020) and Lingappa, Shah and Matthew (2020) believe that entrepreneurial Self-Efficacy is essential during the start-up phase of a new business. Studies conducted by Neneh (2020) and Burnette, Pollack, Forsyth, Hoyt, Babij and Thomas (2020) concurred that it is a social-cognitive process that

guides individuals' mental mindset in shaping their entrepreneurial intention and behaviour. The European Union's Entrepreneurship Competence Framework (2016) assert that having a solid trust in one's ability to influence events amidst uncertainties and setbacks can boost cognitive reasoning for better actions. This is because it expounds on how an individual views his expectation of success in a given situation (Cooper, Peake & Watson, 2016; Austin & Nauta, 2016). When applied to Entrepreneurship, it refers to a psychological measurement of the strength of one's conviction in his innate ability, capacity and capability to successfully perform the entrepreneurial roles and tasks (Bandura, 1997; Chen, Greene & Crick, 1998). This confidence has a bearing on his alertness and cognition towards opportunity identification and exploitation (Davidsson, 1995). Hence, it sheds light on a person's ability to task organisation and execution (Delmar, 2006; Shane et al., 2003) and can positively motivate and influence his attitude towards goals selection and performance expectations (Zhao, Seibert & Hills, 2005). Furthermore, many scholars concur that Entrepreneurs with extraordinary Self-Efficacy for a particular task have a better advantage in taking up entrepreneurial activities than those who have less of it (Şahin, Karadag & Tuncer, 2019; Urban, 2020).

(i) Perceived self-confidence to engage in Entrepreneurship

Self-Efficacy can be projected by a person's confidence in the way he explores, discovers, and engages in potential market opportunities, and such self-assurance can vastly boost his chances of entrepreneurial success (Urban, 2020; Puni, Anlesinya & Korsorku, 2018). Venturing out to be business owners, Entrepreneurs must first believe and trust in their ability to complete the essential entrepreneurial tasks. In other words, an Entrepreneur must perceive a sense of self-confidence in personal aptitude and capacity towards managing business affairs (Chen-Chi et al., 2020). Having adequate confidence is a necessary entrepreneurial characteristic associated with other psychological traits like having a high internal locus of control, high-risk propensity, high ambiguity tolerance and high Self-Efficacy (Ho and Koh, 1992; Cromie, 2000).

Entrepreneurial confidence is built on superior knowledge of market needs with high self-assured efforts to extract those potential benefits from a newly discovered opportunity (Urban, 2020). It reflects one's belief in own capabilities to

organise, execute and manage a particular task. Hayward, Shepherd and Griffin (2006) even counter that having a high level of self-confidence can help new business owners attract more significant support and resources from those impressionable stakeholders. According to Chell (2008), all new ventures come with high-stack risk, and business owners must possess a high level of self-confidence to have faith in their knowledge, capabilities and judgement to overcome all these difficulties to mitigate the risks.

However, over-confidence may be detrimental to the Entrepreneur, but this subject received little empirical attention in many Entrepreneurship literatures works. Some recent scholars suggest that extreme levels of Self-Efficacy may manifest into over-confidence or excessive pride and arrogance on the part of Entrepreneurs, which may undermine their ability to run their business effectively in the long run. The worst-case scenario may be that the alertness to business opportunity and necessary cognition to acquire and allocate resources could be adversely blurred by way of overestimation and self-deception (Hayward et al., 2006).

(ii) Perceived personal ability to overcome challenges in Entrepreneurship

Self-Efficacy can also be concerned with how a person feels about his ability. A successful Entrepreneur believes in his abilities and is not afraid to explore uncharted territories or take risks when making difficult decisions (Urban, 2020). The perception of personal ability is an individual's belief in carrying out work to achieve overall goals. This concept is concurred by Bandura (1997), who proposed that the distinct personal perceptions of outcome expectancy and Self-Efficacy drive such expectations. Most individuals tend to set their targets consistent with their interpretations of personal capabilities and the types of outcomes they expect from pursuing a particular course of action. Outcome expectancy often refers to the credence and faith placed on the fact that the desired outcome will come from necessary task accomplishments. Self-Efficacy of personal ability is the precondition for behavioural change since it determines the initiation of coping behaviour. However, it has a significant implication on the expectation of personal capability on outcome expectancy. The Self-Efficacy theory explains various relationships between beliefs, attitudes, intentions, and actions. Bandura (1997) asserts that Self-Efficacy accumulates from individual psychological and affectional



states, previous experience and social persuasion. In most cases, Entrepreneurs often perceive themselves to be competent in identifying and exploiting opportunities.

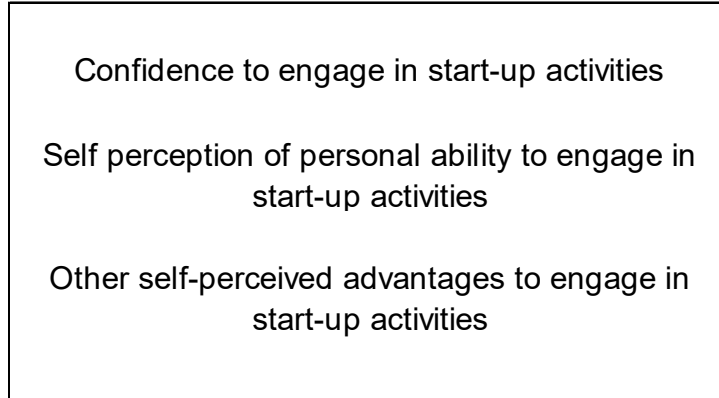
There have been arguments that Entrepreneurship education and training might help substitute the missing confidence in mastery experience and skills nascent Entrepreneurs lack in completing entrepreneurial tasks. However, Cooper and Lucas (2006) submit that the lack of entrepreneurial Self-Efficacy can be due to a psychological condition and not an actual lack of hard entrepreneurial skills. Thus, we decided to include the personal Self-Efficacy assessment under the Psychological Capital consideration in this research.

(iii) Individual's Optimism does not represent Self-Efficacy

Some researchers like Khilstrom and Laffont (1979) have supported the argument that individual differences may be a cause of influence on their willingness to bear the risk. This attitude towards a situation, in turn, affects their decision to act on business opportunities. For example, Palich and Bagby (1995) claim that people involved in option tradings tend to frame and interpret their collected information more positively so that their later actions can reconcile with these positive perceptions. More importantly, individual differences in Optimism level can influence the decisions on opportunities exploitation. People who exploit opportunities tend to perceive a higher chance of success, even higher than other Entrepreneurs (Cooper, Woo, & Dunkelberg, 1988).

Kaish and Gilad (1991) warn of such over-the-top Optimism, as it motivates the possibility of taking action on an opportunity by blocking the negative side of information to present a rosy side of the future. Busenitz and Barney (1997) further that an Individual's Optimism may lead to complacency in searching for information or even leading people to act first without a complete evaluation. Hence, although Optimism's attribute may increase discovery and action probability on the opportunity, it may not necessarily increase the likelihood of their success. For this reason, we will not consider this variable to assess the state of entrepreneurial readiness of the late-career PMETs.

**Possessing a high level of  
Entrepreneurial Self-Efficacy**



***FIGURE 10: Components of entrepreneurial Self-Efficacy  
(Source: Researcher's own work)***

## **2.7 THE INFLUENCE OF INHERENT HUMAN CAPITAL ON THE STATE OF READINESS TOWARDS OPPORTUNITIES**

Entrepreneurs, especially nascent ones, must possess sufficient Human Capital to notice and assess opportunities and operate a new business effectively (Daniel et al., 2021; Baciú et al., 2020). Bruderl and Preisendorfer (1998) suggest using the metrics of schooling, industry-specific works, managerial experience and self-employment tenure as tangible forms of Human Capital indicators to measure up business founders. DeNoble, Jung and Ehrlich (1999) later categorised them under the critical dimensions of experience, knowledge, information and operations management skills. Based on the arguments of these authors, these factors can directly contribute to the entrepreneurial intention, take-up rate, entrepreneurial success rate and, more importantly, the overall readiness towards entrepreneurial opportunities (Sharma, 2019).

Weber and Schaper (2004) and Watson, Stewart and BarNir (2003) underpin Human Capital as an accumulated wealth of tacit knowledge, business skills and competence, experience and acumen acquired from an educational background and past working experience. These observations were concurred by Shane (2003)'s argument of the individual-opportunity nexus, which claims that an individual's accumulation of Human Capital consisting of experience, knowledge, skills, and information can alter the way one seeks on opportunities.

Davidsson and Honig (2003) claim there is a direct link between the Human Capital construct and the explorative and exploitative aspects of entrepreneurial opportunities. Explorative intent covers activities such as opportunity recognition and discovery for new businesses and markets, while the exploitative ones include actual new business formation, execution and performance monitoring. Managers would utilise their deeply embedded knowledge to process limited information used for scanning viable commercial prospects for their firm. They would then use their deep-rooted knowledge, experience and abilities to organise and deploy resources into prolific productions to edge the market competition in exploiting these opportunities (Kor, 2003; Miller, 2003). This view was likewise shared by Lazear (2004) in that Entrepreneurs, like Managers, must also be multi-skilled people to ensure the sustainability of their businesses. However, when Sarasvathy (2005) interviewed 42 Entrepreneurs for her research, findings revealed a real distinguishment between Entrepreneurs and managers in how

their cognition works. She concluded that entrepreneurial cognitive rational is vastly different from managerial, strategic thinking. Her view was evident from the logic often used to resolve entrepreneurial problems under conditions of uncertainty in which most of such intended actions are often shaped by the Entrepreneurs' belief in a 'yet-to-be-made' future.

Nevertheless, studies on Human Capital show statistical evidence proving its positive relationship with the discovery and pursuit of opportunities. It supports the argument that those having a high level of prior knowledge, educational achievement, and vast work experience are better positioned to identify and pursue entrepreneurial opportunities. Separately, Pathirage, Amaratunga and Haigh (2007) went one step further to classify Human Capital into a technical dimension involving information and 'know-how' and a cognitive factor involving mindset, values and belief. For this study, we compile the many findings of past publications to include a more in-depth exploration of the factors of Prior Managerial Experience, Prior Knowledge and Information and Prior Relevant Skills.

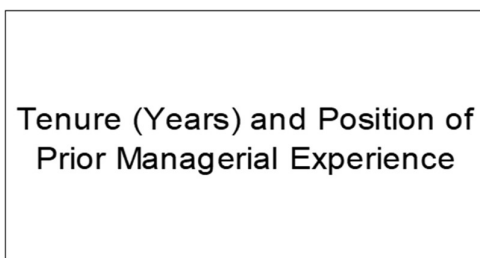
#### 2.7.1 Prior managerial experience and entrepreneurial opportunities

Baciu et al. (2020) and Ruiz, Soriano and Coduras (2016) point out that previous professional work can support the transition from nascent entrepreneurs to business owners. Such acquired experience can equip the new Entrepreneurs with the necessary acumen to better observe and evaluate the market environment while giving them the needed business shrewdness for better chances of venture success. As it is likely that most senior PMETs have worked in a corporate managerial career for many years, Hambrick and Mason (1984) claim that this will undoubtedly impact the way they view and assess their own firm's resources and its operating environment.

Levitt and March (1988) further claim that a long career in specific firms and industries can help these managers to establish sturdy strategic beliefs and cognitive interpretations of the external environment against internal capabilities. This appraisal can directly influence their alertness level and cognitive judgment of strategic options when deciding on activities such as recognising, discovering, and pursuing business opportunities. Hence, a big part of the state of readiness

perception towards opportunities is an outcome of the manager's interpretation of the firm's business environment based mainly on possible cognitive biases gathered from the years and positions of prior managerial experience (refer to Figure 11).

### **Possessing a high level of Prior Managerial Experience**



**FIGURE 11: Components of Prior Managerial Experience**

**(Source: Researcher's own work)**

(i) Tenure (Years) of managerial experience

Prior managerial exposure to different settings of challenges can benefit Entrepreneurs in developing their efficacy in handling the liabilities of newness (Baciu et al., 2020; Shane, 2000; Reuber, 1997). Having longer tenure of managerial experience allows an individual to move through multiple functions, business units and territories to collect a range of knowledge, information and skills helpful in identifying and pursuing new business opportunities (Daniel et al., 2021; Sharma, 2019; Ruiz et al., 2016; Chakravarthy & Lorange, 2008). Miller (2003) gave an example that shows how long-term managers have in-depth knowledge of their company's resources and can identify and capture potential opportunities better than their competitors. Whatever past managerial experience the late-career PMETs received over the years can become an imprinting force that can shape their long-lasting behaviours towards entrepreneurial opportunities (Higgins, 2005). At the same time, the experience can affect their self-awareness, insights, creativity, risk-taking propensity, confidence, and decision-making, all of which will determine their likelihood of success in venturing into entrepreneurial endeavours (Mathias, Williams & Smith, 2015; LeBlanc, 2017). Serving many years in managerial roles within organisations can also help individuals establish a track record of their

performance, build a reputation within the industry, and create a vast network of contacts for future business funding purposes.

However, some strong critics claim that the recording of prior managerial experience years is a weak Human Capital measurement since the length of time served in those positions does not correctly reflect the quality of professional involvement (Brüderl, Preisendorfer & Ziegler, 1992; Evans & Leighton, 1989). Tripsas and Gavetti (2000) counter that individual managers' cognition in their beliefs about their business can sometimes impair their exploitation of opportunities. Another recent study by Schoar and Zuo (2017) revealed that managers who experienced a severe recession are likely to be more cautious and adopt conservative viewpoints and approaches in business. Both arguments claim that a manager's mental modelling based on experience may hinder their ability to try out untested working methods due to their pre-conceived expectation of outcomes. Moreover, all managerial experiences are likely different, depending on their position ranging from supervisory, operational, strategic, or visionary.

(ii) Position of managerial experience

Analogously, industry-specific managerial experience represents top managers' knowledge of the industry dynamics, market niches, customer preferences, industry rules, and norms unique to each industry (Castanias & Helfat, 2001; Kor, 2003). However, such embedded knowledge is generally asymmetrical across rankings and firms, and the experience in a specific sector not only provides knowledge concerning how the industry works but also provides background for managers to gain the skills to anticipate future market opportunities and threats, changes in technology and customer preferences (Helfat and Liberman, 2002; Kor, 2003; Kor et al., 2007). Hence, experience in a senior managerial position is crucial for entrepreneurship, especially when engaging in building opportunities sensing and seizing, and guiding organisational transformation (Teece, 2007; Teece, 2014; Helfat & Martin, 2015). Moreover, leadership trait has enormous implications for entrepreneurial behaviour. Daniel et al. (2021), Baciú et al. (2020) and Sharma (2019) agree that those who possess high leadership attributes often become transformational Entrepreneurs who are not afraid to replace outdated operational routines to become more effective when performing entrepreneurial functions.

### 2.7.2 Prior knowledge and information and entrepreneurial opportunities

Knowledge is an entrepreneurial capital (Purwanto et al., 2017) that can increase creativity and improve innovation (Caputo et al., 2020). Kim (2002) claims that having vital knowledge is a competitive advantage to a starting Entrepreneur because it is hard to imitate and not easy to substitute. At the same time, no two Entrepreneurs can have the same knowledge because of their different mental endowment, exposure and external knowledge sources. Moreover, such domain information resides tacitly inside the head of the practitioner (Choi & Lee, 2003), is difficult to transfer from person to person, and is not easy to capture or archive in some information technology systems (Holste & Fields, 2010). As such, it is almost impossible to extract meaningful tacit knowledge from a person unless he is personally willing to impart it (Beijerse, 2000). The amassed information is also not easily verbalised or be written down in a manual for training and knowledge transfer. Furthermore, it is usually impossible to assess the actual value of tacit knowledge until after post-transfer achievement of successful outcomes.

Having a vast stock of knowledge can help a person create an inherent 'knowledge corridor' that triggers their alertness level to scan for information, no matter how limited they are, to process them more efficiently than others (Gimeno, Folta, Cooper & Woo, 1997). This information processing ability leads to a better and more intuitive opportunity recognition pattern (Venkataraman, 1997). A separate study by Busenitz and Barney (1997) confirms that business owners relied a lot on this 'knowledge corridor' advantage to form cognitive mental modelling for quick decision-making (Corbett, 2007). Given their extended period of life and work experience and vast accumulation of knowledge, these individuals can instantly make rapid syntheses and connections to join the dots even with limited data availability (Yu, 2009).

Clydesdale (2010) counters that everyone interprets their personal experiences differently and use them to construct their subjective view of the future. Because their depth of knowledge differs, individuals' future expectations will similarly diverge. Moreover, the continuous flows of new information over time will cause Entrepreneurs to revise their business plans and models. Hence, each person's view of the future and business potential is unique. Tang et al. (2012) claim that with prior knowledge and information, one would be more aware and

sensitive to execute correct judgement on the value and usefulness of new pieces of information received.

Whether a firm can successfully scan and sense market opportunities and transform its capabilities to seize them is highly dependent on the quality of its top-level managers to access and acquire information, knowledge and resources for their firm (Teece, 2016). These include access to market and customer information, knowledge on how to proficiency serve them and the necessary capital to act on the opportunities. (Beck & Wiersema, 2013; Fainshmidt & Frazier, 2016). This ability to capture the necessary resources is necessary to identify and exploit new opportunities (Kirzner, 2009).

(i) Market and Customer knowledge and information

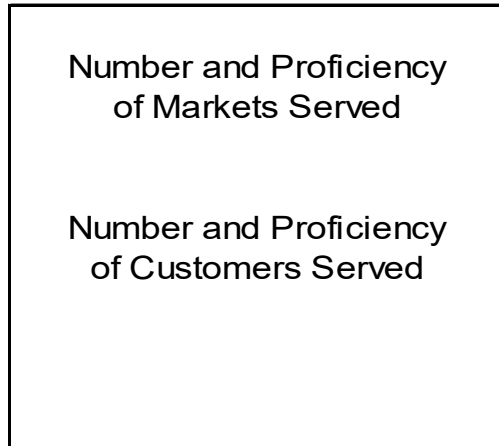
Baciu et al. (2020) and Shane (2000) propose that previous managerial experience can provide nascent Entrepreneurs with ready stock of prior knowledge of market and customer needs. Such expertise is invaluable as it provides alertness and cognition for opportunities, all of which are parts of an active entrepreneurial discovery and exploitation process. Kor (2003) advocates that any industry-specific experience involving direct interactions with customers and suppliers offers irreplaceable knowledge and information about the market environment, opportunities, threats, and competitive conditions unique to that industry. Politis (2005) opinion that older Entrepreneurs who have spent a long time working in managerial roles have more time developing their management know-how than their younger counterparts. When applied to late-career PMETs, this argument undoubtedly gave them a much-needed added advantage.

Terjesen and Sullivan (2011) claim that acquired knowledge of structural, relational, and cognitive nature embedded in the mind of managers can transfer from their previous work to their new ventures. Recent research has suggested that corporate managers' firm-specific and industry-specific Human Capital is an essential antecedent of their firm dynamic capabilities (Maritan & Peteraf, 2011; Kor & Mesko, 2012). With the comprehensive knowledge of their firms' markets and customers, these managers can effectively respond to the demands of a changing business environment to successfully discover new opportunities and to reconfigure resources to seize them before others (Fainshmidt & Frazier, 2016; Beck & Wiersema, 2013; Teece, 2007; 2012). As such, we will measure in our research



the late-career PMETs' prior knowledge and information based on the number of markets and customers they handle and their proficiency in managing them.

### **Possessing Prior Knowledge & Information**



**FIGURE 12: Components of Prior Knowledge and Information**  
(Source: Researcher's own work)

#### 2.7.3 Prior relevant skills and entrepreneurial opportunities

Nascent Entrepreneurs need to have the capacity to enable them to overcome what is generally referred to as the liabilities of newness. The ability to recognise and act on entrepreneurial opportunities is one of the most critical assets of a successful Entrepreneur, and this subject has been a critical issue covered in past literature and research on Entrepreneurship (Daniel et al., 2021; Baciu et al., 2020; Sharma, 2019).

Organising and keeping a business running requires a combination of many functions working together (Lazear, 2004; Davidsson, 2006). Empirical research confirms the high correlations between skill measurements to task-related entrepreneurial outcomes. Past empirical studies have shown that founders' entrepreneurial skills tend to influence the growth and operations of new start-ups and their survival during the company's early period (Hamm, 2002; Whetten & Cameron, 2005). These include overcoming difficulties in the opportunity identification stage to take the initiative to exploit and achieve goals. These soft behavioural skills are required for early business management and organisational operations (Rainsbury, Hodges, Burchell & Lay, 2002). James and James (2004)

state that some cognitive and relational skill sets are highly tacit and most likely acquired from personal encounters and past work experience. It is not easy to transfer the accumulated knowledge and information to another person as they cannot be written down in a manual or be presented in a tangible form.

Starting Entrepreneurs need to possess practical skills to produce their products and services and differentiate them from the competition despite scarce resources and market recognition. Lazear (2004), Smith, Matthews and Schenkel (2009) and many other authors would later categorise the necessary skills according to various perspectives. However, according to Mitchelmore and Rowley (2010), the discussion of entrepreneurial competencies are still in its early stages, and hence, the pursuit of developing the definitions and categorisations of the entrepreneur's essential skills is still an ongoing process.

Implementing a new business idea is not an easy process. Sousa and Almeida (2014) highlighted the possibility of developing a specific type of entrepreneurial capacity that could play such a critical role in successfully executing business ideas from opportunity identification to opportunity exploitation. The EU Skills Panorama (2014, 2016) laid out a comprehensive list of vital Entrepreneurial skills that include technical, management and personal skills. There is currently no one established kind of entrepreneurial skillset definition. However, recent literature works present some more affluent development on entrepreneurial skills that can bring closer alignment and agreement to necessary entrepreneurial abilities and competencies.

Portuguez, Scheede and Gómez (2020) argue that three main groups of intertwined skills, as defined by the OECD (2015), are 'must-have' skills for would-be Entrepreneurs prior to venturing out. They are mainly technical, administrative, and personal entrepreneurial skills.

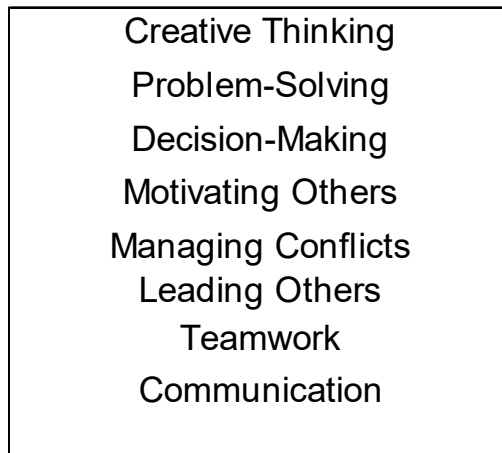
- Technical – Lundstrom and Stevenson (2005) refer to these skills as a combination of technical, business, and entrepreneurial know-how. Entrepreneurs tend to be task-oriented, so Henry, Hill and Leitch (2005) propose that skills be task-focused. Whetten and Cameron (2005) categorise some of them into personal (creative thinking, problem-solving and decision-making), interpersonal (Leading others, managing conflicts, teamwork and communication) and necessary management skills such as project management, sales and marketing, financial

management. As essential management skills are not a critical inherent factor but can be enhanced with appropriate courses and training, this research will not explore further. On the other hand, personal and interpersonal skills are tacit functional skills acquired in previous managerial jobs and are necessary skills for exploiting opportunities.

- Administrative (Business management) – The management skills here refer to specific skills needed to manage a business and to lead an organisation (i.e. business management vs management skills). These include developing a long-term management system to monitor the day-to-day operational functioning of the business enterprise. These require specific management skills such as business planning, financial budgeting, resource and capital acquisition, marketing and sales (Mitchelmore & Rowley, 2010).
- Personal entrepreneurial skills involving the aspects of individual self-control and self-discipline, creativity and innovativeness, risk assessment and management, leadership and change management, interpersonal and communications, and strategic thinking.

A study conducted by Robinson, Lee and Edwards (2012) claims that experienced and trained Entrepreneurs has better management skills to run businesses than inexperienced, untrained ones successfully. Entrepreneurs must organise issues, events, resources and work, and prioritise tasks based on their urgency. They also need business development skills to grow their business and to assess future investment plans' rationality. On top of that, they must make effective decisions on project acquisitions, resources allocations, market pricing and partnerships. Hence, managerial Human Capital becomes the source of a variety of skills that Entrepreneurs draw on to increase their abilities in sensing new opportunities and threats; seize opportunities, and the reconfiguration of resources to achieve continuous renewal (Kor, 2003; Sirmon, Hitt & Ireland, 2007; Zahra, Sapienza & Davidsohn, 2006). Some of those vital skills are highlighted in Figure 13 and individually discussed within this section.

## **Possessing a high level of Prior Relevant Skills**



**FIGURE 13: Components of Prior Relevant Skills**  
**(Source: Researcher's own work)**

(i) Creative thinking (Personal cognitive skill)

Past researchers discussed that creativity is particularly essential for entrepreneurial activities, and Entrepreneurship itself is a creative activity (Shi et al., 2020; Kumar & Shukla, 2019). Creativity is defined as the creation of new and valuable ideas (Entrialgo & Iglesias, 2020), and it is an essential feature of individual cognitive processing of whatever information made available and knowledge possessed by the Entrepreneur (Zampetakis & Moustakis, 2006). According to Rodrigues, Diez, Perez, Bano and Carrio (2019), creativity is the ability and skill that people hold. Similarly, Hu, Gu, Wu and Lado (2018) conducted a study using creativity and entrepreneurial alertness and found significant results in university students in China. Furthermore, a recent study investigated a sample of 390 university students in Pakistan and found the significant impact of creativity in the relationship between entrepreneurial passion and entrepreneurial intention (Murad et al., 2021). Develop creative and purposeful ideas as highlighted in the Entrepreneurship Competence Framework (EU, 2016).

Schumpeter (1934) claims that the most distinctive entrepreneurial characteristic is creativeness. This claim is in line with his assertion that an Entrepreneur's role is to create market disequilibrium through innovations, and the incumbent holding such intellectual skill can differentiate a good or bad idea and

actualise them into a business. An Entrepreneur can apply this skill to connect the dots and assess the requirements regarding new insights on how to execute those ideas in a new and creative way (Omolara, 2018). Such actions may lead to innovative solutions to resolve strategic undertaking and resource distribution (Baker & Nelson, 2005) and develop a business of value (O'Hara, 2011). These claims concur with earlier observations by Shane and Venkataraman (2000) and Gaglio and Katz (2001) that creative thinking drives alertness and sensitivity to recognise new opportunities. Kumar and Shukla (2019) examined the direct influence of creativity and proactive personality with the mediating role of entrepreneurial Self-Efficacy to measure entrepreneurial intention among university students in India and found that creativity positively leads toward entrepreneurial Self-Efficacy and entrepreneurial intention.

(ii) Problem-solving (Personal cognitive skills)

Many business problems are unstructured, and the unpredictability might hurt opportunity perception. Kim et al. (2018) argue that it will not be easy to solve many business issues without a set of creative problem-solving skills. In a volatile, sophisticated knowledge- and technology-based industry, proficient problem-solving abilities are essential to driving innovation and sustainable growth and development. Kickul et al. (2009) counter that cognitive confidence and style can influence a person's approach to problems. A person with excellent problem-solving skills will determine the source of an issue and uncover effective solutions using known facts, existing knowledge, and past historical data to clarify the problem on hand (Kirzner, 2009). It is also often considered a soft skill of personal strength, and those with an aptitude for creative and practical problem-solving possess the most valued attributes. When applied to Entrepreneurs, it refers to handling difficult and unexpected situations in the complex world of business dealings. Such skills found great value in the workplace and business environment.

(iii) Decision-making (Personal cognitive skill)

Decision-making is a thought process of selecting a logical choice after weighing each available options' positives and negatives (Acevedo & Krusger, 2004). It involves a mixture of personal traits, values, beliefs, intuition and rational thinking. It is also greatly influenced by critical inherent factors such as past

personal and work experience, personal biases, prior knowledge and information about the situation. This was confirmed by Deming (2021) research on the complementarity correlations between decision making intensity and work experience to the cognitive ability to make a sound judgement on decisions.

(iv) Leading others (Social and interpersonal skills)

The management of teams to ensure their effectiveness requires an experienced leader who can deliver a clear vision and motivate everyone towards achieving goals (Al-Malki and Wang, 2018). True leaders must set specific, measurable, achievable, realistic and time-constrained targets for their subordinates. They must also empower them sufficiently to let them have space to achieve organisational goals. Never has the leadership role been more critical than during the start of a business venture. During this period, team members are expected to face unsurmountable challenges and need vital leadership to help resolve them in the team environment and create new ways of working.

(v) Managing conflicts (Social and interpersonal skills)

Conflict can happen anywhere, especially when people need to work together in a team or in business dealings. There are many reasons to explain the occurrence of disputes. These include the possibility of differences in members' personalities, ambiguous workplace roles, poor communication and underperformance, unrealistic expectations, scarce resources, stress, and burnout (Mcduffee, 2021). Conflict management is an essential social and interpersonal skill that aims to reduce the negative impact caused by direct and open conflict involving oneself or others. People trained in this skill can professionally eliminate potential and harmful dissensions and harness the upsides of friction to enhance overall team and business outcomes.

(vi) Teamwork (Social and interpersonal skills)

In the absence of teams, employees are limited to individual efforts alone, but with teambuilding, workgroups evolve into cohesive units and share expectations for accomplishing group tasks, added to trust and support for one another and respect for individual differences.

Salas, Dickinson, Converse and Tannenbaum (1992) characterise a team as a group of a minimum of two individuals who can collaborate well together to work towards a shared team goal. As the group size increases, it becomes harder to manage the team due to the diversity of human personality and behaviours. Cohen, Levesque and Smith (1997) defined Teamwork as a group of people who shared a common purpose and mental state working together. Hence, a successful Entrepreneur must possess this teamwork skill to leverage more human resources to get things done faster than the Entrepreneur alone. Effective team management can heighten the team's alertness and cognitive power to scan and sense for opportunities.

(vii) Communication (Social and interpersonal skills)

There are two essential elements of successful communication between people within the team. Firstly, the communicators need to have the ability to understand each other, including the way they each think and are likely to behave. Next is the actual intention of the message itself. In effect, the quantity *and* quality of communication within a team and from leadership affects Teamwork (Mcduffee, 2021). Parviainen (2013) argues that in Entrepreneurship, business owners must communicate effectively on the firm's strategic directions to attract potential investors. On top of that, it is equally important to possess effective and persuasive communication skills with their customers and suppliers. Internal staff also need interpersonal communication skills to lead and inspire people to achieve organisational goals.

## **2.8 THE INFLUENCE OF INHERENT SOCIAL CAPITAL ON THE STATE OF READINESS TOWARDS OPPORTUNITIES**

Matinez (2020) defines Entrepreneurship as a social process by which opportunities for profitable exchanges are pursued. Hence, Social Capital acts like a lubricant that aids the completion of tasks. It enables people to collaborate and reap the benefits of social ties (Ha & Nguyen, 2020) and is an essential ingredient of successful venture creation and Entrepreneurship. Entrepreneurs with better networks are usually more successful and can identify more viable opportunities and access more and better resources (GEDI, 2019). Dubini and Aldrich (1991) liken Entrepreneurship to a relationship-oriented task with entrepreneurial activities involving creating new social and business relationships, together with activating existing ones to establish a new business venture. Empirical research conducted by Bruderl and Preisendorfer (1998) suggests that network support could increase the survival and growth probability of newly formed businesses. Multi-partnership collaborations between individuals in a network can facilitate access and exchange of reliable 'within-the-group' information and knowledge (Baron & Markman, 2003) and other complementary capabilities and resources to foster continued growth (Shane & Cable, 2002).

Adler and Kwon (2002) further explain how individuals capitalise on pre-existing relationships to obtain critical information and resources to achieve desired outcomes for themselves or their firms. Later, Acquaah (2007) would describe it as the total sum of resources accrued to an individual or entity due to developed network relationships. Sirmon, Hitt, Ireland and Gibert (2011) theorise that firms' active management of social resources is necessary for reaching the desired objectives. For example, senior managers' relational abilities with external partners can facilitate successful entry into new markets. Brinckmann and Hoegl (2011) study of technology-based firms supported this claim to reveal that top managers' relational skills are positively associated with their business growth. Hence, enhancing relationships with external stakeholders can improve the firms' ability to seize entrepreneurial opportunities on an ongoing basis (Ketchen, Ireland & Snow, 2007).

Middleton (2010) argue that senior Entrepreneurs, unlike their younger counterparts, could rely on their established nodes of past connections to give them an added advantage in accessing information, knowledge, technology and



much-needed resources to effectively build up capabilities to seize and exploit market opportunities (Hitt & Ireland, 2002; Li, Eden, Hitt & Ireland, 2008). Such first-to-obtain information is crucial when competing with rivals to identify and pursue unnoticed market opportunities (Singh, Hills, Lumpkin & Hybels, 1999). Moreover, specific information related to skill, technical, market, or cultural knowledge can also reduce the venture's transaction cost, enhancing its competitive advantage.

Simultaneously, these social relationships may exert a subtle influence on other network members who get to play a critical role in certain decision-makings because of their unique social status, standings, or expertise. Because of this, any recommendations to 'put in a nice word' by such people may carry more weight than the starting Entrepreneur himself. Maurer and Ebers (2006) and Arregle, Hitt and Sirmon (2007) further claim that corporate managers can easily reach out to pre-existing networks to establish joint partnerships to act on market opportunities. This collaboration is critical to opportunity discovery and exploitation (Fornoni, Arribas & Vila, 2012).

#### 2.8.1 Tangible factors that can influence the perceived strength of Social and Business Networks

The ways to measure Social Capital is still relatively non-standardise today. Over the years, there have been numerous debates on whether it is more accurate to measure on a macro or micro relational level based on single or multiple dimensions (Fornoni et al., 2011). However, past literature did provide some general guidelines on the quantitative measurements of tangible factors, such as:

##### (i) Network Type (Diversity of ties)

Networks are classified as strong or weak ties by Granovetter (1973), based on their members' 'closeness' in relationships. He gave several examples of solid ties and personal relationships, including immediate family, relatives, schoolmates, and close friends. On the other hand, the weaker ones that he quoted are those of non-kin associations such as organisational or business ties, where economic transaction forms the relationship's basis. Specific examples of such weak relations include social acquaintances, commonly known as friends-of-friends (Lin & Dumin,

1986). This intensity of the relationship between parties can also represent their interactions' depth (Granovetter, 1985; Dubini and Aldrich, 1991; Bruderl & Preisendorfer, 1998).

Similarly, Hills, Lumpkin and Singh (1997) support the notion that an Entrepreneur who has a robust and diversified network will undoubtedly be exposed to cross-cultural norms and perspectives, leading to a broader scan and higher awareness level that is imperative in recognising opportunities. Finding from Chell and Baines (2000) study provides supporting evidence that well-networked Entrepreneurs can achieve higher performance levels than those who are not. The time and effort put into social and business networking can eventually help senior Entrepreneurs to access critical financing and new markets. Hitt and Ireland (2002) claim that strong and weak ties are embodied among the top and middle managers and other employees in organisation-social interactions, communication routines and information exchanges. Such 'bonds' to familiar networks, 'bridges' to networks with peers, and 'links' to vertical systems with power-holders form the invaluable asset of Social Capital (Halpern, 2005).

The fundamental dimension of Social Capital also explains the frequency to which the connecting members share and exchange information (Leana & Pill, 2006). Helfat and Martin (2015) argue that such flow of information and knowledge can enhance the sensing ability of the Entrepreneur towards new opportunities and their ability to direct resources to seize them.

a) Informal (strong) social network relationships

Granovetter (1973, 1991) claims that strong informal social ties are considered helpful in stable environments when exploiting the opportunity to gain access to sensitive information or resources. Larson and Starr (1993) reckon that social network is strong ties where members are more motivated to assist the starting Entrepreneur. This help can come in knowledge transfer, trusted feedback on opportunity viability, or even access to resources at a fraction of market cost. Pinchler and Wallace (2007) and Klyver (2007) outline that these strong informal ties would consist of the individual's social relationships with immediate family, relatives, close friends, schoolmates, acquaintances, and neighbours. Entrepreneurs who receive support from their immediate family members, relatives, and close friends during the start-up phase will be more successful than

Entrepreneurs who do not accept any help (Santarelli & Tran, 2012). Emotional support from a family member who is an Entrepreneur might help sustain emotional stability for the nascent Entrepreneur.

b) Formal (weak) business networks relationships

Granovetter (1973) argues that those formal business networks described as weak ties can potentially offer access to new valuable information as its sources come from distant communal nodes. Granovetter (1974) further hypothesised that although weak links are less reliable, they can still provide critical support in accessing crucial exclusive information. Peng and Lou (2000) studied top managers in Chinese firms offered concrete empirical evidence that solid customer network ties promote a better understanding of the market and customer needs. Such information quickly transforms necessary resources and facilitates product offerings to the changing conditions. Moreover, the network relationships that managers often develop in previous professional positions in a specific firm or industry can provide them with an opportunity to develop social relationships with executives from suppliers, distributors and significant customers beyond their organisations (Adler & Kwon, 2002). It also strongly influence their ability to establish new relationships to expand their Social Capital on an ongoing basis (Gulati, Nohria & Zaheer, 2000). Such external relationships cultivated can later help them and their firm gain access to valuable resources, knowledge, and information pertinent for sensing and seizing new opportunities for their firm.

Davidsson and Honig (2003) claim that weak ties have a role in providing specific knowledge during the exploitation period is critical because such information is unlikely to come from the networks of informal ties. Managerial connections with customers are also a great source of market information, ideas, and opportunities (Acquaah, 2007). Kor and Sundaramurthy (2009) argue that senior managers' previous positions in the industry are the primary source of goodwill and connections with key industry players, and they can help companies mobilise the resources required to capture the industry's growth opportunities. Prashantham and Dhanaraj (2010) find that the top managers of entrepreneurial firms with professional experience in multinational enterprises successfully leverage their contacts with former employers to expand their knowledge of new markets and internationalise their firm operations. Santarelli and Tran (2012) argue that the benefits from weak-tie networks outweigh those from strong-tie, as the former gives Entrepreneurs

access to various types of resources that are unlikely available within strong-tie interactions. Entrepreneurs who participate in formal business networks will be more successful.

(ii) Network Member Sizes (Density of ties)

Granovetter (1973) argues that network member size is vital to acquiring resources, as there is a possibility that each contact may be linked to some source. The benefit may involve lower capital cost, a critical resource for new ventures to reduce the nascent Entrepreneur's newness liabilities (Uzzi, 1999). Moreover, connecting to multiple network members may create an elaborate network structure to facilitate critical information flows. Hoang and Antoncic (2003) concur that the most intuitive measure of network strength is counting member size, a direct indicator of network nodes and actors' links. Batjagal (2003) highlights a measurement model to integrate the number of connections structurally, known as the network structure configuration's density and characteristics.

(iii) Years of Relationships (Depth of ties)

Granovetter (1973) focused on conceptualising interpersonal ties as an essential element of Social Capital. He considers that such relational strengths are dependent on the years of relational ties and the intimacy, reciprocity, and emotional intensity involved to characterise the relationship. This multidimensional network analysis later received support from Gulati (1995), who summarised that network strength is established based on the relationship's duration.

Singh et al. (1999) counter that the social networks' depth, and not its width, can exert influence on the Entrepreneur's alertness and cognition to source and pursue business potentials and hence, the entrepreneurial process. This argument suggests that the number of social network nodes that an individual established is not as significant as its practical usage. Koka and Prescott (2002) add new relational dimensions related to the more qualitative and intangible factors to project the strength of the network; familiarity, shared knowledge and information, resources value accrued, shared cognition, trust and confidence.

## 2.8.2 Intangible factors that can influence the perceived strength of Social and Business Networks

The value of inherent Social Capital networks is much dependent on the quality of people forming the networks' nodes. De Koning and Muzyka (1999) claim that a strong network typically consists of solid relational ties with people within an inner circle. These include people you have known for years and are confident that you can trust. They are also the ones who can provide information and resources to facilitate access to financial markets and production. However, the problem is that some of these 'closeness' factors cannot be measured objectively. These are:-

### (i) Familiarity

Christoforou (2017) argued that Social Capital is crucial in creating identities and shared values among network members regarding governing structures and decision-making mechanisms and protocols. Kim and Aldrich (2005) claim that individuals' networks often lack diversity as it is expected that individuals like to socialise with those of similar backgrounds and interests. Everybody is in contact with other people in either social settings such as family and friends reunions or work settings such as team and client meetings. As such, any extended networking from outside these groups will bring valuable homogenous connections based on the familiar grouping of race, religion, age, and gender.

### (ii) Shared knowledge and information

Burt (1992) theory of social structural hole suggests that individuals can gain tremendously by embedding themselves in neighbourhoods or other social structures. This structure is especially evident if the individual can act as a mediator between closely related groups of people and then be able to advance his comparative advantages in transferring or gatekeeping valuable information between them (Burt, 2004). Furthermore, most social structures are dense clusters of secure relational connections between interlinked networks of industry partners, competitors, colleagues, acquaintances, close friends and relatives. These can also provide access to market, financial or human resources. Ha and Nguyen (2020) research confirmed that the more the network members trust each other and share

common goals, mission, vision, the higher the chance they become involved in knowledge and information sharing.

(iii) Shared cognition

The common identities and shared values among network members, as presented by Christoforou (2017), govern the relationships and decision-making mechanisms and protocols within the group. This attribute diminishes any relational misunderstandings and disputes among members of the networks while enhancing their group level of cognitive embracements. Shared cognition refers to integrating diverse knowledge structures in a group used to assess, evaluate, and reach a consensus on the firm's future goals and strategies (Ensley & Pearson, 2005). In this respect, shared cognition represents a collective thought process (Vlacic et al., 2020). It involves ongoing deliberation among team members on how to solve problems creatively by experimenting with different ideas, seeking support from each other, and reflecting on different solutions. Thus, shared cognition results from high-quality relationships among network members and frequent interactions and information exchanges (Leana & Pill, 2006). In other words, it serves as a bonding mechanism that enables organisational members to integrate each other's ideas and knowledge and to create a collective output (Foss & Lorenzen, 2009).

(iv) Trust and confidence

The close interactions between network members often engender mutual trust and respect for each other's abilities and promote greater social cohesion (Zheng, 2010). This claim supports Gulati et al. (2000)'s argument that strong ties are presumed to be characterised by trust while reducing opportunistic behaviour and encouraging organisational members to share novel ideas and insights. It also promotes the collective sharing of learning to accumulate overall knowledge (Sirmon et al., 2007). Thus, this aims to foster an environment of collaboration and knowledge exchange, resulting in a ready pool of tacit knowledge stock to mobilise the late-career PMET to sense and seize new opportunities (Tecce, 2014; Helfat & Martin 2015; Fainshmidt & Frazier, 2016).

(v) Accrued resource value

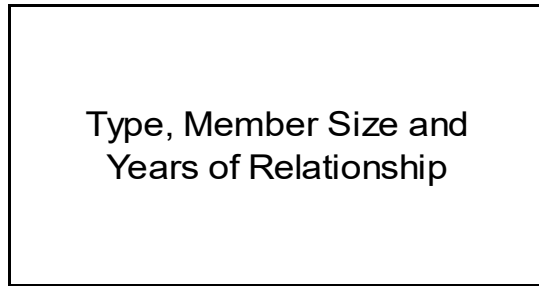
Yao, Wen and Ren (2009) claim that unique network resources are the underlying reason that most Entrepreneurship activities can stand to gain monetary and non-monetary from enterprise clusters. We do not measure the amount of support that the PMET expects to receive from their networks. For example, past research conducted by Aldrich et al. (1989) examined how Entrepreneurs mobilised their strong and weak ties (families, friends and close personal and business acquaintances) to discuss their impending new venture. Other researchers such as Bruderl and Preisdorfer (1998) claim that nascent Entrepreneurs may receive financial, active help or emotional support. Batjargal (2003) integrates all these accesses to finance, markets, production and information resource consideration into a new accrued resource value dimension.

2.8.3 Social network factors used in this research

Our research categorised the PMET's Social Capital's inherent strength as the combination of the structural Network type and member size to denote the relational diversity and density. The Years of Ties' measure is then to find out the relational depth of his network, which expects to increase mutual trust, confidence, and other intangible benefits that significantly influence the perceived strength of Social Capital between partners. However, accurately measuring the intangible aspects of network strength would involve an in-depth qualitative research methodology. Furthermore, it would not be easy to measure the accrued resources value dimension of the PMETs as they have yet to start their new businesses. Figure 14 below shows the factors for measuring social network strength that can influence the perceived readiness for entrepreneurial opportunities.

Based on the assumption that network member size and years of relational ties will create most intangible network strength factors like familiarity, shared cognition, shared knowledge and information, trust and confidence. This understanding gives us the confidence to proceed with our measurements of Network type, member size, and years of relationship.

## **Possessing Strength of Social & Business Network**

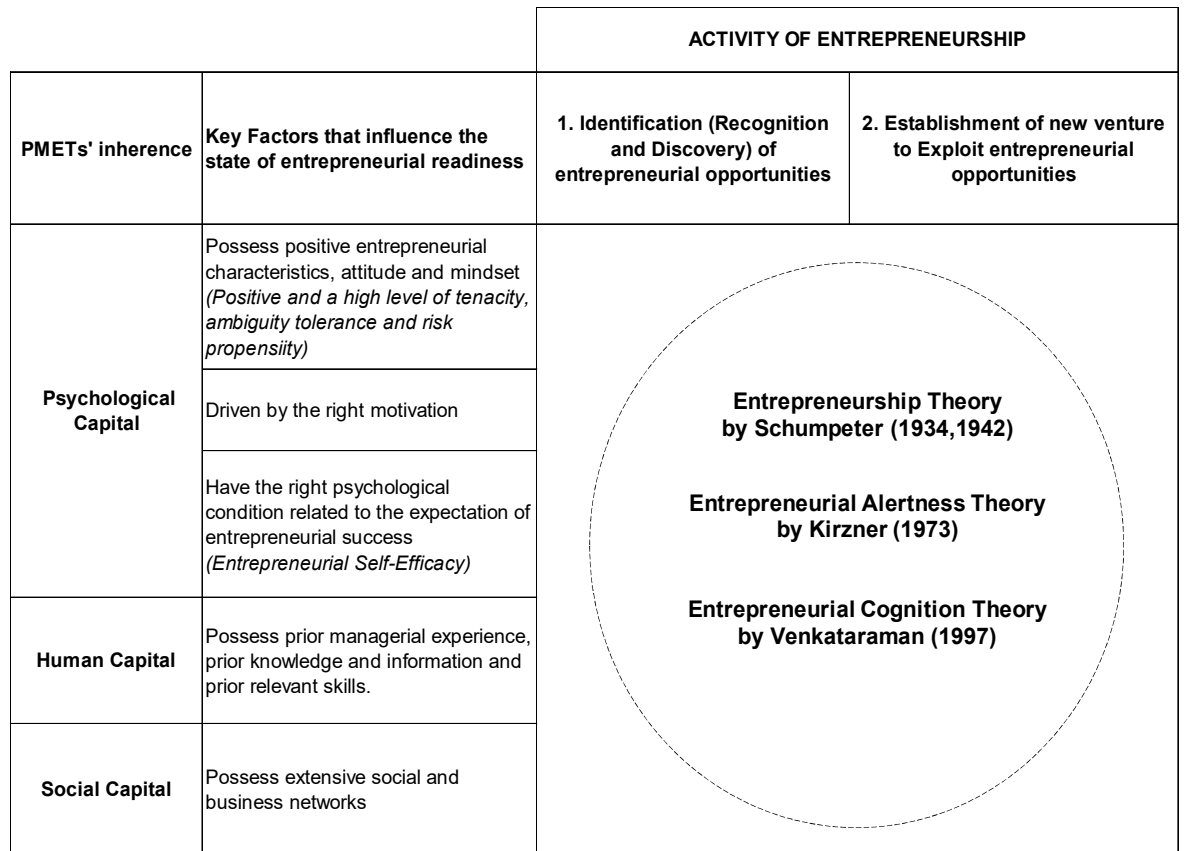


***FIGURE 14: Components of Social and Business Networks  
(Source: Researcher's own work)***



## 2.9 RESEARCH UNDERPINNING THEORIES

From Figure 15 shown below, the main underpinning theories discussed are the Entrepreneurship theory by Schumpeter (1934, 1942), opportunity alertness theory by Kirzner (1973) and opportunity cognition theory by Venkataraman (1997). The selected authors' ideas run through this study's main threads because their concepts have a pertinent influence on the Entrepreneur's state of readiness towards identifying and exploiting entrepreneurial opportunities.



**FIGURE 15: Proposed theoretical framework to support the research**  
(Source: Researcher's own work)

Schumpeter (1934) insisted that the Entrepreneur should be creative and innovative enough to contribute to the purposeful destruction of established market structures. To achieve profit, Schumpeter further that the Entrepreneur needs to turn scarce resources into more efficient new products and services either through innovations or breakthroughs in business processes. In his view, instead of waiting for the opportune moment to arrive, the Entrepreneur should instead create the circumstance through the use of inventions to disrupt market equilibrium so that new

business opportunities can surface. Hence, the Entrepreneur's key role is to disrupt existing market balances to earn economic profits by introducing new success elements. However, according to the author, not everyone is cut to perform this function.

Kirzner (1973) is one of the first few scholars to claim that business opportunities should go to those capable of recognising market gaps and inefficiencies, depicting the Entrepreneur as more alert to taking notice of profit opportunities before others. Ultimately, the person who first notices the opportunity can introduce new and better quality products, access to new markets or supplies, or new production methods. In essence, Kirzner's theory is really about advocating that those individuals with unique kinds of quality inferences can possess and practice a high level of alertness within their operating environment (Kirzner, 2009).

Given the attention to disequilibria, the Entrepreneur must then have the state of readiness to perform the entrepreneurial act despite the level of uncertainty, coupled with the characteristics of alert to disequilibria. Venkataraman (1997) advocated that an individual must possess critical information-processing skills to take advantage of a newly discovered/recognised business opportunity. However, he argues that only certain people who are better at seeing patterns and relationships in the information received possess such entrepreneurial cognition to integrate them into their existing viewpoint and outlook.

The above discussion of Schumpeter (1934)'s market disequilibria, Kirzner (1973)'s entrepreneurial alertness and Venkataraman (1997)'s entrepreneurial cognition theories help to promote a better understanding of the Entrepreneur's state of mind. The Entrepreneur's alertness and cognitive styles will influence how he organises and interprets information, approaches, frames and resolves business problems, and projects other entrepreneurial behaviours. More importantly, an individual's characteristics, personal background and lifestyle, and occupational and industrial work experiences will significantly influence his alertness level and cognitive structure. Hence, using this approach, we can arrive at the following research hypotheses listed under section 2.10.

## 2.10 PROPOSED RESEARCH HYPOTHESES

On conducting this research, we will test out the following hypotheses derived for each research questions:

**Research Question 1 (RQ1): Do the inherent Psychological Capital factors of late-career PMETs positively influence their perceived state of readiness towards entrepreneurial opportunities?**

H1a – Late-career PMETs who possess the right Entrepreneurial Characteristics (Positivism and Tenacity) and Attitude (Ambiguity Tolerance and Risk Propensity) are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities.

H1b – Late-career PMETs who possess a high level of Entrepreneurial Motivation are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities.

H1c – Late-career PMETs who possess a high level of Entrepreneurial Self-Efficacy are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities.

**Research Question 2 (RQ2): Do the inherent Human Capital factors of late-career PMETs positively influence their perceived state of readiness towards entrepreneurial opportunities?**

H2a – Late-career PMETs who possess a high level of Prior Managerial Experience are positively associated with higher perceived state of readiness to discover and exploit entrepreneurial opportunities.

H2b – Late-career PMETs who possess a high level of Prior Knowledge and Information are positively associated with higher perceived state of readiness to discover and exploit entrepreneurial opportunities.

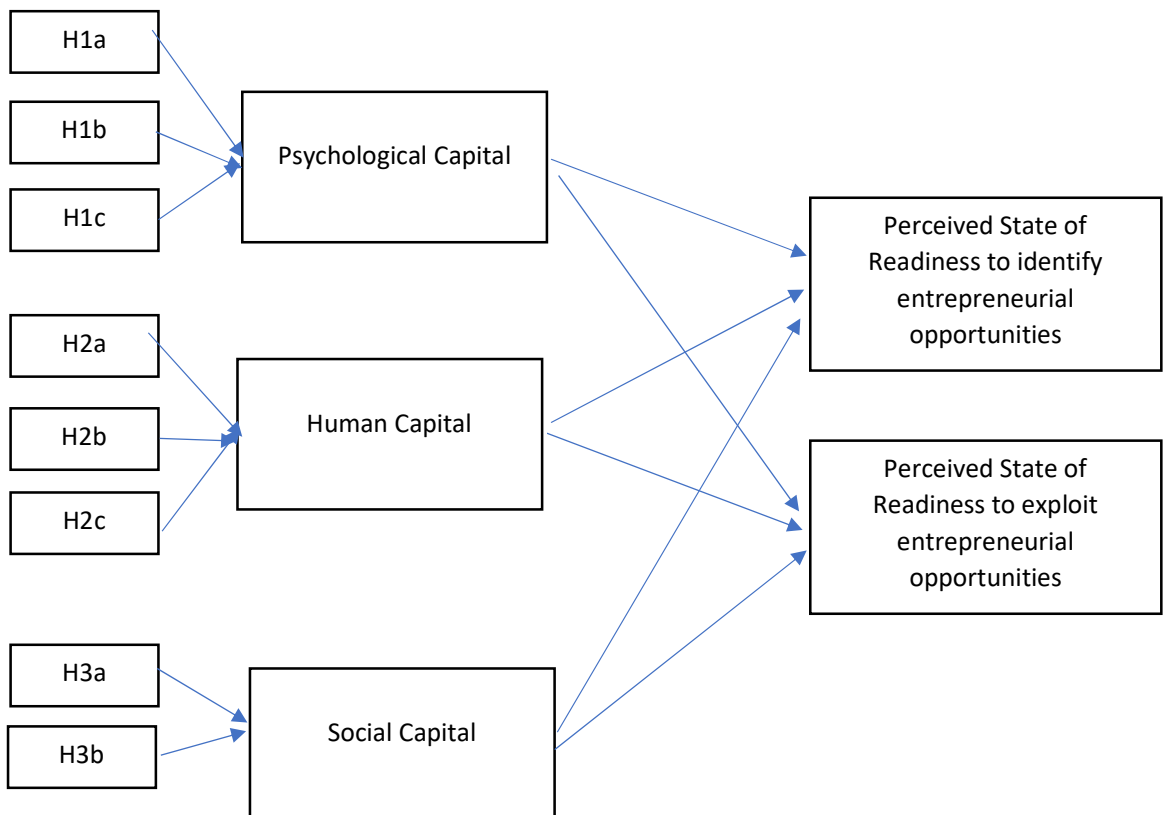
H2c – Late-career PMETs who possess a high level of Prior Relevant Skills are positively associated with higher perceived state of readiness to discover and exploit entrepreneurial opportunities.

