

Tamsah, Hasmin; Ilyas, Gunawan Bata; Nurung, Jumiatty; Jusuf, Ekafadly; Rahmi, Sri

## Article

# Soft skill competency and employees' capacity as the intervening factors between training effectiveness and health workers' performance

Cogent Business & Management

## Provided in Cooperation with:

Taylor & Francis Group

*Suggested Citation:* Tamsah, Hasmin; Ilyas, Gunawan Bata; Nurung, Jumiatty; Jusuf, Ekafadly; Rahmi, Sri (2023) : Soft skill competency and employees' capacity as the intervening factors between training effectiveness and health workers' performance, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 10, Iss. 1, pp. 1-19,  
<https://doi.org/10.1080/23311975.2023.2199493>

This Version is available at:

<https://hdl.handle.net/10419/294383>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

## Soft skill competency and employees' capacity as the intervening factors between training effectiveness and health workers' performance

Hasmin Tamsah, Gunawan Bata Ilyas, Jumiathy Nurung, Ekafadly Jusuf & Sri Rahmi

**To cite this article:** Hasmin Tamsah, Gunawan Bata Ilyas, Jumiathy Nurung, Ekafadly Jusuf & Sri Rahmi (2023) Soft skill competency and employees' capacity as the intervening factors between training effectiveness and health workers' performance, Cogent Business & Management, 10:1, 2199493, DOI: [10.1080/23311975.2023.2199493](https://doi.org/10.1080/23311975.2023.2199493)

**To link to this article:** <https://doi.org/10.1080/23311975.2023.2199493>



© 2023 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



Published online: 09 Apr 2023.



Submit your article to this journal [↗](#)



Article views: 1927



View related articles [↗](#)



View Crossmark data [↗](#)



Received: 28 October 2021  
Accepted: 01 April 2023

\*Corresponding author: Hasmin Tamsah, Departement of Management, STIE Amkop Makassar, Jalan Meranti No.1 Panakkukang - Makassar 90231, Sulawesi Selatan, Indonesia  
E-mail: [hasmintamsah@gmail.com](mailto:hasmintamsah@gmail.com)

Reviewing editor:  
Pablo Ruiz, Universidad de Castilla-La Mancha, Spain

Additional information is available at the end of the article

## MANAGEMENT | RESEARCH ARTICLE

# Soft skill competency and employees' capacity as the intervening factors between training effectiveness and health workers' performance

Hasmin Tamsah<sup>1\*</sup>, Gunawan Bata Ilyas<sup>1</sup>, Jumiaty Nurung<sup>1</sup>, Ekafadly Jusuf<sup>1</sup> and Sri Rahmi<sup>1</sup>

**Abstract:** This study aimed to determine the role of soft skill competency (SSC) and employees' capacity (EC) in mediating the effect of training effectiveness (TE) on health workers' performance (HWP). A quantitative approach was conducted by using the Structural Equation Modeling (SEM)-Amos version 23 analysis, with data obtained through accidental sampling from 222 health workers who filled out online questionnaires and were declared complete. The results showed that TE improved SSC and HWP, although it did not have a direct effect on increasing EC. This indicated that SSC was needed to mediate the relationship between these two variables. SSC and EC also mediated the effect of TE on HWP. These results were expected to enrich the limited references in explaining the relationship between human resources (HR) planning and HWP, specifically during the COVID-19 pandemic.

**Subjects:** Health & Development; Employment Relations; Human Resource Development

**Keywords:** training effectiveness; soft skill competency; employees' capacity; health workers' performance

## ABOUT THE AUTHORS



Hasmin Tamsah

Hasmin Tamsah is an Assistant Professor at Department of Management, STIE Amkop Makassar, Indonesia. His research interest include Human Resources Management, Human Development Theory and Environmental Economics. His research that has been carried out includes Poverty Analysis, Poverty Alleviation Model, Economic Valuation of Coral Reefs and others. His current project is Calculating regional assets with an economic valuation approach

Gunawan Bata Ilyas is an Associate Professor at Departement of Management, STIE Amkop Makassar, Indonesia. His research interest include Marketing Management, Human Resource and Business Management.

Jumiaty Nurung is an Assistant Professor at Department of Management, STIE Amkop Makassar, Indonesia. Her research interest include Human Resources Management, Human Capital and Business Administration.

Ekafadly Yusuf is an Assistant Professor at Department of Management, STIE Amkop Makassar, Indonesia. His research interest include Management, Human Resource, Economics and Public Administration.

Sri Rahmi is an Assistant Professor at Department of Management, STIE Amkop Makassar, Indonesia. Her research interest include Marketing, Management, Consumer Behavior, Human Resource and Digital Information.

## 1. Introduction

Globalization is considered a tremendous challenge in organizational management, where difficulties have been increasingly encountered in the realization of employees' performance, which is an absolute demand in every company. In this case, consistent and continuous efforts are highly required, specifically during the present COVID-19 pandemic. These difficult problems are reportedly experienced by several Arab countries with good health systems (United Nations, 2020a). Indonesia and some Southeast Asian nations are also experiencing similar challenges (United Nations, 2020b). In addition, a frightening study emphasized the assumption of an economic recession, which threatened the world (Bohoslavsky, 2020).

Based on these problems, a clear drug capable of curing the COVID-19 disease is highly needed. Besides medicine, the readiness of human health resources is also essentially required in handling emergencies. According to several study experts, good human resources (HR) planning was helpful to many organizations in handling changing environmental situations (Chakraborty, 2019), with Artificial Intelligence-based HR planning aiding human resource practices (Pandey, 2020). This showed that HR planning was able to improve organizational human resource performance, regarding various reports within private and public organizations. However, only a few of these analyses examined the performance of human resources in the health sector. This was in line with the data of Open Knowledge Maps, where only six publications prioritized the performance of health workers during 2019–2021 (Open Knowledge Maps, 2021). Based on the results, more analyses were still required despite the help of these publications on health organizations, where human resources were adequately prepared to overcome the present conditions.

Several experts also agreed that the developmental patterns of organizational employees' systems are very crucial to the improvement of employees' performance. From this context, training is the most common HR development considered to improve competency (Aci et al., 2021; Mislia et al., 2021) and employees' capacity (EC) toward the enhancement of performance. Based on various studies, training contributed to the improvement of employees' performance (Asfaw et al., 2015; Cooney et al., 2002; Khan et al., 2016; Onyango & Wanyoike, 2014; Rajeswari & Palanichamy, 2014; Thevanes & Dirojan, 2018) and service (Nurung et al., 2019, 2020).

Although some reports showed that training improved performance, different perspectives were still observed for others (Häfner & Stock, 2010), with the development element not emphasizing significant improvements. These perspectives triggered the curiosity of many experts in reexamining the contribution of training, specifically effective teaching processes to health workers' performance (HWP) heavily affected by the present COVID-19 pandemic. Despite many reports emphasizing this development plan, more analyses are still needed regarding the patterns by which training effectiveness (TE) emphasizes HWP. Based on several experts, the low influence of training on improving performance depends on two factors, namely (1) ineffective teaching processes, and (2) the need for determinants capable of strengthening the impact between the two variables.

This study used conceptual framework models of soft skill competency (SSC) and EC, whose establishment is mostly promoted by effective training. The collaboration of these variables subsequently triggers an improvement in HWP. Therefore, this study aims to determine the role of SSC and EC in mediating the effect of TE on HWP. In this context, a conceptual framework is elaborated based on human capital theory, with assumptions emphasizing the intervention of HR TE. This condition is prioritized because the intangible assets existing in each organizational individual are increased to improve employees' performance (Amankwah-Amoah et al., 2016; Crook et al., 2011; Nafukho et al., 2004; Strober, 1990). From this description, the intangible assets focus on competency, specifically soft skill and EC (Bontis & Fitz-Enz, 2002; Bontis et al., 2007). The intervention is also considered TE promoting employees' skill toward the improvement of performance. Meanwhile, EC is obtained from TE, leading to performance development. The results

obtained are expected to enrich the references needed to strengthen human health resources toward the improvement of performance.

