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Skill performance in informal economy workers: Multilevel perceptual assessment

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Article Info

Abstract

Workers in the informal economy are generally considered to be low-skilled, which affects their productivity, income, and wellbeing. However, studies have not really explored the perceptions of these workers and their customers with regard to these workers' skill performance levels and how practice and training affect performance. We explored the skill performance of informal economy workers as perceived by 120 workers and 120 customers in 71 service operations in Hat Yai, Thailand using a mixed methods and multilevel survey. A model was developed for multilevel perceptual assessments using the Dreyfus adult skill performance rating scale. Workers perceived themselves much lower than the customers, but overall perceptions indicated that workers were primarily at the novice performance level for most skills, which agrees with the global assumptions that informal workers are plagued with low skills. The conclusions were that improving the quality and access to higher-level skills training could greatly improve the workers' performance. This study is vital for policymakers and training-providers to understand and plan vocational skills training for these workers.

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Introduction

As important as skills are to the work and social life of informal economy workers (IEWs) (Adams, de Silva Johansson, & Setarah, 2013; dvv International, 2013; International Labor Organization [ILO], 2013; Pina, Kotin, Hausman, & Macharia, 2012), it is surprising that so little is known about how skills performance is perceived by workers and their customers. Studies reveal that informal workers (IWs) are plagued with low skills, low income, low productivity, and other vulnerabilities (Adams et al., 2013; Pina et al., 2012). This has led to conclusions that the skill performance of these workers should be improved in order to enhance their productive capacity as well as their livelihood (Asian Development Bank [ADB], 2011; Cano-Urbina, 2012; Peter-Cookey & Janyam, 2017).

In spite of over three decades of focus on the skills development of IEWs, their skills performance quality and the way it is perceived are understudied. Most studies focused more on pre-employment preparation for work in the formal/industrialized sector, formalization, property rights, and poverty alleviation, which were often commissioned by multilateral or regional organizations toward individual organizations objectives (King & Palmer, 2013; La Porta & Shleifer, 2009). Perceptual assessments of the skill performance levels of IEWs have not been studied even though understanding the way key stakeholders view the skill performance of workers could be crucial to creating programs and designing policies (Rigby & Sanchis, 2006) that could help them grow and sustain self-reliance

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and livelihood (dvv International, 2013; UNHCR, 2012). This paper assesses the skill performance of IEWs in the informal hair and beauty services of Hat Yai, Thailand to determine the gross skill performance level of this occupational domain in the study area.

Skill performance is dependent on the quality of training, duration of practice, standards of excellence and the content, context and conditions of the task required (Cornford, 1996); thus, investigating the conditions of the skill performance and the levels of proficiency of these workers becomes expedient for policymaking and intervention. For developing countries to fully grasp the potential of the IE and benefit from its workforce, requires filling up the knowledge gaps in employment and skill development (King & Palmer, 2013; Leach, 1995). One way to do this is to explore the perceptions of those employed (waged/self-employed) directly in the IE concerning SD strategies, opportunities, and importance. On the other hand, the perception of the workers and those they serve will give insight into their actions, commitment, acceptance, and involvement (Bagheri, Shabanali-Fami, Rezvanfar, Asadi, & Yazdani, 2008; Cookey, Rotchanatch, & Ratanachai, 2016) and this could support policy development with far-reaching effects (Bjornavold, 1997; ILO, 2011). However, since the peculiarities of localities differ, it would be more practical for perceptions of local IEWs to be considered to capture what is relevant to them. Therefore, the purpose of this work was to explore the perceptions of IEWs and the users of their services on the workers' skill performance levels and to make recommendations for effective and practical policymaking and interventions.

In this study, performance is viewed as the ability to carry out a task up to a standard (Schechner, 2013) using skills and knowledge acquired toward a journey (and not a destination) with steps along the way called 'performance levels', where each level represents the efficiency and quality of performance (Elger, 2007). Skill performance is considered as behaviors, actions, and outcomes within and outside the control of workers toward the fulfillment of customers' expectations and product/service requirements (Beilock & Carr, 2001; Harris, 2008). If IEWs work with low skills, then it follows that their performance and productive capacity will be low, negatively impact their livelihood, and worsen their vulnerabilities; therefore, improving their productivity, income, and wellbeing will require an upgrade in the skill performance quality (Gupta & Upadhyay, 2012; Phusavat, 2013). These workers and those that buy their skills have their own understandings and perceptions of expected performance quality (Mone & London, 2010; Rigby & Sanchis, 2006), and so skill performance assessment from their perceptions will assist policymakers and training-providers with the planning and implementation of intervention and training programs.

