

Adula, Metasebia; Birbirs, Zerihun A.; Kant, Shashi

Article

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*Corresponding author: Metasebia Adula, Department of Management, Bule Hora University, Bule Hora, Ethiopia
E-mail: metti807@gmail.com

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Pablo Ruiz, Universidad de Castilla-La Mancha, Spain

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MANAGEMENT | RESEARCH ARTICLE

The effect of interpersonal, problem solving and technical training skills on performance of Ethiopia textile industry: Continuance, normative and affective commitment as mediators

Metasebia Adula^{1*}, Zerihun A. Birbisa² and Shashi Kant¹

Abstract: This cross-sectional study finds the relationship between interpersonal, problem-solving, and technical training skills and the performance of Ethiopia's textile and clothing industries when mediated by their employee's commitment and continuance. Through a survey conducted in 2023, 426 employees and HR managers of the textile and clothing industry provided cross-sectional data for



Metasebia Adula

ABOUT THE AUTHORS

Metasebia Adula received the Master of Business administration degree with Dilla University, Ethiopia and currently student of Ph.D. degree in management at Bule Hora University, Ethiopia. She has over 15 years of governments organization works experience in the different field in women leadership development in Ethiopia. She has published 24 research papers in different international journals.

Zerihun A. Birbisa as Associate professor in Department of Management, Jimma University, Ethiopia. His specialization is Management (Marketing and strategic management). Since, He has published several research papers in Scopus and WOS reviewed international journals. He guided PhD Scholars throughout the Ethiopia. Courses he is teaching PhD-Students at different Universities are Qualitative and Quantitative Research for PhD students with different Research designs and advanced software's.

Shashi Kant the Master of Business Administration degree with UGC-NET, and the Ph.D. degree in management from India from MDU University, NCR, Delhi. He is currently working with the Department of Management, Bule Hora University, Ethiopia. He has published several research papers in Scopus, IEEE, Springer, WOS, and PubMed reviewed international journals. Recently his authored book *Computer Applications in Engineering and Management* published under CRC Press, Taylor, and Francis. He is entrepreneurship trainer for Ministry of Skill Development, India.

PUBLIC INTEREST STATEMENT

Understanding relationships between training skills three dimensions (*interpersonal, problem solving and technical training skills*), employee work commitment three dimensions (*Continuance, normative and affective commitment*) and textile industry performance three dimensions (*financial, customer satisfaction and growth*) is globally imperative and inevitable for employee attitude development and firm sustainability. Technically, interpersonal ability and problem solving skills proficient candidates may feel more confident and committed when applying to specific employers. As proxies of training skills, problem-solving ability, interpersonal ability, and technical ability improved the organizational performance.

the study. Co-variation matrix shows the outcome of hypothesis testing. To analyze the findings, structural equation modeling (SEM) was utilized. It was determined whether the data were adequate using exploratory factor analysis (EFA), and the discriminatory validity was assessed using confirmatory factor analysis (CFA). With the aid of the SEM model and AMOS software, mediation analysis was carried out. Because normative commitment's factor loading was under .40, it was amputated or deleted. Its purpose normative commitment as an observed item was unable to account for commitment as a latent variable. As a result, the empirical evidence in the research demonstrated that problem solving and technical expertise are important for the operation of the clothing industry. The results also demonstrate that continuance, normative and affective commitment of employees act as mediators for Interpersonal, problem-solving, and technical training based imparted skills. The research will pave way forward to the textile industries in this regard by highlighting the significance of problem-solving and technical expertise on the performance of the cloth industries in Ethiopia by taking resource-based view and social exchange theory as theoretical lens.

Subjects: Attitudes & Persuasion; Personnel Selection, Assessment, and Human Resource Management; Human Resource Development; Sustainability Education, Training & Leadership; Education & Training; Human Resource Management; Human Resource Management

Keywords: interpersonal skill; problem solving skill; technical Skill; continuance commitment; affective commitment

1. Introduction

Understanding relationships between training skills three dimensions (interpersonal, problem solving and technical training skills), employee work commitment three dimensions (continuance, normative, and affective commitment), and textile industry performance three dimensions (financial, customer satisfaction, and growth) is globally imperative and inevitable. Technically, interpersonal ability and problem solving skills proficient candidates may feel more confident and committed when applying to specific employers (Silva & Rosa, 2023). As proxies of training skills, problem-solving ability, interpersonal ability, and technical ability improved the organizational performance. According to Taylor (1909), these training skills are utilized as practices for increasing productivity. The interpersonal skills are priorities the tasks and focus on the most pressing business challenges by applying creative thinking by augmented the problem-solving skills. It is one of the key benefits of having problem-solving skills at work to enhance the employees work commitment like continuance, normative and affective (Allen & Meyer, 1990). As a result, committed employees will be in a position to provide solutions in the allocated time with effective utilization of available resources (Zhao et al., 2023).

