THE SIGNIFICANT ROLE OF SOFT SKILLS TRAINING IN THE WORKPLACE IN THE ERA OF INDUSTRY REVOLUTION 4.0: A LITERATURE REVIEW

Shaliza Shafie^{1,*}, Faizah Abd Majid ¹, Siti Maftuhah Damio ¹

¹Faculty of Education, Universiti Teknologi MARA, UiTM Puncak Alam Campus, 42300 Puncak Alam, Selangor, Malaysia

*For correspondence; Tel. + (60) 193862809, E-mail: shalizashafie1965@gmail.com

ABSTRACT: The Industrial Revolution (IR4.0) has intensified the need for the workforce to perform competitively. To facilitate the workforce in optimizing job quality and productivity, employers must use the training program as a strategic approach to improve their workforce performance. However, to meet the challenges of the IR4.0 technical skills training alone is insufficient because soft skills training, such as communication, interpersonal, and collaborative skills training are required to ensure the workforce fully optimize their performance. Thus, the IR4.0 has given a new impetus to soft skills training transformation and that it must play a more prominent role in the workplace. This can be achieved when the transfer of soft skills knowledge learned in training is satisfactorily applied back into the workplace. Therefore, this paper attempts to highlight the significant role of soft skills training in the workplace in the era of IR4.0. This was conducted primarily based on findings by reviewing a comprehensive review of literature from local and global perspectives. The findings from the literature have revealed that soft skills play an important role in developing the workforce able to produce quality work and high productivity performance. Given the current competitive working environment, researchers have concurred that soft skills abilities are critical for the workforce to optimize their potentials as soft skills have been suggested to have a strong influence on an individual's job performance. The conclusion from the literature will facilitate to highlight the critical soft skills needed in the workplace and an informed approach to improve soft skills training. Moreover, understanding the factors that influence soft skills transfer of training will enable improvement in the application of soft skills back into the workplace. This, in turn, could shed some light on future research.

Keywords: Training, Soft skills, Workforce, Transfer of training, IR4.0

1. INTRODUCTION

In keeping abreast of the impact of Industry Revolution 4.0 (IR4.0), employers have to be proactive in preparing the readiness of their workforce to embrace the changes in the workplace. In the coming years, this will be a common situation happening throughout the organizations across industries, locally and globally. In doing so, the Malaysian workplace has a rather challenging task to manage the impact of the IR4.0 due to the unique aspect of its workplace. This is because Malaysia is well-known for its racial and cultural diversity that affects many aspects of life that include the workplace. As such, the endeavor to meet the changes in the workplace has to be addressed according to the Malaysian context.

Furthermore, to be regionally and globally competitive, employers must ensure the workforce are capable to perform at an optimum level. As such, employers have to provide support by way of upskilling and reskilling the workforce's knowledge and skills. At the national level, a Malaysian government agency, Human Resources Development Corporation commonly known as HRDF is overseeing this effort. This is to ensure consistent participation of employers to upgrade the skills of the workforce through training [1] as a strategic approach in managing the globalized working environment. It is because training is no longer in the category of "nice to do" but it is a "must-do" for organizations to gain competitiveness [2].

In fact, many researchers have asserted that it is imperative for employers to provide knowledge and skills for their workforce to perform their jobs effectively and efficiently [3,4]. However, after investing so much into training activities employers are dissatisfied with the current transfer of training rates. The past findings have shown that despite millions have been invested in training by organizations, only 10% results in the transfer of knowledge, skills, and abilities

[5]. This is more apparent in soft skills training where it shows low transfer rates. Thus, it has created a tendency for employers to invest in technical skills training compared to soft skills training. On the other hand, lack of soft skills training can be detrimental to human capital development in the workplace [6]. Moreover, this condition can impede the organization's well-being and its survival in this tumultuous working environment brought by the IR4.0.