**Research Question 3 (RQ3): Do the inherent Social Capital factors of late-career PMETs positively influence their perceived state of readiness towards entrepreneurial opportunities?**

H3a – Late-career PMETs who possess Social Network strength are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities.

H3b – Late-career PMETs who possess Business Network strength are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities.

**2.11 RESEARCH FRAMEWORK**



**FIGURE 16: Proposed research framework**  
(Source: Researcher's own work)

## 2.12 THEMATIC REVIEW OF LITERATURE

Table 2 shows a list of literature that were critically reviewed for this study. They are categorised under specific themes to enable easy referencing.

**TABLE 2: Thematic review of literature (Source: Researcher's own work)**

<b>Topic</b>	<b>Authors/Year of Publication</b>
Definition of Entrepreneurship	Shahneaz, Amin and Eni (2020); OECD (2015); Shane (2003) Davidson and Honig (2003); Shane and Venkataraman (2000); Venkataraman (1997); Kirzner (1973, 1979, 1985, 1999, 2009); Schumpeter (1934,1942);
Senior Entrepreneurship	GEM (2020, 2017); Camba (2020); Claudio and Pablo (2020); Hessels (2019); Kautonen, Kibler and Minniti (2017); OECD (2012); Curran and Blackburn (2001); Kautonen, Down and Minniti (2014); Kautonen, Down and South (2008); Hart, Anyadike-Danes and Blackburn (2004)
Entrepreneurial Readiness (Alertness & Cognition)	Santoso et al. (2021); Vlacic, Gonzalez-Loureiro and Eduardsen (2020); Chavoushi et al. (2020); Sharma (2019); Lewin (2013); Baron and Ensley (2006); Ardichvili et al. (2006); Gaglio and Katz (2001); Shane (2000); Rider and Rayner (1998); Venkataraman (1997); Kaish and Gilad (1991); Kirzner (1973, 1999, 2009);
Entrepreneurial Opportunities Identification	Diandra and Amy (2020); Bartelheim (2020); Baron and Ensley (2006); Shane (2003); Ardichvili et al. (2003); Sarasvathy et al. (2003); Davidsson and Honig (2003); Shane and Venkataraman (2000); Venkataraman (1997); Galio (1997); Kirzner (1979).
Entrepreneurial Opportunities Exploitation	Daniel et al. (2021); Santoso et al. (2021); Chavoushi et al. (2020); Teece (2016, 2007); Kor and Mesko (2012); Tang et al. (2012); Gavetti (2005); Ander and Helfast (2003); Venkataraman (1997); Walsh (1995); Hambrick and Mason (1984); Kirzner (1979);
Psychological Capital - Entrepreneurial characteristics of Positivism	Banicki (2017); Astebro et al. (2014); Chell (2008); Kuratko and Hodgetts (2007); Timmons and Spinelli (2007); Baron (2004)
Psychological Capital - Entrepreneurial characteristics of Tenacity	Portuguez and Gomez (2021); GEDI (2019); Lucas and Spencer (2018); Denoel et al. (2017); Dweck et al. (2014); Timmons (1999).
Psychological Capital - Entrepreneurial Attitude of Ambiguity Tolerance	Portuguez and Gomez (2021); Arend (2020); Peschl et al. (2020); Pereira (2007); Mitton (1989); Sexton and Bowman (1985).
Psychological Capital - Entrepreneurial Attitude of Risk Propensity	Saiz-Alvarez, Coduras and Roomi (2020); Muhajid, Mubarik and Naghavi (2020); GEDI (2019); Astebro et al. (2014); Pereira (2007); Stewart and Roth (2001); Stewart et al. (1998); Sexton and Bowman (1985); Mill (1984); Brockhaus (1980).

**TABLE 2 (Con'd): Thematic review of literature (Source: Researcher's own work)**

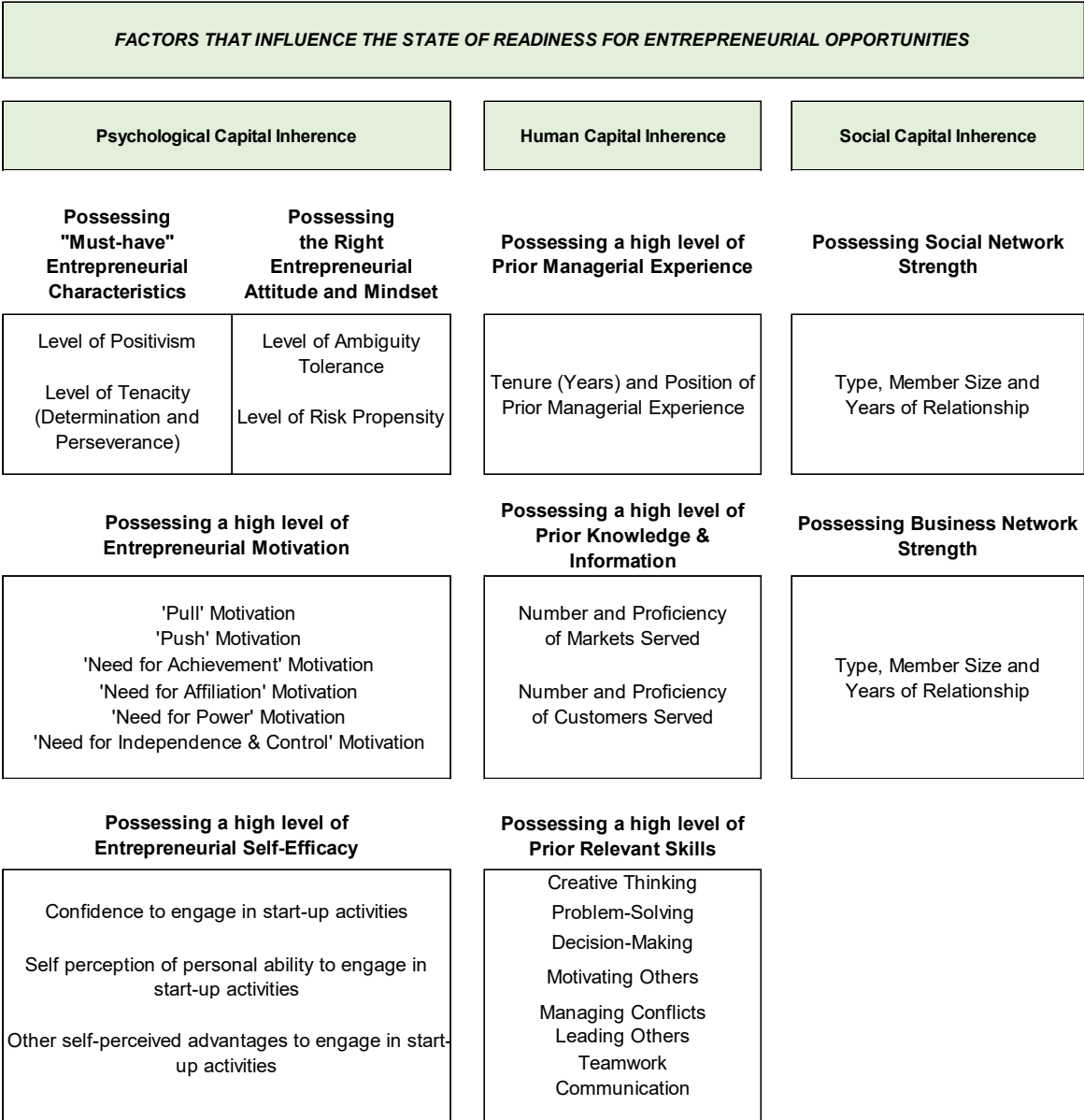
<b>Topic</b>	<b>Authors/Year of Publication</b>
Psychological Capital - Entrepreneurial Motivation	Godany et al. (2021); GEM (2020/2021); Murnieks, Klotz and Shepherd (2020); Parveen et al. (2020); Soto-Simeone and Kautonen (2020); Ramesh (2020); Shwetzter et al. (2019); Jinjian et al. (2019); CERIC (2018); Kautonen et al. (2017); Cueto et al. (2015); Wood et al. (2013); Hayne and Shepherd (2011); DeNoble and Singh (2003); Shane and Venkataraman (2000); Turner (1995); McClelland (1985, 1961)
Psychological Capital - Entrepreneurial Self-Efficacy	Chien-Chi et al. (2020); Lingappa et al. (2020); Neneh (2020); Burnetter at al. (2020); Urban (2020); Barbaranelli et al. (2019); Newman et al. (2019); Sachin et al. (2019); Cooper et al. (2016); Austin and Nauta (2016); Chell (2008); Copper and Lucas (2006); Delmar (2006); Hayward et al. (2006); Bandura (1997)
Human Capital - Prior Managerial Experience	Baciu, Virga and Lazar (2020); LeBlanc (2017), Schoar and Zuo (2017); Mattias et al. (2015); Helfat and Martin (2015); Teece (2014); Higgins (2005); Ardichivili et al. (2003); Miller (2003); Kor (2003); Helfat and Liberman (2002); Castanias and Helfat (2001); Tripsas and Gavetti (2000)
Human Capital - Prior Knowledge and Information	Caputo et al. (2020); Purwanto et al. (2017); Fainshmidt and Frazier (2016); Teece (2016); Fainshmidt and Frazier (2016); Abou-Moghli and AL-Kasasbeh (2012); Clydesdale (2010); Holste and Fields (2010); Yu (2009); Corbett (2007); Horvath (2007); Choi and Lee (2003); Kim (2002); Beijerse (2000)
Human Capital - Prior relevant skills	EU Skill Panorama (2014, 2016); Portuguez et al. (2020); OECD (2015); Sousa and Almeida (2014); Robinson et al. (2012); Mitchelmore and Rowley (2010); Simon et al. (2007); Davidsson (2006); Whetton and Cameron (2005); Lumdstrom and Stevenson (2005); Lazear (2004); Kor (2003); Rainsbury et al. (2002); Sheperd et al. (2000)
Social Capital - Tangible factors that influence network strength	Matinez (2020); Ha and Nguyen (2020); GEDI (2019); Helfat and Martin (2015). Santarelli and Tran (2012); Fomoni et al. (2011); Prashanthan and Shanaraj (2010); Kor and Sundaramurthy (2009); Eden et al. (2008); Acquaah (2007); Leana and Pill (2006); Davidsoon and Honig (2003), Adler and Kwon (2002); Hitt and Ireland (2002); Hite and Hesterly (2001); Peng and Lou (2000); Singh et al. (1999); Uzzi (1999); Bruderl and Preisendorfer (1998); Granovtter (1973, 1974, 1985, 1991)
Social Capital - Intangible factors that influence network strength	Ha and Nguyen (2020); Christoforou (2017); Fainshmidt and Frazier (2016); Helfat and Martin (2015); Teece (2014); Zheng (2010); Yao, Wen and Ren (2009); Foss and Lorenzen (2009); Sirmon et al. (2007); Leana and Pill (2006); Ensley and Pearson (2005); Moran (2005); Kim and Aldrich (2005); Batjargal (2003); Autio and Tontti (2001); Gulati et al. (2000); DeKoning and Muzyka (1999); Bruderl and Preisendorfer (1998); Walsh (1995); Burt (1992, 2004); Aldrich et al. (1989)

## **2.13 CHAPTER SUMMARY ON LITERATURE REVIEW**

This literature review aims to offer a detailed perspective of the breakdown of inherent factors that can influence the state of readiness towards entrepreneurial opportunity identification and exploitation. It includes past studies by researchers, performed rigorously and scientifically, covering most of the Psychological Capital aspect of Characteristics, attitudes and mindset; Human Capital aspects of prior managerial experience, knowledge and information and relevant skills; and Social Capitals aspects of social and business networks.

One key challenge faced in this study is capturing and consolidating diverse themes and relevant perceptions, all of which have a direct but varying level of impacting the late-career PMETs' alertness and cognition towards entrepreneurial opportunities. Simultaneously, the research exercises extreme caution to ensure that the literature review does not go beyond an over-reaching scope that will stretch the study into an impracticable project.

Figure 17 shows an overview of the domain knowledge covered in this study. Under the specific heading of Psychological, Human, and Social Capital are the influencing factors that will inevitably affect the individual's alertness and cognitive readiness towards entrepreneurial opportunities. Each influencing factor will be considered an independent variable for measurement in this research study.



**FIGURE 17: Overview of domain knowledge covered in this research**  
 (Source: Researcher's own work)



### **3 CHAPTER THREE – RESEARCH METHODOLOGY**

Most of the research on Entrepreneurship in the past followed the qualitative approach. According to Bruderl and Preisendorfer (1998), the qualitative methodology uses a relatively small sample size and risks not capturing essential variables which otherwise could be collected under appropriate statistical procedures. Arguably, a direct and systematic data collection method is considered a better scientific research design with the advantage of a much larger sample that allows more elaborate statistical techniques of data analysis (Marczyk, DeMatteo & Festinger, 2005). As such, this study on the inherent factors influencing late-career PMETs' readiness towards entrepreneurial opportunities will use the empirical evidence-based approach. It will be based on direct data collection to reach a conclusion that can help shed a new understanding of the subject. This study employs a non-probability sampling method, involving 384 conveniently selected late-career Singapore-resident PMETs who run business units either as paid managers in companies or are small business owners.

The reason for adopting the purposive sampling method is its quick, convenience and cost-effectiveness to facilitate data collection from the 384 senior PMETs. Of these, 192 are online members from the Entrepreneurship for Senior (EFS) and the Singapore Entrepreneurs Network (SEN) meetup groups. Another 192 white-collar senior PMETs work in the Singapore Central Business District (CBD) and other industrial areas.

Semi-structured questionnaires in digital format were administered to the Respondents to determine whether there are any relationships between their self-perceived psychological, human and Social Capital inferences and their state of entrepreneurial readiness towards opportunities. Answers collected from the Respondents will justify three already identified hypotheses. The survey questionnaire adapts from past literature publications, from which questions were designed based on a variety of questioning techniques including, Yes/No, open-ended, 5-point rating and 7-point Likert scales questions.

The information obtained is then analysed using the statistical software package SPSS version 23.0 for Windows 10 Operating System. The next step is the application of univariable and bivariable analytical techniques. The processed

information is then presented as statistical frequencies, percentages, means, modes and medium. Cross-tabulations, Pearson Correlations and Linear Regression tests are the different techniques used to analyse the data obtained from the questionnaires. It uses Factor and Cronbach's Alpha analyses to test the questionnaire items' validity and reliability to ensure appropriate use. All research variables were then cross-checked with the entrepreneurial readiness rating to confirm the validity of identified hypotheses and provide answers to the research questions. All answers provided by the findings can also help satisfy the identified hypotheses and research objectives and predict likely future trends regarding senior Entrepreneurship, particularly late-career PMET Entrepreneurship.

### **3.1 RESEARCH DESIGN**

This research design is based on the adaptation of past similar studies conducted on entrepreneurial readiness. The referenced literature are from Maritz, Zolin, De-Waal, Fisher, Perenyi and Eager (2015), Ruiz et al. (2016), Al-Lamki, Al-Sumri, Al-Ismaili and Ali Al-Busaidi (2016) and Samsudin, Jalil, Yahaya, Wahid and Jizat (2016). These studies took place in Australia, Spain, Oman and Malaysia. Adaptation of such analyses can serve as a guideline for this Singapore study and deliver a higher assurance of validity and reliability for the questionnaire and the theoretical framework.

This study's causal (explanatory) research design relies on a generalised plan to answer relevant questions related to the subject under investigation conceived to obtain answers to this research study (Saunders, Lewis & Thornhill, 2009). As such, the remainder of this chapter will highlight all the justifications for the preplanned sampling method, data collection method and the structuring of questionnaire design. The research aims to determine the extent and nature of every association between the IVs and the DVs.

### **3.2 PURPOSE OF THE RESEARCH**

Today, there is limited published literature on the inherent factors that influence late-career PMETs' entrepreneurial readiness towards opportunities, especially in the context of Singapore. It is still relatively unknown how many aspects of socioeconomic or personal attributes and the extent to which they can affect an individual in his mental alertness and cognition for opportunity identification and exploitation. Hence, our study's objective is to explore the Respondents' self-perception of their inherent psychological, human and Social Capital factors to determine potential correlations to their overall state of entrepreneurial readiness level. Complex quantified data collected can then provide answers to the research questions.

### **3.3 TYPE OF INVESTIGATION**

This research follows the guidance of Sekaran and Bougie (2009) and Waters (2011) studies in establishing a correlation analysis that will delineate crucial variables associated with the problem. Therefore it takes the form of a holistic and balanced approach (Miner & Raju, 2004) set out to explore & investigate the extent to which each respective independent variable can influence the state of readiness for entrepreneurial opportunities of late-career PMETs. In total, eight main Independent Variables (IVs) are identified. These are then further broken down into twenty subsidiaries IVs separately under the inherent Psychological Capital, inherent Human Capital and inherent Social Capital.

There are two Dependent Variables; one to measure the PMET's perceived state of readiness to identify opportunities (DV1) and another to measure their perceived state of readiness to exploit (DV2) opportunities. We will test the correlations between IVs and DV1 and DV2 to explain their respective relationships. We will also capture each IV's relevancy and extent of impact (influence) on the respective DV.

### 3.3.1 Independent and dependent research variables

This research aims to determine the inherent factors of late-career PMETs that can influence their perceived readiness for entrepreneurial opportunities. From Figure 18 on page 102, the dependent variables are each Respondent's state of entrepreneurial readiness to identify and exploit entrepreneurial opportunities (DV1 and DV2, respectively). These dependent variables are the measures of the effect (if any) of the specific independent variables, which are inherent factors categorised under psychological, human and Social Capitals (Marczyk et al., 2005).

### 3.3.2 PMET's Inherent Psychological Capital

IV1 = PMET's Entrepreneurial characteristics and attitude

IV1-1 Positivism level

IV1-2 Tenacity level

IV1-3 Ambiguity tolerance level

IV1-4 Risk propensity level

IV2 = PMET's Entrepreneurial Motivation

IV2-1 Motivational Level

IV2-2 Source of Motivation

IV3 = PMET's Entrepreneurial Self-Efficacy

IV3-1 Perceived ease in starting own business

IV3-2 Confidence in engaging start-up activities

IV3-3 Other personal advantages when engaging in start-up activities.

### 3.3.3 PMET's Inherent Human Capital

IV4 = PMET's prior managerial experience

IV4-1 Years of prior managerial experience

IV4-2 Position of prior managerial experience

IV5 = PMET's prior knowledge and information

IV5-1 Number of markets previously served

IV5-2 Number of customers previously served

IV5-3 Proficiency level of markets and customers previously served

IV6 = PMET's prior relevant skills

IV6-1 Type and proficiency of skillsets

IV6-2 Certification of skillset proficiency

### 3.3.4 PMET's Inherent Social Capital

IV7 = PMET's social network strength

IV7-1 Type and member size of social network

IV7-2 Years of the relationship within the social network

IV8 = PMET's business network strength

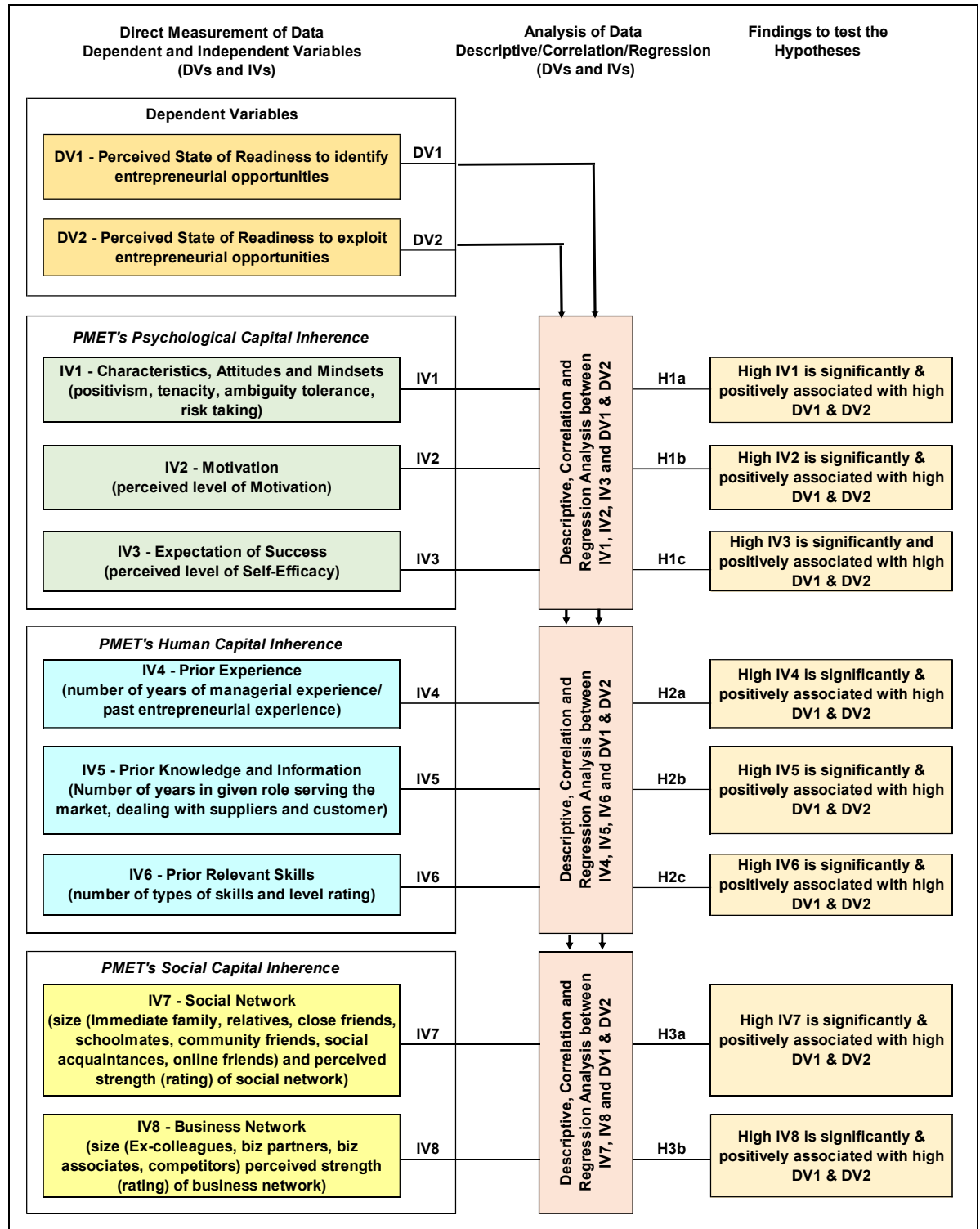
IV8-1 Type and member size of business network

IV8-2 Years of the relationship within the business network

### 3.3.5 Inter-relationships between IVs and DVs

Figure 18 shows a construct of the direct measurements of IVs for comparison with DVs. It is expected that some IVs may be significantly and positively associated with the DVs to prove the Hypotheses correct, while others may be proven to contradict the Hypotheses outlined.

### 3.3.6 Overview of research variables



**FIGURE 18: Overview of research variables**

(Source: Researcher's own work)

### **3.4 RESEARCH PHILOSOPHY AND PARADIGM**

#### **3.4.1 Research philosophy**

The Entrepreneur's state of readiness is a perception that can be measured. The research philosophy of positivism is adopted to investigate the phenomena. This Positivism philosophy takes a fully quantitative research methodology (Hair, Black, Babin & Anderson, 2019; Johnson, Onwuegbuzie & Turner, 2011) to explore the impacts and relationships between the influencing independent factors on the late-career PMETs' state of entrepreneurial readiness to identify and exploit entrepreneurial opportunities (otherwise known as the dependent variables). Positivism and deductive validation approaches support the view that a higher state of entrepreneurial readiness will boost opportunity identification and exploitation. It can also develop a richer theoretical understanding for integration into a readiness-screening conceptual framework for late-career PMET Entrepreneurship transitioning.

#### **3.4.2 Research paradigm**

One major challenge encountered in this study is to capture a complete understanding of the diverse influences on overall entrepreneurial readiness and yet ensure that the project's scale is manageable. To consider every single aspect and factor may risk the project having an over-reaching scope that may generate findings that lack depth and insights. Applying a philosophy of pragmatism in which the quantitative investigation approach is designed to place focus mainly on the late-career PMETs' inherent Psychological, Human, and Social Capitals that denote personal, managerial, and business attributes to successful Entrepreneurship.

This study involves a two-stage research design described in the proposed research process framework in Section 3.6. It mainly covers a pilot study and primary sequential research (Creswell & Clark, 2007). The method of the whole investigation is to collect data for hypothesis testing using quantitative measurements. The technique is selected to deliver a more holistic interpretation of the subject topic.

### **3.5 UNIT OF ANALYSIS**

This study targets the population of late-career PMETs in Singapore who are at least 50 years old and above, using a sample size of 384 Respondents. All identified variables are measured according to the following unit of analysis.

#### **3.5.1 Instrument for measuring the independent variables**

The eight independent variables (IV1 to IV8) were measured by twenty-five questions set in a variety of questioning techniques such as Yes/No, rating, multiple-choice, open-ended and Likert scales. We choose to use each of these instruments based on their credits and relevancies to the questions asked. For example, the main reason for selecting the seven-point Likert scale is its accuracy and reliability (Sekaran & Bougie, 2009). These scales are coded based on 1, 2, 3, 4, 5, 6, 7, which correspond to the degree of 'strong disagreement' to 'strong agreement'.

#### **3.5.2 Hypothetico-deductive questionnaire design**

The hypothetico-deductive methodology involves a structured and predetermined formal design (Saunders, Lewis & Thornhill, 2009). The survey employs a self-administered questionnaire that consists of a mix of questioning techniques. The item structure aims to test pre-formulated hypotheses for already-defined variables adopted from the extensive literature review (Dana & Dana, 2005). It is cost-effective and efficient to obtain quantitative data from a relatively large sample size for statistical analysis. In our case, semi-structured questionnaires were used to collect information underlying the impact of an individual's perceived characteristics, attitude and mindset, Motivation and Self-Efficacy, personal perceived level of managerial experience, tacit knowledge and skills, and personal perceived level of social and business networks. The questionnaire is designed in such a way to measure and quantify the individual Respondent's perceptions. Further probings were carried out with open-ended follow-up questions, including asking for more explanations with 'why' questions. Findings from those returned questionnaires can then be tabulated and analysed to test out the eight hypotheses identified.



### **3.6 PROPOSED RESEARCH PROCESS FRAMEWORK**

This research comprises a 2-stage descriptive design involving a pilot study and sequential research (Creswell & Clark, 2007) set up to collect data for hypotheses testing using quantitative measurements. The selection of such a technique aims to deliver a more holistic interpretation of the subject topic.

#### **3.6.1 Stage-1 - Pilot Study**

The proposed pilot study is small-scale preliminary research to appreciate the existing phenomena to frame better the parameters of the research construct, i.e. theme and scope (Kim, 2010). It aims to reaffirm that the main study is relevant and appropriate, ensuring that the process is feasible with no issues or constraints on the proposed data collection resources (Saunders et al., 2009). This action stage can quickly remedy identified lapses in both the tools and procedures. Doing so can save precious time and resources, with the whole research design being strengthened (Malhotra & Birks, 2007). Another reason for the pilot study is to subject the questionnaire to a stability and consistency test to produce the same data regardless of the Respondents' testing condition and state (Fink, 2003).

#### **3.6.2 Stage-2 - Quantitative Deductive Survey**

According to Saunders et al. (2009), the quantitative deductive survey process involves further testing underpinning theories with supporting quantitative data to confirm or reject the identified hypotheses. In this Stage-2 of our research which is the actual research execution phase, we employ the process of deductive reasoning to test out selected existing theories on entrepreneurial opportunity theories. Empirical evidence collected from the Respondents in this survey can then confirm whether they satisfied a derived set of predictive hypotheses.

### **3.7 TARGET POPULATION AND SAMPLING DESIGN**

The targeted population for this research is late-career PMETs over 50 years old. The study employs a non-probability sampling method involving 384 conveniently selected Singapore-resident PMETs business owners or corporate managers running a business unit to volunteer for the survey. This purposeful sampling technique was selected because of its convenience and the belief that it could facilitate more excellent responses during the data collection stage.

In total, we managed to collect 192 responses from the online members of both the Entrepreneurship for Senior (EFS) and the Singapore Entrepreneurs Network (SEN) meetup groups, while another 192 responses from those white-collar late-career PMETs working in the Singapore Central Business District (CBD).

This sampling design aims to get a generalised sample of the late-career PMET individuals representing Singapore's total late-career PMET population. As it is impossible to study the entire community of interest, we must ensure that those selected represent the actual people understudied (Marczyk et al., 2005). For our case, it was the random pick of 384 PMETs who have conveniently made themselves available to participate in our survey. This convenient sampling method is widely known as the best, if not the most accessible, timely, and inexpensive way to quickly and efficiently collect data (Sekaran & Bougie, 2009).

Using two different outlets to find the respective online and offline participants, we can confidently reduce participants' motives, attitudes, and behavioural effects, hence, cutting down on the risk of potential bias in collected responses to our survey (Kruglanski, 1975).

### 3.7.1 Sample Size

There were approximately about 1.3 million resident PMETs in Singapore at the end of 2018 (MOM, Jan 2019). Late-career PMETs are estimated to make up about 10% or 130,000 of this local workforce. Hence, this research study's sample size is determined and recommended by Raosoft's sample size calculator to be 384 people, at a 5% margin of error acceptance and a confidence level of 95%.

**Sample size calculator**

What margin of error can you accept?  %  
5% is a common choice

What confidence level do you need?  %  
Typical choices are 90%, 95%, or 99%

What is the population size?   
If you don't know, use 20000

What is the response distribution?  %  
Leave this as 50%

---

Your recommended sample size is **384**

The margin of error is the amount of error that you can tolerate. If 90% of respondents answer *yes*, while 10% answer *no*, you may be able to tolerate a larger amount of error than if the respondents are split 50-50 or 45-55.  
 Lower margin of error requires a larger sample size.

The confidence level is the amount of uncertainty you can tolerate. Suppose that you have 20 yes-no questions in your survey. With a confidence level of 95%, you would expect that for one of the questions (1 in 20), the percentage of people who answer *yes* would be more than the margin of error away from the true answer. The true answer is the percentage you would get if you exhaustively interviewed everyone.  
 Higher confidence level requires a larger sample size.

How many people are there to choose your random sample from? The sample size doesn't change much for populations larger than 20,000.

For each question, what do you expect the results will be? If the sample is skewed highly one way or the other, the population probably is, too. If you don't know, use 50%, which gives the largest sample size. See below under **More information** if this is confusing.

This is the minimum recommended size of your survey. If you create a sample of this many people and get responses from everyone, you're more likely to get a correct answer than you would from a large sample where only a small percentage of the sample responds to your survey.

**FIGURE 19: Sample size calculator**

This sample size is further confirmed by using the calculation formula:

$$n = \frac{\pi(1 - \pi)Z^2}{D^2}$$

Where:

$n$  = Sample size

$\pi$  = Population proportion (50% of population is investigated)

$z$  = Z value (level of confidence expressed in standard errors) (standard value of 1.96)

$D$  = Level of precision (standard value of 0.05)

By applying the above formula, the calculation is shown as:

$$n = \frac{\pi(1 - \pi)Z^2}{D^2} = \frac{0.5(1 - 0.5)(1.96)^2}{(0.05)^2} = 384.16$$

For quantitative research methodology, this sample size of 384 is sufficient to clarify the issues affecting late-career PMET entrepreneurial readiness perception with acceptable confidence with an error margin between the range suggested by Sekaran and Bougie (2009).

### 3.7.2 Non-probability Convenience sampling used

With Convenient sampling, survey participants are easily accessible (Marczyk et al., 2005), which help us gain valuable, albeit limited, information on the factors influencing PMETs' entrepreneurial readiness. Other reasons for choosing this method are its time and cost-effectiveness. However, because of the non-parametric characteristics of this non-probability sample size, there is a need to run correlation and regression tests (Hair et al., 2019) to diminish the effect of potential selection bias.

TABLE 3: Sampling Design (Source: Researcher's own work)

<b>Population</b>	Male or Female Singapore residents > 50 years old, who are PMETs responsible for a business unit in companies; or Business Qwners who were previously PMETs.	
<b>Sampling Frame</b>	<b>Sampling Frame 1</b>	<b>Sampling Frame 2</b>
	<b>Offline Survey</b> - reaching out to late-career PMETs working in the CDB and various industrial areas of Singapore. Survey data are digitally captured using the Survey Monkey platform.	<b>Online Survey</b> - reaching out to late-career PMET business owners who are registered members of The Entrepreneurship for Senior (EFS) and the Singapore Entrepreneurs Network (SEN) meetup groups (combined membership of 23,120 as of Jun 2020). Survey data are digitally captured using the Survey Monkey platform.
<b>Sampling Size</b>	First 384 respondents captured with fully completed questionnaires	
	192	192
<b>Confidence Level</b>	95%	
<b>Sampling Error</b>	5%	
<b>Sampling Method</b>	Purposeful non-probability convenience sampling.	
<b>Survey Method</b>	Self-administered questionnaire (offline and online) survey based on Quantitative and Hypothese testings methodology	

### **3.8 COLLECTION OF DATA**

The data collection process ultimately produces findings to validate the hypotheses and proves the influence of the stated inferences on the PMETs perceived state of entrepreneurial readiness towards opportunities. As part of the study, we would also want to determine whether these factors of characteristics, attitude and mindset, experience and skillsets, and network connections exist as necessary attributes of the late-career PMETs moving into Entrepreneurship. The study is based on quantitative primary data collection while using secondary data such as official reports, journals, magazines and websites to back it up.

According to Burns (2000) and Bell (2005), the value of reviewing secondary data will help improve the understanding of the problem's contextual background and provide a basis for comparison with future primary data collection in this study.

#### **3.8.1 Sources of secondary data**

As shown in Table 4, this study starts with detailed desk research on official statistical data available on government websites. These include commissioned reports on research into senior entrepreneurial start-ups in Singapore between 2015 and 2018. We also used the Singapore Department of Statistics (DOS) data to process population and other demographic information for studies. Specific information and data on PMETs employment come directly from governmental and non-governmental agencies. These include NTUC trade unions, MOM and various Singapore Press Holdings' publications such as The Straits Times and Business Times, and other secondary data sources. At the same time, we also gathered published information on the level of entrepreneurial activities in Singapore via GEM, GEI and ACRA Singapore.

**TABLE 4: Secondary data collection plan (Source: Researcher's own work)**

Data Description	Data Needed	Data Location	Data Analysis
<b>(1) Singapore Demographics</b>	Population Data (2020)	Department of Statistics, Singapore ( <a href="https://www.singstat.gov.sg">https://www.singstat.gov.sg</a> )	To analyse the published population growth rate of Singapore from 2000 to 2020.
	UN Population Prospects (2017) Report	United Nations	To analyse the published population growth rate of Singapore in 2030 and 2050.
	Focus Group Study Report (2019)	LKY School of Public Policy	To analyse the published percentage of seniors in Singapore who lack sufficient retirement savings and cannot meet the basic standard of a living sum of \$1379/month.
	GEM (2021/2012) Report	Global Entrepreneurship Monitor ( <a href="https://www.gemconsortium.org">https://www.gemconsortium.org</a> )	To study the published historical data of entrepreneurship & senior entrepreneurship and analyse their impacts on job creations and the fueling of economic development and growth worldwide.
	OECD (2015) Report	OECD ( <a href="https://www.oecd.org">https://www.oecd.org</a> )	To study the published historical data of entrepreneurship and analyse its impact on job creations and the fueling of economic development and growth worldwide.
<b>(2) Singapore Labour Market Information</b>	Ministry of Manpower, Singapore ( <a href="https://stats.mom.gov.sg">https://stats.mom.gov.sg</a> )	Singapore	To analyse the Singapore employment statistics from 2015 to 2020.
	Straits Times, Today and The Edge Singapore	Singapore	To analyse news reports related to Ageism and PMETs retrenchment. (2019/2018/2015)
<b>(3) Data supporting the success of Senior Entrepreneur</b>	Klimas et al. (2021); Lee et al. (2021); OECD (2020); Bartik et al. (2020); OECD (2015)	Global	To analyse published data on the percentage of new start-ups failures, especially amid the covid-19 pandemic.
	The UK Institute of Directors (2017)	UK	To analyse published data on whether business acumen improves with age.
	Dibeki and Aydin (2020); Azoulay, Jones and Kim (2019)	Australia	To analyse published data on the correlations between entrepreneurial success and founders' age.
	Forbes (2019), Age UK (2016)	US and UK	To analyse published data on the performance of enterprises set up by mature entrepreneurs - 70% of startups established by mature entrepreneurs were still in operation after five years.

### 3.8.2 Sources of primary data

This research employs the quantitative survey method using an in-depth self-administered questionnaire built on Survey Monkey. Link of the digital questionnaire is made available to the targeted sample (PMET Entrepreneurs, age > 50 years), who are currently business owners or managing a company's business unit. The questionnaire will be completed by 192 late-career PMETs

registered as members of the EFS and SEN meetup groups and 192 late-career PMETs working in the CDB and various industrial estates in Singapore.

Based on a review of the literature, a total of 25 items were construed. They aim to determine their perceived state of entrepreneurial readiness (dependent variable) based on the identified independent factors shown in Table 5. As highlighted, each item was assessed by the individual Respondent based on various data measurement techniques. These four dimensions were measured on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

**TABLE 5: Primary data collection plan** (Source: Researcher’s own work)

Data Description	Data Needed	Data Measurement	Data Analysis
<b>(1) Independent Factors of Psychological Capital</b>			
Positivism Level (1 item)	Level of agreement on a statement on self-perceived Positivism level	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on the possession of inherent optimism towards any situation. This affirmation is significant to support the entrepreneur’s optimism in assessing the market environment for opportunities. A low score of (1) indicates total disagreement with the statement.
Tenacity Level (1 item)	Level of agreement on a statement on self-perceived Tenacity level	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on the possession of inherent Tenacity towards challenges and problematic situations. This affirmation means that the entrepreneur does not give up easily. A low score of (1) indicates total disagreement with the statement.
Ambiguity Tolerance Level (1 item)	Level of agreement on a statement on self-perceived Ambiguity Tolerance level	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on the possession of inherent Ambiguity Tolerance towards uncertain situations where there may be a lack of complete information to work on a decision. A low score of (1) indicates total disagreement with the statement.
Risk Propensity Level (1 item)	Level of agreement on a statement on self-perceived Risk Propensity level	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on possessing sufficient inherent Risk Propensity attitude towards assessing the market environment and opportunities. A low score of (1) indicates total disagreement with the statement.

The methodology implemented in this section of the questionnaire aims to measure four latent independent variables like level of Positivism, Tenacity, Ambiguity Tolerance and Risk Propensity of the Psychological Capital inherence:

(1) Level of Positivism

A high score (7) on this scale indicates a firm agreement on the possession of inherent optimism towards any situation. This affirmation is significant to

support the entrepreneur's optimism in assessing the market environment for opportunities. A low score of (1) indicates total disagreement with the statement. This measurement of the Positivism level is adapted from similar research conducted by Ruiz, Soriano and Coduras (2016).

(2) Level of Tenacity

A high score (7) on this scale indicates a firm agreement on the possession of inherent Tenacity towards challenges and problematic situations. This affirmation means that the entrepreneur does not give up easily. A low score of (1) indicates total disagreement with the statement. This measure of Tenacity level is adapted from Maritz et al. (2015).

(3) Level of Ambiguity Tolerance

A high score (7) on this scale indicates a firm agreement on the possession of inherent Ambiguity Tolerance towards uncertain situations where there may be a lack of complete information to work on a decision. A low score of (1) indicates total disagreement with the statement. This measurement of Ambiguity Tolerance level is adapted from various authors, including Portuguez and Gomez (2021); Arend (2020); Peschl, Deng and Larson (2021); Ruiz et al. (2016); Mitton (1989); Sexton and Bowman (1985) and McClelland (1961).

(4) Level of Risk Propensity

A high score (7) on this scale indicates a firm agreement on possessing sufficient inherent Risk Propensity attitude towards assessing the market environment and opportunities. A low score of (1) indicates total disagreement with the statement. This measurement of Risk Propensity level is adapted from Caliendo, Fossen and Kritikos (2009).



**TABLE 5(a): Primary data collection plan (Source: Researcher’s own work)**

Data Description	Data Needed	Data Measurement	Data Analysis
Motivational Level (2 items)	Level of agreement on a statement on self-perceived Entrepreneurial Motivational level	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on possessing sufficient inherent Motivation towards entrepreneurship. A low score of (1) indicates total disagreement with the statement.
	Source of Entrepreneurial Motivation	Selection Question 1 Pull motivation 2 Push motivation 3 Need for achievement; 4 Need for affiliation; 5 Need for power; 6 Need for independence 7 Need for control.	To provide data for analysing the respondent's sources for inherent Motivation towards entrepreneurship.
Self-Efficacy Level (4 items)	Level of agreement on a statement on perceived ease of starting own business	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on possessing sufficient inherent Self-efficacy to perceive ease in starting own business. A low score of (1) indicates total disagreement with the statement.
	Level of agreement on a statement on self perceived confidence level to engage in start-up activities	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on possessing sufficient inherent Self-efficacy to engage in start-up activities confidently. A low score of (1) indicates total disagreement with the statement.
	Level of agreement on a statement on self perceived personal ability to engage in start-up activities	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on possessing sufficient inherent Self-efficacy to perceive personal ability to engage in start-up activities. A low score of (1) indicates total disagreement with the statement.
	Other self-perceived advantages to engage in start-up activities	Open-ended	To analyse other personal advantages perceived by the respondent which might help them when engaging in start-up activities.

The methodology implemented in this section of the questionnaire, as shown in Table 5(a), aims to measure the independent variables of Motivation and Self-Efficacy of Psychological Capital inheritance:

(1) Level of Motivation

A high score ‘7’ on this scale indicates a firm agreement on possessing sufficient inherent Motivation towards Entrepreneurship. A low score of ‘1’ indicates total disagreement with the statement. This measurement of Motivation is adapted from various authors, including McClelland (1961), DeNoble and Singh (2003), Hayne and Shepherd (2011), Wood et al. (2013), Singer et al. (2015) and Kibler et al. (2011).

(2) Source of Motivation

To provide data for analysing the source of Respondent's inherent Motivation driving him/her towards Entrepreneurship. This recording of the source of Motivation is adapted from various authors, including, Godany, Machová, Mura and Zsigmond (2021); Stephan, Hartand and Drews (2015); Gem (2013); Singh and Rahman (2013); Kibler et al. (2011); Amit and Muller (1995); Rotter (1966) and McClelland (1961).

(3) Perceived ease in starting own business

A high score '7' on this scale indicates a firm agreement on possessing sufficient inherent Self-Efficacy to perceive ease in starting own business. A low score of '1' indicates total disagreement with the statement. This measurement is adapted from Maritz et al. (2015).

(4) Confident to engage in start-up activities

A high score '7' on this scale indicates a firm agreement on possessing sufficient inherent Self-Efficacy to engage in start-up activities confidently. On the other hand, a low score of '1' indicates a strong disagreement with the statement. This measurement is adapted from Maritz et al. (2015).

(5) Self-perception of personal ability to engage in start-up activities

A high score '7' on this scale indicates a firm agreement on possessing sufficient inherent Self-Efficacy to perceive personal ability to engage in start-up activities. A low score of '1' indicates total disagreement with the statement. This measurement is also adapted from Maritz et al. (2015).

(6) Other self-perceived advantages to engage in start-up activities

To provide data for analysing other advantages that the Respondent possessed that might help them engage in start-up activities. This recording on other self-perceived advantages to engaging in start-up activities is adapted from Erogul (2014).

**TABLE 5(b): Primary data collection plan (Source: Researcher’s own work)**

Data Description	Data Needed	Data Measurement	Data Analysis
<b>(2) Independent Factors of Human Capital</b>			
Prior Managerial Experience (2 items)	Years of Managerial Experience	<3, 3 to 6, 7 to 10, >10	To provide data for analysing the number of years of Managerial Experience of the respondent.
	Position of Managerial Experience	Multiple Choice Question (1) Executive (2) Junior Manager (3) Middle Manager (4) Senior Manager (5) Not Applicable	To provide data for analysing the position of last Managerial Experience of the respondent.
Prior Knowledge and Information (4 items)	Number of Markets previously Served	<3, 3 to 6, 7 to 10, >10	To provide data for analysing the number of respondents' previously served markets.
	Proficiency of Markets previously served	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on possessing a proficiency level of previously served markets. A low score of (1) indicates total disagreement with the statement.
	Number of Customers previously Served	<3, 3 to 6, 7 to 10, >10	To provide data for analysing the number of respondents' previously served customers.
	Proficiency of Customers previously served	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on having previously served customers at a proficient level. A low score of (1) indicates total disagreement with the statement.
Prior Relevant Skills (2 items)	Type and Skill Rating of each skillset: 1 Creative Thinking 2 Problem Solving 3 Decision-making 4 Motivating Others 5 Managing Conflicts 6 Leading Others 7 Teamwork 8 Communication	Indicate your Proficiency Level for each skill set: 1 (Not Proficient) 2 (Average) 3 (Proficient)	To provide data for analysing the proficiency level of each skill set selected by the respondent.
	Level of agreement on a statement on Course attendance with certification of skillset.	1 (Strongly Disagree), 2 (Disagree), 3 (Somewhat disagree), 4 (Neither agree or disagree), 5 (Somewhat agree), 6 (Agree), 7 (Strongly Agree)	A high score (7) on this scale indicates a firm agreement on respective course attendance with certification of skill set. A low score of (1) indicates total disagreement with the statement.

The methodology implemented in this section of the questionnaire, as shown in Table 5(b), aims to measure the independent variables of Prior Managerial Experience (2 items), Prior Knowledge and information (4 items) and Prior Relevant Skills (2 items) of Human Capital inheritance:

**(1) Years in prior managerial experience**

To provide data for analysing the number of years of Managerial Experience of the Respondent. This measurement of tenure in prior managerial experience is adapted from Ruiz et al. (2016).

- (2) Position in prior managerial experience  
To provide data for analysing the position of last Managerial Experience of the Respondent. This measurement of position in prior managerial experience adapts from Daniel et al. (2021), Baciú et al. (2020), Helfat and Martin (2015), Kor (2003) and Helfat and Liberman (2002).
- (3) Number of markets served  
To provide data for analysing the number of Respondents' previously served markets.
- (4) Proficiency level of markets served  
A high score '7' on this scale indicates a firm agreement that markets previously served are at a proficiency level. A low score of '1' indicates otherwise. This measurement adapts from authors Fainshmidt and Frazier (2016) and Beck and Wiersema (2013).
- (5) Number of customers served  
To provide data for analysing the number of Respondents' previously served customers.
- (6) Proficiency level of customers served  
A high score '7' on this scale indicates strong agreement that customers are previously served at a proficient level, while a low score of '1' indicates total disagreement. This measurement is adapted from Fainshmidt and Frazier (2016) and Beck and Wiersema (2013).
- (7) Type of prior relevant skillsets and proficiency level  
This measurement adapts from EU Skills Panorama (2016, 2014) and OECD (2015). To provide data for analysing the proficiency level of each skill set selected by the Respondent.
- (8) Level of agreement on course attendance with certification of skillset  
A high score '7' on this scale indicates a firm agreement on respective course attendance with certification of skill set. A low score of '1' indicates strong disagreement with the statement.

**TABLE 5(c): Primary data collection plan** (Source: Researcher’s own work)

Data Description	Data Needed	Data Measurement	Data Analysis
<b>(3) Independent Factors of Social Capital</b>			
Social Networks (2 items)	Member Size per Network Group	<6, 6 to 10, 11 to 15, >15	To provide data for analysing the number of member per each Social Network Group selected by the respondent.
	Years of Relationship per Network Group	<6, 6 to 10, 11 to 15, >15	To provide data for analysing the years of relationship per each Social Network Group selected by the respondent.
Business Networks (2 items)	Member Size per Network Group	<6, 6 to 10, 11 to 15, >15	To provide data for analysing the number of member per each Business Network Group selected by the respondent.
	Years of Relationship per Network Group	<6, 6 to 10, 11 to 15, >15	To provide data for analysing the years of relationship per each Business Network Group selected by the respondent.

Rating of strength of ties - To measure these two variables, we asked the Respondents to indicate the nature of the relationship they had with each link they had selected. Several authors, such as (Brüderl & Preisendorfer, 1998; Dublino & Aldrich, 1991; Granovetter, 1985), have reported that ties with intimate friends, spouses and close parents are considered strong, whereas those with distant parents and old friends are considered weak. The nature of relationship of each Entrepreneur is equal to the number of links for each type of relationship (strong or weak) divided by the number of the link categories that he has selected

(1) Member size per Social Network group

To provide data for analysing the number of members per each Social Network Group selected by the Respondent. This measurement of Social Network member size is adapted from Fornoni et al. (2011, 2012).

(2) Years of relationship per Social Network group

To provide data for analysing the years of relationship per each Social Network Group selected by the Respondent. This measurement of Social Network years (depth) of relationship is adapted from Fornoni et al. (2011, 2012).

(3) Member size per Business Network group

To provide data for analysing the number of members per each Business Network Group selected by the Respondent. This measurement of

Business Network member size is adapted from Fornoni et al. (2011, 2012).

(4) Years of relationship per Business Network group

To provide data for analysing the years of relationship per each Business Network Group selected by the Respondent. This measurement of Business Network years (depth) of relationship is adapted from Fornoni et al. (2011, 2012).

### 3.8.3 Quantitative data collection

The quantitative design approach of collecting data aims to validate a set of identified hypotheses that could project new perspectives on the existing phenomena of PMET Entrepreneurship in Singapore. Hopefully, it could shed some light on the Respondents' impending themes and behavioural patterns. A short and non-interactive survey is preferred over lengthy personal interviews or participatory field observation as they require a relatively more straightforward time commitment from Respondents.

Data collection involves both online and offline methods. For the online survey, 192 members of the SEN and EFS meetup groups in Singapore were invited to complete the survey monkey questionnaire via a link. Request to participate in the survey will be posted on the forums of the Entrepreneurship for Senior (EFS) and the Singapore Entrepreneurs Network (SEN) meetup groups, with a cover letter and link to an online Survey Monkey page set up for this purpose (See Appendix G).

The offline survey involved the first 192 late-career PMETs and PMET Entrepreneurs in the CDB/industrial areas who accepted our request to complete the questionnaire using a supplied iPad. The primary goal of using both online and offline surveys is to reduce the participants' inherent motives, attitudes, and behavioural effects. The decision to go ahead with the research came after the satisfactory conclusion of a pilot study. The period set for the primary research survey was from June to September 2020 (4 months).

### **3.9 QUESTIONNAIRE DESIGN**

The Survey Monkey digital questionnaire is selected because it is one of the most reliable, practical, user-friendly, and low-cost options to gather data on 384 Respondents. Moreover, it is also possible to extract 'real-time' raw data for 'on-the-spot' analysis by transforming them into an appropriate format for periodical reporting as the survey was ongoing. For the online survey, the link to the self-administered digital questionnaire on the Survey Monkey platform was shared with Respondents, allowing them the ease of recording their answers within the strictly defined alternatives within each pre-formulated question asked. Another advantage of using self-administered questionnaires is to encourage the Respondents to give their honest responses (Sekaran & Bougie, 2009). Research by a digital questionnaire allows comprehensive statistical information from the Respondents' answers. The chosen method also considers the Singapore context, where internet connection is widely available to conduct the survey anywhere in the country. The specific measurement of variables follows Hair et al. (2007) employment of interval scales in designing the questionnaire to collect quantitative data for the study.

Various questioning techniques were used, including Yes/No questions, open-ended questions, rating questions, and five and seven-point Likert scale items. Each scale used in the questionnaire represents a certain degree of agreement or disagreement to a statement that best expressed the Respondents' feelings about it. Both Likert has a respective internal middle point denoting a neutral standing point of '3' (Neutral) and '4' (Undecided/Neutral). This use of diverse questioning techniques aims to keep the survey attractive, easy to answer, and in keeping with the projected time needed to fill the questionnaire, thus encouraging a higher number of duly completed questionnaires.

#### **3.9.1 The five-point rating scale**

The questionnaire used in this research carries rating questions that use the five-point rating scale. The design of these scales offers Respondents the choice to choose answers that range from '1' (Very Low) to '5' (Very High). The middle of the scale is an option for a neutral position by the Respondent whenever they feel that the item is not pertinent or relevant (Garland, 1991).

This rating method effectively assesses one's satisfaction level regarding a specific performance (Saunders et al., 2009). Listed below in Figure 20 illustrates the five-point rating scale used for this study. It is within the expectation that the Respondents can complete it based on their relevancy perception.

1	2	3	4	5
Very Low	Low	Neutral	High	Very High

**FIGURE 20: Diagram of five-point rating scale**

### 3.9.2 The seven-point Likert scale

Likert scale is a single-dimensional measure design that offers our survey participants the choice to select between a range an answer that best reflects their viewpoints. It is, therefore, a vital quantitative research tool to gauge attitude towards a particular point-of-view. The seven-point Likert-style scales can measure the Respondent's level of agreement or disagreement to a given statement by merely selecting an answer ranging from 'strongly agree' to 'strongly disagree' (Saunders et al., 2009). The seven-point Likert scale method is a highly accurate and reliable measurement tool (Sekaran & Bougie, 2009), and assumes that the experience's strength and intensity are linear, a continuum from strong disagreement to strong agreement. A score of 1,2,3,4,5,6,7 corresponds to the degree of consensus, i.e. '1' denotes 'strongly disagree', and '7' indicates 'strongly agree'. Questions using this measuring technique collect the independent variables (IV1 to IV8) representing both Psychological and Human Capital. Listed below in Figure 21 illustrates the seven-point Likert Scale used for this study. Respondents are to complete it based on their relevancy perception and attitude towards each given statement.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	More or Less Disagree	Undecided/ Neutral	More or Less Agree	Agree	Strongly Agree

**FIGURE 21: Diagram of seven-point Likert scale**



### 3.10 QUESTIONNAIRE BLUEPRINT

Following a detailed analysis plan outlined for each heterogeneous data characteristic in Section 3.8, a questionnaire is formulated for this research study. It consists of five closely related sections to this research study's literature reviews and objectives. In the first section, the questions asked were merely more qualifying in nature. In section 2, questions were focused on the DVs. Sections 3, 4 and 5 were focused on questions to draw inputs for IVs of Psychological, Human and Social inherent factors from the late-career PMETs.

