COMPETENCIES FRAMEWORK FOR CULINARY PROFESSION IN MALAYSIAN HOTEL SECTOR

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It was one of the longest years I've ever had, but by the time this piece of work were submitted, I was reminded of Allah's subhanahu wa ta'ala wisdom from Surah al-Baqarah, verse 216: "... it may well be that you hate a thing while it is good for you, and it may well be that you love a thing while it is bad for you. And God knows, whereas you do not". Alhamdulillah. "Verily, with hardship, there is ease."

The three-year postgraduate journey is indeed very challenging. The tide is high but I always believe; it takes time to save time, it requires competency to build competency. I am thankful to Allah, for I was surrounded by beautiful and audacious hearts, which encouraged me to have a strong, bold determination in chasing my dreams. Thus, the completion of this thesis has been made possible only through the encouragement and support of many individuals. I would like to extend a personal word of thanks to the many people around me, who contributed to the extensive guide and motivations through the journey. In preparing this thesis, I was in contact with many people, researchers, academicians, and practitioners. They have contributed towards my understanding and thoughts. In particular, I wish to express my sincere appreciation to my main thesis supervisor, Dr. Aede Hatib Bin Mustaamal, for encouragement, guidance, critics and friendship. I am also very thankful to my co-supervisors Dr. Nor Fadila Binti Mohd Amin for her guidance, advices and motivation. Without their continued support and interest, this thesis would not have been the same as presented here.

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ABSTRACT

Growth of luxurious culinary tourism in Malaysia has created new paradigms focusing on competencies of culinary professionals in the hotel sector. However, there are no guidelines to define and measure these competencies. Hence, the research proposed a Star-Chef Competency Model as a competency framework and basis for developing an instrument to measure competency as well as competency profile. This study employed an exploratory sequential mixed method design comprising qualitative document analysis and interviews with culinary experts followed by a quantitative survey administered to culinary professionals in 4 and 5 starred hotels. From the qualitative data, six constructs comprising Technical, Non-technical, Personal Quality, Self-Concept, Physical State and Motives were identified as elements in the framework of Star-Chef Competency Model. Based on this framework, a three-staged instrument testing were carried out to develop the Star-Chef Self-Assessment Tool (SC-SAT) which utilized the Winstep 3.72.3 software for Rasch analysis. In the first stage, 203 items from the instrument was tested on 35 respondents. The second stage refined the instrument where 164 items from the instrument was re-tested with 42 respondents. Finally, 159 items was re-tested on 111 respondents. Data from the final version of SC-SAT had an item reliability of 0.94 with item separation index of 4.02, and person reliability as 0.99 with person separation index of 8.78. For unidimensionality, the raw variance explained by measures was 41.8%. Unexplained variance in the 1st contrast of 5.5% was obtained. Statistically, results showed that SC-SAT instrument was improved from stage one to three upon review. Utilizing the SC-SAT instrument, 20% of 35 respondents were identified as superior performers in the first instrument testing stage. In the second stage, 17% Finally, 15% of 111 of 42 respondents superior performers were identified. respondents were identified as superior performers in the third stage. These results led to the development of competency profiling for culinary professionals. The competency profiling showed that majority of culinary professionals have a high mastery level. The study recommends that the framework of Star-Chef Competency Model be the basis for developing instrument to measure competencies of culinary professionals.

ABSTRAK

Perkembangan perlancongan kulinari mewah di Malaysia mencipta paradigma baru yang memberi tumpuan kepada kompetensi profesional kulinari dalam sektor hotel. Namun, tiada garis panduan untuk menentukan dan mengukur kompetensi ini. Oleh itu, kajian ini mencadangkan Model Kompetensi Star-Chef sebagai kerangka kompetensi dan asas untuk membangunkan instrumen pengukuran kompetensi serta profil kompetensi. Kajian ini menggunakan pendekatan kaedah gabungan exploratory sequential yang bermula secara kualitatif melalui analisis dokumen dan temu bual dengan pakar kulinari, diikuti oleh kaji selidik kuantitatif kepada profesional kulinari di hotel 4 dan 5 bintang. Daripada data kualitatif, enam konstruk yang terdiri daripada Teknikal, Bukan Teknikal, Kualiti Peribadi, Konsep Kendiri, Keadaan Fizikal dan Motif telah dikenalpasti sebagai elemen di dalam kerangka Model Kompetensi Star-Chef. Berdasarkan kerangka ini, tiga peringkat pengujian instrumen dijalankan untuk membangunkan instrumen Star-Chef Self-Assessment Tool (SC-SAT) yang menggunakan perisian Winstep 3.72.3 untuk analisis Rasch. Pada peringkat pertama, 203 item daripada instrumen tersebut telah diuji ke atas 35 responden. Instrumen diperhalusi pada peringkat kedua di mana 164 item diuji semula dengan 42 responden. Akhir sekali, 159 item diuji semula kepada 111 responden. Data daripada versi akhir SC-SAT mempunyai kebolehpercayaan item adalah 0.94 dengan indeks pengasingan item 4.02, dan kebolehpercayaan individu adalah 0.99 dengan indeks pemisahan 8.78. Untuk unidimensionality, raw variance explained by measures adalah 41.8% manakala unexplained variance in the 1st contrast adalah 5.5%. Secara statistik, hasil kajian menunjukkan instrumen SC-SAT adalah bertambah baik peringkat pertama ke ketiga berdasarkan semakan. Melalui instrumen SC-SAT, 20% daripada 35 responden dikenalpasti sebagai pekerja berprestasi cemerlang pada pengujian instrumen peringkat pertama. Pada peringkat kedua, 17% daripada 42 responden dikenalpasti sebagai pekerja berprestasi cemerlang. Akhir sekali, 15% daripada 111 responden dikenalpasti sebagai pekerja berprestasi cemerlang pada pengujian instrumen peringkat ketiga. Dapatan ini membawa kepada pembangunan profil kompetensi bagi professional kulinari. Profil kompetensi menunjukkan majoriti profesional kulinari mempunyai tahap penguasaan yang tinggi. Kajian ini mencadangkan kerangka Model Kompetensi Star-Chef dijadikan sebagai asas untuk membangunkan instrumen bagi mengukur kompetensi profesional kulinari.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Towards embracing the rapid demand for quality workforce in the industry, Malaysian government is always committed in producing competent and knowledgeable human resources in every field and level of the industry (Ramlee & Rohana, 2013). For instance, in 2010, Malaysian government expenditure on education and training comprises 22.8% of total government expenditure (CHREST, UKM, 2015). Certainly, human capital investment by means of education and training serves as a platform that can be utilized towards the enhancement of the existing human capital. In this context, Technical and Vocational Education and Training (TVET) are one of the primary strategies in bringing Malaysia towards global arena (Jailani, Wan Mohd Rashid, Noraini, & Wahid, 2010). Rapid changes in the world of work require TVET providers to strengthen their role in producing highly skilled human capital to cater the industrial demands. Professional workers in the industry should continue to develop their competencies to be able to comprehend with future developments in work and life.