For this reason, soft skills training requires transformation and it must play a more prominent role in the workplace. This can be achieved when the transfer of soft skills knowledge learned in training is satisfactorily applied back into the workplace. On that note, this paper attempts to highlight the significant role of soft skills training in the era of IR4.0.

2. PAST STUDIES

There are many studies found in the literature on the two subjects related to training and soft skills from local and global perspectives [3-5]. Generally, this comprehensive literature review has established the importance of training and soft skills for human capital development. For organizations to grow, the workforce must also grow. Therefore, the relevance of training should not be taken lightly by employers in making sure their workforce is competent to perform according to their job performance standard. Equally important is soft skills training and employers should handle it objectively to build a well-balanced workforce, especially in this highly competitive working environment.

2.1 General Review on Previous Studies of Training

Going through relevant literature, it has been observed that training can be considered as an important management approach for people development in most organizations. Researchers have expressed that both technical and soft skills training have a substantial influence on job involvement and job satisfaction [3,7]. Hence, it is undeniable that employers

are willing to invest a huge amount of money in training activities to gain commitment from their workforce by enhancing their job performance [8]. In doing so, employers expect their workforce to seriously apply the knowledge and skills learned back into their jobs. To determine if the desired outcomes have been achieved, the effectiveness of training is usually measured. This is because employers need to see that improvement has taken place through their job quality and productivity.

On the other hand, during economic uncertainty, most employers would usually tend to reduce the training budget as a measure of financial management [9]. Of the two types of training, soft skills training would suffer a bigger budget cut as shown in several training reports. The reports have revealed that economic uncertainty had adversely affected training budgets in organizations [10,11]. In this economic condition, the preference of employers towards technical training is obvious. This is most likely due to technical training is seen to have a more direct impact on job performance than soft skills training. Employees attending technical skills training, such as computing, typing, and accounting can directly apply the knowledge learned after the training session in comparison to employees attending soft skills training, such as communication, motivation, and leadership. In fact, the nature of soft skills that is the subjective skills are harder to quantify, which makes it more difficult and trivial for employers to assess the transfer of soft skills knowledge learned [12,13] compared to technical skills. In spite of that, in this highly challenging working environment, technical skills alone are not enough [14] because technical skills do not guarantee the quality of the job. Moreover, researchers have affirmed that soft skills are necessary competencies in enabling an individual to perform a quality job [3-16]. Therefore, individuals having both skills would yield better results. Additionally, the current workplace requires solid teamwork and the quality of teamwork requires employees to connect effectively with other individuals in the workplace. Their ability to do so would depend on their soft skills abilities. For that reason, employers have to treat soft skills training more objectively as it is apparent that soft skills play a significant role in ensuring the organizations' survival in the globalized working environment.

2.2 Discussion on Previous Findings of Soft Skills

There are many studies focusing on soft skills subjects covering various settings, for instance, higher learning institutions, hospitality, manufacturing, and banking sectors [16-18]. This is possibly due to the crucial effect of soft skills play in creating a healthy working environment. Essentially, a healthy workplace would produce a positive and happy workforce. As a result of that, the contented workforce will optimize their job performance that will increase the overall performance of the organization [19].

So, it is now clear that an organization's growth depends heavily on the personal growth of its workforce. Thus, employers are strongly encouraged to provide appropriate soft skills training to their workforce in order to improve any deficiency in soft skills competencies. As researchers have indicated in numerous kinds of literature, workforce possessing well-defined soft skills abilities would demonstrate positive influence in the workplace [3,6,14]. They will be able to execute job tasks according to the standard requirement and behave professionally in the workplace. In addition, having soft skills abilities will enable them to properly manage themselves at work, as well as effectively interact with their superiors, peers, and customers.

