

Original Article

Personal Entrepreneurial Competency and Entrepreneurial Intention of Master Plumbers in Davao City, Philippines

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Abstract: *The study analyzed the Personal Entrepreneurial Competencies (PECs) and Entrepreneurial Intention (EI) of Master Plumbers in Davao City. Using a descriptive-correlation research design, data were collected via an instrument with a range of 10 PEC and Entrepreneurial Intention that encompassed the LEP framework. The research investigated the PEC scores of 112 respondents, their level of entrepreneurial intention, and the determinants that significantly predict their entrepreneurial intentions. The results indicated that the experienced entrepreneurs scored high in persistence, goal setting, and risk-taking, while the low score was recorded under demand for quality and efficiency and self-confidence. The average score for entrepreneurial intention was moderate ($M = 4.429$, $SD = 0.791$), which suggests the students have a strong entrepreneurial tendency. Using stepwise regression, five PECs—persistence, demand for quality and efficiency, risk-taking propensity, information seeking behavior, and self-confidence—were identified as significant determinants of EI, with the latter being the strongest predictor. The results emphasize the role of educational exposure and focused skill development in increasing the entrepreneurial potential of technical professionals. The study suggests that empirical and theoretical programs of entrepreneurship education and competency-based training must be incorporated into master plumbers' continuing professional development if their entrepreneurial potential is to be enhanced.*

Keywords: *Personal Entrepreneurial Competencies, Entrepreneurial Intention, Master Plumbers, Risk-Taking, Self-Confidence.*

I. INTRODUCTION

In the rapidly changing business world, effectiveness is particularly relevant given the rapidly changing nature of today's business environment, where competence means taking the initiative. Economic success increasingly depends on entrepreneurship, which offers an outlet for talented people in the workforce to create livelihoods and businesses. But, even though technical people are experts in their domain areas, they also have very poor knowledge of basic business topics such as finance, marketing, and strategy that can make the difference between a successful venture and one where considerable money is squandered.

Despite their technical capability, some engineers and master plumbers face challenges as they shift into Lagos Business School overseas bank entrances essay writing competition potentials (Gujford, 2024). The classical approach to education and training in technical areas focuses on becoming an expert, which can leave serious gaps in business knowledge, as some empirical research shows that engineering and technical professionals often lack an entrepreneurial background (being insufficiently trained at entrepreneurship) to be able to recognize and exploit new or existing market opportunities (Pitel, 2017). The lack of business savvy will make it more difficult for professionals to operate and financially survive (Baum et al., 2014).

People in technical roles frequently face fear and hesitation about doing some business-related work, such as managing finances, marketing, or accounts, because they are generally not used to it, so they do not learn how these things are done. It's also why many are hesitant in moving into entrepreneurship, fearful and lacking confidence in some fundamental skills of business. They are nervous about having little experience in finance, marketing, and bookkeeping. According to Phelan and Sharpley (2012), employees with technical skills, who generally lack business knowledge in these crucial areas of entrepreneurial ability, can experience great difficulty achieving results due to the same fact. An obstacle for experts is difficulty solving the right business problems and successfully setting priorities in order to move the complex business forward (Kothadiya, 2017). Tech-related employees often find it difficult to carry out crucial business activities such as those concerning financing aspects of the business because of a lack of entrepreneurial competencies necessary to manage and develop a business well (Rae, 2004). The absence of entrepreneurial skills can lead to fear of failure, low self-efficacy, and reluctance to engage in independent business activities (Mutmainnah et al., 2024).



Moreover, the plumbing industry in general experiences challenges towards entrepreneurial development since it is mostly comprised of small business owners or micro-entrepreneurs who have limited access to institutional support services for enterprise (Tan et al., 2023). Master plumbers are typically not experts in financial management, marketing, or the legal issues related to setting up a business and hiring help, so added costs like these add strain. Such constraints underline the importance of a heavier emphasis on PECs to help increase entrepreneurial literacy and entrepreneurial preparedness.

In the country of the Philippines, working as a master plumber could earn you a sustainable income and career progression, but owning your own plumbing business can really give you an additional boost both locally and over internationally bounds. Plumbers with an entrepreneurial spirit can go on to set up service companies, consult, tender for major projects, and provide paid work for other workers (Zhao et al., 2021). The government has acknowledged the plumbing industry's contribution to infrastructure development and housing programs under the "Build, Build, Build" program. Although the job market is favorable, a skills gap exists, especially in rural and developing areas where certified master plumbers are scarce (TESDA, 2022).

Most studies that have explored PECs within the area of self-development have tended to examine general entrepreneurs, business students, or corporate individuals (Mitchelmore & Rowley, 2010). Only a few studies have been conducted to survey the connection between PECs and entrepreneurial intention in technical professionals (Sánchez, 2011). Furthermore, prior research on entrepreneurs in engineering and construction disciplines has mainly focused on the financial and operational barriers to establishing a business, such as access to financial support, project management, and compliance (Abd-Hamid et al., 2015; Akhund et al., 2017). Yet there are very limited studies that have considered in what way the personal competencies affect entrepreneurial intention, creating a void of knowledge about how these competencies develop the technical professional's entrepreneurial mindset (Sánchez, 2013).