In recognition of the importance of competency for an effective work performance, Malaysia Skills Certification, a competency-based training program has also been introduced by the Malaysian government in order to give the potential workers an exposure to the world of vocation. Augmenting the existing efforts related to skills training and certification among industrial workers, the 2015 Budget announced by the Prime Minister of Malaysia, Datuk Seri Najib Razak also emphasized on the enhancement of workforce quality in the industry, as highlighted in the third strategy (empowering talent and entrepreneurship). For up skilling and reskilling programs intensified, the Government introduced a new program, the Globally Recognized Industry and Professional Certification (1MalaysiaGRIP) with an allocation of RM300 million in matching grants between the Government and the Human Resources Development Fund (HRDF) to train over 30 thousand employees in the industry (Budget Speech 2015, Ministry of Finance, Malaysia, 2015). Further, the Department of Skills and Development (Ministry of Human Resources) and Ministry of Education Malaysia have established the National Occupational Skill Standards (NOSS) that defines the employment level and essential competency level which need to be fulfilled by industrial employees. The skill standards were developed to provide guidance for workers with an ideal career For the Malaysia Occupational Skills Qualification (MOSQ) skill certification, NOSS is used as the main criteria in determining the level of competencies which the trainee required. As shown in Figure 1.1, the higher levels of MOSQ (Level 4 and Level 5) are equivalent to Diploma and Advanced Diploma of Malaysia Academic Qualification (Department of Skills Development, 2013).

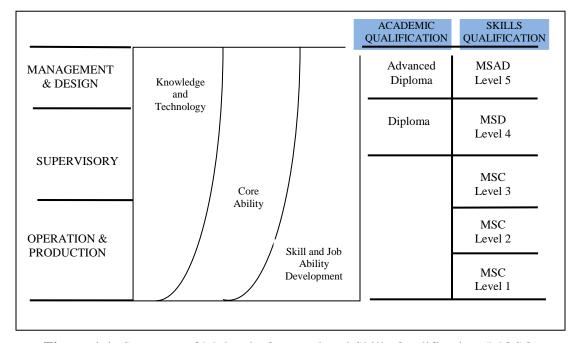


Figure 1.1: Structure of Malaysia Occupational Skills Qualification (MOSQ)

Hospitality and tourism is one of the sectors listed in the NOSS directory for skills profession related to TVET. Sub sector which addressed culinary art area is the kitchen management. Table 1.1 below shows the field of study and five category levels of MOSQ for the kitchen sub sectors based on the NOSS. The course of Hotel Culinary (HL01) has been developed for the National Dual Training System (NDTS). This literally highlights the importance of culinary as one important niche in the hospitality and tourism industry.

Table 1.1: Sub Sectors (Kitchen)

Level	Cooking	Pastry	Bakery	Butchering
L5	HT-012-5			
	Food Preparation and			
	Production Service	HT-01	3-4 & 5	Not available
L4	HT-012-4	Pastry and Bake	ery Management	
	Food Preparation and			
	Production Service			
L3	HT-012-3	HT 014-3	HT 013-3	HT 011-3
	Food Preparation	Pastry Production	Bakery Production	Senior Butcher
L2	HT-012-2	HT 014-2	HT 013-2	HT 011-2
	Food Preparation	Pastry Production	Bakery Production	Junior Butcher
L1	No level	No level	No level	No level
*HL01	Hotel Culinary			

Source: Department of Skills Development (2013)

Indubitably, culinary art is a vital element in Malaysian hospitality and tourism industry as the travelling experience would be unforgettable and becoming the most invaluable part of the entire journey (Salehuddin, Hairi, Izzat, Salleh, & Zulhan, 2009; Shahrim, Chua & Hamdin, 2009). Moreover, hospitality and tourism has been listed among sectors for development in the National Key Economic Activities (NKEA) of Economic Transformation Program in Malaysia. It can be seen that synergizing hospitality, tourism and culinary has become one of the major attention of the Malaysian government to spur the economic growth of the country. As food and beverages is one of the core components of the sector, the need for skilled personnel from the food preparation industry is in demand. The number of employment in the industry had demonstrated almost 14 percent from the total Malaysian labor force (NKEA, Chapter 10, 2011). Thus, culinary tourism certainly presents a promising needs and demands for employment of competent, well-

prepared, dedicated chefs, administrators and managers in the areas of hotels, food service, restaurant, food manufacturers, catering and hospitality-related fields who could work together in providing the best food and services for guests and consumers (Rozila & Noor Azimin, 2011). Additionally, Aguirre & Andrade (2013) stated that the chefs' professionalization is vital towards the country economic development.

Reviewing the latest scenario and amount of attention given to the tourism and hospitality industry with reference to culinary industry, it can be seen that career path in culinary field has developed its own reputation from the Malaysian public. The Chefs Association of Malaysia (CAM) is a registered association representing professional chefs who are actively employed in this country. CAM has established progressive endeavors to work together with Malaysian chefs and brings them to be at par with world-class standards. Among the aims are to establish network with culinary professionals in Malaysia, promote betterment and uphold chefs' image by sharing cooking knowledge and skill (Nourish, Issue 3, 2013). In conjunction with these aims, Culinaire Malaysia, an international cooking competition among talented chefs from all around the nation and world has been organized since the year 1993 by CAM. The competition draws as an international platform to showcase Malaysian food and beverage as our honored heritage and culture as well as to challenge the culinary skill set of the chefs in producing creative and outstanding Malaysian cuisines (Chefs Association of Malaysia, 2013).

Zopiatis (2010) asserted that profession as a chef is an arduous, yet a demanding, which requires culinary professionals to master both scientific and artistic innovation. Emphasizing on the competencies of a pastry chef, Boyle (2012:2) accentuated on the expectations anticipated from the chefs,

A plated dessert is the measure of a pastry chef. The arranging of dessert components on a plate – a slice of cake, a quenelle of sorbet, a twirl of tuile – is an art form, and one that requires a combination of technical skill, a sense of timing and an eye for design

In order to produce a culinary masterpiece, which is known as Chef-d'oeuvre in culinary world, the combination of technical skills, along with time management and creativity are needed. Chef-d'oeuvre is a stroke of genius that reflects the stunning success of a chef (Symons, 2004). The same notion on the important role and competencies held by the chefs has also been highlighted in a famous quote in culinary world by Briffault (1846) in appreciating the value of desserts in a meal experience,

The desserts crown the dinner. To create a fine dessert, one has to combine the skills of a confectioner, a decorator, a painter, an architect, an ice cream manufacturer, a sculptor, and a florist. The splendor of such creations appeals above all to the eye – the real gourmand admires them without touching them

Further, Aron (1975:150), as also cited in Zopiatis, Kyprianou & Pavlou (2011) stated that,

Chefs are not an employee in the common meaning of the word, but a practitioner, an artist, a fabricator.