#### 3.10.1 Section 1 of Survey Questionnaire

Section 1 of the questionnaire identifies whether the Respondent is qualified to respond to the questionnaire. Therefore, in this part of the questionnaire, there is a question asking the Respondent whether he/she is over 50 years old and previously a PMET. Another question asks whether the Respondent had at least 3-month entrepreneurial experience. This qualification question ensures that the PMET-Respondent met our requirement for some experience in Entrepreneurship. Referenced literature for the setting of these questions is shown in Table 6 below. Respondents will only be qualified to continue with the questionnaire if they have answered 'Yes' for both these questions.

**TABLE 6: Qualifying questions**

Section 1 Qualifying Questions on survey respondent. This variable is measured to ensure that the respondent is qualified to participate in the survey.			
Data Description	Questionnaire Question	Data Measurement	Referenced Literature & Question
Age >50 Years Old and ex-PMET?	Are you over 50 years old and previously a PMET?	Yes/No	Kautonen, Down and South (2008); Kautonen, Down and Minniti (2014); Curran and Blackburn (2011); Hart, Anyadike-Danes and Blackburn (2004); Ruiz, Soriano and Coduras (2016)
Have at least 3-month entrepreneurial experience	Are you currently an entrepreneur or previously have at least 3-month of entrepreneurial experience?	Yes/No	<u>Ruiz, Soriano and Coduras (2016)</u> Have you ever act as an intrapreneur (start up a business, product or any improvement on the current firm or organisation for your employer? 1 (No, Never); 2 (Sometimes); 3 (Frequently).

### 3.10.2 Section 2 of Survey Questionnaire

Section 2 of the questionnaire consists of two questions directly related to the dependent variables. The Respondents need to rate themselves regarding their perceived readiness to spot (identify) and take action (exploit) business opportunities when they first ventured into Entrepreneurship. These two questions use the 5-point Likert rating scale. An open question is also employed to drill into the reasons to support the answers given by Respondents. A table of referenced literature for setting these survey questions on the state of entrepreneurial readiness is shown in Table 7 below.

**TABLE 7: Questions on perceived state of readiness for opportunities**

Section 2 Survey Questions to find out PMET's state of readiness to discover and exploit opportunities. This variable is measured in terms of overall scoring on the perceived state of readiness to recognise and exploit opportunities.			
Data Description	Questionnaire Question	Data Measurement	Referenced Literature & Question
DV-1 State of Readiness to Spot (Recognise) Opportunities	How would you rate your state of readiness to spot (identity) business opportunities when you first make the move to entrepreneurship? State of readiness refers to a combination of attitude and mindset, skills, networks, finance, etc.	1 (Very Low), 2 (Low), 3 (Neutral), 4 (High), 5 (Very High)	Ruqaya Al-Lamki, Marwah Al-Sumri, Sharifah Al-Ismaili and Kamla Ali Al-Busaidi (2016); Ruiz, Soriano and Coduras (2016); Samsudin, Jalil, Yahaya, Wahid and Jizat (2016); Markman and Baron (2003) (Wasdani, 2012) - I have a special "alertness" or sensitivity toward new venture opportunities.
Reasons to support above answer	Reasons for your selection.	Open-ended	
DV-2 State of Readiness to take action on (Exploit) Opportunities	How would you rate your state of readiness to take action (exploit) on business opportunities when you first make the move to entrepreneurship? State of readiness refers to a combination of attitude and mindset, skills, networks, finance, etc.	1 (Very Low), 2 (Low), 3 (Neutral), 4 (High), 5 (Very High)	Ruqaya Al-Lamki, Marwah Al-Sumri, Sharifah Al-Ismaili and Kamla Ali Al-Busaidi (2016); Ruiz, Soriano and Coduras (2016); Samsudin, Jalil, Yahaya, Wahid and Jizat (2016); Markman and Baron (2003)
Reasons to support above answer	Reasons for your selection.	Open-ended	

### 3.10.3 Section 3 of Survey Questionnaire

Section 3 of the questionnaire consists of 10 questions. This part of the drafted questionnaire was designed to extract the late-career PMETs' personal and behavioural characteristics to test the independent variables in the category of inherent Psychological Capital, namely;

- (1) Entrepreneurial characteristics, attitude and mindset.

- (a) Characteristics - Question 1 and Question 2 test on the level of Positivism (IV1-1) and Tenacity (IV1-2), respectively;
- (b) Attitude and mindset - Question 3 and Question 4 test on the level of Ambiguity Tolerance (IV1-3) and Risk Propensity (IV1-4), respectively.

These survey questions on IV1-1, IV1-2, IV1-3 and IV1-4 were based on referenced literature, as shown in Table 8 below.

**TABLE 8: Questions on entrepreneurial characteristics, attitude and mindset**

<b>Section 3 Survey Questions to find out PMET's Psychological Capital Inherence of Characteristics, attitude and mindset.</b>			
<b>Data Description</b>	<b>Questionnaire Question</b>	<b>Data Measurement</b>	<b>Referenced Literature and Question</b>
IV1-1 Positivism level	I am a positive person who has a strong belief that my goals can be achieved.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More of less Agree), 6 (Agree), 7 (Strongly Agree)	<u>Ruiz et al. (2016)</u> - Being positive in front of the adversity. 1 (Not important for you); 2 (Medium important for you ); 3 (Very important for you)
IV1-2 Tenacity level	I do not give up easily whenever I encounter a challenge or problem.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More of less Agree), 6 (Agree), 7 (Strongly Agree)	<u>Maritz et al. (2015)</u> - I am not easily discouraged by failure. 1 (Broadly Disagree); 2 (Neutral); 3 (Broadly Agree)
IV1-3 Ambiguity Tolerance level	I expect that there will be times of doubts and periods of uncertainties in life.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More of less Agree), 6 (Agree), 7 (Strongly Agree)	Portuguez and Gomez (2020); Arend (2020); Ruiz et al. (2016); Mitton (1981); McChelland (1961)
IV1-4 Risk-taking level	I expect that there will be junctures in my life that I need to take some risks in making important decisions.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More of less Agree), 6 (Agree), 7 (Strongly Agree)	<u>Caliendo et al. (2009)</u> - How do you see yourself: 1 Are you generally a person who is fully prepared to take risks or 2 Do you try to avoid taking risks?"

### Entrepreneurial Motivation

- (a) Question 5 requires the Respondent to assess on own level of Motivation (IV2-1).
- (b) Question 6 expands on Question 5 and requires the Respondent to select from a given list of the source of Motivation (IV2-2).

The referenced literature for setting questions to ask on IV2-1 and IV2-2 are shown in Table 9 below.

**TABLE 9: Questions on entrepreneurial Motivation**

<b>Section 3 Survey Questions to find out late-career PMET's inherent Psychological Capital of Motivation.</b> This variable measures the motivational level of the individual at the point of entering entrepreneurship.			
Data Description	Questionnaire Question	Data Measurement	Referenced Literature and Question
IV2-1 Motivation level	I am highly motivated to make my move into entrepreneurship.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More of less Agree), 6 (Agree), 7 (Strongly Agree)	McClelland (1961); DeNoble and Singh (2003); Hayne and Shepherd (2011); Wood et al. (2013); Singer et al.(2015); Kibler et al. (2011)
IV2-2 Source of Motivation	What motivates you to move into entrepreneurship? (1) I wanted to take advantage of a business opportunity. (2) I was having no better choices of work at that time. (3) I always wanted to achieve something in my life. (4) I have relatives and friends who are successful entrepreneurs. (5) I always wanted people to listen to me. (6) I wanted to be independent. (7) I always wanted to be in control of my work, time and finances.	Selection Question 1 Pull motivation 2 Push motivation 3 Need for achievement; 4 Need for affiliation; 5 Need for power; 6 Need for independence 7 Need for control.	McClelland (1961); Rotter (1966); Kibler et al. (2011); Amit & Muller (1995) <u>Stephan, Hart and Drews (2015) / GEM (2013) - Pull &amp; Push Motivation</u> "Are you involved in this start-up/ firm to take advantage of a business opportunity or because you have no better choices for work?" <u>Singh and Rahman (2013) - Achievement, affiliation, power, independence and control motivations.</u>

(3) Entrepreneurial Self-Efficacy (ESE)

- (a) Question 7 tests on the self-perceived ease in starting up own business and overcoming challenges (IV3-1),
- (b) Question 8 tests the level of confidence and readiness to engage in entrepreneurial activities (IV3-2),
- (c) Question 9 tests the belief in own ability to engage in entrepreneurial activities (IV3-3), and
- (d) Question 10 tests self-perceived possession of other personal advantages (IV3-4).

Table 10 shows the literature list used as references to set questions on IV3-1, IV3-2, IV3-3, and IV3-4.

**TABLE 10: Questions on entrepreneurial Self-Efficacy**

<b>Section 3 Survey Questions to find out PMET's Psychological Capital Inherence of Self-Efficacy.</b> This variable measures the strength of one's belief about own capacity, ability and capability to successfully perform the various roles and specific tasks of entrepreneurship.			
IV3-1 Perceived ease in starting own business	Starting my own business was challenging but I was able to overcome them.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More or less Agree), 6 (Agree), 7 (Strongly Agree)	Bandur (1997); Kruger (2000); Markman and Baron (2003); Zhao et al. (2005); Chen, Greene and Crick (1998); Cassar and Friedman (2009)
IV3-2 Confident to engage in start-up activities	I was confident and ready to engage in start-up activities.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More or less Agree), 6 (Agree), 7 (Strongly Agree)	<i>Maritz et al. (2015)</i> - I am equipped and confident to engage in start-up activities. 1 (Broadly Disagree); 2 (Neutral); 3 (Broadly Agree)
IV3-3 Self perception of personal ability to engage in start-up activities	I believe I have the ability to engage in start-up activities when venturing into entrepreneurship.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More or less Agree), 6 (Agree), 7 (Strongly Agree)	<i>Maritz et al. (2015)</i> - I have the required technical skills to engage in start-up activities. 1 (Broadly Disagree); 2 (Neutral); 3 (Broadly Agree)
IV3-4 Self perception of other advantages to engage in start-up activities.	I believe I have other advantages which helped me in the start-up activities when venturing into entrepreneurship. They are :_____.	Open-ended Question	<i>Eroglu (2014)</i> - You have the knowledge, skill and experience required to start a new business? 1 (Yes); 2 (No)

It should be noted that eight of the questions in Section 3 are of the 7-point Likert item types, leaving Question 6 and Question 10. For Question 6, Respondents can select more than one answer from a list of 7 Motivational sources. For Question 10, the open-ended question type is used for Question 10 to allow the Respondent to limitless reasons that make them feel having the advantages benefiting their entrepreneurial venturing.

### 3.10.4 Section 4 of Survey Questionnaire

Section 4 of the questionnaire consists of eight questions that focus on the PMET's Human Capital Inherence. This part of the questionnaire was specifically designed to establish the extent of the late-career PMETs' accumulated experience over the years, accrued knowledge and information, and learned business and management skills. These independent variables include the Respondents' years of prior managerial experience, knowledge and

information, and relevant skills proficiency levels. This section's variety of questioning techniques include open-ended, Likert-scale, and Yes/No questions.

Tables 11, 12 and 13 show the literature list used as references to set question groups of IV4, IV5, and IV6, respectively.

**TABLE 11: Questions on prior managerial experience**

<b>Section 4 Survey Questions to find out PMET's Human Capital Inherence of Prior Managerial Experience</b>			
<b>Data Description</b>	<b>Questionnaire Question</b>	<b>Data Measurement</b>	<b>Referenced Literature and Question</b>
IV4 -1 Years in prior managerial experience	How many years of Managerial Experience do you have prior to taking up entrepreneurship?	<3, 3 to 6, 7 to 10, >10	<i>Ruiz et al. (2016)</i> - Possession of business management experience - Low (up to 1 year); Medium (2-5 years); High (more than 5 years)
IV4-2 Position in prior managerial experience	What is the position of your Prior Managerial Experience?	Multiple Choice Question (1) Executive (2) Junior Manager (3) Middle Manager (4) Senior Manager (5) Not Applicable	Daniel et al. (2021); Baciu et al. (2020); Helfat and Martin (2015); Kor (2003); Helfat and Liberman (2002).

**TABLE 12: Questions on prior knowledge and information**

<b>Section 4 Survey Questions to find out PMET's Human Capital Inherence of Prior Knowledge and Information.</b>			
<b>Data Description</b>	<b>Questionnaire Question</b>	<b>Data Measurement</b>	<b>Referenced Literature and Question</b>
IV5-1 Number of markets served	What is the number of markets (in terms of country or segment) previously served by you?	<3, 3 to 6, 7 to 10, >10	
IV5-2 Proficiency level of markets served	I am good at serving the market needs (products and pricings) in my previous experience.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More of less Agree), 6 (Agree), 7 (Strongly Agree)	Fainshmidt and Frazier (2016); Beck and Wiersema (2013).
IV5-3 Number of customers served	What is the number of customers previously served by you?	<3, 3 to 6, 7 to 10, >10	
IV5-4 Proficiency level of customers served	I am good at serving the customers' needs (delivery of service quality) in my previous experience.	1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More of less Agree), 6 (Agree), 7 (Strongly Agree)	Fainshmidt and Frazier (2016); Beck and Wiersema (2013).

**TABLE 13: Questions on prior relevant skills**

<b>Section 4 Survey Questions to find out PMET's Human Capital Inherence of Prior Relevant Skills.</b>			
<b>Data Description</b>	<b>Questionnaire Question</b>	<b>Data Measurement</b>	<b>Referenced Literature and Question</b>
IV6-1 Type of Prior Relevant Skillsets and Proficiency Level	From the given list of Skillsets below, indicate your Proficiency Level: 1 (Very Poor) 2 (Poor) 3 (Acceptable) 4 (Good) 5 (Very Good)	Given List of Skillsets 1 Creative Thinking 2 Problem Solving 3 Decision-making 4 Motivating Others 5 Managing Conflicts 6 Leading Others 7 Teamwork 8 Communication	EU Skills Panorama (2016, 2014); OECD (2015)
IV6-2 Evident of Skillset Proficiency via course attendance or certification of Skillset.	Have you attended courses or obtain certifications for this skillset?	Yes/No	

### 3.10.5 Section 5 of Survey Questionnaire

The last section of the questionnaire, Section 5, was designed to gauge the Respondent's inherent Social Capital's network strength. The tabled questions here is supposed to estimate the Type within a specified given range; Member Size in terms of the number of members (IV7-1/IV8-1) and Network Strength in Years of Relationship (IV7-2/IV8-2) for both the social and business networks.

The referenced literature for setting questions to ask on IV7-1, IV7-2, IV8-1, and IV8-2 are shown in Tables 14 and 15, respectively.

**TABLE 14: Questions on social network strength**

<b>Section 5 Survey Questions to find out PMET's Social Capital Inherence of Social Networks (Type, size and strength of network ties).</b> To measure this variable, we gave respondents a list of seven categories of Social Network link. The respondents were asked to select the link that they had personally undertaken among the specified seven categories. The network size of each Entrepreneur is thus equal to the number of links per categories that they had selected.			
<b>Data Description</b>	<b>Questionnaire Question</b>	<b>Data Measurement</b>	<b>Referenced Literature and Question</b>
Type of Social Network (Relationship)	For each of below given types of Social Relationships	List of Social Network (Relationship) given	<i>Fornoni, Arribas and Vila (2011)/(2012)</i> - Type of Relationship you had at that time (Family, Friends, Others)?
IV7-1 Social Network Size	Estimate your Network Size?	<6, 6 to 10, 11 to 15, >	<i>Fornoni, Arribas and Vila (2011)/(2012)</i> - Do you consider yourself to be a person with a large number of contacts and acquaintances?
IV7-2 Years of Relationship?	What is the number of years of your Relationship?	<6, 6 to 10, 11 to 15, >	<i>Fornoni, Arribas and Vila (2012)</i> - How much time did you spent with that person (years)? <i>Fornoni, Arribas and Vila (2011)</i> - How long had you known your main contact? (Years)

**TABLE 15: Questions on business network strength**

<p><b>Section 5 Survey Questions to find out PMET's Social Capital Inherence of Business Networks (Type, size and strength of network ties).</b>                      To measure this variable, we gave respondents a list of four categories of Business Network link. The respondents were asked to select the link that they had personally undertaken among the specified four categories. The network size of each entrepreneur is thus equal to the number of links per categories that they had selected.</p>			
Data Description	Questionnaire Question	Data Measurement	Referenced Literature and Question
IV8-1 Type and member size of Business Network	Q22. For the given types of Business Network Relationship, provide an estimated member size for each.	Member Size <6, 6 to 10, 11 to 15, >15	<i>Fornoni, Arribas and Vila (2011)/(2012)</i> - Type of Relationship you had at that time (Work, Professional, Others)? <i>Fornoni, Arribas and Vila (2011)/(2012)</i> - Do you consider yourself to be a person with a large number of contacts and acquaintances?
IV8-2 Years of Relationship with the Business Network?	Q23. What is the number of years of each Business Network Relationship?	Years of Relationship <6, 6 to 10, 11 to 15, >15	<i>Fornoni, Arribas and Vila (2012)</i> - How much time did you spent with that person (years)? <i>Fornoni, Arribas and Vila (2011)</i> - How long had you known your main contact? (Years) <i>Which Author?</i> - How many years do you know them?



### **3.11 ANALYSIS OF THE COLLECTED DATA**

Both Hair et al. (2019) and Zikmund, Babin, Carr and Griffin (2010) suggest that the data processing and analysing stage allows researchers to perform several interrelated procedures to convert the raw data into useable information to answer the research questions.

This research will have eight groups of Independent Variables (IV1 to IV8). The derivation of 25 questions in the digital questionnaire came from these IVs. Each question is measured based on a mix of questioning techniques; YES/NO, multiple-choice, five and seven-point Likert scales and open-ended questions. Every one of the questions in the research questionnaire focuses on one aspect of the Respondent's attitude and perception about his/her perceived state of readiness towards entrepreneurial opportunities.

The statistical software, SPSS 23.0 for Windows 10, is used to analyse data as it assures that the relevant issues can be carefully examined comprehensively and cost-effectively (Hair et al., 2007). This tool also helps to tabulate descriptive statistical parameters such as Means, Standard Deviations, Cronbach's alpha and Exploratory Factor Analysis (EFA). These measurements will test the overall goodness of the collected data. The study uses descriptive analysis to show a histogram chart of data distributions. Cross-tabulation and Pearson Chi-square correlation analyses are also employed to analyse the correlations between variables and their relational significance. All research variables were then cross-referenced to the entrepreneurial state of readiness to ensure that the specified hypotheses are statistically well supported to answer the research questions raised in this study on late-career PMET Entrepreneurship.

### 3.12 MEASUREMENT OF RELIABILITY

The reliability measurement refers to the research strategy to test the consistency of collected data upon repeating a similar survey on this same late-career PMET sample at different times. Hence, the measured value represents the transient consistency and stability level over multiple measurements using the same technique across various settings, conditions, and timeframes. Thus, the reliability score explains the relationship between two independently measured results based on the same assessment instrument on two separate occasions. Through the statistical analysis, the reliability score is a correlation coefficient and can tell us something about the relationship between two sets of results or variables. According to Saunder et al. (2009), if the measurement is reliable, the obtained score is less likely to be subject to random factors and measurement errors. Adequate reliability exists in most research when the Cronbach's Alpha coefficient is 0.80 or higher.

#### 3.12.1 Strategies for improving Reliability

Planning on the reliability strategy to reduce possible measurement errors occurred early during the research's methodology design stage. The focus was on how data are collected and how the independent and dependent variables are measured. Below is an explanation of each of these strategies.

1. There is a practice of standardised data measurement throughout the pilot and primary survey, with every measure occurring consistently across all online and offline Respondents.
2. There are specific instructions in the questionnaire to let the survey Respondents know and understand how they should be providing their answers to questions. For example, there are instructions to inform Respondents that they can select more than one answer by ticking the appropriate box. The reason for doing this is to reduce misunderstanding that could lead to Respondents not answering the survey questionnaire accurately, causing potential bias in the collected information.
3. The collection and measurement of data should involve only a well-trained interviewer to collect data for consistency. The conduct of the pilot testing provided ample opportunity for practice before the actual survey began.

Maximum efforts are put in place to ensure that data are accurately recorded, compiled, and analysed. This precaution involves close monitoring of data entry to ensure they follow the data preparation and processing procedures spelt out under para 4.1 of this report.

### 3.12.2 Cronbach's Alpha analysis

Cronbach's Alpha is a test performed to determine how positively correlated the questionnaire questions are to one another (Sekaran & Bougie, 2009). It also measures the internal reliability or consistency of the 7-point Likert scale questions used in our questionnaire and helps determine whether the scale is reliable and consistent to measure the variables. Hence, a reliability test on the listed items that use this questioning technique to find out the independent variables of Characteristics, Attitude and Mindset, Motivation and perceived Self-Efficacy (IV1, IV2, IV3), Prior Knowledge and Information (IV5) and Prior Relevant Skills (IV6). A total of 18 questions in the questionnaire were then analysed using the SPSS software. When the Cronbach's Alpha value is closer to 1.0, it represents a higher internal consistency of the items in the scale. Table 16 below shows an explanation of the meaning for each level of the Cronbach's Alpha coefficient value (Hair et al., 2007). A coefficient value of > 0.7 is acceptable.

TABLE 16 : Cronbach's Alpha coefficient table (Hair et al., 2019; 2007)

<b>Cronbach's Alpha</b>	<b>Level of Reliability</b>
$\alpha = < 0.6$	Poor
$\alpha = 0.6 \text{ to } < 0.7$	Moderate
$\alpha = 0.7 \text{ to } < 0.8$	Good
$\alpha = 0.8 \text{ to } < 0.9$	Very Good
$\alpha = > 0.9$	Excellent

### 3.13 MEASUREMENT OF VALIDITY

The validity measurement refers to the research strategy to test the consistency of collected data when a similar survey on this same late-career PMET sample is repeated at different times. Conceptually, a research validity test seeks to determine whether the instrument or measurement method measures the data the way it is selected to do. Sullivan and Feldman (1979) claim that validity and reliability tests are interconnected, meaning a measurement cannot be valid unless it is reliable.

#### 3.13.1 Strategies for Improving Validity

To further ensure internal consistency and validity among the questions (on each variable) in the questionnaire, Factor analysis was performed on the collected data using the SPSS software. The results obtained from the test will reveal the fitness of the questionnaire for use in the survey.

#### 3.13.2 Factor analysis

DeCoster (1998) defines Factor analysis as a data collection of methods used to examine how underlying constructs influence many measured variables' responses. According to Malhotra and Birks (2007), factor analysis further validates and strengthens the measurement instrument and helps understand the correlation between the variable's factors. However, as a rule of thumb, Wolf, Harrington, Clark, and Miller (2013) suggested a minimum sample size of 100 to present a clear structure of the relationships among variables.

In this test, several statistical measures help validate the instrument used. These include the Kaiser-Meyer-Olkin (KMO) measurement of sampling adequacy test (KMO), the Bartlett's test of sphericity, and the Total Variance Explained. They used both KMO and Bartlett's sphericity tests to determine whether it is appropriate to proceed with factor analysis. According to Field (2009), the KMO test results can assure the researchers that the data used is suitable for a Factor Analysis. Interpreting the value of the KMO test is relatively straightforward. The closer the KMO value is to 1, the better it indicates that the sampling used is sufficient to ensure

the reliability of measurements. Kaiser (1974) recommends that the KMO test values be benchmarked to the KMO test result table, as shown in Table 17.

TABLE 17 : KMO test result table (Kaiser, 1974)

<b>KMO Test Result Range</b>	<b>Level of Validity</b>
Below 0.5	Unacceptable
0.5 to 0.6	Miserable
0.6 to 0.7	Mediocre
0.7 to 0.8	Good
0.8 to 0.9	Great
Above 0.9	Superb

### **3.14 PILOT TESTING THE QUESTIONNAIRE**

Based on Saunders et al. (2009) and Malhotra and Birks (2007), the general rule of thumb is to pre-test the questionnaire (refer to Appendix G) before its release for actual data collection in the primary survey. It involves testing the questionnaire using a smaller sample size of about 5% of the sample used for the phase 2 central survey via convenient sampling. The reason for doing this is to polish and perfect the questionnaire to a level that Respondents face no difficulties in attempting to answer the questions set in it. On top of that, it will also enhance the recording of data to keep its informational integrity. Fink (2003) argument that pilot testing is a golden opportunity first to try out the purposed tool to make sure it works before making a final decision to use it. It aims to improve the researcher's capabilities to acquire and process the collected data and ensure the ease of the later process of analysis work (Ijdens, 2015). It provides possible checks for potential errors and surface hidden problems that need urgent attention. It meant to achieve a certain degree of clarity on the questions asked in the study. Radhakrishna (2007) supports Fink (2003)'s argument that pilot testing the questionnaire will ensure its reliability standard and reveal its execution feasibility.

#### **3.14.1 Time-frame for pilot testing**

Execution of the pilot test for this research took place between 15 - 29 February 2020 based on a test size of 20 Respondents, or 5% of the actual sample size. This percentage met what Malhotra and Birks (2007) suggested on the adequate sample size for pilot testing. Cronbach's Alpha analysis was conducted on the pilot test questionnaire to determine its suitability for use in the actual survey. As the pilot test sample size is less than 100, it is inappropriate to conduct Factor Analysis. The test will be carried out for the primary survey with a sizable sample of 384.

#### **3.14.2 Cronbach's Alpha analysis results on pilot test questionnaire**

(a) Cronbach's Alpha testing on the PMET's entrepreneurial Characteristics, Attitude and Mindset, Motivation and Self-Efficacy (IV1, IV2 and IV3).

**Case Processing Summary**

		N	%
Cases	Valid	20	2.0
	Excluded <sup>a</sup>	975	98.0
	Total	995	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.812	.813	8

From the test, the Cronbach's Alpha coefficient value of **0.812** for the group of questions related to Characteristics, Attitude and Mindset, Motivation and Self-Efficacy is considered 'Very Good' based on Hair et al. (2007)'s coefficient table shown in Table 14. It represents a high level of internal consistency for the 7-point Likert scale used in the questionnaire on IV1, IV2 and IV3. In other words, measurements on these factors for this specific sample are consistent and reliable.

Table below is the Item-Total Statistics of the 8 questions used to measure the Psychological Capital Inherence independent variable or this research study:

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Postivism	46.2500	5.882	.580	.499	.783
Tenacity	46.1500	5.818	.646	.888	.773
Ambiguity Tolerance	46.2500	6.513	.451	.405	.801
Risk-Taking	46.0500	6.576	.560	.884	.790
Motivation	46.1500	6.134	.517	.512	.793
Able to overcome challenges during business start-up	46.2500	6.513	.451	.514	.801
Ready and Confident to engage in start-up activities	46.3500	5.818	.593	.675	.781
Have Ability to engage in start-up activites	46.5000	6.579	.440	.619	.803

Many pilot test Respondents provided feedback that Question 8 looks like a repetition of Question 6. As the corrected item-total correlation for Question 8 is

0.44, removing it will not seriously impact the questionnaire's reliability. Hence, a decision was taken to merge it with Question 6, with the revised question is now reading, 'Starting my own business was challenging, but I always believe I can overcome them.'

(b) Cronbach's Alpha testing on IV5 (PMET's Prior Knowledge and Information)

**Case Processing Summary**

		N	%
Cases	Valid	20	2.0
	Excluded <sup>a</sup>	975	98.0
	Total	995	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.882	.882	2

Likewise, Cronbach's Alpha testing for this independent variable IV5 is **0.882** which is also rated 'Very Good' according on Hair et al. (2007). This figure shows the adequacy, consistency and reliability for the set two questions to find out the independent variable of PMET's Prior Knowledge and Information (IV5).

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Good at serving Market Needs	6.5000	.368	.789	.622	.
Good at serving Customer Needs	6.4500	.366	.789	.622	.



(c) Cronbach's Alpha testing on IV6 (PMET's Prior Relevant Skills)

**Case Processing Summary**

		N	%
Cases	Valid	20	2.0
	Excluded <sup>a</sup>	975	98.0
	Total	995	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.716	.699	8

Cronbach's Alpha testing for this independent variable IV6 is **0.716**, rated 'Good' based on Hair et al. (2007). Although this rating is lower than the previous two Cronbach's Alpha tests mentioned (a) and (b), there is still reasonable adequacy, consistency and reliability for this set of 5-point Likert scale questions to determine the independent variable of PMET's Prior Relevant Skills (IV6).

However, based on the pilot test Respondents' feedback, the 5-point rating scale can be confusing for some who are unsure how to rate themselves on a particular skill, i.e. should it be 'Very Poor', 'Poor', 'Neutral', 'Good', or 'Very Good'? A simple improvement is to reduce the 5-point Likert rating scale to 3-point in the questionnaire for the survey denoting 'Not proficient', 'Average', and 'Proficient'. This change reduced the confusion caused to Respondents.

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Creative Thinking	30.7000	6.221	.615	.722	.646
Problem Solving	30.5000	7.211	.243	.402	.720
Decision-Making	30.5000	6.789	.384	.390	.693
Motivating Others	30.6500	6.134	.525	.588	.661
Managing Conflicts	30.9000	5.463	.674	.792	.618
Leading Others	30.7500	6.197	.447	.677	.680
Teamwork	30.6500	7.397	.262	.545	.714
Communication	30.7000	7.905	.080	.493	.741

A face-to-face interview was conducted on late-career PMETs in Singapore using the pilot test sample size of 20 to validate the designed questionnaire. Analysed results from collected data showed there are significant adequacy, consistency and reliability as the Cronbach's alpha for the individual variable of IV1, IV2, IV3, (PMET's Characteristics, Attitude & Mindset, Motivation and perceived Self-Efficacy) = **0.812**, IV5 (PMET's Prior Knowledge and Information) = 0.882, IV6 (PMET's Prior Relevant Skills) = **0.716**. All questions asked are above the minimum acceptable alpha coefficients value of **0.7**. This value indicates the reliability of all questions in the questionnaire for this research study.

### 3.14.3 Feedback received from pilot testing for questionnaire improvements

Other issues that feedback were gathered in the pilot of the questionnaire included:

- Respondents' ease in comprehending the instructions in the covering letter
- Respondents' ability to understand the questionnaire items, for example, the sequence of questions, the terminologies used and the flow of statements.
- Format of the questionnaire, layout, font type, and font size.
- Length of the questionnaire, especially the time taken to complete it.
- Other comments by Respondents

All feedback was taken into consideration, and errors were amended. Table 18 shows the tabulated feedback and proposed actions to improve the original questionnaire.

**TABLE 18: Feedback from pilot testing and improvements made**

Item Description	Issues discovered during Pilot Testing	Improvement made	Remarks
7-point Likert scale	The 7-point Likert scale was confusing to respondents. 1 (Strongly Disagree), 2 (Disagree), 3 (More or less Disagree), 4 (Neutral), 5 (More of less Agree), 6 (Agree), 7 (Strongly Agree)	"More or less" changed to "somewhat", "Undecided/Neutral" changed to "Neither agree nor disagree". Based on feedback, it would be better to put the strongly agree as the first option instead of the last.	The new improved 7-point Likert scale is as below: 1 (Strongly Disagree), 2 (Disagree), 3 ( <b>Somewhat disagree</b> ), 4 ( <b>Neither agree nor disagree</b> ), 5 ( <b>Somewhat agree</b> ), 6 (Agree), 7 (Strongly Agree)
Question on Risk-taking level - " I expect that there will be junctures in my life that I need to take some risks in making important decisions".	This question asked was not very clear to respondents, and have to be explained during face-to-face interview.	Question was revised for better clarity so that the questionnaire can be self-administrated.	The new improved question is : "I expect that there will be <b>times</b> in my life that I need to take some risks in making important decisions".
Question on the source of Motivation	Grammatical errors were found. Base on feedback from respondents, there is also a lack of expression for other types of motivation factors.	Made corrections for grammatical errors. Added an 8th option for "Other reasons", to be specified with open-ended answers.	What motivates you to move into entrepreneurship? (1) I wanted to take advantage of a business opportunity. (2) I was having no better choices of work at that time. (3) I always wanted to achieve something in my life. (4) I have relatives and friends who are successful entrepreneurs. (5) I always wanted people to listen to me. (6) I <b>want</b> to be independent. (7) I <b>want</b> to be in control of my work, time and finances. (8) <b>Other reasons (please specify)</b>
IV3-1 Question on "Starting my own business was challenging but I was able to overcome them".	Feedback from respondents revealed that they were confused by the question asking them whether they actually did overcome the challenges, or just a state of mental confidence.	Revised Question for better clarity	"Starting my own business was challenging but I <b>always believe I have the ability</b> to overcome them".

**TABLE 18 (Cont'd): Feedback from pilot testing and improvements made**

Item Description	Issues discovered during Pilot Testing	Improvement made	Remarks
IV3-2 Question "I was confident and ready to engage in start-up activities".	Respondents feedback that this question was not very clear as it did not specify the point in time when they have this feeling of confidence.	Revised Question for better clarity	"I was confident and ready to engage in start-up activities <b>when venturing into entrepreneurship</b> ".
IV3-3 Question on Self perception of personal ability to engage in start-up activities	Respondents feedback that this question is quite similar to earlier question IV3-1.	Removed this question to avoid repetition of question asked.	
IV4-2 Question on Position of prior managerial experience with Multiple Choice answers given below (1) Executive (2) Junior Manager (3) Middle Manager (4) Senior Manager (5) Not Applicable	Respondents feedback that the multiple choice answers given for this question are too restrictive, and should include a Director/GM level, as well as, allowing a selection to specify other options.	Rephrase Question to give more selection options for respondents	Multiple Choice Question (1) Executive/ <b>Team Leader</b> (2) Junior Manager (3) Middle Manager (4) Senior Manager (5) <b>Director/ General Manager</b> (6) <b>Other, please specify</b>
IV5-1 Question on number of markets served and IV5-2 Question on number of customers served	Respondents feedback that these two questions are quite similar and therefore can be merged.	These two questions were merged for better clarity to the respondent.	<b>"Following up on Question 15, how many markets and customers are served by you in that managerial position?"</b>
IV5-3 Question on Proficiency level of markets served and IV5-4 Question on Proficiency level of customers served	Respondents feedback that there are too many questions in the questionnaire.	These two questions were merged to reduce the number of questions in the questionnaire.	<b>"I am good at serving both the market (products and pricing) and customer (service quality).</b>
IV6-1 Rating answers for this question on the Type and proficiency level of Skillsets 1 (Very Poor) 2 (Poor) 3 (Acceptable) 4 (Good) 5 (Very Good)	The 5-rating answers given was deemed too complex as respondents have problem rating a particular skill as either good or very good rating, as well as, either poor or very poor.	Revised 5-point to 3-point rating to make it easier for respondent to rate their skill sets.	Indicate your Proficiency Level for each skill set: <b>1 (Not Proficient)</b> <b>2 (Average)</b> <b>3 (Proficient)</b>
IV6-2 Question on whether Certification of Skillset have been obtained "Have you attended courses or obtain certifications for this skillset?"	Respondents were confused by the question.	Revised Question to make it easier for respondent to respond	<b>I have attended formal trainings and obtained certifications for most of the skill sets mentioned in Question 18?</b>
IV7-1 and IV8-1 - Questions on Type and member size of social and business networks	Respondents were confused by the question.	Question revised for better clarity	Estimate your <b>Network Member Size?</b>

### **3.15 REVISED QUESTIONNAIRE FOR MAIN SURVEY IN STAGE 2**

A revised copy of the online questionnaire generated using Survey Monkey's digital platform is attached in Appendix H.

The same digital survey questionnaire will be made available to both groups of Respondents for the online and offline survey. The total number of questions asked was dropped from 25 during the pilot test to 23 for the actual survey based on feedback given on question repetitions. In place of them, two additional questions related to the Respondent's demographic profiling of Gender and Portfolio size under their current or previous management were added towards the end of the questionnaire. One question is to facilitate the tabulation of the Respondents' Gender Composition to highlight potential gender differences, while the other is to gauge the current success of the PMETs in their present endeavours as business owners or managers.

### **3.16 RESEARCH PLAN OF WORK AND TIMELINE**

The total length of time to complete this research is about 2.5 years. Table 19 shows the detailed research plan of work and timeline for each step of the research process starting from 1 September 2018 to the date of research report submission on 15 February 2021.

The actual length of time needed to collect the primary data was three months. The targeted completion time was slightly affected by the outbreak of COVID-19. During May, June and July of 2020, the infection rate in Singapore was one of the highest in Asia, with more than 50,000 cases reported by end-July 2020. The mandatory movement lockdown imposed from 7 April to 30 June 2020 caused the postponement of the face-to-face survey in the CDB areas with a group of 192 Respondents to July and August. Meanwhile, a concurrent online survey proceeded without hitches via the Survey Monkey platform to selected meetup groups of the Entrepreneurship for Seniors (EFS) and the Singapore Entrepreneur Network (SEN) from 22 June to 15 September 2020.

**TABLE 19: Research Plan of Work and Timeline**

Action	Writing	Target completion date
Deciding on research question	Introduction (final version)	1 September 2018
Reading background literature	Literature review (draft version)	31 March 2019
	PG3 Approval	March 2019
	Chapter 1	31 August 2019
	PG1 Approval	30 September 2019
	Chapter 2	31 October 2019
	Chapter 3	30 November 2019
	PG2 Approval	31 May 2020
Data Collection		22 June 2019 to 15 September 2020
	Chapter 4	30 September 2020
	Chapter 5	31 October 2020
	PG8 Submission	31 October 2020
	Chapter 6	30 November 2020
	Literature Review Final version	15 December 2020
	Final conclusions	31 December 2020
	Footnotes and bibliography	15 January 2021
Proof Reading, corrections and binding of thesis		31 January 2021
Final Research Submission		15 February 2021

### **3.17 RESEARCH ETHICAL CONSIDERATIONS**

The research's conduct is in strict adherence to the ethical guidelines in the UWTSD's Code of Practice for Research Degrees (2020-2021) and Academic Quality Handbook (AQH) 2020-2021. It seriously considers the research data management policy in specific guidelines, especially regarding how primary data are collected, stored and processed. Outlined below are some examples of these guidelines concerning collecting Respondents' completed questionnaires in this research.

#### **3.17.1 Confidentiality and anonymity of Respondents**

The research will ensure that there will be no linkage between a survey questionnaire to any Respondent's identity. Each of the completed questionnaires received is given a serial number only for future references by the researcher, supervisors and the university. At no time will there be any collection of Respondents' names, addresses, contacts or other personal details. There is a need to ensure confidentiality to reassure the participants that there will be no disclosing their provided information other than those within the research context. These precautionary steps intend to offer the Respondents better assurance of their anonymity to be more forthcoming to answer open-ended questions.

#### **3.17.2 Proper procedures for conducting the survey**

To conduct the offline survey, an oral request for permission must first be made with the Respondents' consent to complete the questionnaire on the provided APPLE IPad; Wi-Fi connected to the Survey Monkey website. Similarly, digital survey request messages containing the Survey Monkey website URL are posted to Senior Entrepreneurs Network (SEN) and Entrepreneurship for Seniors (EFS) Meetup Groups in the online survey.

#### **3.17.3 Right of withdrawal from the survey**

As this survey allows Respondents to withdraw at any time, participants are informed beforehand of their right to do so whenever they feel uncomfortable and



do not want to be further involved with the project. It must be clearly stated on the questionnaire or orally to the Respondents on their right to withdraw from the research before, during or at the end of their participation.

#### 3.17.4 Legitimate and reasonable purpose of data collection

We need to assure survey participants that the collected information is for a legitimate and reasonable purpose. A clear explanation of the research objectives must be highlighted at the start of the questionnaire to keep all survey Respondents informed.

#### 3.17.5 Data security and archiving

Collected data are stored in a secured laptop computer to prevent unauthorised access and periodically backed up on cloud storage. Hard copies of the questionnaire are to be discarded correctly after the research. To ensure that the research data is held in a secure manner consistent with the Data Protection Act requirements, it must be archived so that it can be accessible for future audit purposes. The arrangement for this research is that only the researcher can access the collected information. There is currently no plan to submit research data to other open repositories. All collected data are to be stored in the cloud storage of Survey Monkey. Duplicate data will be archived in the secured hard disk of the researcher's desktop computer, and a copy will be kept in a thumb drive as a backup. Access to the data files are password-protected, and the access password is limited to only the researcher, thus preventing any unauthorised access.

#### 3.17.6 Respondent traceability risk

All online Respondents are registered members of SEN and EFS networks are not subjected to traceability risk when they directly input their responses to the Survey Monkey portal. Survey Monkey will only keep digital logs of the survey response number, dates and time of survey taken, IP address accessed by the Respondent; the time duration taken to complete each questionnaire and the percentage of the questions done. There will be no recording of other information.

Although the research survey was conducted after the Singapore COVID-19 partial lockdown (also known as the Circuit Breaker) period was lifted, strict social distancing rules were adhered to protect both the researcher and the Respondents who agreed to participate in the face-to-face offline survey. The shared iPad used in the survey was sanitised after each use to reduce the risk of possible infection to the participants. Mask was worn at all times by the researcher and the Respondent, seated about a metre apart. There were no shaking of hands before and after the interview.

### **3.18 SUPPLEMENTARY INTERNAL AND EXTERNAL ETHICAL GUIDANCE MATERIALS**

As research ethic considerations are standard benchmarks to distinguish acceptable conduct from unacceptable ones (Burgess, 1989), listed below are some of the internal and external guidance materials used in consultation to carry out this study. As the research takes place in Singapore, on top of the UWTSD's Research Data Management Policy, we will also reference four local legal and ethical stipulations. These include the Singapore Personal Data Protection Act 2012 (PDPA), the Maintenance of Religious Harmony Act, the Singapore Statement on Research Integrity (2010) and the Singapore COVID-19 Temporary Measures Act 2020.

#### **3.18.1 UWTSD's Research Data Management Policy**

This research will comply with UWTSD's Research Data Management Policy in that the recommended research methodology used must ensure the data collection process is as accurate, complete, valid and reliable as possible. The researcher will ensure that all collected data are stored securely. If the need arises for data to be made available to other researchers, it must be done according to appropriate ethical and data sharing principles. At the moment, only the researcher is allowed access to the data.

#### **3.18.2 The Personal Data Protection Act 2012 (PDPA) of Singapore**

The PDPA Act (2012) is a Singapore legislation to protect personal data. It is made up of various rules governing the country's collection, storage, usage, disclosure, and care of personal information. This Act outlines a comprehensive law protecting personal data with established rules to govern the collection, usage and disclosure of personal information throughout the research process. The PDPA emphasises every Singapore resident's right to protect their private data, giving them the right to access and correct them from the organisation that collected them.

### 3.18.3 The Maintenance of Religious Harmony Act (1990)

The Singapore Maintenance of Religious Harmony Act (1990) is a local statute against racial and religious discrimination among Singapore residents. The guidelines in this Act serve well as a good reminder when meeting offline Respondents of diverse ethnicity. Special attention must be paid to unintended messages that may cause ill-will feelings, hatred, hostility or enmity that could invoke social disharmonies in a multi-racial and religious Singapore. As a precaution, the researcher must ensure that online and offline questionnaires distributed do not contain sensitive racial or religious contents that can cause ill-will feelings toward this group of participants.

### 3.18.4 The Singapore Statement on Research Integrity (2010)

The 2nd World Conference on Research Integrity held in July 2010 in Singapore includes an announcement on the Singapore research integrity statement. As Singapore prides itself on aligning its research standards to international best practices, the declaration reinforces its commitment to promote ethical conduct among researchers in Singapore and worldwide. This research is also adherent to the research ethics protocols mentioned in the statement.

### 3.18.5 Singapore COVID-19 (Temporary Measures) Act 2020 – Control Orders

From 07 April 2020, the Singapore government enforced the COVID-19 Control Order Regulations 2020 to prevent the community spread of the COVID-19 virus. This temporary measure law includes a public order that mandates wearing a mask outside of one's place of residence. The researcher and Respondent should not sit on a fixed seat demarcated with 'tapes'. Participants must observe social distancing rules to stand at least one metre apart when briefing them before starting the survey. The researcher will also sanitise the shared iPad provided for the Respondents after their use.

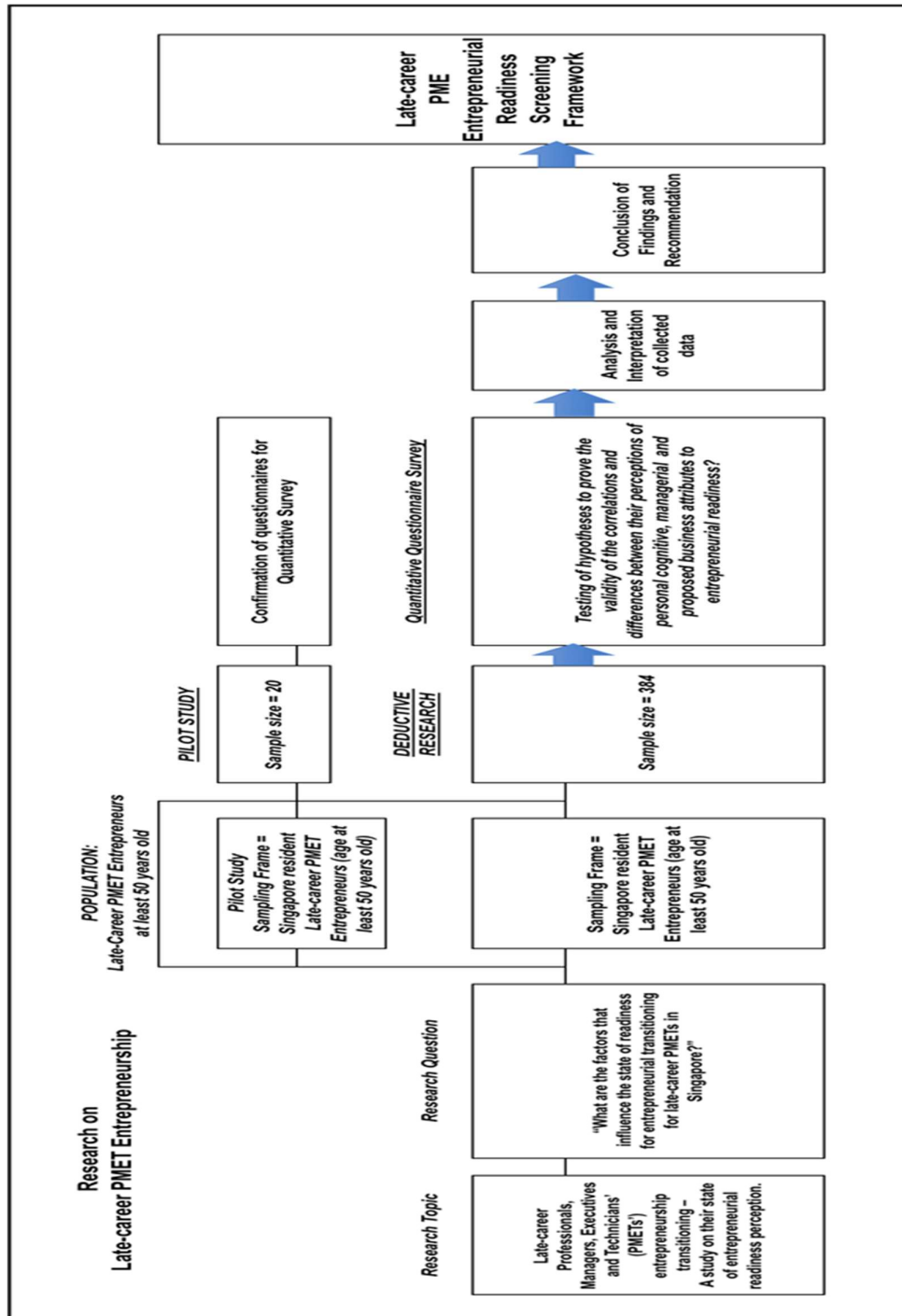
### **3.19 CHAPTER SUMMARY ON RESEARCH METHODOLOGY**

This chapter on research methodology specifically articulates the research design, particularly the sampling method, sample size, data collection and analysis methodologies. The choice of convenience sampling method of 384 late-career PMETs survey Respondents (age > 50 years old) extracted from both online sources (EFS and SEN meetup groups) and offline (white-collar PMETs working in the CBD and industrial areas). The proposed research includes a pilot study and the primary survey conducted with a sample with a 5% margin of error acceptance and a confidence level of 95%. The pilot testing aims to improve the questionnaire design to ensure reliability and validity. Figure 22 shows an overview of the proposed research process framework.

The research design is based on a quantitative deductive survey with a questionnaire to measure the extent and nature of associations between eight sets of independent variables to the two dependent variables identified. Answers collected will be analysed using the statistical software package SPSS 23.0. Descriptive statistical frequencies, percentages, means, modes, medium, cross-tabulations, Pearson correlation and Linear regression tests are the different analysis methods used to provide empirical support to answer identified research questions and justify hypotheses.

The whole research is executed based on strict adherence to the ethical guidelines laid out in the UWTSD's Code of Practice for Research Degrees (2020-2021) and Academic Quality Handbook (AQH) 2020-2021. Using other internal and external ethical guidance materials ensured that the research's conduct was appropriate.

Typology of the proposed research process framework



**FIGURE 22: Proposed research process framework**  
(Source: Researcher's own work)

## 4 CHAPTER FOUR - FINDINGS AND INTERPRETATION OF FINDINGS

This chapter presents the collected survey data and provides clear descriptions of findings, analyses, and interpretations of the results to test the proposed hypotheses. The survey was conducted over three months, between 15 June 2020 to 15 September 2020, whereby 384 late-career PMETs agreed to complete the digital questionnaire. Half or 192 of the Respondents did their survey offline, face-to-face in person using a provided iPad connected to the Survey Monkey website. Another half or 192 Respondents did the survey online using a URL link to the Survey Monkey website. Completed questionnaires for the online participants came at a slower rate of 1-3 responses per day compared to the 3-6 answers per day collected for the offline survey.

### 4.1 DATA PREPARATION AND PROCESSING

The way the data was prepared and processed follows the pathway as shown in Figure 23 below.



**FIGURE 23: Proposed data preparation and processing framework**  
(Source: Researcher's own work)

Completed questionnaires from survey Respondents were captured on Survey Monkey. They were carefully checked and coded before keying each of the data individually into the SPSS software system for further analysis. After that, we performed the descriptive statistics, and frequency distribution analysis to get a good feel of the data. Followed next was the Cronbach's Alpha reliability tests and Factor Analysis to examine the goodness of the collected data pool. Finally, the Pearson Correlation tests & Regression Analysis will check and confirm the associations between the two DVs and each of the eight IVs.

#### 4.1 1 Data Checking

To ensure that all the 384 completed questionnaires are valid and reliable before keying their responses into the SPSS software system, they were counter

checked simultaneously with the on-going of the survey. A total of 19 online questionnaires did not qualify as completed and got discarded, and immediately replaced with new surveys. Most of the rejections were due to severe incompletions of DVs' questions, or when more than 25% of IV questions asked on each response were not furnished. For the offline, face-to-face survey, the check was conducted on the spot with a gentle reminder to urge the Respondent to answer every questions in the questionnaire.

#### 4.1.2 Data Editing

As both online and offline responses are captured on the Survey Monkey platform, no further editing was needed to be performed on the data after that.

#### 4.1.3 Data Coding

Hair et al. (2007) refer to data coding as assigning a number to represent a Respondent's answer to a questionnaire question. This step ensures that all the responses entered into the database are quantifiable, precise and accurate. For this survey, coding the questions occurred about the same time the questionnaire was designed. This stage was performed way before the set-up of the Survey Monkey platform. Tables 20, 21, 22, 23 and 24 show the data coding for each expected answer, using simple numerical codes for each item. One other benefit of this data coding is that it allows the collected data to be transferred directly from the completed questionnaire to the SPSS software for quick data analysis (Zikmund & Babin, 2007).

Table 20: Data Coding for Dependent Variables

VARIABLE	QUESTION	ANSWER CODE				
		Very Low	Low	Neutral	High	Very High
<b>DV1</b>	Q3. Before the Covid-19 pandemic, how would you rate your state of readiness to discover/recognise business opportunities then? State of readiness generally refers to a mental preparedness to act. You can only choose one answer.	1	2	3	4	5
<b>DV2</b>	Q4. Before the Covid-19 pandemic, how would you rate your state of readiness to exploit business opportunities then? State of readiness generally refers to a mental preparedness to act. You can only choose one answer.	1	2	3	4	5



**Table 21: Data Coding for Characteristics, Attitudes and Mindsets**

		ANSWER CODE						
		Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<b>IV1-1 Positivism level</b>	Q5. I am a positive person who has a strong belief that I can achieve my goals. You can only choose one answer.	1	2	3	4	5	6	7
<b>IV1-2 Tenacity level</b>	Q6. I do not give up quickly whenever I encounter a challenge or problem. You can only choose one answer.	1	2	3	4	5	6	7
<b>IV1-3 Ambiguity Tolerance level</b>	Q7. I expect that there will be times of doubts and periods of uncertainties in life. You can only choose one answer.	1	2	3	4	5	6	7
<b>IV1-4 Risk Propensity level</b>	Q8. I expect that there will be times in my life that I need to take some risks in making important decisions.	1	2	3	4	5	6	7
<b>IV2-1 Motivation level</b>	Q9. I am highly motivated to take up Entrepreneurship. You can only choose one answer.	1	2	3	4	5	6	7
		YES	NO					
<b>IV2-2 Source of Motivation</b>	(1) I wanted to take advantage of a business opportunity (Pull Motivation)	1						
	(2) I was having no better choices of work at that time (Push Motivation)	1						
	(3) I always wanted to achieve something meaningful in my life (Achievement Motivation)	1						
	(4) I have relatives and friends who are successful entrepreneurs.	1						
	(5) I always wanted people to listen to me.	1						
	(6) I want to be independent.	1						
	(7) I want to be in control of my work, time and finances.	1						
	(8) Others (please specify)	1						

**Table 22: Data Coding for Self-Efficacy**

		ANSWER CODE						
		Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<b>IV3-1 Perceived ease in starting own business</b>	Q11. I believe it is easy to overcome the challenges in starting my own business. You can only choose one answer.	1	2	3	4	5	6	7
<b>IV3-2 Confidence in engaging Entrepreneurial start-up activities</b>	Q12. I am confident to engage in Entrepreneurial start-up activities. You can only choose one answer.	1	2	3	4	5	6	7

**Table 23: Data Coding for Prior Managerial Experience, Prior Knowledge and Information and Prior Relevant Skills**

		ANSWER CODE						
		Less than 3 year	3 to 6 years	7 to 10 years	More than 10 years			
<b>IV4 -1 Years of prior managerial experience</b>	Q14. How many years of professional managerial experience do you have? If you are a business owner, it refers to the point in time when you just took up entrepreneurship?	1	2	3	4			
		ANSWER CODE						
		Executive/ Team Leader	Junior Manager	Middle Manager	Senior Manager	Director/ GM	Other, please specify	
<b>IV4-2 Position of prior managerial experience</b>	Q15. What is/was the position of your current/last managerial experience?	1	2	3	4	5	6	
		ANSWER CODE						
		< 3	3 to 6	7 to 10	> 10			
<b>IV5-1 Number of markets served</b>	Q16a. Following up on Question 15, how many markets do/did you served in that managerial position?	1	2	3	4			
<b>IV5-2 Number of customers served</b>	Q16b. Following up on Question 15, how many customers do/did you served in that managerial position?	1	2	3	4			
		ANSWER CODE						
		Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<b>IV5-3 Proficiency level of markets and customers previously served</b>	Q17. I am good at serving the market (products and pricings) and customer (service quality).	1	2	3	4	5	6	7
		ANSWER CODE						
		Not Proficient	Average	Proficient				
<b>IV6-1 Type and proficiency level of skill sets</b>	1 Creative Thinking	1	2	3				
	2 Problem Solving	1	2	3				
	3 Decision-making	1	2	3				
	4 Motivating Others	1	2	3				
	5 Managing Conflicts	1	2	3				
	6 Leading Others	1	2	3				
	7 Teamwork	1	2	3				
	8 Communication	1	2	3				
		ANSWER CODE						
		Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<b>IV6-2 Certification of skill set Proficiency</b>	Q19. I have attended formal training, and obtained certifications for the skill sets mentioned in Question 18? You can only choose one answer.	1	2	3	4	5	6	7

Table 24: Data Coding for Social and Business Network Type, Member Size and Years of Relationships.