By uncovering critical entrepreneurial success factors, this study can offer insights that will enable technical professionals to become more self-assured and better equipped to understand their own hurdles and get the skills they need in order to make a successful move. This investigation will concentrate on the master plumber's organization members in Davao City, and how their entrepreneurial competencies affect them towards the start and continuance of business.\

A) Research Objectives

The following objectives will be met by this paper;

- i. To establish the Personal entrepreneurial competency of the respondents in opportunity seeking, Persistence, 3 Commitment to work contract, d) Demand for quality and efficiency e) Risk taking f) Goal setting g) Information seeking h) Systematic planning and monitoring i) Persuasion and networking j.)Self-confidence.
- ii. Measurement of entrepreneurial intention of the respondents.
- iii. To determine the indicators of Personal entrepreneurial competences that are predictors of entrepreneurship intention.

II. LITERATURE REVIEW

A) Personal Entrepreneurial Competencies

Personal entrepreneurial competences (PECs) are the indispensable traits and skills that make individuals good at successfully carrying out entrepreneurial activities. These competencies are essential if entrepreneurship is to succeed and often are developed with specific training programs and courses. According to Rosita (2023), PECs are a set of skills and attributes that allow individuals to find opportunities. People with PECs will escape constraints and penetrate markets, then manage challenges effectively. This original version includes such things as persistence, problem-solving ability, confidence in themselves, and doing a good job. MSI's PECs have been widely accepted and generally supported in the field of human behavior research. There are ten major competences, including: (1) Opportunity Seeking, (2) Persistence, (3) Commitment to Work Contract, (4) Risk-Taking, (5) Demand for Efficiency and Quality, (6) Goal Setting, (7) Information Seeking, (8) Systematic Planning and Monitoring, (9) Persuasion and Networking, and (10) Self-Confidence (Reyes et al., 2018).

Opportunity seeking: It is an essential trait of entrepreneurs, showing their ability to identify and exploit potential business opportunities. This trait is influenced by factors such as motivation, socio-demographic aspects, and the entrepreneur's responsiveness to the market. Entrepreneurs are often moved by a combination of motivation and aspiration, which greatly affects their behavior of seeking opportunities. Thus, willingness to become an entrepreneur is positively correlated with purposeful opportunity searching, which stresses individual motivation (Zhou & Wu, 2021). Factors such as age, gender, education, and income may shape people's opportunity motivations. However, male entrepreneurs aged 45-64 with secondary education and lower household income are more willing to exploit opportunities (Amidžić, 2019). Entrepreneurs see opportunities, whereas non-entrepreneurs do not. This is the first distinction. Entrepreneurs either actively seek out opportunities or think up the best way of turning them into operational reality, highlighting a dual approach to company creation (Chaston, 2017).

Persistence: It is a vitally important characteristic that has a strong impact on the venture's success and survival. It consists of the entrepreneur's ability to maintain their motivation and continue engaging in business even when confronted with difficulties and setbacks. This characteristic is influenced by various factors, such as personal traits, external pressures, and the nature of the business itself. Human capital, business characteristics, and possessing employees are crucial. For example, entrepreneurs with more workers and lower operating debt are more likely to be persistent, while high debts lower the probability of this occurring (Coppens et al., 2021). Different types of commitment, such as affective commitment and normative commitment, affect the pathway of persistence. Affective commitment is particularly important for long-term persistence (Gabay-Mariani et al., 2023). The work of Entrialgo, Fernández, and Vázquez (2017) emphasized the importance of persistence and identified risk-taking as a strong predictor of entrepreneurial intentions among students. Ismail, Khalid, Othman, Jusoff, Rahman, Kassim, & Zain (2018) found that entrepreneurial competencies, particularly persistence and goal-setting, were significantly associated with positive entrepreneurial intentions among Malaysian university students.

Commitment to work contract: Entrepreneurship and its supportive psychological contracts lend diversity to the world of work. Procedural, associational, constitutional, and polyarchic are the psychological contracts of entrepreneurs. This flexibility feels the absence of a given structure affords them a great range, but it also ensures against unvarying performance over time. No Payments; Performance; Incentive et al., 2020. A lack of this flexibility would otherwise mean that many of the entrepreneurial positions created by people with different backgrounds and career levels would go unfilled (Itami 1987, Lahtinen & Shelton, 2024). However, this kind of contract makes it possible to achieve certain forms of stability even in contemporary social environments: it is just these contracts that afford people some sanctuary from the breakneck business world. More liberal forms of commitment, whether value-based or those with the exchange of agreed services for one of variable value, affect the behavior of entrepreneurs and so shape their business results. (Gabay-Mariani & Barbosa, 2024). There is a trade-off between upfront and delayed contracting for team members, and it affects team dynamics. Provisional contracts can help relieve such hassles (Hellmann & Thiele, 2015).

Risk-Taking: Entrepreneurial risk-taking is a pivotal characteristic that significantly influences business performance and success. Research indicates that risk-taking propensity varies across different stages of a venture, with early-stage entrepreneurs typically exhibiting higher levels of risk-taking compared to those in later phases (Salmony & Kanbach, 2022). The study by Liñán and Chen (2017) shows that entrepreneurial intention is significantly influenced by students' personal attitudes and perceived behavioral control, both of which are closely associated with entrepreneurship competencies such as risk-taking and persistence.

