

# The Practice of Hiring, Training and Promoting Less-Educated Workers in Malaysian-Based Manufacturing Companies

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## Abstract

This paper reports a qualitative study on the experience of Malaysian employers in hiring, training, and promoting workers with low levels of formal education. Data for this study were obtained from interviews with six individuals who have experience in hiring and supervising less-educated workers. They are managers and executives from three different manufacturing companies: a fabric company, a steel company, and an automotive company. The findings show that less-educated workers are hired for entry-level jobs because they are less demanding and are more likely to stay at the same company for a longer period of time. To compensate for the workers' lack of education, the employers provide learning opportunities, mostly through on-the-job training. Lack of education is not a barrier to career progression at these companies, because workers are promoted based on performance rather than qualifications.

**Keywords:** less-educated workers, hiring, training, promoting, manufacturing, Malaysia

## 1. Introduction

### 1.1 The Problem and Its Context

The manufacturing sector is an important contributor to growth and employment creation in Malaysia (Ali, 2009). The sector employs about 28% of the 12.7 million people in the country's labor force, making it the second largest employment sector after the service sector (Economic Planning Unit, 2012). In terms of wages, the Malaysian manufacturing sector pays lower than the petroleum, mining, and utilities sectors, but higher than the construction and agriculture sectors (World Bank, 2012).

Although the manufacturing sector is valued for its contribution to economic growth and job creation, many of the jobs available do not seem to require a high level of education. This is apparent from the composition of labor in the manufacturing sector, which is dominated by workers who are relatively less educated. According to the Department of Statistics (2012), 80.8% of the workers in manufacturing industry have secondary-school qualifications or lower. This is higher than the overall percentage of less-educated workers in Malaysia, which is 75.5% broken down as follows: 56% with secondary-level education, 16.6% with primary education, and 2.9% with no formal education at all (Department of Statistics, 2013).

This paper raises three pertinent issues on the employment of less-educated workers in the manufacturing industry. The first issue relates to employers' motivation for hiring less-educated workers. Why do employers hire them, instead of hiring better-qualified individuals such as those with post-secondary academic or vocational qualifications? Some possible reasons for hiring less-educated workers are the shortage of qualified workers and the need to reduce labor cost. But we are interested in finding out whether there are other reasons. For example, in the case of foreign workers, one of the reasons for hiring is that they are perceived to be more obedient and easier to manage (North, 2013). In the case of part-time workers, companies prefer them not so much because of the cost but because of scheduling flexibility (Zeytinoglu, 1992).

The second issue is training opportunities. Since less-educated workers have had no formal training prior to employment, much of the training has to be provided by employers. How do employers train these workers up to a satisfactory level? The third issue is job advancement prospects. How do employers provide opportunities for less-educated workers to progress in their jobs? It is very likely that less-educated workers start with low pay. Low-wage jobs are acceptable as long as they serve as a platform to move to better jobs; they should be

“stepping stones” and not “dead ends” (Campbell, 2012). But without opportunities for career progress, there is a risk that these workers may be trapped in low-wage employment.

Concentrating on these issues, we studied the experience of manufacturing industry managers and executives in hiring, training, and promoting less-educated workers. This paper contributes to an improvement in the understanding of the employment situation of people with low levels of education in Malaysia. Currently, there is little research on this topic, which is alarming considering the large percentage of less-educated workers especially in the manufacturing industry.

### *1.2 Defining Less-Educated Workers*

There are other terms besides “less-educated workers” that are used in the literature for example “low-educated workers” and “low-skilled workers”. The terms normally refer to the same group of people. Studies in the literature have conceptualized this group from either the perspective of education by using the term “low-educated”, or the perspective of the labor market by using the term “low-skilled” (Kyndt, Govaerts, Dochy, & Baert, 2011). Currently, there is no consensus on who should be considered low-educated or low-skilled. Using the UNESCO (1997) classification, the International Standard Classification of Education (ISCED), most studies in the literature use either ISCED level 2 (lower-secondary education) or ISCED level 3 (upper-secondary education) as the benchmark for what is considered a low education level.