		ANSWER CODE			
		< 6	6 to 10	11 to 15	> 15
<b>IV7-1 Type and member size of Social Network</b>	Q20. For the given types of Social Network Relationship, provide an estimated member size for each.	1	2	3	4
<b>IV7-2 Years of the Relationship within the Social Network?</b>	Q21. What is the number of years of each Social Network Relationship?	1	2	3	4
<b>IV8-1 Type and member size of Business Network</b>	Q22. For the given types of Business Network Relationship, provide an estimated member size for each.	1	2	3	4
<b>IV8-2 Years of Relationship with the Business Network?</b>	Q23. What is the number of years of each Business Network Relationship?	1	2	3	4

#### 4.1.4 Data Assembly & Data Entry

Once the raw data from 384 Respondents are coded and assembled, they are then manually transferred from Survey Monkey by keying each piece of information into the SPSS software version 23.0 to run the data analysis.

## **4.2 STATISTICAL ANALYSIS**

All statistical analysis of the findings is performed through SPSS version 23.0 for Windows 10.

### **(1) Spearman Correlation Test for non-parametric sampling method used**

Before conducting any analysis on survey findings, there is a need to determine whether the selected non-probability sample used will produce data that will pass the assumptions required for Spearman's correlation to give a valid result. It tests the monotonic relationship of the non-probability sample to ensure they meet the assumption test of correlations to reduce the effect of any selection bias.

The following tests were further performed to justify that the generated research results are valid and reliable:

### **(2) Cronbach's Alpha ( $\alpha$ ) Reliability Test**

Section 3.12 offers a detailed explanation of the use of Cronbach Alpha reliability test. This SPSS generated analysis is a measurement to ensure internal consistency, otherwise known as reliability. Our aim is to determine the suitability of the Likert scale items set in the survey questionnaire. Table 16 shows the coefficient values above 0.7 suitable for use.

### **(3) Factor Analysis Validity Test**

Based on explanation offered in Section 3.13, the KMO test value will tell us about the overall goodness of the collected data regarding the instrument's validity in this study. Hence, any KMO test value of below 0.5 is considered unacceptable. Table 17 will be used as a reference check to assess the acceptability of the KMO values generated.

Once the fitness of the sample used and the overall goodness of the collected data were determined, we then analysed the eight groups of Independent Variables measured by twenty-five questions based on a mix of Likert-scale, multiple-choice, rating and open-ended questioning techniques on the questionnaire using the following analyses.

### **(4) Frequency Distribution Analysis**

This analysis provides a visual representation for the distribution of observations to illustrate the data collected in a chosen sample.

## **(5) Excel Spreadsheet Analysis**

We use this tool to analyse open-ended questions to categorised the raw data into relevant themes for comparison. Next, all research variables were then cross-referenced with the entrepreneurial state of readiness to check whether the research hypotheses are statistically supported to answer the research questions raised in this study. Performing this step requires the following analysis to check on the correlations and significances of relationships between independent and dependent variables.

## **(6) Cross-Tabulation**

This analysis's performance is to look into the relationships between two independent variables and describe their interactions, which might not be obvious when analysing the totality survey responses.

## **(7) Pearson Correlation Analysis**

We perform this analysis to look into the relationships between two independent variables and describe their interactions, which might not be obvious when analysing the totality survey responses.

## **(8) Linear Regression**

The linear regression can identify the strength of each IV's effect on a DV. It is a statistical tool designed to predict and scrutinise the following scenarios:

(1) Is the IV doing an excellent job in accurately predicting the magnitude or impact on the DV?

(2) Which variables are significant predictors of the dependent variable? The dependent variable's relationship to one or more independent variables is explained by the regression coefficient value generated from the data collected.

## **(9) Multiple Regression**

This is a statistical method that uses the values of two or more IVs to predict the value of a dependent variable. For our research, it is used to ascertain how much changes to the dependent variables were actually contributed by each of the eight independent variables.

### 4.3 RELIABILITY AND VALIDITY OF DATA

#### 4.3.1 Spearman Correlation test to justify the non-probability sample size

Before conducting descriptive analysis on the data collected, there is a need to determine whether the non-probability sample used in this study will produce data that pass the following assumptions that satisfy Spearman's correlation to give a valid result free from selection bias.

This non-parametric test is necessary to measure the degree of association between two variables. Due to the differential access to the survey, the degree of Respondents' interest selection bias may occur based on the type of person that would opt-in to complete the survey.

##### Assumption 1

All variables should be measured on an ordinal scale. For example, a 7-point scale from 'strongly agree' through to 'strongly disagree', or a 5-point scale from 'Very High' to 'Very Low'.

##### Assumption 2

All variables represent paired observations. For example, the research is interested in the relationship between perceived level of Positivism corresponding to the perceived level of Entrepreneurial Readiness. A single paired observation reflects the score on each variable for a single participant (e.g., high level of Positivism of 'Respondent 1' correspond to high perceived level of Entrepreneurial Readiness of 'Respondent 1'). With 384 participants in the study, this means that there would be 384 paired observations.

##### Assumption 3

This analysis is performed to determine whether there is a monotonic component of association between two ordinal variables. That is, when either the variables

increase in value together, or as one variable value increases, the other variable value decreases.

Table 25 shows the mean and standard deviation for each variable collected from the selected non-probability sample based on the Spearman correlation analysis. Results show a consistent spread of the data about the mean value for each item for the sample size of 384.

**TABLE 25: Spearman Correlation Analysis (Descriptive Statistics)**

	<b>MEAN</b>	<b>STD DEVIATION</b>	<b>N</b>
<b>DV1</b>	4.5078	0.61312	384
<b>DV2</b>	4.3021	0.78324	384
<b>Positivism</b>	6.2578	0.66520	384
<b>Tenacity</b>	6.2656	0.73854	384
<b>Ambiguity Tolerance</b>	6.0885	0.77323	384
<b>Risk Propensity</b>	5.8620	0.95552	384
<b>Motivation</b>	6.0911	0.80438	384
<b>Able to overcome challenges during business start-up</b>	5.9401	0.84832	384
<b>Confident to engage in start-up activities</b>	5.8802	0.83727	384
<b>Good at serving Markets' and Customers' Needs</b>	6.1354	0.79974	384
<b>Formal Trainings with certifications of skillset proficiency</b>	5.6328	0.91866	384

Spearman's correlation analysis of variables obtained from the non-parametric sample, as shown in Table 26, indicates that the coefficients range from 0 to +1. This positive sign of the correlation coefficients indicates that the variables' monotonic relationships are mainly positive. These values suggest that most of the strongly agreed values tend to occur together for the sample size of 384. All their correlations are significant (<0.001) at the 95% confidence level (e.g. less than 0.05). All values pass assumptions and satisfy Spearman's correlation to give a valid result, making it suitable for further data analysis. The analysis shows no sign of bias in terms of age, gender and industry distribution, or other factors.

**TABLE 26: Spearman Correlation Analysis**

		DV1	DV2	Positivism	Tenacity	Ambiguity Tolerance	Risk Propensity	Motivation	Able to overcome challenges during business start-up	Confident to engage in start-up activities	Good at serving Markets' and Customers' Needs	Formal Trainings with certifications of skillset proficiency
DV1	Pearson Correlation Significance (2-tailed)	1	.593 <.001	.274 <.001	.278 <.001	.219 <.001	.240 <.001	.298 <.001	.214 <.001	.297 <.001	.120 <.001	.188 <.001
DV2	Pearson Correlation Significance (2-tailed)	.593 <.001	1	.351 <.001	.330 <.001	.322 <.001	.366 <.001	.321 <.001	.334 <.001	.418 <.001	.205 <.001	.249 <.001
Positivism	Pearson Correlation Significance (2-tailed)	.274 <.001	.351 <.001	1	.455 <.001	.346 <.001	.319 <.001	.395 <.001	.287 <.001	.398 <.001	.175 <.001	.228 <.001
Tenacity	Pearson Correlation Significance (2-tailed)	.278 <.001	.330 <.001	.455 <.001	1	.375 <.001	.330 <.001	.328 <.001	.326 <.001	.356 <.001	.248 <.001	.229 <.001
Ambiguity Tolerance	Pearson Correlation Significance (2-tailed)	.219 <.001	.278 <.001	.375 <.001	.455 <.001	1	.607 <.001	.419 <.001	.346 <.001	.367 <.001	.323 <.001	.307 <.001
Risk Propensity	Pearson Correlation Significance (2-tailed)	.240 <.001	.330 <.001	.607 <.001	.419 <.001	.607 <.001	1	.468 <.001	.431 <.001	.439 <.001	.325 <.001	.335 <.001
Motivation	Pearson Correlation Significance (2-tailed)	.298 <.001	.321 <.001	.395 <.001	.328 <.001	.419 <.001	.468 <.001	1	.414 <.001	.478 <.001	.326 <.001	.303 <.001
Able to overcome challenges during business start-up	Pearson Correlation Significance (2-tailed)	.214 <.001	.278 <.001	.375 <.001	.455 <.001	.607 <.001	.419 <.001	.468 <.001	1	.541 <.001	.358 <.001	.347 <.001
Confident to engage in start-up activities	Pearson Correlation Significance (2-tailed)	.297 <.001	.418 <.001	.398 <.001	.321 <.001	.418 <.001	.478 <.001	.326 <.001	.541 <.001	1	.356 <.001	.438 <.001
Good at serving Markets' and Customers' Needs	Pearson Correlation Significance (2-tailed)	.120 <.001	.205 <.001	.175 <.001	.248 <.001	.323 <.001	.325 <.001	.326 <.001	.356 <.001	.356 <.001	1	.320 <.001
Formal Trainings with certifications of skillset proficiency	Pearson Correlation Significance (2-tailed)	.188 <.001	.249 <.001	.228 <.001	.229 <.001	.307 <.001	.335 <.001	.303 <.001	.347 <.001	.438 <.001	.320 <.001	1



#### 4.3.2 Cronbach's Alpha reliability test

Reliability tests the stability and internal consistency of the data measurement employed (Zikmund, 2000). If the measurement method passes the Reliability test, the results would likely be valid. This test utilises calculating the questionnaire items' Cronbach Alpha coefficient value to compare it with the values shown in Table 16 (Hair et al., 2019, 2007).

(a) Cronbach's Alpha Analysis for all items in the whole questionnaire

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.862	.863	26

The Cronbach's Alpha coefficient for the whole questionnaire is **0.862**, which is rated '**Very Good**', according to Hair et al. (2007). This number indicates a high level of internal consistency and reliability for the scale employed in the whole questionnaire's questions to determine both the independent and dependent variables.

The Item-Total Statistics table presented on the next page shows that removing any item from the questionnaire will not significantly increase the Cronbach's Alpha consistency value. As all items are relevant and fit for use in the actual survey, we will keep them in the final questionnaire for conducting the primary survey.

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
DV1	108.1215	97.686	.281	.407	.860
DV2	108.3398	94.812	.389	.478	.857
Postivism	106.3840	95.157	.453	.379	.856
Tenacity	106.3757	94.939	.409	.343	.857
Ambiguity Tolerance	106.5304	94.416	.426	.472	.856
Risk Propensity	106.7652	91.931	.471	.502	.855
Motivation	106.5304	93.707	.453	.415	.855
Able to overcome challenges during business start-up	106.6906	93.383	.446	.436	.856
Confident to engage in start-up activities	106.7348	92.561	.517	.517	.854
Years in Prior Managerial Experience	108.9807	97.709	.335	.217	.859
Position in Prior Managerial Experience	108.8094	93.905	.422	.303	.856
Number of Markets Served	109.7818	92.853	.363	.387	.859
Number of Customers Served	109.1160	94.613	.392	.390	.857
Good at serving Markets and Customer Needs	106.4779	94.765	.391	.270	.857
Formal Trainings with certifications of skillset proficiency	106.9862	94.872	.324	.300	.860
Immediate Family	109.4696	93.962	.375	.345	.858
Relatives	109.0331	96.919	.339	.418	.859
Close Friends	109.0635	95.788	.401	.510	.857
Schoolmates	109.1354	95.397	.391	.527	.857
Community Friends	109.2127	95.354	.370	.529	.858
Social Acquaintances	109.3425	93.827	.423	.593	.856
Online/Social Media Friends	109.2928	93.992	.406	.539	.857
Business Partners	110.0110	91.451	.456	.441	.855
Ex-Colleagues	109.3950	94.522	.405	.517	.857
Business Associates	109.5967	92.363	.496	.735	.854
Business Competitors	109.6381	91.899	.498	.763	.854

- (b) Cronbach's Alpha coefficient testing on the late-career PMET's Characteristics, Attitude and Mindset, Motivation and perceived Self-Efficacy (on IV1, IV2 and IV3 )

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.824	.824	7

The Cronbach's Alpha coefficient for this group of 7 items is **0.824**, which is also rated '**Very Good**' according to Hair et al. (2007). This number indicates a very high level of internal consistency and reliability for the scale employed in the questions to determine the 7-items of IV1-1, IV1-2, IV1-3, IV2-1, IV2-2, IV3-1, IV3-2 and IV3-3, that represent the measure of inherent Psychological Capital variables.

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Postivism	36.1276	12.702	.506	.308	.810
Tenacity	36.1198	12.419	.495	.290	.811
Ambiguity Tolerance	36.2969	11.812	.589	.422	.797
Risk-Taking	36.5234	10.741	.621	.462	.792
Motivation	36.2943	11.634	.595	.363	.796
Able to overcome challenges during business start-up	36.4453	11.605	.557	.360	.802
Confident to engage in start-up activities	36.5052	11.368	.615	.418	.792

- (c) Cronbach's Alpha coefficient testing on IV4 (PMET's Prior Managerial Experience, IV5 (PMET's Prior Knowledge and Information) and IV6 (PMET's Prior Relevant Skills)

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.688	.696	6

Likewise, Cronbach's Alpha coefficient for the independent variables of IV4, IV5 and IV6 is **0.688** which is also rated '**Moderate**' according on Hair et al. (2007). This figure shows the adequacy, consistency and reliability for the set two questions to find out the independent variables of PMET's Prior Managerial Experience (IV4), Prior Knowledge and Information (IV5) and Prior Relevant Skills (IV6).

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Years in Prior Managerial Experience	21.9180	8.786	.368	.160	.669
Position in Prior Managerial Experience	21.7593	7.260	.495	.249	.621
Number of Markets Served	22.7434	6.648	.436	.301	.647
Number of Customers Served	22.0450	7.306	.494	.316	.622
Good at serving Markets and Customer Needs	19.4339	7.880	.380	.165	.659
Courses Attended	19.9312	7.454	.383	.195	.660

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Creative Thinking	15.9841	4.840	.455	.275	.752
Problem Solving	15.6923	5.336	.450	.249	.751
Decision-Making	15.7321	5.218	.432	.233	.754
Leading Others	15.9151	4.434	.608	.550	.716
Managing Conflicts	15.9178	4.544	.572	.508	.725
Teamwork	15.7003	5.205	.479	.311	.746
Communication	15.7162	5.198	.464	.313	.748

(d) Cronbach's Alpha testing on IV7 (Social Networks)

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.758	.785	14

Cronbach's Alpha coefficient for the independent variables of IV7 (Social Networks) is **0.758** which is also rated '**Good**' according on Hair et al. (2007). This figure shows an acceptable level of adequacy, consistency and reliability for the set two questions to find out the independent variables of PMET's Social Networks (IV7).

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Immediate Family	42.8182	28.006	.409	.312	.740
Relatives	42.3884	29.647	.412	.371	.742
Close Friends	42.4215	28.753	.506	.460	.734
Schoolmates	42.4986	28.008	.557	.507	.728
Community Friends	42.5620	27.440	.599	.511	.723
Social Acquaintances	42.6997	26.829	.601	.534	.720
Online/Social Media Friends	42.6639	27.389	.507	.493	.729
Immediate Family	42.2782	31.682	.162	.175	.759
Relatives	42.2011	32.133	.100	.216	.762
Close Friends	42.4270	30.566	.304	.192	.750
Schoolmates	42.4242	31.626	.137	.153	.761
Community Friends	43.1074	24.676	.277	.127	.797
Social Acquaintances	43.5344	27.487	.502	.457	.730
Online/Social Media Friends	43.8678	28.579	.427	.416	.739

The above table shows that removing any social network type from the questionnaire will not significantly increase the Cronbach's Alpha consistency value. As such, we will keep all items in the questionnaire.

(e) Cronbach's Alpha testing on IV8 (Business Networks)

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.884	.883	8

Cronbach's Alpha coefficient for the independent variables of IV8 (Business Networks) is **0.884** which is also rated 'Very Good' according on Hair et al. (2007). This figure shows a high level of adequacy, consistency and reliability for the scale used in the two questions to find out the independent variables of PMET's Business Networks (IV8).

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Business Partners	20.9101	20.262	.638	.502	.872
Ex-Colleagues	20.2751	21.882	.634	.489	.871
Business Associates	20.4841	20.882	.699	.722	.864
Business Competitors	20.5317	20.388	.729	.751	.861
Business Partners	20.8069	20.862	.654	.512	.869
Ex-Colleagues	20.2090	23.529	.431	.306	.888
Business Associates	20.6534	21.018	.721	.747	.863
Business Competitors	20.7037	20.713	.712	.751	.863

From above table, it shows that removing any business network type from the questionnaire will not significantly increase the Cronbach's Alpha consistency value. As such, we will keep all items in the questionnaire.

#### 4.3.3 Factor Analysis validity test

To ensure there are internal consistency and validity among the questionnaire questions for each variable, we can perform factor analysis through SPSS. We employ the statistical tools of KMO sampling adequacy test, Bartlett's test of sphericity, and the Total Variance Explained analysis to check the validity of the instrument used in this study. According to Kaiser (1974), the KMO test values must be greater than 0.5 to be considered acceptable for factoring.

##### (a) Factor Analysis for all items in the whole questionnaire

<b>KMO and Bartlett's Test</b>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.845
Bartlett's Test of Sphericity	Approx. Chi-Square
	4742.404
	df
	435
	Sig.
	.000

The KMO result for the whole questionnaire is **0.845** is considered as '**Great**'. The Bartlett's test of sphericity resulted in **0.000** (less than 0.05), indicating the significance of the correlation between the variables in the whole questionnaire is relatively compact. Hence, factor analysis for this independent variables data group is suitable.

Component	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
DV1	6.919	23.065	23.065	6.919	23.065	23.065
DV2	4.277	14.256	37.320	4.277	14.256	37.320
Postivism	2.010	6.699	44.020	2.010	6.699	44.020
Tenacity	1.600	5.332	49.352	1.600	5.332	49.352
Ambiguity Tolerance	1.341	4.469	53.820	1.341	4.469	53.820
Risk Propensity	1.181	3.936	57.756	1.181	3.936	57.756
Motivation	1.060	3.532	61.288	1.060	3.532	61.288
Able to overcome challenges during business start-up	1.047	3.489	64.777	1.047	3.489	64.777
Confident to engage in start-up activities	0.897	2.989	67.766			
Years in Prior Managerial Experience	0.845	2.817	70.584			
Position in Prior Managerial Experience	0.768	2.561	73.145			
Number of Markets Served	0.712	2.373	75.517			
Number of Customers Served	0.676	2.255	77.772			
Good at serving Markets and Customer Needs	0.650	2.167	79.938			
Formal Trainings with certifications of skillset proficiency	0.622	2.073	82.011			
Immediate Family	0.571	1.904	83.915			
Relatives	0.516	1.721	85.636			
Close Friends	0.497	1.656	87.292			
Schoolmates	0.474	1.582	88.874			
Community Friends	0.449	1.497	90.371			
Social Acquaintances	0.384	1.281	91.652			
Online/Social Media	0.377	1.257	92.908			
Business Partners	0.360	1.200	94.109			
Ex-Colleagues	0.358	1.192	95.301			
Business Associates	0.314	1.048	96.348			
Business Competitors	0.307	1.024	97.372			

The Total Variance Explained table above shows that the cumulative percentage of the extraction sums of squared loadings among the components for the whole questionnaire is at 64.777, which is >60% and therefore is acceptable.

(b) Factor analysis on IV1 (PMET's entrepreneurial Characteristics and Attitude)

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.687	←
Bartlett's Test of Sphericity	Approx. Chi-Square	350.088	
	df	6	
	Sig.	.000	

The KMO result for the independent IV1 (PMET's Characteristics, Attitude and Mindset) is **0.687** is considered as '**mediocre**' but acceptable (greater than 0.5). The Barlett's test of sphericity resulted in **0.000** (less than 0.05), indicating the significance of the correlation between the variables of IV1-1, IV1-2, IV1-3, and IV1-4 is relatively compact. Hence, factor analysis for this independent variables data group is suitable.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			←
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	2.221	55.515	55.515	2.221	55.515	55.515	
2	.844	21.105	76.620				
3	.544	13.612	90.232				
4	.391	9.768	100.000				

Extraction Method: Principal Component Analysis.

From the above table, the extraction sums of squared loadings show the variance distribution among the components. This independent variable IV1-1 (Positivism) resulted in a value of 55.515%, followed by IV1-2 (Tenacity) at 21.105%, IV1-3 (Ambiguity Tolerance) at 13.612% and IV1-4 (Risk Propensity) at 9.768%.

(c) Factor analysis on IV2 (PMET's entrepreneurial Motivation)

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500	←
Bartlett's Test of Sphericity	Approx. Chi-Square	132.265	
	df	1	
	Sig.	.000	

The KMO result for the independent variable IV2 (PMET's entrepreneurial Motivation) is **0.5**, which is a borderline case. The Barlett's test of sphericity resulted in **0.000** (less than 0.05) indicating the significance of the patterns of



correlations between IV2 group of variables are relatively compact, making factor analysis for this independent variable data measurement suitable.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.541	77.064	77.064	1.541	77.064	77.064
2	.459	22.936	100.000			

Extraction Method: Principal Component Analysis.

(d) Factor analysis on IV3 (PMET's entrepreneurial Self-Efficacy)

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.603
Bartlett's Test of Sphericity	Approx. Chi-Square
	df
	Sig.
	214.313
	3
	.000

The KMO result for the independent variable IV3 (PMET's entrepreneurial Self-Efficacy) is **0.603**, hence, is '**mediocre**' but acceptable (greater than 0.5). The Bartlett's test of sphericity resulted in **0.000** (less than 0.05) indicating the significance of correlations between IV3 group of variables are relatively compact, making factor analysis for this independent variable data measurement suitable.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.825	60.835	60.835	1.825	60.835	60.835
2	.769	25.624	86.459			
3	.406	13.541	100.000			

Extraction Method: Principal Component Analysis.

The Total Variance Explained graph shows that the cumulative percentage of the extraction sums of squared loadings for this independent variable IV3-1 (PMET's perceived ease in starting own business) acceptable at a value of 60.835

(e) Factor analysis on IV4 (PMET's Prior Managerial Experience)

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.550	←
Bartlett's Test of Sphericity	Approx. Chi-Square	139.651	
	df	3	
	Sig.	.000	

The KMO result for the independent IV4 (PMET's Prior Managerial Experience) is **0.55** which is considered as 'miserable' but acceptable (greater than 0.5). The Bartlett's test of sphericity resulted in **0.000** (less than 0.05) indicating that the patterns of correlations between the IV4 group of variables are significantly compact, making factor analysis for this independent variable data measurement suitable.

**Component Matrix<sup>a</sup>**

	Component
	1
Number of Markets Served	.812
Years in Prior Managerial Experience	.512
Number of Customers Served	.845

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	1.637	54.562	54.562	1.637	54.562	54.562	←
2	.885	29.503	84.065				
3	.478	15.935	100.000				

Extraction Method: Principal Component Analysis.

(f) Factor analysis on IV5 (PMET's Prior Knowledge and Information)

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.564	←
Bartlett's Test of Sphericity	Approx. Chi-Square	142.027	
	df	3	
	Sig.	.000	

The KMO result for the independent IV5 (PMET's Prior Knowledge and Information) is **0.564** is acceptable (greater than 0.5). The Barlett's test of sphericity resulted in **0.000** (less than 0.05). This value indicates that the significant relationships between the IV5 group of variables are relatively correlated, and this deems factor analysis for this data measurement suitable.

**Component Matrix<sup>a</sup>**

	Component
	1
Number of Markets Served	.816
Number of Customers Served	.836
Good at serving Markets and Customer Needs	.539

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.655	55.172	55.172	1.655	55.172	55.172
2	.863	28.767	83.939			
3	.482	16.061	100.000			

Extraction Method: Principal Component Analysis.

(g) Factor analysis on IV6 (PMET's Prior Relevant Skills)

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.737
Bartlett's Test of Sphericity	Approx. Chi-Square	684.833
	df	21
	Sig.	.000

The KMO result for the independent IV6 (PMET's Prior Relevant Skills) is **0.737** is considered as 'good'. The Barlett's test of sphericity resulted in **0.000** ( < 0.05) which is significant and indicates that the relationships between the IV6 group of variables relatively correlated, making factor analysis for this independent variable data measurement suitable.

**Communalities**

	Initial	Extraction
Creative Thinking	1.000	.531
Problem Solving	1.000	.498
Decision-Making	1.000	.382
Leading Others	1.000	.833
Managing Conflicts	1.000	.751
Teamwork	1.000	.435
Communication	1.000	.596

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.969	42.416	42.416	2.969	42.416	42.416
2	1.058	15.110	57.526	1.058	15.110	57.526
3	.906	12.950	70.476			
4	.735	10.494	80.970			
5	.601	8.581	89.551			
6	.449	6.413	95.964			
7	.283	4.036	100.000			

Extraction Method: Principal Component Analysis.

(h) Factor analysis on IV7 (PMET's social networks)

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.805
Bartlett's Test of Sphericity	Approx. Chi-Square	1421.264
	df	91
	Sig.	.000

The KMO result for the independent IV7 (PMET's Social Networks) is **0.805** is considered as 'Great'. The Bartlett's test of sphericity resulted in **0.000** (< 0.05), which is significant and indicates no redundancy between the variables. The patterns of correlations between them are relatively compact, making factor analysis for this data measurement suitable.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.060	28.997	28.997	4.060	28.997	28.997
2	1.792	12.799	41.796	1.792	12.799	41.796
3	1.419	10.138	51.934	1.419	10.138	51.934
4	1.168	8.341	60.275	1.168	8.341	60.275
5	.842	6.012	66.287			
6	.802	5.732	72.019			
7	.780	5.573	77.592			
8	.621	4.434	82.026			
9	.588	4.202	86.228			
10	.484	3.457	89.685			
11	.423	3.024	92.710			
12	.374	2.672	95.382			
13	.336	2.401	97.782			
14	.310	2.218	100.000			

Extraction Method: Principal Component Analysis.

(i) Factor analysis on IV8 (PMET's Business Networks)

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.816
Bartlett's Test of Sphericity	Approx. Chi-Square	1849.350
	df	28
	Sig.	.000

KMO result for the independent IV8 (PMET's Business Networks) is **0.816** is considered as '**Great**'. The Bartlett's test of sphericity resulted in **0.000** (less than 0.05) which is indicative that the relationships between all the variables are significantly compact, making factor analysis suitable for the data.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.452	55.655	55.655	4.452	55.655	55.655
2	1.081	13.515	69.170	1.081	13.515	69.170
3	.877	10.957	80.127			
4	.535	6.686	86.814			
5	.424	5.296	92.110			
6	.328	4.094	96.204			
7	.174	2.170	98.374			
8	.130	1.626	100.000			

Extraction Method: Principal Component Analysis.

## 4.4 ANALYSIS, FINDINGS AND INTERPRETATION OF FINDINGS

### **DEMOGRAPHICS FINDINGS**

The first two analyses of collected data seek to explore the Respondents' demographic profiles. These include the Respondents' gender composition and their annual business portfolio management size.

#### 4.4.1 Respondents' Gender composition

**TABLE 27: Respondents' gender composition**

	<b>Frequency</b>	<b>Percentage</b>
<b>Male</b>	295	77.4%
<b>Female</b>	86	22.6%
<b>Total</b>	381	100.0%

From this question in the questionnaire, we hope to determine the gender composition of our late-career PMET Respondents. However, only 381 out of the 384 Respondents answered this question posed. Of them, 295 (77.4%) are male, and 86 (22.6%) are female, as shown in Table 27 above. This gender made-up is assumed to be reasonably consistent with the male-female ratio in a management position in the Singapore workforce. This assumption is supported by Robert Walters (2020)'s claim that women form about 21% of those holding corporate managerial roles in Singapore.

However, as our research primarily focuses on the general group of late-career PMETs, the study does not specify that the sample must consist of a definite proportion of gender mix. Moreover, the survey findings should not represent the gender mix retrospective of PMETs considering taking up Entrepreneurship in Singapore. Instead, it is likely because of our study's non-probability convenience sampling methodology.

#### 4.4.2 Respondents' existing Business Portfolio under management

Table 28 below shows the annual revenue (in SGD) of the business portfolio currently under the Respondents' management?

TABLE 28: Annual portfolio size managed by the Respondents

	<b>Frequency</b>	<b>Percentage</b>
<b>\$5,000,000 and below</b>	129	33.8%
<b>\$5,000,001 to \$10,000,000</b>	84	22.0%
<b>\$10,000,001 to \$15,000,000</b>	85	22.3%
<b>\$15,000,001 to \$20,000,000</b>	46	12.0%
<b>Above \$20,000,000</b>	38	9.9%
<b>Total</b>	382	100.0%

From the research findings, 129 (33.8%) of those surveyed manage an annual business portfolio size of S\$5m and below, while 38 (9.9%) manage a significant one that is more than S\$20m. Another 215 (56.3%) operates a portfolio between S\$5m to S\$20m, a rather substantial a business size. All these Respondents are directly running their businesses or overseeing a company's business unit as paid managers.

The above findings illustrate that many of these late-career PMETs have either past management experience or are currently managing a business portfolio with millions of dollars in turnover a year. That means we can safely assume that running a sizeable business operation is not new to these individuals.

Also, based on the significant percentage of 66.2% running a business portfolio worth more than \$5m, we can accept that most Respondents in this survey are considered quite successful in their respective industries. The reason is that the ability to run a multimillion-dollar business unit does reflect on the individual's trait and competency as a successful manager or business operator.

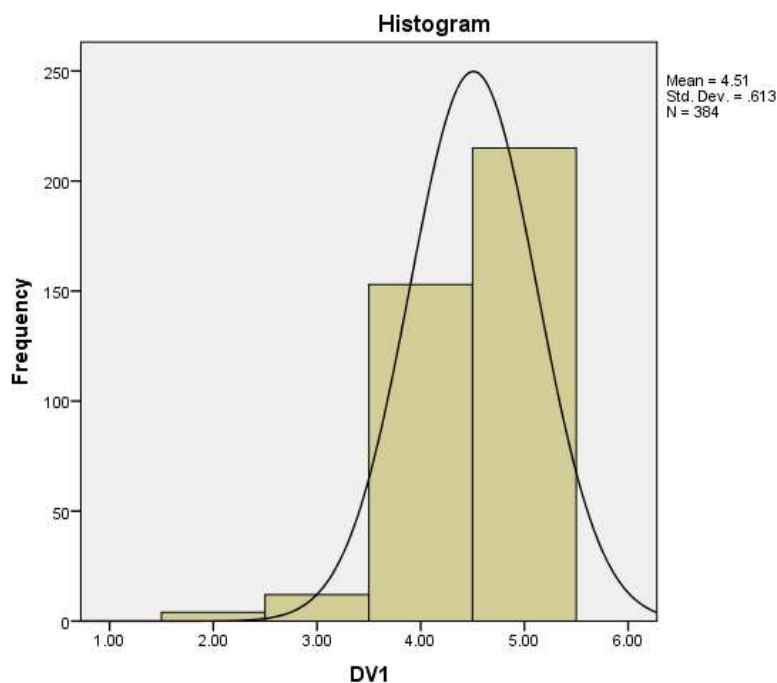
**FINDINGS ON RESPONDENTS' PERCEIVED STATE OF READINESS  
TOWARDS ENTREPRENEURIAL OPPORTUNITIES**

4.4.3 Respondents' perceived state of readiness to identify opportunities (DV1)

Question 3 - Before the COVID-19 pandemic, how would you rate your state of readiness to identify business opportunities? Give your reason.

**TABLE 29: Respondents' perceived state of readiness to identify opportunities (DV1)**

	FREQUENCY	PERCENTAGE
1. Very Low	0	0.0%
2. Low	4	1.1%
3. Average	12	3.1%
4. High	153	39.8%
5. Very High	215	56.0%
TOTAL	384	100.0%



**GRAPH 1: Histogram of Respondents' perceived state of readiness to identify opportunities.**

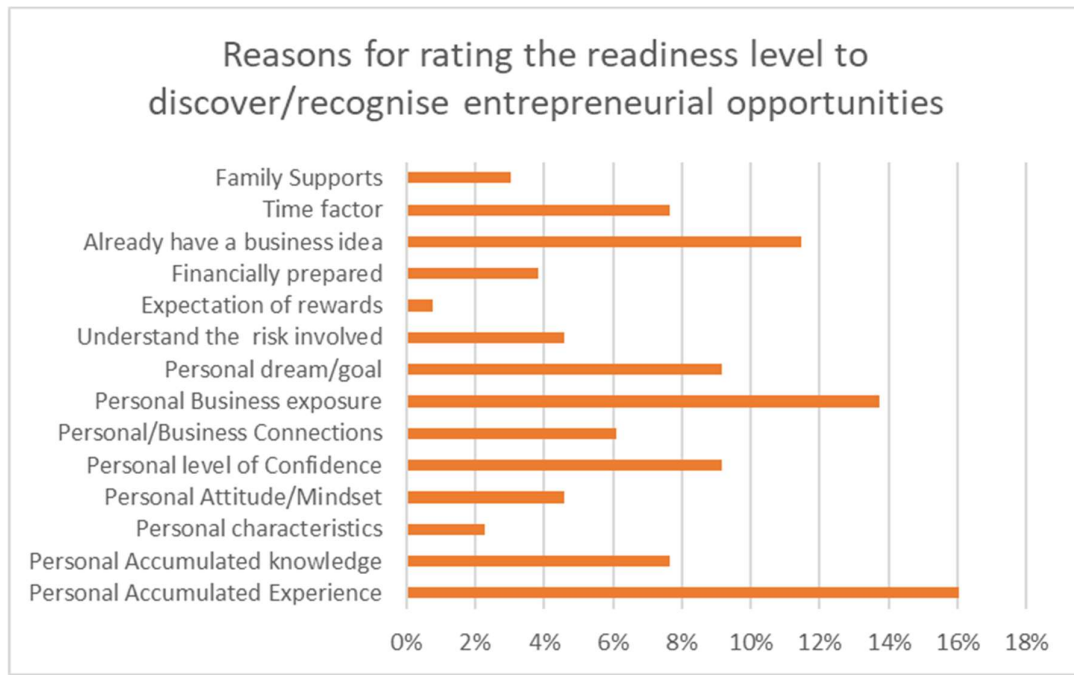


From Table 29, at least 368 (95.8%) of the late-career PMETs interviewed rated a combined 'High' to 'Very High' level of the perceived state of readiness towards the identification of business opportunities (See area highlighted by a circle). It has been emphasised explicitly to the Respondents that their perceptions must be based on the pre-COVID-19 situation. This instruction is given because their overall attitude towards Entrepreneurship could have been badly affected by the economic slowdown caused by partial lockdowns during the pandemic. To overlook this fact might skew the collected data to distort our findings.

Hence, we need to probe deeper into their thought by asking them to provide reasons for their answers. Using the excel spreadsheet, it can then tabulate the counts for reasons given to support their rating selection. These reasons are categorised into 14 themes, as shown in Table 30 below.

**TABLE 30: Reasons for rating selection given to Question 3**

<b>Theme (Reasons Given)</b>	<b>Count</b>	<b>Percentage</b>
<b>Personal Accumulated Experience</b>	21	16%
<b>Personal Accumulated knowledge</b>	10	8%
<b>Personal characteristics</b>	3	2%
<b>Personal Attitude/Mindset</b>	6	5%
<b>Personal level of Confidence</b>	12	9%
<b>Personal/Business Connections</b>	8	6%
<b>Personal Business exposure</b>	18	14%
<b>Personal dream/goal</b>	12	9%
<b>Understand the risk involved</b>	6	5%
<b>Expectation of rewards</b>	1	1%
<b>Financially prepared</b>	5	4%
<b>Already have a business idea</b>	15	11%
<b>Time factor</b>	10	8%
<b>Family Supports</b>	4	3%
	<b>131</b>	<b>100%</b>



**GRAPH 2: Reasons for rating selection given to Question 3**

A graphical representation of the reasons given to rate their readiness level to recognise entrepreneurial opportunities, as shown in Graph 2. In it, we can assume that many of the late-career PMETs surveyed have the personal perception that they possess a high state of readiness to recognise or discover a business opportunity if one is to surface around them. Among the reasons given by the Respondents for having such a readiness perception, the top three are:-

1. Many claimed that their accumulated experience from a past career working as managers could help them identify opportunities (16%).
2. Many claimed that they possess business exposure that could help them discover new business opportunities (14%). These occasions were when they made overseas business trips or participated in trade fairs and exhibitions during their past careers.
3. 11% of the Respondents stated that they already have a business idea. It can thus be interpreted that a pre-conceived idea can help one to be more alert to potential business opportunities and recognise it immediately when it surfaces.

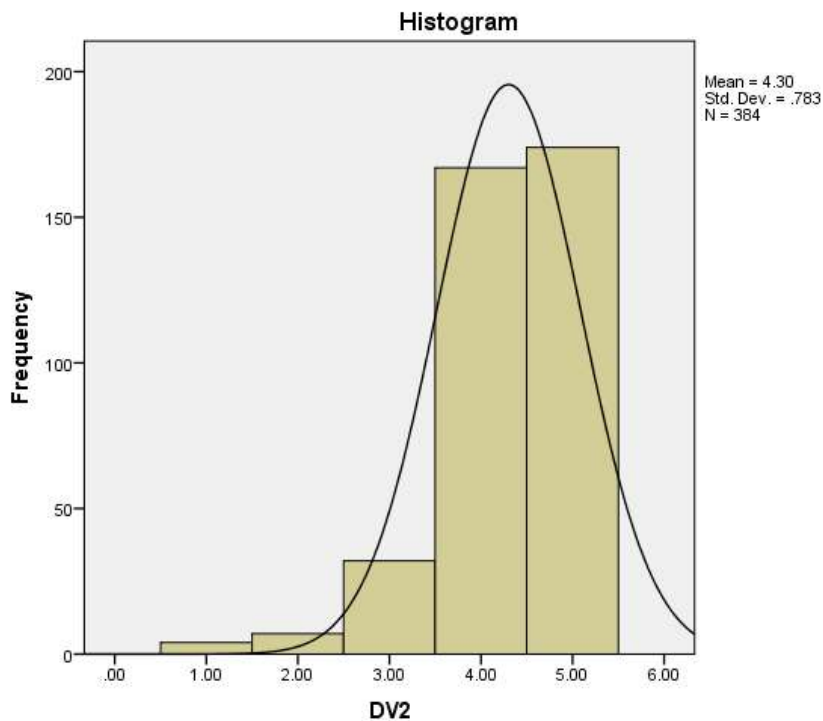
The above reasons given by the Respondents are not exaggerated but very much in line with the portfolio size of the businesses they currently oversee or have previously managed.

#### 4.4.4 Respondents' perceived state of readiness to exploit opportunities (DV2)

Question 4 - Before the COVID-19 pandemic, how would you rate your state of readiness to exploit business opportunities? Give your reason.

**TABLE 31: Respondents' perceived state of readiness to exploit opportunities**

	FREQUENCY	PERCENTAGE
1. Very Low	4	1%
2. Low	7	1.8%
3. Average	32	8.3%
4. High	167	43.5%
5. Very High	174	45.3%
TOTAL	384	100.0%



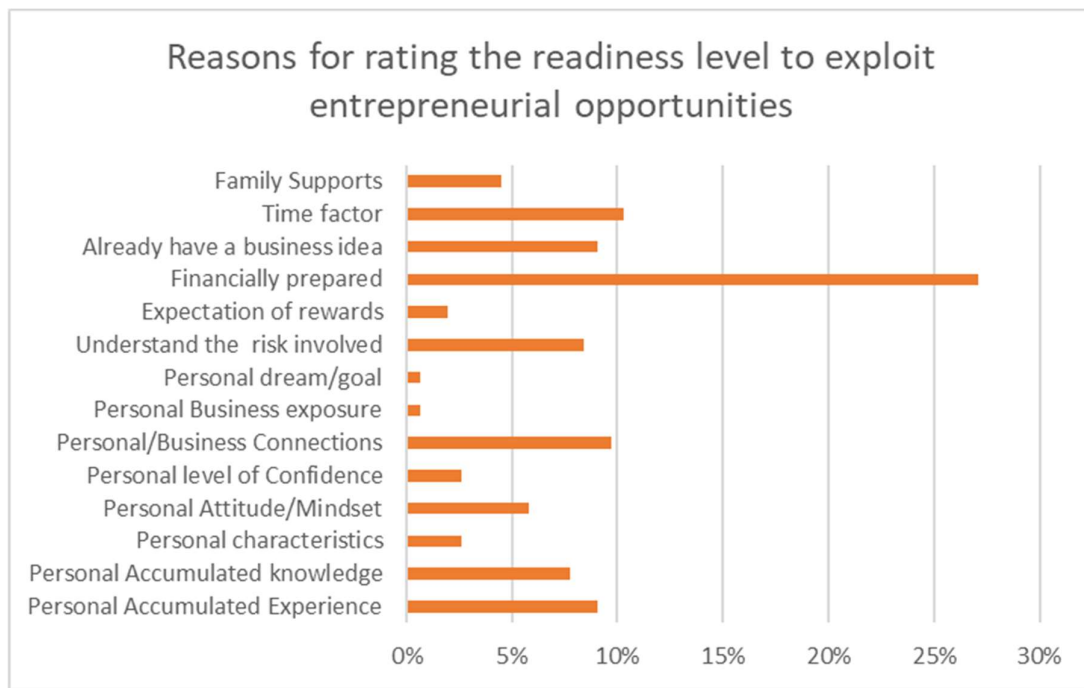
**GRAPH 3: Histogram of Respondents' perceived state of readiness to exploit**

From Table 31, about 341 (88.8%) of the late-career PMETs interviewed perceived their state of readiness to exploit business opportunities as 'High' to 'Very High' combined. These ratings reflect the Respondents' confidence level to undertake entrepreneurial activities on an identified business opportunity. Once again, we gathered these Respondents' perceptions with consideration based on their situational experience before the COVID-19 pandemic.

To further explore their thought behind the given scores, we asked the Respondents to provide more reasons to support their selections. Using excel spreadsheets to tabulate counts of all reasons given, it can then be categorised into 14 themes, as shown in Table 32 below.

**Table 32: Reasons for rating selection given to Question 4**

Theme (Reasons Given)	Count	Percentage
Personal Accumulated Experience	14	9%
Personal Accumulated knowledge	12	8%
Personal characteristics	4	3%
Personal Attitude/Mindset	9	6%
Personal level of Confidence	4	3%
Personal/Business Connections	15	10%
Personal Business exposure	1	1%
Personal dream/goal	1	1%
Understand the risk involved	13	8%
Expectation of rewards	3	2%
Financially prepared	42	27%
Already have a business idea	14	9%
Time factor	16	10%
Family Supports	7	5%
	<b>155</b>	<b>100%</b>



**GRAPH 4: Reasons for rating selection given to Question 4**

From Tables 31 and 32, the data shows that most of the late-career PMETs perceived themselves to have a high state of readiness to exploit any entrepreneurial opportunity as it surfaces before them. In other words, they feel that they are well-prepared to organise critical resources necessary to turn a given opportunity into an operational business reality.

Graph 4 shows a graphical illustration of the reasons given to support their rating selection. The top three reasons given for their level of confidence are:-

(1) 27% of the Respondents said they are financially prepared. Most who gave this reason mainly achieved financial freedom, have sufficient savings or are already receiving multiple passive income streams either in retirement or on top of their regular work pay.

(2) 10% of the Respondents said they have personal and business connections where people in these networks are sure to support their entrepreneurial endeavours.

(3) Another 10% of the Respondents gave a reason related to the time factor. Most claim that they are fully prepared but are waiting for the right moment to act on any business opportunity.

Two other reasons that the Respondents widely quoted include (4) Personal accumulated experience gathered from their past careers and (5) Already having a business idea on hand. Some of these reasons are quite similar to the earlier Question 3 on assessing their readiness to identify business opportunities. We can assume that running an existing profitable business will also help these individuals acquire the necessary capability to evaluate the environment and make informed judgments and decisions on whether to proceed with the recognised opportunities.

#### 4.4.5 Relationships between DV1 and DV2

**TABLE 33: Cross-tabulation of DV1 and DV2**

		DV2					Total
		Very Low	Low	Average	High	Very High	
DV1	Very Low	0	0	0	0	0	0
	Low	2	1	0	1	0	4
	Average	0	2	6	3	1	12
	High	1	4	20	107	21	153
	Very High	1	0	6	56	152	215
	Total	4	7	32	167	174	384

From Table 33 above, 336 (87.5%) of the 384 Respondents who rated 'High' or 'Very High' in their state of readiness to identify entrepreneurial opportunities rated an equally 'High' or 'Very High' perception of their state of preparedness to exploit them.

These findings translate to construe that those late-career PMETs who perceived having a 'High' to 'Very High' state of readiness to identify opportunities also think they possess an equally 'High' to 'Very High' level of entrepreneurial readiness to exploit them.

We can assume that this is because most of the late-career PMETs believe they possess most of the experience and skills to understand the working of the market, and they are confident about identifying and exploiting any potential entrepreneurial opportunity that could surface before them.

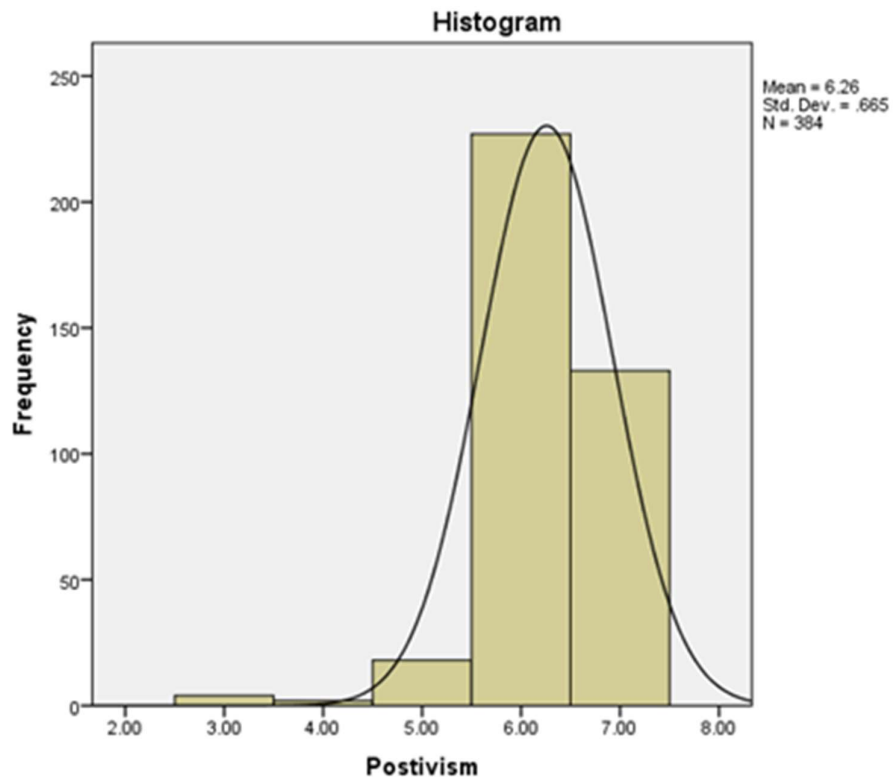
**FINDINGS ON RESPONDENTS' ENTREPRENEURIAL CHARACTERISTICS, ATTITUDES & MINDSETS**

4.4.6 Respondents' Positivism level (IV1-1)

Question 5 - I am a positive person who has a strong belief that I can achieve my goals.

**TABLE 34: Respondents' level of Positivism (IV1-1)**

	FREQUENCY	PERCENTAGE
1. Strongly disagree	0	0.0%
2. Disagree	0	0.0%
3. Somewhat disagree	4	1.1%
4. Neither agree no disagree	2	0.5%
5. Somewhat agree	18	4.7%
6. Agree	227	59.1%
7. Strongly agree	133	34.6%
TOTAL	384	100.0%



**GRAPH 5: Histogram of Respondents' level of Positivism**

Table 34 shows a certain level of skewness in Respondents' answers toward 'Agree' and 'Strongly Agree' when asked whether they think they are positive people with a strong belief that they can achieve their goals. The result indicates a significant majority of 360 (93.7%) out of 384 Respondents perceived themselves as having a 'positive' characteristic.

The finding indicates a healthy level of Positivism among the late-career PMETs surveyed. Such revelation is not surprising, given that managers and executives are expected to lead and drive teams towards completing tasks. They must constantly keep a positive 'can-do' attitude to motivate their team members. One way to do it is to filter out the operational problems and crises and find ways to focus on any potential bright spark that may surface. Possessing such an attitude is crucial as it gives one the optimism and confidence to make judgements and decisions in pursuit of uncertain opportunities, especially when it concerns investing for future incomes and profitabilities.

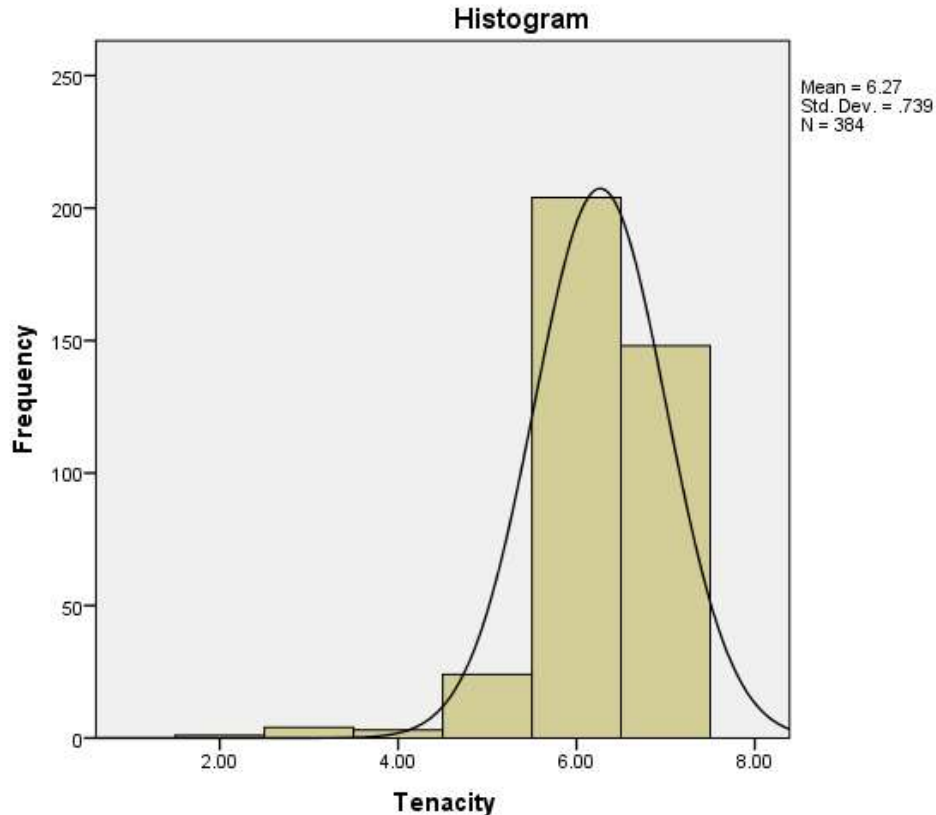
#### 4.4.7 Respondents' Tenacity level (IV1-2)

Question 6 - I do not give up quickly whenever I encounter a challenge or problem.

TABLE 35: Respondents' level of Tenacity (IV1-2)

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. Strongly disagree</b>	0	0.0%
<b>2. Disagree</b>	1	0.3%
<b>3. Somewhat disagree</b>	4	1.0%
<b>4. Neither agree no disagree</b>	3	0.8%
<b>5. Somewhat agree</b>	24	6.3%
<b>6. Agree</b>	204	53.1%
<b>7. Strongly agree</b>	148	38.5%
<b>TOTAL</b>	384	100.0%





**GRAPH 6: Histogram of Respondents' level of Tenacity**

With regards to the question on whether the Respondents see themselves as having a high level of Tenacity, a majority of 352 (91.6%) of them gave answers that skewed toward 'Agree' and 'Strongly Agree' (See Table 35).