This study, therefore, attempted to capture some feedback on the skill performance of IEWs in the informal hair and beauty services through the eyes and minds of the local workers and their customers as well. The main research questions were: 'How do they perceive the skill performance levels of the workers?' and 'How do they perceive the impact of practice and training on skill performance?'

Conceptual Background

Social perception could be described as the lens through which a group of people or community view, organize, and interpret behaviors, actions, experiences, and outcomes such as the skill performance of workers and this could affect their responses (Beyerl, Putz, & Breckwoldt, 2016; Gallagher & Zahavi, 2012; Severin & Tankard, 2001). In that case, it makes sense to assess the perceptions of more than one group of people in order to arrive at a close consensus conclusion. Therefore, understanding the perceptions of the workers and their customers will give insights into the needs, interests, expectations, behaviors, and actions that could provide feedback for policy and intervention design and planning (Bagheri et al., 2008; Beyerl et al., 2016).

This study used the concepts of job performance (Koopmans et al., 2011; Murphy, 1989; Sonnentag & Frese, 2002; Sonnentag, Volmer, & Spychala, 2010), the Dreyfus levels of skill performance (Dreyfus & Dreyfus, 1980; Dreyfus, 2004), and multisource performance rating (Bracken, Timmreck, & Church, 2001; Rotundo & Sackett, 2002; Sonnentag et al., 2010) to assess the skill performance levels of IEWs from two separate groups' perceptions. This is significant to the study because it allows for assessing skills performance per task and context rather than prescribed duties and responsibilities based on levels of proficiency (novice-to-master) as well as adaptiveness and creativity from a multilevel platform.

For this study, skill performance was viewed through the multidimensional and dynamic lens of job performance in that it changes over time as a result of learning (Koopmans et al., 2011; Koopmans, Bernards, Hildebrandt, de Vet, & van de Beek, 2014; Sonnentag et al., 2010; Sonnentag & Frese, 2002) working from the dimensions of task, contextual, adaptive, and creative performance. The survey and interview instruments were designed based on what is required for the tasks involved in the selected skill sets in the occupational domain under study as well as the local context and expectations of customers, while assessments relate to the way a skill is performed (task), fulfillment of individual expectations (contextual), and the ability to adapt to fast-changing trends and create styles (adaptive and creative).

In addition, the Dreyfus levels of skill performance toward mastery, (novice, advanced beginner, competent, proficient, expert, and master) as shown in Table 1 were used in this study to develop a performance rating scale (PRS) for the survey instrument as well as to describe the perceived performance levels of the workers and the development of the analytical model used for the study (Benner, 2004; Dreyfus, 2004). According to Dreyfus and Dreyfus (1980), the journey of skills performance is traced from the novice to the master stage onto the expert facing unfamiliar situations (Dreyfus, 2004); and is essential for "designing training programs and materials to facilitate the acquisition of high order skills" (Dreyfus & Dreyfus, 1980). This concept has been used in education, engineering, medicine, nursing, sports, language training, science, psychology and libraries (Benner, 1984, 2004; Benner, Tanner, Chesla, Dreyfus, & Rubin, 1996; Bridges & Lau, 2006; Carraccio, Benson, Nixon, & Derstine, 2008; Rushbrook,

Table 1
Performance rating scale used for the assessment

S/N	Skill performance level	Explanation
1	Novice	Just learned or learning skills; Need complete supervision; and Need more understanding
2	Advanced Beginner	Follow rules step-by-step; Need less supervision; and Complete simpler tasks without supervision
3	Competent	Can learn new techniques; Need no supervision; and Still need refinement in my work
4	Proficient	Maintain regular high standards; Do not need to follow rules step-by-step; and Have deep understanding of the processes
5	Expert	Work intuitively from my own mind; Creative and spontaneous; Create exceptional designs and work; and Make good use of time without compromising quality
6	Master	Express exceptional creativity, originality and spontaneity always; Create cutting edge designs and service effortlessly; and Work well under pressure

Bound, & Sivalingam, 2013) to determine performance progression as well as actions, activities, and other factors that affect performance. However, this is the first time it has been applied to informal workers in a non-formal setting with large-scale occupational domain and perceptual assessments.

Finally, the multisource performance rating model used is akin to the 360 feedback model (Bracken, Timmreck, Fleenor, & Summers, 2001; McCarthy & Garavan, 2001; Morgan, Canaan, & Cullinane, 2005), which is often considered effective for developmental purposes (Bracken, Timmreck, and Church, 2001; Rotundo & Sackett, 2002; Sonnentag et al., 2010) as is the case for this study. It was assumed that observations from multisources yield more reliable and valid results; thus being more useful and meaningful (Rotundo & Sackett, 2002).

