



#### **Conference Paper**

# Understanding Skill Mismatch from Learning Organization Perspective: A Literature Review

#### Yustina Erti Pravitasmara Dewi and Lieli Suharti

Satya Wacana Christian University, Indonesia

#### **Abstract**

Various studies say that skills mismatch is one of the causes of weak competitiveness of a country. Although skills mismatch has been widely described in various macroeconomic kinds of literature but has not been explained in human resource management literature. This article attempts to explain the skill of mismatch in the perspective of learning organization literature to bring the better explanation on how an organization is handling such a mismatch. With this objective, this article provides a bridge analysis in understanding macro skills mismatch to the management of human resources at the organization level. As a literature review, this article is derived from the search of scientific journals through EBSCO and Google Scholar with the publication period of the year 2000–2017. The conclusion of this article is to support organizational learning theory that can enhance the competitiveness of the organization. The competitiveness created through the learning organization will be an effort in dealing with the skills mismatch.

Keywords: skills mismatch, learning organization, competitiveness

Corresponding Author:
Lieli Suharti
lieli.suharti@staff.uksw.edu

Received: 29 August 2018 Accepted: 18 September 2018 Published: 11 November 2018

#### Publishing services provided by Knowledge E

© Yustina Erti Pravitasmara
Dewi and Lieli Suharti. This
article is distributed under the
terms of the Creative Commons
Attribution License, which
permits unrestricted use and
redistribution provided that the
original author and source are
credited.

Selection and Peer-review under the responsibility of the ICOI-2018 Conference Committee.

## 1. Introduction

People in general have been a common practice that job seekers accept jobs that are not in line with their educational background. The same thing happens in organizations, companies recruit and place employees who do not have an educational background requested by specific positions. The previous academic literature found that terminology used to describe such a situation is called the skills mismatch. As claimed by the International Labor Office or ILO (2013), the skills mismatch phenomena encountered by these companies undermines the competitiveness level at both micro and macro level.

Previous studies have examined, and observed skills mismatch as dynamic situations that occur continuously in the business context. Some researchers have tested the mismatch skill with a connectivity approach between the inherent level of education in the individual, and the work is done, where it triggers the skills mismatch

**○** OPEN ACCESS



(Jobenkova 2015, Artes et al. 2014). Studies skills mismatch use the educational level approach because data are available, so it is easier to analyze (Dobbs and Anu 2015). Meanwhile, assessing the skills mismatch with the approach to education is considered to have a weak side. Badillo-Amador (2013) states that there is a difference between skills mismatch and education mismatch because each has different characteristics and aspects in the level of accuracy on balance between the types jobs and the workers, thus there are different consequences for the workers in both monetary and non-monetary forms.

Human resource management practices of placing employees in particular jobs without proper skills or education can undermine competitiveness, yet saying so cannot provide a picture with can assist the organization. Various studies have been dedicated to proving that skill mismatch affects company productivity, such as Mahy et al. (2015), Abraham (2015), Bender and Heywood (2011), Chowdhury (2014), Allen and DeWeert (2007) Kasarda (1990). The evidence that contributes significantly to the skills mismatch literature opens opportunities for analysis at the lower levels with a focus on organizational behavior.

The study of the organization and its behavior has provided various positive contributions for the company to achieve its goals in business. Changes in the social trends are phenomena as the skills mismatch, can be viewed as both a challenge and an opportunity for a learning organization to adjusts and maintains its competitive advantage. Past research has convinced that in a healthy organization there is a willingness and commitment to continuously learn to expand its capacity, which is one of the characteristics of learning organizations (Senge 1990). Thus, this article wishes to contribute to the skills mismatch literature from the perspective of a learning organization.

## 2. Literature Review

#### 2.1. Skill mismatch

The ILO (2014) publication explains that term skill mismatch represents the various types of imbalances between the skills possessed and the skills needed in the work-place. Departing from the belief of the economists on the inequality of the labor market, Holzer (2013) assesses the incidence of mismatched skills as something that is always there at any time or decade. Thus the policy interventions to improve the worker's skills to match the needs of the employers takes particular attention.