These findings gathered on Tenacity indicates the mental toughness of the late-career PMETs surveyed. These individuals who rated themselves highly on this dimension will not give up quickly in the face of imminent difficulties commonly encountered during business venturing. A tenacious person will grip tight to his goals and vision no matter how challenging the situation can become. These people have a 'growth' mindset and believe that their persistence will eventually pay off profitability. Such a determined-character person usually comes with the quality of perseverance, resilience and an ability to face objections and challenges. They can also recover quickly from any possible failures or setbacks. Tenacious people refuse to back away from their commitment because they firmly believe all their

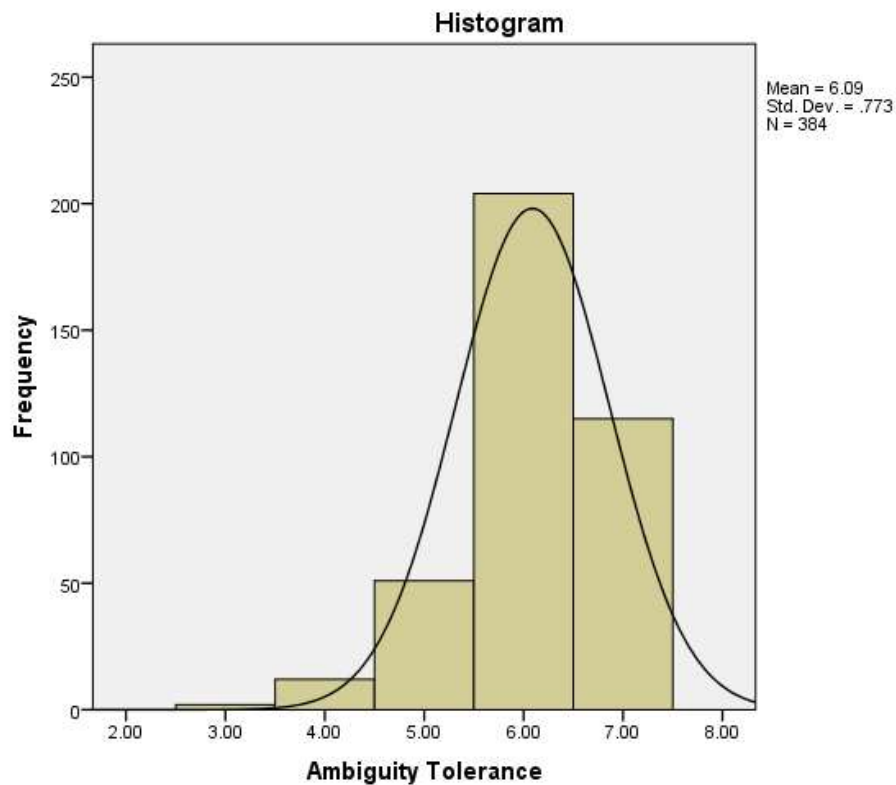
effort will bring them well-deserved rewards. Hence, such attitude and conviction make them very suitable for the role of an Entrepreneur.

#### 4.4.8 Respondents' Ambiguity Tolerance level (IV1-3)

Question 7 - I expect that there will be times of doubts and periods of uncertainties in life.

**TABLE 36: Respondents' level of Ambiguity Tolerance (IV1-3)**

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. Strongly disagree</b>	0	0.0%
<b>2. Disagree</b>	0	0.0%
<b>3. Somewhat disagree</b>	2	0.5%
<b>4. Neither agree no disagree</b>	12	3.1%
<b>5. Somewhat agree</b>	51	13.3%
<b>6. Agree</b>	204	53.1%
<b>7. Strongly agree</b>	115	30.0%
<b>TOTAL</b>	<b>384</b>	<b>100.0%</b>



**GRAPH 7: Histogram of Respondents' level of Ambiguity Tolerance**

From Table 36, based on the answers given by the Respondents to this question, at least 319 (82.2%) of them 'Agree' and 'Strongly Agree' that they have their moments of doubts and uncertainties in life. The finding indicates that most of the late-career PMETs surveyed perceived themselves as upholding a high tolerance level of ambiguous circumstances. Accepting ambiguity is critical for new business venture start-ups where ambiguous situations are commonly faced with insufficient information to frame a problem or when available information is too incomplete for sense-making or any constructive decision-making and planning.

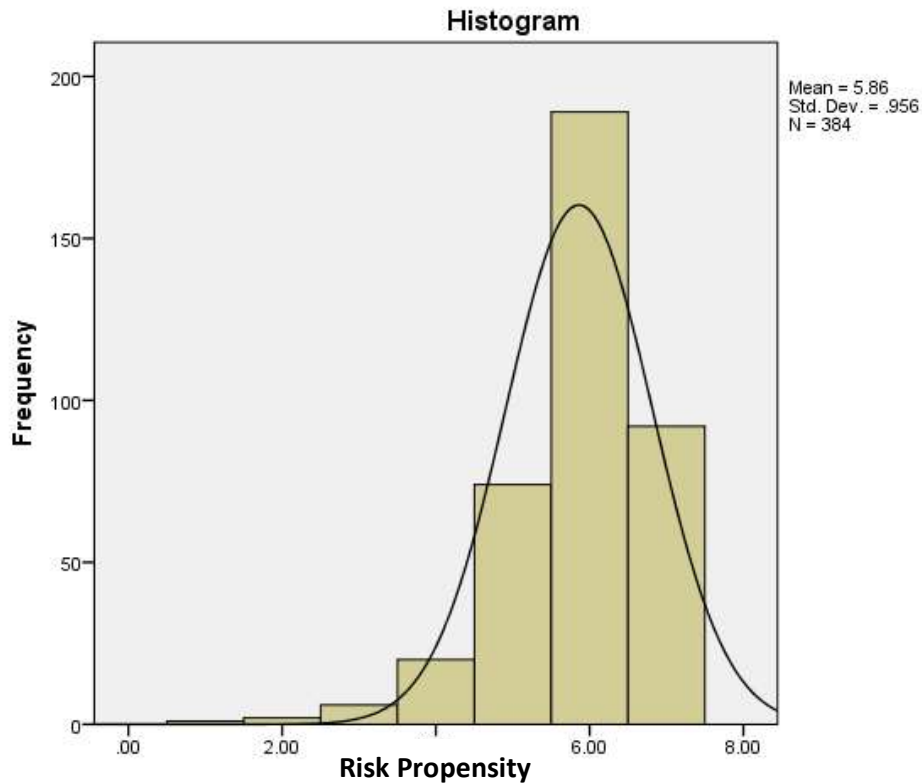
The embracement of Ambiguity Tolerance is an attitude or mindset evident in most corporate managers who operate in high market uncertainties in their profitability quests. Hence, the response from the Respondents is not unexpected since late-career PMETs are likely to have gone through similar ambiguous circumstances many times throughout their managerial career. Therefore, in any uncertain predicaments, we can assume that most late-career PMETs can remain cool-headed to manage the situation by organising whatever available data to approach the challenges head-on.

#### 4.4.9 Respondents' level of Risk Propensity (IV1-4)

Question 8 - I expect that there will be times in my life that I need to take some risks in making important decisions.

TABLE 37: Respondents' level of Risk Propensity

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. Strongly disagree</b>	1	0.3%
<b>2. Disagree</b>	2	0.5%
<b>3. Somewhat disagree</b>	6	1.6%
<b>4. Neither agree no disagree</b>	20	5.2%
<b>5. Somewhat agree</b>	74	19.3%
<b>6. Agree</b>	189	49.2%
<b>7. Strongly agree</b>	92	24.0%
<b>TOTAL</b>	<b>384</b>	<b>100.0%</b>



**GRAPH 8: Histogram of Respondents' level of Risk Propensity**

Table 37 and Graph 8 show that at least 281 (73.2%) out of the 384 Respondents' answers given to this question were skewed towards 'Agree' and 'Strongly Agree'. Only 9 (2.4%) of them expressed disagreement with the statement. Hence, our findings point out that most of these late-career PMET Respondents share a high-Risk Propensity level and are willing to accept a certain level of risk in life.

We can assume that they hold on to the notion that risk-taking comes naturally to them under their innate personal predisposition. This attitude will help the Respondents to make difficult judgement calls and decisions under extreme uncertain environments and situations. Our survey finding matches the assumption that high-risk philosophy is better associated with the identification and pursuance of business opportunities in uncertainties. Hence, it also explains why late-career PMETs are willing to accept a higher risk level in anticipation of receiving more rewards from risky business venturing.

4.4.10 Relationships between DVs and IV1-1, IV1-2, IV1-3 and IV1-4

Association between DV1/DV2 and IV1-1, IV1-2, IV1-3 and IV1-4

Pearson correlation Test

TABLE 38: Correlation between DV1/DV2 and IV1-1 (Positivism)

**Correlations**

		DV1	DV2	Positivism	
DV1	Pearson Correlation	1	.593**	.274**	←
	Sig. (2-tailed)		.000	.000	
	N	384	384	384	
DV2	Pearson Correlation	.593**	1	.351**	←
	Sig. (2-tailed)	.000		.000	
	N	384	384	384	
Positivism	Pearson Correlation	.274**	.351**	1	
	Sig. (2-tailed)	.000	.000		
	N	384	384	384	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The test results shown in Table 38 indicate the Pearson Correlation index between DV1 and Positivism = 0.274, while DV2 and Positivism = 0.351. It reveals positive relationships between the late-career PMETs’ perceived state of readiness to identify and exploit entrepreneurial opportunities and their Positivism level. As all P-Values for these correlations = 0.000 (which is <0.05), this also indicates that the relationships between DV1/DV2 and Positivism (IV1-1) are significant.

TABLE 39: Correlation between DV1/DV2 and IV1-2 (Tenacity)

**Correlations**

		DV1	DV2	Tenacity	
DV1	Pearson Correlation	1	.593**	.278**	←
	Sig. (2-tailed)		.000	.000	
	N	384	384	384	
DV2	Pearson Correlation	.593**	1	.330**	←
	Sig. (2-tailed)	.000		.000	
	N	384	384	384	
Tenacity	Pearson Correlation	.278**	.330**	1	
	Sig. (2-tailed)	.000	.000		
	N	384	384	384	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Based on the test results shown in Table 39, the Pearson Correlation index between DV1 and Tenacity = 0.278, while DV2 and Tenacity = 0.330. It reveals that positive relationships exist between the late-career PMETs' perceived state of readiness to identify and exploit entrepreneurial opportunities and their Tenacity level. As all P-Values for these correlations = 0.000 (which is <0.05), this also indicates that the relationships between DV1/DV2 and Tenacity (IV1-2) are significant.

**TABLE 40: Correlation between DV1/DV2 and IV1-3 (Ambiguity Tolerance)**

		Correlations		
		DV1	DV2	Ambiguity Tolerance
DV1	Pearson Correlation	1	.593**	.219**
	Sig. (2-tailed)		.000	.000
	N	384	384	384
DV2	Pearson Correlation	.593**	1	.322**
	Sig. (2-tailed)	.000		.000
	N	384	384	384
Ambiguity Tolerance	Pearson Correlation	.219**	.322**	1
	Sig. (2-tailed)	.000	.000	
	N	384	384	384

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Based on the tabulated results shown in Table 40, the Pearson Correlation index between DV1 and Ambiguity Tolerance = 0.219, while that between DV2 and Ambiguity Tolerance = 0.322. It hence is concluded that positive relationships exist between the late-career PMETs' perceived state of readiness to identify and exploit entrepreneurial opportunities and their level of Ambiguity Tolerance. As P-Values for these correlations = 0.000 (which is <0.05), this also indicates that the relationships between DV1/DV2 and Ambiguity Tolerance (IV1-3) are significant. Therefore, it can be assumed that these late-career PMETs who have spent a long career working in corporations are used to working without the full availability of markets, customers or competitors information before committing to a project or a new strategy.

**TABLE 41: Correlation between DV1/DV2 and IV1-4 (Risk Propensity)**

**Correlations**

		DV1	DV2	Risk Tolerance	
DV1	Pearson Correlation	1	.593**	.240**	←
	Sig. (2-tailed)		.000	.000	
	N	384	384	384	
DV2	Pearson Correlation	.593**	1	.366**	←
	Sig. (2-tailed)	.000		.000	
	N	384	384	384	
Risk Tolerance	Pearson Correlation	.240**	.366**	1	
	Sig. (2-tailed)	.000	.000		
	N	384	384	384	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From the tabulated results shown in Table 41, the Pearson Correlation index between DV1 and Risk Propensity = 0.240, while DV2 and Risk Propensity = 0.366. From these indexes, we can safely settle that the relationships existing between the late-career PMETs' perceived readiness to identify and exploit entrepreneurial opportunities and their Risk Propensity level are positive. As P-Values for these correlations = 0.000 (which is <0.05), this also indicates that the relationships between DV1/DV2 and Risk Propensity (IV1-4) are significant.

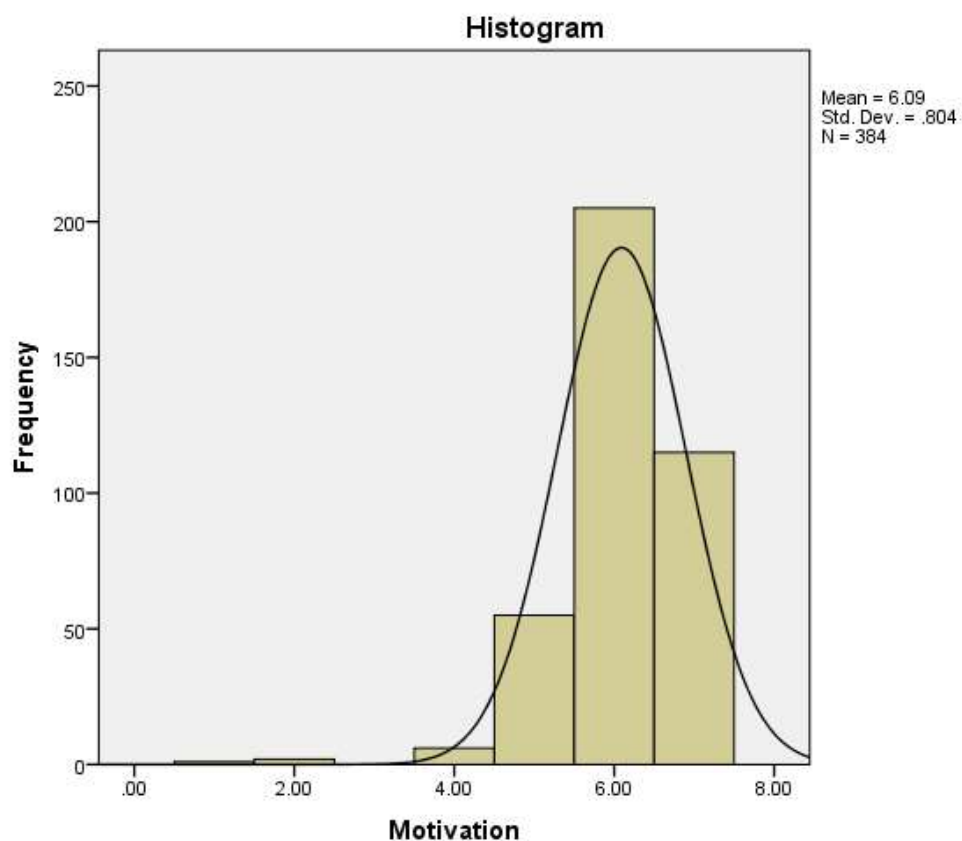
## **FINDINGS ON RESPONDENTS' ENTREPRENEURIAL MOTIVATION**

### 4.4.11 Respondents' Motivational level (IV2-1)

Question 9 -. I am highly motivated to take up Entrepreneurship.

**TABLE 42: Respondents' level of Motivation (IV2-1)**

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. Strongly disagree</b>	1	0.3%
<b>2. Disagree</b>	2	0.5%
<b>3. Somewhat disagree</b>	0	0.0%
<b>4. Neither agree no disagree</b>	6	1.6%
<b>5. Somewhat agree</b>	55	14.3%
<b>6. Agree</b>	205	53.4%
<b>7. Strongly agree</b>	115	29.9%
<b>TOTAL</b>	384	100.0%



**GRAPH 9: Histogram of Respondents' level of Motivation**






From Table 42, at least 320 (83.3%) of the late-career PMET Respondents interviewed expressed 'Agree' to 'Strongly Agree' to having high Motivation to take up Entrepreneurship. There is another 55 (14.3%) who feel somewhat motivated. Only 3 (0.8%) of the Respondents expressed disagreement with the statement.

From our survey findings, a high majority of the Respondents believed themselves to be very motivated to take up Entrepreneurship, and this belief came from various reasons discussed in 4.4.12. Technically, we assume that the higher Motivation of the late-career PMETs is within expectation. It will sustain these starting Entrepreneurs in having greater energy levels to endure long hours working on their ideas and projects and drive them towards their goals and possible success. Hence, having a high Motivational level is critical for successful Entrepreneurship.

#### 4.4.12 Respondents' Source of Motivation (IV2-2)

Question 10 - What motivates you to consider Entrepreneurship?

TABLE 43: Respondents' Sources of Motivation (IV2-2)

	Yes
	Count
Pull Motivation	291 
	198
	132
	119
	214 
	204 
	134

Following up on Question 9, we next would like to know the Respondents' entrepreneurial Motivation source. From a given list of motivational statements as shown in Table 43, the top three selected by the Respondents are:

1. 'I wanted to take advantage of a business opportunity' = 'Pull' Motivation (291 counts or 75.8%);
2. 'I wanted to be independent' = 'Independence' Motivation (214 counts or 55.7%)
3. 'I want to be in control of my work, time and finances' = 'Control' Motivation (204 counts or 53.1%).

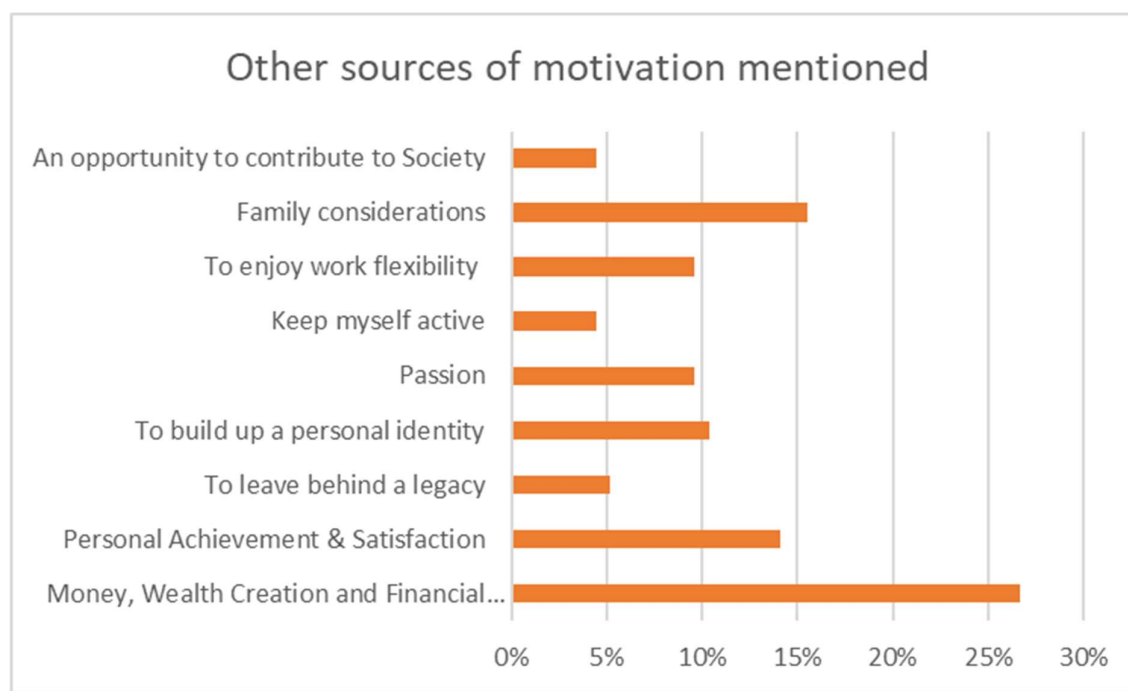
Lower on the list is 'I have relatives and friends who are successful Entrepreneurs' = 'Affiliation' Motivation at 132 counts (34.4%), 'I always wanted people to listen to me' = 'Power' Motivation at 119 counts (31%) and 'I was having no better choices for work at that time' = 'Push' Motivation at 110 counts (28.6%).

Another 134 (34.9%) of the Respondents selected the Motivational statement of 'Others'. Using excel spreadsheets to analyse all open-ended answers given as reasons, we can categorise them into nine specific themes, as shown in Table 41. The top three of them are:

1. 36 (27%) of the Respondents are driven by money, wealth creation and financial freedom.
2. 21 (16%) of the Respondents place significant consideration to prioritise the family.
3. 19 (14%) of the Respondents are motivated by personal achievement and satisfaction

**TABLE 44: Reasons given for other sources of Motivation**

Theme	Count	Percentage
Money, Wealth Creation and Financial Freedom	36	27%
Personal Achievement & Satisfaction	19	14%
To leave behind a legacy	7	5%
To build up a personal identity	14	10%
Passion	13	10%
Keep myself active	6	4%
To enjoy work flexibility	13	10%
Family considerations	21	16%
An opportunity to contribute to Society	6	4%
	<b>135</b>	<b>100%</b>



**GRAPH 10: Other sources of Motivation mentioned**

From the findings, as shown in Table 44 and Graph 10 above, quite a number of the late-career PMETs surveyed indicated that they are motivated to Entrepreneurship because they want to take advantage of a business opportunity. Other reasons given include having the independence and controls over own

business, financial matters, working hours, family and personal life. On further expanding these answers, we found out that most of their intrinsic Motivations to start a business is very achievement-driven related. For example, most given answers shed lights on money rewards, wealth creation and the attainment of financial freedom, either to provide for their family, personal self-satisfaction or to prove to others.

#### 4.4.13 Relationships between DV1/DV2 and IV2-1 (Motivation level)

##### *Pearson correlation Test*

TABLE 45: Correlation between DV1/DV2 and Motivational level

**Correlations**

		DV1	DV2	Motivation
DV1	Pearson Correlation	1	.593**	.298**
	Sig. (2-tailed)		.000	.000
	N	384	384	384
DV2	Pearson Correlation	.593**	1	.321**
	Sig. (2-tailed)	.000		.000
	N	384	384	384
Motivation	Pearson Correlation	.298**	.321**	1
	Sig. (2-tailed)	.000	.000	
	N	384	384	384

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Based on the test result shown in Table 45, Pearson Correlation between DV1 and Motivation level = 0.298 while that of DV2 and Motivation level = 0.321. Hence, there is a positive relationship existing between them. P-Value for both tests is  $< \alpha$  (0.05) reflecting the significance of their relationships.

##### Linear Regression Test for DV1 and IV2-1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.298 <sup>a</sup>	.089	.086	.58609

a. Predictors: (Constant), Motivation

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.757	1	12.757	37.139	.000 <sup>b</sup>
	Residual	131.219	382	.344		
	Total	143.977	383			

a. Dependent Variable: DV1

b. Predictors: (Constant), Motivation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.126	.229		13.665	.000		
	Motivation	.227	.037	.298	6.094	.000	1.000	1.000

a. Dependent Variable: DV1

Based on the result of the Linear Regression test, Standard Coefficient (R) = 0.298. This coefficient value shows that the relationship between Readiness, DV1 and Motivation, IV2-1 is positive.  $R^2 : 0.089 =$  about 8.9% of the variance in DV1 can be explained by IV2-1. The P-Value  $< \alpha$  (0.05) means that its relationship to DV1 is significant.

Linear Regression Test for DV2 and IV2-1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.321 <sup>a</sup>	.103	.101	.74280

a. Predictors: (Constant), Motivation

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.192	1	24.192	43.846	.000 <sup>b</sup>
	Residual	210.767	382	.552		
	Total	234.958	383			

a. Dependent Variable: DV2

b. Predictors: (Constant), Motivation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.399	.290		8.275	.000		
	Motivation	.312	.047	.321	6.622	.000	1.000	1.000

a. Dependent Variable: DV2

Based on the Linear Regression test result, Standard Coefficient (R) = 0.321. The test result points to a positive relationship between DV2 and IV2-1 (Motivation level).  $R^2 = 0.103$ . This ratio means that IV2-1 can explain only 10.3% of the variance in DV2. The P-Value of  $0.00 < \alpha (0.05)$  means that its relationship to DV2 is significant.

We can interpret the findings from the correlation and regression tests to show that the motivational level of the late-career PMETs directly influences their perceived readiness to identify and exploit entrepreneurial opportunities. This mindset is essential for the late-career PMETs to bear the long gruelling hours working on new, untested ideas; most of these individuals must be motivated by some reasons to sustain their energy level.

## **FINDINGS ON RESPONDENTS' ENTREPRENEURIAL SELF-EFFICACY**

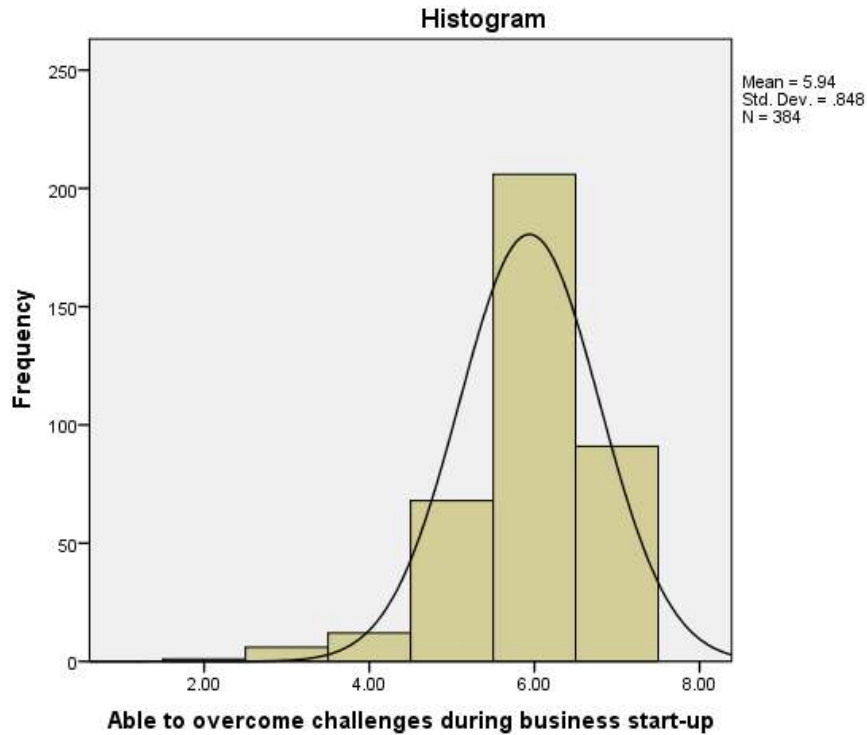
### 4.4.14 Respondents' Ability to overcome challenges in starting own business (IV3-1)

Question 11 - I believe it is easy to overcome the challenges in starting my own business.

**TABLE 46: Respondents' Ability to overcome challenges in starting own business (IV3-1)**

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. Strongly disagree</b>	0	0.0%
<b>2. Disagree</b>	1	0.3%
<b>3. Somewhat disagree</b>	6	1.6%
<b>4. Neither agree no disagree</b>	12	3.1%
<b>5. Somewhat agree</b>	68	17.7%
<b>6. Agree</b>	206	53.6%
<b>7. Strongly agree</b>	91	23.7%
<b>TOTAL</b>	384	100.0%

From Table 46 above, at least 297 (77.3%) of the Respondents interviewed perceived themselves as able to overcome the challenges involved in starting their own business by selecting 'Agree' and 'Strongly Agree' combined. There is also another 68 (17.7%) who feel 'somewhat' confident about their ability. Only 19 (5%) express disagreement with the given statement in the question.



**GRAPH 11: Histogram of Respondents' ability to overcome challenges in starting own business**

Graph 11 shows a histogram of the data presented in Table 46, and the curve reflects the skewness of the responses collected. Having a strong sense of personal ability to overcome challenges in starting their own business was evident among the late-career PMETs surveyed. We assumed that most of them have a strong belief that their innate cognitive abilities, collected experience and skills can help them navigate through unforeseen events or problems and overcome them to perform tasks to fulfil their roles in starting a business. In other words, these Respondents perceived themselves as having a high level of entrepreneurial Self-Efficacy.

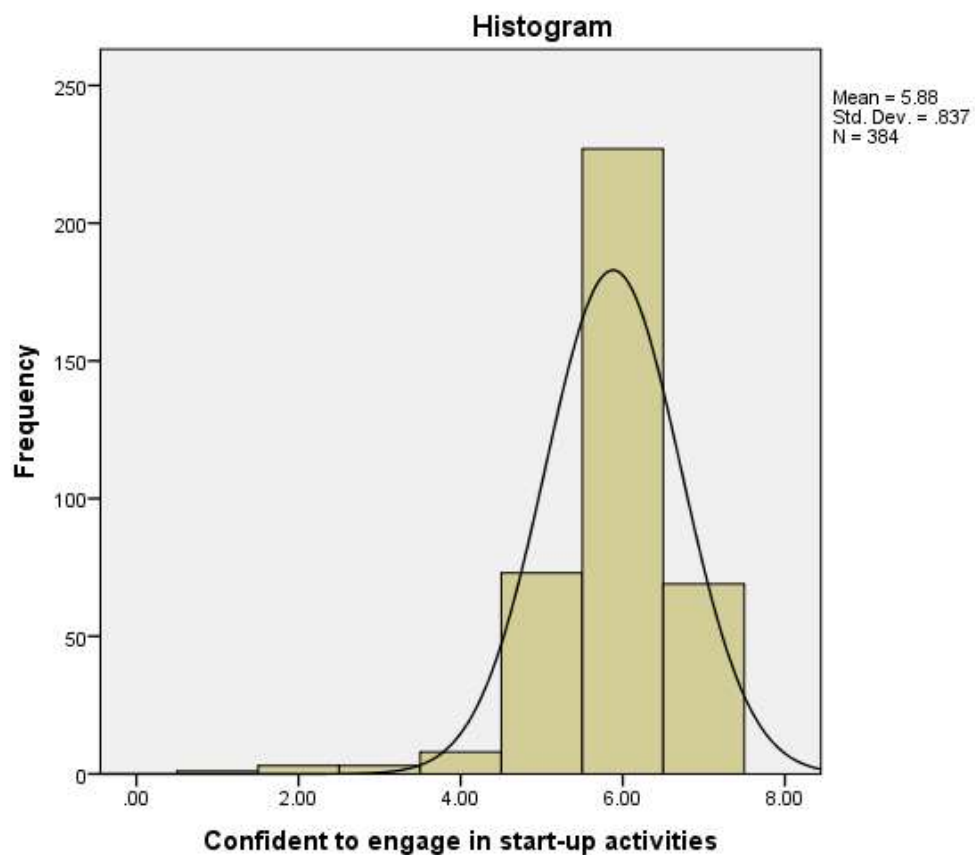


4.4.15 Respondents' Confidence in engaging start-up activities (IV3-2)

Question 12 - I am confident to engage in entrepreneurial start-up activities.

TABLE 47: Respondents' Confidence in engaging start-up activities (IV3-2)

	FREQUENCY	PERCENTAGE
1. Strongly disagree	1	0.3%
2. Disagree	3	0.8%
3. Somewhat disagree	3	0.8%
4. Neither agree no disagree	8	2.1%
5. Somewhat agree	73	19.0%
6. Agree	227	59.1%
7. Strongly agree	69	18.0%
TOTAL	384	100.0%



**GRAPH 12: Histogram of Respondents' Confidence in engaging start-up activities (IV3-2)**

From Table 47, at least 296 (77.1%) of the Respondents interviewed feel confident in engaging in start-up activities. There is also another 19% who feel somewhat confident. Only 15 (4%) did not answer positively to this question. Graphic 12 reflects the skewness of the data collected for this question.

There is a healthy level of confidence displayed by the late-career PMET Respondents based on their answers given to this question. As Self-Efficacy is a significant factor influencing entrepreneurial spirit, we can assume that the Respondents have a high level of entrepreneurial Self-Efficacy.

Having such a self-assured mental state is particularly important when venturing into an unknown area without the luxury of complete knowledge and information. The Respondents' high confidence level will push on with faith to execute their visions and keep a keen eye for potential market changes that could lead to new products and markets opportunities. These findings support previous arguments that Self-Efficacy might be an essential mechanism for overcoming perceptions of opportunities and risk associated with new venture creation.

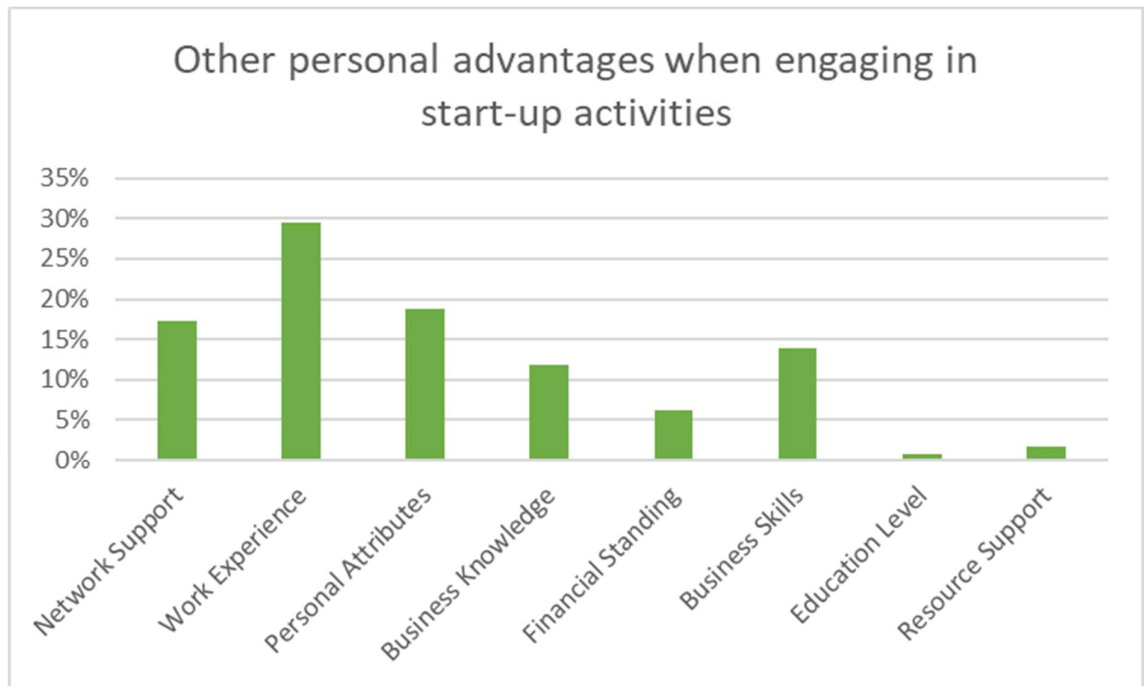
#### 4.4.16 Respondents' perception of other personal advantages when engaging in start-up activities (IV3-3)

Question 13 - I believe I have other advantages which can help me in Entrepreneurial start-up activities. They are:

TABLE 48: Respondents' perceived other personal advantages when engaging in start-up activities (IV3-3)

Theme	Count	Percentage
Network Support	50	17%
Work Experience	85	30%
Personal Attributes	54	19%
Business Knowledge	34	12%
Financial Standing	18	6%
Business Skills	40	14%
Education Level	2	1%
Resource Support	5	2%
	<b>288</b>	<b>100%</b>





**GRAPH 13: Respondents' perceived other personal advantages when engaging in start-up activities (IV3-3)**

Table 48 and Graph 13 show the Respondents' self-perception of possessing other personal advantages when engaging in start-up activities. All the responses from the late-career PMET Respondents to this open-ended question were categorised using excel spreadsheets into eight specific themes. Top of those mentioned includes (1) work experience (30%), (2) personal attributes (19%) and network support (17%).

Thus, it can be assumed that because of the above perception of personal advantages, most of these Respondents think that they have sufficient entrepreneurial Self-Efficacy to engage in start-up activities. These include their perceived acquired market and industry knowledge, business and industry experience and skills, sales experience, years of accumulated corporate management skills and business networks and connections. These findings support their earlier perception of personal abilities and confidence levels related to start-up activities.

4.4.17 Relationships between DV1/DV2 and IV3 (Self-Efficacy)

- (a) Association between DV1 and IV3-1 (Ability to overcome challenges in starting own business)

Pearson Correlation Test

TABLE 49: Correlation between DV1/DV2 and IV3-1 (Ability to overcome challenges in starting own business)

**Correlations**

		DV1	DV2	Able to overcome challenges during business start-up	
DV1	Pearson Correlation	1	.593**	.214**	←
	Sig. (2-tailed)		.000	.000	
	N	384	384	384	
DV2	Pearson Correlation	.593**	1	.334**	←
	Sig. (2-tailed)	.000		.000	
	N	384	384	384	
Able to overcome challenges during business start-up	Pearson Correlation	.214**	.334**	1	
	Sig. (2-tailed)	.000	.000		
	N	384	384	384	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 49 shows the Pearson Correlation between DV1 and IV3-1 = 0.214 while DV2 and IV3-1 = 0.334. These values suggest that positive relationships exist between the late-career PMETs' perceived state of readiness to identify and exploit entrepreneurial opportunities and their perceived ability to overcome challenges in starting their own business. As both the P-Values = 0.00 <  $\alpha$  (0.05), it also reflects the significance of their relationships.

Linear Regression Test for DV1 and IV3-1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.214 <sup>a</sup>	.046	.043	.59967

a. Predictors: (Constant), Able to overcome challenges during business start-up

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	3.588	.217		16.555	.000		
(Constant)							
Able to overcome challenges during business start-up	.155	.036	.214	4.287	.000	1.000	1.000

a. Dependent Variable: DV1

Based on the Linear Regression test result, Standard Coefficient (R)= 0.214. This result reflects a positive association between DV1 and IV3-1.  $R^2 = 0.046$  means that IV3-1 can explain 4.6% of the variance in DV1. The P-Value of  $0.00 < \alpha (0.05)$  means that its relationship to DV1 is significant. The perception of one's ability to overcome challenges in starting their own business has a tremendous impact on their entrepreneurial Motivation and intention. Such a mindset will influence their preferences to explore specific opportunities and identify reasons for avoiding other opportunities. More importantly, it assumed that those with a low perception of their ability would choose not to participate in Entrepreneurship in the first place.

### Linear Regression Test for DV2 and IV3-1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.334 <sup>a</sup>	.111	.109	.73928

a. Predictors: (Constant), Able to overcome challenges during business start-up

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	2.471	.267		9.249	.000		
(Constant)							
Able to overcome challenges during business start-up	.308	.045	.334	6.921	.000	1.000	1.000

a. Dependent Variable: DV2

Based on the Linear Regression test result, Standard Coefficient (R) = 0.334. This mindset shows that a positive relationship exists between DV2 and IV3-1.  $R^2 = 0.111$  = only 11.1% of the variance in DV2 can be explained by IV3-1. The P-

Value of  $0.00 < \alpha$  (0.05) means that the relationship between DV2 and IV3-1 is significant.

From the findings, we now know that having a higher perception of overcoming challenges in starting own business will influence the late-career PMETs to exploit an identified entrepreneurial opportunity more than if the perception is low. We can explain it by assuming that those who are confident about their ability are usually less sceptical about the outcome and more motivated to achieve their entrepreneurial goals.

(b) Association between DV1/DV2 and IV3-2 (Confidence to engage in startup activities)

Pearson Correlation Test

TABLE 50: Correlation between DV1/DV2 and IV3-2 (Confidence to engage in startup activities)

		<b>Correlations</b>		
		DV1	DV2	Confident to engage in start-up activities
DV1	Pearson Correlation	1	.593**	.297**
	Sig. (2-tailed)		.000	.000
	N	384	384	384
DV2	Pearson Correlation	.593**	1	.418**
	Sig. (2-tailed)	.000		.000
	N	384	384	384
Confident to engage in start-up activities	Pearson Correlation	.297**	.418**	1
	Sig. (2-tailed)	.000	.000	
	N	384	384	384

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 50 shows the Pearson Correlation between DV1 and IV3-2 = 0.297, while DV2 and IV3-2 = 0.418. This Pearson correlation value shows a positive association between DV1/DV2 and IV3-2, the late-career PMETs' Confidence to engage in startup activities. As both the P-Values =  $0.00 < \alpha$  (0.05), It reflects that the significance of their relationships is also very significant.

Linear Regression Test for DV1 and IV3-2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.297 <sup>a</sup>	.088	.086	.58626

a. Predictors: (Constant), Confident to engage in start-up activities

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.230	.213		15.198	.000		
	Confident to engage in start-up activities	.217	.036	.297	6.075	.000	1.000	1.000

a. Dependent Variable: DV1

Based on the Linear Regression test result, Standard Coefficient (R) = 0.297. This value supports the positive association existing between DV1 and IV3-2.  $R^2 = 0.088$  = only 8.8% of the variance in DV1 can be explained by IV3-2. The P-Value of  $0.00 < \alpha (0.05)$  means that their relationship is significant.

A higher confidence level in starting a new business will lead to attainable outcomes, and success will give the late-career PMETs incentives to act on identified opportunities. Similarly, if the confidence level of the late-career PMETs is not there, it will deter them from engaging in any startup activities.

Linear Regression Test for DV2 and IV3-2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.418 <sup>a</sup>	.174	.172	.71260

a. Predictors: (Constant), Confident to engage in start-up activities

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.005	.258		7.761	.000		
	Confident to engage in start-up activities	.391	.043	.418	8.984	.000	1.000	1.000

a. Dependent Variable: DV2

Based on the Linear Regression test result for DV2 and IV3-2, Standard Coefficient (R) = 0.418. This coefficient value shows that a positive relationship exists between DV2 and IV3-2.  $R^2 = 0.174$  = only 17.4% of the variance in DV2 can be explained by IV3-2. The P-Value of  $0.00 < \alpha (0.05)$  means that the relationship between DV2 and IV3-2 is significant.

Hence, this finding shows that the perception of confidence to engage in startup activities has a definite influence on the late-career PMETs to exploit identified business opportunities. We can explain this by assuming that self-confidence is a needed entrepreneurial mindset related to the mental attitudes of ambiguity tolerance, the propensity to take risks, and intrinsic Motivation for more control over work independence and family and finance matters.

Having a higher confidence level to assess the market environment and internal situation will cause the late-career PMETs to firmly believe that they will achieve their business goals, enhance their decision-making, and increase their willingness to take necessary action to exploit discovered opportunities.



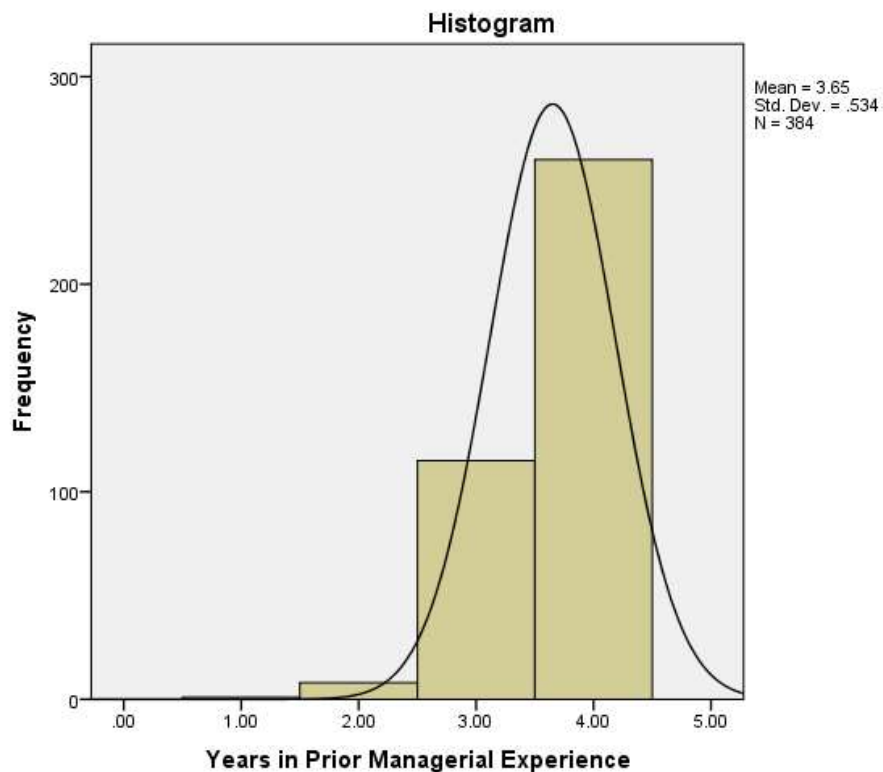
## **FINDINGS ON RESPONDENTS' PRIOR MANAGERIAL EXPERIENCE**

### 4.4.18 Respondents' years of Prior Managerial Experience (IV4-1)

Question 14 - How many years of professional managerial experience do you have?  
If you are a business owner, it refers to the point in time when you just took up Entrepreneurship?

**TABLE 51: Respondents' years of Prior Managerial Experience (IV4-1)**

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. &lt; 3</b>	1	0.3%
<b>2. 3 to 6</b>	8	2.1%
<b>3. 7 to 10</b>	115	29.9%
<b>4. &gt; 10</b>	260	67.7%
<b>TOTAL</b>	<b>384</b>	<b>100.0%</b>



***GRAPH 14: Respondents' Years of Prior Managerial Experience (IV4-1)***

Table 51 shows that 375 (97.6%) of the Respondents interviewed on this question have worked in a managerial role for at least seven years. These include 260 (67.7%) of them having worked in one exceeding ten years. Graph 14 illustrates the skewness of the responses received from the sample towards '7-10' and '>10' years.

Most of the late-career PMETs interviewed have at least seven years of corporate managerial experience behind them. Therefore, it is safe to assume that they have boned their business and management knowledge and skills during this period of overseeing their business portfolios. Longer tenure of managerial experience means that these late-career PMETs have probably moved through multiple business units and functions. Some of them may have even moved across geographical territories. Such exposure enables these individuals to accumulate diverse experience, knowledge, information, and relevant expertise for Entrepreneurship.

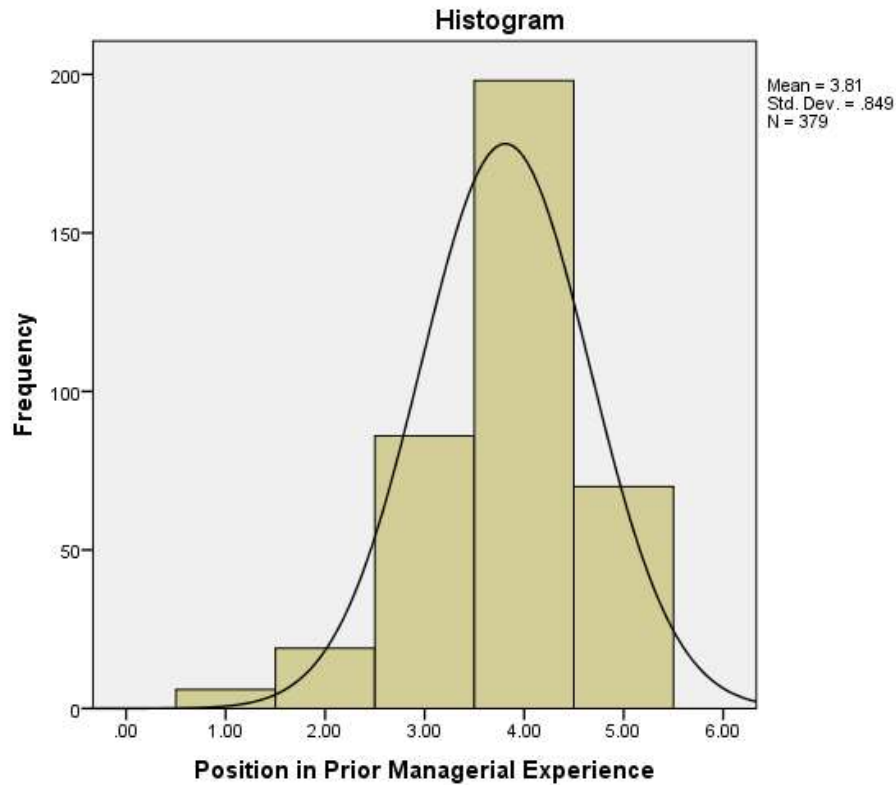
#### 4.4.19 Respondents' position of Prior Managerial Experience (IV4-2)

Question 15 - What is/was the position of your current/last managerial experience?

TABLE 52: Respondents' position of Prior Managerial Experience (IV4-2)

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. Executive</b>	6	1.6%
<b>2. Junior Manager</b>	19	5.0%
<b>3. Middle Manager</b>	86	22.7%
<b>4. Senior Manager</b>	198	52.2%
<b>5. Director/General Manager</b>	70	18.5%
<b>TOTAL</b>	379	100.0%

From Table 52, 354 (93.4%) of the Respondents worked in a management position of at least a middle management role as a PMET. This consists of 86 (22.7%) as Middle Managers, 198 (52.2%) as Senior Managers and 70 (18.5%) as Director/General Managers. Graph 15 shows the skewness of the responses received from the sample towards 'Middle Manager', 'Senior Manager', and 'Director/General Manager'.



**GRAPH 15: Respondents' position of Prior Managerial Experience (IV4-2)**

Working in managerial roles allow the late-career PMETs to accumulate the necessary market and customer knowledge and information, and gain sufficient business operational experience. Such experience is likely to influence their cognitive thinking, worldview and interpretation of the business operating environment and resource matters. This exposure can help them create a superior set of awareness levels and cognition to be alerted to entrepreneurial opportunities and their exploitations.

Prior Managerial Experience can also lead the late-career PMETs to develop strategic beliefs and form a cognitive assessment of the external environment. Such internalised alertness and cognition can help them accurately interpret available information for judgment and decide on the required course of action on opportunities. It is not too far stretch to assume that many of the Respondents have in-depth knowledge of firm resources and capabilities to capture them. Pre-existing expertise and experience accumulated from the Respondent's previous managerial positions can also induce them to develop a mental model for their business and environment.

4.4.20 Relationships between DV1/DV2 and IV4 (Prior Managerial Experience)

- (a) Association between DV1/DV2 and IV4 -1 (Years of prior managerial experience)

Pearson Correlation Test

TABLE 53: Association between DV1/DV2 and IV4-1 (Years of Prior Managerial Experience)

**Correlations**

		DV1	DV2	Years in Prior Managerial Experience
DV1	Pearson Correlation	1	.593**	.120*
	Sig. (2-tailed)		.000	.019
	N	384	384	384
DV2	Pearson Correlation	.593**	1	.196**
	Sig. (2-tailed)	.000		.000
	N	384	384	384
Years in Prior Managerial Experience	Pearson Correlation	.120*	.196**	1
	Sig. (2-tailed)	.019	.000	
	N	384	384	384

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Table 53 above shows the Pearson Correlation index between DV1 and IV4-1 = 0.120, and DV2 and IV4-1 = 0.196. These values indicate positive relationships exist between DV1/DV2 and IV4-1 (Years of prior managerial experience).

Both the P-Values are = 0.019 <  $\alpha$  (0.05) and 0.000 <  $\alpha$  (0.05) respectively. These values reflect the significance of the association of the late-career PMETs perceived state of readiness to identify and exploit entrepreneurial opportunities (DV1 and DV2) to their years of prior managerial experience (IV4-1).

### Linear Regression Test for DV1 and IV4-1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.120 <sup>a</sup>	.014	.012	.60949	.014	5.579	1	382	.019

a. Predictors: (Constant), Years in Prior Managerial Experience

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.005	.215		18.613	.000		
	Years in Prior Managerial Experience	.138	.058	.120	2.362	.019	1.000	1.000

a. Dependent Variable: DV1

Based on the Linear Regression test result, Standard Coefficient (R) = 0.12. This shows the somewhat positive relationship between DV1 and IV4-1. R<sup>2</sup>: 0.014 = only 1.4% of the variance in DV1 can be explained by IV4-1. The P-Value of 0.019 < α (0.05) means that the relationship between DV1 and IV1-4 is significant.

Holding a managerial position for an extended period has allowed the late-career PMETs to acquire a superior set of market and customer understanding, knowledge, and skills to look at problems from a 'helicopter' viewpoint. Such advantaged perspectives allow the Respondents to see everything with better clarity than most others, thus boosting their mental alertness and cognition to identify opportunities.

### Linear Regression Test for DV2 and IV4-1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.196 <sup>a</sup>	.039	.036	.76898	.039	15.340	1	382	.000

a. Predictors: (Constant), Years in Prior Managerial Experience

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.250	.271		11.972	.000		
	Years in Prior Managerial Experience	.288	.074	.196	3.917	.000	1.000	1.000

a. Dependent Variable: DV2

Based on the Linear Regression test result, Standard Coefficient (R) = 0.196. This shows the somewhat positive relationship between DV2 and IV4-1.  $R^2: 0.039$  = only 3.9% of the variance in DV2 can be explained by IV4-1. The P-Value of  $0.00 < \alpha (0.05)$  means that the relationship between DV2 and IV4-1 is significant.

From the research findings, despite being a small influencer, the tenure of managerial experience (IV4-1) can still significantly impact how late-career PMETs perceive their readiness to exploit business opportunities. Having a long tenure in a corporate managerial position can boost the late-career PMET Respondents' confidence in approaching and prioritising problems, generating proposals, and mobilising resources to act on business ideas. This self-assured mental state enhances their alertness and cognitive level, pushing them to try even untested ways to exploit opportunities.

(b) Association between DV1/DV2 and IV4 -2 (Position in Prior Managerial Experience)

Pearson Correlation Test

TABLE 54: Association between DV1/DV2 and IV4-2 (Position in Prior Managerial Experience)

		Correlations		
		DV1	DV2	Position in Prior Managerial Experience
DV1	Pearson Correlation	1	.593**	.117*
	Sig. (2-tailed)		.000	.023
	N	384	384	379
DV2	Pearson Correlation	.593**	1	.157**
	Sig. (2-tailed)	.000		.002
	N	384	384	379
Position in Prior Managerial Experience	Pearson Correlation	.117*	.157**	1
	Sig. (2-tailed)	.023	.002	
	N	379	379	379

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

From Table 54, the Pearson Correlation between DV1 and IV4-2 = 0.117, while DV2 and IV4-2 = 0.157. This means that there are positive relationships between DV1/DV2 and IV4-2 (Position in Prior Managerial Experience). Both their

P-Values are  $0.023 < \alpha (0.05)$  and  $0.02 < \alpha (0.05)$  respectively, reflecting the significant of their relationships. In other words, the Position of the late-career PMETs' Prior Managerial Experience significantly impacts their perceived state of readiness to identify and exploit entrepreneurial opportunities.