Methodology

Study Area

Hat Yai (Figure 1) is the largest municipality in Songkhla province in southern Thailand, the largest metropolitan area in the whole south, and the third largest city in the country (Kuncharin & Mohamed, 2014; Tepsing, 2014) with a population of 158,128 (HYC, 2011). An estimated 357,000 foreigners live, study and work in southern Thailand (Sciortino & Punpuing, 2009) and so as the largest metropolitan area with two major international universities, one international airport, several global businesses, and an export zone as well as being the southern center for commerce, business, entertainment, transportation, healthcare, and tourism (Kuncharin & Mohamed, 2014; Tepsing, 2014), it can safely be assumed that a good number of those foreigners are in Hat Yai. The city is also a tourist hotspot for
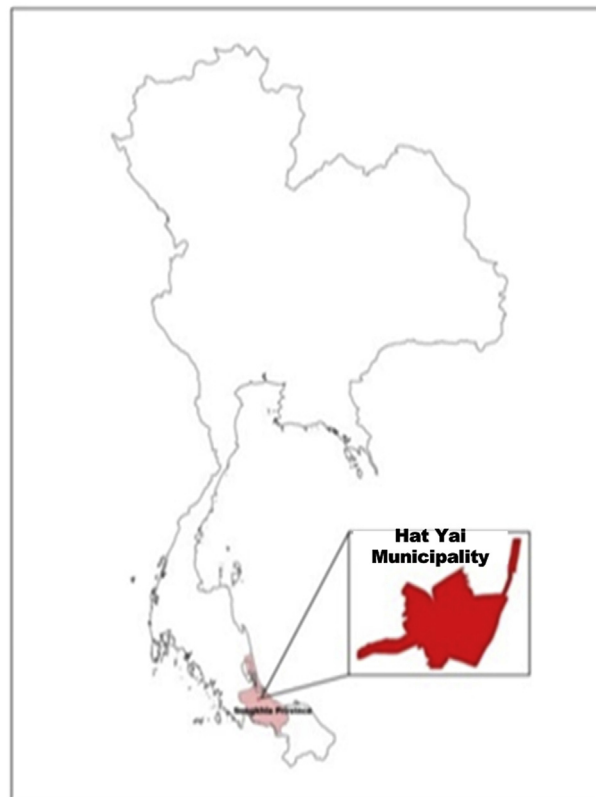

Figure 1 Map of Thailand showing Hat Yai municipality

ASEAN visitors with over 400,000 from Malaysia alone every weekend (Tepsing, 2014). It was chosen based on its metropolitan and heterogeneous quality in a developing country as well as its convenience of proximity (Creswell, 2009; Tashakkori & Teddie, 2003a, 2003b; Teddlie & Tashakkori, 2009).

Research Design

Considering that the study utilized a multisource perceptual rating, the research design followed a mixed methods approach in sampling, data collection and analysis (Creswell, 2009; Creswell & Plano Clark, 2007; Tashakkori & Teddie, 2003a; 2003b). This allowed for flexibility and multiple evidence/data sources, which enabled diverse interpretations for triangulation and in-depth assessments (Baxter & Jack, 2008; Creswell, 2009; Gillham, 2000). In addition, an in-depth document review and pilot study were conducted for surface exploration and testing of collection instruments. A multilevel survey of workers and customers was conducted concurrently from October 2015 to February 2016 using self-administered questionnaires and in-depth face-to-face interviews to ensure credibility, trustworthiness, and reliability (Bernard, 2000; Onwuegbuezie & Collins, 2007). Closed/open ended questions were used in the questionnaire and interview instruments to maintain depth of understanding, inference quality, and representation from the sample (Kemper, Stringfield, & Teddlie, 2003).

A mixed purposeful sampling method was used because there was no formal sampling frame for the study area and to ensure that participants for questionnaires and interviews were drawn from the same pool (Kemper et al., 2003; Kuzel, 1999; Onwuegbuezie & Collins, 2007; Teddlie & Yu, 2007). Samples were taken from the informal hair and beauty services operations in Hat Yai city center and environs based on findings from a pilot study and this aimed to reduce bias and increase representation (Bernard, 2000). Haircare, facecare, nailcare, body/skincare, and massage were considered as hair and beauty services for the purpose of the study. Only participants who were strictly connected with the informal hair and beauty services in Hat Yai were used (Onwuegbuezie & Collins, 2007; Teddlie & Yu, 2007) to enable in-depth study and a convergence of results (Tashakkori & Teddie, 2003a).