Some authors have used the term “low-educated” to refer to individuals whose highest education is at ISCED level 2 (Atkinson, Marlier, & Nolan, 2004; Addabbo & Favaro, 2011; Gesthuizen, Solga, & Künster, 2011). Others have used the term to mean those whose highest level of education is a high school diploma (Presser & Cox, 1997), or who have no qualifications from higher education (Kyndt et al., 2011). Steedman & McIntosh (2001) suggested that the term “low-skilled” is appropriate for individuals with ISCED level 3 and below. However, others have defined “low-skilled” as someone with ISCED level 2 and below (Illeris, 2006; Huber, Landesmann, Robinson, & Stehrer, 2010). Although the terms “low-skilled” and “low-educated” frequently share similar meanings, Illeris stressed that the low-skilled group actually consists of broader categories of adult individuals, such as early school leavers with no formal education and training, adults whose skills are no longer in demand, and adults who have never worked a lasting job.

The term used in this study, “less-educated workers,” refers to workers who have no formal education beyond secondary school. This is equivalent to ISCED level 3, or the upper-secondary level of education. In the context of Malaysia, this definition is appropriate as the schooling rate at primary and secondary levels in the country is generally high. Only after the upper-secondary level is the schooling rate lower. According to the Ministry of Education (2014, p. 41), the enrolment rates for primary school, lower-secondary school, and upper-secondary school in 2013 were 94%, 85%, and 78% respectively, but the enrolment rate for post-secondary education was low, at only 16.8%. However, it should be noted that the actual figure must be higher as the ministry’s statistics exclude those who are enrolled at post-secondary private institutions.

### *1.3 Employment and Training Prospects for Less-Educated Workers*

It is estimated that about 23% of secondary-school graduates in Malaysia, or approximately 100,000 students, enter the job market directly after completing secondary school, every year (Economic Planning Unit, 2010). Despite not having formal education beyond secondary school, they continue to find employment in the labor market. The unemployment rate in the country is 3% (Department of Statistics, 2015), which can be considered low. This implies that opportunities for work are still abundant in the country, even for those who are less-educated. Nevertheless, the situation may change in the future. In advanced countries, for example the United States, the employment prospects for low-skilled workers are deteriorating and the earning gap between low-skilled and high-skilled individuals is widening (Sum, Khatiwada, McLaughlin, & Palma, 2011).

When less-educated individuals join the labor market for the first time, the employers who hire them have to give them training. The amount of training they actually received may differ depending on the nature of their occupation. Schindler, Weiss, and Hubert (2011) argued that the training gap between high-skilled and low-skilled workers is primarily due to job characteristics (particularly the task performed and technology used) rather than worker characteristics. If we use this argument, it is reasonable to suggest that manufacturing firms are in a good position to give more training owing to the higher amounts of technology generally utilized in manufacturing processes. Xiao (2002) studied determinants of salary growth using data from both the manufacturing and service sectors in Shenzhen, China. She found that manufacturing firms provided more on-the-job training than service firms owing to the introduction of new technology at the manufacturing firms.

Cuesta and Salverda (2009) analyzed data from the European Community Household Panel (ECHP) from 1995

to 2001 for several European countries. They found that the likelihood of being in a low-paying job can be reduced by high levels of general education and on-the-job training. However, they also found that in Italy and Spain, on-the-job training is important for upward mobility while in Denmark and the Netherlands, tertiary education is more important. Ng and Feldman (2009) conducted a meta-analysis on the relationship between the level of education and job performance using data from empirical studies published in or before 2007. They found that although educational level is positively related to task performance, it is only weakly related to performance in training program. This indicates that less-educated workers can be trained to perform specific tasks until they become competent in executing them. Omar, Krauss, Sail, and Ismail (2011) studied career success among “late bloomers” in Malaysia. They found that success among these workers, who had low academic performance in school, requires a match between the individual’s strength and the organization’s compensation, motivation, and support for that person during their career progression.