On job training in form of interpersonal, technical skills, and problem-solving abilities enable workers to determine the cause of an issue in form of a team and discover an appropriate solution by paved the way forwarded for continuance and affective commitment. Although on job training is sometimes classified as an independent skill, there are other related abilities that help develop other ability abilities such as interpersonal, technical skills and problem-solving abilities (Nasiri et al., 2023). When employers learn problem-solving abilities through on-job training, they frequently pass on the dynamic capacity to handle challenges and unexpected workplace events as well as complex business difficulties that's make them mentally strong and enhances their commitment towards both team and organization (De Clercq et al., 2023). Problem-solving skills

traits help the employees to commit oneself as a part of the organization, which is something that organizations additionally rely on from mature trained personnel (Billett, 2023).

In the words of Allen and Meyer (1990, p. 6), organizational commitment is categorized as a tri-dimensional phrase since affective, continuance and normative dimensions are all important (Meyer & Allen, 1991). The “*Three Component Model of Commitment*” was propounded by Meyer and Allen (1991), and it was documented in the “Human Resource Management Review”. The three types of commitment mentioned by the model are as follows: Affective commitment, or affection for your job, Fear of loss (commitment to continue) (Rasoolimanesh et al., 2022) and normative commitment is “the employee’s feelings of obligation to remain with the organization.”

By generating cash, creating employment opportunities, transforming and improving technology, sharing information or skills, and reducing poverty, the textile and clothing industries sector supports national economic progress (Kabish, 2023; Ruteri, 2023). By removing barriers to industrialization, industrial parks aim to draw investment, provide jobs, and increase export orientation (Olwor, 2023). By 2025, Ethiopia hopes to contribute 20% of its GDP and 50% of its export volume by expanding its industrial parks (Zelalem et al., 2023). The domestic textile industry in Ethiopia contributes 7% of Ethiopia’s industrial production in value terms or around 2% of India’s GDP. Additionally, it is among the biggest employers in the nation. More than any other industry, textile and clothing production helps Ethiopia create jobs (Ewnetu & Gzate, 2023). The operational environment of the textile and clothing industries, despite their contribution to employment, is complex, and many workers and managers in their home countries face several difficulties when deciding how to carry out their jobs in the sectors (Jianguo & Solangi, 2023).

Pursuant to the literature’s resource-based perspective and social exchange theories, an industry’s advantages in competition and sustainability depend on both tangible and intangible resources, specifically highly skilled and motivated human resources (Wójcik, 2015). However, the literature has paid little attention to the significance of a resource-based perspective on the performance of the textile industry. The resource-based perspective claims that problem resolution and technical expertise are among the intangible resources influencing the success of the textile and clothing sectors (Eryarsoy et al., 2022). To pursue problem-solving and technical skill strategy and describe how industries may establish and sustain employee’s commitment that can drive growth, it is believed that resource base view have a more substantial impact than real resources. How combining these resources to maintain employee continuance, normative, and affective commitment advantage over time leads to employees citizenship behavior based on commitment (Nwokolo & Onuoha, 2023).

Globally, training in form of interpersonal, problem-solving dynamic abilities are now acknowledged as a significant factor in determine textile and cloth industries performance (Elvis et al., 2023). These skills contributed to both employees and customer satisfaction. In this regard, the recent problem-solving and technique skills development in employee training for textile and cloth industries has made training a requisite endurance means. Given that a paucity in employee skills based on training can results in employee continuance and affective commitments at work place (Fernandes et al., 2023; Silva & Rosa, 2023). No study as per the researcher’s knowledge accessed at the association among technical, interpersonal, and problem-solving training skills and the expansion of the textile industry in Ethiopia. Also, other studies, however, fail to take into account the employee’s work commitment as a mediating factor in the relationship between interpersonal, problem-solving, and technical abilities and organizational success in Ethiopia’s textile industries. In this regard, the current study expands on the body of evidence already available on the training dimensions in terms of interpersonal, problem-solving, and technical abilities, as well as the success that the textile industries sustained in the marketplace.