2.2.1 Soft Skills Enlightened

There are several descriptions for soft skills by scholars, one of them is soft skills comprise of character traits, attitudes, and behaviours [8]. Another description of soft skills is that a mixture of skills that exhibit in a person's character traits that enable the person to adapt to the specific context [20,21], which could be in or outside the workplace context. Also, soft skills have been referred to by other terms, for instance, generic skills, social skills, and people skills [22]. Several examples of soft skills abilities are communication, interpersonal, teamwork, leadership, critical thinking, and problem-solving skills. Scholars have agreed that soft skills are a critical component of human competencies to function effectively at work and in everyday life [3,8].

Meanwhile, it has been indicated that the organization's success depends more on people skills (75%) compared to technical skills (25%) [23]. Additionally, soft skills are pertinent for a person to be successful in the workplace whereby it has been suggested that for career success, soft skills contribute 85% and technical skills only 15% [24]. In short, soft skills are essential for an individual's growth, particularly for personal development and career advancement.

2.2.2 Required Soft Skills Identified

Soft skills have been found to be pertinent in developing high-performance organizations [6,8] and they are required to be demonstrated by the workforce. For instance, soft skills abilities like interpersonal and communication skills would benefit the workforce in their day-to-day interactions regarding work matters. More so, these skills would be useful in dealing with personal issues or conflicts in the workplace. The pleasant and conducive working environment would allow the workforce to be more focused at work.

To an extent, employers would appreciate if the soft skills are being applied in the workplace apart from the technical skills [18]. Based on the last ten years of previous findings, a number of soft skills have been ascertained needed in the organizations. These soft skills abilities are deemed essential for the development of the workforce, as well as for the development of the organizations. The findings of soft skills required in the workplace shown in Table (1) below have indicated that these skills are perceived as extremely important in the workplace [8].

Table (1) perceived level of important soft skills in the workplace

	Not Important		Not Very Important		Somewhat Important		Very Important		Extremely Important	
Soft Skill Attribute	n	%	n	%	n	%	n	%	n	%
Integrity							4	7.0	53	93.0
Communication							5	8.8	52	91.2
Courtesy					2	3.5	7	12.3	48	84.2
Responsibility					5	8.8	П	19.3	41	71.9
Interpersonal skills					9	15.8	13	22.8	35	61.4
Professionalism					7	12.3	23	40.4	27	47.4
Positive attitude					6	10.5	25	43.9	26	45.6
Teamwork skills			- 1	1.8	16	28.1	15	26.3	25	43.9
Flexibility			- 1	1.8	12	21.1	20	35.1	24	42.1
Work ethic					14	24.6	22	38.6	21	36.8

Source: Executive perceptions of the top 10 soft skills needed in today's workplace (Robles, 2012).

In a later study by another researcher, the findings have shown the similar top ten soft skills considered the most significant by employers: integrity, communication, courtesy, responsibility, social skills, positive attitude, professionalism, flexibility, teamwork, and work ethic [25].

Meanwhile, Figure (1) below has identified six key soft skills required at the workplace in Malaysia: communication, positive attitude, teamwork, interpersonal, leadership and analytical thinking [18].

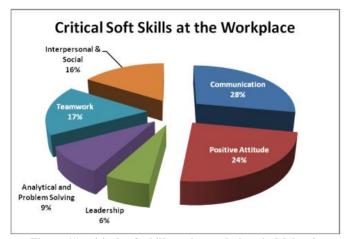


Figure (1) critical soft skills at the workplace in Malaysia Source: Important soft skills in the workplace (Seetha, 2014).

In the Malaysian workplace, the workforce is expected to work effectively in teams in performing their jobs to produce desired results. Given the uniqueness of the Malaysian context where multi-racial and multi-ethnic workforce exists, the need for soft skills abilities is compelling. Racial and culturally diverse environments would require the workforce to inculcate soft skills abilities, such as tolerance, empathy, communication, and cooperation to foster a healthy working environment.

Apart from the benefits at the workplace, soft skills also play an important role in the daily life of individuals. Soft skills abilities can even help develop healthy individuals outside the workplace [19]. In brief, it can be stated that the importance of soft skills has substantial effects on personal, professional and organization's success.