The informal hair and beauty services (IHBSs) were chosen because they form an occupational domain that is quite popular with women, youths, and vulnerable groups, are very common in developing nations, and can be found literally on most urban center streets (Kamau & Bwisa, 2013). They work in the informal economy, especially in developing countries, have all the features of informal workers, are mostly self-employed or work for micro-businesses, and have no social or legal protection. Furthermore, as well as the vibrant-timeless nature of the occupation and its potential for job creation in the informal economy, it is most unlikely to succumb to formalization.

The perceptual rating for skill performance levels was developed based on the principle of matching results from multiple raters to derive a single score in order to reduce bias and increase reliability. The consensus estimation of

agreement was also adapted to measure the statistical significance by determining how close or far in agreement the final consensus of both groups were from each other. Descriptive statistics were used for the quantitative analysis and the perceptual rating for skill performance level. Qualitative analysis included grouping similar responses into categories of common themes and sub-themes using frequency counts and percentages.

Informal Hair and Beauty Services Workers' Rating

Survey questionnaires and interview protocols were developed by the researchers to obtain the perceptions of these IEWs and their customers on the skill performance rating. A sample of 150 workers from 71 operations participated in the questionnaire survey while 27 workers were interviewed; However, 120 questionnaires were validly completed and only 15 interview permissions were granted for public dissemination. The survey instruments were developed from the pilot study and then verified by a three-member panel made up of workers from the pilot and an expert. The panel's corrections were then effected and confirmed before being used in the survey. Self and peer performance assessment of 85 skills within the six skill sets were collated based on workers' perceptions and they were required to tick their perceived performance level per skill. All survey instruments were presented in the local language (Thai), but the researcher had a translator on hand and translations were made and confirmed on the support by the respondents. Final translation was carried out by professional translators, an audit team, and the three-member panel. Interviews followed the same route of translation with an exploratory guide using open/closed ended questions, which allowed for in-depth probing in a bid to draw out the workers' strong perceptions about their performance levels. Each worker's profile included socio demographic data, types of training, level of training, and period of practice as well as cumulative, initial, and further training duration.

Informal Hair and Beauty Services Customers' Rating

In total, 130 customers participated in filling the questionnaires and 120 of them were matched to the surveyed workers and service operations. Furthermore, 15 out of the 30 interviewed customers were also matched to the workers (Erzberger & Kelle, 2003; Onwuegbuezie & Collins, 2007). Separate questionnaires and interview protocols were developed for the customers with the only identical sections being the skill performance rating sections where customers were required to tick the perceived performance level of their service provider using the PRS. Survey instruments were verified by a separate three-member panel drawn from the pilot study participants and then corrections were made, effected, and confirmed. Customers were selected from the surveyed operations, tourist groups, non-Thai residents, and university students and so survey instruments were in the Thai and English languages, although only 50 questionnaires and 7 interviews were in English.

Overall Rating

Perceptual estimated ratings scores from the workers and customers were matched and triangulated (Creswell,

2009; Onwuegbuezie & Collins, 2007) and then the skill performance level was estimated using a formula developed for this study called 'perceptual performance rating estimation' (PPRE). This formula is based on the concepts of multisource performance rating, Dreyfus levels of skill performance, job performance, and perceptual assessments were used as described in Section 1.1. This was designed to use group perception to estimate the skill performance of a group of workers from self-peer-customer perspectives. It measures the estimated skill performance levels of workers from novice to master from two levels of perceptual assessment in an occupational domain which reduces individual bias from self-assessment or leniency/central tendency from other-assessments (Bracken, Timmreck, and Church, 2001, Bracken, Timmreck, Fleenor et al., 2001; Landy & Farr, 1980). The sum estimated perceptual score for each skill and skill set at each performance level of both groups (workers and customers) are combined and a percentage score is derived. If paired ratings, for example, show a high percentage at a low performance level for a particular skill, then it means that skill is perceived to be inadequate.

Analysis of Skill Set Performance Levels Estimation

First, the estimated score for each performance level on the PRS per individual skill in a skill set was determined to derive a consensus estimation of workers' performance level per skill as a group of service-providers in the same location and occupation in order to give insight to perceptions of skill performance. Then, the perceived estimated score for each performance level on the PRS was measured as it relates to the entire skill sets required for job performance in an occupational domain. In this case, performance levels for each skill set were estimated to determine the way performance in that service area (for example, haircare) was perceived on the whole. This would further reveal how perceptions of individual skills' performance were affecting the perception of the service area and its patronage. It could also reveal weak links in the service area that need immediate support or actions. This perceptual estimation was determined by taking the final score for each performance level of all skills in a skill set and adding them up together and then dividing that sum by the total number of scores in that skill set and multiplying by 100 (equation (1)) to get a final perceptual estimation score for that performance level. The performance level with the highest score was considered the perceived performance level for that skill set.