Early-stage entrepreneurs are taking more risks, an essential condition of pioneering. On the other hand, entrepreneurs who reach later stages are probably more cautious; they are more purely exploiting the opportunity in front of them, and it may not be feasible to strive for too much at one time (Salmony & Kanbach, 2022). Studies suggest that there is a direct link between entrepreneurial risk-taking and improved business performance. In micro-enterprises, the risk propensity of entrepreneurs emerges as the key factor: Entrepreneurs in Skikda, Algeria 22% explained to us that their success would be due primarily to entrepreneurial risk-taking among other factors (Messikh, 2022).

For Efficiency and Quality: A prerequisite of successful entrepreneurs is their starting point, as well as what defines their ability. Being more efficient will help them to overcome challenges faced by the enterprise; coupled with refined production or service quality, this generates ongoing sales and orders. Good quality management practices are required by all product manufacturers. Provides greater customer satisfaction and further removes the risk to reputation for companies, as the motivation for making money is further increased. Effective quality management systems both help financial performance and operational efficiency. It is based on statistical thinking. A business owner must make rational choices that are in tune with the needs of the market he supplies. This will greatly increase efficiency throughout the whole process, and hence profits will similarly climb accordingly (Guo, 2023).

Goal Setting: Abstract entrepreneurs exhibit certain goal-setting characteristics that significantly influence the way they create businesses. At the same time, what many entrepreneurs look for is how to maximize their effort, developing anything of value from an idea in the shortest time. Achievement striving is a significant predictor of entrepreneurial aspirations (Ogunyemi et al., 2023). Research has shown that entrepreneurs who are successful often set multiple, clear, specific, and viable goals that they chase after at the same time. So not only are their aims more achievable and accurate, but this may lead to better achievements in general. It is to the benefit of entrepreneurs to break down great tasks into small parts. Goals that are clear and specific bring rational emphasis to decision-making; not only does this permit you to control yourself, but it also helps to guarantee that the way forward will be smooth, with clarity of direction. Entrepreneurs need to continue assessing and adjusting their goals based on progress and changing circumstances. This possibility allows them to throw off fruitless goals without any compunction and turn to try out new opportunities instead, thereby increasing their chances of success (Schjoedt et al., 2015). Productivity striving is a significant predictor of entrepreneurial aspirations, pointing to the importance of strong

goal setting in this area (Ogunyemi et al., 2023). Kolvereid (2016) found that goal-setting behavior is significantly related to intentions of entrepreneurial career in Norway.

Information Seeking: Digitalization, critical literacies, and relational dynamics have made entrepreneurs exhibit different information-seeking characteristics. Their behaviors in the information-seeking process are important resources and opportunities that influence personal or business growth. This chapter discusses some key aspects of these characteristics. With the growth in entrepreneurial sectors, digital sources for information are now used more and more frequently. Consequently, it is essential that people have excellent information literacy skills to sift through the ocean of data (Orrensalo 2023). Social interactions significantly impact people's searching behavior. Trust, emotional support, and familiarity make better opportunities more accessible. Mentors often take important roles in the information network (Chen 2010, p. 835). When it comes to entrepreneurs in developing countries, they often rely on their own social networks for leads. This suggests that relational dynamics might play a profound role in information-seeking processes. (Zhang and Cai 2007) Information services in developing countries are becoming more and more diverse. Therefore, one-size-fits-all approaches simply won't do (Lillard 2014). Proactive information gathering is key when it comes to intending to form an enterprise, as Fayolle and Gailly (2019) pointed out. The study of Entrialgo et al. (2017) found that information-seeking, persistence, and risk-taking were all significant predictors of entrepreneurial intention.

Successful entrepreneurs have systematic planning and monitoring, and anything in between that can help them efficiently navigate the complexities of business ventures. Entrepreneurs who engage in structured planning are in a better position to set quantitative goals, measure their own progress, and adapt to new circumstances. Challenging but realistic targets are of great importance for judging success and performance. In their ventures, which entrepreneurs systematically assess, they also make complete business plans. Systematic planning incorporates feedback loops, allowing entrepreneurs to make adjustments in their strategies (Ehmke & Boehlje, 2005). Entrepreneurs who emphasize strategic planning align their resources and focus towards long-term goals, thus increasing their competitive edge (Suklev et al., 2015). Keeping a close eye on the progress of their goals allows the timely initiation of interventions, taking us to reassign resources so that growth is maintained (Hisrich & Ramadani, 2017).

Persuasion and Networking: Entrepreneurs have distinctive features in both persuasion and networking that are of serious importance to their success. By their self-efficacy, they transform self-identity, hence increasing persuasion capacity to form business partnerships and attract investment. Strong social ties aid in persuasion, as entrepreneurs mobilize allies and support through a network (Karam, 2022). Entrepreneurs manage their networks actively, adjusting them according to the environment and resource needs that change. Thus, navigating through uncertainty is an integral part of their survival strategy (Elfring & Hulsink, 2019). Actively investing in building and maintaining networks is important in determining the performance of an enterprise, with social capital as a moderating variable (Akol, 2020). Entrepreneurs exploit their networks (relatives, friends, business associates) in order to obtain information on financing and advice, which is vital in the startup phase and subsequent expansion of their operations (Mba, et al., 2017).