Linear Regression Test for DV1 and IV4-2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.117 <sup>a</sup>	.014	.011	.60672

a. Predictors: (Constant), Position in Prior Managerial Experience

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.192	.144		29.212	.000		
	Position in Prior Managerial Experience	.084	.037	.117	2.283	.023	1.000	1.000

a. Dependent Variable: DV1

Based on the Linear Regression test result, Standard Coefficient (R) = 0.117. This shows the somewhat positive relationship between DV1 and IV4-2.  $R^2: 0.014$  = only 1.4% of the variance in DV1 can be explained by IV4-2. The P-Value of  $0.023 < \alpha (0.05)$  means that the relationship between DV1 and IV4-2 is significant.

Our research findings reveal the positive correlation between managerial positions occupied by the late-career PMETs and their readiness for business opportunities. This relationship can be expected because when a person moves up the corporate ladder, he is exposed to a higher level of operational challenges and experience, giving him more heightened alertness and greater entrepreneurial cognition towards business opportunities.

Linear Regression Test for DV2 and IV4-2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.157 <sup>a</sup>	.025	.022	.77697

a. Predictors: (Constant), Position in Prior Managerial Experience

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.746	.184		20.384	.000		
	Position in Prior Managerial Experience	.145	.047	.157	3.078	.002	1.000	1.000

a. Dependent Variable: DV2

Based on the result of the Linear Regression test, Standard Coefficient (R) = 0.157. This shows the positive relationship between DV2 and IV4-2.  $R^2$ : 0.025 = only 2.5% of the variance in DV2 can be explained by IV4-2. The P-Value of 0.002 <  $\alpha$  (0.05) again confirm that their relationship is significant.



## **FINDINGS ON RESPONDENTS' PRIOR KNOWLEDGE AND INFORMATION**

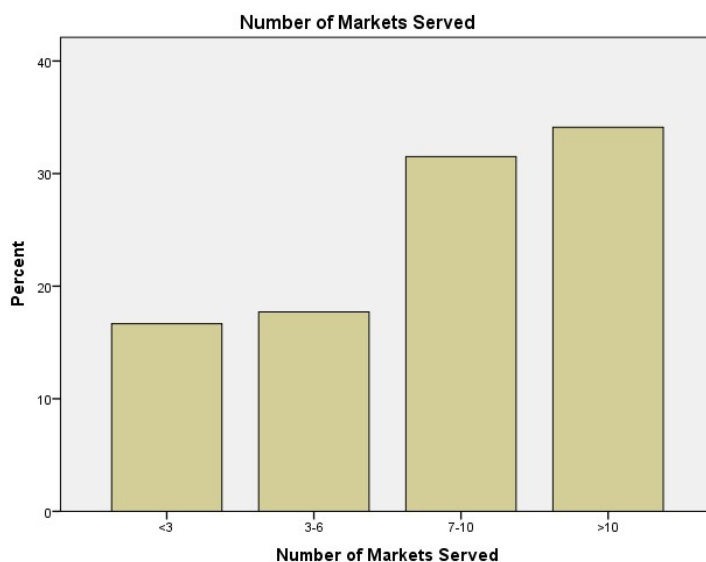
### 4.4.21 Respondents' Number of Markets previously served (IV5-1)

Question 16 - Following up on Question 15, how many markets and customers do/did you served in that managerial position?

**TABLE 55: Respondents' Number of Markets previously served (IV5-1)**

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. &lt; 3</b>	64	16.7%
<b>2. 3 to 6</b>	68	17.7%
<b>3. 7 to 10</b>	121	31.5%
<b>4. &gt; 10</b>	131	34.1%
<b>TOTAL</b>	<b>384</b>	<b>100.0%</b>

From Table 55, about 252 (65.6%) of the Respondents surveyed have previous experience or are currently servicing seven markets or more in a position as a Professional Manager or Executive in corporations. Graph 16 below presents a graphical illustration of this distribution.



**GRAPH 16: Respondents' Number of Markets previously served (IV5-1)**

Many of the late-career PMETs surveyed feel that they have accumulated the necessary market knowledge and information through serving many markets previously or at the moment. This knowledge and information may include

demographical, political or environmental materials, giving them a head up on the respective market opportunities, threats and competition presented in each of them. It can be assumed that comprehensive prior knowledge and information of the market can effectively prepare the Respondents to respond to changing market situations quickly.

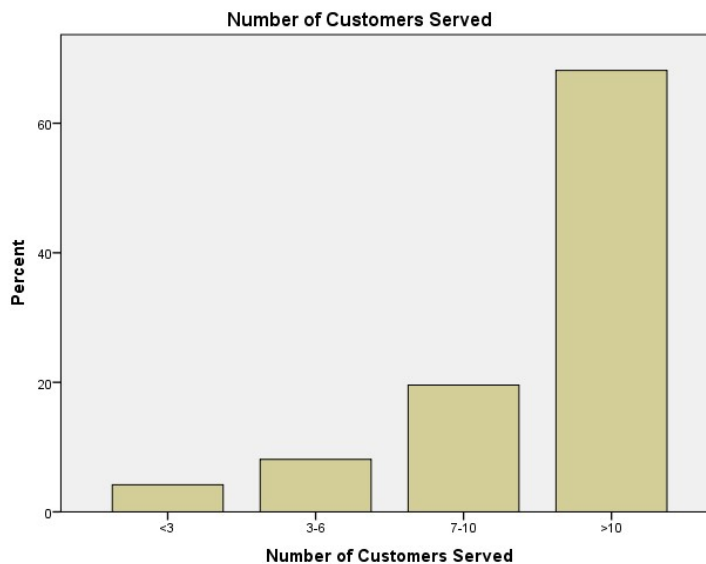
#### 4.4.22 Respondents' Number of Customers previously served (IV5-2)

For the same Question 16 - Following up on Question 15, how many markets and customers do/did you served in that managerial position?

**TABLE 56: Respondents' Number of Customers previously served (IV5-2)**

	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1. &lt; 3</b>	16	4.2%
<b>2. 3 to 6</b>	31	8.1%
<b>3. 7 to 10</b>	75	19.6%
<b>4. &gt; 10</b>	261	68.1%
<b>TOTAL</b>	383	100.0%

From Table 56 above, about 336 (87.7%) of the Respondents have previous experience or are currently servicing seven customers or more in a position as a Professional Manager or Executives in corporations.



**GRAPH 17: Respondents' Number of Customers previously served (IV5-2)**

By serving many customers, it can be assumed that most of the late-career PMETs surveyed feel that they have the necessary knowledge and information related to the many customers that they have been serving in their corporate jobs. The knowledge here may refer to both tacit and explicit types. Examples of tacit skills are relationship management and negotiating with the customers. Examples of explicit skills are know-how in extracting and analysing available customer databases for better customer relations building.

4.4.23 Respondents' Proficiency level of markets and customers previously served (IV5-3)

Question 17 - I am good at serving both the market (products and pricings) and customer (service quality).

TABLE 57: Respondents' Proficiency level of markets and customers previously served (IV5-3)

	FREQUENCY	PERCENTAGE
1. Strongly disagree	0	0.0%
2. Disagree	1	0.3%
3. Somewhat disagree	3	0.8%
4. Neither agree no disagree	9	2.3%
5. Somewhat agree	45	11.7%
6. Agree	198	51.6%
7. Strongly agree	128	33.3%
<b>TOTAL</b>	<b>384</b>	<b>100.0%</b>

TABLE 58: Breakdown of Respondents' Proficiency level of markets and customers previously served

		Good at serving Markets and Customers Needs						
	Range	Strongly Disagree	Disagree	More of Less Disagree	Neither agree no disagree	More of Less Agree	Agree	Strongly Agree
Number of Markets Served	< 3	0	0	1	4	14	26	19
	3 to 6	0	0	0	1	13	40	14
	7 to 10	0	0	1	2	13	68	37
	> 10	0	1	1	2	5	64	58
Number of Customers Served	< 3	0	0	1	3	5	5	2
	3 to 6	0	0	0	2	5	17	7
	7 to 10	0	0	0	0	11	48	15
	> 10	0	0	2	4	24	127	105

From Table 57, about 198 (51.6%) and 128 (33.3%) of the Respondents rated 'Agree' and 'Strongly Agree' to say that they are good at serving the markets and customers' needs. It can only be assumed that the previous management experience of these late-career PMETs may have provided them with prior knowledge of markets and customers and the methods to serve them best. This somehow explains why the Respondents have the perception that they have good skills in serving both the markets and customers (as shown in Table 58).

#### 4.4.24 Relationships between DV1/DV2 and IV5 (Prior Knowledge and Information)

- (a) Association between DV1/DV2 and IV5-1 (Number of Markets previously served)

##### Pearson Correlation Test

TABLE 59: Association between DV1/DV2 and IV5-1 (Number of Markets previously served)

		<b>Correlations</b>		
		DV1	DV2	Number of Markets Served
DV1	Pearson Correlation	1	.593**	.000
	Sig. (2-tailed)		.000	1.000
	N	384	384	384
DV2	Pearson Correlation	.593**	1	.042
	Sig. (2-tailed)	.000		.409
	N	384	384	384
Number of Markets Served	Pearson Correlation	.000	.042	1
	Sig. (2-tailed)	1.000	.409	
	N	384	384	384

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From Table 59, the Pearson Correlation index between DV1 and IV5-1 is 0.000, indicating that there is no relationship between DV1 and the number of previously served markets. Moreover, the P-value of DV1 and IV5-1 is 1.000 >  $\alpha$  (0.05), while that between DV2 and IV5-1 is 0.409 >  $\alpha$  (0.05). Hence, both of their relationships are NOT significant.

Linear Regression Test between DV1 and IV5-1 (Number of Markets previously served)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.000 <sup>a</sup>	.000	-.003	.61392

a. Predictors: (Constant), Number of Markets Served

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.508	.088		51.094	.000		
	Number of Markets Served	1.760E-5	.029	.000	.001	1.000	1.000	1.000

a. Dependent Variable: DV1

Based on the Linear Regression test result, the Standard Coefficient (R) = 0.000. This shows there is no relationship between DV1 and IV5-1.  $R^2: 0.000 = 0\%$  of the variance in DV1 can be explained by IV5. The P-Value of  $1.000 > \alpha (0.05)$  means that their relationship is NOT significant.

This research revealed that the Number of Markets previously served by the late-career PMETs has no direct impact on their readiness to identify entrepreneurial opportunities. It can be assumed that although such knowledge and information on markets may be critical for operational management, it may serve little importance in sensing new business opportunities. Also, the late-career PMETs may not seek opportunities in those markets they previously have served.

Linear Regression Test between DV2 and IV5-1 (Number of Markets previously served)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.042 <sup>a</sup>	.002	-.001	.78357

a. Predictors: (Constant), Number of Markets Served

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.215	.113		37.433	.000		
	Number of Markets Served	.031	.037	.042	.826	.409	1.000	1.000

a. Dependent Variable: DV2

Based on the Linear Regression test result, the Standard Coefficient (R) = 0.042 shows that there is a somewhat positive relationship between DV2 and IV5-1.  $R^2: 0.002 =$  only 0.2% of the variance in DV2 can be explained by IV5-1. The P-Value of  $0.409 > \alpha (0.05)$  means that their relationship is NOT significant.

These findings revealed that the Number of Markets previously served by the late-career PMETs has no direct bearings on their state of readiness to exploit entrepreneurial opportunities. It can be assumed that although such market knowledge and information may be critical for existing operational management, it may serve little relevance when applied to the exploitation of new business opportunities. One reason could be that the late-career PMETs may not seek opportunities in those markets or industries they have previously served in past jobs.

(b) Association between DV1/DV2 and IV5-2 (Number of Customers previously served)

Pearson Correlation Test

TABLE 60: Association between DV1 and IV5-2 (Number of Customers previously served)

**Correlations**

		DV1	Number of Customers Served
DV1	Pearson Correlation	1	.103*
	Sig. (2-tailed)		.044
	N	384	383
Number of Customers Served	Pearson Correlation	.103*	1
	Sig. (2-tailed)	.044	
	N	383	383

\*. Correlation is significant at the 0.05 level (2-tailed).

From Table 60, Pearson Correlation index of 0.103 indicates that there is somewhat positive relationship existing between DV1 and IV5-2 (Number of customers previously served). P-value (0.044) <  $\alpha$  (0.05) is significant.

**TABLE 61: Association between DV2 and IV5 -2 (Number of Customers previously served)**

		Correlations	
		DV2	Number of Customers Served
DV2	Pearson Correlation	1	.135**
	Sig. (2-tailed)		.008
	N	384	383
Number of Customers Served	Pearson Correlation	.135**	1
	Sig. (2-tailed)	.008	
	N	383	383

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From Table 61, Pearson Correlation index of 0.135 indicates there is a positive relationship existing between DV2 and IV5-2 (Number of Customers previously served). P-value (0.008) <  $\alpha$  (0.05) is significant.

**Linear Regression Test for DV1 and IV5-2 (Number of Customers previously served)**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.103 <sup>a</sup>	.011	.008	.61090

a. Predictors: (Constant), Number of Customers Served

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.241	.136		31.211	.000	1.000	1.000
	Number of Customers Served	.076	.037	.103	2.025	.044		

a. Dependent Variable: DV1

Based on the Linear Regression test result, the Standard Coefficient (R) = 0.103 shows that there is a somewhat positive relationship between DV1 and IV5-2.  $R^2$ : 0.011= only 1.1% of the variance in DV1 can be explained by IV5-2. The P-Value of 0.044 <  $\alpha$  (0.05) means that their relationship is significant.

These findings revealed that the Number of Customers previously served directly impacted their state of readiness to identify entrepreneurial opportunities. We assume that serving more customers can enhance knowledge and information to create new business opportunities. These may be due to the late-career PMETs' connections with the many customers they served previously.

Linear Regression Test for DV2 and IV5-2 (Number of Customers previously served)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.135 <sup>a</sup>	.018	.016	.77791

a. Predictors: (Constant), Number of Customers Served

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.853	.173		22.269	.000		
1	Number of Customers Served	.127	.048	.135	2.668	.008	1.000	1.000

a. Dependent Variable: DV2

Based on the result of the Linear Regression test, the Standard Coefficient (R) = 0.135 shows that there is somewhat positive relationship between DV2 and IV5-2.  $R^2$ : 0.018 = only 1.8% of the variance in DV2 can be explained by IV5-2. The P-Value of  $0.008 < \alpha$  (0.05) means that their relationship is significant.

These findings revealed that the Number of Customers previously served directly impacted their state of readiness to exploit entrepreneurial opportunities. Therefore, we can assume that serving more customers can enhance knowledge and information to help the Respondents to act on new business opportunities due to their established connections and experience.



(c) Association between DV1/DV2 and IV5-3 (Proficiency level of markets and customers previously served)

*Pearson Correlation Test*

TABLE 62: Association between DV1/DV2 and IV5 -3 (Proficiency level of markets and customers previously served)

**Correlations**

		DV1	DV2	Good at serving Markets and Customer Needs	
DV1	Pearson Correlation	1	.593**	.120*	←
	Sig. (2-tailed)		.000	.018	
	N	384	384	384	
DV2	Pearson Correlation	.593**	1	.205**	←
	Sig. (2-tailed)	.000		.000	
	N	384	384	384	
Good at serving Markets and Customer Needs	Pearson Correlation	.120*	.205**	1	
	Sig. (2-tailed)	.018	.000		
	N	384	384	384	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Table 62 shows the result of the correlation test between DV1/DV2 and IV5-3. The Pearson Correlation index of 0.120 indicates a positive relationship between DV1 and IV5-3 (Proficiency level of markets and customers previously served). The P-value (0.018) < α (0.05) also suggests the significance of their relationship.

For the variables, DV2 and IV5-3, the Pearson Correlation test shows a value of 0.205, which denotes a positive relationship between the State of readiness to the Proficiency level of markets and customers previously served. The P-value (0.000) < α (0.05) again suggests the significance of their relationship.

Linear Regression Test for DV1 and IV5-3 (Proficiency level of markets and customers previously served)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.120 <sup>a</sup>	.014	.012	.60946

a. Predictors: (Constant), Good at serving Markets and Customer Needs

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.942	.241		16.361	.000		
	Good at serving Markets and Customer Needs	.092	.039	.120	2.369	.018	1.000	1.000

a. Dependent Variable: DV1

Based on the Linear Regression test result, the Standard Coefficient (R) = 0.120, denoting that the relationship between DV1 and IV5-3 is positive. R<sup>2</sup>: 0.014 = only 1.4% of the variance in DV1 can be explained by IV5-3. The P-Value of 0.018 <  $\alpha$  (0.05) means that their relationship is significant.

Findings from the Pearson Correlation and Linear Regression tests revealed that the Respondents' Proficiency level for markets and customers previously served by them directly implies their perceived state of readiness to identify entrepreneurial opportunities. The late-career PMETs, working as managers in corporations, can acquire meaningful knowledge and information about the market environment or customers' needs to find out where potential business prospects are. Hence, they are alerted to business opportunities before others.

Linear Regression Test for DV2 and IV5-3 (Proficiency level of markets and customers previously served)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.205 <sup>a</sup>	.042	.040	.76753

a. Predictors: (Constant), Good at serving Markets and Customer Needs

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.067	.303		10.110	.000		
	Good at serving Markets and Customer Needs	.201	.049	.205	4.103	.000	1.000	1.000

a. Dependent Variable: DV2

Based on the Linear Regression test result, Standard Coefficient ( $R$ ) = 0.205 denotes a positive association between the variables DV2 and IV5-3.  $R^2$ : 0.042 = only 4.2% of the variance in DV2 can be explained by IV5-3. The P-Value of 0.00 <  $\alpha$  (0.05) means that their relationship is significant.

Findings from both the Pearson Correlation and Linear Regression tests revealed that the Respondents' market and customer proficiency levels previously served directly implicate their perceived state of readiness to exploit entrepreneurial opportunities.

To acquire such market and customer proficiency levels, it is likely that the Respondents have worked in corporate managerial roles over a long tenure. During this time, the experience enables them to gain the necessary market and customer insights for any future development of the business. It is thus safe to assume that these managers have acquired in-depth knowledge of the markets and customers to understand where to access critical resources and capabilities to capture and exploit these opportunities faster and cheaper than their competitors. Such knowledge is precious and is usually embedded deep in the cognition of the Respondents. Best of all, the inherent nature of such knowledge makes it is not easy to codify them to offer the same wisdom for sharing with other Entrepreneurs.

**FINDINGS ON RESPONDENTS' PRIOR RELEVANT SKILLS**

4.4.25 Respondents' Type and Proficiency of skillsets (IV6-1)

Question 18 - From the given list of skillsets below, indicate your proficiency level by selecting the appropriate box.

**TABLE 63: Respondents' Type and Proficiency of skillsets (IV6-1)**

	Not Proficient		Average		Proficient		
	Count	Row N %	Count	Row N %	Count	Row N %	
Creative Thinking	29	7.6%	147	38.6%	205	53.8%	
Problem Solving	5	1.3%	85	22.2%	293	76.5%	←
Decision-Making	12	3.1%	86	22.5%	284	74.3%	←
Leading Others	32	8.4%	114	30.0%	234	61.6%	
Managing Conflicts	30	7.9%	120	31.6%	230	60.5%	
Teamwork	9	2.4%	79	20.7%	294	77.0%	←
Communication	10	2.6%	83	21.7%	289	75.7%	←

Table 63 above shows the top four skillsets proficiency as indicated by the Respondents. They include both personal cognitive (PC) and social and interpersonal (S&I) skills. These are Teamwork which is an S&I skillset at 294 (77%); Problem Solving, which is a PC skillset at 293 (76.5%); Communications, another S&I skillset at 289 (75.7%) and Decision-Making, another PC skillset at 284 (74.3%).

A lesser 234 (61.6%), 230 (60.5%) and 205 (53.8%) of the Respondents think they are proficient in Leading Others (S&I skill), Managing Conflicts (S&I skill) and Creative Thinking (PC skill), respectively.

Operating a profitable business requires a variety of task-oriented skills. Entrepreneurs must effectively organise operations and direct critical resources toward supporting them efficiently. To do this, they must collaborate with other functional team members and learn to work with them. Priority setting is necessary, and the Entrepreneur must assess urgent problems or tasks on hand for delegation to other team members. Team communication is thus vital to ensure that everyone involved knows the expected goals and their respective involvement. The findings

above show that many senior PMETs perceived high skill proficiency for primary entrepreneurial-related skills. The late-career PMETs also view themselves as making effective decisions on project acquisition, resources allocation, market pricing and partnership. Interestingly, most Respondents do not consider themselves to have as much proficiency in leadership skills such as Leading Others and Managing Conflicts.

4.4.26 Respondents' Formal training with certifications of skillset proficiency (IV6-2)

Question 19 - I have attended formal training, and obtained certifications for the skill sets mentioned in Question 18?

TABLE 64: Respondents' Formal trainings with certifications of skillset proficiency

	FREQUENCY	PERCENTAGE
<b>1. Strongly disagree</b>	0	0.0%
<b>2. Disagree</b>	3	0.8%
<b>3. Somewhat disagree</b>	6	1.6%
<b>4. Neither agree no disagree</b>	30	7.8%
<b>5. Somewhat agree</b>	102	26.6%
<b>6. Agree</b>	192	50.0%
<b>7. Strongly agree</b>	51	13.3%
<b>TOTAL</b>	<b>384</b>	<b>100.0%</b>

From Table 64, a total of 243 (63.3%) Respondents rated 'Agree' or 'Strongly Agree' to this question on whether they have attended courses and obtained certifications for all these skillsets mentioned in question 18. Another high proportion of 102 (26.6%) also 'somewhat agreed' to the given statement.

For the late-career PMETs, a likely reason for their responses could be that they pick up the skills through school education or formal training during their employment as managers and executives in corporations. Most PMETs in Singapore are graduates of a tertiary programme where many skillsets such as Problem Solving, Leadership, Teamwork and Communications were taught.

**TABLE 65: Cross-tabulation of Respondents' Proficiency of skillsets and courses attended**

		Courses Attended						
		Strongly disagree	Disagree	Somewhat disagree	Neither Agree or disagree	Somewhat agree	Agree	Strongly agree
		Count	Count	Count	Count	Count	Count	Count
Creative Thinking	Not Proficient	0	2	1	5	11	10	0
	Average	0	1	4	17	49	64	12
	Proficient	0	0	1	8	42	115	39
Problem Solving	Not Proficient	0	2	1	0	1	1	0
	Average	0	1	3	11	26	41	3
	Proficient	0	0	2	19	75	149	48
Decision-Making	Not Proficient	0	1	3	3	4	1	0
	Average	0	2	1	11	28	38	6
	Proficient	0	0	2	16	70	152	44
Leading Others	Not Proficient	0	1	2	7	12	8	2
	Average	0	2	1	15	32	59	5
	Proficient	0	0	3	8	57	123	43
Managing Conflicts	Not Proficient	0	2	0	5	8	12	3
	Average	0	1	2	15	38	58	6
	Proficient	0	0	4	10	56	118	42
Teamwork	Not Proficient	0	0	0	1	3	5	0
	Average	0	3	1	14	24	31	6
	Proficient	0	0	5	15	75	154	45
Communication	Not Proficient	0	0	0	2	2	5	1
	Average	0	3	1	13	29	33	4
	Proficient	0	0	5	15	71	153	45

Table 65 shows the cross-tabulation between the Respondents' proficiency and the course attended for each skill set. From the results, it is pretty apparent that the extent of the 'agreement' on course attendance with certification (IV6-2) will most likely lead to a higher proficiency level of skills (IV6-1).

4.4.27 Relationships between DV1/DV2 and IV6-2 (Formal training with certification of skillset proficiency)

Pearson Correlation Test

TABLE 66: Correlation between DV1/DV2 and IV6-2

		Correlations		
		DV1	DV2	Formal Trainings with certifications of skillset proficiency
DV1	Pearson Correlation	1	.593**	.188**
	Sig. (2-tailed)		.000	.000
	N	384	384	384
DV2	Pearson Correlation	.593**	1	.249**
	Sig. (2-tailed)	.000		.000
	N	384	384	384
Formal Trainings with certifications of skillset proficiency	Pearson Correlation	.188**	.249**	1
	Sig. (2-tailed)	.000	.000	
	N	384	384	384

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From Table 66 above, the Pearson Correlation index between DV1/DV2 and IV6-2 is 0.188 and 0.249, respectively. This shows that there are positive relationships between DV1/DV2 and Formal training with certifications of skillset proficiency. Both the P-values (0.000) < α (0.05) meaning their relationships are significant.

Linear Regression Test for DV1 and IV6-2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.188 <sup>a</sup>	.035	.033	.60295

a. Predictors: (Constant), Courses Attended

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.800	.191		19.855	.000	1.000	1.000
	Courses Attended	.126	.034	.188	3.745	.000		

a. Dependent Variable: DV1

Based on the Linear Regression test result, Standard Coefficient (R) = 0.188 shows a positive relationship between DV1 and IV5-3. R<sup>2</sup>: 0.035 = only 3.5% of the

variance in DV1 can be explained by IV6-2. The P-Value of  $0.00 < \alpha (0.05)$  means that their relationship is significant.

Our findings from the correlation and regression tests confirmed that Formal training with the certifications of skillset proficiency of the late-career PMETs directly impacts their perceived readiness to identify entrepreneurial opportunities. These skillsets cover those of personal effectiveness, leadership and management.

Linear Regression Test for DV2 and IV6-2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.249 <sup>a</sup>	.062	.059	.75958

a. Predictors: (Constant), Courses Attended

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.107	.241		12.885	.000		
	Courses Attended	.212	.042	.249	5.023	.000	1.000	1.000

a. Dependent Variable: DV2

Based on the Linear Regression test result, the Standardised Coefficient (R) value of 0.249 confirms a positive relationship between DV2 and IV6-2.  $R^2: 0.062 =$  only 6.2% of the variance in DV2 can be explained by IV6-2. The P-Value of  $0.00 < \alpha (0.05)$  means that their relationship is significant.

Our findings from the correlation and regression tests also confirmed that Formal training with certifications of skillset proficiency of the late-career PMETs has direct impacts on their perceived state of readiness to exploit entrepreneurial opportunities.



## **FINDINGS ON RESPONDENTS' SOCIAL NETWORKS**

### 4.4.28 Respondents' Social Network types and member sizes (IV7-1)

Question 20 - For the given types of Social Network relationship, provide an estimated member size for each.

**TABLE 67: Respondents' Immediate Family network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	19	5.0%
<b>6 to 10</b>	74	19.3%
<b>11 to 15</b>	115	30.0%
<b>&gt; 15</b>	175	45.7%
<b>Total</b>	383	100.0%

From Table 67 above, a total of 175 (45.7%) Respondents have an Immediate Family network member size of more than 15 members. Another 115 (30%) have between 11 to 15 members. About 74 (19.3%) have an Immediate Family member size between 6 to 10 members, and another 19 (5%) have less than 6 members. The findings are not of any surprise as most of the late-career PMETs are born in the 60s or before, making them belong to what is widely known as the Babyboomer generation, whose family units are large.

**TABLE 68: Respondents' Relatives network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	5	1.3%
<b>6 to 10</b>	13	3.4%
<b>11 to 15</b>	113	29.7%
<b>&gt; 15</b>	249	65.5%
<b>Total</b>	380	100.0%

From Table 68, about 249 (65.5%) of the Respondents have a Relatives network member size of more than 15 members. Another 113 (29.7%) have between 11 to 15 members. About 13 (3.4%) have between 6 to 10 members, and another 5 (1.3%) have less than 6 members. Again, the findings are within

expectation for the babyboomer generation, whom many come from large extended families of uncles, aunts, cousins, and other distant relatives.

**TABLE 69: Respondents' Close Friends network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	5	1.3%
<b>6 to 10</b>	23	6.0%
<b>11 to 15</b>	105	27.5%
<b>&gt; 15</b>	249	65.2%
<b>Total</b>	382	100.0%

From Table 69 above, a total of 249 (65.2%) Respondents have a Close Friends network member size of more than 15 members. Another 105 (27.5%) indicated between 11 to 15 members size. About 23 (6%) have between 6 to 10 members, while only 5 (1.3%) have less than 6 members. This finding is highly expected given the age of the late-career PMETs, which provided them several decades to cultivate good and close friendships and confidants.

**Table 70: Respondents' Schoolmates network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	9	2.4%
<b>6 to 10</b>	25	6.5%
<b>11 to 15</b>	117	30.6%
<b>&gt; 15</b>	231	60.5%
<b>Total</b>	382	100.0%

Table 70 above shows that about 231 (60.5%) of the Respondents indicated a Schoolmates network size of more than 15 members. Another 117 (30.6%) of them indicated between 11 to 15 members. About 25 (6.5%) have between 6 to 10 members, and 9 (2.4%) have less than 6 members. This finding is entirely unexpected, given the lapse of time since their completion of schooling. However, it shows that this group still maintains close contact with their old schoolmates from primary and secondary schools, colleges and universities.

**TABLE 71: Respondents' Community Friends network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	11	2.9%
<b>6 to 10</b>	29	7.6%
<b>11 to 15</b>	123	32.1%
<b>&gt; 15</b>	220	57.4%
<b>Total</b>	383	100.0%

From Table 71 above, about 220 (57.4%) of the Respondents indicated a Community Friends network member size of more than 15 members, while another 123 (32.1%) indicated between 11 to 15 members. About 29 (7.6%) have between 6 to 10 members, and 11 (2.9%) have less than 6 members. This finding shows that late-career PMETs are sociable people who maintain healthy interactions with their communities, either social, religious or other interest-related.

**TABLE 72: Respondents' Social Acquaintances network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	17	4.5%
<b>6 to 10</b>	46	12.1%
<b>11 to 15</b>	127	33.4%
<b>&gt; 15</b>	190	50.0%
<b>Total</b>	380	100.0%

From Table 72 above, about 190 (50.0%) of the Respondents indicated a Social Acquaintances Network Member Size of more than 15 members, while another 127 (33.4%) indicated between 11 to 15 members. About 46 (12.1%) have between 6 to 10 members, and 17 (4.5%) have less than 6 members. This finding again shows that late-career PMETs are very sociable individuals who keep an extensive network of people they met in their getting through in life. These networks include getting acquainted with 'friends' of 'friends'.

TABLE 73: Respondents' Online/Social Media Friends network member size

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	18	4.7%
<b>6 to 10</b>	46	12.0%
<b>11 to 15</b>	108	28.3%
<b>&gt; 15</b>	210	55.0%
<b>Total</b>	382	100.0%

From Table 73 above, a total of 210 (55.0%) Respondents indicated an Online/Social Media Friends network member size of more than 15 members, while another 108 (28.3%) indicated between 11 to 15 members. About 46 (12.0%) have between 6 to 10 members, and 18 (4.7%) have less than 6 members.

This finding is reasonably expected given that late-career PMETs are the first generation of people to have access to online and social media platforms in the 90s. Being sociable individuals, they are connected to an extensive network of online/social media friends they could have encountered at work or play.

The higher percentages of member size of the late-career PMETs Social Network show the wide outside-of-business contacts and connections they have built over the years with Immediate Family members, Relatives, Schoolmates, Close Friends, Community Friends, Social Acquaintances and Social Media Friends.

#### 4.4.29 Respondents' years of Social Network relationships (IV7-2)

Question 21 - What is the number of years of each Social Network Relationship?

TABLE 74: Respondents' years of relationship with Immediate Family network

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	0	0.0%
<b>6 to 10</b>	3	0.8%
<b>11 to 15</b>	100	26.2%
<b>&gt; 15</b>	279	73.0%
<b>Total</b>	382	100.0%

From Table 74, about 279 (73.0%) of the Respondents indicated an Immediate Family relationship of more than 15 years, while another 100 (26.2%)

stated length of associations between 11 to 15 years. Only 3 (8.0%) have between 6 to 10 members. This finding is entirely within expectation given the age of the late-career PMETs and their time with their immediate families.

**TABLE 75: Respondents' years of relationship with Relatives network**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	0	0.0%
<b>6 to 10</b>	0	0.0%
<b>11 to 15</b>	78	20.5%
<b>&gt; 15</b>	303	79.5%
<b>Total</b>	381	100.0%

From Table 75 above, a total of 303 (79.5%) Respondents indicated a Relatives relationship of more than 15 years, while another 78 (20.5%) stated the length of their ties between 11 to 15 years. There were no responses to the Relatives relationship for less than 11 years. This finding is again within expectation given the age of the late-career PMETs and the time they spent with their close and distant relatives as such.

**Table 76: Respondents' years of relationship with Close Friends network**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	1	0.3%
<b>6 to 10</b>	13	3.4%
<b>11 to 15</b>	139	36.4%
<b>&gt; 15</b>	229	59.9%
<b>Total</b>	382	100.0%

From Table 76 above, about 229 (59.9%) of the Respondents indicated a Close Friends relationship of more than 15 years, while another 139 (36.4%) stated length of connections between 11 to 15 years. About 13 (3.4%) have between 6 to 10 members, and only 1 (0.3%) have less than 6 members. Again, this finding is within our expectations given the age of the late-career PMETs and their time spent cultivating close friendships.

**TABLE 77: Respondents' years of relationship with Schoolmates network**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	0	0.0%
<b>6 to 10</b>	9	2.4%
<b>11 to 15</b>	147	38.6%
<b>&gt; 15</b>	225	59.1%
<b>Total</b>	381	100.0%

From Table 77 above, about 225 (59.1%) of the Respondents indicated a Schoolmates relationship of more than 15 years, while another 147 (38.6%) stated length of associations between 11 to 15 years. Only 9 (2.4%) have between 6 to 10 members. This finding is again within our expectation given the age of the late-career PMETs and the length of time since they have completed schools, colleges and universities.

**TABLE 78: Respondents' years of relationship with Community Friends network**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	16	4.2%
<b>6 to 10</b>	122	32.0%
<b>11 to 15</b>	159	41.7%
<b>&gt; 15</b>	84	22.0%
<b>Total</b>	381	100.0%

From Table 78 above, about 84 (22.0%) of the Respondents indicated a Community Friends relationship of more than 15 years. Another 159 (41.7%) and 122 (32.0%) indicated length of relationships between 11 to 15 years and 6 to 10 years, respectively. About 122 (32.0%) have between 6 to 10 members, and 16 (4.2%) have less than 6 members. Again, this finding is reasonably expected because relationships cultivated with community friends are not as sustainable as Immediate Family, Relatives, Close Friends, or Ex-schoolmates.

**TABLE 79: Respondents' years of relationship with Social Acquaintances network**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	49	12.9%
<b>6 to 10</b>	152	39.9%
<b>11 to 15</b>	134	35.2%
<b>&gt; 15</b>	46	12.1%
<b>Total</b>	381	100.0%

From Table 79 above, only 46 (4.6%) of the Respondents indicated a Social Acquaintances relationship of more than 15 years. Another 134 (35.2%) and 152 (39.9%) stated length of associations between 11 to 15 years and 6 to 10 years, respectively. Only 49 (12.9%) have less than 6 members. This finding is again reasonably expected because relationships cultivated with social acquaintances are not easy to maintain compared to Immediate Family, Relatives, Close Friends or Schoolmates from schools, colleges and universities.

**TABLE 80: Respondents' years of relationship with Online/Social Media Friends network**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	84	22.0%
<b>6 to 10</b>	181	47.5%
<b>11 to 15</b>	104	27.3%
<b>&gt; 15</b>	12	3.1%
<b>Total</b>	381	100.0%

From Table 80 above, only 12 (3.1%) of the Respondents indicated an Online/Social Media Friends relationship of more than 15 years. Also, 104 (27.3%) and 181 (47.5%) have the length of associations between 11 to 15 years and 6 to 10 years, respectively. Another 84 (22.0%) have relationships of less than six years. This finding is again quite expected given that online social media platforms have been more readily available since the late-90s. More popular platforms like Facebook and Messaging Apps came even later and were more readily available only in the late-2000s. Hence, this explains why the length of relationships that late-career PMETs have built up with their online/social media friends are mostly below 15 years.

To conclude, our findings revealed that most of the Respondents surveyed have long-lasting relationships extending beyond 15 years for their immediate family members, relatives, close friends and schoolmates. When it comes to community, social acquaintances and online/social media friends, most have shorter relationships below 15 years. Most of the Respondents have online/social media friends relationships of 10 years or lower. This answer is reasonable considering that online/social media platforms were only more readily available about 15 years ago from the mid-2000s.

#### 4.4.30 Relationships between DV1/DV2 and IV7 (Social Networks)

##### (a) Association between DV1 and IV7-1 (Social Network Types and Member Sizes)

##### Multiple Regression Test

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.131 <sup>a</sup>	.017	-.002	.61725

a. Predictors: (Constant), Online/Social Media Friends, Relatives, Immediate Family, Schoolmates, Community Friends, Close Friends, Social Acquaintances

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.416	.225		19.621	.000
	Immediate Family	.060	.042	.089	1.437	.151
	Relatives	-.068	.065	-.068	-1.037	.300
	Close Friends	.064	.067	.069	.954	.341
	Schoolmates	.001	.063	.001	.012	.990
	Community Friends	-.048	.059	-.059	-.811	.418
	Social Acquaintances	-.046	.055	-.063	-.836	.404
	Online/Social Media Friends	.070	.051	.098	1.374	.170

a. Dependent Variable: DV1

The multiple *R*-value (Adjusted *R* Square in the Model Summary table) between IV7-1 and DV1 at -0.002. This negative adjusted *R* Square appears when the calculation towards response is very low or negligible, suggesting that the non-linear relationship between DV1 and IV7-1 is insignificant. *P*-Values > 0.05 also show their insignificant associations. Hence, the member size of the late-career PMETs' Immediate Family, Relatives, Close Friends, Schoolmates,



Community Friends, Social Acquaintances or Online Social Media Friends have insignificant impacts on DV1.

Findings reveal that although more significant network types and member sizes may help facilitate better sharing of information and knowledge through the familiarity of race, language or religion, the assumption that this will naturally translate to more generous accrual of resource values to influence perceived state of readiness for business opportunities is not there. With that, we can safely assume that the member sizes of social network relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness to identify business opportunities.

(b) Association between DV2 and IV7-1 (Social Network Types and Member Sizes)

Multiple Regression Test

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.117 <sup>a</sup>	.014	-.005	.79426

a. Predictors: (Constant), Online/Social Media Friends, Relatives, Immediate Family, Schoolmates, Community Friends, Close Friends, Social Acquaintances

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.883	.290		13.407	.000
	Immediate Family	.059	.054	.068	1.094	.275
	Relatives	-.005	.084	-.004	-.062	.950
	Close Friends	-.011	.086	-.009	-.129	.897
	Schoolmates	.020	.082	.019	.248	.804
	Community Friends	.018	.076	.017	.230	.819
	Social Acquaintances	-.039	.071	-.042	-.548	.584
	Online/Social Media Friends	.087	.065	.095	1.324	.186

a. Dependent Variable: DV2

The multiple *R-value* (Adjusted *R Square*) of -0.005 indicates the weak and fragile non-linear relationship between the IV7-1 and the DV2. All their P-Values > 0.05 support these insignificant associations as well. This figure means that the member size of the late-career PMETs Immediate Family, Relatives, Close Friends, Schoolmates, Community Friends, Social Acquaintances, or Online Social Media

Friends have minimal and insignificant impacts on their mental state act on identified entrepreneurial opportunities.

Again, the assumption that the more significant social network types and member sizes may lead to better sharing of information and knowledge through interlink social structures does not naturally translate to more generous accrual of resource values to influence their perceived state of readiness to act on business opportunities is not valid. With that, we can safely assume that the Member Sizes of Social Network Relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness to exploit business opportunities.

(c) Association between DV1 and IV7-2 (Years of Social Network Relationships)

Multiple Regression Test

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.155 <sup>a</sup>	.024	.005	.61095

a. Predictors: (Constant), Online/Social Media Friends, Schoolmates, Immediate Family, Close Friends, Relatives, Community Friends, Social Acquaintances

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.468	.380		11.761	.000
	Immediate Family	.086	.074	.066	1.152	.250
	Relatives	.058	.088	.039	.665	.507
	Close Friends	-.112	.062	-.102	-1.808	.071
	Schoolmates	-.090	.062	-.080	-1.443	.150
	Community Friends	.026	.049	.034	.520	.603
	Social Acquaintances	.045	.051	.063	.876	.382
	Online/Social Media Friends	.018	.053	.023	.345	.730

a. Dependent Variable: DV1

The multiple *R-value* (Adjusted *R Square* in the Model Summary table) indicates a weak linear relationship between IV7-2 and DV1 at 0.005, signifying that IV7-2 impacts only 0.5% of DV1. All their P-Values > 0.05 means that their relationships are not significant.

Hence, the length of time that the late-career PMETs spent knowing their Immediate Family, Relatives, Close Friends, Schoolmates, Community Friends, Social Acquaintances or Online Social Media Friends has minimal and insignificant impacts on their mental state identify entrepreneurial opportunities.

Findings reveal that although longer network relationships may breed grouping familiarity, the assumption that this will naturally foster greater trust, confidence and shared cognition to influence their perceived state of readiness for business opportunities is not happening. With that, we can safely assume that the Years of Social Network Relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness to identify business opportunities.

(d) Association between DV2 and IV7-2 (Years of Social Network Relationships)

Multiple Regression Test

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.142 <sup>a</sup>	.020	.001	.78851

a. Predictors: (Constant), Online/Social Media Friends, Schoolmates, Immediate Family, Close Friends, Relatives, Community Friends, Social Acquaintances

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.695	.490		7.536	.000
	Immediate Family	.123	.096	.073	1.277	.202
	Relatives	.022	.113	.011	.198	.843
	Close Friends	-.058	.080	-.041	-.724	.470
	Schoolmates	-.013	.081	-.009	-.164	.870
	Community Friends	.046	.064	.048	.723	.470
	Social Acquaintances	.096	.066	.105	1.454	.147
	Online/Social Media Friends	-.023	.068	-.023	-.340	.734

a. Dependent Variable: DV2

The multiple *R-value* (Adjusted *R Square* in the Model Summary table) indicates a weak linear relationship between IV7-2 and DV2 at 0.001, signifying that IV7-2 impacts only 0.1% of DV2. All their P-Values > 0.05 means that their relationships are not significant. What this means is that the extended length of time

that the late-career PMETs spent knowing their Immediate Family, Relatives, Close Friends, Schoolmates, Community Friends, Social Acquaintances or Online Social Media Friends have minimal and insignificant impacts on their mental state to take action on recognising and discovering business opportunities.

Findings reveal that although longer network relationships may breed grouping familiarity, the assumption that this will naturally foster greater trust, confidence and shared cognition to influence their perceived state of readiness to exploit business opportunities is not happening. With that, we can safely assume that the Years of Social Network Relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness to exploit business opportunities.

## **FINDINGS ON RESPONDENTS' BUSINESS NETWORKS**

### 4.4.31 Respondents' Business Network types and member sizes (IV8-1)

Question 22 - For the given types of Business Network relationship, provide an estimated member size for each.

**TABLE 81: Respondents' Business Partners network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	72	18.8%
<b>6 to 10</b>	94	24.5%
<b>11 to 15</b>	133	34.7%
<b>&gt; 15</b>	84	21.9%
<b>Total</b>	383	100.0%

From Table 81 above, only 84 (21.9%) of the Respondents indicated a Business Partners size of more than 15 members. Also, 133 (34.7%) and 94 (24.5%) have a size of between 11 to 15 members and 6 to 10 members, respectively. Only 72 (18.8%) have relationships of less than six members. This finding is again quite aligned to that late-career PMETs have worked in their corporate careers in managerial roles for a while of more than 11 years and above.

**TABLE 82: Respondents' Ex-colleagues network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	13	3.4%
<b>6 to 10</b>	47	12.2%
<b>11 to 15</b>	161	41.9%
<b>&gt; 15</b>	163	42.4%
<b>Total</b>	384	100.0%

From Table 82 above, 163 (42.4%) of the Respondents indicated an Ex-Colleagues size of more than 15 members. Another 161 (41.9%) have Ex-Colleagues size between 11 to 15 members. Only 60 (15.6%) have a member size

of 10 or lesser. Again, this finding is entirely aligned to that late-career PMETs' long career that is likely to stretch across many companies, markets and industries.

**TABLE 83: Respondents' Business Associates network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	24	6.3%
<b>6 to 10</b>	68	17.8%
<b>11 to 15</b>	163	42.8%
<b>&gt; 15</b>	126	33.1%
<b>Total</b>	381	100.0%

From Table 83 above, 126 (33.1%) of the Respondents indicated a Business Associates size of more than 15 members. Another 163 (42.8%) have Ex-Colleagues size between 11 to 15 members. Only 92 (24.1%) have a size of 10 or fewer members. Again, this finding is entirely aligned to that late-career PMETs' long career history in one or more companies. It is also aligned with the conclusion that many of them worked in managerial roles dealing with multiple suppliers and customers across different companies, markets and industries.

**TABLE 84: Respondents' Business Competitors network member size**

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	30	7.9%
<b>6 to 10</b>	71	18.6%
<b>11 to 15</b>	155	40.7%
<b>&gt; 15</b>	125	32.8%
<b>Total</b>	381	100.0%

From Table 84 above, a total of 125 (32.8%) of the Respondents indicated a Business Competitors size of more than 15 members. Another 155 (40.7%) have Business Competitors size between 11 to 15 members. Only 101 (26.5%) have a member size of 10 or less. Again, this finding is entirely aligned to that late-career PMETs' long career in one or more companies, markets, and industries.

From the above findings, it is safe to assume that late-career PMETs in top managerial positions, especially in multinational corporations, are more able to

leverage their extensive contacts of past Business Partners, Ex-colleagues, Business Associates and Business Competitors for goodwill and connections with key industry players, such as investors, suppliers, and distributors. Such ready relationships can help them expand their knowledge of new markets and customers and mobilise the necessary resources required to capture the industry's growth opportunities.

#### 4.4.32 Respondents' years of the Business Network relationships (IV8-2)

Question 23 - What is the number of years of each Business Network Relationship?

TABLE 85: Respondents' years of relationships with Business Partners network

	Frequency	Percentage
< 6	43	11.2%
6 to 10	104	27.2%
11 to 15	156	40.7%
> 15	80	20.9%
<b>Total</b>	<b>383</b>	<b>100.0%</b>

From Table 85 above, 80 (20.9%) of the Respondents indicated a Business Partners relationships of more than 15 years. Another 156 (40.7%) and 104 (27.2%) have Business Partners relationships of between 11 to 15 years and 6 to 10 years, respectively. Only 43 (11.2%) have less than six years of Business Partners network relationship. Again, this finding is entirely aligned to that late-career PMETs' long career in one or more companies, markets, and industries.

TABLE 86: Respondents' years of relationships with Ex-colleagues network

	Frequency	Percentage
< 6	7	1.8%
6 to 10	45	11.7%
11 to 15	155	40.4%
> 15	177	46.1%
<b>Total</b>	<b>384</b>	<b>100.0%</b>

From Table 86 above, a total of 177 (46.1%) of the Respondents indicated years of Ex-colleagues network relationship of more than 15 years. Another 155

(40.4%) and 45 (11.7%) have Ex-colleagues' network relationships between 11 to 15 years and 6 to 10 years, respectively. Only 7 (1.8%) have less than six years of Ex-colleagues network relationship. Again, this finding is entirely aligned to that late-career PMETs' long career in one or more companies, markets, and industries.

TABLE 87: Respondents' years of relationships with Business Associates network

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	21	5.5%
<b>6 to 10</b>	100	26.2%
<b>11 to 15</b>	171	44.8%
<b>&gt; 15</b>	90	23.6%
<b>Total</b>	382	100.0%

From Table 87 above, 90 (23.6%) of the Respondents indicated a Business Associates relationship of more than 15 years. Another 171 (44.8%) and 100 (26.2%) have Business Associates relationships between 11 to 15 years and 6 to 10 years, respectively. Only 21 (5.5%) have less than six years of relationship. Again, this finding is entirely aligned to that late-career PMETs' long career in one or more companies, markets, and industries.

TABLE 88: Respondents' years of relationships with Business Competitors network

	<b>Frequency</b>	<b>Percentage</b>
<b>&lt; 6</b>	30	7.9%
<b>6 to 10</b>	102	26.7%
<b>11 to 15</b>	159	41.6%
<b>&gt; 15</b>	91	23.8%
<b>Total</b>	382	100.0%

From Table 88 above, a total of 91 (23.8%) of the Respondents indicated a Business Competitors relationship of more than 15 years. Another 159 (41.6%) and 102 (26.7%) have Business Competitors relationships between 11 to 15 years and 6 to 10 years, respectively. Only 30 (7.9%) have less than six years of relationship. Again, this finding is entirely aligned to that late-career PMETs' long career in one or more companies, markets, and industries.



#### 4.4.33 Relationships between DV1/DV2 and IV8 (Business Networks)

(a) Association between DV1 and IV8-1 (Business Network Type and Member Size)

##### Multiple Regression Test

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.056 <sup>a</sup>	.003	-.008	.61683

a. Predictors: (Constant), Business Competitors, Business Partners, Ex-Colleagues, Business Associates

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.577	.140		32.797	.000
	Business Partners	.001	.038	.002	.030	.976
	Ex-Colleagues	-.045	.053	-.058	-.838	.402
	Business Associates	-.033	.067	-.047	-.493	.622
	Business Competitors	.057	.068	.084	.836	.404

a. Dependent Variable: DV1

The multiple *R-value* (Adjusted *R Square* in the Model Summary table) between DV1 and IV8-1 is at -0.008. This negative value of adjusted *R Square* appears when the response is very low or negligible, suggesting an insignificant non-linear relationship between DV1 and IV8-1. Their P-Values > 0.05 shows little support for their association. It means that the member size of the late-career PMETs' Business Partners, Ex-colleagues, Business Associates and Business Competitors has minimal and negligible impacts on their mental state to identify entrepreneurial opportunities.

Findings reveal that although more significant business network types and member sizes may facilitate better sharing of information and knowledge, the assumption that this will naturally translate to a more generous accrual of resource values to influence the perceived state of readiness to recognise and discover business opportunities is not there. With that, we can safely assume that the Member Sizes of Business Network Relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness to identify business opportunities.

- (b) Association between DV2 and IV8-1 (Business Network Type and Member Size)

Multiple Regression Test

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.112 <sup>a</sup>	.013	.002	.78343

a. Predictors: (Constant), Business Competitors, Business Partners, Ex-Colleagues, Business Associates

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.046	.177		22.831	.000
	Business Partners	-.053	.049	-.070	-1.089	.277
	Ex-Colleagues	.018	.067	.018	.268	.789
	Business Associates	.008	.086	.009	.090	.928
	Business Competitors	.102	.086	.118	1.180	.239

a. Dependent Variable: DV2

The multiple *R-value* (Adjusted *R Square* in the Model Summary table) between DV1 and IV8-2 at 0.002. This adjusted *R Square* figure suggests that the effect of IV8-2 can explain only 0.2% of DV1. The P-Values of each network type > 0.05 support their insignificant association. It means that the member size of the late-career PMETs' relationship with their Business Partners, Ex-colleagues, Business Associates and Business Competitors has minimal and insignificant impacts on their mental state to exploit entrepreneurial opportunities.

Findings reveal that although larger business network types and member sizes may facilitate better sharing of information and knowledge, the assumption that this will naturally translate to a more generous accrual of resource values to influence the perceived state of readiness to take action on business opportunities is not there. With that, we can safely assume that the Member Sizes of Social Network Relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness to exploit business opportunities.

(c) Association between DV1 and IV8-2 (Years of Business Network Relationships)

Multiple Regression Test

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.094 <sup>a</sup>	.009	-.002	.61446

a. Predictors: (Constant), Business Competitors, Ex-Colleagues, Business Partners, Business Associates

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.300	.155		27.828	.000
	Business Partners	-.027	.044	-.041	-.611	.542
	Ex-Colleagues	.058	.047	.071	1.237	.217
	Business Associates	-.033	.074	-.044	-.441	.659
	Business Competitors	.064	.071	.093	.911	.363

a. Dependent Variable: DV1

The multiple *R-value* (Adjusted *R Square* in the Model Summary table) between DV1 and IV8-2 is at -0.002. This negatively adjusted *R Square* value appears when the response is very low or negligible, suggesting a low or insignificant association between the non-linear relationship between DV1 and IV8-2. The P-Values of each network type > 0.05 support their insignificant association. It means that the years of the late-career PMETs' relationship with their Immediate Family, Relatives, Close Friends, Schoolmates, Community Friends, Social Acquaintances or Online Social Media Friends have minimal and insignificant impacts on their mental state identify entrepreneurial opportunities.

Findings reveal that although longer business network relationships may breed familiarity, the assumption that this will naturally foster greater trust, confidence and shared cognition to influence the perceived state of readiness to recognise and discover business opportunities may not be there. With that, we can safely assume that the Years of Social Network Relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness to identify business opportunities. It is because the length of time of each relationship does not represent its network strength.

- (d) Association between DV2 and IV8-2 (Years of Business Network Relationships)

Multiple Regression Test

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.115 <sup>a</sup>	.013	.003	.78281

a. Predictors: (Constant), Business Competitors, Ex-Colleagues, Business Partners, Business Associates

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.020	.197		20.420	.000
	Business Partners	-.077	.056	-.091	-1.372	.171
	Ex-Colleagues	.073	.060	.070	1.225	.221
	Business Associates	.010	.094	.011	.110	.912
	Business Competitors	.076	.090	.086	.847	.398

a. Dependent Variable: DV2

The multiple *R-value* (Adjusted *R Square*) of 0.003 indicates the weak relationship between DV2 and IV8-2. This adjusted *R Square* figure suggests that the effect of IV8-2 can explain only 0.3% of DV2. Their P-Values > 0.05 support these insignificant associations as well. This figure indicates that the years of the late-career PMETs' relationship with their Immediate Family, Relatives, Close Friends, Schoolmates, Community Friends, Social Acquaintances or Online Social Media Friends have minimal and insignificant impacts on their mental state to identify entrepreneurial opportunities.