$$
\begin{aligned}
SSPL &= \sum WssA1 + \sum CssA1 \\
&= \frac{\sum \left(\sum WssA1 + \sum CssA1 \right)}{TNSSS\ (1)} \times 100
\end{aligned}
\tag{1}
$$

Analysis of Overall Performance Levels Estimation

This parameter attempts to determine the perceived skill performance level rating of IEWs in a particular occupation and the same location. It gives an overall estimation of perceptions of skills performance in the six skill sets of the occupation under study. It can serve to indicate the quality of performance of these workers and

to reveal the level of urgency required in intervention. It could also support or negate assumptions of top-level decision-makers on the skill and productivity level of IEWs. It was calculated by taking the total score for each performance level per skill set and then adding the scores from all the skills in that set for that performance level then dividing by total number of scores in that performance level in all the skill sets and then multiplying by 100 (equation (2)) to get overall perceived performance estimation for that performance level. The overall skill performance level was determined as the level with the highest score.

$$
\begin{aligned}
OSPLE &= A1 + B2 + C3 + D4 + E5 + F6 \\
&= \frac{\sum (pPL)}{\sum (TNSSSs)} \times 100
\end{aligned}
\tag{2}
$$

Degree of Agreement Between Workers' and Customers' Ratings

The degree of agreement measure was used to determine the extent of agreement between the ratings of both groups in order to show whether the two ratings could be statistically matched to derive a single rating (McGray, 2013; Robinson, 1957; Stemler, 2004). This was adapted from the simple-percent-agreement consensus estimate for interrater reliability (Barnhart et al., 2008; Robinson, 1957; Stemler, 2004). The percentage difference score indicated the degree of agreement between the two groups' ratings. A percentage difference of 25 percent and above is considered strong disagreement, 15−20 percent is weak disagreement, 10−14 percent is weak agreement, while 0−9 percent is strong agreement. This contributed to the validity of the study because people and groups perceive differently (Beyerl et al., 2016; Rigby & Sanchis, 2006) and so we needed to know in simple terms how closely related the perceptions of workers and customers were. To determine the degree of agreement, all the scores from each skill performance level across skill sets were summed for workers. Thereafter, the sum estimation per skill performance level was divided by the total sum of all levels and multiplied by 100 (equation (3)) to get a percentage score for each level. The same was done for the scores of customers (equation (4)).

$$
\begin{aligned}
WSPLR &= WssA1 + WssB1 + WssC1 + WssD1 + WssE1 \\
&\quad + WssF1 = \frac{\sum (pSPL)}{\sum (SPLs)} \times 100
\end{aligned}
\tag{3}
$$

$$
\begin{aligned}
CSPLR &= CssA1 + CssB1 + CssC1 + CssD1 + CssE1 + CssF1 \\
&= \frac{\sum (pSPL)}{\sum (SPLs)} \times 100
\end{aligned}
\tag{4}
$$

Subsequently, the percentage score of workers' perceptual performance assessment was subtracted from that of customers on each level to get a difference (equation (5)), which showed the degree of agreement between the two levels of estimated ratings.

$$DoA = WSPLR_1 - CSPLR_1 = \Delta\% \qquad (5)$$

Results and Discussion

The use of multiple raters reduced the bias and increased the validity. When workers rated themselves, they over-compensated less because they assessed from the lens of self and peer in a group, so they were more honest. Furthermore, interviews served to confirm or strengthen the survey findings, while multilevel sampling, respondent verification of their responses after translation, exposing findings to peers and experts for scrutiny, and a preliminary study to aid research and instruments design contributed immensely to the validation of the study. The customers' perception also served as a control measure to counter the self-assessments of the IHBSWs and also to gauge the expectations of the customers.