## 2. Literature review

### 2.1. Theoretical background and hypothesis development

Training is generally considered a heated debate due to being an alternative solution in the improvement of performance (Azas et al., 2019; Nasri et al., 2018; Salama Tamsah & Natsir, 2017), regarding the reports in several countries (Asfaw et al., 2015; Cooney et al., 2002; Khan et al., 2016; Onyango & Wanyoike, 2014; Rajeswari & Palanichamy, 2014; Thevanes & Dirojan, 2018). Based on the perspectives of engagement theory, various antecedent levels of TE were prioritized (Sitzmann & Weinhardt, 2018). This hierarchically described the processes at every organizational level, which influenced each other and interacted with the success or failure of training. The temporal nature of this theory also supported the consideration of each analyzed process before the preparation, conceptualization, and completion of training (Kearsley et al., 1998; Sitzmann & Weinhardt, 2018). Furthermore, a sequence model of independent and combined effects of establishing objectives, priorities, and continuity was proposed (Sitzmann & Weinhardt, 2019; Toth et al., 2021). Effective training also produced a series of outputs needed in organizational development based on continuous HR improvement.

SSC is an output produced by participants from effective training (Umar et al., 2020), and is increasingly echoed in this millennial era. It also indicates personal competencies such as social talent, communication and language skills, hospitality, ability to work in groups and organizations, etc (Dwi Riyanti et al., 2016; Mahfud et al., 2017; Sain & Wilde, 2014; Seetha, 2014; Sisson & Adams, 2013). These skills are strategic for success in professional and personal life, specifically during a job acquisition (Cimatti, 2016). Furthermore, resource management is used in the recruitment stage and during a professional appointment as an employee. External, organizational, and service quality, as well as employees' standard of living, are also strongly supported by the soft skill possessed at every level (Luk & Layton, 2004; Mahfud et al., 2017). The skill serves as the bedrock for the quality assurance of human capital job performance in the company (Cimatti, 2016). From this context, employees often turn out focused and effective when self-efficacy is applied in carrying out specific activities (Mensah & Lebbaeus, 2013; Orgambidez et al., 2020; Çetin & Aşkun, 2018). In addition, employees with high self-efficacy are more capable, resistant, and active in printing results and obtaining planned learning outcomes.

This study produces several factors including the perception of progress towards goals and potential consequences, such as existing business regulations (Bandura, 2015; Wood & Bandura, 1989). This explains that self-efficacy is obtained from self-confidence, regarding an individual ability to succeed during job performance. Besides this, employees with high self-efficacy also achieve the maximum level of skill to efficiently conduct daily duties and responsibilities (Çetin & Aşkun, 2018). This level of self-efficacy is observed from their SSC due to the easier achievement of performance (Dean & East, 2017; Ibrahim et al., 2017; Shafie et al., 2014; Wilks & Hemsworth, 2011). Based on these relationships, the following hypotheses are proposed:

**H1:** *Training effectiveness significantly and positively affects soft skill competency*

**H2:** *Soft skill competency significantly and positively influences employees' capacity*

**H3:** *Soft skill competency significantly and positively impacts health workers' performance*

Involvement is also needed to hierarchically interrelate the training processes at various organizational levels, while contributing to the achievement of goals (Anitha, 2014; Lockwood, 2007). In this process, employees are expected to focus on achieving the objectives of program completion, which should be adequately and thoughtfully conducted to improve knowledge and skills (Alainati et al., 2010). Besides, the success of training is also determined by the initiative, independence, and cognitive abilities of the adhering employees (Sitzmann & Weinhardt, 2019). From this context, training clarity is expected to increase when there is clear communication between HR system and employees. Effectiveness is also increasingly anticipated when training is demonstrated as a primary goal (Ostroff & Bowen, 2000). This is capable of strengthening the communication between HR system and employees.

In performance, competency and soft skill are commonly improved by directly targeting their functions. For example, working methods training highly support the growth and development of employees' abilities (Alainati et al., 2010; Chen & Naquin, 2006; Kamen et al., 2010). Soft skill is also transferred from one environment to produce different benefits and develop employees (Avanzi et al., 2014). Moreover, learning is always used as the most effective method of training. The ability and need to adapt to new tasks are also responsible for activating the knowledge of desired thoughts and perspectives. This is carried out by strengthening cognitive and emotional self-regulation in learning (Hautamäki et al., 2002), while increasing employees' work creativity (Kamen et al., 2010; Liu et al., 2020). From this description, employees with high creativity are expected to efficiently complete tasks (Cook, 2018) and design appropriate work methods to achieve effectiveness and efficiency (Cook, 2018; Ohly, 2018). This proves that employees with work experience and training at various levels are capable of producing competent creativity to adequately complete the job performance (Baer, 1991, 1994; Gong et al., 2018; Qureshi, 2016). Based on these relationships, the following hypotheses are proposed:

**H4:** *Training effectiveness positively and significantly affect employees' capacity*

**H5:** *Employees' capacity significantly and positively influence health workers' performance*

Setting training goals and priorities is a causal mechanism that triggers all the behaviors to be motivated (Locke & Latham, 2002). This explains that the first step for employees to attend training is to set goals and focus on achieving specific objectives, such as the attempt to timely complete the teaching process and increase productivity (Gambo, 2015). From this context, knowledge and skills are often increased (Ostaszewski et al., 2018; Yusof et al., 2012) while establishing new performance goals (Asfaw et al., 2015; Dermol & Čater, 2013; Dos Santos, 2019; Karimi & Nejad, 2018; Khan et al., 2016). These goals are generated for organizational effectiveness by the initiative, independence, and cognitive abilities obtained from training outputs (Asfaw et al., 2015; Rahman et al., 2013; T. C. Huang, 2001; Truitt, 2011).

The prioritization of continuous HR development with the best soft skill is also very essential (Karwowski & Soszynski, 2008; Rahman et al., 2013; Truitt, 2011). This ability develops publicly available forms or outcomes of competition and enables many organizations to work effectively and efficiently during the coordination of organizational programs (Borate & Borate, 2016; Liu et al., 2020; Rahman et al., 2013). From this description, increasingly effective soft skill support requires more than technical abilities, even in technology-intensive industries. Furthermore, coordination and collaboration between business owners and employees are essential to achieve a competitive level of quality (Cimatti, 2016). In this case, HR management is found to play a role in the recruitment process for employees, regarding their existence within the professional organizational duties. The qualities of employees' products, organization, service and life also prioritize the soft skill possessed by the personnel at any level (Cinque, 2016, 2017). Based on these relationships, the following hypotheses are proposed:



**H6:** Training effectiveness significantly and positively affects health workers' performance

**H7:** Training effectiveness significantly and positively influences health workers' performance through soft skill competency and employees' capacity

**H8:** Training effectiveness significantly and positively impacts health workers' performance through soft skill competency

**H9:** Training effectiveness significantly and positively affect health workers' performance through employees' capacity

## 2.2. Conceptual framework

Figure 1 shows the references used in building the relationship between variables regarding the hypotheses developed in the conceptual framework, while Table 1 presents the measurement of variables and indicators.

## 3. Methods

### 3.1. Sample criteria

This study was conducted on health workers in South Sulawesi Province during the COVID-19 pandemic. As the largest province in eastern Indonesia, the number of patients was also very high. Therefore, the analysis of health workers performance in handling a pandemic was very important during this period. In this study, all the South Sulawesi health workers at 18,240 were the study population, with the determination of the samples emphasizing Hair et al. (2010). From this context, a minimum of 100 people was implemented for the models using structural equations with five or more variables. By using the Soper sample size calculator for structural equation modeling (Soper, 2022), the appropriate number of samples was determined through a statistical power level of 0.95. This indicated that the sample size of the 4 latent and 16 observed variables should be 137 at a probability level of 0.05.