Findings reveal that although longer business network relationships may breed familiarity, the assumption that this will naturally foster greater trust, confidence and shared cognition to influence the perceived state of readiness to take action on business opportunities may not be there. With that, we can safely assume that the Years of Social Network Relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness to exploit business opportunities. The likely explanation is that each relationship's length of time does not represent its network strength.

## 4.5 SUMMARY ON MAIN SURVEY FINDINGS

TABLE 89: Summary table of Research Main Survey findings

INDEPENDENT VARIABLES	CORRELATION with DEPENDENT VARIABLES			
	DV1	Significance	DV2	Significance
<b>IV1 = PMET's characteristics, attitude and mindset</b>				
IV1-1 Positivism level	Positive	Significant	Positive	Significant
IV1-2 Tenacity level	Positive	Significant	Positive	Significant
IV1-3 Ambiguity Tolerance level	Positive	Significant	Positive	Significant
IV1-4 Risk Tolerance level	Positive	Significant	Positive	Significant
<b>IV2 = PMET's motivation</b>				
IV2-1 Motivational Level	Positive	Significant	Positive	Significant
IV2-2 Source of Motivation	NA	NA	NA	NA
<b>IV3 = PMET's self-efficacy</b>				
IV3-1 Ability to overcome challenges in starting own business	Positive	Significant	Positive	Significant
IV3-2 Confidence to engage in start-up activities	Positive	Significant	Positive	Significant
IV3-3 Other personal advantages when engaging in start-up activities	NA	NA	NA	NA
<b>IV4 = PMET's prior managerial experience</b>				
IV4-1 Years of prior managerial experience	Positive	Significant	Positive	Significant
IV4-2 Position of prior managerial experience	Positive	Significant	Positive	Significant
<b>IV5 = PMET's prior knowledge and information</b>				
IV5-1 Number of markets previously served	No Relationship	Insignificant	Weak Relationship	Insignificant
IV5-2 Number of customers previously served	Positive	Significant	Positive	Significant
IV5-3 Proficiency level of markets and customers previously served	Positive	Significant	Positive	Significant
<b>IV6 = PMET's prior relevant skills</b>				
IV6-1 Type and proficiency of skillsets	NA	NA	NA	NA
IV6-2 Formal trainings with certifications of skillset proficiency	Positive	Significant	Positive	Significant
<b>IV7 = PMET's social networks</b>				
IV7-1 Type and member size of social network	Non-Linear relationship	Insignificant	Non-Linear relationship	Insignificant
IV7-2 Years of the relationship within the social network	Linear relationship	Insignificant	Linear relationship	Insignificant
<b>IV8 = PMET's business networks</b>				
IV8-1 Type and member size of business network	Non-linear relationship	Insignificant	Linear relationship	Insignificant
IV8-2 Years of the relationship within the business network	Non-linear relationship	Insignificant	Linear relationship	Insignificant

From Table 89 summary table of research findings, the following observations were made:

1. Many of the late-career PMETs surveyed have the self-impression that they possess a reasonably high state of readiness to identify (DV1) and exploit (DV2) entrepreneurial opportunities whenever one surface in front of them.
2. Findings on entrepreneurial characteristics, attitude and mindset (IV1) reveal that most Respondents rated themselves highly on positivism, tenacity, ambiguity tolerance, and the propensity to take risks. These factors are proven to correlate to DV1 and DV2 positively.
3. A high percentage of the Respondents also considered themselves highly motivated individuals (IV2) with a strong sense of entrepreneurial Self-Efficacy (IV3). Again, both these factors are proven to be positively correlated to DV1 and DV2.
4. Findings also reveal that most late-career PMETs have prior managerial experience (IV4) of seven years or more in a Middle Manager, Senior Manager to General Manager/Director level position. Based on data collected from the survey, these factors have a direct influence on their state of readiness to identify and exploit entrepreneurial opportunities (DV1 and DV2).
5. On the topic of prior knowledge and information (IV5), research findings reveal that the number of markets previously served by late-career PMETs DOES NOT significantly influence their state of readiness to identify and exploit entrepreneurial opportunities. However, knowledge and information gained from the number of customers previously served by late-career PMETs significantly influence their preparedness for entrepreneurial opportunities. It is also relevant to consider the proficiency level of markets and customers previously served by late-career PMETs as they have direct and significant implications on their state of readiness to identify and exploit entrepreneurial opportunities (DV1 and DV2).
6. Prior relevant skills (IV6) directly impact on their attitude towards entrepreneurial opportunities, especially those that involve commerce, leadership and business management. Formal trainings with certifications of skillset proficiency also significantly impacts the state of readiness of late-career PMETs to identify and exploit entrepreneurial opportunities (DV1 and DV2).

7. Although findings reveal that tangible measures of more significant network types, member sizes and years of ties may be evident with late-career PMETs, there is no proof that it can lead to a more robust network strength to enhance the state of readiness to identify and exploit entrepreneurial opportunities. That means that the assumption that larger network member sizes can help facilitate better sharing of information and knowledge through group familiarity and eventually leads to more generous accrual of resource values, might not be accurate. Similarly, findings also reveal that the assumption that a more extended network relationship may naturally foster more significant members' trust, confidence and shared group cognition to influence their perceived state of readiness for business opportunities is also not proven. With that, we can safely assume that the Member Sizes and Years of Social and Business Network Relationships of late-career PMETs DO NOT influence the state of entrepreneurial readiness like what we expected to see.

## **4.6 ADDITIONAL POST-SURVEY TEST TO CONFIRM ON THE INFLUENCE OF INTANGIBLE FACTORS ON SOCIAL CAPITAL NETWORK STRENGTH**

A quick offline post-Survey to ascertain that network strength's intangible factors can significantly influence the state of entrepreneurial readiness. This proposed survey will be face-to-face, and a new group of twenty participants need to answer some five key questions relating to the intangible factors of social and business networks such as familiarity, shared knowledge and information, shared cognition, trust and confidence and accrued resource value. Respondents can log in their answers on a provided APPLE iPad directly linked to the Survey Monkey Website. The post-Survey was conducted between 23 December 2020 to 6 January 2021.

### **4.6.1 Proposed Questions for Additional Post-Survey Test**

The questions in the Post-Survey Test includes qualifying and key research questions. They are:-

#### Qualifying Questions

If both of your answers to the below questions are YES, then proceed to fill in the Questionnaire.

1. Are you over 50 years old and a PMET (Professional, Manager, Executive and Technician), or previously worked as a PMET?  
(1) Yes  
(2) No
  
2. Are you a business owner, or do you currently manage a business unit in a company?  
(1) Yes  
(2) No



## Research Questions

If you are not comfortable to answer any of the questions, you may choose to skip it or withdraw from the survey at any point in time.

3. Before the COVID-19 pandemic, how would you rate your state of readiness towards business opportunities? State of readiness generally refers to a mental preparedness to act.
  - (1) Very Low
  - (2) Low
  - (3) Average
  - (4) High
  - (5) Very High
  
4. I am more comfortable mixing with people of familiarity, especially if they come from similar backgrounds and interests as myself.
  - (1) Strongly disagree
  - (2) Disagree
  - (3) Somewhat disagree
  - (4) Neither agree nor disagree
  - (5) Somewhat agree
  - (6) Agree
  - (7) Strongly agree
  
5. I am more comfortable with people who are more willing to share knowledge and information with me.
  - (1) Strongly disagree
  - (2) Disagree
  - (3) Somewhat disagree
  - (4) Neither agree nor disagree
  - (5) Somewhat agree
  - (6) Agree
  - (7) Strongly agree

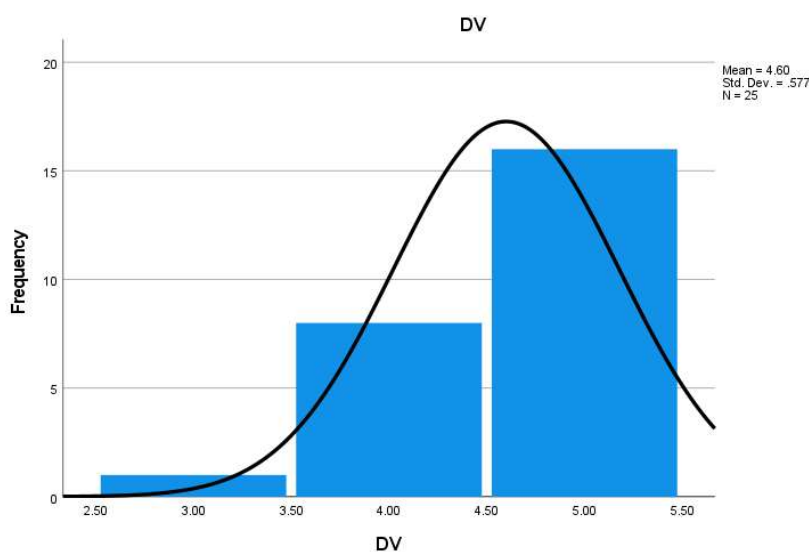
6. I am more comfortable with people who share my understanding on how to go about solving problems, experimenting on different ideas and seeking supports from each other.
- (1) Strongly disagree
  - (2) Disagree
  - (3) Somewhat disagree
  - (4) Neither agree nor disagree
  - (5) Somewhat agree
  - (6) Agree
  - (7) Strongly agree
7. I am more comfortable with people who I can trust and have confidence with.
- (1) Strongly disagree
  - (2) Disagree
  - (3) Somewhat disagree
  - (4) Neither agree nor disagree
  - (5) Somewhat agree
  - (6) Agree
  - (7) Strongly agree
8. I am more comfortable with people who I believe I can receive help such as financial, resources or emotional supports.
- (1) Strongly disagree
  - (2) Disagree
  - (3) Somewhat disagree
  - (4) Neither agree nor disagree
  - (5) Somewhat agree
  - (6) Agree
  - (7) Strongly agree

#### 4.6.2 Analysis and Interpretations of Additional Post-Survey Test Findings

Q3 Before the COVID-19 pandemic, how would you rate your state of readiness towards business opportunities? State of readiness generally refers to a mental preparedness to act.

Table 90: Respondents' perceived state of readiness towards entrepreneurial opportunities

	FREQUENCY	PERCENTAGE
<b>1. Very Low</b>	0	0.0%
<b>2. Low</b>	0	0.0%
<b>3. Average</b>	1	4.0%
<b>4. High</b>	8	32.0%
<b>5. Very High</b>	16	64.0%
<b>TOTAL</b>	25	100.0%



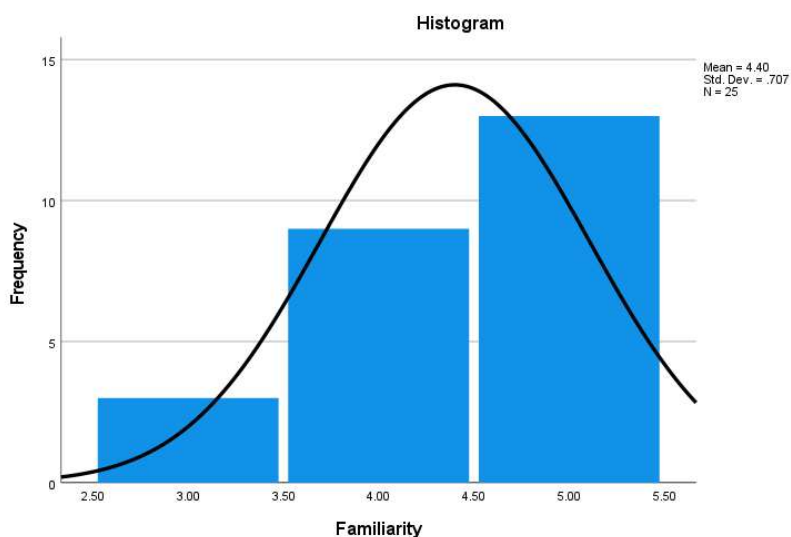
**Graph 18: Respondent perceived state of readiness towards entrepreneurial opportunities (Post-Survey Test)**

From Table 90 above, 18 (64%) of the Respondents rated themselves 'Very High' while another 8 (32%) rated 'High' when posed with the question on their state of readiness perception towards business opportunities.

Q4 I am more comfortable mixing with people of familiarity, especially if they come from similar backgrounds and interests as myself.

**Table 91: Respondents' comfort level with Network familiarity**

	FREQUENCY	PERCENTAGE
1. Strongly disagree	0	0.0%
2. Disagree	0	0.0%
3. Somewhat disagree	3	12.0%
4. Neither agree no disagree	9	36.0%
5. Somewhat agree	13	52.0%
6. Agree	0	0.0%
7. Strongly agree	0	0.0%
<b>TOTAL</b>	<b>25</b>	<b>100.0%</b>



**Graph 19: Respondent comfort level with network familiarity**

Table 91 above shows that 13 (52%) of the Respondents somewhat agree that they are comfortable mixing with people of familiarity, especially if they are from the same backgrounds and have similar interests as themselves. 9 (36%) of them neither agree nor disagree with this statement.

### Correlations

		DV	Familiarity
DV	Pearson Correlation	1	.408*
	Sig. (2-tailed)		.043
	N	25	25
Familiarity	Pearson Correlation	.408*	1
	Sig. (2-tailed)	.043	
	N	25	25

\*. Correlation is significant at the 0.05 level (2-tailed).

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.408 <sup>a</sup>	.167	.130	.53838

a. Predictors: (Constant), Familiarity

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.333	1	1.333	4.600	.043 <sup>b</sup>
	Residual	6.667	23	.290		
	Total	8.000	24			

a. Dependent Variable: DV

b. Predictors: (Constant), Familiarity

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.133	.692		4.526	<.001		
	Familiarity	.333	.155	.408	2.145	.043	1.000	1.000

a. Dependent Variable: DV

Based on the result of the Linear Regression test, Standard Coefficient (R) = 0.408. This test result shows that there is a positive relationship between DV and Network familiarity. The P-value  $0.043 < 0.05$  also means that their relationship is significant.

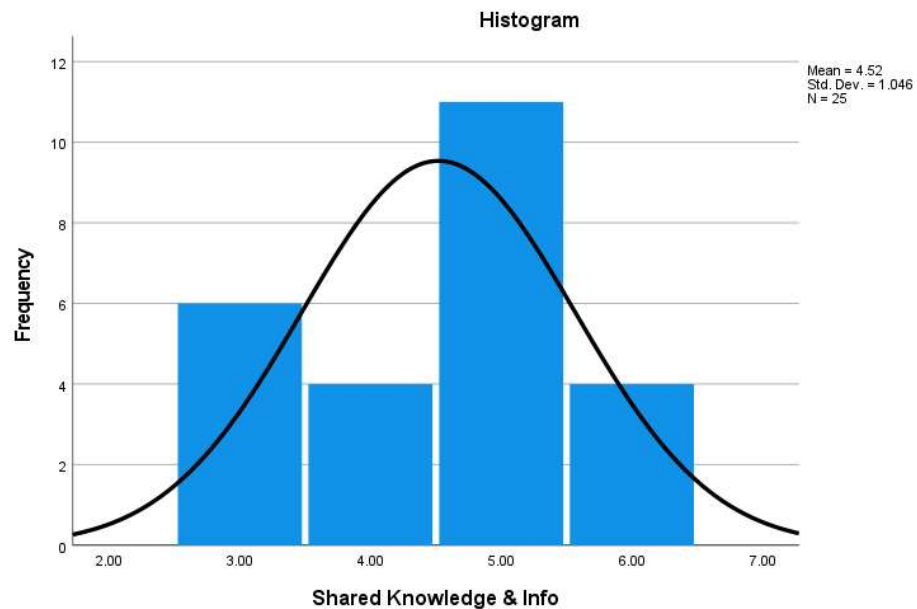
Hence, we can conclude that the element of Network familiarity has a significant positive impact on late-career PMETs' perceived state of readiness towards entrepreneurial opportunities.

Q5 I am more comfortable with people who are more willing to share knowledge and information with me.

Table 92: Respondents' comfort level with Network shared knowledge and information

	FREQUENCY	PERCENTAGE
<b>1. Strongly disagree</b>	0	0.0%
<b>2. Disagree</b>	0	0.0%
<b>3. Somewhat disagree</b>	6	24.0%
<b>4. Neither agree no disagree</b>	4	16.0%
<b>5. Somewhat agree</b>	11	44.0%
<b>6. Agree</b>	4	16.0%
<b>7. Strongly agree</b>	0	0.0%
<b>TOTAL</b>	25	100.0%

Table 92 above shows that 4 (16%) and 11 (44%) of the Respondents agree and somewhat agree that they are comfortable mixing with people who are more willing to share knowledge and information. Only 4 (16%) of them neither agree nor disagree with this statement.



**Graph 20: Respondent comfort level with network shared knowledge and information**

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.428 <sup>a</sup>	.183	.148	.53304

a. Predictors: (Constant), Shared Knowledge & Info

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.465	1	1.465	5.156	.033 <sup>b</sup>
	Residual	6.535	23	.284		
	Total	8.000	24			

a. Dependent Variable: DV

b. Predictors: (Constant), Shared Knowledge & Info

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.532	.482		7.324	<.001		
	Shared Knowledge & Info	.236	.104	.428	2.271	.033	1.000	1.000

a. Dependent Variable: DV

### Correlations

		DV	Shared Knowledge & Info
DV	Pearson Correlation	1	.428*
	Sig. (2-tailed)		.033
	N	25	25
Shared Knowledge & Info	Pearson Correlation	.428*	1
	Sig. (2-tailed)	.033	
	N	25	25

\*. Correlation is significant at the 0.05 level (2-tailed).

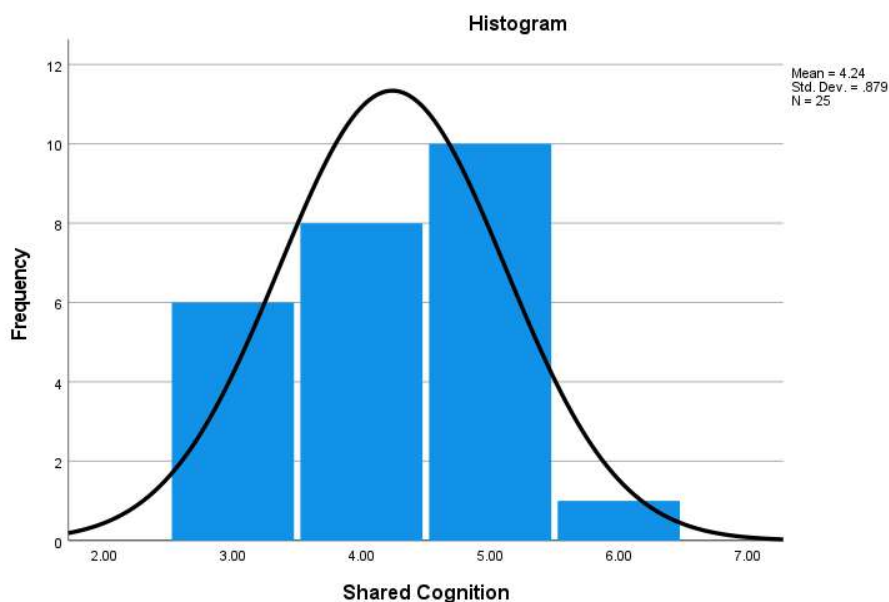
Based on the result of the Linear Regression test, Standard Coefficient (R) = 0.428. This test result shows that the relationship between DV and Network shared knowledge and information is positive. The P-value of 0.033 < 0.05 also indicates that this relationship is significant.

Hence, we can conclude that the intangible Network shared knowledge and information factor has a significant positive impact on late-career PMETs' perceived state of readiness towards entrepreneurial opportunities.

Q6 I am more comfortable with people who share my understanding on how to go about solving problems, experimenting on different ideas and seeking supports from each other.

Table 93: Respondents' comfort level with Network shared cognition

	FREQUENCY	PERCENTAGE
1. Strongly disagree	0	0.0%
2. Disagree	0	0.0%
3. Somewhat disagree	6	24.0%
4. Neither agree no disagree	8	32.0%
5. Somewhat agree	10	40.0%
6. Agree	1	4.0%
7. Strongly agree	0	0.0%
<b>TOTAL</b>	<b>25</b>	<b>100.0%</b>



**Graph 21: Respondent comfort level with network shared cognition**

From Table 93 above, 1 (4%) and 10 (40%) of the Respondents agree and somewhat agree that they are comfortable mixing with people who share the same understanding of how to solve problems, experiment with different ideas seeking supports from each other. Another 8 (32%) of them are neither agreeable nor disagreeable with the statement.



### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.525 <sup>a</sup>	.276	.244	.50187

a. Predictors: (Constant), Shared Cognition

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.207	1	2.207	8.762	.007 <sup>b</sup>
	Residual	5.793	23	.252		
	Total	8.000	24			

a. Dependent Variable: DV

b. Predictors: (Constant), Shared Cognition

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.138	.504		6.226	<.001		
	Shared Cognition	.345	.116	.525	2.960	.007	1.000	1.000

a. Dependent Variable: DV

### Correlations

		DV	Shared Cognition
DV	Pearson Correlation	1	.525 <sup>**</sup>
	Sig. (2-tailed)		.007
	N	25	25
Shared Cognition	Pearson Correlation	.525 <sup>**</sup>	1
	Sig. (2-tailed)	.007	
	N	25	25

\*\* . Correlation is significant at the 0.01 level (2-tailed).

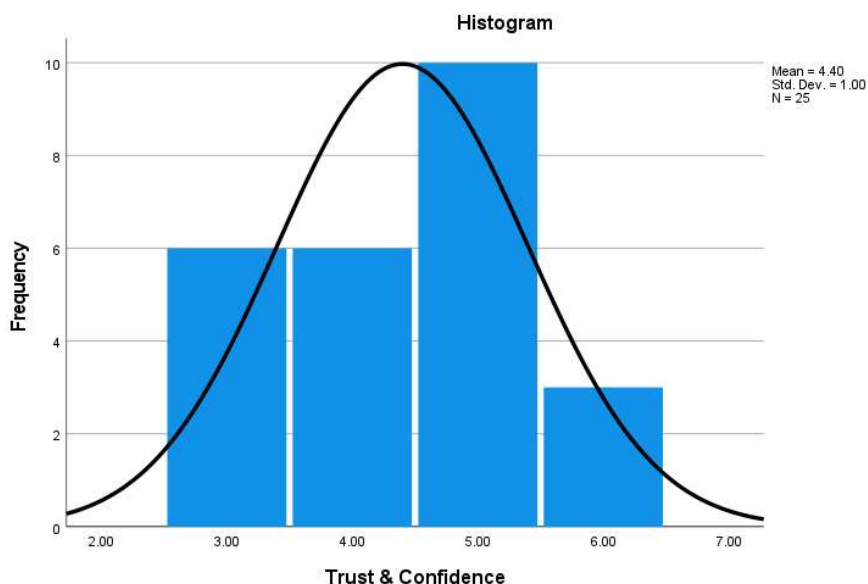
Based on the result of the Linear Regression test, Standard Coefficient (R) = 0.525. This test result indicates a positive relationship existing between DV and Network shared cognition. The P-value of 0.007 < 0.05 indicates that the relationship between DV and Network shared cognition is also significant.

Hence, we can conclude that the element of Network shared cognition has a significant positive impact on late-career PMETs' perceived state of readiness towards entrepreneurial opportunities.

Q7 I am more comfortable with people who I can trust and have confidence with.

Table 94: Respondents' comfort level with Network trust and confidence

	FREQUENCY	PERCENTAGE
1. Strongly disagree	0	0.0%
2. Disagree	0	0.0%
3. Somewhat disagree	6	24.0%
4. Neither agree no disagree	6	24.0%
5. Somewhat agree	10	40.0%
6. Agree	3	12.0%
7. Strongly agree	0	0.0%
<b>TOTAL</b>	<b>25</b>	<b>100.0%</b>



Graph 22: Respondent comfort level with network trust and confidence

Table 94 above shows that 3 (12%) and 10 (40%) of the Respondents agree and somewhat agree that they are comfortable mixing with people they can trust and have confidence in them. Another 6 (24%) of them are neither agreeable nor disagreeable with the statement.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.433 <sup>a</sup>	.188	.152	.53161

a. Predictors: (Constant), Trust & Confidence

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.500	1	1.500	5.308	.031 <sup>b</sup>
	Residual	6.500	23	.283		
	Total	8.000	24			

a. Dependent Variable: DV

b. Predictors: (Constant), Trust & Confidence

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.500	.489		7.155	<.001		
	Trust & Confidence	.250	.109	.433	2.304	.031	1.000	1.000

a. Dependent Variable: DV

### Correlations

		DV	Trust & Confidence
DV	Pearson Correlation	1	.433*
	Sig. (2-tailed)		.031
	N	25	25
Trust & Confidence	Pearson Correlation	.433*	1
	Sig. (2-tailed)	.031	
	N	25	25

\*. Correlation is significant at the 0.05 level (2-tailed).

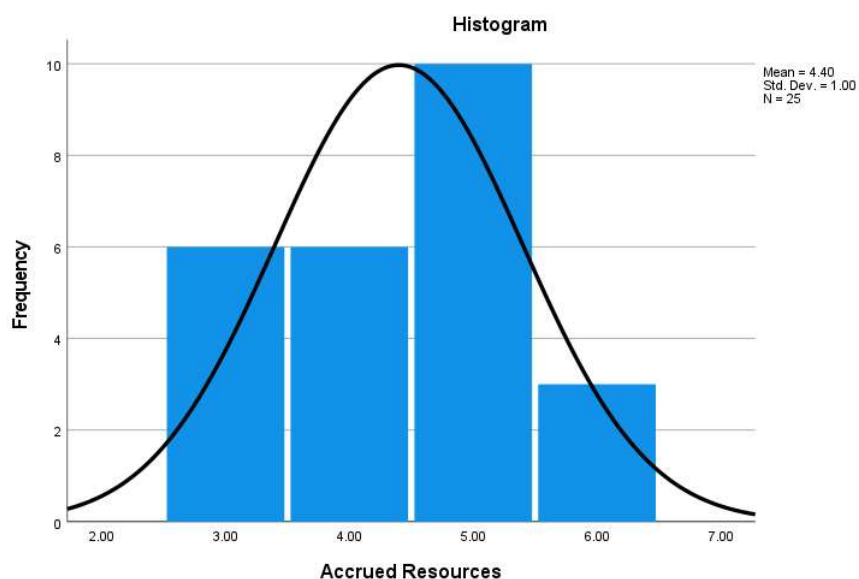
Based on the result of the Linear Regression test, Standard Coefficient (R) = 0.433. This test result shows the relationship between DV and Network Shared Cognition as positively correlated. The P-value of 0.031 < 0.05 means that the relationship between DV and Network trust and confidence is significant.

Hence, we can conclude that the element of Network trust and confidence has a significant positive impact on late-career PMETs' perceived state of readiness towards entrepreneurial opportunities.

Q8 I am more comfortable with people who I believe I can receive help such as financial, resources or emotional supports.

Table 95: Respondents' comfort level with Network accrued resource expectation

	FREQUENCY	PERCENTAGE
1. Strongly disagree	0	0.0%
2. Disagree	0	0.0%
3. Somewhat disagree	6	24.0%
4. Neither agree no disagree	6	24.0%
5. Somewhat agree	10	40.0%
6. Agree	3	12.0%
7. Strongly agree	0	0.0%
<b>TOTAL</b>	<b>25</b>	<b>100.0%</b>



**Graph 23: Respondent comfort level with network accrued resource expectation**

Table 95 above shows that 3 (12%) and 10 (40%) of the Respondents agree and somewhat agree that they are comfortable mixing with people they can rely on to receive financial and resources help and emotional support. Another 6 (24%) of them are neither agreeable nor disagreeable with the statement.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.505 <sup>a</sup>	.255	.223	.50898

a. Predictors: (Constant), Accrued Resources

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.042	1	2.042	7.881	.010 <sup>b</sup>
	Residual	5.958	23	.259		
	Total	8.000	24			

a. Dependent Variable: DV

b. Predictors: (Constant), Accrued Resources

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.317	.468		7.082	<.001		
	Accrued Resources	.292	.104	.505	2.807	.010	1.000	1.000

a. Dependent Variable: DV

### Correlations

		DV	Accrued Resources
DV	Pearson Correlation	1	.505 <sup>*</sup>
	Sig. (2-tailed)		.010
	N	25	25
Accrued Resources	Pearson Correlation	.505 <sup>*</sup>	1
	Sig. (2-tailed)	.010	
	N	25	25

\*. Correlation is significant at the 0.05 level (2-tailed).

Based on the result of the Linear Regression test, Standard Coefficient (R) = 0.505. This test result indicates a positive relationship between DV and Network accrued resource expectation. The P-value  $0.01 < 0.05$  also indicates the relational significance between DV and the Network accrued resource expectation factor.

Hence, we can conclude that this intangible factor of network strength has a significant positive impact on late-career PMETs' perceived state of readiness towards entrepreneurial opportunities.

#### 4.6.3 Conclusion on Additional Post-Survey Test findings

Findings from the Additional Post-Survey Test show that those more difficult-to-measure intangible aspects of network strength have a greater impact on the Respondents' state of readiness perception towards entrepreneurial opportunities. These intangible factors include Network familiarity, Network shared knowledge and information, Network share cognition, Network trust and confidence and Network accrued resource expectation.

Based on the above intangible factors measurements and the correlation tests performed, we can confidently conclude that each of these intangible factors enhances the late-career PMETs' inherent network strength directly influences their perceived state of readiness to identify and exploit entrepreneurial opportunities. Thus, instead of focusing on using the actual measurements of Network type, member size and years of ties as network strength indicators, it is recommended that future researchers should place greater attention on the intangible aspects.

#### 4.7 LINKING FINDINGS TO RESEARCH HYPOTHESES

From our overall research findings from both the main survey and additional post-survey test, we can therefore come to a conclusion on whether the research hypotheses are supported.

→ **H1a** - Late-career PMETs who possess the right Entrepreneurial Characteristics (Positivism and Tenacity), Attitude and Mindset (Ambiguity Tolerance and Risk Propensity) are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities. Hence this hypothesis is **SUPPORTED**.

→ **H1b** - Our research findings confirmed that late-career PMETs who possess a high level of Entrepreneurial Motivation are positively associated with a higher perceived state of readiness to discover and exploit entrepreneurial opportunities. Hence this hypothesis is **SUPPORTED**.

→ **H1c** - The research findings confirmed that late-career PMETs who possess a high level of Entrepreneurial Self-Efficacy are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities. Hence this hypothesis is **SUPPORTED**.

→ **H2a** - Our research findings show that those late-career PMETs who possess a high level of Prior Managerial Experience are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities. Hence this hypothesis is **SUPPORTED**.

→ **H2b** - Our research findings show that those late-career PMETs who possess a high level of Prior Knowledge and Information are positively associated with a higher perceived state of readiness to identify and exploit entrepreneurial opportunities. However, this refers to serving more customers, together with a higher proficiency level of serving market and customers. However, the number of markets under the charge of the PMET is irrelevant. There is no evidence to claim that many served markets represent more excellent prior knowledge and information as their correlations are weak and insignificant. Hence we can still consider this hypothesis as **SUPPORTED** with some adjustments to remove the number of markets.

→ **H2c** - Our research findings show that those late-career PMETs who possess a high level of Prior Relevant Skills (based on formal training attended with a certification of skillset proficiency) are positively associated with a higher perceived state of readiness to identify exploit entrepreneurial opportunities. Hence this hypothesis is **SUPPORTED**.

→ **H3a** - Our research findings revealed that the late-career PMETs' Social Network strength's tangible measurements, denoted by their network member sizes and years of ties, show evidence of non-linear relationships. However, the associations are not significant to their perceived state of readiness to identify and exploit entrepreneurial opportunities. Hence this hypothesis is **NOT SUPPORTED**.

However, through the conduct of the additional post-survey test, there are clear empirical evidence to suggest that Intangible factors such as network familiarity, shared knowledge and information, shared cognition, trust and confidence level and the accrued resource expectation, can contribute to the late-career PMETs' Social Network strength. All these factors are significantly associated to their perceived state of readiness towards entrepreneurial opportunities.

→ **H3b** - Our research findings revealed that the tangible measurements of the late-career PMETs' Business Network strength denoted by their network member sizes and years of ties show evidence of non-linear relationships. However, the associations are also not significant to their perceived state of readiness to identify and exploit entrepreneurial opportunities. Hence this hypothesis is also **NOT SUPPORTED**.

However, through the conduct of the additional post-survey test, there are clear empirical evidence to suggest Intangible factors of network familiarity, shared knowledge and information, shared cognition, trust and confidence level and the accrued resource expectation, can contribute to the late-career PMETs' Business Network strength. All these factors are also significantly associated to their perceived state of readiness towards entrepreneurial opportunities.



## 4.8 LINKING FINDINGS TO RESEARCH QUESTIONS & OBJECTIVES

### 4.8.1 Answering the Research Questions

From data collected from the primary survey and upon analysis to test the hypotheses, it provides substantial empirical evidence that answers the three specific research questions as follows:-

#### **Research Question RQ1**

**Does the inherent Psychological Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?**

Our research findings seem to suggest that the entrepreneurial characteristics (Positivism and Tenacity), attitude and mindset (Ambiguity Tolerance and Risk Propensity), entrepreneurial Motivations and entrepreneurial Self-Efficacy of the late-career PMETs have a direct and significant influence on their perceived state of readiness to both recognise and take actions on emerging business opportunities. Hence, we can conclude that the inherent Psychological Capital of late-career PMETs positively influences their state of readiness towards entrepreneurial opportunities.

#### **Research Question RQ2**

**Does the inherent Human Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?**

Our research findings seem to suggest that Prior Managerial Experience, Prior Knowledge and Information and Prior Relevant Skills of the late-career PMETs have a direct and significant influence on their perceived state of readiness to both recognise and take actions on emerging business opportunities. Hence, we can conclude that the inherent Human Capital of late-career PMETs positively influences their perceived state of readiness towards entrepreneurial opportunities.

### **Research Question RQ3**

**Does the inherent Social Capital of late-career PMETs has a positive influence on their perceived state of readiness towards entrepreneurial opportunities?**

Our main research findings suggest that the tangible aspects of Social and Business Networks of the late-career PMETs have very insignificant impacts on their mental state of readiness to recognise and take actions on emerging business opportunities. With these findings, we can only conclude that the actual network member size and years of their relationships do not accurately reflect the shared cognition, trust and confidence built between network members. Nor does it correlate to the level of knowledge and information exchanges and value accrual from goodwill and resource expectation.

Additional post-survey test, however, suggested that intangible factors such as network familiarity, shared trust and confidence, shared cognition, shared knowledge and information, and accrued resource values tapped from such relationships have a positive influence on their social and business network strength, and on the overall entrepreneurial readiness of the late-career PMETs.

In summary, we can conclude that both the inherent factors of Psychological and Human Capital have a definite influence on the perceived state of readiness of late-career PMETs in Singapore to identify and exploit entrepreneurial opportunities. However, we have our reservation on the effect of inherent Social Capital tangible factors since the empirical evidence collected so far has shown insignificant influence. Additional post-survey tests conducted confirmed that intangible factors of network familiarity, shared trust and confidence, shared cognition, shared knowledge and information, and accrued resource values expectation has an overall positive and significant influence on the entrepreneurial readiness of the late-career PMETs. Hence, all research questions were satisfactorily answered to achieve the research objectives as specified in Section 4.8.2.

#### 4.8.2 Achievement of the research objectives

From empirical evidence obtained from this research which answered the research questions, the following research objectives were also achieved:

**Achievement of Research Objective 1 (RO1):** Findings concur with our understanding that the relationship between the inherent Psychological Capital of late-career PMETs and their perceived state of readiness to identify and exploit entrepreneurial opportunities is positive and significant.

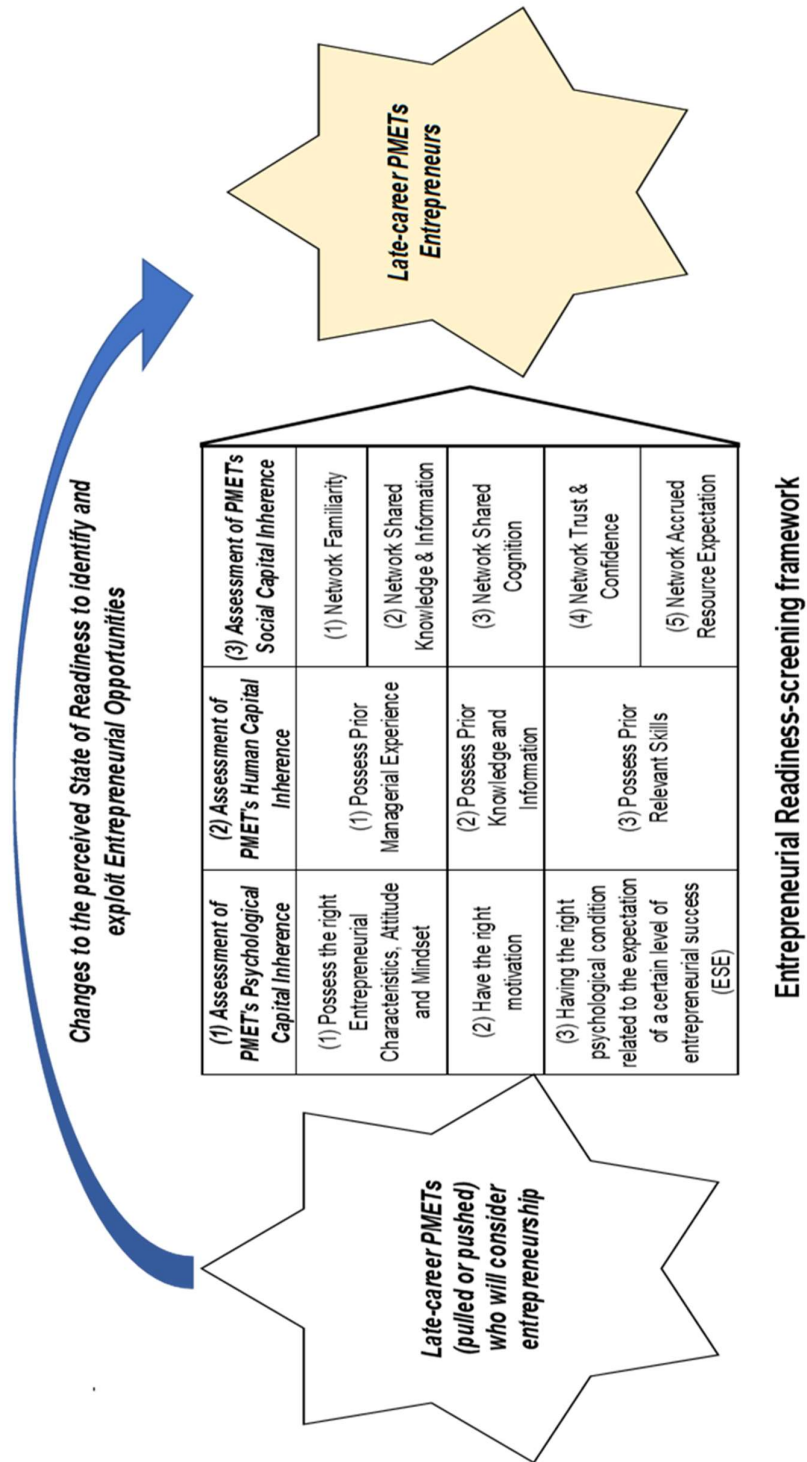
**Achievement of Research Objective 2 (RO2):** Findings concur with our understanding that the association between the inherent Human Capital of late-career PMETs to their perceived state of readiness to identify and exploit entrepreneurial opportunities is positive and significant

**Achievement of Research Objective 3 (RO3):** Although research findings reveal a positive correlation between the inherent Social Capital of late-career PMETs to their perceived state of readiness to identify and exploit entrepreneurial opportunities, they do not concur with our understanding that the relationships are significant enough to make an impact on them.

As the study aims to understand better the phenomenon of late-career PMET Entrepreneurship under the Singapore business context, the empirical evidence collected has achieved the research objectives by uncovering hidden perception and expectation gaps, especially regarding the Social Capital influencing factors. The research's significance is ultimately getting enough answer to enable us to design a useful and practical self-assessment screening framework to help future late-career PMETs transit from their corporate careers to Entrepreneurship. This validated model can also help to explain the challenges faced by senior PMETs during their entrepreneurial transitioning. By focusing on their 'state-of-mind readiness' towards entrepreneurial opportunities, we let the individuals be aware of their alertness level to business opportunities and readiness to bring about the entrepreneurial realisation.

#### 4.9 LINKING FINDINGS TO CONCEPTUAL FRAMEWORK

We can devise a Final Conceptual Framework with the research findings from the primary survey and post-survey test, as shown in Figure 24 below.



**FIGURE 24: Final Conceptual Framework**

(Source: Researcher's own work)

#### **4.10 CHAPTER SUMMARY ON FINDINGS AND INTERPRETATION OF FINDINGS**

The research data collection was done through a quantitative survey conducted between 15 June to 15 September 2020. Survey Monkey was engaged to facilitate a digital questionnaire that can be made available to online and offline late-career PMET Respondents. Findings were then processed using the SPSS version 23.0 to generate results for analysis and interpretations, as detailed in this chapter.

Research findings supported the identified research hypotheses of Entrepreneurial Characteristics, Attitude and Mindset (H1a), Entrepreneurial Motivation (H1b), Entrepreneurial Self-Efficacy (H1c), Prior Managerial Experience (H2a), Prior Knowledge and Information (H2b) and Prior Relevant Skills (H2c). However, the findings did not support the hypotheses for Social Network strength (H3a) and Business Network strength (H3b). We believe this is due to the misplaced assumption that substantial tangible factors of network strength like member size and years of ties will naturally lead to greater network strength, and hence, a higher level of entrepreneurial readiness of the late-career PMETs. Their relationships with the DVs were also proven to be insignificant in the study.

An Additional Post-Survey Testing reveals significant impacts and correlations between entrepreneurial readiness and intangible network factors such as network familiarity, shared cognition, shared knowledge and information, members' trust and confidence, and the expectation of accrued resources to be tapped from other network members.

A detailed overview and discussion of the empirical evidence collected from the primary survey will occur in the upcoming Chapter Five. These include an in-depth discussion on the achievement of research objectives and academic discussions on how our findings compared to published literature on the respective topics covered in Chapter Two. Equally important will be the discussion on how our study fills the knowledge gap identified in Chapter One and applying such new knowledge to develop a self-assessment tool for the late-career PMETs.

## **5 CHAPTER FIVE – DISCUSSION OF FINDINGS**

### **5.1 DISCUSSION OF SURVEY RESULTS**

#### **5.1.1 Respondents' state of readiness**

Many of the late-career PMETs surveyed perceived themselves as having a high state of readiness to recognise or discover a business opportunity if one is to surface around them. Among the top reasons that substantiate their rating was that personal accumulated career experience and business exposure from overseas business trips and trade activities. For many of these PMETs, they are already running a business with a sizeable business portfolio of well over S\$5m, and this helps them stay alert and have the entrepreneurial cognition towards potential business opportunities. These people will continuously scan the environment, recognise an opportunity immediately whenever it surfaces. By having the right mental state, they are well-prepared to organise critical resources necessary to turn that newly found opportunity into an operational business reality.

Capital raising is not an issue with the late-career PMETs, as many are financially prepared with sufficient savings or are already receiving various passive income streams. Moreover, their personal and business connections also provide the necessary support whenever they need it.

For those who are currently not business owners, many of them are just waiting for the right moment to strike, given that they already have the required capability to assess the environment and make informed judgement and decisions on whether to proceed with the recognised opportunities.

#### **5.1.2 The influence of entrepreneurial characteristics, attitude and mindset on the perceived state of readiness**

Managers and executives must lead teams with the expectation to uphold a positive 'can do' attitude to filter out the operational problems and crises they face to spot bright sparkes that may surface. Most of the late-career PMETs surveyed are embedded with a high level of Positivism which is a necessary personal characteristic that gives one the optimism, confidence, alertness and mental

cognition to make pivotal judgements and decisions in times of uncertainty to identify and exploit opportunities when the future of profitabilities, incomes and returns are all unknown and uncertain.

Many of the late-career PMETs surveyed have displayed outstanding mental toughness that caused them not to give up quickly in the face of imminent difficulties often encountered during business venturing. Instead, these people have cultivated a growth mindset and believe that persistence will eventually pay off profitability. This trait is evident from their years of success in running a multi-million dollar business. Such a determined-character person usually comes with the quality of perseverance, resilience, and the ability to face objections and challenges and recover quickly from any possible failures or setbacks, making them very suitable for an Entrepreneur's role.

Furthermore, most of the surveyed late-career PMETs embrace a high tolerance level of ambiguous circumstances. When starting a new business venture, ambiguous situations happen daily, especially when there is insufficient information to frame a problem or when the available data are incomplete for any constructive decision-making and planning. At this point, a person of high ambiguity tolerance will operate best based on their eagerness to undertake the unknown and seek out the uncertainty in the hope of finding profits. Thus, embracing ambiguity is an entrepreneurial attitude that those with a greater entrepreneurial inclination will exhibit. People with a high tolerance of ambiguity are also known to be better at controlling their emotions to overcome unstable, unpredictable and challenging situations to make cognitive judgment calls imperative for Entrepreneurship.

Entrepreneurship is a perilous endeavour, especially for those seeking high returns business opportunities. From our survey, the late-career PMETs rated themselves to accept a high level of risk expectation in life, revealing their propensity to take a risk. Similarly, the late-career PMETs are more willing to accept higher degrees of uncertainty in the world of business venturing to the perceived probability of receiving rewards from high growth opportunities. Our findings also show positive correlations between the association of Risk Propensity of the late-career PMETs to their perceived state of readiness to identify and exploit business opportunities.

### 5.1.3 The influence of entrepreneurial Motivations on the perceived state of readiness

Surprisingly, our findings on Respondents also revealed that most of these late-career PMETs are not 'pushed-motivated' to Entrepreneurship, meaning these people do not start a business because of limited career opportunities, insufficient savings or inadequacies in retirement preparedness.

Most late-career PMETs surveyed are 'pull-motivated' to take up Entrepreneurship because they wanted to take advantage of a business opportunity or a business idea that they already have in mind. In this sense, what drives them to Entrepreneurship comes from a positive Motivation to start a business and pursue profitability. Other given Motivational reasons quoted by the Respondents include

- independence and control over their own business,
- flexible working hours,
- more time for family and other personal interests, and the satisfaction of personal achievements such as wealth creation and financial freedom.

The dimensions of 'independence and control' highlight the desire to control one's own time, and work and this concept is deemed very attractive to many senior PMETs. Other Motivational reasons mentioned include the flexibility to combine work with one's personal life and the satisfaction of pursuing personal goals like wealth and financial freedom.

They are also not motivated to become Entrepreneurs because they need to have a sense of belonging by establishing cordial personal relations with others. Similarly, our research findings also revealed that most are not motivated by the individual's desire to have power and influence over others.

### 5.1.4 The influence of entrepreneurial Self-Efficacy on the perceived state of readiness

Having a strong sense of personal ability to overcome the challenges was evident among the late-career PMET Respondents. Many firmly believe that their mental cognition, innate abilities and acquired skills can help them navigate



challenges and overcome problems to perform needed tasks when starting a business.

The Respondents also displayed a healthy level of confidence in their engagement in startup activities. Such a mindset flourish under the Respondents' strong perception of Self-Efficacy, leading them to overcome their fear of risk and uncertainty to discover and pursue new opportunities.

Many also feel that they have other unique advantages to engaging in startup activities. These include acquired market and industry knowledge, business and industry experience and skills, sales experience, years of accumulated corporate management skills and business networks and connections that they perceived to have.

Hence, this research's findings show that the perception of confidence to engage in startup activities has a definite influence on how the late-career PMETs identify and exploit business opportunities. Having faith in own's ability is an essential entrepreneurial mindset related to the other psychological attitudes such as higher tolerance for ambiguity, propensity to take a risk and intrinsic Motivation for more control and independence of work, family and finances. Hence, there were no conflicts in our findings between entrepreneurial characteristics, attitude and mindsets and entrepreneurial Self-Efficacy.

Having a high level of Self-Efficacy in assessing the market environment and internal situation will also enable the late-career PMETs to firmly believe that they will achieve their business goals, translating to higher confidence in making judgements and decisions and an increased willingness to take action to exploit discovered opportunities.

#### 5.1.5 The influence of prior managerial experience on the perceived state of readiness

Most of the late-career PMETs interviewed have at least seven years of managerial experience behind them. They have likely boned their business and management knowledge and skills during this period of overseeing their business portfolios. Working in management roles allow the late-career PMETs to accumulate necessary market and customer knowledge and information, and gain

sufficient business operational experience to look at problems in different lights than most other people. This advantage can help them create a superior set of awareness and cognition not only to be alerted to entrepreneurial opportunities but also to their exploitations. Experience in managerial experience can also cause the late-career PMETs to develop strategic beliefs and cognitive representation of their external environment. These people are likely to have in-depth knowledge of firm resources and capabilities to enable accurate interpretations of internal assessment for necessary action on identifying and pursuing new opportunities. Hence, pre-existing expertise and experience accumulated from previous managerial positions can also induce them to develop a mental model for their business and the business environment.

#### 5.1.6 The influence of prior knowledge and information on the perceived state of readiness

Many of the late-career PMETs interviewed feel that they have both superior knowledge and information about the markets and customers they have served before or are currently serving in their corporate jobs. These may include data information on the respective market environment and the opportunities presented by every one of them. However, our research findings confirmed that the number of markets that the Respondents previously served have no bearing on their state of readiness to identify or exploit opportunities. These findings may be because market knowledge and information are irrelevant for nascent Entrepreneurs entering a different industry or market where market structure and compositions are different. However, our research findings find the Respondents' prior experience serving many customers useful knowledge and information that can help them sense and act on new business opportunities, likely from changes in customer demands or consumer trends.

From the results collected, having the experience and expertise handling many markets and customers in their corporate jobs may cause the late-career PMETs to feel that they have a high proficiency in addressing the market and customer needs. This perception of an intrinsically acquired factor has a direct bearing on the knowledge and information gained and impact their state of readiness towards entrepreneurial opportunities.

#### 5.1.7 The influence of prior relevant skills on the perceived state of readiness

An Entrepreneur has to conduct a variety of tasks to set up a venture and keep it running, and that requires him to have acquired a varied combination of task-oriented skills. The work includes the organisation and distribution of resources and is significantly dependent on an efficient and functional team to execute them.

In such an instance, communication is vital to ensure that all involved know the project goals and actions needed. Our research findings show that the Respondents perceived themselves as having a high skill proficiency, especially for more skills than one for Entrepreneurship. The late-career PMETs also view themselves as making effective decisions on project acquisition, resources allocation, market pricing and partnership. Most do not consider themselves to have as much proficiency in Leadership skills as Leading Others and Managing Conflicts. One likely reason for their responses could be that the skills learned were through either formal education or training during their employment duration as Managers and Executives in companies. Moreover, most PMETs in Singapore are graduates of universities, where they learned necessary skills such as problem-solving, leadership, teamwork and communications. This assumption is also why many researchers often use school years as a proxy for the Human Capital of younger Respondents because of the tendency to consider received education as a form of knowledge and skill measurement.

#### 5.1.8 The influence of social networks on the perceived state of readiness

The higher percentages of the late-career PMETs Social Network's members size demonstrate the extensive 'outside-of-business' connections built over the years with immediate family members, relatives, schoolmates, close friends, community friends, and social media friends. Research findings revealed that most Respondents have years of relationship with their immediate family members, relatives, close friends, and schoolmates beyond 15 years. Because of their age, the length of time allowed them to build better rapport, trust and confidence with these groups of people. However, when it comes to community, social acquaintances and online/social media friends, most have shorter relationships

below 15 years. This finding is reasonable because social media platforms have only been more readily available since the late-2000s.

The findings reveal that the member size of the late-career PMETs immediate family, relatives, close friends, schoolmates, community friends, social acquaintances or online social media friends have minimal impacts on their mental state to identify and exploit entrepreneurial opportunities. With that, we can safely assume that the tangible factors of Member Sizes and Years of Social Network relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness for entrepreneurial opportunities. As such, we propose an additional step to conduct a Post-Survey Test that focuses solely on the intangible aspects of social network strength based on the discussion in para 2.8.2 of Chapter Two. The reason for doing so is to seek confirmation on whether the intangible factors directly impact the late-career PMET's overall Social Capital network strength that could influence their perceived state of readiness.

Based on the above intangible factors measurements and the correlation tests performed, we can confidently conclude that each of these intangible factors enhances the late-career PMETs' inherent Social Network strength directly influences their perceived state of readiness to identify and exploit entrepreneurial opportunities. Thus, instead of focusing on using the actual measurements of Network type, member size and years of ties as network strength indicators, it is recommended that future researchers should place greater attention on the intangible aspects of network strength.

#### 5.1.9 The influence of business networks on the perceived state of readiness

The late-career PMETs' past corporate careers can be a source of goodwill and professional networking with key industry players such as customers, suppliers, and distributors. Most could even leverage on them to gain access to new markets or mobilise the valuable resources, information, and capital, which are pertinent to sense, seize, and capture new business opportunities for their new business venturing. At the same time, ties with customers are also a great source of market information, ideas and the emergence of opportunities. However, our research findings revealed that the member size and years of the late-career PMETs'

relationship with their business partners, ex-colleagues, business associates and business competitors do not enhance their network strength. Thus, they also have minimal impacts on the late-career PMETs surveyed in a perceived state of readiness to identify and exploit entrepreneurial opportunities. With that, we can safely assume that the tangible factors of Member Sizes and Years of Business Network relationships of late-career PMETs DO NOT significantly influence their perceived state of readiness for entrepreneurial opportunities. .

Data collected from the Post-Survey Test show that those more difficult-to-measure intangible aspects of network strength significantly impact the Respondents' state of readiness perception towards entrepreneurial opportunities. These intangible factors include Network familiarity, Network shared knowledge and information, Network share cognition, Network trust and confidence and Network accrued resource expectation. .

Based on the above intangible factors measurements and the correlation tests performed, we can confidently conclude that each of these intangible factors enhances the late-career PMETs' inherent Business Network strength directly influences their perceived state of readiness to identify and exploit entrepreneurial opportunities. Thus, instead of focusing on using the actual measurements of Network type, member size and years of ties as network strength indicators, it is recommended that future researchers should place greater attention on the intangible aspects of network strength.

#### 5.1.10 Conclusion on discussion on results

So far, the survey findings show that most of the results for Psychological and Human Capitals are within our expectations. However, the research findings for the tangible aspects of Social Capital do not provide the answers that we are expecting. As such, we propose an additional step to conduct a Post-Survey Test that focuses solely on the intangible aspects of social and business network strength based on the discussion in paragraph 2.8.2 of Chapter Two. We are confident that this additional test's collected data can help confirm Social Capital network intangible factors' influence on the late-career PMETs' perceived state of readiness. A detailed discussion of the additional test is in the next section 5.2.