Participants' Profile

A summary of the participants' profile indicated that they were predominantly female (74%) and Thai (73%) and most were within the age-range of 30–40 (36%). Educational status was mainly secondary school level (34%) with workers at 58 percent and customers, 11 percent (50% of the customers were university graduates), while only 8 percent overall had no formal education. Interestingly, up to 15 percent of workers were educated to university level and 69 percent secondary; thus IEWs are not only those with low education. Most of the workers had worked in hair and beauty services for 1–5 years (49%) and 21–25 years (16%) and had lived in Hat Yai for approximately 11–25 years (45%) while most of the customers had lived in Hat Yai and used hair and beauty services for mainly 1–5 years (26%) and 6–25 years (48%). Thus, they had sufficient experience of hair and beauty services in the study area, especially as their age-range shows sufficient maturity to render in-depth and information-rich observations in the survey. However, some of the workers (34%) had recently relocated to the city from other parts of the country and most of the non-Thai customers (38%) were tourists, which explains the fact that 26 percent of them had lived in the city for only 1–5 years. Most of them were just weekend visitors from Malaysia and vacationers from Indonesia, Singapore, Europe, China, and the USA as well as some being students and teachers from ASEAN countries, Africa, and Europe. Services were mostly provided in Full Salons (27%) providing all types of services and haircare only (23%), but the most available skills and services demanded were haircare (43%) and massage (33%). There were no customers younger than 18, but customers were predominantly young adults and middle-aged (83%) and female (71%) who frequently used full (27%) and exclusively haircare (28%) salons and were mainly university graduates (50%) with the majority (32%) earning an annual income of USD 982–1121. This indicated that skills training should target the latest trends and styles as well as youth-enhancing services, especially since customers can afford reasonable service fees and are willing to do so (48%) as was also equivocally confirmed during interviews.

The results further showed that a majority of the workers (36%) acquired their work skills through apprenticeship, mostly within salons and spas. This was followed by on-the-job (OJB; 16%), fashion and beauty training school (FBTS; 12%) and government skill development centers (10%) with lower levels for social media (6%) and family member/friend (5%). Upper-secondary (8%) and vocational colleges (8%) only played a small role in this occupational skill set, even though most workers had completed secondary level education (69%). Some of them had combined training types, with a mix for their initial and further training, which included social media to improve already learned skills. A majority of the surveyed workers only had 1–6 months (61%) of cumulative initial training, 45 percent had some form of further training and 74 percent had 1–6 years of practice after initial training.

In addition, 60 percent had only basic certified training, while 8 percent and 9 percent had intermediate and advanced certified training, respectively, while 23 percent were practicing without any form of certified training. This indicated that most of these workers had only basic initial training of 1–6 months and few of them had had any further training or many years of practical experience. This probably explained why workers with 1–6 years practice mostly rated themselves as novice, but more workers with 6–10 years rated themselves as competent and a few others rated themselves as proficient, expert, and master (Table 2). The workers perceived that as they gained more practical experience, they perfected current skill levels and so performance increased, but no new skills or insights were added because they could not upgrade or learn new skills. This was quite frustrating and demoralizing for them because they could not improve performance optimally in order to satisfy their customers' expectations and requirements. Customers, on the other hand, perceived that more years of practice showed in performance and knowledge of particular customers' needs based on long time interactions. Nonetheless, performance was still not optimal because the skills remained at basic levels and customers could not obtain updated and current services (Elger, 2007; Kim, 2006; Swart, Mann, Brown, & Price, 2005). Overall, participants perceived that years of practice will not improve performance much without requisite training to upgrade skill levels. This highlights the importance of further training to upgrade skills in performance improvement (Barba-Aragon, Jimenez, & Valle, 2014; Hafeez & Akbar, 2015).

Perceived Skills Performance Level of Workers

The results of the perceptual paired ratings estimation (PPRE) showed some specific skills performance levels in the six different skill sets. Most customers perceived performance levels for skills in the general skills set to be lower than most workers' perception, while most customers perceived skills performance in the other skill sets to be higher than most workers think (Table 3). Of course, the customers revealed during interviews that they did not expect much from their service providers due to inadequate training provisions and so judged them based on this bias intending to be fair. However, the workers respond to

Table 2
Workers' self-rating of performance against cumulative period of practice/training duration

Cumulative practice and training duration	Percentage of workers			Skill performance level					
Years	Period of practice	Initial training	Further training	Novice	Advanced beginner	Competent	Proficient	Expert	Master
1–2	39	97	20	49	19	23	6	2	0
2–4	21	100	13	44	16	20	12	4	4
4–6	14	98	10	29	18	29	12	6	6
6–8	12	98	7	13	13	33	13	13	13
8–10	8	100	3	22	11	44	11	1	0
10 and above	6	98	2	14	14	29	0	2	29

this by arguing that they do try to learn new skills and improve on old ones through social media and practice, but there is only so much they can gain since there is no-one to show them how to do things right. The customers also argued that they really do not see the need to patronize these service providers because the services they offer are so common and easy to do at home, but they would be willing to be pay for more advanced services. This, then, shows that if the workers upgrade their skills, they will keep old customers and gain new ones, make more money, keep up with the trends, and even earn more money (as interviews revealed). Overall, more workers considered their skill performance to be at the novice level (46%), while more customers perceived performance at the competent level (29%). The customers defended this position during interviews by claiming that the workers tried to make the best of the training they received.