Chefs must personify a wide range of skills that represents several job characters. Smilow & McBride (2010) shared their strong beliefs that a passion for food possibly could be transformed into a career of a lifetime. As Chef Wilfred Lim, an Executive Chef at Palace of the Golden Horses Hotel, Malaysia shared in Amazing Inspirations (2013), cooking is the main activity in the kitchen however; being a chef is much more than just the cooking. Professional cooking and commercial kitchen operations demands quality workforce with skillful talent, great personality, and strong determinations towards culinary as a profession (Brien, 2010; Kang, Twigg, & Hertzman, 2010; Woolcock & Ferguson, 2006) regardless of the gender (Bartholomew & Garey, 1996; Harris & Giuffre, 2010) and education and training (Cullen, 2010; Mcdermott, 2011).

1.2 Background of the Problem

Initially, personal experience in the culinary profession as well as interest in professional cooking has sparked the idea of going into deep in this topic of study. Why chefs? The idea was formed as a result of observing the latest trend in reality television cooking programs and cooking competitions which focuses on the skills and knowledge of chefs. The chefs are being challenged to create outstanding culinary products that reflect their technical competencies in innumerable types of traditional and modern cuisine, pastry, bakery, confectionary, chocolate and sugars. The challenge is to come out with perfect cuisine that demonstrates the talents behind the plate. With the rise of cooking programs and competitions in social media, chefs are new-fangled players in the fame game (Food & Wine, 2010). Observing these current scenarios, it has no doubt that cooking is no longer seen as traditional method in transforming raw ingredients into consumable products. These days there is a new perspective on how people value food and culinary products; as an art, traditions, culture and even a sign of civilization (Montanari, Moreover, the fame of chef celebrity has gained attention from the community. The chef celebrity phenomenon has led to an increase of public occupation on professional cooking (Henderson, 2011). This scenario also influenced the manifestation of culinary profession as an interesting career. Ashraaf Siddik Khan (2012) identified factors such as chef celebrity's image, television programs and internet sources have an impact on the enrolment in culinary art program in tertiary educational institutions in Malaysia. This demonstrated that culinary career has engendered interests among young Malaysian generations. Furthermore, the inspirations to start conducting a study in this area also emerged after reading a blog post shared by a Malaysian chef who shared disappointments on the current scenario of reality television shows which produce 'instant' chefs.

I am more than enough to see those unhealthy development in the industry in which anyone wearing chef jacket in a split second are called chefs or just participating in the TV show for few months already be cited as the Master Chefs while essentially not so...

This statement consequently makes the researcher stumbled upon interrogations, can anybody be a chef? Can we call anyone who wears a white kitchen jacket along with high white hat as chefs? What are the indicators of an outstanding chef? The issues on chefs celebrities have also been brought into discussions by some researchers in this area. Wood (2012) and Sutcliffe (1995) claimed that extensive exposure of chefs in the media has created a phenomenon where they become role models in the societies, especially among those whom aspiring to embark a career in culinary. The argument remains in questioning the correspondence between recognitions and triumphs in culinary as professional career or more on culinary as a taste of fame. Eventually, the notions of fame that developed perfectly ideal imaginations consequently lead to frustrations in real life, where most of the young chefs found that working in professional kitchen is far from reality. Majority of today's young chefs pursue careers in more routine, mundane culinary environment instead of fine dining establishments, which challenged their intellectualism and amazing talents in culinary.

It is indeed, the fact that participants in most of the cooking competitions are not professional chefs but everyday people who aspire to venture into culinary industry, or who just really enjoy cooking. After few months participating in the series, these people will be entitled as chefs by the society. Somehow, this scenario is a bit biased for chefs who had been in the industry for many years and had undergone all the challenges in the industry. Fatefully, the glorious life of chefs that is seen on media is not a bed of roses for everyone in the industry. Apparently, to be in the industry is not as easy as it is shown in social media (Rowley & Purcell, 2001). Despites of the massive reviews on the popularity of chefs, their personality, achievements, and expanding empires as discussed by Cerea & Rurale (2000) and Henderson (2011), the researcher found limited studies regarding the role of a chef from the literature reviews. Denoting famous chefs as kitchen stars, Hyman (2008) claimed that despites of the fame culture that has been existed for several years, there is something different about the twenty-first century American kitchen stars. Chefs have an influential, aspirational vibes that became one of the attractions among diners today.

As the world of the plate became increasingly interesting and increasingly reflective of American experiences, diners turned their attention from restaurateurs and began to focus on the forces behind the swinging door.

(Hyman, 2008:43)

Symons (2004) emphasized that the cooks and chefs exists behind every occasion and foods served are the truth evidence of their hard work. Many literatures focus on *what* has been their creation, such as the meals, foods, recipes; *how* they cook, the methods of preparing meals, however, too little emphasize on *who* are these cooks and chefs. These people remain as background despite of their contribution to the society civilization. As mentioned by Wood (2012:132),

the whole of 'foodie' culture revolves, of course, around chefs and yet remarkably little is known about chefs as an occupation, nor the aesthetic values that drive the chefs

Congruent with Wood (2012), this gap also has been addressed by Zopiatis (2010) where the author highlighted the needs to explore knowledge, skills and abilities of a specific job classification such as chefs. To gain deep insights of the current issues in Malaysian culinary industry, a preliminary study were conducted among chefs, culinary educators as well as the hotel human resource executives through interviews and online questionnaire surveys. The preliminary study aimed to reconnoiter any competency issues associated with today's culinary profession as well as testing for the research feasibility. One of the issues highlighted by the interview participants is the hardships and challenges to earn the title as a chef. As remarked by the experienced chefs who participated in the preliminary study,

We (the experienced chefs) used to work with Italian, French and Western Chefs. The way they treat us are harsh but we were all fast learners and we could stand such treatment.

(Experienced Chef 7)

I have been travelling to many countries such as Australia, Turkey, USA, London and Japan where profession as chefs are respected and valued. In Malaysia, we are still searching for the right methods to acknowledge our chefs. For instance, the Master Chef TV program, in a few months it become so easy to claim yourself as a Master Chef though you are not supposed to be. What about people who have spent a bountiful years in the industry? How should we address them? (Experienced Chef 8)

High skills cannot be obtained in one day. Some of us learn it the hard way. It is not easy to work in the industry. The job is tough. That's why they (chefs in the industry) really earn the 'Chef' title.

(Chef Educator 2)

In Malaysian context, culinary profession is observed as one profession that is labor-intensive and dynamic in the diversified career market. Views related to the importance of culinary as one of the most demanding professions in the Malaysian hospitality and tourism were shared by Hamed, Wahab, Zakaria, & Jasmi (2010). Culinary tourism creates vast job opportunities for young generations and thus, reducing the rate of unemployment. Furthermore, a study by Nurul Ain, Poo & Norlida Hanim (2012) revealed that employment demand for 2015 manpower from sub-sectors hotels and restaurants in Malaysian tourism sector shows a significant impressive improvement. This clearly shows that the industry provides promising future career undertakings as positive employment prospects in these sub-sectors are expected in the near future.