Promotion within a firm, or upward mobility, is one of the ways in which less-educated workers can improve their earnings. An important determinant of mobility is the structure at the organization. Brüderl, Preisendörfer, and Ziegler (1993) stressed the importance of factors such as the structure of opportunity and the levels of hierarchy for the upward mobility of workers. However, it is unclear how existing structures influence the progression of individuals in low-wage jobs (Campbell, 2012). In the United States, for example, a large section in the middle of the occupational structure has disappeared (Massey & Hirst, 1998; Mouw & Kalleberg, 2010). This means that there are plenty of low-wage jobs and high-wage jobs, but fewer medium-wage jobs.

Having fewer middle-income jobs in the labor market puts low-wage workers who are at the bottom of the workplace hierarchy at risk because there are fewer opportunities for them to progress. There are many who support the idea that the career ladder is important to help low-wage workers move to better jobs (see, for example, Mills and Prince, 2003; Osterman, 2007), but current popular opinion is that climbing the career ladder is outdated (Claman, 2012; Kaye & Giuloni, 2012). Current career concepts such as the protean career (Hall, 2004) and boundaryless career (DeFillippi & Arthur, 1994) suggest flexibility and freedom for individuals to move from one firm to another as and when better opportunities arise. While such freedom “may benefit those nimble enough to take advantage of it, it leaves countless others vulnerable” (Fitzgerald, 2006, p.11), especially among the less-educated population.

Currently there is little research on topics related to the employment of less-educated workers in Malaysia. This should be considered an important area for research because less-educated workers form the majority of the workforce in the Malaysian manufacturing industry. This paper provides some understanding of the employment of less-educated workers in manufacturing, particularly with respect to hiring, training, and job prospects.

#### *1.4 Research Questions*

There are three research questions in this study. First, what are the motivations behind the decision of manufacturing companies to hire less-educated workers? Second, how do manufacturing companies provide training for less-educated workers? Third, how do manufacturing companies provide opportunities for progression to less-educated workers?

## **2. Method**

Data for this study were obtained through interviews with representatives from three different manufacturing companies. The first company is a small, privately-owned local factory that has 35 employees and manufactures woven narrow fabrics. The second is a large steel factory that employs around 1,000 people; about 800 of them work in the steel plant. This company is a subsidiary of a public company listed on the Bursa Malaysia. The third company is a car engine factory that employs around 600 people. This factory is a subsidiary of an automotive company that produces cars for the local market.

Interviews were conducted after receiving permission from company management. There were three interview sessions. The first session was with a technical director and an assistant factory manager at the fabric company. The second was with two human resource executives from the steel company. The third was with the deputy general manager and a trainer from the engine factory. It should be noted that at the first and second companies, only a single, one-off session took place. At the third company, ongoing work is currently being conducted by the first author, who is carrying out a case study for his doctoral dissertation. However, the data for this paper is based only on the first interview at the engine company.

All participants were male, with the exception of the assistant factory manager at the fabric company. The interviews were semi-structured. During the interviews, the participants were asked a similar set of questions relating to the research questions of this study. They were also asked additional questions based on their

responses during the interview. All interviews were recorded and transcribed for the purpose of analysis. The interview transcripts were analyzed to identify themes that emerged from the data. This process was done manually by coding the data and comparing the data from the three interviews. The practice in interview research is that the participants remain unidentified (Seidman, 2006). Thus, in this paper, pseudonyms are used to protect the identities of the participants.

In the findings section, direct quotes from company representatives are used when appropriate. Words or phrases added by the authors to improve meaning and clarity are enclosed in square brackets. Parts of speech that were omitted are indicated with empty brackets.

### 3. Findings

Based on analysis of the interview transcripts, three main findings can be presented. First, most of the companies prefer hiring less-educated workers for entry-level jobs because such workers are less demanding and more likely to remain working at the factory for a longer period of time. Second, the companies provide learning opportunities in the workplace. Company representatives believe that less-educated workers are trainable; a low level of education is not a barrier for workers to be trained or to do well at work. Third, employers are willing to promote less-educated workers regardless of their academic qualifications, as long as they show good performance.