Workers measured their abilities per skill performed rather than task and weighed the quality of their service (task) based on the culminated performances of the required skill. In a like manner, customers showed more interest in the performance of skills required for the services rendered than in the full task being carried out. Nevertheless, both groups were more focused on the outcome of the skill performed, which showed that they were not interested in any particular system of operation, but in the turnout of the finished product—for example, 'How did the hair treatment/cutting service turn out?'—rather than what process was used. Therefore, training programs should focus on transferring creative and adaptive skills and not just task and contextual related skills of particular systems/processes so workers can fulfill customers' expectations. Interviews also revealed that customers were highly dissatisfied with performance because they argued that the workers need more skills training, particularly in new, trendy, and more personalized services. Customers want service that attends to their individual uniqueness and treatment conditions, but do not often get such service in Hat Yai. On the other hand, the workers countered that they mostly learn new skills from social media and so have the challenge of really mastering skills as they should.

Perceptual Performance Level for Each Skill Set

For ratings of skill sets, the general skill set was shown to be mainly at the fair level while all the other skill sets (haircare, facecare, nailcare, bodycare, and massage) were at the novice level (Figure 2).

This was evident in the fact that most skills had the highest perceptual performance rating at either fair or novice and so it followed that the skill sets would be patterned in the same trend. Interviews revealed that the challenge was more the fact that customers do not want to spend time and money on services they can do for themselves because the workers mainly operate with basic skills. For example, Thai customers who were greater in number argued that they did not need Thai massage since they can get it at home, but they were willing to pay for health-related massage services like pre-natal, orthopedic, deep tissue, and specific massage therapy that addressed their individual conditions. They lamented that most workers in Hat Yai treat all their customers the same, as if all people were the same, because they did not have the skills and knowledge to handle individualized conditions. Other nationals, especially the tourists, complained that most of the workers do not understand how to handle multicultural hair and skin tones and this makes it difficult for the customers to patronize their services. This indicated that the consensus perception is that these workers in Hat Yai need increased, higher level training to improve their performance and satisfy the needs and desires of their customers. This perception could affect the way the workers view themselves and their occupation as well as the way the customers behave to the workers whether as service providers or acquaintances. It could also explain the self-esteem issues workers exhibited during interviews.
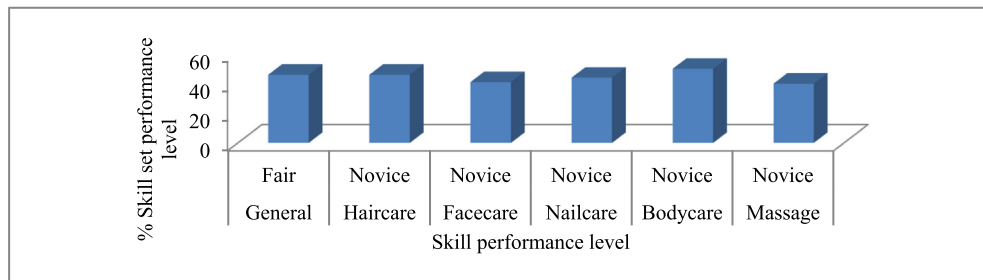
Overall Skill Set Performance Level

The overall results (including both workers' and customers' ratings for the six skill sets) revealed that performance was highly perceived to be at the novice level (35%), although the performance level of the general skills set was considered to be more at the fair level (Figure 3).

The interviews confirmed this, as customers bemoaned the fact that most of the service-providers scattered all over the study area were operating with basic skills because they get only a few weeks of training and then open shop without any further training over the years. The workers interviewed also stated that they would like to upgrade their skills, but there are no quality and desired skills training options available to them and in any case skills training costs too much for them in time and money. It could then be inferred that workers do not attempt to obtain training because the kinds of training they need and desire are not available to them. Further probing revealed

Table 3
Workers' and customers' perceptions of skill set performance levels

Percentage mean		Workers' perception%						Customers' perception%					
Skill performance level		1	2	3	4	5	6	1	2	3	4	5	6
Skill sets	General skills	4	22	43	18	7	2	12	14	46	20	7	1
	Haircare skills	42	20	17	7	4	3	19	26	32	12	5	4
	Facecare skills	54	19	9	6	4	3	19	23	25	9	3	2
	Nailcare skills	55	16	16	4	4	2	19	22	22	7	2	2
	Bodycare skills	68	19	8	4	2	2	22	19	20	5	1	1
	Massage skills	53	17	12	5	4	4	19	20	27	7	5	3