However, for the four consecutive years (2012-2015), the annual Talent Shortages Survey reported that skilled trade workers particularly in culinary art field (chefs, bakers and butchers) were among the hardest job to fill in (Manpower Group, 2015). Ironically, the rapid growth of the Malaysian tourism industry also failed to orchestrate with the employment issues. Skilled worker scarcities, employee deskilling, high turnover rate in hotels sectors are examples of internal employment glitches (Ahmad Rasmi & Ahmad Puad, 2013; Hazrina, 2010; Hemdi,

Rahman, Mara, & Alam, 2010; Siti Zuraini, Salleh, & Mohamad, 2009). Similar issues were confounded by other countries such as Cyprus, Korea, France, Europe and United States (Balazs, 2001; Hansford, 2011; Kim, Kim, Seo, & Hyun, 2011; Self & Dewald, 2011; Zopiatis, Kyprianou, & Pavlou, 2011). The industry, world-widely has confronted this complex problem for ages. While more talents for the new pool of workforce are being recruited, the rate of attrition or skill wastages either before completion of the apprenticeship or soon after are high (Robinson & Barron, 2007).

Specifically, there are several studies in Malaysia which addressed employment issues. Firdaus (2012) addressed occupational turnover as one of the most prominent issues that revolves around the hospitality industry. In particular, this issue also poses impact on chef's profession. According to Mohd Onn, Rahman, Mohd Azuan, Harnizam, Noraida, Siti Noraishah, Hamdin and Mohd Fazli (2010), the growth of the service and tourism industry in Malaysia were embittered by the high turnover rate in the hotel industry. Factors such as relationship with superior, level of education, income and time duration in the industry are the most influential factor for a chef's frequencies of job turnover. Additionally, current studies on chefs' occupational issues pointed out that chefs often work in stressful, highly bureaucratic, unsociable, and unpleasant work environments (Chuang, Yin, & Dellmann-Jenkins, 2009; Rowley & Purcell, 2001). These scenarios impacted culinary professionals, from culinary graduates, entrylevel chefs to experienced chefs. Pratten (2003) studied chefs' retention in British restaurants and found that lack of training, long working hours, low wages, and cramped work conditions were major reasons for chefs' turnover in the industry.

Boulud (2003) asserted that lack of motivations contributes to the high labor turnover in the culinary industry. Several studies reported this problem is more protuberant among culinary graduates and young chefs. Many young chefs dropped out from industry, as early as in their apprenticeship program (Joo & Lee, 2011; Mcdermott, 2011; Pratten, 2003; Pratten & O'Leary, 2007). Nonetheless, retention of chefs in the industry is the major concerns. After years of developing their own skills and experience, investment on education and training, these people failed to

make success in their anticipated career choice. Pratten (2003) highlighted that young chefs were unaware of dedications demanded by the industry in order to reach the highest level of culinary excellence. During the preliminary study, experienced chefs also highlighted the issues of under-skilled of today's young chefs and their lack of perseverance.

Chefs these days are lack of basic cooking skills... too dependent on instant ingredients while cooking. Most of them do not know how to produce basic dishes from scratch. They want faster results by compromising the most important skill that they should have mastered (Chef 5)

...they are lack of knowledge and could not stand the pressure...

(Chef 7)

Interview participants also mentioned about the long and winding road to sustain and excel in the industry. Among the responses are,

Todays' young chefs are overly flattered by the limelight of famous celebrity chefs and not aware of the actual kitchen life, which is stressful with bad pays. Though they have diploma or degree in culinary, the journey is not easy, they have to start from bottom...

(Chef Educator 6)

If you want to be a chef, you need to start from the lowest position, kitchen helper; Commis 1, Commis 2, Commis 3, Demi Chef, Chef de Partie, and then only you reach Sous Chef position...

(Chef 7)

Chef's profession is unique and dynamic. Young chefs are required to start their career from the bottom regardless of their level of formal education, those who brilliant in taking charge of their career directions could find the right paths to the peak. Each entry-level culinary professional have to aware of the organizational hierarchy that they need to overcome even though they have the required qualifications. Emphasizing on the issues of chefs' retention in the industry, Eguaras & Frederick (2010) and Bartholomew & Garey (1996) stated that to success in the profession, adaptability with the work environment is crucial. Motivation, attitude, aptitude and strong work ethics are the key factors of the success in the culinary profession. Young chefs need to recognize numerous characteristics that are mandatory for the success of the endeavor. It has become the nature of culinary profession where a person has to get prepared for the long working hours and pressure poses by working with food and heat in the crowded kitchen. The challenge is to stay focus and wisely utilize their full potential.

The problems of early attrition among culinary graduates and young chefs give impact on the industry with the loss of skills and training invested on the apprentice as well as to the apprentices' personal career development (McDermott, 2011). At present, the greatest challenge is to find solutions on how to attract, produce and retain quality workforce in the industry. Apart from the upsetting distress on skill wastages, another concern is on reviewing the existing culinary curriculum and methods of delivery. These problems portray negative impressions for TVET as the leading education and training providers, which supposed to produce young generations with various skills for the world of work. TVET institutions were liable for not keeping pace with wheel of times and developing competencies as perceived important by the industry (Hanapi & Nordin, 2014). Rahmat, Salehuddin, Salleh, & Saidatul Afzan (2010) also claimed that hospitality management education providers produced graduates with qualification but lack of quality competencies. Nevertheless, Gough (2010: viii) stated that,

It must be recognized that TVET can provide skills for work but not the guarantee of job. The world's most sophisticated and expensive programs are destined to fail if the labor market cannot gainfully absorb the students, despite their skills and education.

Competency issues among hospitality and tourism graduates have been revolving around the industry for years. Workforce nowadays needs to competitively upgrade their knowledge, skills, abilities and attitudes in order to cater the current needs of the labor market. In some cases, experienced chefs also dropped out from the industry due to the issues of employee deskilling as reported by Robinson & Barron (2007). Because of these various employment issues, several players in the business-oriented hospitality and tourism industry opt for the foreign workers. Based on Malaysian Association of Hotels Workforce Survey reports in 2008, there was a shortage of 2113 workers in the hotel industry which forced the hotels to employ foreign workers. This has reduced workforce shortage to 1146 in year 2009. In both years, Food and Beverage sectors faced the highest worker shortage. Malaysian hospitality and tourism industry are experiencing critical labor shortage which led to dependency on the recruitment of foreign workers (Liu & Liu, 2008). This practice is conflicted with the government aspirations to reduce the number of unskilled foreign workers in Malaysia. Effort on improving the existing industrial manpower need to be done to overcome this problem (Fadilah, Muhammad Nashroh, Sharifah Shahirah, & Muhammad Azim, 2011) identified two factors resulted in employers dependency on foreign workers are the repudiation of Malaysian to work in the food service industry and willingness of foreign workers to work long hours. Janie, Datu Razali, Izyanti, & Awangku Hassanal Bahar (2012) reported that in comparison with the local workers, foreign workers possess better attitudes and highly-disciplined at workplace.