Figure 1. Conceptual Framework.



**Table 1. Measurement of variables**

Variable	Indicator	Items
Training Effectiveness (TE)	additional knowledge (TE1)	<ul style="list-style-type: none"> <li>• I always have additional knowledge after every training</li> <li>• I always have additional work skills after every training</li> </ul>
	ability to remember (TE2)	<ul style="list-style-type: none"> <li>• I can remember the activities carried out during the training</li> <li>• I can understand activities carried out during training</li> </ul>
	ability to practice (TE3)	<ul style="list-style-type: none"> <li>• I can apply the training outputs in my present job</li> <li>• I can put into practice the experience gained from training in my current work</li> </ul>
Soft Skill Competency (SSC)	searching for information (SSC1)	<ul style="list-style-type: none"> <li>• I can find the latest information to add skills</li> </ul>
	orientation on efficiency (SSC2)	<ul style="list-style-type: none"> <li>• I have simple work skills and always prioritize efficiency at work</li> </ul>
	systematic planning (SSC3)	<ul style="list-style-type: none"> <li>• I can make systematic plans and steps in my work</li> </ul>
	problem-solving (SSC4)	<ul style="list-style-type: none"> <li>• I am responsive, alert to problems, and able to always find a solution faced by the work team</li> </ul>
	the persuasive ability (SSC5)	<ul style="list-style-type: none"> <li>• I can communicate ideas and convince others to follow what I want</li> </ul>
Employees' Capacity (EC)	employees' cooperation (EC1)	<ul style="list-style-type: none"> <li>• I can work well with fellow employees to increase work capacity</li> </ul>
	employees' commitment (EC2)	<ul style="list-style-type: none"> <li>• I have a high commitment to work through a capacity development</li> </ul>
	employees' involvement (EC3)	<ul style="list-style-type: none"> <li>• I always prioritize employee involvement as a whole to increase work capacity</li> </ul>
	employees' capacity building initiatives (EC4)	<ul style="list-style-type: none"> <li>• I always initiate businesses or activities in the context of developing employees' capacity</li> </ul>

(Continued)



Variable	Indicator	Items
Health Workers' Performance (HWP)	responsiveness (HWP1)	• I have high responsiveness, specifically about work, to improve my performance
	availability (HWP2)	• I always maintain attendance and availability of time for work
	productivity (HWP3)	• I always maintain and prioritize work productivity to improve performance
	use of competence (HWP4)	• I always improve my competence to improve my performance

Data collection was also carried out through the distribution of online questionnaires, which were filled out by 222 participants within two months. The data instrument consisted of several professions, namely Doctors ( $n=13$ ), Nurses ( $n=49$ ), Midwives ( $n=35$ ), Physiotherapists ( $n=12$ ), Dentists ( $n=25$ ), Health Analysts ( $n=15$ ), Sanitarians ( $n=9$ ), Nutritionists ( $n=9$ ), Radiographers ( $n=10$ ), Medical Record Experts ( $n=10$ ), Public Healthcare Graduates ( $n=35$ ), and Electromedical Scholars ( $n=2$ ). The participants also had the following education level, namely Diploma 1–3 ( $n=83$ ), as well as Bachelor's ( $n=106$ ) and Master's ( $n=33$ ) Degrees. Furthermore, 97 (43.69%) and 125 (56.31%) of the entire sample were male and female, respectively, with their ages ranging from 20–30 ( $n=31$ ), 31–40 ( $n=75$ ), 41–50 ( $n=91$ ), and 51–60 ( $n=25$ ) years old. From these descriptions, the number of participants had exceeded the required minimum sample size.

### 3.2. Measurement

Table 1 shows the data obtained from the participants' answers to statement items, which were measured by a 7-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = moderately disagree, 4 = neutral, 5 = moderately agree, 6 = agree, 7 = strongly agree). TE was also measured by additional knowledge, ability to remember, and subsequent study practice (Perdue et al., 2002; Wilson et al., 2002) in public organizations (Umar et al., 2020). For SSC, measurement was conducted by searching for information, orientation on efficiency, systematic planning, problem-solving, and persuasive ability (Dwi Riyanti et al., 2016; Umar et al., 2020; Wike & Fagin, 2015). Meanwhile, EC was measured by cooperation, commitment, involvement, and capacity-building initiatives (Kimutai et al., 2013), with HWP being analyzed through responsiveness, availability, productivity, and use of competence (Kimutai et al., 2013; Lutwama et al., 2012).

The data collection process underwent two testing stages before measuring the effect between variables. Firstly, the Confirmatory Factor Analysis (CFA) was used to confirm that each indicator was capable of accurately measuring its latent variables (Ghozali, 2017). In this stage, an indicator is declared measurable and appropriate when loading factor and Critical Ratio coefficients greater than 0.5 and 2 are observed, respectively. CFA was also responsible for the construct validity assessment of the conceptualized measurement theory, by using the CR (Construct Reliability) and Average Variance Extracted (AVE) values. Based on the CR and AVE values, the validity of the data on a construct was greater than 0.7 and 0.5, respectively. From these results, the measurement of variables were obtained from a sample describing the actual population score.

Secondly, a model fit testing was carried out to determine the extent to which the data obtained confirmed the conceptualized framework (Anderson & Gerbing, 1988). From this context, the Goodness of Fit (GoF) value indicated various outcomes through the AMOS output. This showed that the model data were declared to have conformity when the GoF criterion had a small expected Chi-Square value, RMSEA<0.08, GFI>0.90, AGFI>0.90, the Degree of Freedom<2.0, as well as CFI and TLI>0.95.

## 4. Results

### 4.1. CFA and model fit testing

From the obtained data, Table 2 shows the CFA and model fit outputs.

Based on Table 2, each indicator had a loading factor value>0.5, critical ratio>2, and p-value<0.05, proving their abilities to measure the validity of latent variables. The CR and AVE values were also 0.7 and 0.5, respectively, indicating an excellent reliability level from the data obtained (Ghozali, 2017). Furthermore, the model structurally complied with the fit testing approach, where the GoF value met the suitability standard. This was specifically observed for the values of CMIN/DF, GFI, TLI, CFI, and RMSEA at 1.674 ( $\leq 2$ ), 0.917 ( $\geq 0.9$ ), 0.969 ( $\geq 0.9$ ), 0.974 ( $\geq 0.9$ ), and 0.05, respectively. From these results, the suitability of the conceptualized model was confirmed from a modelling perspective.

According to data processing, TE was analyzed by three indicators, namely additional knowledge (TE1= .826), ability to remember (TE2= .850), and capability to practice (TE3= .887), with the reliability analysis showing CR=0.89 and AVE=0.73. Furthermore, SSC was measured by information search (SSC1= .754), efficiency orientation (SSC2= .786), systematic planning (SSC3= .857), problem-solving (SSC4=.850), and persuasive ability (SSC5= .669), with the reliability test indicated by CR=0.88 and AVE=0.61. EC was also analyzed by cooperation (EC1= .813), commitment (EC2= .873), involvement (EC3= .734), and capacity building initiatives (EC4= .748), where the reliability analysis emphasized CR=0.90 and AVE=0.70. Meanwhile, HWP was measured by responsiveness (HWP1=.817), availability (HWP2= .738), productivity (HWP3= .818), and use of competence (HWP4= .793), where the reliability test prioritized CR=0.87 and AVE=0.62. Based on these results, the final model is shown in Figure 2

### 4.2. Hypothesis testing

By using a feasible data, the hypothesis testing outputs are shown in Table 3.