#### 3.1 Companies Hire Less-Educated Workers Because They Are Loyal and Less Demanding

The first research question was, “what is the motivation behind the decision of manufacturing companies to hire less-educated workers?” The findings from this study show that the manufacturing companies select less-educated workers for two reasons: First, less-educated workers are less demanding; and second, they are more likely to stay at the company for a longer time.

Company representatives believe that many better-educated people such as certificate and diploma holders do not have the right knowledge and experience to justify their salary demands. According to Tajinder, the technical director at the fabric company, these people think that they “know too much” and thus their “expectation for remuneration is very high”. This observation is supported by Nizam, one of the human resource executives at the steel company, who clearly stated his hiring preference: “Qualification wise, I take from the bottom. When we focus on diploma and certificate holders, they start to demand. They demand high salary with no experience”. The company representatives clearly have a preference for less-educated workers for entry-level positions. “I prefer those from the lower level,” was Nizam’s response when asked of his hiring preference. Tajinder explained his hiring policy:

*You can take from primary school all the way up to degree. Management is usually degree. Supervisory can be anything from Form Five up to diploma [level]. But we find normally diploma holders are too impatient. The grass is greener on the other side so it’s difficult with them.*

Formal education does not seem to make a person special. It seems that the skills that matter most to the companies are factory-specific skills; this is true within the context of entry-level manufacturing jobs. Someone with a diploma qualification still has to be trained but unfortunately, most of them don’t stay for long. According to Nizam, “the diploma students that I hire, they only worked here for two or three years. Then, they got other offers and left”. Company representatives think that diploma holders lack the patience to learn the trades at the company. Sheila, the assistant factory manager at the fabric company, made the following comment on people with diploma qualifications:

*They didn’t have that attitude, or positive mind that “Okay, today I learn, I have people who gave me opportunity to learn. And I learn today and tomorrow I can use it in other places”. They don’t want to take that. They are not patient.*

This phenomenon is in contrast to people who lack formal qualifications. They are less demanding and they have the patience to stay with the firm for a longer period. Tajinder thinks that they are more “receptive to be trained, to be given knowledge on [a] piecemeal basis, slowly in a steady manner so that they move forward”. Sheila made the following observation on less-educated workers:

*They feel that they don’t have anything, so they have to learn. So they have that attitude. People who already got [a] certificate, they don’t have that attitude. They will feel that they know everything and you’re not giving enough to them. So they won’t stay.*

Hamdi, the deputy general manager at the engine factory, told a similar story of how qualified machinists at the machine shop in his engine factory usually stay for only a short period of time. He said, “these people are quick

to leave". But Hamdi didn't put the blame solely on these individuals, as market demand and the company's existing pay structure also contribute to the situation. At his factory, the starting pay is the same regardless of qualifications. This means that individuals with vocational certificates and those with secondary qualifications receive equal starting pay. Hence, someone with a vocational qualification would use the knowledge and experience at the company as a stepping stone to obtain a better job elsewhere. "Demand is high," said Hamdi about his qualified machinists. "Here, you get a thousand and half [salary in Ringgit], outside they can get more than two, [or] three thousand basic [salary]," he added. At the engine company, less-educated workers tend to stay longer and thus provide stability to the manufacturing workforce.

Shahrin, a trainer at the engine factory and also a former production supervisor, explained that the factory used to differentiate between new recruits based on their qualifications. New workers with post-secondary vocational qualifications were normally given better pay and a slightly higher job-entry position than secondary-school graduates. However, over a period of time, the company observed that workers who lacked qualifications could sometimes perform better than qualified employees. This means that workers have the potential to perform well, despite lacking in academic credentials.