Reviewing the NOSS document developed by the Department of Skills Development Malaysia, a comprehensive guideline of performance specifications required in the related occupation were established through job analysis technique (NOSS Development Guideline, 2012). However, Sanchez & Levine (2009) stated that job analysis only describes and measures the requirements of work, compared to another method known as competency modeling which creates a channel to influence day-to-day employee performance. Similarly, Curnow (2005) stated that job analyses are more task-oriented and thus, unable to capture the changing nature of work, whereas competency models are better in handling this matter. Findings

from the preliminary study also supported the idea to embark on a research in developing a competency model focusing on Malaysian culinary professionals,

... For me it's good because it will help a lot of ways to improve, in the sense of the education and industrial point of view. To start with a competency study among chefs is challenging. However, in my opinion it will be good. It can be used as self-evaluation or reference for those who aim for enhancing themselves

(Chef Educator 3)

So far there are no models for chefs' competencies... but it is good if we have one. It can be utilized as a reference

(Chef 3)

The survey findings also demonstrated majority respondents agreed that competencies are important for chefs superior work performance. About 73.8 percent of them agreed that currently there is no chefs' competency model exists in Malaysian culinary industry. Further, all of the respondents agreed that there is a vital need to develop such competency model for the profession. Accordingly, what and which competencies lead to superior work performance? The current study started with the exploration of competencies required for superior work performance in the culinary profession from the views of subject-matter experts (SME) such as the high performers' chefs and culinary educators. Inclusions of the high performers' perspectives are recommended by several studies focusing on superior work performance (Spencer & Spencer, 1993). Lucia & Lepsinger (1999) mentioned that competencies are deemed critical for inclusion in a competency model when they distinguish superior performers from poor or average performers.

Keller (2001) said character can only be developed through experience of trial and suffering, by which the soul is strengthened, ambition inspired, and success achieved. Studies pertaining to expertise and the notion of top performance have brought insights into the thinking and knowledge-based behavior of these

people. Experts (high performers) are those who do not just know more than novices, they also have a different way of structuring their domain-specific knowledge (Boshuizen, Bromme & Gruber, 2004). Traditionally, Anders Ericsson & Towne (2010) explained that the progression from novice to experts is a result from training combined with years of experience, even without reproducibly skills. From the modern perspectives, the attainments of superior performance were caused by reproducible competence for representative tasks which consequently capture expertise in the domain. Views on special characteristics of high performers in culinary profession were also mentioned in the interview,

Actually it depends on individual, their passion and soul for cooking and foods that drive the determination. With this, only then they will set their own goals of achievement in the profession...

(Human Resource Executives 1)

Marelli & Tondora (2005) stipulated that the application of competency modeling for effective job performance has become a complex and sophisticated endeavor as this approach has been furthered in business and human resource management. From the competency model, self-assessment instrument of competency measurement could be derived which later could be utilized to provide data for competency profiling. Competency measurement is the starting point prior to further-emphasized competency assessment such as vocational tests and examinations. As suggested by Spencer, McClelland & Spencer (1994), Whiddett & Holyforde (2005) and Sanghi (2007), self-assessment of competencies could be potentially used to guide employees in their professional development. Competency is one of the critical aspects in the assessment of vocational performance. Greenstein (2012) and Yahya (2005) described competency assessment is a process to gain evidence and judgment on the levels of competency among individuals in performing task based on the identified standards. Similarly, Gonczi, Hager, & Athanasou (1993:23) defined competency-based assessment as,

assessment of a person's competence against prescribed standards of performance. Thus, if a profession has established a set of, say, entry level competency standards, then these detail the standards of performance required of all new entrants to that profession. It is the process of determining whether a candidate meets the prescribed standards of performance

However, previous studies provide little evidence on the existence of such assessment system or measurement tool for the culinary professionals who are already in the industry (Ko, 2010; Zopiatis, 2010). In the context of industrial workers, there is also limited indication on the existing instrument of competency measurement at workplace that can be identified from the literature (Koopmans, Coffeng, Bernaards, Boot, Hildebrandt, de Vet and van der Beek, 2014). This is supported by interview findings of the preliminary study,

For now, for me, no. So far there is no specific tool to assess our kitchen employees. Normally that one we judge by our own.

(Experienced Executive Chef 4)

There is no instrumentation developed to assess the chef's capability in the industry. The only method of assessment is based on loyalty, seniority, but in overseas, instrumentation has been developed and it is widely used in restaurants.

(Chef Educator 3)

...to date, I don't think there is a tool for competency assessment. There have been no specific assessment system or tool, even if such tool exist, it haven't made available for members in the industry...

(Human Resource Executive 1)

Additionally, majority of the respondents in the survey (90.5 percent) agreed that currently there is no instrument for measuring competencies exists in Malaysian culinary industry. They agreed that having instrument for measuring chef's competency will help the chefs to identify competencies that they are well-mastered and need to be improved. Thus, it will be beneficial if there is a standard instrument of measurement or assessment system that could measure competencies possessed by the chefs. As mentioned by interview participants,

To have an instrument is good, because it will help a lot of ways to improve in the sense of the education and industrial point of view (Chef Educator 3)

The most difficult situation is when a person wishes to apply for a higher position. Sometimes it is not fair for those degree/master holders to start from the bottom unless their skills are zero. Therefore, it might be beneficial if there is a system to identify possessed skill by individual. Because once they are already in the vocation, it is not that difficult, there will be someone who can guide them...

(Chef 1)

Previous systematic instrument review in various field of studies by Palmaan, Terwee, Jansma & Jansen (2013); Law, Barnett, Yau & Gray (2011); and Price, Beach, Gary, Robinson, Gozu, Palacio, & Cooper (2005) demonstrated that majority of the instruments are not sufficiently validated. For decades, there have been a rising concern regarding the inadequacies inherent in many of human science measurement which deserting the properties of the measures. Cavanagh & Fischer (2015) mentioned the need to avoid these shortcomings. It is crucial to accurately assess and interpret the real problem or context that is being measured. Thus, using Rasch Measurement Model in analyzing a newly-developed instrument provides robust grounds in evaluating and improving its psychometric properties. Hence, Rasch analysis could provide a mechanism in developing a competency profile of the culinary professionals in the current study.

Previous studies had shown that competencies are important for superior work performance (Lee, 2010; Orr, Sneltjes, & Dai, 2010; Stines, 2003). Therefore, the current study is important because competencies identification, modeling and measurement are key elements in ensuring all parts of the organizations are working in harmony. This is the challenge faced by the human resource management as they play significant role in managing organizations' human capital, parallel with government's aspirations to enhance the quality of existing workforce in Malaysian industry. The focal concern for conducting this study is because there were lacks of empirical data specifically on the topic of culinary art field in Malaysia. There are extensive studies on hospitality and tourism industry in Malaysia, such as in (Goldsmith, Salehuddin, & Zahari, 1994; Poon & Low, 2005; Ryan, Hazrina, & Asad, 2011; Ahmad Rasmi & Ahmad Puad, 2013) but the studies leave gaps relative to culinary area. Previous studies related to hospitality and tourism were limited to the hotel industry in general (Rozila & Noor Azimin, 2011) and hospitality and tourism education studies, also in general (Goldsmith, Salehuddin, & Zahari, 1994).