Based on Table 3, the AMOS output showed that TE positively and significantly affected SSC ( $\gamma = .839$ ; p-value = .000), leading to the acceptance of H1. However, SSC positively and insignificantly influenced HWP ( $\beta = .243$ ; p-value = .052), causing the rejection of H2. The AMOS output also proved that SSC positively and significantly impacted EC ( $\beta = .793$ ; p-value = .000), confirming the acceptance of H3. From the results, rejection was subsequently observed for H4, as TE did not significantly affect EC ( $\gamma = .078$ ; p-value = .487). EC and TE also positively and significantly influenced HWP ( $\beta = .586$ ; p-value = .000 and  $\gamma = .190$ ; p-value = .025), leading to the acceptance of H5 and H6, respectively. According to Estimates/Bootstrap (two-tailed significance-BC), the relationships between TE & HWP and TE & EC were mediated by SSC at p-value = .011 and .014, causing the acceptance of H7 and H8, respectively. The relationship between SSC and HWP was also mediated by EC at p-value = .008, confirming the acceptance of H9.

## 5. Discussion

Based on the results, the ability to practice was the most significant indicator that provided a measurement of TE, leading to the encouragement of SSC. These results were in line with several previous reports, where training and practice played essential roles in improving personal abilities, specifically in the health sector (Ahmad et al., 2022; Calavia et al., 2023; Taddio et al., 2022). As a series of efforts to improve HR quality, TE was also demonstrated by increasing knowledge, as

Table 2. Statistical result							
Variables	Indicators	Standardized Estimate	Estimate	Standard Error	Critical Ratio	P-Value	Construct Reliability (CR ≥ 0.7)
Training Effectiveness (TE)	additional knowledge (TE1)	.826	.935	.060	15.701	***	.89
	ability to remember (TE2)	.850	.951	.058	16.409	***	
	ability to practice (TE3)	.887	1.000	-	-	***	
Soft Skill Competency (SSC)	searching for information (SSC1)	.754	1.000	-	-	***	.88
	orientation on efficiency (SSC2)	.786	.953	.079	12.013	***	
	systematic planning (SSC3)	.857	1.104	.082	13.408	***	
	problem-solving (SSC4)	.850	1.088	.082	13.245	***	
	the persuasive ability (SSC5)	.669	1.019	.101	10.055	***	
							.73
							.61
							.61

(Continued)

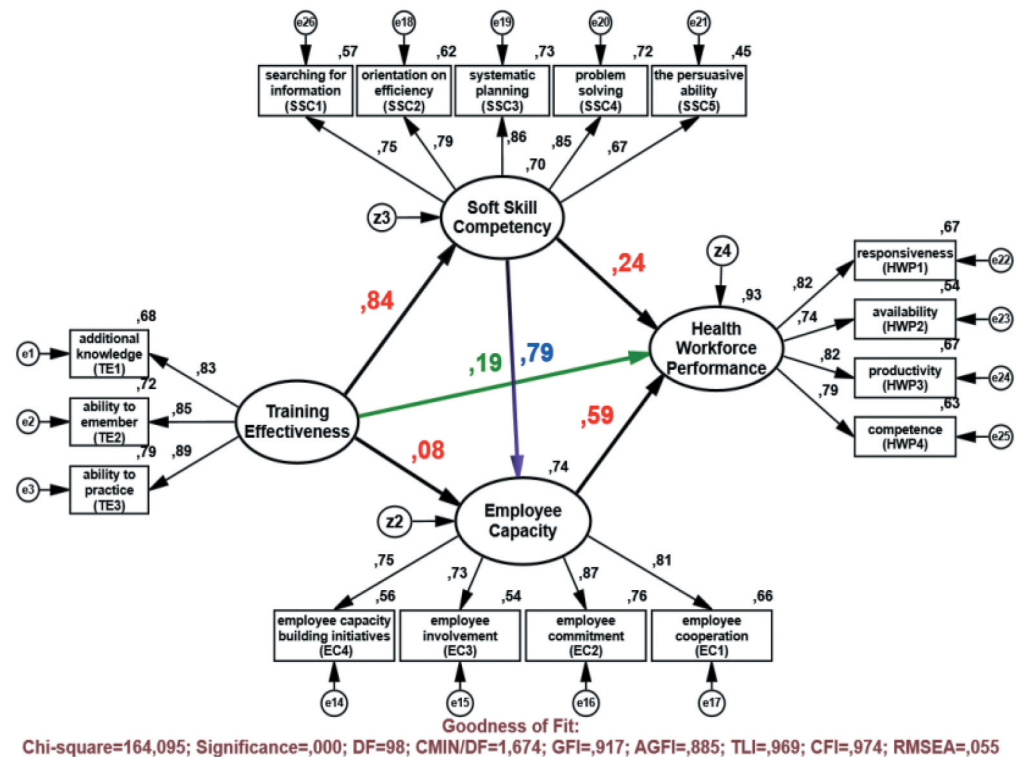
**Table 2. (Continued)**

Table 2. (Continued)								
Variables	Indicators	Standardized Estimate	Estimate	Standard Error	Critical Ratio	P-Value	Construct Reliability (CR ≥ 0.7)	Average Variance Extracted (AVE ≥ 0.5)
Employees' Capacity (EC)	Employees' cooperation (EC1)	.813	1.000	-	-	***	.90	.70
	Employees' commitment (EC2)	.873	1.110	.072	15.372	***		
	Employees' involvement (EC3)	.734	.961	.081	11.841	***		
	Employees' capacity building initiatives (EC4)	.748	1.102	.090	12.273	***		
Health Workers' Performance (HWP)	responsiveness (HWP1)	.817	1.000	-	-	***	.87	.62
	availability (HWP2)	.738	.810	.067	12.162	***		
	productivity (HWP3)	.818	.867	.063	13.829	***		
	use of competence (HWP4)	.793	.810	.061	13.387	***		
Model Fit Testing		Cut of Value			Result		Remark	
Chi-Square		df = 98, X2 = 122.107			164,095		Marginal	
Significance		0.05			.000		Marginal	
CMINDF		2			1,674		Fit	
GFI		0.90			.917		Fit	

(Continued)

Table 2. (Continued)								
Variables	Indicators	Standardized Estimate	Estimate	Standard Error	Critical Ratio	P-Value	Construct Reliability (CR ≥ 0.7)	Average Variance Extracted (AVE ≥ 0.5)
AGFI			0.90			.885		Marginal
TLI			0.95			.969		Fit
CFI			0.95			.974		Fit
RMSEA			0.03–0.08			.055		Fit
Note: *** (Significant at Level $p < 0.01$ )								

**Figure 2. Structural equation model.**



well as the abilities to remember and practice the process, causing the encouragement of soft skill improvements in employees. This result was supported by various recent studies, where the importance of training was confirmed for the development of skills (Gomez et al., 2023). It was also in line with Dammert and Nansamba (2023), where training strengthened messages in achieving long-term organizational goals by improving the soft skill possessed by HR. These results are essential for the medical workers primarily handling new cases in the health sector. Based on the soft skill measurement, systematic planning was the primary indicator providing the largest contribution. This showed that TE promoted HR to have systematic planning abilities. The soft skill was subsequently expected to support the readiness of health workers, regarding the confrontation of future challenges. In this case, the ability to systematically plan and solve problems was the component mainly considered in increasing the assessment of soft skill and improving HWP.