2.3 Soft Skills in the IR4.0 Environment

In addition to fierce global competition, the approaching of the IR4.0 also presents unknown challenges. World Economic Forum (WEF) has asserted that the worldwide workforce is likely to meet with the reduction in employment. This is due to most jobs will be taken over by automation, artificial intelligence (AI), and robotics. However, human skills are still required in ensuring the remaining manpower are capable to perform their jobs at high level of quality and productivity. Although jobs are taken over by automation, AI, and robotics, new set of soft skills will emerge by year 2020 [26]. Also, even with the IR4.0 impact on routine jobs, experts have acceded that soft skills abilities such as empathy, cooperation, and communication cannot be performed by machines as only human is capable to express emotions and understand one another [27,28]. Hence, it seems that soft skills are still relevant today and in the coming years.

In spite of the emphasis on technological progress in the working environment, the technical skills only will not be adequate [14]. The technology would still need humans to execute job tasks and soft skills would ensure the quality of tasks executed. Parallel with this point, WEF reports in 2016 and 2018 have stated that soft skills are crucial for the workforce to perform effectively in the workplace. 'The Future of Jobs Report' has published the top ten skills in 2018 and skills trending for the year 2022 [26], as can be seen in Table (2) below. It is evident that soft skills still dominate the skills needed in the year 2022.

Table (2) skills demand comparison, 2018 vs. 2022

	2018		Trending, 2022
1.	Analytical thinking and innovation	1.	Analytical thinking and innovation
2.	Complex problem solving	2.	Active learning and learning strategies
3.	Critical thinking and analysis	3.	Creativity, originality, and initiative
4.	Active learning and learning strategies	4.	Technology design and programming
5.	Creativity, originality, and initiative	5.	Critical thinking and analysis
6.	Attention to detail, trustworthiness	6.	Complex problem solving
7.	Emotional intelligence	7.	Leadership and social influence
8.	Reasoning, problem solving and ideation	8.	Emotional intelligence
9.	Leadership and social influence	9.	Reasoning, problem solving and ideation
10.	Coordination and time management	10.	Systems analysis and evaluation

Source: 'The Future of Jobs Report' WEF (2018)

Additionally, WEF has also published a survey report conducted by LinkedIn in Figure (2) below that exhibits soft skills that are increasing in significance which also contribute towards the organization's success [29]. The report has shown the four trends expected to affect the coming years. This

clearly means that soft skills will be the central point in an organization's continued achievement.

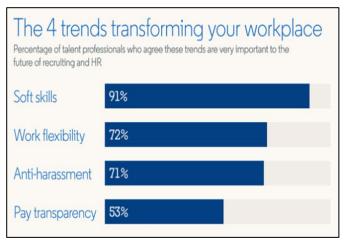


Figure (2) the 4 trends transforming your workplace Source: LinkedIn

With respect to the Malaysian context in mitigating the IR4.0, Malaysia is also gearing up to be ready for the impact. For example, Talent Corporation Malaysia Berhad (TalentCorp) has initiated several key plans to future-proof Malaysia's workforce [30]. The plans will involve retraining and reskilling of the Malaysian workforce to encounter the challenges poses by the IR4.0. The first strategic step in upgrading the workforce is to identify the critical soft skills competencies required at the workplace that are essential for the survival of organizations.

2.4 Implication of Soft Skills Training in the Workplace

With a highly competitive working environment and the effect of the forthcoming IR4, have caused soft skills to be even more crucial in organizations across industries, locally and globally. Workforce needs to be consistently upskilled and reskilled in order to remain relevant and competitive in various aspects of work. Interestingly, the workforce has generally been considered an important asset in organizations as it also contributes towards the organization's success.