The term Skills mismatch is used to interpret various situations about the employee's skills that are not in line with needs of the company. Previous research has identified these gaps and mentioned them in other terms such as over and under Skilling, over and under education or skills shortage. Thus, the similar situation faced by both the companies and the employees has different terminologies. However, they are similar in meaning to the definition of skills mismatch. In other words, skills mismatch has several dimensions.

The skills mismatch dimension can be found in a variety of literature that has been dedicated to examining the gap between education and the workplace, as well as between the employee's skills and the company demands. The first mismatch is over education and under education called educational mismatch, referring to situations where one's education is incompatible with the criteria of the work it carries. Mahy, Rycx, Vermylen (2015) proves a link between educational mismatch and company productivity. Using panel data between the years of 1999–2010 in Belgium, the research cites two features of educational mismatch. The first is over education, a situation where the employees have higher levels of education compared to company's demand. The second educational mismatch is under education referring to a situation where the employee's education is lower compared to company demand.

The second mismatch dimension is the vertical mismatch and horizontal mismatch. Cedefop (2010) defines vertical mismatch as a situation where the level of education or skills is less or more than the requirement. While horizontal mismatch is defined as a situation where the level of education or skill matches the job requirements, but the type of education or skill is inappropriate for the current job. More simply horizontal non-horizontal is defined by Domadenik, Farcnik and Pastore (2013) as the gap between the field of education and the types of jobs available.

The next dimension of mismatch is skill shortage or lack of skills. Skill shortage is one of the terminologies used by previous researchers in examining mismatch. Cappelli (2015) describes this as a situation where a corporate faces a shortage of employees with specific skills. The fourth dimension of mismatch is over or under skilling which refers to conditions in which the skills possessed by the employees are below or above the company requirements. Figure 1 reflects the terms used by earlier researchers in relating to the skill-summing terms, which briefly depict the gap between the ability of the employee and the needs of the firm. Skill mismatch is a topic that attracts the attention of researchers from various disciplines. In organizational and management journals, researchers like David Smith (2012) mentioned the gap as the skills gap.





Figure 1: Skills Mismatch Dimension (literature).

## 2.2. Learning organization

Linking the skills mismatch phenomenon and the theory of learning organization invites the question of a link that needs to be discovered so that there is a conformity between the theory and practice within the organization. Individual inconvenience factors at work due to skill mismatch (Florentine and Prabowo 2014) are contrary to the principle of running a learning organization.

The demand for the organization to survive the flow of changes, affirms every individual owns the learning organizational skills, including employees with a skills mismatch. Such demand refers to what makes the organization grow into a learning organization, which is expected to be able to survive in various business model changes due to technological developments.

Despite the various changes in the environment and business models, organizations are required to make changes or adjustments to the growing trend to maintain a competitive advantage. Marquardt (1996) explains that companies need to improve their ability as learners if they want to stay in a fast-changing business competition. Organizations cannot be learning organization without any support from individual learners. So the role of individuals who wish to continue learning will form a learning organization. When it comes to the phenomenon of skills mismatch it can be, temporarily concluded that only with a learning organization climate, an employee with



skills mismatch could adapt and acquire skills that match the company's expectations. That conclusion in line with the result of Wang's (2006) research on the importance of learning organizations in the success of the company which also mentions that to achieve success there is a crucial role of human resource management that manages individuals within the company.

The integration of the role of human resource management in shaping the company's atmosphere as a work environment that can learn every time continuously will result in employees who are ready to achieve corporate goals. In this context, the learning organization will be able to manage its employees well, to produce an optimal performance for the achievement of organizational objectives, including for employees with a skills mismatch. Learning organizations can be successful when it involves employees in day-to-day practices that improve the quality of the organization. More than just a tradition, Senge (1990) mentions the need to share vision between employees and companies. Involving employees in building the learning organizations can be found from the characteristics of the roles of employees as individuals and companies as organizations, as shown in Table 1.

TABLE 1: Characteristics of learning organizations and practices.