From the results, soft skill did not significantly adjust the impact of training on HWP. According to Cimatti (2016), this element showed several interpersonal skills, namely talent, language and communication skills, friendly nature and teamwork ability, etc. This indicated that the skills were advantageous in the interpersonal relationships involving everyone within multiple organizations. Although they were needed everywhere, soft skill still showed all the abilities and skills that are not directly related to work attributes or tasks. This result was not in line with Ibrahim et al. (2017), where different organizations need to understand HR capabilities, such as SSC, to obtain good performance. By identifying the soft skill possessed by HR, multiple companies need to provide appropriate training to encourage and improve organizational performance. The result also showed that any increase in SSC promoted EC, whose indicators included commitment, collaboration, capacity-building initiatives, and engagement. The contribution of systematic planning and problem-solving also promoted the development of EC in establishing SSC. These conditions subsequently illustrated the extent to which employees performing systematic planning promoted organizational commitment and cooperation. This was in line with Cimatti (2016), where soft skill was one of the most influential factors in measuring a person's ability level at work. Y. Huang et al. (2014),

**Table 3. Hypothesis Testing**

Hypothesis	Standardized estimate	Estimate	Standard Error	Critical Ratio	P-Value	Result
H1: Training Effectiveness → Soft Skill Competency	.839	.396	.035	11.434	***	Supported
H2: Soft Skill Competency Health Workers' Performance	.243	.255	.131	1.943	.052	Not Supported
H3: Soft Skill Competency → Employees' Capacity	.793	.725	.115	6.315	***	Supported
H4: Training Effectiveness → Employees' Capacity	.078	.034	.048	.696	.487	Not Supported
H5: Employees' Capacity → Health Workers' Performance	.586	.672	.117	5.734	***	Supported
H6: Training Effectiveness → Health Workers' Performance	.190	.094	.042	2.245	.025	Supported
H7: Training Effectiveness → Soft Skill Competency & Employees' Capacity → Health Workers' Performance	.640	Estimates/Bootstrap (two-tailed significance-BC)			.011	Supported
H8: Training Effectiveness → Soft Skill Competency → Employees' Capacity	.665	Estimates/Bootstrap (two-tailed significance-BC)			.014	Supported
H9: Soft Skill Competency → Employees' Capacity → Health Workers' Performance	.465	Estimates/Bootstrap (two-tailed significance-BC)			.008	Supported

Note: \*\*\* (Significant at Level  $P < 0.001$ )



Layuk et al. (2017), and Mendes and MacHado (2015) also confirmed that employees were capable of applying their abilities more systematically through the good soft skill to drive better performance.

According to the relationship between TE and EC, the ability to practice and remember, as well as additional knowledge, did not significantly impact increasing EC, specifically commitment and cooperation, which play major measurement roles. However, each increase in the indicators provided a significant improvement in HWP. The occurrence of TE is often observed when targeted outputs are realized and employees are satisfied with the teaching experience, leading to the improvement of motivation, knowledge, and skills (Sitzmann & Weinhardt, 2018). From this context, a transfer of knowledge and skill commonly caused significant changes in post-training work after participation. Training is also effective when most participants complete the process and the company obtains a return on their investment in increased organizational performance (Playhart et al., 2014; Sitzmann & Weinhardt, 2018). Although EC is not affected by TE, some observations were still emphasized regarding the failure to acquire knowledge and skill in the teaching process. Based on these results, the transfer of knowledge and skill was not perfectly conducted due to low motivation in training participation. This was because employees considered the training objectives irrelevant or monotonous, causing boredom. Subsequently, these conditions are the reason employees do not complete the training process.

According to Table 3, employees' commitment was the main indicator providing the most important measurement of EC. This indicated that the growing commitment of health workers promoted the improvement of performance, specifically their productivity and ability to respond to duties and responsibilities. These results were in line with several previous studies, where the development patterns of HWP were observed with increased EC (Kimutai et al., 2013; Latif, 2012). It also stated that an increase in EC only occurred when the authority or HR department invested in developing HR performance. Since HR is an essential capital for the organization, HR quality development should be highly considered by the management. Based on these results, training was considered one of the main focuses in measuring HWP (Sellers et al., 2019). Although it had a significant effect, the standardized estimate value still showed a minimal effect of TE on HWP. This study was understandably carried out during the COVID-19 pandemic, where many health workers were unprepared to handle various situations. In this case, previous training processes had not significantly influenced HWP in handling COVID-19 patients. Despite all limitations, the efforts of health workers were still appreciated during the pandemic period. This led to the encouragement of the special training processes for health workers in handling unexpected conditions and having extensive impacts.

From these results, training is capable of effectively improving performance when appropriately implemented by health workers (Dieleman & Harnmeijer, 2006). According to previous studies, the practical ability of these workers determined the level of TE and increased performance (Khan et al., 2016; Onyango & Wanyoike, 2014; Patri & Suresh, 2018; Ramadevi et al., 2016). These results were reinforced by Dammert and Nansamba (2023), where no strong relationship was observed between training intensity and the improvement of HR performance. Furthermore, TE improved SSC and EC as a trigger for HWP. This showed that SSC and EC were good mediators in the relationship, as the contribution of TE toward the improvement of performance was directly or indirectly optimal. Therefore, SSC was a mediator affecting EC, with training playing a good role in improving performance when HR adequately transferred the teaching process outputs into daily activities. This result subsequently aligned with several previous studies (Asfaw et al., 2015; Sitzmann & Weinhardt, 2018, 2019). SSC also indirectly improved HWP through EC, showing that the contribution of soft skills consistency toward employee capacity development was decisive in improving health worker performance. From this context, EC was considered an important variable that was used to increase HWP through SSC development. This proved that health workers with improved soft skill were capable of improving their work capacity and performance.

## 6. Conclusion and implications

Based on the results, TE improved SSC and HWP, although it indirectly improved EC. Besides, it also optimally improved HWP through SSC and EC. This indicated that soft skill consistency contributed to the improvement of employee capacity, while highlighting the need to directly improve HWP. It also confirmed that the enhancement of HWP was achieved through EC. Although SSC indirectly improved HWP, it still optimally contributed to EC. The results also showed that EC importantly promoted HWP due to the enhancement of SSC. This proved that health workers with improved soft skill were motivated toward possessing better capacity and performance. Besides indirectly improving and triggering health worker performance (HWP), soft skill consistency (SSC) also promoted the development of employee capacity (EC). This development condition showed that EC was a good mediator. From this context, the direct contribution of TE was optimal in promoting HWP improvement. Meanwhile, indirect inputs were observed to be better through SSC and EC. Based on these results, SSC and EC were good mediators in improving HWP.

Overall, the findings in this study show that human resource development has a huge role in dealing with very precarious situations such as a pandemic. Good management of training results is the key to human resource development in order to boost employee capacity and further encourage performance improvement. Theoretically, this research reinforces human capital theory, where effective training contributes significantly to human resource development. This research shows that training contributes to improving the intangible assets of each individual in the organization, which can further encourage performance improvement. Managerially, it can be explained that training is needed in order to improve soft skills. Therefore, HR development managers must pay attention to improving training management because only effective training can contribute to employee performance, especially in health organizations.

### Acknowledgments

The authors are grateful to the health workers who filled out the questionnaire despite the COVID-19 pandemic. The authors are also grateful to the leadership and the academic community at their institution.

### Funding

The author(s) obtained no financial support for this study, authorship, and/or publication.

### Author details

Hasmin Tamsah<sup>1</sup>  
E-mail: [hasmintamsah@gmail.com](mailto:hasmintamsah@gmail.com)  
ORCID ID: <http://orcid.org/0000-0002-9570-9658>  
Gunawan Bata Ilyas<sup>1</sup>  
ORCID ID: <http://orcid.org/0000-0003-1002-7031>  
Jumiaty Nurung<sup>1</sup>  
ORCID ID: <http://orcid.org/0000-0003-4366-8716>  
Ekafadly Jusuf<sup>1</sup>  
Sri Rahmi<sup>1</sup>  
ORCID ID: <http://orcid.org/0000-0003-1773-6498>

<sup>1</sup> Department of Management, STIE Amkop Makassar, Makassar, Indonesia.

### Disclosure statement

No potential conflict of interest was reported by the authors.

### Declaration of conflicting interests

The author(s) declared no potential conflicts of interest regarding the study, authorship, and/or publication of this article.

### ORCID iD

Hasmin Tamsah <https://orcid.org/0000-0002-9570-9658>

### Citation information

Cite this article as: Soft skill competency and employees' capacity as the intervening factors between training

effectiveness and health workers' performance, Hasmin Tamsah, Gunawan Bata Ilyas, Jumiaty Nurung, Ekafadly Jusuf & Sri Rahmi, *Cogent Business & Management* (2023), 10: 2199493.