It is interesting to note that precautionary measures exist at the factories to ensure that new recruits meet the minimum literacy and numeracy criteria set by the companies. Before hiring, potential employees are assessed to make sure that they have sufficient literacy levels to perform work on the production floor. They must have skills such as basic literacy, numeracy and the ability to understand instructions. At the engine factory, the management purposely hire workers with good grades in mathematics to work as machine operators in a computer numerical control (CNC) machining line. According to Mohan, one of the steel's company human resource executives, new workers must at least be able to "read and write and then understand what we are saying". At the fabric company, according to Sheila, "if we hire operators, we want to make sure they can read at least Malay". Workers at the fabric company are also tested for measurement skills: They are given a ruler to measure, for example, the width of a tape, to see whether they have the basic measurement skill that is required for work the fabric factory.

There seems to be a common view among the company representatives that positive attitude is more important than a high level of education. The employers are willing to hire people with a low level of education as long as they are trainable and they have the patience to learn. People with low levels of education are seen as less demanding than certificate or diploma holders. They are also believed to be more likely to stay at the company for a longer period of time.

### 3.2 Companies Provide Learning Opportunities at the Workplace

The second research question in this study was, "how do manufacturing companies provide training for less-educated workers? From analysis of the interview transcripts, it appears that the companies provide plenty of ways and opportunities for workers to learn at work. According to the representatives, training is given to help workers to do well at work. Tajinder said:

*We actually run a class, give them training for about minimum two weeks. They do nothing but learn, you know. Learn and practice, learn and practice. Two weeks in different aspects of the job. Then, they're put on the job. If they are okay, fine. That means they're learning, they're moving forward. If they're not okay, then we bring them back and again, do it again one more time.*

The role of a supervisor or an immediate superior is important in the training of new workers. Mohan from the steel company said, "At each section there is an immediate superior, he will train every worker". The situation is similar at the fabric company: According to Tajinder, "We always have the supervisor teaching them. If the supervisor says the person is good, if he can't deliver the goods, then you are responsible for that person".

At the fabric company, there are also opportunities for off-the-job training. According to Tajinder, his company sends workers for technical certification: "We try to send people on the boilerman certificate and we try to send people on the chargin certificate". Company representatives believe that with the training and experience, less-educated workers can match or even surpass the ability of diploma holders. According to Nizam,

*The boys whom I train from the bottom, with enough knowledge in them, they can beat diploma guys, they can beat them. By the time they reached a similar age to the diploma guys, they would've had more experience than the diploma guys who only have theories but no practice.*

Tajinder narrated a success story of a former employee who joined the factory with only a Lower Certificate of Education (LCE), which is equivalent to ISCED level 2. This person was able to progress within the company, despite lacking in formal education. Tajinder told this story:

*I had one Malay guy who joined us, who joined with me since 1979 I think, 1979 or '80. He was just an*

*LCE guy [ ] That guy came in with zero [knowledge], when he walked out of here he could do welding, he could repair electrical wiring, he could do wiring and stuff like that, he could repair gear boxes, very complex infinitely variable gear boxes, he could repair that [ ] He also got his boilerman certificate.*

There is a common belief among the company representatives that a low level of education is not a barrier for workers to perform well in the workplace. This belief is probably rooted in their successful experience in providing training for less-educated workers. Companies can provide the right training to help workers gain the necessary skills for success. As less-educated workers gain skills and experience, they are able to work just as well as those with formal qualifications.

### *3.3 Companies Promote Based on Performance Not on Academic Qualification*

The third research question was “how do manufacturing companies provide opportunities for progress among less-educated workers?” The findings from this study show that job prospects do exist. There is a willingness to promote, regardless of academic qualifications. According to Tajinder, “You deliver the result, you get the appointment”. This is true in the case of less-educated workers. They can be promoted as long as they demonstrate good performance. Sheila provided examples of female workers who, despite having low academic qualifications, managed to rise to supervisory levels. According to Sheila, “We have a foreign worker [ ] She joined us as an operator [and] now she’s a technician [ ] we have another lady, she’s a standard six [received primary schooling only] and she has become a line leader”.