Characteristic	Personal mastery – individual	Mental models – individual	Building shared vision – group	Team learning – group	Systems thinking – group
Definition	The ability to see reality as it exists, and to define what goals are trying to achieve	the ability to compare reality or personal vision with perceptions	The ability of a group to hold shared visions with commitments and mutual understandings	The capacity of members of a team to suspend assumptions and enter into a genuine 'thinking Together'.	The ability in developing scientific knowledge by adopting an analytical method to understand problems.
Practice	Willingness to face limitations and difficulties; ability to deal with changes; being responsible to one's own behavior	Being more open and positive toward many things including colleagues; willingness to adopt new challenges	more effective communication flows; easier to ease the arguments, to build team trust and commitment, and being more cooperative		Long-term improvement or change; decreased organizational conflict; continuous learning among group members
References: Wang (2006)					



# 3. Methods

This study is a literature review conducted in 2014–2017 and refers to carefully selected scientific articles taking into account the reputation of the publisher, the topic discussed and the year of publication. The selection of publication time spans is divided between articles on skills mismatch and learning organizations, as presented in the following table:

TABLE 2: Source of the article.

Topic	Resources	Range of Year Publication
Skill Mismatch	EBSCO and Google Scholar	2000-2017
Learning Organization	EBSCO and Google Scholar	1996-2000

# 4. Discussion

According to Senge (2000) the definition of earning organization refers to the ability of individuals in the organization to continually expand their capacity to achieve what is desired or the environment in which individuals and organizations learn together. Thus, this is consistent with Table 1 on the explanation of the role of sides of both the individual and the organization in realizing the learning organization.

Continuous relationships between individuals and organizations in realizing the learning organization also need to pay attention to the ability to see the reality in the world of work, to achieve the goals of the company. Previous research has shown a positive correlation between the realities facing the company and the model of the learning organization. By finding a scientific explanation of the skills mismatch phenomenon and how the learning organization improves the learner's capacity for productive performance is a micro-contribution for better competitiveness.

The strategy and work plan emphasized in the learning organization that involves all the individuals within the organization indicates a continuous process of communication in building the characteristics of the learner. In other words, the relationship between individuals and organizations occupies a critical position, whereas found by Simon (1999) the organization can be a learner of the individuals in it. Thus, a learning organization will be applicable if there is continuous communication between the individuals and their organization.

In today's turbulent business environment, communication between individuals and organizations can be assumed that it does not always go on smoothly. Thus, this



becomes a challenge for the organizational learning climate. Developments in the world of work that mention skills mismatch a factor weaken the competitiveness of companies and countries, need to get a response from the perspective of learning organizations. In other words, learning organizations get same challenges that need to be answered to explain the relationship between individual skills mismatch and the organization.

## 5. Conclusion

Various studies have been conducted to understand the learning organization in its ability to support productivity and competitiveness. In some other literature, the criticism of the difference between employee's skill and occupation translated as skills mismatch, has been summed up as a cause of low competitiveness. The two areas of research cannot be separately analyzed, given the equality of research objects, in this case, is business organization. Explaining the skills mismatch from a learning organization perspective can be used as a better organizational analysis and management tools, matching and being prepared for change. In other words, it can be concluded that the company could avoid the skill mismatch incident by practicing the principles of a learning organization. Previous studies confirm that the practice of learning organizations can support employee's productivity. Therefore, learning organization becomes the resolution of the mismatch skill that negatively influences employee's and company's productivity.

The limitation in this article is on the empirical data on how the learning organization can be the answer to the skills mismatch phenomenon at the enterprise level. So the suggestion for the future research is to survey some individuals and companies that can support this literature review.

# **Funding**

This article is part of a dissertation under the same topic 'Skills mismatch and corporate HRM governance'. The research received a support from the Ministry of Research and Higher Education of the Republic of Indonesia under 2018 Dissertation Research Grants.