2. Literature appraisal and hypothesis enlargement

The foundations of problem solving orientation can be found in the writings of significant psychologists and sociologists in the experimental learning including the likes of Kurt Lewin., (Endrejat & Burnes, 2022). The concept of problem-solving skills propounded by Kurt Lewin refers to an individual's ability to identify, analyze, and solve complex problems effectively and efficiently (1984). This includes critical thinking, creativity, decision-making, and the ability to develop practical solutions.

The next proxy of measurement indicator in the study is technical skills are specific competencies and knowledge required to perform job-related tasks and duties effectively (Dooley, 1945). These skills can vary greatly depending on the role and industry but often include proficiency in software, machinery, tools, or industry-specific techniques. Technical skills are usually defined during the initial phases of training, especially when an employee is learning the specific tools and technologies relevant to their job. Continuous learning and skill development are encouraged throughout an employee's tenure to keep up with evolving technology and industry standards (Gagne et al., 1992).

The last proxy of measurement indicate of latent variable of employee training is interpersonal skills, often referred to as soft skills, involve an individual's ability to communicate, collaborate, and interact effectively with colleagues, clients, and other stakeholders. These skills include communication, teamwork, empathy, and conflict resolution (Swanson & Torraco, 1994).

The issue of industry performance, furthermore, in context of interpersonal, problem-solving, and technical skills has crucial for industries survival in present world (Sarangal et al., 2020; Zhou et al., 2020). In this regards, industries should skill their human resource to develop work attitudes and tangible resource to bring cost-effective performance (Rasoolimanesh et al., 2022).

Employee training in the company's resources and employees' skills may give it a competitive edge, according to the resource-based approach. Because they can give you a competitive advantage, intangible resources like an employee's commitment are important (Su et al., 2022). Employee's skills to identify problems brainstorm and analyses solutions and implement the best solution is referred to as problem-solving skills (Iftikar et al., 2022). A problem-solving worker is both a self-starter and effective team-member that leads to both continuances and normative and affective commitment at work place. Such trained skilled employees are proactive in identifying the root of a problem and collaborate with other people to evaluate a range of alternatives that augmented the organization performance (Tafesse, 2021; Teame et al., 2022).

Employee work commitment helps industries to see opportunities because by problem solving and technical skills they can able to look for new opportunities (Agarwal et al., 2022). In addition, interpersonal, problem-solving and technical skills can maintain the longevity of their business by obtaining attitudinal change through training and ensuring employee's decision-making abilities. Without proper continuance, normative and affective commitment for their operations (Nogueira et al., 2023).

Significant psychologists and sociologists in the field of experimental learning, such as Kurt Lewin et al. (1984), wrote on the roots of problem-solving orientation. Kurt Lewin developed the idea of problem-solving abilities to describe a person's capacity to recognize, understand, and resolve complex situations successfully and effectively (1984). This encompasses the capacity for creative problem-solving, critical thinking, and decision-making.

Technical abilities, which are specialised talents and knowledge needed to accomplish job-related activities and obligations successfully, are the next proxy of measuring indicator in the research (Dooley, 1945). These abilities might vary widely depending on the position and sector, but frequently entail mastery of software, equipment, instruments, or processes specialized to that

business. During the early stages of training, particularly when a worker is learning the precise tools and technology pertinent to their position, technical skills are typically described. To stay up with changing technology and industry norms, it is suggested for employees to continue their education and expand their skills throughout their employment (Gagne et al., 1992).

Interpersonal skills, also known as soft skills, are the last proxy for measuring the latent variable of employee training. These abilities to successfully communicate, cooperate, and connect with coworkers, clients, and other stakeholders are referred to as interpersonal skills. Communication, cooperation, empathy, and conflict resolution are some of these abilities (Swanson & Torraco 1945).

H1: Interpersonal, problem-solving and technical skills will positively and significantly affect the textile and cloth industries performance.

Resources and human capital within industries are the main factors of business survival by increasing employee commitment, according to the resource-based and human capital theoretical lens (Haldorai et al., 2022). Since commitment and involvement are intangible resources based on human capital and its abilities to solve problems, relate to team members, and possess technical know-how, social exchange theories further argued that linking work commitment and training-based skills like interpersonal, problem-solving, and technical skills should be one critical aspect (Tafesse, 2021). Dwikat et al. (2023) demonstrated how social interchange is used by both employees and managers to make quality decisions and find novel approaches to business issues that result in employee reward and recognition (Abualigah et al., 2022). Consequently, reward and acknowledge skilled. Meyer and Allen (1991) found that affective commitment is favorably correlated with training outcomes when senior management provides interpersonal support while employees increase their technical and problem-solving abilities.