Self-confidence: An entrepreneur's success and ability to resolve problems depend largely on how self-confident they are. High self-confidence is a prerequisite to taking risks. This attribute, vital for entrepreneurial success (Gunawan and Syah, 2013), fosters innovation. Entrepreneurs with strong self-assurance are much more likely to pursue innovative ideas and businesses even in challenging environments (Ranti et al., 2013). Self-efficacy enhances persistence. Startups can only be successful if they keep going after failing, and such resilience is key. Self-efficacy helps to maintain a positive attitude during difficult periods like economic downturns, which is crucial for overcoming obstacles (Zuliani, 2013). The lack of experience or practical exposure that is characteristic of students at this stage also makes it difficult for them to be confident about their success in entrepreneurship. However, as noted by Zuliani in the same volume, no substantial differences were observed when comparing thoughts on what kind(s) of role models proved most effective.

On the other hand, a study by Reyes et al (2012) showed that in all but two areas of PEC opportunity seeking and persistence, there was a significant correlation between EI and competency. Moreover, students' PEC scores in all areas improved after taking the course in ASE.

B) Entrepreneurial Intention

Those who indicate their intention to engage in entrepreneurship have a belief or commitment to start a new business or pursue other entrepreneurial activities. The willingness differs between one person and another, and it is also subject to psychological factors such as attitude toward entrepreneurship and perceived behavioral control (Huang, 2024). It can be seen as the motivation of business majors to set up their own enterprises, which is affected by both push and pull. Independence push factors balance off the pull of achievement or recognition (Tewari, 2023). Kolvereid (2016) found that individuals who score highly on EI usually think hard about carrying out aims and then dare to take the risk that entrepreneurship entails.

In addition, one of the most crucial findings of this study was that PECs are significantly correlated with entrepreneurial intent. Studies found that these competencies may be cultivated by education and experience--thereby encouraging individuals to start enterprises. (Botha & Taljaard, 2021) We conclude that PECs such as achievement and personal maturity have a distinct influence on entrepreneurial intention in Jakarta, while individual achievement, thinking, and problem-solving all bear an impact on entrepreneurial intention in Balikpapan. PECs are of great importance to the actual practice of entrepreneurship. (Sandroto et al., 2024) Entrepreneurial intention has a positive correlation with PECs. The study found that people who possess more competencies are more likely to seek entrepreneurial opportunities, but that education for entrepreneurship showed no significant effects. (Malebana & Vhukeya, 2023) Here we see that Ismail et al.'s research showed that university students who possess higher PECs usually report greater entrepreneurial intention.

A study found that accomplishments such as tenacity, hazard-taking, and information search techniques were all closely related to the likelihood of starting a business. (Schlaegel & Koenig, 2014) It is widely accepted in the literature that education appears to play a key role in shaping attitudes toward entrepreneurship. Entrialgo et al.'s (2017) study, in Ismail et al. (2018), and in general have indicated that people who have higher educational experience are more apt to approach an entrepreneurial ideal--they know entrepreneurship better. They also have acquired the "why and how to do it; thus, they have more possibility of undertaking entrepreneurial activities than people without this same training. (Fayolle and Gailly, 2019) However, Liñán and Chen (2011a) pointed out that entrepreneurial intentions are primarily driven by intrinsic motivations and cognitive perceptions rather than demographic traits alone.

Ismail et al.'s (2018) findings suggested that self-confidence and a desire for quality and efficiency were essential entrepreneurial competencies linked to intention. With their acknowledgments, Zhang and partner claim that both education and training should be tough, practical, and over a long time period if they are to have a genuine impact on the intentions of would-be entrepreneurs; but they emphasize that only a few countries can hope to achieve a high level in the near future. Zhang's group emphasized that program quality is an important thing: not just going through motions. Some remarks about entrepreneurship. But they also noted a somewhat moderate attitude towards entrepreneurship among students in countries with only limited facilities for business or institutional support.

C) Master Plumber

Master plumbers play an essential role in the construction and infrastructure sector in the Philippines. They specialize in the installation and maintenance of piping, ensuring that plumbing systems comply with safety codes and building codes. In order to safeguard public health, they are responsible for promoting clean water and hygiene. The clean water makes sure the number of gastrointestinal diseases remains low, while safety serves to remind us how soon we forget where we came from.