## 5.2 DISCUSSION ON ACHIEVEMENT OF RESEARCH OBJECTIVES

This study has managed to bring together all the fragmented literature on the Entrepreneur-Opportunity state of readiness relationship. Through the combined theories on character traits, learned cognition and attributes, social networking factors, the study achieved a comprehensive and inclusive theoretical framework to determine those factors that enhance late-career PMET's state of alertness & cognitive readiness towards the emergence of opportunities.

This research survey validated the outlined hypotheses, answered all the research questions, and hence, achieved the following research objectives:

**Achievement of Research Objective 1 (RO1):** Findings concur with our understanding that the relationship between the inherent Psychological Capital of late-career PMETs and their perceived state of readiness to identify and exploit entrepreneurial opportunities is positive and significant. Research Objective 1 achieved.

**Achievement of Research Objective 2 (RO2):** Findings concur with our understanding that the association between the inherent Human Capital of late-career PMETs to their perceived state of readiness to identify and exploit entrepreneurial opportunities is positive and significant. Research Objective 2 achieved.

**Achievement of Research Objective 3 (RO3):** Although research findings reveal a positive correlation between the inherent Social Capital of late-career PMETs and their perceived state of readiness to identify and exploit entrepreneurial opportunities, they do not concur with our understanding that the relationships are significant enough to impact their impact. Further Post-Survey tests conducted confirmed the importance of intangible Social Capital factors such as Network familiarity, Network shared knowledge and information, Network shared cognition, Network trust and confidence and Network accrued resource expectation. These factors contribute to a higher level of late-career PMETs' perceived readiness for entrepreneurial opportunities. Hence, Research Objective 3 is also considered achieved.

Through achieving the research objectives, the study offers a better understanding of the phenomenon of late-career PMET Entrepreneurship in the Singapore business context. We believe the quantitative research findings have helped us achieve our research objectives by confirming the influence of late-career PMETs' inherent factors on the entrepreneurial alertness and cognition levels and their entrepreneurial readiness towards opportunities. The study also uncovered hidden perceptions and expectation gaps and provided new insights into Social Capital influencing factors.

The research's significance is ultimately getting enough answers to design a valuable and practical self-assessment screening framework to help future late-career PMETs transition from corporate careers to Entrepreneurship. This validated model can also help to explain the challenges faced by senior PMETs during their entrepreneurial transitioning.

By focusing on their 'state-of-mind readiness' towards entrepreneurial opportunities, we let the individuals be aware of their alertness level to business opportunities and readiness to bring about the entrepreneurial realisation. It can help to aspire to late-career PMETs to assess their suitability for Entrepreneurship as a viable, exciting and valuable career option, resulting in better successes in their entrepreneurial endeavours and transition. Therefore, the best-expected outcome is an overall increase in their confidence level, enhancing their entrepreneurial intentions and take-up rate for successful senior Entrepreneurship in Singapore.

### 5.3 ACADEMIC DISCUSSION

Below is a list of our findings compared to the evidence from past research obtained from the literature review. Detailed explanations of their similarities and differences are given in each respective section.

#### 5.3.1 The influence of inherent Psychological Capital factors on the perceived state of entrepreneurial readiness

Findings from our study match that of Pirhadi et al. (2021), Baciú et al. (2020), Sexton (2001) and Smith and Smith (2000) that the right internal make-up of the Entrepreneur is vital to a high alertness and cognition level towards opportunities. More importantly, our study confirms that a high level of Positivism gives individuals a 'can-do' attitude and relentlessly get them to find ways to circumvent obstacles head-on (Kuratko and Hodgetts, 2007). The high Tenacity characteristic and unwavering resoluteness put the individual into a growth mindset, pathing a single-minded, self-directed entrepreneurial journey that is imperative to identifying and exploiting business opportunities (GEI, 2019).

Our findings concur with Portuguez and Gomez (2021), Arend (2020) and Pereira (2007) that the late-career PMETs' high level of Ambiguity Tolerance helps them overcome uncertain and unpredictable circumstances, giving them control of their emotions for sound decision-making and performance. Results also match Saiz-Alvarez et al. (2020) and Brockhaus (1980) findings that the late-career PMETs' high level of Risk Propensity heightens their risk orientation toward a willingness to take on chances in an uncertain start-up business environment. This factor makes a clear distinction between the entrepreneur and an employee (Muhajid et al., 2019).

Contrary to the common understanding that late-career PMETs opt for Entrepreneurship because of 'push' factors, our findings reveal that majority of this group are attracted to business ownership by the opportunity to pursue a dream venture and the achievement of a desirable lifestyle, as well as, work, time and financial independence and control. The 'Pull' factor findings support Jinjian et al. (2020) and Shwetzter et al. (2019) arguments that seniors can become natural Entrepreneurs because of their vast business exposure, work experience and extensive social and business network of contacts. On top of that, our research



findings also agree with the discussions put up by Godany et al. (2021), Shwitzer et al. (2019), CERIC (2018), Kibler et al. (2011), DeNoble and Singh (2003) and Curran and Blackburn (2001) that most expect this career to provide better autonomy and control overtime management between family and work, how rewards are distributed and the type of lifestyle to have. Interestingly, these sentiments were shared by the GEM (2020/2021) global report that a higher proportion of men agree they became Entrepreneurs driven by the Motivation 'to build great wealth' and to continue with 'family tradition'.

Likewise, our findings concur with that of Neneh (2020), Burnette et al. (2020), Lingappa et al. (2020), Chien-Chi et al. (2020), Newman et al. (2019), Barbaranelli et al. (2019), Bandura (1997) and Zhao et al. (2005) that late-career PMETs have a high level of Self-Efficacy in terms of their belief and confidence in own's ability, capacity, capability and expectation of success to engage in entrepreneurial activities and overcoming potential challenges. Those possessing such a mindset will have an advantage when exploring and assessing identified entrepreneurial opportunities for exploitation (Sahin et al., 2019; Urban, 2020).

### 5.3.2 The influence of inherent Human Capital factors on the perceived state of entrepreneurial readiness

Our findings concur with Baciu et al. (2020) that the Human Capital aspect of Entrepreneurship is not innate but can be acquired with proper timeframe, industry exposure and professional practices. The tenure and position of late-career PMETs' past managerial experience can equip them with higher alertness to notice and cognition to assess potential business opportunities. Findings revealing the Respondents are managing sizable business portfolios of a few million dollars per annum may work to their advantage when starting their businesses (Sharma, 2019) as it affects their confidence, decision-making and the likelihood of success in their entrepreneurial venturing (Deming, 2021; LeBlanc, 2017; Mathias et al., 2015). The correlation between managerial experience and their projected readiness to exploit opportunities suggests that it bears on their cognition and expectations regarding their firm's resource values and business operating environment. This experience will quicken the process of obtaining the necessary resources to adjust product offerings in a fast-changing marketplace.

Our findings also concur with Portuguez, Scheede and Gomez (2020), Kor (2003) and Miller (2003) that the Respondents have relevant skills and in-depth tacit knowledge and information can identify and exploit new opportunities better than competitors. However, our research findings counter the arguments of Terjesen and Sullivan (2011) and Fainshmidt and Frazier (2016) that managers who manage many markets and customers across industries, markets, and firms stand to gain a competitive advantage. Findings pointed out that it is not easy to codify such unevenly distributed inherent knowledge. That is to say, having prior experience in handling many markets does not equate to more excellent market knowledge and information, nor translate to higher alertness and cognition to entrepreneurial opportunities. The argument is that the constant market changes will deem any such prior knowledge irrelevant over time. An example is the advent of online sales platforms that are transient across boundaries and time zones. Moreover, local business partnerships and collaborations can easily substitute particular market knowledge and information.

Regarding the skills viewed as necessary for identifying and exploiting opportunities, our findings concur with Deming (2021), Daniel et al. (2021), Baciú et al. (2020) and Sharma (2019) on the complementary correlations between decision-making intensity and work experience to the cognitive ability to make a sound judgement on decisions. Many factors influencing opportunity perception also require creative problem-solving skills (Kim et al., 2018). These include having good teamwork skills to drive an effective team with heightened team alertness and cognitive power to scan and sense for opportunities (Cohen et al., 1997) and quality communication skills for team effectiveness (Mcduffee, 2021).

### 5.3.3 The influence of inherent Social Capital factors on perceived state of entrepreneurial readiness

Our findings confirmed Martinez (2020) and Ha and Nguyen (2020)'s viewpoints that Social Capital is an essential ingredient of successful venture creation and Entrepreneurship. It concurs with GEDI (2019), Prashantham and Dhanaraj (2010), Li et al. (2008) and Hitt and Ireland (2002) that Entrepreneurs who previously worked in a professional and managerial position in multinational enterprises can successfully leverage their past business contacts to give them an added advantage in accessing information, knowledge, technology and much-

needed resources to build up capabilities to seize and exploit market opportunities effectively. Evidence from Kor and Sundaramurthy (2009) study shows that top managers' prior positions in the industry are the primary source of goodwill relations with key industry players such as investors, suppliers, and distributors. With these connections, top managers help firms mobilise the resources required to capture the industry's growth opportunities.

However, our research findings revealed that instead of focusing on the tangible network types diversity, member sizes density, and years of the tie relationship as a measure of network strength, it is better to emphasise the intangible factors that are less noticeable to the eyes. For example, researchers like Burt (2004), Kim and Aldrich (2005), Ensley and Pearson (2005), Leana and Pill (2006), Foss and Lorenzen (2009) and Fainshmidt and Frazier (2016) support the notion that network familiarity, trust and confidence, shared cognition, shared knowledge, shared information and projected accrued resource value are essential elements that can affect network strength. It is logical that if network familiarity, trust and confidence are not there, it would be impossible for shared cognition and the sharing of knowledge and information to occur regardless of how diversified, how extensive the member size and how long their relationships are. Ensley and Pearson (2005) highlight that shared cognition represents a collective thought process within the group. Hence, having a vast social network can work against the Entrepreneur if there is a lack of shared cognition with family members, relatives, and other close people discourage him from starting the venture.

Our Post-Survey Test results seem to confirm the notion that a substantial network member size and many years of ties may not necessarily lead to a more robust network trust and confidence or more significant exchanges of knowledge and information. These intangible aspects of network familiarity, shared experience and information, shared cognition, trust and confidence, and accrued resource expectations are more important for researchers to focus on as they are essential indicators of network strength of Social Capital. Our Post-Survey Test findings confirm those research results from Kim and Aldrich (2005), Burt (1992; 2004), Ensley and Pearson (2005), Foss and Lorenzen (2009), Fainshmidt and Frazier (2016), and Batjargal (2003) that highlighted the contribution of these intangible factors to the strength of network relations.

## **6 CHAPTER SIX – CONCLUSION AND RECOMMENDATIONS**

### **6.1 APPLICATION OF RESEARCH FINDINGS**

Findings collected from the research provided answers to satisfy the research questions, hypotheses and objectives. From there, we can assemble all the influencing independent variables into a final conceptual framework, as shown in Figure 24 on page 276 of this report. This diagram illustrates the overall critical inherent factors of the late-career PMETs and their inter-relationships that will significantly influence their perceived state of readiness towards identifying and exploiting entrepreneurial opportunities.

Each of these independent variables has been tested based on a direct, rigorous and scientific approach to measuring the late-career PMETs' perceived state of readiness to identify and exploit opportunities. Although every one of these inherent factors has proven to positively influence the PMET's state of preparedness, the degree of their influence is different. Hence, when all these intrinsic factors act together in varying combinations, it will ultimately lead to a variation in a person's overall score tabulation of their perceived state of readiness.

The next step is to derive a systematic descriptive score rubric that can compare the overall score attained to the situation and condition that best represent the respective late-career PMETs state of entrepreneurial readiness. This rating should help the late-career PMETs qualify their readiness self-perception. It should also help boost their confidence when acting on their business, venturing intentions and transitioning. More importantly, it can also assess the existing human or Social Capital gaps faced by the late-career PMET and encourage their commitment to drawing up self-improvement plans to further their entrepreneurial intentions.

## 6.2 IMPLICATIONS FOR FUTURE LATE-CAREER PMET ENTREPRENEURS

As there is a lack of an easy-to-use state of entrepreneurial readiness self-assessment framework today that is dedicated for use by late-career PMETs, this study's research findings can help develop such a reliable tool. The proposed entrepreneurial readiness screening framework comprises an all-rounder self-assessment questionnaire providing inferences to the psychological and cognitive preparedness of aspiring late-career PMETs for Entrepreneurship.

The Psychological Capital readiness screening will evaluate individual characteristics, attitudes, and mindsets consistent with running a business. The Human Capital readiness screening aims to determine if the incumbent perceives himself as having the personal capacity and operations management readiness to seize business opportunities. Lastly, the Social Capital readiness screening seeks to determine the incumbent's self-perceived networking strength, gathering better information and insights into identifying unexplored business opportunities and amassing financial and non-financial supports to exploit them.

One of the positive implications of this research is its application potential in the labour and commercial sectors as a late-career PMET's entrepreneurial readiness screening framework. Those inherent factors proven in our study to positively influence PMETs' entrepreneurial readiness are considered for developing an effective entrepreneurial readiness screening scorecard. Figure 25 shows an example of this Self-Assessment Scorecard. Users need to give a score to each item listed under the respective categories of Psychological, Human and Social Capitals. The next step is to benchmark the final score tabulation to the Score Rubric shown in Figure 26 to determine their overall entrepreneurial opportunities readiness level.

Aspiring late-career PMETs can use this Self-Assessment Scorecard to assess their suitability for Entrepreneurship as a viable, exciting and valuable career option, resulting in better successes in their entrepreneurial endeavours and transition. The best-expected outcome is an overall increase in their confidence level, enhancing their entrepreneurial intentions and take-up rate for successful senior Entrepreneurship in Singapore.

### STATE OF ENTREPRENEURIAL READINESS SELF-ASSESSMENT SCORECARD

This scorecard's objective is to understand your perceived state of entrepreneurial readiness to start a business venture.

(1) You are required to rate yourself from a score from 1 (Low) to 5 (High) on questions that refer to characteristics, attitude & mindset, motivation, self-efficacy, managerial experience, knowledge and information, skills, social and business network strength.

(2) Add up all the scores per item and then the sub-scores for each column, then compute your total score at the bottom right corner.

(3) Check your total score with the scoring rubric on the opposite side of this scorecard.

SELF-ASSESSMENT OF PSYCHOLOGICAL CAPITAL INHERENCE	SELF-ASSESSMENT OF HUMAN CAPITAL INHERENCE	SELF-ASSESSMENT OF SOCIAL CAPITAL INHERENCE																																																																																																																																																																																																																																																																			
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**FIGURE 25: Sample of State of Readiness Self-Assessment Scorecard for late-career PMETs (Source: Researcher's own work)**

<b>STATE OF ENTREPRENEURIAL READINESS SELF-ASSESSMENT SCORE RUBIC</b>				
<i>IF YOUR SELF-ASSESSMENT SCORE IS</i>				
<i>Lower than 20</i>	<i>Between 20 - 40</i>	<i>Between 40 - 60</i>	<i>Between 60 - 80</i>	<i>Higher than 80</i>
<b>VERY LOW</b> State of Readiness	<b>LOW</b> State of Readiness	<b>MODERATE</b> State of Readiness	<b>HIGH</b> State of Readiness	<b>VERY HIGH</b> State of Readiness
You are not ready to transit into Entrepreneurship. It would be best if you reconsidered your entrepreneurial intention. Discuss your plan with close family members or friends before you venture into your own business			You are not ready to make the transition yet. You should meanwhile seriously look into how you can improve on those areas where you have scored 3 points and below.	You are ready to deal with the realities of the business venturing. Wish you all the best in your transition to Entrepreneurship. Good Luck!

**FIGURE 26: Sample of State of Readiness Self-Assessment Score Rubric for late-career PMETs (Source: Researcher's own work)**

### 6.3 CONCLUSION

The advocacy for senior Entrepreneurship is urgent for countries like Singapore, which faces a fast-ageing population and an increase in life expectancy. Late-career PMET Entrepreneurs can play a significant role in society by transferring their career-accumulated business experience and management know-how to private business start-ups. It is indisputable that their entrepreneurial inputs can help create employment for senior workers and overhaul the numerous ageing-population-related social problems. However, late-career PMETs need first to overcome their entrepreneurial hesitancy and project self-confidence on their readiness for Entrepreneurship.

Past researchers have pointed out in their studies that this group of seniors have a unique competitive advantage over their younger counterparts. Likewise, our research findings also infer the apparent correlations between their inherent attributes to enhanced alertness and cognition levels towards entrepreneurial opportunities. This study confirms the research hypotheses that specific Psychological, Human, and Social Capital factors positively influence the late-career PMETs' readiness towards identifying market gaps and exploiting market potentials. The study concluded that it is not one specific character, attitude or mindset that is solely attributable to successful Entrepreneurship, but a combination of them all. Many of the experience, tacit knowledge, skills and network contacts accumulated by the PMETs throughout their decade-long career also become very useful in their entrepreneurial transitioning.

This study managed to contribute in many ways. It brings together the fragmented literature on the contributing factors influencing the Entrepreneur-Opportunity state of readiness relationship. It also clarifies the distinct aspects of alertness and cognition that underwrite business venturing activities involving identifying and exploiting entrepreneurial opportunities. Although each theoretical approach on character traits, learned cognition and attributes, social networking factors, has its merit in linking to entrepreneurial alertness, cognition and behavioural outcomes, they are insufficient to explain the complex Entrepreneur-Opportunity nexus. By integrating all these theories, we managed to achieve a 'never-before' comprehensive and inclusive entrepreneurial 'Self-Assessment Scorecard' appropriate for measuring the late-career PMET's state of readiness towards the emergence of opportunities.



## 6.4 LIMITATIONS OF RESEARCH

There are some significant limitations in the process of conducting this study. We welcome future researchers to look into these highlighted limitations using more comprehensive and empirical research explorations to expand further and strengthen this research's validity and rigour.

### 6.4.1 Limiting contextual scope of this research

As Chepurenko (2015) correctly pointed out, researchers should treat the subject of Entrepreneurship contextually and should not try to generalise their findings with a myopic conclusion and recommendation. This warning is especially relevant for a small place like Singapore, where the research context in terms of targeted population is somewhat too small and limited to cast exploratory findings and conclusions in stone. Specifically, to use a population of senior individuals over 50 years old who are current or ex-managers of multinational firms or local SMEs is like giving one broad brushstroke to assume that these PMETs are alike in attitude, cognition and behaviour. Without considering the types of organisations, industries, cultures, or geographical regions, it risks making our findings too generalised.

### 6.4.2 Limitation of the data collection method

The hypotheses testings carried out in this study rely on data collected from the 384 senior PMET Respondents. In other words, the hypotheses testing relied entirely on the personal opinions, perceptions and experiences of the late-career PMET Respondents. As a result, the research findings' precision and accuracy depend heavily on the Respondents' answers provided to each questionnaire item. The research's purposive convenience sampling method may present limitations as it does not ensure the entire senior PMET population's actual representation. Instead, it can become too generalised to focus only on this selected group's ability to provide the information needed to answer the study's research questions. The study may have attracted a higher response rate because of the convenience sampling method. However, if we choose to use a national random sample of late-career PMETs, we might increase our ability to acquire more data that will better represent the overall population of PMETs but reduce our

potential for a high response rate. This larger sample could also potentially highlight more deep-rooted social differences in our research findings against diverse backgrounds of differing occupations, income levels, ethnicities, genders, and other demographic characteristics.

#### 6.4.3 Time constraint to conduct the research survey

The primary survey to collect data from the 384 Respondents took place over a short time frame of three months. As highlighted in Figure 5 on the Opportunity-related activities in Entrepreneurship, identifying and exploiting entrepreneurial opportunities are often performed over an extended period by the Entrepreneur where perceptions of results and successes may change. Hence, as Zikmund (2000) rightfully put it, merely taking a snapshot of a point-in-time study on the sample population might not capture accurate answers from the Respondents.

#### 6.4.4 Timing of research

Halfway through this research, the arrival of the COVID-19 pandemic in the first quarter of the year 2020 causes a partial city lockdown in Singapore. The precautionary measures undertaken unleashed a series of firm bankruptcies and staff downsizing, leading to widespread retrenchments and job losses here and elsewhere. Thus, it is reasonable to expect that most people are risk-averse during a sudden economic downturn, and their mental state of readiness towards Entrepreneurship may differ from when the economy is doing well. Although we have tried to mitigate this factor by constantly reminding survey Respondents to keep in mind the pre-covid situation when answering the questionnaire, there will undoubtedly be skewed answers in the collected data.

## 6.5 RECOMMENDATIONS FOR FUTURE RESEARCH

### 6.5.1 Expand the scope of future study to cover a variety of specific groups

Future research may find it interesting to look into specific groups of individuals representing particular segments in the general population. This ensures the inclusivity of a larger pool and more representing informants that are diverse in terms of geographical, demographical, and gender. For example:

#### (i) Expand study into the region research data collection

As this research is carried out only in the context of Singapore, it would be an exciting proposal for future investigation to consider the effect of a type-specific environment on this study. For example, future researchers can consider conducting similar tasks at the regional and global levels to expand research data collection on different types of organisations, industries, cultures, and geographical influences.

#### (ii) Include an analysis of mid-career PMETs for comparison study

To conduct a new study that looks into mid-career PMETs' state of readiness towards entrepreneurial opportunities. Data collected can then be compared to late-career PMETs' state of entrepreneurial readiness to understand the differences in their perceived inherent psychological, human and social makeups. The reason for this recommendation is to promote a better understanding of their entrepreneurial gaps.

#### (iii) Include Gender analysis as part of the study

This inclusion is to understand how male and female late-career PMETs differ in their state of entrepreneurial readiness for opportunities. For example, it would be interesting to explore gender implications when leveraging personal depositions, acquired acumen, knowledge and skills, and networks in the way they approach businesses opportunities. Given women's distinctive psychological characteristics, unique corporate experience, and an inclination toward social networking (Uzzi, 2019), findings may shed new light on how those factors influence their state of readiness towards opportunities relative to male PMETs.

### 6.5.2 Improve the methodology for future research

Future researchers should consider improving the research methodology by establishing mixed quantitative and qualitative methods to conduct a similarly exhaustive study like this one. The mixed method's evolving research design and flexibility are also appropriate for exploratory studies on entrepreneurial behaviours, and it is hailed to eliminate some of the inherent biases in quantitative questionnaire design. The addition of an active qualitative study conducted through fact-finding processes will be more contextual. Given that questions asked are primarily open-ended, such face-to-face interactions will facilitate better contextualisation of words from the Respondents' perceptions and experiences to give deeper insights and a better understanding of the phenomena.

### 6.5.3 Conduct longitudinal studies on the Respondents

To achieve more accurate findings from this type of research, future researchers to consider conducting the same research using interventions that could track the Respondents over a more extended period of a few years. A more intensive and longitudinal study of the phenomenal should better understand the real influence of the Respondents' inherent qualities on each specific entrepreneurial activity. We confirm the validity of our findings in this research regarding the entrepreneurial opportunity identification and exploitation processes, as highlighted in Figure 5.

### 6.5.4 Conduct a similar study after the pandemic

It is recommended that future researchers conduct this same study after the pandemic to reaffirm the findings from our survey. The benefit of such a post-COVID study is that the collected data may more appropriately reflect the Respondents' risk-taking attitude, optimism, and overall state of readiness under a more stable economic environment.

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## APPENDICES

### Appendix A: Singapore Residents by Age Group

Age Group	2000 (Actual)	2005 (Actual)	2010 (Actual)	2015 (Actual)	2020 (Actual)
50-54	206,657	254,168	303,044	315,091	296,068
55-59	125,061	197,803	248,696	295,063	305,830
60-64	110,503	117,575	191,995	240,493	284,626
65-69	88,305	101,088	111,511	182,425	229,396
70-74	66,948	76,545	92,618	102,631	170,008
75-79	39,644	51,601	65,178	81,211	90,990
80-84	22,876	27,879	39,839	51,785	66,513
85 & above	17,523	22,580	29,241	41,663	57,461
Total > 50 years old	677,517	849,239	1,082,122	1,310,362	1,500,892
Total Population	3,273,363	3,467,814	3,771,721	3,933,559	4,044,200
<b>% of &gt;50</b>	<b>20.7%</b>	<b>24.5%</b>	<b>28.7%</b>	<b>33.3%</b>	<b>37.1%</b>

Source: Singapore 2000 to 2020 actual population distribution based on The Singapore Department of Statistics (2020).

Age Group	2030 (projection)	2050 (Projection)
50-54	477,145	441,770
55-59	498,108	461,836
60-64	471,607	433,471
65-69	462,169	451,134
70-74	400,369	456,997
75-79	293,686	436,589
80-84	186,999	355,792
85 & above	154,397	565,547
Total > 50 years old	2,944,480	3,603,136
Total Population	6,340,000	6,580,000
<b>% of &gt;50</b>	<b>46.4%</b>	<b>54.8%</b>

Source: Singapore 2030 and 2050 projected population distribution based on The UN World Population Prospects (UNWPP) Report (2017).

## **Appendix B: Definition of Professional, Managers, Executives and Technicians (PMET) and Late-career PMET Entrepreneurship**

The Singapore Ministry of Manpower (MOM) defines Professionals, Managers, Executives and Technicians (PMETs) as those functionally or organisationally empowered employees to carry out authorised duties involving at least one of these executive and supervisory functions:

1. Making decisions on employment issues involving recruitment, performance assessment, discipline and reward
2. Formulation of policy and strategies
3. Management of business operations

This group of individuals include those tertiary-educated employees with specialised skills set or professional knowledge working in jobs where the terms of employment are similar to that of managers or executives. Practising medical doctors and dentists, chartered accountants and advocates and solicitors are some examples that fall into such category.

Throughout this paper, the terms “late-career PMETs ” and “Senior or Older PMETs” are used interchangeably and meant to refer to the same group of individuals with a chronological age above 50 years old, currently or previously working in a PMET position. Many would have spent decades working in professional or managerial jobs, some already in retirement or might even have ventured out to set up their own business. The characterisation of late-career PMET Entrepreneurship used throughout this study purely denotes the “outside the corporation” creation of new business venture, which can be in the form of a simple organisation or entity startup (Gartner 1988). It does not take into account the concepts of self-employment, i.e. freelancers, gig workers or “inside the corporation” intrapreneurship as based on Kuppa (2015).

## **Appendix C: Proportion of PMET retrenchment hits all-time high**

Source: Kok, Xinghui. The Edge Singapore, Published on 14 Mar 2019

SINGAPORE (Mar 14): Professionals, managers, executives and technicians (PMETs) accounted for a staggering 79.3% of retrenched residents in 4Q18, according to a labour market report released by the Ministry of Manpower (MOM) on Thursday. This brings the total figure for retrenched local PMETs -- comprising Singaporeans and permanent residents -- to 75.8% of all retrenchments for 2018, the highest level since such data was first published by MOM in 2006.

Some 58% of retrenched residents had degrees, while 19.9% held diplomas. The bulk of the individuals who were retrenched in 4Q18 were aged 40 to 49 (34%) and 50 and over (33.6%). Further, only 62.6% of PMETs found a new job within six months after retrenchment — falling below the 71.5% for clerical, sales, and service workers, and the 68.2% for production, transport operators, cleaners and labours.

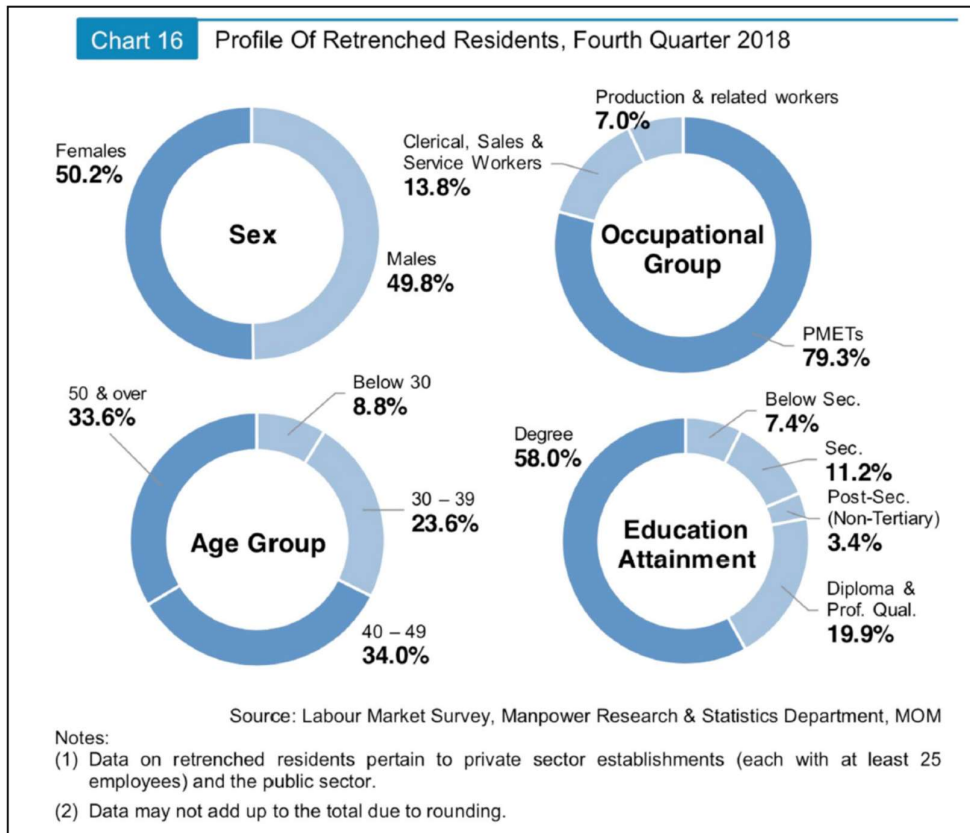
The article found that PMETs are increasingly forming the bulk of retrenchments — far beyond their 56% representation in the labour market. Compared to blue-collar workers, they also find it harder to find a job after retrenchment.

Experts say the statistics are worrying, and have pegged these trends to automation taking over the jobs of PMETs, as well as a mismatch between those looking for jobs and the jobs available in terms of skills and pay expectations. In addition, they say it may be easier for blue-collar workers to find new jobs since their skills are less specialised and more transferrable. Calling the trends a “worrisome phenomenon”, OCBC economist Selena Ling says the challenge is to stem this rising tide of PMETs being retrenched and helping them get back to work faster given the ageing population, digital disruption and skills obsolescence.

Ling says the authorities are already looking at skills upgrading and professional conversion programmes, but urges the problem to be addressed with increasing urgency.

DBS economist Irvin Seah says the current policies are skewed towards curing rather than preventing the problems. “Policies are currently tilted towards providing support to retrenched PMETs. Perhaps there is a need to re-orientate policy focus towards mitigating against such worsening trend,” he says.

But not all is gloom and doom. Overall retrenchment figures fell to 10,730 in 2018, compared to 14,720 in 2017 and 19,170 in 2016. MOM says last year's figures were the lowest since 2011. Job vacancies are also on the rise since 2017, with 62,300 in December last year compared to 58,800 three months prior. The number of job vacancies for PMETs has also spiked by more than 5,000, with the bulk of the jobs within the information and communications sector, followed by professional services and financial services.



## **Appendix D: COVID-19 pandemic puts more PMET jobs at risk.**

Source: Ng, Jun Sen. The Straits Times, Published on 27 August 2020

### **As Covid-19 puts more local white-collar jobs at risk, NTUC forms new task force to protect, push for their interests**

By [NG JUN SEN](#)

Published AUGUST 27, 2020

SINGAPORE — With the pandemic putting professional, managerial and executive (PME) jobs at risk, the labour movement on Thursday (Aug 27) said it will form a new task force centred around the needs of PME workers, in a bid to organise them and ensure their interests are heard by companies and the Government.

Announcing the move in a virtual media briefing on Wednesday, National Trades Union Congress (NTUC) secretary-general Ng Chee Meng said that the situation for PMEs, especially those between 40 and 60, have reached a "tipping point" — these traditionally safe jobs have now become much more vulnerable because of Covid-19 and its effects on the economy.

"(PMEs) now feel a growing sense of anxiety about whether their job is secure. And it is with this feedback that I think we have reached somewhat of a tipping point for NTUC to actually act upon this feedback and see how we can take the initiative to help this group of PMEs," said Mr Ng.

He also noted that many PMEs are now taking up jobs in the gig economy, such as becoming private hire car drivers.

And so the PME Task Force will be formed sometime in October to champion the protection of Singaporean PMEs, and will be led by NTUC assistant secretary-general Patrick Tay and the Singapore National Employers Federation executive director Sim Gim Guan.

It will engage PME workers — including those who are not union members — over an estimated period of six months to a year, to come up with "concrete recommendations" for companies to benefit local PMEs, said Mr Ng in response to the media.

He added that one of the chief aims of the task force is to keep the momentum for a collective voice for PMEs going, even after the work of the PME Task Force concludes.

While NTUC has had programmes for PMEs before, Mr Ng said this is the first such concerted effort undertaken by NTUC that focuses on local PMEs.



## **Appendix E: Older people need \$1,379 a month for basic needs, according to study**

Source: Lee Kuan Yew School of Public Policy, Published on 22 May 2019

How much money does an older person need to meet their basic needs? According to a team of researchers in Singapore, in 2018, the figure for a single person aged 65 or above, living alone, was \$1,379 a month. The team of researchers, led by Assistant Professor Ng Kok Hoe from the Lee Kuan Yew School of Public Policy, National University of Singapore (LKYSPP), conducted focus group discussions involving over 100 participants from a diverse range of backgrounds. Using a consensus-based methodology known as Minimum Income Standards (MIS), the groups came to agreement on how ordinary Singaporeans think about basic needs, and determined the household budgets necessary for older people to meet those needs. Participants generated lists of items and services related to housing and utilities; things needed in a two-room HDB flat; personal care items and clothing; food; transport; leisure and cultural activities; and healthcare. Each item or service was only included if participants came to a consensus that it was a basic need, and could explain their reasons for its inclusion. "This study reveals that ordinary members of society can come to a consensus about a basic standard of living in light of norms and experiences in contemporary Singapore," said Dr Ng. "Such income standards can help by translating societal values and real experiences into unambiguous and substantive benchmarks that policy can aim for."

Key findings in the report include:

1. Participants agreed that basic needs go beyond subsistence. They emphasised values such as quality of life, independence, autonomy and social connections
2. Based on the lists of items and services, the household budgets necessary to meet basic needs were: a. \$1,379 per month for single elderly households b. \$2,351 per month for coupled elderly households c. \$1,721 per month for single persons aged 55-64.

Said Associate Professor Teo You Yenn from the School of Social Sciences, Nanyang Technological University (NTU), another member of the research team and author of the best-selling "This Is What Inequality Looks Like": "To tackle inequality, it is critical to establish an agreed floor below which no one should fall. The MIS method can be usefully applied to generate societal consensus across a range of household types."

## Appendix F: Singapore Government to support start-ups by older PMETs

Source: Wong, Poh Kam & Ho, Yuen Ping. The Straits Times, Published on 8 October 2020

# Support start-ups by older PMETs

More can be done to help them become the source, rather than recipients, of job creation

Wong Poh Kam and Ho Yuen Ping

For The Straits Times

As Singapore's economy matures, the challenge of creating high-value-adding jobs for the growing professional, managerial, executive and technician (PMET) workforce has received increasing policy attention.

Between 2008 and 2018, the supply of PMETs has increased with the share of Singapore's labour force, with tertiary education qualification rising from 42.6 per cent to 56.2 per cent.

The dramatic adverse impact of Covid-19 on the economy in general, and on specific PMET-intensive sectors such as transport and hospitality services in particular, has further heightened awareness of the urgency of the challenge in recent months.

To help existing businesses sustain their current PMET jobs and to provide new ones, especially for older PMETs who may be most at risk, a wider range of policy interventions has been introduced by the Government, and additional ones are being debated in Parliament.

But there is an area that deserves greater policy attention: how to encourage older PMETs to become start-up entrepreneurs – making them the source, rather than the recipients, of job creation. The popular belief is that start-ups, especially technology-based ones, are founded mainly by young entrepreneurs, with images of Bill Gates and Mark Zuckerberg coming readily to mind.

This is more a myth than reality. A sizeable number of new business start-ups are actually founded by older PMETs (those 40 years and above) and that on average, they are more likely to do better in job creation than young entrepreneurs.

In a recent study covering 2.7 million business start-ups between 2007 and 2014 in the United States, Professor Pierre Azoulay at the Massachusetts Institute of Technology and Dr Javier Miranda at the United States Census Bureau found the average age of people who founded any business that hired at least one employee to be 42.

Among entrepreneurs who founded start-ups that are likely to be tech-based or innovation-intensive – as measured by one of several indicators such as owning a patent, receiving venture capital investment, or operating in an industry that employs a high



Many older PMETs can act as early angel investors or advisers, or take up interim senior management roles in start-ups led by younger entrepreneurs who have the drive and tech-savviness but lack business experience, industry-specific domain knowledge or connections, say the writers. ST FILE PHOTO

fraction of STEM (science, technology, engineering and mathematics)-educated persons – the average age of founding turns out to be similar. Interestingly, looking at only the 0.1 per cent of start-ups that had grown the fastest in terms of employment in the first five years, the average age of founders is even higher, at 45.

The study also shows that having the relevant experience matters: Those entrepreneurs who had started their businesses in the same industry they had worked in before grew, on average, more than twice as fast as those without prior background in their chosen industry.

#### MEAN AGE FOR START-UPS

Our own research on start-ups in Singapore tells a similar story. Drawing on data from the annual Global Entrepreneurship Monitor (GEM) surveys for the most recent three years (2012 to 2014) where we have data on Singapore, the mean age of Singaporean adults who were engaged in start-up activities at the time of the survey was over 39, just a little bit lower than in the US study.

The GEM surveys covered new business formation in general. To look at the subset of tech start-ups, including mobile/Internet/e-commerce-related start-ups, we conducted a survey in 2016 covering 530 such start-ups.

The mean age of entrepreneurs at the time they founded their

start-ups was estimated to be 35.3, somewhat younger than entrepreneurs in general.

However, if we look at only the subset of technology-intensive start-ups that either owned one or more patents, or were in "deep-tech" sectors, the mean age goes up to over 39. We also replicated the regression analysis by the US study using our Singapore sample and found that the age of founders at the time of founding is significantly correlated with the start-ups' three-year employment growth performance, as in the US study.

Moreover, having prior work experience in the private sector has a positive impact on the employment growth performance of the firm.

It is important to note that the significant participation of older PMETs (40 years or above) in new business start-ups has occurred in the last 10 years, even though most government policy attention in the same period has focused more on promoting, and supporting, young entrepreneurs.

In particular, tertiary students and recent graduates in Singapore have benefited enormously from government support for various entrepreneurship education programmes and incubation services for start-ups.

Although not intended as such, government venture investment co-funding programmes such as the Technology Incubation Scheme had been used mainly by the recipient

A sizeable number of new business start-ups are actually founded by older PMETs (those 40 years and above) and that on average, they are more likely to do better in job creation than young entrepreneurs.

venture capital funds to invest in Internet/mobile-related start-ups. These start-ups were primarily started by young entrepreneurs.

It is true that government agencies such as the National Research Foundation (NRF), Agency for Science, Technology and Research and universities themselves have sought to encourage deep-tech spin-offs to commercialise research coming out of publicly funded research, and such spin-offs could arguably involve the engagement of professors and research scientists who are older.

#### RESEARCH MATCHED WITH EXPERIENCE

However, experience worldwide has shown that few academic researchers make good entrepreneurs, and that a more likely route to successful university/public research

institute spin-offs is to get experienced/seasoned PMETs from industry to take up the start-up execution role.

However, this "matching" of industry expertise with research scientists does not occur easily and needs to be actively promoted through policy intervention.

Our own experience in promoting this, through the Lean Launchpad Programme (LLP) that we initiated with funding support of the Ministry of Education and subsequently NRF, has shown promising results.

One example is Kosmode Health, a company co-founded in November 2016 by Associate Professor Huang Dejian, a chemist and food scientist from the National University of Singapore, and Ms Florence Leong, a former pharmaceutical executive.

The pair were connected in 2015 through LLP, and the mentor-mentee relationship grew into an entrepreneurial partnership, with both investing in a Singapore company that upcycles food processing by-products for human nutrition and biomedical applications.

Their complementary skill sets – Prof Huang's core plant extraction expertise and Ms Leong's operations and business strategy experience – culminated in Kosmode Health developing, among other things, starchless noodles with protein and fibre for individuals with high blood sugar and weight issues.

#### POLICY INTERVENTION

A key advantage for older PMETs in starting new businesses is their deep industry domain knowledge and network connections.

However, many of them often face a challenge in raising venture capital funding if they operate in highly specialised industries such as oil bunkering services that few venture capitalists have the domain expertise to understand, or if the market niche they are targeting is too small to fit the venture capital funding model.

Policy intervention is thus necessary to address such funding gaps.

The recent effort by the Maritime and Port Authority of Singapore and Enterprise Singapore, in which venture investors will inject a combined \$50 million in maritime technology start-ups, is a step in the right direction, but more can be done.

The engagement of older PMETs in start-ups encompasses more than taking on the lead entrepreneurial role. Few solo-founded start-ups succeed; most are team efforts.

Many older PMETs can act as early angel investors or advisers, or take up interim senior management roles in start-ups led by younger entrepreneurs who have the drive and tech-savviness but lack business experience, industry-specific domain knowledge or connections.

Such inter-generational matching, however, does not happen easily as it requires the right chemistry and mutual trust, which are often developed only after a process of mutual learning, adaptation of work culture and role expectations on both sides.

While a lot of the Government's current skills development policy focus has been on technical skills retraining of older PMETs, more attention needs to be paid to PMET training to foster mindset change, such as risk tolerance, and to develop interpersonal skills, such as coaching skills.

From a longer-term perspective, Singapore's rapidly ageing society will result in significant growth in the pool of older PMETs, including many reaching the traditional retirement age, but who still have much to contribute productively.

This is provided the right engagement opportunities can be designed, such as stock option vesting, and effectively matched to their time preference, for example, taking on a part-time role.

More policy research and policy experimentation should be encouraged to promote productive longevity through supporting the engagement of older PMETs in start-up entrepreneurship.

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\* Wong Poh Kam is a professor at NUS Business School and formerly the director of the NUS Entrepreneurship Centre, a division of NUS Enterprise. Ho Yuen Ping is associate director at the NUS Entrepreneurship Centre.

## **Appendix G: Proposed Questionnaire for Pilot Testing (Stage 1)**

### **Survey on the State of Readiness for Entrepreneurial Opportunities**

Dear respondent,

I am ALBERT NG KEE CHYE, a postgraduate student of University of Wales Trinity Saint David (UWTSD), United Kingdom, undertaking a Doctor of Business Administration Degree. This survey conducted is part of my research on the factors influencing the state of readiness of late-career PMETs in Singapore for entrepreneurial opportunities.

Your responses to the questions listed behind are very important to the success of this study. Please also take note that all information you provided in this survey will be kept strictly **PRIVATE & CONFIDENTIAL**.

This survey will likely take up 15 minutes of your time. Kindly note that by filling up this questionnaire, you have given your consent to be part of this study. However, if you don't feel comfortable answering any of the questions, you may choose to skip it or withdraw totally from the survey at any point in time.

**Section 1: Qualifying Questions**

Are you over 50 years old and previously a PMET?

YES  NO

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Are you currently an entrepreneur or previously have at least 3-month of entrepreneurial experience?

YES  NO

*If both of your answers to above questions are "YES", please fill in the Questionnaire below.*

**Section 2: Reasoning Questions**

**In below two questions, you are to indicate your answer by placing a TICK on ONE of the 5-point rating box below.**

1. How would you rate your state of readiness to spot (identify) business opportunities when you first make the move to entrepreneurship? State of readiness refers to a combination of attitude and mindset, skills, networks, finance, etc. (you can only choose one answer)

1 Very Low	2 Low	3 Neutral	4 High	5 Very High
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Reasons for your selection.

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2. How would you rate your state of readiness to take action (exploit) on business opportunities when you first make the move to entrepreneurship? State of readiness refers to a combination of attitude and mindset, skills, networks, finance, etc. (you can only choose one answer)

1 Very Low	2 Low	3 Neutral	4 High	5 Very High
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Reasons for your selection

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**Section 3: Survey Questions on Psychological Capital Inherence**

Listed below are statements/questions, in which you are to indicate the extent of your Agreement or Disagreement by placing a TICK on ONE of the 7-point Likert-scale box below.

1. I am a positive person who has a strong belief that my goals can be achieved. You can only choose one answer.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>More or Less Disagree</b>	<b>Undecided/ Neutral</b>	<b>More or Less Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

2. I do not give up easily whenever I encounter a challenge or problem. You can only choose one answer.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>More or Less Disagree</b>	<b>Undecided/ Neutral</b>	<b>More or Less Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

3. I expect that there will be times of doubts and periods of uncertainties in life. You can only choose one answer.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>More or Less Disagree</b>	<b>Undecided/ Neutral</b>	<b>More or Less Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

4. I expect that there will be times in my life that I need to take some risks in making important decisions. You can only choose one answer.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>More or Less Disagree</b>	<b>Undecided/ Neutral</b>	<b>More or Less Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

5. I am highly motivated to make my move into entrepreneurship. You can only choose one answer.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>More or Less Disagree</b>	<b>Undecided/ Neutral</b>	<b>More or Less Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

6. What motivates you to move into entrepreneurship? You may select more than one answer by ticking the boxes below.

<b>1</b> I wanted to take advantage of a business opportunity.	
<b>2</b> I was having no better choices for work at that time.	
<b>3</b> I have always wanted to achieve something in my life.	
<b>4</b> I have relatives and friends who are successful entrepreneurs.	
<b>5</b> I always wanted people to listen to me.	
<b>6</b> I wanted to be independent.	
<b>7</b> I want to be in control of my work, time and finances.	

7. Starting my own business was challenging but I was able to overcome them. You can only choose one answer.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>More or Less Disagree</b>	<b>Undecided/ Neutral</b>	<b>More or Less Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

8. I was confident and ready to engage in start-up activities. You can only choose one answer.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>More or Less Disagree</b>	<b>Undecided/ Neutral</b>	<b>More or Less Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

9. I believe I have the ability to engage in start-up activities when venturing into entrepreneurship. You can only choose one answer.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>More or Less Disagree</b>	<b>Undecided/ Neutral</b>	<b>More or Less Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

10. I believe I have other advantages which helped me in the start-up activities when venturing into entrepreneurship. They are:

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**Section 4: Survey Questions on Human Capital Inherence**

1. How many years of Managerial Experience do you have prior to taking up entrepreneurship?

You are to indicate the number of years of your prior managerial experience by placing a TICK in the appropriate box below.

Number of Years in Managerial Position			
<3	3-6	7-10	>10

2. What is the position of your Prior Managerial Experience?

Position in Prior Managerial Experience				
Executive	Junior Manager	Middle Manager	Senior Manager	Not Applicable

3. What is the number of markets (in terms of country or segment) previously served by you?

You are to indicate the number of markets served by you during your prior managerial experience by placing a TICK in the appropriate box below.

Number of Markets previously served			
<3	3-6	7-10	>10

4. I am good at serving market needs (products and pricings) in my previous experience.

You can only choose one answer.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	More or Less Disagree	Undecided/ Neutral	More or Less Agree	Agree	Strongly Agree

5. What is the number of customers previously served by you?

**You are to indicate the number of internal or external customers served by you during your prior managerial experience by placing a TICK in the appropriate box below.**

Number of Customers previously served			
<3	3-6	7-10	>10

6. I am good at serving the customers' needs (delivery of service quality) in my previous experience. You can only choose one answer.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	More or Less Disagree	Undecided/ Neutral	More or Less Agree	Agree	Strongly Agree

7. From the given list of Skillsets below, indicate your Proficiency Level by circling your Answer - 1 (Very Poor); 2 (Poor); 3 (Acceptable); 4 (Good) and 5 (Very Good)

	Proficiency Level - Between 1 (Very Poor) to 5 (Very Good).					Have you attended courses or obtain certifications for this skillset?
<b>1 Creative Thinking</b>	1	2	3	4	5	YES / NO
<b>2 Problem Solving</b>	1	2	3	4	5	YES / NO
<b>3 Decision-making</b>	1	2	3	4	5	YES / NO
<b>4 Motivating Others</b>	1	2	3	4	5	YES / NO
<b>5 Managing Conflicts</b>	1	2	3	4	5	YES / NO
<b>6 Leading Others</b>	1	2	3	4	5	YES / NO
<b>7 Teamwork</b>	1	2	3	4	5	YES / NO
<b>8 Communication</b>	1	2	3	4	5	YES / NO



**Section 5: Survey Questions on Social Capital**

1. For each of below given types of Social Relationships, estimate your Network Size. You are to indicate the Number of Members per network type by placing a TICK in the appropriate box below.

Type of Social Network (Relationship)	Give estimation of Social Network Size (Number of Members)			
	<6	6-10	11-15	>15
1. Immediate Family				
2. Relatives				
3. Close Friends				
4. Schoolmates (e.g. primary, secondary, college, etc)				
5. Community Friends (e.g. from neighbourhood, society, etc)				
6. Social Acquaintances (e.g. Friends of friends)				
7. Online/Social Media Friends (e.g. Linkedin, Facebook, etc)				

2. What is the number of years of your Relationship?

You are to indicate the years of Relationship per network type by placing a TICK in the appropriate box below.

Type of Social Network (Relationship)	Number of years of Relationship			
	< 6	6-10	11-15	>15
1. Immediate Family				
2. Relatives				
3. Close Friends				
4. Schoolmates (e.g. primary, secondary, college, etc)				
5. Community Friends (e.g. from neighbourhood, society, etc)				
6. Social Acquaintances (e.g. Friends of friends)				
7. Online/Social Media Friends (e.g. Linkedin, Facebook, etc)				

3. Give an estimated size of your Business Network?

You are to indicate the Number of Members per network type by placing a TICK in the appropriate box below.

Type of Business Network (Relationship)	Give estimation of Business Network Size (Number of Members)			
	<6	6-10	11-15	>15
1. Business Partners (e.g. people you know and work with in the current business set-up)				
2. Ex-Colleagues (e.g. people you know and worked with in previous firms, projects, etc)				
3. Business Associates (e.g. people you know from the same industry or market)				
4. Business Competitors (e.g. people you know from competitive firms, etc)				

4. What is the number of years of your Business Network Relationship?

You are to indicate the years of Relationship per network type by placing a TICK in the appropriate box below.

Type of Business Network (Relationship)	Number of years of Relationship			
	<6	6-10	11-15	>15
1. Business Partners (e.g. people you know and work with in the current business set-up)				
2. Ex-Colleagues (e.g. people you know and worked with in previous firms, projects, etc)				
3. Business Associates (e.g. people you know from the same industry or market)				
4. Business Competitors (e.g. people you know from competitive firms, etc)				

Thank you for taking time to participate in this survey. Rest assure that the information you have provided will be kept strictly PRIVATE & CONFIDENTIAL.

- End of Survey -

**Appendix H: Proposed Questionnaire for Main Survey (Stage 2) hosted on Survey Monkey online platform**

**Qualifying Questions**

**If both of your answers to below questions are YES, then proceed to fill in the Questionnaire.**

\* 1. Are you over 50 years old and a PMET (Professional, Manager, Executive and Technician), or previously worked as a PMET?

Yes

No

\* 2. Are you a business owner, or do you currently manage a business unit in a company?

Yes

No

## Key Research Questions

If you are not comfortable to answer any of the questions, you may choose to skip it or withdraw from the survey at any point in time.

\* 3. Before the Covid-19 pandemic, how would you rate your state of readiness to identify business opportunities? State of readiness generally refers to a mental preparedness to act.

- Very High
- High
- Average
- Low
- Very Low

Reason for your selection

4. Before the Covid-19 pandemic, how would you rate your state of readiness to exploit business opportunities? State of readiness generally refers to a mental preparedness to act.

- Very High
- High
- Average
- Low
- Very Low

Reason for your selection

\* 5. I am a positive person who has a strong belief that I can achieve my goals.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

\* 6. I do not give up quickly whenever I encounter a challenge or problem.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

\* 7. I expect that there will be times of doubts and periods of uncertainties in life.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

\* 8. I expect that there will be times in my life that I need to take some risks in making important decisions.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

\* 9. I am highly motivated to take up Entrepreneurship.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

\* 10. What motivates you to consider Entrepreneurship? (You may select more than one answer by ticking the appropriate box below)

- I wanted to take advantage of a business opportunity
- I was having no better choices for work at that time
- I have always wanted to achieve something in my life
- I have relatives and friends who are successful entrepreneurs
- I always wanted people to listen to me
- I want to be independent
- I want to be in control of my work, time and finances
- Other (please specify)

\* 11. I believe it is easy to overcome the challenges in starting my own business.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

\* 12. I am confident to engage in Entrepreneurial start-up activities.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

13. I believe I have other advantages which can help me in Entrepreneurial start-up activities. They are:

\* 14. How many years of professional managerial experience do you have? If you are a business owner, it refers to the point in time when you just took up entrepreneurship?

- More than 10 years
- 7-10 years
- 3-6 years
- Less than 3 years

\* 15. What is/was the position of your current/last managerial experience?

- Director/General Manager
- Senior Manager
- Middle Manager
- Junior Manager
- Executive/Team Leader
- Other (please specify)

16. Following up on Question 15, how many markets and customers do/did you served in that managerial position?

	More than 10	7-10	3-6	Less than 3
Markets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 17. I am good at serving both the market (products and pricings) and customer (service quality).

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree



18. From the given list of skill sets below, indicate your proficiency level by selecting the appropriate box.

	Proficient	Average	Not Proficient
Creative Thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Problem Solving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decision Making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leading Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing Conflicts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teamwork	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 19. I have attended formal training, and obtained certifications for the skill sets mentioned in Question 18?

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

20. For the given types of Social Network Relationship, provide an estimated member size for each.

	Less than 6 members	6-10 members	11-15 members	More than 15 members
Immediate family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schoolmates (primary, secondary, college, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community friends (from neighborhood, society, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social acquaintances (friends of friends, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online/Social media friends (Facebook, Linked-in, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. What is the number of years of each Social Network Relationship?

	Less than 6 years	6-10 years	11-15 years	More than 15 years
Immediate family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schoolmates (primary, secondary, college, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community friends (from neighborhood, society, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social acquaintances (friends of friends, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online/Social media friends (Facebook, Linked-in, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>