Therefore, relationships are more likely to succeed when there is commitment and contentment, which means that employees are content with the connection either intrinsically or as a result of the benefits they obtain by applying skills adopted from training (Haldorai et al., 2022; Meyer and Allen; 1991). In this regard, recent literature favoring resource-based view and social exchange theories well documented the role of interpersonal, problem solving, and technical skill to develop employee affective and continuance commitment as a result of recognition and reward (Nagpal, 2022).

Technical analytical skills are founded on technical training of employees under expert supervision that augmented the bases for effective commitment. It is based on both resource based (RBV) and knowledge based view (KBV) theoretical foundation (Dubey & Bhargava, 2023). Interpersonal skills are an essential component of the problem-solving skill set. Creative thinking skills are the right solution that will motivate employees to step out of their comfort zone and committed them to think outside the box (Naqvi et al., 2023).

The historical evolution of the concept of employee commitment revealed its relationship with interpersonal, problem-solving, and technical skills. According to Lodahl and Kejner (1965), commitment is defined as job participation, which is viewed as a stimulus response based condition of emotional appreciation at work place when he or she outperforms others based on skill sets. According to Smith (1969), employee dedication affects how satisfied employees are with their jobs. According to Meyer & Allen (1997), commitment is the feeling that an employee has to keep working because of their technical and problem-solving abilities. According to Robbins (2003), commitment is the basis of an employee's work commitment towards other people or circumstances, which may be positive or negative. This attitude is founded on interpersonal skills.

Problem solving, interpersonal, and technical skills pose challenge, although it is prerequisite for managing employee continuance, affective commitment, and organizational performance (Ngcobo, 2022). In line with this, problem solving interpersonal and technique training skills have dedicated significant effect and help to increase continuance, normative, and affective commitment and its crucial role in the success of industries (Dalal, 2022).

H2: Interpersonal, problem-solving, and technical skills will positively and significantly influence continuance and affective commitment.

Staff commitment to their work is essential for the development and growth of the textile and clothing sectors, based to the resource base view (Nguyen, 2023). According to this perspective, an industry's ability to make money is largely dependent on how committed its employees are to their jobs (Abisuga & de Beer, 2022). Textile and cloth industries must have continuance, normative, and affective commitment to function well to change employee's behavior (Adula et al., 2023). Lower employee turnover is the main advantage of a continued commitment. High-continuance commitment employees are more likely to stay with the company (Azinga et al., 2023). High emotional affective commitment is a sign of good service quality from the organization. Employee loyalty increases as a result of their requirements being met, which enhances job performance (Agarwal et al., 2022). Employees that are committed to their jobs are more likely to be productive, perform better, and stay with a company longer, which benefits the company's success and keeps it at the forefront of its industry (Moussa & El Arbi, 2020).

Based on three-component theory given by Meyer and Allen (1991), for organizational performance industries exchanges employee's work commitment by training that can enhance the crucial employee's continuance, normative and affective commitment (Oamen, 2023). In this context, it is largely assumed that augmented problem-solving and technical skills could help to change employee decision making skills regarding work commitment of employee's and increase the probability of behavioral change (Kitsaras et al., 2023). Conversely, textile and cloth industries with inadequate employee training are facing challenges in using internal resource efficiently (Mady et al., 2023). Because, textile and cloth business management with poor employee's problem-solving and technical skill will affect their continuance, normative and affective commitment (Wong & Ngai, 2023).

H3: Continuance, normative and affective commitment will positively and significantly influence the textile and cloth industries performance.

The five elements of interpersonal problem-solving abilities identified by Cam and Tümkaya (2007) involve tackling problems adversely, creative problem solving, insufficient confidence in oneself, unwillingness to take accountability, and insistent-persistent approach. Empirical evidences show that interpersonal problem-solving and technical skills positive affects employee's Continuance, normative and affective commitment and finally the organizational performance including increasing financial performance and employee satisfaction. Therefore, employee believes that these abilities pertaining to textile and cloth industries helps to manage employee committed behavior and are crucial for the success of related industries. The greater the level of training based interpersonal, problem-solving and technical skill, the more effective employee commitment like to be (Azam, 2023). The success of the organization was paved for as long as reason should be the foundation of sound decision-making (Contreras-Cruz et al., 2023).