Therefore, preparing the workforce to deal with the unknown challenges is the responsibility of employers. To deal with this demanding situation, it is a necessity for employers to provide effective soft skills training to their workforce. At the same time, employers must be ready to effectively and efficiently manage soft skills training in ensuring the appropriateness of training programs in meeting the needs of the workforce and the organizations. Suitability of soft skills training programs is part of the people development process, which has been recognized as an important facet for the organization's success [17,20].

As presented in the previous sections above, training has been a strategic management approach [2] to enhance the performance of the workforce, even though employers tend to favor technical skills. Nevertheless, the importance of soft skills training is indisputable as it has a significant role in today's workplace, especially in the era of IR4.0. Thus, employers must now genuinely regard soft skills training as human capital ventures rather than an expenditure.

3. CONCLUSION & THE WAY FORWARD

In conclusion, it has been established that in the coming year's soft skills training will play a prominent role in organizations. This is a smart action by employers to upgrade their workforce in preparing them for unknown challenges brought by the IR4.0. The soft skills abilities highlighted in recent years, for instance, communication, emotional intelligence, critical thinking, and social skills are amongst the critical skills identified to fulfill the needs in the workplace. These critical soft skills abilities must be instilled through consistent training.

Moving forward, employers have to ensure that the soft skills training will generate the desired outcomes. This can be done by way of ensuring the soft skills knowledge learned in a training session is applied back into the workplace. This requires an effort to understand the factors that influence soft skills transfer of training. To do so, they need to determine the influencing factors of transfer will enable improvement in the application of the soft skills back into the workplace. The effort will generate a compelling model to predict influencing factors of soft skills transfer of training that will ultimately provide informed approaches to improve soft skills training effectiveness. Employers will feel more satisfied with the investment in soft skills training that will eventually encourage them to continuously provide soft skills training to their workforce. Hence, a call for further study on the influencing factors of soft skills transfer of training is warranted.

4. REFERENCE

- [1] Human Resources Development Fund (HRDF)., "About hrdf" Retrieved from https://www.hrdf.com.my (2017).
- [2] Noe, R. A., "Employee training and development" (5th ed.). New York: McGraw Hill Irwin (2010).
- [3] Ibrahim, R., Boerhannoeddin, A., & Bakare, K. K., "The effect of soft skills and training methodology on employee performance" *European Journal of Training and Development*, **41**(4):1-19 (2017).
- [4] Truitt, D. L., "The effect of training and development on employee attitude as it relates to training and work proficiency "Sage, 1(3):1-13 (2011).
- [5] Franke, F., & Felfe, J., "Transfer of leadership skills" Journal of Personnel Psychology, **11**(3): 138-147 (2012).
- [6] Moeller, S., Robinson, M., Wilkowski, B., & Hanson, D., "The big chill: interpersonal coldness and emotion-labeling skills" *Journal of Personality*, **80**(3): 703-724 (2012).
- [7] Obisi, C., "Employee training and development in Nigerian organizations: some observations and agenda for research" *Australian Journal of Business and Management Research*, **1**(9): 82-91 (2011).
- [8] Robles, M., "Executive perceptions of the top 10 soft skills needed in today's workplace" *Business Communications Quarterly*, **75**(4): 453-465 (2012).
- [9] Felstead, A., Green, F., & Jewson, N., "The impact of the 2008-9 recession on the extent, form and patterns of training at work" *Centre for Learning and Life Chances in Knowledge Economies and Societies* Retrieved from http://www.llakes.org (2011).