In Malaysian context, we are still lacking of information and empirical data on the chefs profession itself. Locally, there have been little studies on culinary art area, especially with regards to culinary competency among Malaysian chefs. Studies on culinary art competencies mostly put more emphasis on culinary art students and graduates, with fewer attentions to the professional chefs. Some researchers focusing on the culinary educators' competencies such as in Antun & Salazar (2012), Ko & Chiu (2011), Woolcock (2011) and Sollish (2001). These days, many studies have been carried out emphasizing on the Research Chefs (Birdir & Pearson, 2000; Bissett, Cheng, & Brannan, 2010a; Hu, 2010a) and Culinologists (Bissett, Cheng & Brannan, 2010b; Cheng, Ogbeide, & Hamouz, 2011; Cheng, 2012; Hegarty, 2001), an advanced job position in culinary professions, shedding the lights that we are standing behind the par from the body of knowledge in this area. Furthermore, the researcher found very little academic studies on the competencies required for superior performance of successful chefs which provide an opportunity for this study to fill in the gaps.

1.3 Statement of the Problem

Culinary industry in Malaysia has undergone a tremendous development in the past years, the latest of which the emergence of culinary tourism. Consequently, the role and competencies of the chefs are the key points that reflect the brand image of the food service and catering providers such as hotels and restaurants (Liming, 2009; Agut, Grau & Peiro, 2003). For a service-driven industry, culinary professionals are the key contributors towards the entire performance of the hospitality and tourism industry (Aguirre & Andrade, 2013; Harrington & Herzog, 2008). However, due to the stressful nature of work, the turnover rate is high and many chefs dropped out from the industry despites of their earlier inclination towards making culinary profession as their dream career. The issues were discussed locally (Ahmad Rasmi & Ahmad Puad, 2013; Hazrina, 2010; Hemdi, Rahman, Mara, & Alam, 2010; Siti Zuraini, Salleh, & Mohamad, 2009) and globally (Chuang, Yin, & Dellmann-Jenkins, 2008; Pratten, 2003; Rowley & Purcell, 2001).

Several studies suggested the needs of having a competency model for a profession to guide the people in the profession. These studies unanimously agreed that there are apparent benefits of developing and implementing competency model for a specific career profession (Lambert, Plank, Reid & Fleming, 2014). However, past researches lack of empirical data concerning the development of a comprehensive competency model. In detailed, there are several studies resulted with the development of competency lists and several constructs of culinary competencies (Birdir & Pearson, 2001, Zopiatis, 2010; Hu, 2010; Bissett, Cheng, & Brannan, 2010a). Yet, these studies centered on the perceptions of culinary professionals towards the perceived importance of such competencies, and provide insufficient information on the perceived competencies as possessed by them. Rothwell & Graber (2010) pointed out that a measurable competency model instigates the assessment of competencies. The use of the established model in the assessment of employees is recommended as the results can be compared to the model. This process allows identification of the employee's performance gaps and strengths.

Highlighting the concept of competencies is important during the delivery of educational interventions and training as well as in the actual profession. From the perspectives of education, the delivery and assessment method of competency are apparent because it is embedded in the system, allowing institutions to gauge the value of programs offered. The competency-based assessments made available for the culinary graduates through the competence-based education provided by TVET providers. However, once these graduates already in the vocation system, competency assessment strategies and tools are no longer or scarcely viable. For the profession, the measurement and the assessment methods of competency are rather vague because of the definitions and elements of culinary professionals' competencies are not thoroughly explored. The significance of such measurement and assessment is perceived less valuable as the turnover rate is high for the industry. These are the factors that make it difficult for a thorough competency measurement and assessment in the industry though such measurement and assessment is important in a way that it would allow the industry to know where they stand, and how does education and training contribute to the profession.

Moreover, there are rising need developed for vocational tests and measurement to assist in predicting how successful job applicants would be in specific profession and how good people in the profession are doing (Miller, McIntire & Lovler, 2011). In organizational settings, employment testing, performance tests and personality inventory were often utilized among employees. Yet, the use of these testing and assessment tool is not prevalent in the context of Malaysian culinary profession. Findings from the preliminary study also proposed that a tool measuring competencies are important for chefs' professional development. Currently, there is a limited indication on the existing of any standard measures or assessment tool for culinary professionals in Malaysia. Therefore, there has been a sense of urgency to develop an instrument which may be beneficial in facilitating these issues. Great emphasis has been extended to TVET students with the goals to produce a competent high skilled worker, however, little emphasis has been put on the existing worker which accountable for the gap in previous studies.

1.4 Research Objectives

In general, this study intends to develop a competency model for superior work performance in the culinary profession, develop an instrument of competency measurement and accordingly, develop a competency profile. The competency model and the competency measurement instrument are named as Star-Chef Competency Model and Star-Chef Self-Assessment Tool (SC-SAT), respectively. The following are the specific objectives:

- 1. To identify constructs and sub constructs of competencies required for superior work performance in culinary profession
 - a. To identify constructs and sub constructs of competencies from document analysis
 - b. To identify constructs and sub constructs of competencies from the perceptions of culinary educators and high performers
- 2. To develop a framework of competency model for superior work performance in culinary profession
 - a. To develop the lists of competencies required for superior work performance in culinary profession
 - b. To develop a valid framework of Star-Chef Competency Model for superior work performance in culinary profession
- 3. To develop a reliable instrument with essential validity evidence to measure competencies for superior work performance in culinary profession
 - a. To develop items according to each constructs in the SC-SAT
 - b. To determine the reliability of SC-SAT instrument
 - (i) To determine the reliability index of items and separation index
 - (ii) To determine the reliability index of person and separation index
 - c. To determine the validity evidence of SC-SAT instrument based on Rasch Measurement Model
 - (i) To determine the item polarity
 - (ii) To determine the item fit and person fit
 - (iii) To determine the item dimensionality

- (iv) To determine the standardized residual correlation
- (v) To determine the item calibration
- (vi) To determine the differential item functioning
- d. To identify the item targeting of the SC-SAT instrument
- e. To develop a competency profile for culinary professionals in Malaysian hotels sector based on the SC-SAT instrument using item difficulty and person ability diagnosis

1.5 Research Questions

The above-mentioned paradox in the problem background and statement of problem has led the following research questions:

- 1. What are the constructs and sub constructs of competencies required for superior work performance in culinary profession?
 - a. What are the constructs and sub constructs of competencies from document analysis?
 - b. What are the constructs and sub constructs of competencies from the perceptions of culinary educators and high performers?
- 2. What is the framework of competency model for superior performance in culinary profession?
 - a. What are the lists of competencies required for superior work performance in culinary profession?
 - b. What is the valid framework of Star-Chef Competency Model for superior work performance in culinary profession?
- 3. What is the reliable instrument with essential validity evidence to measure competencies for superior work performance in culinary profession?
 - a. What are the items according to each constructs in the SC-SAT?
 - b. What is the reliability of SC-SAT instrument?
 - (i) What are the reliability index of items and the separation index?
 - (ii) What are the reliability index of person and the separation index?
 - c. What is the validity evidence of SC-SAT instrument based on Rasch Measurement Model?