According to the Meyer and Allen (1991) model of organization commitment and social-exchange theory, continuance, normative and affective commitments are a body of knowledge management that helps in generating employee's commitment and achieving lasting success for industries (Ilevbare, 2023). Problem solving and technical skills as outcome of training are enhance

employee's understanding of basic economic concepts, knowledge, and skills for decision-making capabilities (Zakiy et al., 2023). However, interpersonal, problem-solving and technical skills are crucial for textile industries to maintain business growth and continue to be relevant when considering RBV theoretical lens (Björndahl & Nilsson, 2023)

In the literature on textile and cloth industries, the direct effect of training-based skills in form of employee literacy effect on industries performance is not well documented (Shin et al., 2023). In the same way, the direct effect of continuance, normative and affective commitment also noticed (Moussa & El Arbi, 2020). Therefore, it could be argued that training-based skills direct and indirectly, impact industries performance, although limited evidence existed in the literature on Ethiopia context Almulla and Al-Rahmi (2023).

Accordingly, literature suggests that employee training augment their customs of skill sharing to get better the employee's commitment (Gu et al., 2023). Documented evidences show that problem-solving and technical skills increases the employee's continuance, normative and affective commitment and raise organizational performance (Hung & Huy, 2023). A problem-solving and technical skill improves employee's work commitment and achieving economic well-being by enhancing internal resource capabilities and employee satisfaction (Arcadio, 2023). According to the social exchange theory, participation and engagement is vital to change employee commitment that leads to employee abilities for initiating, handling, and prospering textile and cloth industries challenges (Kossyva et al., 2023).

H4: Continuance, normative and affective commitment mediating between interpersonal, problem-solving, and technical skills and textile and cloth industries performance.

Consequently, as portrayed in the Figure 1, the researchers framed below conceptual framework based on developed hypotheses:

3. Research Methodology

3.1. Description of study area

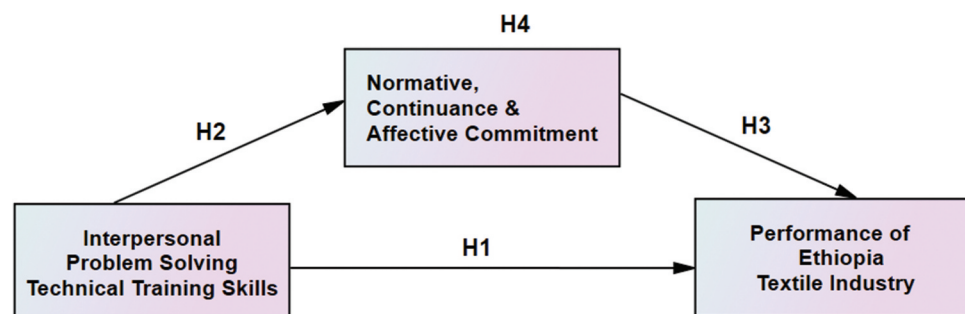
Present research was studied in Bole Lami industrial park located in capital city Addis Ababa and Hawassa industrial park located in southern Ethiopia, in Horn of Africa.

3.2. Research approach and design

In order to conduct investigations efficiently and manage data, researchers are expected to select a suitable underlying postulate to guide their study and then carefully and tactically develop their approach. Therefore, investigators can divide the study method of design into a passed manner: selecting a paradigm of research, a methodology, and a methodological approach. As a result, it is crucial to stress the need of looking at preconceptions about comprehension and retention before choosing a study approach (Jailani, 2023).

Figure 1. Study testing framework.

Source: Researchers Own framework, based on Baron and Kenny (1986) method.



The study follows the approach of positivism as a result, emphasizing quantifiable variables, evaluating hypotheses, and drawing conclusions about a wider population from data collected from samples (Taherdoost, 2022). Additionally, choosing a study strategy involves adhering to the framework (Maarouf, 2019). In the current study, researchers used a number of techniques to apply the pragmatic paradigm in order to better understand the stated research issue. The use of induction (finding patterns), deduction (testing ideas and hypotheses), and abduction (choosing and relying on the best of a group of explanations for understanding) are all part of the logic of pragmatic inquiry. An exploratory research design and a quantitative research approach were used in the study.

3.3. Design of sample

Designing of sample is the procedure of choosing a sufficient number of individuals from a certain group to accurately represent that population as a whole. Target a population is a particular number of people that an examiner wants to investigate while using sampling techniques. As a result, the target demographic of the present investigation is made up of the various textile and clothing textile industries in Ethiopia's industrial park. The increasing demand for statistical analysis has made it necessary to take an expert strategy to estimating the sample size needed to accurately represent a given community.