The Philippine Dual Training System combines instruction and practical learning to enhance the skills of plumbers, giving them better job prospects and higher pay. (Igarashi et al., 2018) In terms of the economy, construction is one of the driving forces for growth. It is expected to maintain an annual growth rate of around 6% over the next 15 years. (Siman, 2023) Initiatives such as the "Build! Build! Build!" program have increased labor demand; and skilled workers, including master plumbers, are now at a shortage in construction firms just wait to get one more warm body While it is vital for public health and economic development that master plumbers can be taught anywhere any time of day or night, there nonetheless exist some problems. The problems are related to training and skill development. The Philippines' master plumbers are eager and able, so they expect that any problems they come up against will not remain. Fostering successful entrepreneurship in Philippine universities can lead to a more general entrepreneurial tendency among students, in other words, a long-lasting legacy on the education level. (Campos, 2022) Moreover, the Davao region's orientation for multi-purpose cooperatives towards new technology also highlights how important modern methods of growth and trade are. (Perocho & Gempes, 2024)

There are several key factors that help promote entrepreneurship in the Davao Region. These include a supportive entrepreneurial environment, the tenacity of entrepreneurs themselves, and public policies favoring small business development. Small businesses receive priority attention below.

The Davao Region has made small businesses a priority, which is necessary for economic growth. State support and public-private partnerships are crucial in creating an atmosphere conducive to entrepreneurship. (Kocharnaya et al., 2018) The Department of Trade and Industry has been instrumental in promoting the growth of micro and small enterprises within the region. (Gumpad, 2024).

D) Entrepreneurship Among Construction and Allied Professionals

Entrepreneurship in the construction and plumbing trades offers special difficulties and opportunities that affect the fate of your business. Several important success factors have been found for research outlets aiming at identifying these 18 key indicators, so we shall attempt to summarize briefly here. Successful entrepreneurs often work this trade for more than ten years, giving them chances to make a go of themselves that are significantly better than those who merely dabble. Economic

factors (construction volume and building permits) are generally positive for entrepreneurial development, but unemployment inflation is a problems on the long-term horizon. The construction industry's multiplier effect on the economy underlines the need for innovation and entrepreneurship in order to drive growth efforts (Sebastian & Alina, 2014).

E) Theory Base

Entrepreneurial competency theory had links with psychologist David C. McClelland. The purpose of his article, 'Testing For Competence Rather Than For Intelligence', is to suggest that competencies like initiative, self-esteem, goal-setting, appraisal of risk, and persistence are more promising signs of our successes in entrepreneurship than IQ. The Entrepreneurial Competency Theory implies that successful entrepreneurship is the result of a combination of personal traits and learned behaviors. One of the key PECs, risk-taking, plays a crucial role in EI.

Entrepreneurial competences are strongly related to higher entrepreneurial intentions. This theory will particularly benefit the research since it provides a foundation for the identification and measurement of the Personal Entrepreneurial Competences (PECs) required by Master Plumbers in Davao City. But it is opportunity-seeking, perseverance, risk-taking, and relational construction that really lead to entrepreneurial success. The paper also discusses how these skills are formed in a being (product or service), learned, and realized, ultimately shaping the entrepreneurial readiness of master plumbers.

F) Conceptual Framework

Based on the foregoing discussions, this conceptual framework will be a guide to this paper.

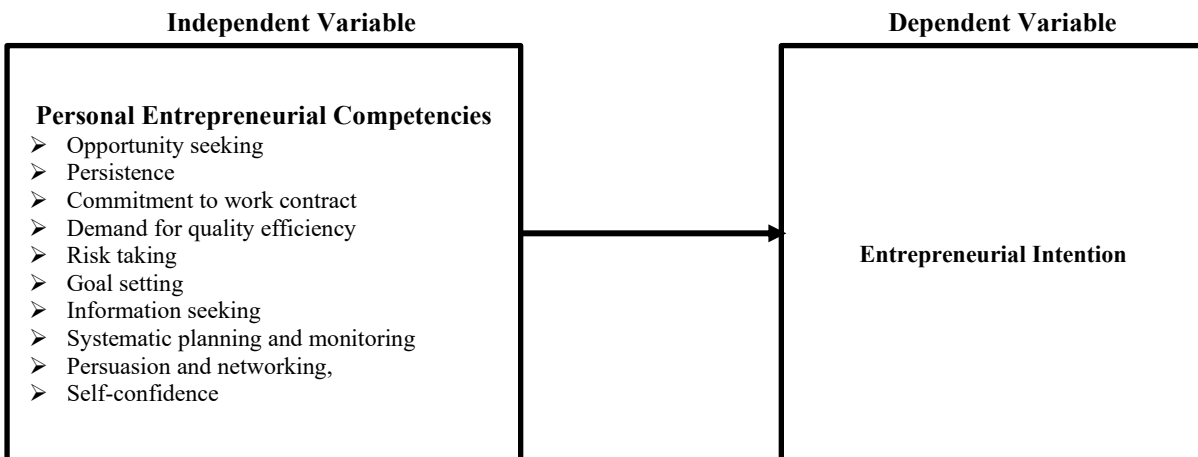


Fig.1. Conceptual framework showing the relationship between Personal entrepreneurial competency and Entrepreneurial Intention

G) Research Hypotheses

The hypothesis is formulated specifically for this study:

H₀: None of the Personal Entrepreneurial Competency indicators significantly predict the entrepreneurial intention of the respondents.