### references

- Aci, A. et al (2021). Implementation of Soft Competency through Education and Training as well as Work Experience on the Quality of Financial Reports in the Government of Mamuju Regency. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, Singapore, March 7-11. IEOM Society International. 7132-7140. <http://www.ieomsociety.org/singapore2021/papers/1254.pdf>
- Ahmad, J., Anwar, S., Latif, A., Haq, N. U., Sharif, M., & Nauman, A. A. (2022). Association of PPE availability, training, and practices with covid-19 sero-prevalence in nurses and paramedics in tertiary care hospitals of Peshawar, Pakistan. *Disaster Medicine and Public Health Preparedness*, 16(3), 975-979. <https://doi.org/10.1017/dmp.2020.438>
- Alainati, S., Alshaw, S. N., & Al-Karaghoul, W. (2010). The effect of education and training on competency. *Proceedings of the European, Mediterranean and Middle Eastern Conference on Information Systems: Global Information Systems Challenges in Management*, EMCIS 2010, 12-13 April 2010. Abu Dhabi, UAE. 2010, 1-9.
- Amankwah-Amoah, J., Ifere, S. E., & Nyuur, R. B. (2016). Human capital and strategic persistence: An examination of underperforming workers in two emerging economies. *Journal of Business Research*, 69(10), 4348-4357. <https://doi.org/10.1016/j.jbusres.2016.04.063>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423. <https://doi.org/10.1037/0033-2909.103.3.411>

- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323. <https://doi.org/10.1108/IJPPM-01-2013-0008>
- Asfaw, A. M., Argaw, M. D., & Bayissa, L. (2015). The impact of training and development on employee performance and effectiveness: A Case Study of District Five Administration Office, Bole Sub-City, Addis Ababa, Ethiopia. *Journal of Human Resource and Sustainability Studies*, 3(3), 188–202. <https://doi.org/10.4236/jhrss.2015.34025>
- Avanzi, L., Fraccaroli, F., Sarchielli, G., Ullrich, J., & van Dick, R. (2014). Staying or leaving: A combined social identity and social exchange approach to predicting employee turnover intentions. *International Journal of Productivity and Performance Management*, 63(3), 272–289. <https://doi.org/10.1108/IJPPM-02-2013-0028>
- Azas, A. I., Romadhoni, B., & Tamsah, H. (2019). Pengaruh Motivasi Kerja, Kompensasi dan Pelatihan terhadap Kinerja Pegawai pada Rektorat UIN Alauddin Makassar. *YUME Journal of Management*, 2(1). <https://doi.org/10.2568/yum.v2i1.385>
- Baer, J. (1991). Generality of creativity across: Performance Domains. *Creativity Research Journal*, 4(1), 23–39. <https://doi.org/10.1080/10400419109534371>
- Baer, J. (1994). Generality of creativity across performance domains: A replication. *Perceptual and Motor Skills*, 79(3), 1217–1218. <https://doi.org/10.2466/pms.1994.79.3.1217>
- Bandura, A. (2015). Self-Efficacy. *International Encyclopedia of the Social & Behavioral Sciences: Second Edition*, 4(1994), 504–508. <https://doi.org/10.1016/B978-0-08-097086-8.25033-2>
- Bohoslavsky, J. P. (2020). COVID-19 Economy vs Human Rights: A Misleading Dichotomy. *Health Hum Rights*, 22(1), 383–385.
- Bontis, N., & Fitz-Enz, J. (2002). Intellectual capital ROI: A causal map of human capital antecedents and consequents. *Journal of Intellectual Capital*, 3(3), 223–247. <https://doi.org/10.1108/14691930210435589>
- Bontis, N., Seleim, A., & Ashour, A. (2007). Human capital and organizational performance: A study of Egyptian software companies. *Management Decision*, 45(4), 789–801. <https://doi.org/10.1108/00251740710746033>
- Borate, N. S., & Borate, S. L. (2016). A case study approach for evaluation of employee training effectiveness and development program. *SSRN Electronic Journal*, 2(6), 201–210. <https://doi.org/10.2139/ssrn.2486212>
- Calavia, M. B., Blanco, T., Casas, R., & Dieste, B. (2023). Making design thinking for education sustainable: Training preservice teachers to address practice challenges. *Thinking Skills and Creativity*, 47, November 2022. <https://doi.org/10.1016/j.tsc.2022.101199>
- Çetin, F., & Aşkun, D. (2018). The effect of occupational self-efficacy on work performance through intrinsic work motivation. *Management Research Review*, 41(2), 186–201. <https://doi.org/10.1108/MRR-03-2017-0062>
- Chen, H. C., & Naquin, S. S. (2006). An integrative model of competency development, training design, assessment center, and multi-rater assessment. *Advances in Developing Human Resources*, 8(2), 265–282. <https://doi.org/10.1177/1523422305286156>
- Cimatti, B. (2016). Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises. *International Journal for Quality Research*, 10(1), 97–130. <https://doi.org/10.18421/IJQR10.01-05>
- Cinque, M. (2016). “Lost in translation”. Soft skills development in European countries. *Tuning Journal for Higher Education*, 3(2), 389. [https://doi.org/10.18543/tjhe-3\(2\)-2016pp389-427](https://doi.org/10.18543/tjhe-3(2)-2016pp389-427)
- Cinque, M. (2017). Moocs and soft skills: A comparison of different courses on creativity. *Journal of E-Learning and Knowledge Society*, 13(3), 83–96. <https://doi.org/10.20368/1971-8829/1386>
- Cook, J. W. (2018). Sustainability, human well-being, and the future of education. In *Sustainability, Human Well-Being, and the Future of Education*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-78580-6>
- Cooney, R., Terziovski, M., & Samson, D. (2002). *Employee Training, Quality Management and The Performance of Australian and New Zealand Manufacturers*. <https://files.core.ac.uk/pdf/907/36963919.pdf>
- Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen, D. J. (2011). Does human capital matter? a meta-analysis of the relationship between human capital and firm performance. *The Journal of Applied Psychology*, 96(3), 443–456. <https://doi.org/10.1037/a0022147>
- Dammert, A. C., & Nansamba, A. (2023). Skills training and business outcomes: Experimental evidence from Liberia. *World Development*, 162, 106120. <https://doi.org/10.1016/J.WORLDDEV.2022.106120>
- Dean, S. A., & East, J. I. (2017). Soft skills needed for the 21st-Century Workforce. *International Journal of Applied Management and Technology*, 18(1), 5. <https://doi.org/10.5590/ijamt.2019.18.1.02>
- Dermol, V., & Čater, T. (2013). The influence of training and training transfer factors on organisational learning and performance. *Personnel Review*, 42(3), 324–348. <https://doi.org/10.1108/00483481311320435>
- Dieleman, M., & Harnmeijer, J. W. (2006). 1174\_improving-health-worker-performance. *Dieleman\_Harnmeijer*. September.
- Dos Santos, L. M. (2019). Rural public health workforce training and development: The performance of an undergraduate internship programme in a rural hospital and healthcare centre. *International Journal of Environmental Research and Public Health*, 16(7). <https://doi.org/10.3390/ijerph16071259>
- Dwi Riyanti, B. P., Sandroto, C. W., Warmiyati, D. W., & T, M. (2016). Soft skill competencies, hard skill competencies, and intention to become entrepreneur of vocational graduates. *International Research Journal of Business Studies*, 9(2), 119–132. <https://doi.org/10.21632/irjbs.9.2.119-132>
- Gambo, H. S. (2015). The impact of training and development on workers productivity. *Review of Public Administration and Management*, 3(1). <https://doi.org/10.4172/2315-7844.1000160>
- Ghozali, I. (2017). *Model Persamaan Struktural Konsep dan Aplikasi Dengan Program AMOS 24 Update Bayesian SEM* (7th ed.). Badan Penerbit Universitas Diponegoro.
- Gomez, S. M., Bartolome, A., & Luna, M. (2023). Importance of sustainable training for the employment of the future. *Intangible Capital*, 19(1), 25–41. <https://doi.org/10.3926/ic.2100>
- Gong, Z., Zhao, Z., Wang, S., & Yu, H. (2018). The antecedents of creative performance: A literature review and research Agenda. *Advances in Social Science*,