- (i) What is the item polarity?
- (ii) What is the item fit and person fit?
- (iii) What is the item dimensionality?
- (iv) What is the standardized residual correlation?
- (v) What is the item calibration?
- (vi) What is the differential item functioning?
- d. What is the item targeting of the SC-SAT instrument?
- e. What is the profile for culinary professionals in Malaysian hotels sector based on the SC-SAT using item difficulty and person ability diagnosis?

1.6 Study Outcome

There are three study outcomes of the current study:

- a. A framework of competency model for superior work performance in culinary profession (Star-Chef Competency Model)
- b. An instrument for measuring competency for superior work performance in culinary profession (SC-SAT instrument)
- c. A profile of Malaysian culinary professionals in hotel sectors based on the SC-SAT instrument

1.7 Significance of the Study

It is believed that this study serves both the theoretical and practical purposes. Theoretically, the current study aimed to extend the body of knowledge in three ways. Firstly, by providing a framework of competency model designed to represent culinary profession, of which, not yet exist. Secondly, this study provides an instrument that is useful in measuring competencies of culinary professionals for their superior work performance in the profession. Thirdly, the study provides a mechanism in developing a competency profile based on the developed instrument

that is beneficial to identify the level of competencies of the current culinary professionals who works in the industry. The significance of the study with regards to its practical purposes is explained further, such as following;

1.7.1 Culinary Professionals

The Star-Chef Competency Model defines the work of culinary professionals in Malaysian hotel sector with significant competencies established in local setting. By setting out essential elements of competency for superior work performance, it is hoped that the model could be used as a reference point among members in the profession as well as in the community. The collaborative approach in the development of the framework of Star-Chef Competency Model which includes chefs' educators and high performer's chefs allows identification of competencies that considers views from different stakeholders in the industry. Young chefs will have a better understanding on the needed requirement once they enter the professions and motivate them along the journey towards success. The competency model also enables young adolescents to make an informed decision before they consider chefs profession as their future career.

1.7.2 Human Resource Management

Assessment for individual work performance could be used for organizational records. The SC-SAT instrument is helpful in measuring competencies of the existing culinary professionals in the profession, thus allows the human resource management to manage and plan for future employee development interventions especially in the area of training and development. The instrument can be used as a tool augmenting the interview sessions in the recruitment process so that the human resource management able to select only those who are most likely to become high performers with required competency.

1.7.3 Culinary Industry

The study provides empirical evidence about the key competencies which contributes to superior work performance among culinary professionals in the industry. For practical purposes, the study offer the industry with a functional-competency model that (1) organizations can use to develop their own model of culinary profession development (2) employees can use to understand competencies needed for professional advancement, (3) hospitality schools can use to design and review culinary curriculum, and (4) students can use to craft culinary career paths.

1.7.4 Technical and Vocational Education and Training (TVET) Institutions

For TVET institutions specializing in culinary education and training, the SC-SAT instrument can be adapted to measure culinary students' overall competencies before they graduated. By this means, the institutions can also identify which of the areas in the curriculum those need improvement and targeting specific competencies.

1.8 Scope of the Study

Scope of this study includes the development and validation stage of a research-based competency modeling which is the resulting Star-Chef Competency Model. According to Mansfield (2005), a research-based competency modeling emphasizes on the data collection method and analysis, where the application of the competency model was the major concerns. Constructs identified for the Star-Chef Competency Model and SC-SAT instrument is gathered using literature review, document analysis and interview among culinary experts. With interviews approaches, behaviors demonstrated by high performers can be identified accurately. Precisely, the study emphasizes on competency for superior work performance - competencies which differentiate high performers from the average

and low performers in the profession. From the methodology aspect, sample for qualitative phase will be unique to the accessible population of the professional chefs who had vast industrial experience and contribution towards representing Malaysian culinary industry locally and internationally. For the quantitative stage, the sample includes chefs and cooks in the 4-star and 5-star hotels. These establishments are selected because of the nature of work environment which challenge the chefs to respond promptly with the latest development in the culinary industry and strictly adhered to the utmost quality standards of the products and services. Since this is a cross-sectional research, the findings only reflect the current scenario of the areas under research during the research period.

For the competency measurement, the criteria of the methods of assessment undertaken in this study is immediate, as recommended by Viswesvaran (2011) as a measure of individual work performance at that particular point in time. This assessment method is also referred as an indirect formal assessment. The self-reported instrument considered as reliable and strengthened with necessary validity evidence for it is developed and analyzed thoroughly with multiple considerations in each development stages. This is the most appropriate methods in gathering data on "within-person" decisions which provides feedback to individuals in identifying individual strengths and weaknesses (Viswesvaran, 2011). For data analysis, Rasch Measurement Model guides the analysis process and the interpretation of the findings. This analysis is used to examine the instrument reliability, and providing empirical evidence to support arguments on the construct validity of the items.

1.9 Conceptual framework

The conceptual framework is the system of concepts, assumptions, expectations, beliefs and theories that supports and informs the research undertaken, as key parts of the design (Miles & Huberman, 1994; Robson, 2002). In brief, the conceptual framework plays a major role in the research process, as it helps to clarify the main ideas by giving the right routes to take in order to develop the

study. The main concepts extracted from the literature review were used to develop an initial conceptual framework. This is done by focusing on the subject area through the identification of the scope and boundary of the study. The current study centers on competencies for superior work performance. As mentioned by Gallardo (2010), the world of employment has radically changed in the last 10 years, and due to that, recently many studies have developed a new paradigm to improve human resources inside organizations with the aim; "Work Competencies for Professional Excellence". An established theory is that competencies will contribute to work performance because expertise and skills are developed at workplace (Campbell, 1990 and Ericsson, Krampe, & Tesch-Romer, 1993). Figure 1.2 illustrates the competency domains being studied in the current study.

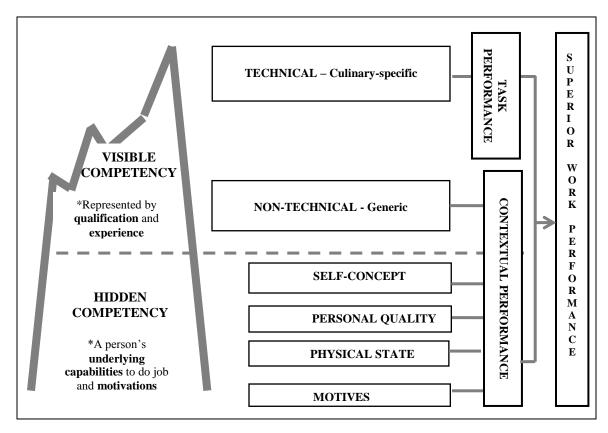


Figure 1.2: Domains of Competencies for Superior Work Performance

Based on the literature (Spencer & Spencer, 1993; Boyatzis, 1998; Evers, Rush & Berdrow, 1998; Rao, 2010, and Mukherjee, 2011), two important components of a competency model were identified which are the visible competencies (Technical and Non-Technical), and the hidden competencies (Self-

Concept, Personal Quality, Physical State and Motives). Similarly, Viswesvaran (2011) and Koopmans et al., (2011) categorized individual work performance into two main constructs, which are task-performance (focusing on the technical expertise) and contextual performance which focusing on individuals behavior that support the organizational, social and psychological environment in which the technical core must function.