H) Methodology

This chapter will present the methods used in this study, including data sources, data collection tools, sampling methodology, research procedures, including the issue for investigation, and statistical processing of the information obtained. The study is a quantitative method. As such, according to Creswell (2014), objective theories are tested by looking into relationships between measurable variables using statistical techniques, including path analysis and structural equation modeling. The descriptive-correlational research design was specifically chosen to present the current status of Personal Entrepreneurial Competencies (PECs). The aim was not to alter any conditions, but more to show how these variables interrelate with each other. Primary data collection was carried out by means of a survey. The research instrument was given to members of the Master Plumbers Organization in Davao City. An instrument was developed with two sections. The first section contains the ten PECs adopted from Management Systems International (MSI) and is a self-assessment tool to see how each respondent measures up to common competencies. The second part is the Entrepreneurial Intention Questionnaire (EIQ) developed by Liñán and Chen (2009), using a five-point Likert scale ranging from "1" meaning "strongly disagree" through to "5" meaning "strongly agree".

III. RESULTS AND DISCUSSION

A) *Personal Entrepreneurial Competencies (PEC) Score of the Respondents*

Based on Table 3, the respondents' overall mean scores for the different Personal Entrepreneurial Competencies (PECs) ranged from 2.268 to 2.759 on a 3-point scale. The findings imply that respondents generally exhibit moderate to strong levels of entrepreneurial competencies, with both specific strengths and areas in need of improvement.

On the other hand, of the various PECs, Persistence obtained the highest mean value - 2.759 (SD =0.450), followed closely by Goal Setting and Risk Taking, both with a mean of 2.750 (SD = 0.475 and SD =0.493, respectively). This indicates that respondents are notably persistent in pursuing their tasks and objectives, and similarly comfortable taking calculated risks - both essential traits in entrepreneurial success.

Contrariwise, Demand for Quality and Efficiency scored the lowest average, 2.268 (SD =0.870), followed by Self-confidence (M =2.295, SD =0.877). From these results, we can see that although students display determination and clear objectives when setting goals, they may have a problem in consistently ensuring quality outputs and imbuing confidence in their entrepreneurial abilities at the same time. This could reflect the hesitations often seen among young or would-be entrepreneurs, especially in contexts where exposure to real-world entrepreneurial practice is limited.

Moreover, the outcome further indicates that while the respondents manifest some of the major characteristics of entrepreneurs, such as persistence, risk-taking, and goal-setting, they meet hindrances in doing so with self-confidence, demanding high product quality or high system efficiency and planning. Therefore, status needs to change: it suggests in favor of one-off programs or opportunities for experiential learning, which can foster these competences as yet more widely available.

The conclusions of the research in this paper fully reveal results from the research of Entrialgo, Fernández, and Vázquez (2017). They held forth that persistence and risk-taking are robust predictors for students' intentions of entrepreneurship in Universitaria II Dis-po sometime between September 2015 and May 2016. Rumor has it that Ismail, Khalid, Othman, Jusoff, Rahman, Kassim, and Zain (2018) discovered in their investigation of entrepreneurial competencies among students at Malaysian universities that the major drivers were persistence and goal-setting. If you got either one right, you would have good fortune!

In addition, the fact that students' Self-confidence and efforts to Ensure Quality Efficiency scored lower in their average marks mirrors findings from Liñán, Rodríguez-Cohard, & Rueda-Cantuche (2019). Even though entrepreneurial intentions stand high level on student opinion polls in these countries of southern Europe, fate sometimes may not smile favorably upon those who work for it. This is regularly due to lack of experience and practical exposure -- so says

Instead of this, results conflict with a study conducted by Gnyawali and Fogel (2016). They advocated that if people studied at institutions that enjoy well-supported entrepreneurial ecosystems, then they would naturally possess stronger self-confidence and a better instinct for ensuring product quality: that is to say, higher.

In short, the findings of this study confirm what is already known from the literature--that although PECs such as persistence, risk-taking and goal-setting may be well-established in many university students, development needs to be ongoing in such areas as having more self-confidence, maintaining standards for products and systems with an eye towards efficiency planning -- especially given how strongly other T-shaped graduates are competing for off-beat jobs these days.

Table 1. Personal Entrepreneurial Competencies (PEC) score of the respondents

Personal Entrepreneurial Competency (PEC)	Mean	Standard Deviation	Interpretation
Opportunity seeking	2.741	0.479	Strong
Persistence	2.759	0.450	Strong
Commitment to the work contract	2.732	0.484	Strong
Demand for Quality and Efficiency	2.268	0.870	Moderate
Risk Taking	2.750	0.493	Strong
Goal Setting	2.750	0.475	Strong
Information Seeking	2.482	0.805	Moderate
Systematic Planning & Monitoring	2.411	0.812	Moderate
Persuasion and Networking	2.607	0.606	Strong
Self-confidence	2.295	0.877	Moderate
Overall	2.580	0.635	Strong

B) The Level of Entrepreneurial Intention of the Respondents

According to Table 4, the average entrepreneurial intention of respondents was 4.429 (SD = 0.791), measured on a 5-point Likert scale. It can be inferred that respondents expressed very high levels of entrepreneurial intention. Indeed, with a mean that is relatively close to the highest possible score, it can be inferred that most respondents have strong desires or plans for future entrepreneurial activities.