- Education and Humanities Research*, 246(Icpel), 111–117. <https://doi.org/10.2991/icpel-18.2018.5>
- Häfner, A., & Stock, A. (2010). Time management training and perceived control of time at work. *Journal of Psychology: Interdisciplinary and Applied*, 144(5), 429–447. <https://doi.org/10.1080/00223980.2010.496647>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: International version*. Upper Saddle River, NJ: Pearson Education.
- Haley, RI (1968). *Benefit Segmentation: A Decision-Oriented Research Tool*. *The Journal of Marketing*, 32(3), 30–35.
- Hautamäki, J., Arinen, P., Eronen, S., Hautamäki, A., Kupiainen, S., Lindblom, B., Niemivirta, M., Pakaslahti, L., Rantanen, P., & Scheinin, P. (2002). Assessing learning-to-learn: A framework. In *Collaboration with the National Board of Education in* (pp. 62). Centre for Educational Assessment Helsinki University.
- Huang, T. C. (2001). The relation of training practices and organizational performance in small and medium size enterprises. *Education + Training*, 43(8–9), 437–444. <https://doi.org/10.1108/00400910110411620>
- Huang, Y., Strawderman, L., Babski-Reeves, K., Ahmed, S., & Salehi, A. (2014). Training effectiveness and trainee performance in a voluntary training program: Are Trainees really motivated? *Nonprofit and Voluntary Sector Quarterly*, 43(6), 1095–1110. <https://doi.org/10.1177/0899764013506787>
- Ibrahim, R., Boerhannoeddin, A., & Bakare, K. K. (2017). The effect of soft skills and training methodology on employee performance. *European Journal of Training and Development*, 41(4), 388–406. <https://doi.org/10.1108/EJTD-08-2016-0066>
- Kamen, C., Veilleux, J. C., Bangen, K. J., VanderVeen, J. W., & Klonoff, E. A. (2010). Climbing the stairway to competency: Trainee perspectives on competency development. *Training and Education in Professional Psychology*, 4(4), 227–234. <https://doi.org/10.1037/a0021092>
- Karimi, S., & Nejad, A. H. R. (2018). The effect of organizational training on job satisfaction and individual performance of ahwaz oil company employees revista. *Revista Publicando*, 5(15), 385–401.
- Karwowski, M., & Soszynski, M. (2008). How to develop creative imagination?. Assumptions, aims and effectiveness of Role Play Training in Creativity (RPTC). *Thinking Skills and Creativity*, 3(2), 163–171. <https://doi.org/10.1016/j.tsc.2008.07.001>
- Kearsley, G., Shneiderman, B., Alavi, M., & Norman, K. (1998). Engagement theory: A framework for technology-based teaching and learning. *Educational Technology*, 38(4), 20–23. <https://doi.org/10.1007/BF02299671>
- Khan, A. A., Abbasi, S. O. B. H., Waseem, R. M., Ayaz, M., & Ijaz, M. (2016). Impact of training and development of employees on employee performance through job satisfaction: A study of telecom sector of Pakistan. *Business Management and Strategy*, 7(1), 29. <https://doi.org/10.5296/bms.v7i1.9024>
- Kimutai, G., Gachunga, H., Wanjau, K., & Gichuhi, A. W. (2013). Influence of employee capacity on health workforce performance in Kenya's Public Health Sector: A tale of ISO 9001: 2008 certified hospitals. *European Journal of Business and Social Sciences*, 2(9), 134–152.
- Latif, K. F. (2012). An integrated model of training effectiveness and satisfaction with employee development interventions. *Industrial and Commercial Training*, 44(4), 211–222. <https://doi.org/10.1108/00197851211231487>
- Layuk, E., Tamsah, H., & Kadir, I. (2017). Pengaruh Pengetahuan, Sikap Dan Keterampilan Perawat Terhadap Kepuasan Pasien Rawat Inap Di Rs Labuang Baji Makassar. *Jurnal Mirai Management*, 2(2), 319–337.
- Liu, H. Y., Wang, I. T., Chen, N. H., & Chao, C. Y. (2020). Effect of creativity training on teaching for creativity for nursing faculty in Taiwan: A quasi-experimental study. *Nurse Education Today*, 85(August 2019), 104231. <https://doi.org/10.1016/j.nedt.2019.104231>
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *The American Psychologist*, 57(9), 705–717. <https://doi.org/10.1037/0003-066X.57.9.705>
- Lockwood, N. R. (2007). Leveraging Employee Engagement for Competitive Advantage. *SHRM Research Quarterly*, 52(3), 1–12.
- Luk, S. T. K., & Layton, R. (2004). Service skills and service quality: An empirical analysis. *Journal of Human Resources in Hospitality and Tourism*, 3(2), 33–60. [https://doi.org/10.1300/J171v03n02\\_02](https://doi.org/10.1300/J171v03n02_02)
- Lutwama, G. W., Roos, J. H., & Dolamo, B. L. (2012). A descriptive study on health workforce performance after decentralisation of health services in Uganda. *Human Resources for Health*, 10(1), 1–10. <https://doi.org/10.1186/1478-4491-10-41>
- Mahfud, T., Jati, B. K., & Mulyani, Y. (2017). Soft skill competency map for the apprenticeship programme in the Indonesian balikpapan hospitality industry. *Journal of Technical Education and Training*, 9(2), 16–34.
- Mendes, L., & MacHado, J. (2015). Employees skills, manufacturing flexibility and performance: A structural equation modelling applied to the automotive industry. *International Journal of Production Research*, 53(13), 4087–4101. <https://doi.org/10.1080/00207543.2014.993772>
- Mensah, A. O., & Lebbaeus, A. (2013). The influence of employees' self-efficacy on their quality of work life: The case of cape coast, Ghana. *International Journal of Business and Social Science*, 4(2), 195–205.
- Misliha M, Alim A, Usuf E, Tamsah H and Yusradi Y. (2021). The effect of training and education and teacher certification allowances on teachers. *CJES*, 16(4), 1368–1383. [10.18844/cjes.v16i4.5986](https://doi.org/10.18844/cjes.v16i4.5986)
- Nafukho, F. M., Hairston, N. R., & Brooks, K. (2004). Human capital theory: Implications for human resource development. *Human Resource Development International*, 7(4), 545–551. <https://doi.org/10.1080/1367886042000299843>
- Nasri, H., Tamsah, H., & Firman, A. (2018). Pengaruh Kompetensi, Gaya Kepemimpinan, dan Pelatihan, terhadap Kinerja Aparatur Sipil Negara Sekecamatan Binamu Kabupaten Jeneponto. *Jurnal Mirai Management*, 3(2), 78–91.
- Nurung, J., Rakhmat Asang, S., & Hamsinah. (2019). Public service motivation and job satisfaction as driving the quality of public services in disaster emergency. *IOP Conference Series: Earth and Environmental Science*, 235. <https://doi.org/10.1088/1755-1315/235/1/012060>
- Nurung, J., Rakhmat, T., Burhanuddin, H., Azis, M., & Azis, M. (2020). The effect of leadership on public service quality. *IOP Conference Series: Earth and Environmental Science*, 473(1), 012070. <https://doi.org/10.1088/1755-1315/473/1/012070>