Through an extensive literature review, the conceptual model of the study has been established as presented in Figure 1.3. Generally, the research design was based on the competency modeling design and instrument development design. For competency modeling development and validation design, the main sources are from Boyatzis (1982), Spencer & Spencer (1993), Lucia & Lepsinger (1999) and Prien, Goodstein, Goodstein & Gamble (2011). Extensive studies have been carried out utilizing the adoption of competency modeling procedures proposed by Boyatzis (1982), as refined by Spencer & Spencer (1993). This modeling procedure is widely used in identifying the competencies of production supervisors (Camuffo & Gerli, 2005) and managers (Lambert, et al, 2014). In general, there are three alternative methods for the design of competency studies (Boyatzis, 1982; Spencer & Spencer, 1993). The methods are (i) Classic study design using criterion samples, (ii) Short study design using expert panels, and (iii) Studies of single incumbent and future job where there are not enough job holders to offer samples of superior and average performance. The current study commenced the second method, which is the short study design using panel of experts. The selections of this method were made after considering the availability of the data and resources deemed important for the study. Data gathered from expert panels is the most appropriate source based on the desired dimensions of competency.

Kandula (2013) outlines steps that need to be followed to develop a comprehensive competency model which are: (i) identification of competency through document analysis, job specifications, interviews or observations, (ii) development of competency dictionary consists of competency clusters with competency statements and behavioral indicators, (iii) competency lists utilization as basis for scale measurement, and (iv) development of competency assessment.

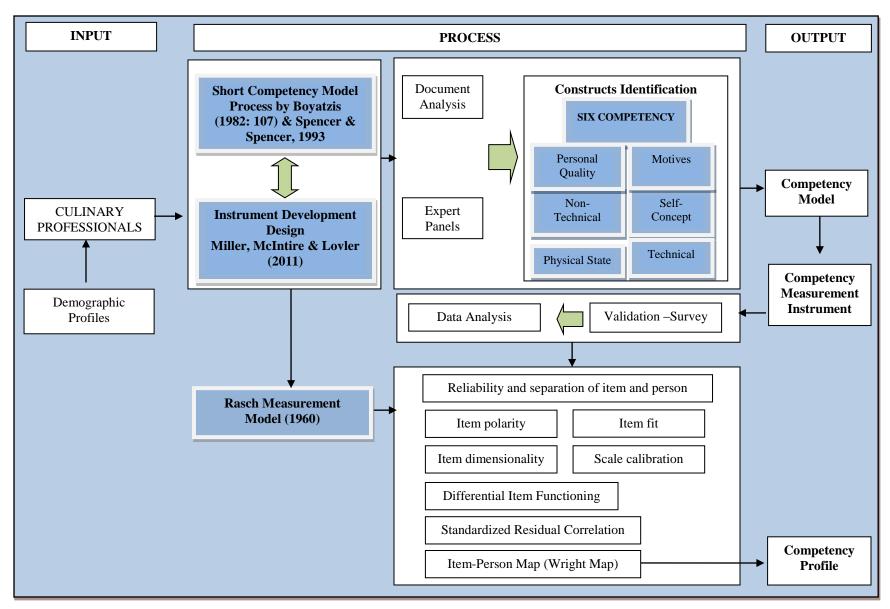


Figure 1.3: The Conceptual Framework for the Study

For instrument development design, the main source is from Miller, McIntire & Lovler (2011). Specifically, the instrument development model developed by these authors was adapted to guide the study in the process of developing the competency measurement instrument. Furthermore, Murphy & Davidshofer (2005) highlighted on the importance of good instrument of measurement to be carefully developed for obtaining meaningful samples that reflect characteristics of the individuals being assessed.

1.10 Operational Definition of Key Terms

This section provides the operational definition of the key terms which were used in the current study.

1.10.1 Chef

Chef is a professional cook who plans and creates dishes, who usually is in charge of a kitchen in a restaurant or catering setting (McBride, 2010). In this study, chef is defined as a person who cooks professionally for other people and refers to a highly skilled professional cook who is proficient in all aspects of food preparation.

1.10.2 Competency Profiling

According to Azrilah, et al., (2008), competency profiling refers to a model which comprises competency attributes required by the employees. In this study, the competency profiling is the process of finding out the skills that are needed to do the job effectively. In organizations, the competency profiling provides an opportunity for the upper level management executives to identify competencies that are important for professional training and development.

1.10.3 Competency Model

According to Marrelli, Tondora & Hoge (2005), competency model is a model that provides a list of competency statement that is necessary for effective job performance. In this study, competency model consists of a combination of individual competencies that represents competency required for chef's superior performance and success in culinary profession.

1.10.4 Culinary Competency

According to Cheng (2012), culinary competency is referred to knowledge, skills and abilities in the preparation of food and beverages. For the current study, culinary competency is well-defined as skills, knowledge, abilities, behavior and personality attributes with regards to vast area of food, such as food management, culture, service, marketing, development, creativity and innovations in food.

1.10.5 Culinary Art

Culinary art is the practices of preparing foods and beverages (Marcus, 2013). In this study, culinary art refers to the practices, behaviors portrays by a person in the process of preparation and production of foods and beverages.

1.10.6 High performers

High performer is an employee who is a key contributor, demonstrates high performance, is capable of a lateral move, may be qualified for a broader role within the same profession and has reached the potential to move "upward' in a management capacity (Deloitte, 2013). In this study, high performer's chefs are those who had demonstrated an outstanding performance in the profession and gain recognition from the culinary industry.

1.10.7 Non-technical competency

Koopmans et. al., (2014) defined non-technical competencies as behaviors that go beyond the formally prescribed work goals such as taking on extra tasks, or showing initiatives. Non-technical competency in this study refers to knowledge, skills and abilities that will be the added value for the chefs in performing job tasks.

1.10.8 Technical competency

Technical competencies refer to any knowledge, skill and abilities that an individual possesses and needed to perform a specific job. For chefs' profession, Zopiatis (2010) stated that technical competencies are those culinary-specific competencies. Thus, technical competency refers to knowledge, skills and abilities associated with the actual chef's job, the culinary-specific competencies such as cooking, recipe, menu development, knife skills, and food service operations.

1.11 Summary

This chapter highlighted on important issues that lead to the needs and urgency to carry out the current study. It is hoped that the problems and issues have been precisely specified and capable of being addressed with adequate resources. The chapter provides justifications on the aspects of researchable, yet workable for the study to be conducted, which mainly focusing on the development of a competency model, instrument of measurement and the resulting competency profile. In summary, this study attempts to enhance understanding with reference to the competencies required for superior work performance among culinary professionals in Malaysian hotels sector.

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