Because the respondents exhibit high mean scores, they incline towards entrepreneurship and show considerable interest in business creation as well as setting up business enterprises. A standard deviation of 0.791 means a moderate variability in responses from the subjects; namely, even though most express strong entrepreneurial intentions, there are still a number of people who may have averages toward the low end.

The result is consistent with the mean scores for various entrepreneurial competencies that are predictive of successful entrepreneurship: Persistence (M = 2.759), Risk-Taking (M = 2.750), and Goal Setting (M = 2.750). It underscores to further that entrepreneurial intentions are more likely to be generated among students who possess mainline entrepreneurial character traits and mentalities.

This finding has been examined in greater depth by Li and Chen (2017), who discovered that entrepreneurial intention is significantly influenced by personal attitudes and perceived control over behavior, both of which are bound up with entrepreneurial competencies such as risk taking and persistence. Similarly, Kolvereid (2016) has shown that people with strong goal-setting behavior and a certain willingness to take risks generally earn higher scores for entrepreneurial intention.

Furthermore, the results mirror the work of Ismail et al. (2018), who found that students at universities with higher PECs generally had higher entrepreneurial intentions. The study found that competencies such as persistence, risk-taking, and information seeking sixth-home with the desire to start a business.

However, the results contrast with those of Zhang, Wang, and Owen (2020). They reported that students located in countries with low entrepreneurial ecosystems or weak institutional support had only moderate levels of entrepreneurial intention. This difference may suggest the establishment of a dynamic entrepreneurial ethos and perception among the subjects in this study, brought about perhaps by improved access to entrepreneurial education, digital tools, and the lack of existing models for new business operators.

In sum, the high mean entrepreneurial intention scores underscore the students' willingness and positive mindset toward entrepreneurship, which creates fertile soil for nurturing future entrepreneurs through targeted programs, counseling, and experiential learning events.

Table 2. The level of entrepreneurial intention of the respondents

Entrepreneurial Intention	Mean	Standard Deviation	Interpretation
	4.429	0.791	Strong

C) Personal Entrepreneurial Competencies (PECs) that best predict entrepreneurial intention

In order to ascertain which Personal Entrepreneurial Competencies (PECs) can significantly predict Entrepreneurial Intention among the respondents, regression analysis was performed. According to the table presented above, the overall model was highly significant: $F(10, 101)=154.242$, $p<.001$. This means that a set of PEC variables taken together can be used to predict entrepreneurial intention intensively. Therefore, in the future, maybe we can omit some variables, or add information about specific PECs-demand for quality and efficiency, or persistence, in one context, about why these things have such powerful effects on entrepreneurial intentions. As a consequence of this most important finding about self-confidence as a predictor for entrepreneurial intentions, any further discussion should clearly focus on how people can make themselves more self-confident.

Specifically, Persistence ($\beta = 0.169$, $p = 0.036$) was found to have a significant positive relationship with entrepreneurial intention. This means that people whose persistence is stronger are more likely than others to get involved in starting their own enterprise and make it successful. The demand for Quality and Efficiency ($\beta = 0.200$, $p = 0.005$) also exhibited a significant positive effect, showing that the higher people place their standards at or the speed of doing things in an enterprise, the more likely they are to express entrepreneurial intention. When it came to handling risk, ($\beta = 0.190$, $p = 0.002$) predicted entrepreneurial intention in a positive direction. Those who have the ability to weigh risks are likely to create stronger businesses and/or plans for themselves. Likewise, Information Seeking ($\beta = 0.218$, $p = 0.002$) also significantly combined with entrepreneurial intention. These results indicate that one's ongoing information search behavior supports the habit of study, which is needed in order to prepare for entrepreneurial action in any field. It has been reported that one's self-confidence ($\beta = 0.267$, $p < 0.001$) has the maximum impact, suggesting that a person's confidence in their own ability to undertake an

enterprise will very much determine how far those intentions are actually implemented. Continuing then, other PEC variables, including Opportunity Seeking, Commitment to Work Contract, Goal Setting, Systematic Planning and Analysis, and Persuasion and Networking, all failed to significantly predict entrepreneurial intention, meeting the standard of 0.05.

Instead, their p-values were higher than 0.05. It replicates the results of Entrialgo et al. (2017), which found persistence, risk, and information seeking to be key predictors of entrepreneurial intention. CHAPTER 1: IS ENTREPRENEURSHIP JUST ANOTHER JOB? They are also consistent with Ismail's (2018), who pointed out boldness and the demanding pursuit of excellence as two essential entrepreneurial competencies that underlie intention to establish a new enterprise. Here too, we collected evidence for the assertion of Liñán and Chen (2017) that belief in oneself -- not just any confidence, but technically speaking, this is called "self-efficacy--having a healthy level of this quality is Shen Kaiyuan's most important factor, which explains why people have entrepreneurial intentions. Such information-gathering behaviors also conform with Fayolle et al. (2019), who proposed that active information collection can help intensify people's ideas or concepts of entrepreneurship education.

This results in an increased likelihood later on to activate one's plans for action, at least in the direction spoken of here. Opportunity seeking and Goal setting did not significantly predict entrepreneurial intention, unlike Kolvereid (2016), who found goal-setting behavior in his study to be a predictor of entrepreneurial intentions and an enhancer to ensure their success. Different situations, such as different samples, the climate of entrepreneurship, and cultures or readiness for entrepreneurial engagement, are liable to lead researchers to report contradictory results.