- [10] Common Purpose., "Taming the Wolf at the Door: Learning and Development in an economic downturn" Retrieved from the UK: https://www.scribd.com/document/32637665/Learning-Development-in-an-Economic-Downturn (2008).
- [11] Eurofound, "European on the observatory of working life: impact on recession on workplace training" Retrieved from https://www.eurofound.europa.eu/observatories/eurwor k/articles/impact-of-recession-on-workplace-training (2009).
- [12] Ritter, B. A., Small, E. E., Mortimer, J. W., & Doll, J. L., "Designing management curriculum for workplace readiness: developing students' soft skills" *Journal of Management Education*, 42(1): 80 –103 (2018).
- [13] Tonhäuser, C., & Büker, L., "Determinants of transfer of training: a comprehensive literature review" *International Journal for Research in Vocational Education and Training (IJRVET)*, **3**(2): 127-165 (2016).
- [14] Lazarus, A., "Soften up: the importance of soft skills for job success" *Physician Executive*, **39**(5): 40-45 (2013).
- [15] Feng, Y., & Richards, L., "A review of digital curation professional competencies: theory and current practices" *Records Management Journal*, **28**(1): 62-78 (2018).
- [16] Mohd Salleh, K., Sulaiman, L., N., & Talib, K. N., "Globalization's impact on soft skills demand in the Malaysian workforce and organizations: what makes graduates employable?" Paper presented at the 1st UPI International Conference on Technical and Vocational Education and Training, Bandung, Indonesia (2010).
- [17] Lim, Y. M., Lee, T. H., Yap, C. S., & Ling, C. C., " Employability skills, personal qualities, and early employment of entry-level auditors: Perspectives from employers, lecturers, auditors, and students" *Journal of Education for business*, **91**(4): 185–192 (2016).
- [18] Seetha, N. "Are soft skills important in the workplace? a preliminary investigation in Malaysia" *International Journal of Academic Research in Business and Social Sciences*, **4**(4): 44-56 (2014).
- [19] Sahoo, M., & Mishra, S., "Training evaluation and motivation to transfer Training a review of literature" *Journal of Management*, doi # 10.23862/kiit-parikalpana/2017/v13/i2/164517 (2017).

- [20] Bhanot, S., "Importance of soft skills for an employee and for the organization" *SIES Journal of Management*, **6**(1): 18-22 (2009).
- [21] Parsons, T. L., "Definition: Soft skills" Retrieved from http://searchcio.techtarget.com/definition/soft-skills (2008).
- [22] Amiruddin, H., M., Ngadiman, N., Abdul Kadir, R., & Saidy, S., "Review of soft skills of TVET trainees from the Malaysian Advanced Technology Training Center (ADTEC)" *Journal of Technical Education and Training (JTET)*, **8**(1): 14-24 (2016).
- [23] Klaus, P., "Communication breakdown" *California Job Journal*, **28**(1248): 1-9 (2010).
- [24] Wats, M., & Wats, R. K., "Developing soft skills in students" *International Journal of Learning*, **15**(12): 1-10 (2009).
- [25] Clarke, M., "Addressing the soft skills crisis" *Strategic HR Review*, **15**(3):137-139 (2016).
- [26] World Economic Forum (WEF)., "The future of jobs" Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs_ 2018.pdf (2018).
- [27] Bonekamp, L., & Sue, M., "Consequences of Industry 4.0 on human labour and work organisation" *Journal of Business and Media Psychology*, **6**(1): 33-40 (2015).
- [28] Bowles, J., "The Computerisation of European Jobs" Retrieved from http://www.bruegel.org/nc/blog/detail/article/1394-the-computerisation-of-europeanjobs/ (2014).
- [29] Fleming, S., "These 4 trends are shaping the future of your job" *World Economic Forum (WEF)*, Retrieved from https://www.weforum.org/agenda/2019/02/these-4-trends-are-shaping-the-future-of-your-job/ (11 February 2019).
- [30] Talent Corporation Malaysia Berhad (TalentCorp)., TalentCorp takes the lead in preparing Malaysia for the future of work. *TalentCorp launches talent profiling platform and framework for action*. Retrieved from https://www.talentcorp.com.my/resources/press-releases/talentcorp-takes-the-lead-in-preparing-malaysia-for-the-future-of-work (2017).

^{*}For correspondence; Tel. + (60) 193862809, E-mail: shalizashafie1965@gmail.com