Figure 2 Perceptual performance level for each skill set

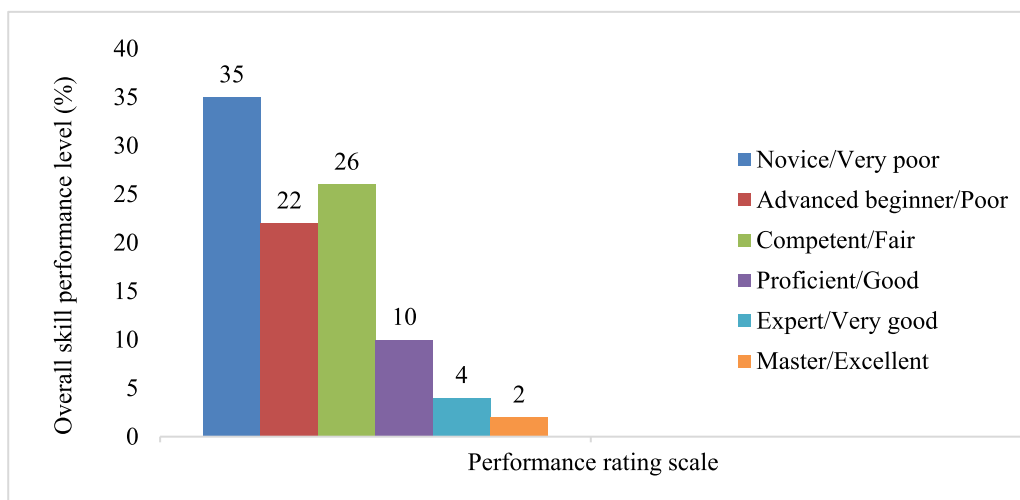that such training is usually too far away, expensive, and time-consuming.

Degree of Agreement Between Workers and Customers

There was weak disagreement between perceptual ratings for very-poor/novice (workers: 45%; customers: 22 −23%) and weak disagreement for fair/competent; but all other levels showed strong agreement in the perceptual ratings. However, the percentage difference for the total of both assessments was only about 7.4 percent indicating that overall, there was minimal disagreement between the perceptual ratings, suggesting that the skill performance of workers in Hat Yai was mostly perceived at the novice level. It was revealed that the highest disagreement was at the

novice level (23%) where more workers rated themselves at the novice level than customers did. This was still weak disagreement. However, interviews exposed a case of leniency and central tendency bias on the part of the customers because they wanted to be fair to the workers since skills were low mainly due to training quality and availability, which the workers have no control over. This reinforces the issue of how workers perceive themselves because even during interviews, workers strongly berated their own performance.

Conclusion

This study was the first of its kind in the assessment of perceptions of workers and their customers on skill

Figure 3 Overall IEW skill performance levels

performance in the IE to provide insight and critical information for policy development and implementation as well as training design and delivery. It uniquely contributes to the discussion on skills development in the IE by developing an instrument of performance assessment from multiple perceptions to determine views on skill performance from different perspectives. The study also highlighted the fact that skill performance assessment is different to job performance, and assessing skill performance of IEWs cannot be conducted as in formal employment. This prompts the need for further study on skills performance assessment for IEWs and how this impacts their productivity, income, and wellbeing. Furthermore, perceptions on the creative and adaptive skill performance of IEWs can be assessed to provide insight on their abilities and requirements for innovation and resilience. In addition, the viability of the multiple perceptual performance rating estimation analytical tool could be tested and strengthened.

It was observed that the period of practice and training quality and duration contributed immensely to skill performance; thus, improving performance will require advancing and progressive levels of skills training, particularly since performance improvement is dependent on levels of skills and knowledge. Overall, the study supported the general concept that IWs are basically low-skilled with low-productivity. This same study can be carried out in other occupational domains to determine performance levels in order to aid training design and delivery. Further research could explore performance levels using a standard rating format to see if there is convergence or divergence with this study. The workers really rated their skill performance levels low even when customers rated them high; and this indicates a low level of self-esteem and occupational respect among the workers; future research could attempt to determine the degree of self-esteem, causes, and remedies. Consequently, we recommend that skills upgrading rather than just acquisition is required; and appropriate and quality training of proportionate duration should be provided for IEWs and designed to incorporate more than one type of training method with enough flexibility to wrap around the workers' schedules. In addition, financial incentives could be provided for IEWs to access training that they ordinarily would not be able to afford. This could be in the form of grants or loans, free training sessions, or even internships with relevant companies and should be able to cover the time period required for the training. Finally, micro-enterprises should be supported to provide opportunities for IEWs to improve their performance through workplace training or internships.

Conflict of Interest

We guarantee that all authors contributed to the article and there is no conflict of interest.

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