A similar situation was reported by representatives of the engine factory. According to Shahrin, academic qualifications are not the main criterion for promoting workers. For example, operators can be promoted to team leaders and subsequently to supervisors if they demonstrate good performance. Shahrin said that there was an employee at the company who started as an operator but now holds the title of assistant manager. At the factory, a university degree is not required for promotion to an executive. A good example is Hamdi, the deputy general manager. He doesn’t have a university degree, only a vocational certificate from a skills training institute and an executive diploma from a private college. Nevertheless, with knowledge and experience gained on the job, he was able to gain promotion to a senior management position.

When promoting employees, the companies look for criteria that are beyond formal qualifications. According to Mohan, “Attendance must be good. Interest in the work must be good, quality of work must be good, and also attitude”. When he was asked whether there is a certification requirement for promotion, he answered,

*Normally no. Of course we will encourage them. Then we will send them for internal training, something like safety training, 5S housekeeping, what they call on-the-job training, crane training, we have a few courses related to this position.*

At the steel company, the entry-level employees at the production plant are called production technicians. The company uses this job title to reflect the nature of products manufactured at the company; Mohan refers to these as “heavy-duty” items. Even if a person joins the company with only a secondary qualification, he or she would still be called a technician. Mohan explained the company’s career ladder:

*There are five levels for technicians. If a person is skilled enough after one or two years, he will move to level 2. At level 2, after two to three years move to level 3, and then when he has everything; [all the] information at his fingertips, most probably he can move straight to level 5 or level 4 [ ] If his performance is really good, after level three, double promotion is possible.*

Workers who show good performance can be promoted to supervisory and even executive levels. Mohan said, “After level 5, the next position is called supervisor, after supervisor, then the next position is executive”. A similar pathway also exists for workers at the fabric company. Tajinder explained the career pathway, which consists of five hierarchies for production workers at his company:

*You come in as an operator, sometimes line leader, sometimes no line leader, [then] technician, that means you start to be able to maintain the machines [ ] After technician you become assistant supervisor and supervisor.*

The companies in this study have put in place a well-defined career pathway for entry-level production workers. Nevertheless, not all are promoted, and some eventually leave. But they leave after gaining useful knowledge, and after securing better jobs at other places. Tajinder said, “Some of them do get better offers because their friends have introduced them to other companies, like multinationals”. Tajinder added that the larger companies pay better salaries: “They pay at least 30% more than we do”. Similar events have occurred at the steel company. According to Mohan, “Not everybody stays for a long period. Even technicians, after three or four years, despite being skillful here, they still want to go for a higher salary, right, so they will quit”.

#### 4. Discussion

This study shows that lack of formal education is not a barrier for less-educated workers to be trained or to be successful at work. To help workers to succeed, employers provide opportunities for them to learn in the workplace, mostly through on-the-job training. Prospects for job progression do exist for less-educated workers. At the manufacturing companies where they work, there are career ladders that they can climb in order to reach higher positions and better pay. When employers promote workers, they are willing to waive the formal education requirements as long as the workers show good performance.

Logically, an unskilled worker would cost a firm much less than a skilled worker; the cost of hiring a skilled worker is between 10 and 17 weeks of wage payments (Blatter, Muehlmann, & Schenker, 2012). However, the company representatives in this study didn't mention saving money as a reason for hiring less-educated individuals. Based on past experience, company representatives believe that people with formal qualifications will not stay very long and may also have some attitude issues. Thus, they prefer less-educated workers. One of the employers stated his willingness to hire even those with only primary school qualifications as long as they show a willingness to learn. These employees have the potential to stay at the company for a while, and at least a little longer than certificate or diploma holders, who tend to join just for the experience and leave as soon as they receive a better offer from elsewhere.

The fact that hiring less-educated workers is not detrimental to production operations indicates that manufacturing jobs at these companies do not require a high level of education. Of course, there are company-specific skills that need to be acquired in order to be able to do the job, but these skills have to be acquired on-site, not through academic courses at educational institutions. Nevertheless, the companies do take precautionary measures by screening the workers so that those who are hired have sufficient numeracy and literacy skills.