Table 3. Personal Entrepreneurial Competencies (PECs) that best predict entrepreneurial intention

Personal Entrepreneurial Competency (PEC)	Standardized Coefficient (β)	p-value	Interpretation
Opportunity Seeking	0.008	0.915	Not Significant
Persistence	0.169	0.036	Significant
Commitment to Work Contract	0.058	0.254	Not Significant
Demand for Quality and Efficiency	0.200	0.005	Significant
Risk Taking	0.190	0.002	Significant
Goal Setting	-0.011	0.846	Not Significant
Information Seeking	0.218	0.002	Significant
Systematic Planning & Monitoring	-0.015	0.846	Not Significant
Persuasion and Networking	-0.005	0.921	Not Significant
Self-confidence	0.267	< .001	Most Significant

IV. CONCLUSION

A) Conclusion

Previous research has shown that the readiness for the Principle of Enterprise in China's eastern region. Based on this, some meaningful conclusions can be drawn about the Master Plumbers organization in Davao City for its entrepreneurial readiness and competencies.³

First, Persistence and Self-confidence, full aspects of enterprise planning, risk indication, recognizing an opportunity for gain, and motivation demand above average: These are predictors that must be taken seriously by any new business operator. Otherwise, with all their positive qualities, they will not succeed in maintaining a big enough position in a large development process.

Secondly, I have been enabled in this paper to place a code on the essence of PEC segments (main components but not all) that one could use under earlier conditions. By doing so, both sides' content was able to fit together and explain each other better than it used to at the systematic paragraph level in previous papers. Through this analysis, we are able to test null hypotheses 1 and 2. The conclusions are clear: PECs mean significant 11y influence individual enterprise behaviour; their weight of influence should be carefully controlled when predicting in the future whether someone is going likely to take up or stay with an entrepreneurial career Third, Evaluating real conditions leads to the conclusion that no single personal entrepreneurial competence can by itself cause promotion in an MNC culture: without sufficient other qualities such as strong intent or a thorough PLDC for example to back up the requisite skill set And then there are some practical matters, which is why from this evaluation process I believe that

One third, the high level of personal entrepreneurial competency and entrepreneurial intention among respondents indicates that there is a strong hidden potential for entrepreneurship within this organization. Despite existing gaps in specific competencies, the majority of members are generally motivated and qualified to try out new businesses. This underscores both the critical opportunity for educational institutions and policy-makers, as well as the need for practical technical assistance, which will ensure these resources can translate their intentions into action.

While self-confidence was rated only at a moderate level among respondents, regression analysis revealed it as the strongest predictor of entrepreneurial intention. This means that future actions in the enterprise of the master plumbers in this organization depend mainly on changing members' self-confidence. Since other competencies, such as persistence and risk-taking, were already rated high, self-confidence emerges as the key determinant separating people with stronger entrepreneurial intentions from others. In collectivist cultures (like those found in the Philippines), people will probably undervalue their self-confidence for reasons of humility or social face, which would even lead them to make worse scores on a PEC. But then internally, still plays the most decisive role when they look at future entrepreneurial enterprises.

To sum up, this study confirms that training, mental progress, and pedal exercises are important in fostering entrepreneurial behavior. While master plumbers in the age of reform have a clear entrepreneurial spirit, actualizing the potential practice of economic activities with higher productivity is an event largely determined by how stakeholder groups decide that they will provide enhanced education, practical rather than official administrative worker training, or mentor-and-protégé relationships, or long-range entrepreneurship support programs.

B) Recommendations

In light of the conclusions above, a number of suggestions are hereby made:

1. Incorporate education about entrepreneurship into your organization's training programs. Lessons on technique and technology can be of use, but learning by doing will also play a very important role here, and so it must be passed on in ways that make use of methods to enhance one's sense of both safety and feeling while performing one's work.
2. Develop targeted measures: seminars that take up issues related to self-confidence or efficiency, study groups for people who want to improve their demand-side service quality, and creative spirit. Such measures should use experiential learning methods that are more interesting and effective than lectures, including real experiences, such as internships.
3. Take practical chances to learn. For instance, spend time with a mentor or intern in a real company where you can put what you've learned into practice and observe the results for yourself.
4. Establish a system of mentorship to help rookies get started and learn from successful models. This 'peer learning' approach can provide practical advice, sympathy for the struggles ahead, as well as good examples of effective entrepreneurial behavior.
5. Take existing programs that focus on business or work skills and improve them. Make the courses more practical, more intense, and result-oriented. It is insufficient to just attend class. Practical work must be taught well and be useful in practice, not simply learning about it.
6. Additional research is needed to find out why some PCS—which of course includes opportunity seeking and goal setting—were not found to be significant for entrepreneurial intentions. Qualitative methods would yield a more profound understanding by looking at more specific factors in situ, both cultural and psychological, that explain what entrepreneurship means for the master plumber. This might include interviews and focus group discussions with other master plumbers.

Interest Conflicts

The authors declare that there is no conflict of interest concerning the publication of this paper.

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