- Ohly, S. (2018). Promoting creativity at work - implications for scientific creativity. *European Review*, 26(S1), S91–99. <https://doi.org/10.1017/S1062798717000576>
- Onyango, J. W., & Wanyoike, D. M. (2014). Effects of training on employee performance: A Survey of health workers in Siaya County, Kenya. *European Journal of Material Sciences*, 1(1), 11–15.
- Orgambidez, A., Borrego, Y., & Vázquez-Aguado, O. (2020). Linking Self-efficacy to Quality of Working Life: The Role of Work Engagement. *Western Journal of Nursing Research*, 42(10), 821–828. <https://doi.org/10.1177/0193945919897637>
- Ostaszewski, K., Ferić, M., Foxcroft, D. R., Košir, M., Kranželić, V., Mihić, J., Novak, M., Pisarska, A., & Talić, S. (2018). European prevention workforce competences and training needs: An exploratory study. *Adiktologie*, 18(1), 07–15.
- Ostroff, C., & Bowen, D. E. (2000). Moving HR to a higher level: HR practices and organizational effectiveness. *Multilevel Theory, Research, and Methods in Organizations: Foundations, Extension, and New Directions*, 5, 211–266.
- Patri, R., & Suresh, M. (2018). Factors influencing lean implementation in healthcare organizations: An ISM approach. *International Journal of Healthcare Management*, 11(1), 25–37. <https://doi.org/10.1080/20479700.2017.1300380>
- Perdue, J., Ninemeier, J. D., & Woods, R. H. (2002). Training methods for specific objectives: Preferences of managers in private clubs. *International Journal of Contemporary Hospitality Management*, 14(3), 114–119. <https://doi.org/10.1108/09596110210424402>
- Ployhart, R. E., Nyberg, A. J., Reilly, G., & Maltarich, M. A. (2014). Human capital is dead; long live human capital resources! *Journal of Management*, 40(2), 371–398. <https://doi.org/10.1177/0149206313512152>
- Qureshi, M. (2016). The impact of employees' creativity on the performance of the firm. *Research Issues in Social Sciences*, 1(May), 1–12.
- Rahman, A. A., Ng, S. I., Sambasivan, M., & Wong, F. (2013). Training and organizational effectiveness: Moderating role of knowledge management process. *European Journal of Training and Development*, 37(5), 472–488. <https://doi.org/10.1108/03090591311327295>
- Rajeswari, T., & Palanichamy, P. (2014). An empirical analysis of the relationship between training and development and employee performance. *Training & Development Journal*, 5(2), 82. <https://doi.org/10.5958/2231-069x.2014.00783.5>
- Ramadevi, D., Gunasekaran, A., Roy, M., Rai, B. K., & Senthikumar, S. A. (2016). Human resource management in a healthcare environment: Framework and case study. *Industrial and Commercial Training*, 48(8), 387–393. <https://doi.org/10.1108/ICT-03-2016-0014>
- Sain, S., & Wilde, S. (2014). Review of Soft Skills Within Knowledge Management. In *Management for Professionals* (pp. 7–55). Springer, Cham. [https://doi.org/10.1007/978-3-319-05059-1\\_2](https://doi.org/10.1007/978-3-319-05059-1_2)
- Salama Tamsah, H., & Natsir, M. (2017). Pengaruh Pelatihan, Motivasi Kejadian Pengembangan Karir Terhadap Prestasi Kerja Pegawai Pada Satuan Polisi Pamong Praja Kabupaten Soppeng. *Jurnal Mirai Management*, 2(1), 164–174.
- Seetha, N. (2014). Are soft skills important in the workplace? â€“a preliminary investigation in Malaysia. *The International Journal of Academic Research in Business and Social Sciences*, 4(4), 44–56. <https://doi.org/10.6007/ijarbs/v4-i4/751>
- Sellers, K., Leider, J. P., Gould, E., Castrucci, B. C., Beck, A., Bogaert, K., Coronado, F., Shah, G., Yeager, V., Beitsch, L. M., & Erwin, P. C. (2019). The state of the US governmental public health workforce, 2014–2017. *American Journal of Public Health*, 109(5), 674–680. <https://doi.org/10.2105/AJPH.2019.305011>
- Shafie, H., Syed Khuzzan, S. M., & Mohyin, N. A. (2014). Soft skills competencies of quantity surveying graduates in Malaysia: Employers' Views and Expectations. *International Journal of Built Environment and Sustainability*, 1(1), 9–17. <https://doi.org/10.11113/ijbes.v1.n1.3>
- Sisson, L. G., & Adams, A. R. (2013). Essential hospitality management competencies: The importance of soft skills. *Journal of Hospitality & Tourism Education*, 25(3), 131–145. <https://doi.org/10.1080/10963758.2013.826975>
- Sitzmann, T., & Weinhardt, J. M. (2018). Training engagement theory: A multilevel perspective on the effectiveness of work-related training. *Journal of Management*, 44(2), 732–756. <https://doi.org/10.1177/0149206315574596>
- Sitzmann, T., & Weinhardt, J. M. (2019). Approaching evaluation from a multilevel perspective: A comprehensive analysis of the indicators of training effectiveness. *Human Resource Management Review*, 29(2), 253–269. <https://doi.org/10.1016/j.hrmr.2017.04.001>
- Soper, D. (2022). A-priori Sample Size Calculator for Structural Equation Models [Software]. <https://www.danielsoper.com/statcalc>
- Strober, M. H. (1990). Human capital theory: implications for hr managers human resource management and industrial relations at the annual meetings of the industrial. *Industrial Relations*, 29(2), 214–239. <https://doi.org/10.1111/j.1468-232X.1990.tb00752.x>
- Taddio, A., Gerges, S., Rocchi, M., Gudzak, V., & Ilersich, A. (2022). Perceptions of pharmacy technician students of the CARD (Comfort Ask Relax Distract) e-module introduced as part of vaccine injection training. *Cpj, Under Revi(x)*, 156(1\_suppl), 1–8. <https://doi.org/10.1177/17151635221139827>
- Thevanes, N., & Dirojan, T. (2018). Impact of training and job involvement on job performance. *International Journal of Scientific and Management Research*, 1(1), 1–10.
- Toth, I., Heinänen, S., & Puumalainen, K. (2021). Passionate and engaged? Passion for inventing and work engagement in different knowledge work contexts. *International Journal of Entrepreneurial Behavior & Research*, 27(9), 1–25. <https://doi.org/10.1108/ijeb-09-2020-0632>
- Truitt, D. L. (2011). Effect of training and development on employee attitude as it relates to training and work proficiency. *SAGE Open*, 1(3), 1–13. <https://doi.org/10.1177/2158244011433338>
- Umar, A., Tamsah, H., Mattalatta, M., Baharuddin, B., & R, A. L. (2020). Training-Effectiveness and team-performance in public organization. *The Journal of Asian Finance, Economics and Business*, 7(11), 1021–1031. <https://doi.org/10.13106/jafeb.2020.vol7.no11.1021>
- Wikle, T. A., & Fagin, T. D. (2015). Hard and Soft Skills in Preparing GIS Professionals: Comparing Perceptions of Employers and Educators. *Transactions in GIS*, 19(5), 641–652. <https://doi.org/10.1111/tgis.12126>
- Wilks, D., & Hensworth, K. (2011). Soft skills as key competencies in hospitality higher education: Matching

- demand and supply. *Tourism & Management Studies*, 7, 131–139. <https://www.tmstudies.net/index.php/ectms/article/view/342>
- Wilson, P. H., Strutton, D., & Farris, M. T. (2002). Investigating the perceptual aspect of sales training. *Journal of Personal Selling and Sales Management*, 22(2), 77–86. <https://doi.org/10.1080/08853134.2002.10754296>
- Wood, R., & Bandura, A. (1989). Social Cognitive Theory of Organizational Management. *Academy of Management Review*, 14(3), 361–384. <https://doi.org/10.2307/258173>
- Yusof, A. N. M., Ahmad, N. N., & Lishudzaimah. (2012). Quality and effectiveness of knowledge management transfer using of mentor-mentee program and on job training in work place. *ICIMTR 2012 - 2012 International Conference on Innovation, Management and Technology Research*, 50–55. <https://doi.org/10.1109/ICIMTR.2012.6236359>