On the issue of the perceived negative attitude among certificate and diploma holders, it is possible that manufacturing jobs, especially entry-level jobs at a factory, may not be suitable for someone with a certificate or diploma qualifications. Certificate and diploma holders may not want to start in entry-level posts alongside secondary-school graduates, but unfortunately, employers feel that their skills and experience are not sufficient for them to start higher up in the company. Naturally, higher education leads to higher expectations. When the expectations are not met, better-educated individuals become dissatisfied.

A person's level of education is frequently equated to their skill level (Steedman & McIntosh, 2001; Illeris, 2006). However, the companies in this study did not equate skills with educational level. Lack of formal education is not a barrier to career success in manufacturing jobs because the critical skills can be acquired in the workplace. Manufacturing jobs require factory-specific skills that formal education is unable to provide. At the factories, on-the-job training is vitally important for ensuring that workers have sufficient skills and knowledge to perform their tasks in the workplace.

The reality of technical education in Malaysia is that the educational content lacks practical skill components that graduates can utilize immediately in the workplace. A person who has a bachelor's degree in engineering may have a great deal of theoretical knowledge, but will lack practical skills; these have to be acquired in the workplace. On the other hand, someone with a vocational certificate has plenty of practical skills, but lack the theoretical foundation that a bachelor's degree holder acquires through their university education. Between these two extremes are diploma holders, who possess a certain amount of both theory and practice.

The available graduates are often not suitable for the companies, so the companies hire employees who do not have formal higher education. To compensate for a lack of education, the companies provide support in the form of continuous training in order to help the workers acquire the skills and knowledge required to be successful in the workplace. The scenario in which less-educated employees are given plenty of opportunities to learn in the workplace is consistent with the findings of a study by Xu and Lin (2011), who suggested that "Workplace training is driven primarily by the gap between the job functions performed by workers and the education backgrounds of these workers, everything else being equal" (p. 423). This situation indicates that a lack of formal education is not necessarily a barrier for learning in manufacturing industry.

A less-educated person is likely to earn a low initial salary upon joining a firm. However, this situation is not permanent. There is a pathway for this person to move up the career ladder. Pre-employment formal education is an important determinant for salary only at the hiring point; as workers gain more experience and receive on-the-job training, their technical proficiency improves and so do their wages (Xiao, 2002).

The manufacturing firms in this study emphasized worker performance; that is, good employees are promoted.

This is how workers move up the career ladder. In cases where they do not move up the ladder, they still gain valuable knowledge and skills that increase their value or employability. At the companies in the study, there are reported cases of people leaving to join other companies, after working for a few years, in order to obtain higher pay. Their skills and experience helped them to earn better wages elsewhere.

## 5. Conclusion

An important point to emerge from this study is that workforce stability seems to be the key behind an employer's decision to hire. Employers dislike workers who join the company just for the experience and leave as soon as they receive a better offer from elsewhere. From past experience, employers have learned that less-educated workers are more loyal than their better-educated peers. Thus, employers prefer to hire less-educated workers for entry-level manufacturing jobs and to groom them for higher positions.

Career paths exist for less-educated manufacturing workers. Their low-wage initial pay is not permanent. They can progress higher up the organization and earn better pay through a well-defined career path that has been put in place by their employers. Progression along the career pathway depends on their work performance. To help workers perform better, learning opportunities are provided by the employers. Lack of formal education is not a barrier to career progress; workers can move up the career ladder despite having a low level of academic qualifications.

More studies are needed in order to examine whether similar situations exist in other manufacturing companies. One of the limitations of this study is that it had only a small number of participants. Thus, the findings are only valid for these particular companies and cannot be generalized to other manufacturing companies in Malaysia. Further data collection would be useful to improve the validity of the findings. Understanding the situation in a broader context will be crucial for designing intervention policies to improve the employment situation for less-educated Malaysian workers.

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