### References

- [1] Artes, J., Salinas-Jimenez, M., and Salinas-Jimenez, J. (2014). Small fish in a big pond or big fish in a small pond? The effects of educational mismatch on subjective wellbeing. *Social Indicator Research*, vol. 119, no. 2.
- [2] Abraham, K. (2015). Is skill mismatch impeding U.S. economic recovery? Retrieved from ilr.sagepub.com
- [3] Allen, J. and DeWeert, E. (March 2007). What do educational mismatches tell us about skill mismatches? A cross country analysis. *European Journal of Education*, vol. 42.
- [4] Badillo-Amador, L. and Vila, L. E. (2013). Education and skill mismatches: Wage and job satisfaction consequences. *International Journal of Manpower*.
- [5] Bender, K. A. and Heywood, J. S. (July 2011). Educational mismatch and the careers of scientists. *Education Economics*, vol. 19, no. 3, pp. 253–274.
- [6] Cappelli, P. (March 2008). Talent management for the twenty-first century. *Harvard Business Review*.
- [7] Cappelli, P. (2009). A supply chain model for talent management. *Perspectives-Point, People and Strategy*, vol. 32, no. 3.
- [8] Cedefop. (2010). *The Skill Matching Challenge-Analysing Skill Mismatch From Policy Implication*. European Centre for the Development of Vocational Training. Luxembourg: Publications Office of the European Union.
- [9] Chowdhury, S. R. (2014). Skill mismatches in Indian labor market: Policy priorities & challenges ahead. *Indian Journal of Industrial Relations*, vol 49, no. 3.
- [10] Dobbs, R. and Madgavkar, A. (June 24, 2014). The world at work: Matching skills and jobs in Asia. UNESCO IBE.
- [11] Domadenik, P., Farčnik, D., and Pastore, F. (July 2013). Horizontal Mismatch in the Labour Market of Graduates: The Role of Signalling. Discussion Paper No. 7527, the Institute for the Study of Labor. IZA.
- [12] Florentine and Prabowo, S. (2014). Hubungan antara Skill Mismatch dengan stres kerja pada karyawan PT X. *Psikodimensia*, vol. 13, no. 2. Fakultas Psikologi Universitas Katolik Soegijapranata Semarang.
- [13] Holzer, H. J. (November 2013). Skill mismatches in contemporary labor markets: How real? And what remedies? Georgetown University and American Institutes of Research.



- [14] International Labor Organization. (2013). Skills mismatch in Europe. Statistics Brief, Geneva 2014. Retrieved from http://www.cedefop.europe.eu/EN/Files/9023\_en. pdf (accessed Aigust 1, 2015).
- [15] Jonbekova, D. (2015). *University graduates' skills mismatches in Central Asia: Employers' perspectives from post-soviet Tajikistan*. University of Cambridge, European Education.
- [16] Kasarda, J. D. (1990). The Jobs Skills Mismatch. *NPQ: New Perspectives Quarterly*, vol. 7.
- [17] Mahy, B., Rycx, F., and Vermylen, G. (2015). Educational Mismatch and Firm Productivity: Do Skills, Technology and Uncertainty Matter? IZA Dissucion Paper No. 8885.
- [18] Marquardt, M. J. (1996). Building the Learning Organization: A System Approach to Quantum Improvement. Mc-Graw-Hill.
- [19] Senge, P. M. (1990). *The Fifth Discipline The Art and Practise of Learning Organization*. New York, NY: Double D/Currency.
- [20] Senge, P. M. (2000). Schools that Learn: A Fifth Discipline Fieldbook for Educators, Parents and Everyone Who Cares About Education. New York, NY: Doubleday A Division of Random House.
- [21] Simon, B. (1999). Why no pedagogy in England? in J. Leach and B. Moon (eds.) *Learners and Pedagogy*. London: SAGE Publications.
- [22] Smith, D. (2012). How employers can help close the skills gap. *Harvard Bussiness Review*. Retrieved from https://hbr.org/2012/02/how-employers-can-help-solve-t&cm\_sp=Article-\_-Links-\_-End%20of%20Page%20Recirculation (accessed on April 15, 2017).
- [23] Wang, P. Y. (2006). Human Resource Management plays a new role in learning organizations. *The Journal of Human Resource and Adult Learning*.