Therefore, the selection method developed by Dillman formula (2000, 2007) was employed in the present investigation to select a representative sample and to reduce coverage inaccuracy in the questionnaire used for the research (Quan & Liamputtong, 2023). The study used a multi-stage sampling method to create sub-clusters and achieve the desired sample size. Researchers initially chose public and private textile industries using purposive sampling. The population was divided into homogeneous subpopulations from a sample that was heterogeneous using stratified sampling in the second step. The researchers used Dillman formula (2000, 2007 cited in Quan & Liamputtong, 2023) method for obtaining authentic sample.

$$n = \frac{[(N)(p)(1 - p)] / [(N - 1)(B/C)^2 + (p)(1 - p)]}{n = [(45608)(0.3)(1 - 0.3)] / [(45608 - 1)(0.03/2.01)^2 + (0.3)(1 - 0.3)] = 388}$$

Accordingly, 388 plus 10% was chosen proportionately from the manufacturing and service sectors to create a total of 426 respondents. This was done to account for the anticipated low response or unresponded rate percent of 10% to 20% and to increase the generalizability of the results (Remenyi & Sherwood-Smith, 1998). For infinite or enormous populations, it is hoped that this sample size will produce the necessary data with comparatively high precision (Saunders et al., 2000). Additionally, it is larger than what is advised for using statistical methods like factor analysis, AMOS, regression, etc. (Julie Yazici, 2005).

3.4. Construct development and measurement

The study's main constructs are factors influencing how employees are trained, including interpersonal, technical, problem-solving, and perseverance abilities, as well as affective commitment developed in Ethiopia's textile and clothing industries. The study evaluates the model by means of a legitimate, self-administrative "five-point Ordinal Likert scale", where one stands for "strongly disagree" and five for "strongly agree." It used earlier research and carried out a thorough literature study to guide our strategy. The instrument was divided into four main components, with the first section concentrating on the demographic profile of the participants and the features of training skills. Seven items were modified from literature in the second section to measure employee training skills in form of problem-solving, interpersonal skills, and technical skill (Islam et al., 2023; Mariano & Tantoco, 2023; Nguyen, 2023). Seven questions from the body of literature on employee work attitudes were used in the third section of the study to assess continuance, normative and affective commitment (Blake-Beasley, 2023; Ly, 2023).

The study assessed the constructs of access to textile and clothing performance, training competence and continuance, normative and affective commitment. It measured problem-solving and technical skill by evaluating the employees' actions, attitudes, knowledge, and skills. Utilizing seven questions from the body of literature on employee work commitment and a variable developed from the Meyer & Allen (1997) model and Social Exchange theory, it assessed commitment to continuance and affective commitment. Accordingly, the study evaluated the performance of the textile and clothing industries using internal resources, financial growth, and employee happiness.

3.5. Data analysis techniques

The study employed the confirmatory factor analysis approach of structural equation modeling, which integrates factor analysis (Gu et al., 2023; Marsh et al., 2023). The study used a two-step methodology using SPSS 23 for data analysis. Before moving on to test the hypothesis, the study first evaluated the model reliability and validity using confirmatory factor analysis and maximum likelihood. Based on the data gathered, the study employed structural equation modeling to explore the suggested underlying links between problem-solving, technical skill, continuance, normative and affective commitment, and Ethiopian textile industry performance.

4. Data Analysis and Interpretation

4.1. Measurement model: Conformity factor analysis

According to Barnes et al. (2023), all of the items had standardized loadings factor and were significantly higher than the threshold value of more than 5%.

Confirmatory factor analysis (CFA) was used by the researchers to verify the factor structure of a set of observed data. Researchers tested the hypothesis and significant relationship was founded between the observable variables and the latent structures that underlie them using confirmatory factor analysis. The first estimate displayed under Figure 2 was the association among employee training and employee work commitment. Normative commitment was amputated/removed because its factor loading was below .40. Its means Normative commitment as an observed item was not able to explain the latent variable i.e. commitment.

The covariance predicted between employee training skills determinants and employee work commitment to be 0.19 shows an observation on an approximately normally distributed random variable centred around the population covariance with a standard deviation of .024, meaning that any critical ratio that exceeds 1.96 in magnitude would be significant as shown in the Table 1 below. This assumption in the section "Distribution assumptions for AMOS model" was founded as true.

Standard error (S.E.) estimate and covariance are both calculated at 0.19. At a significance level of 0.05, the Critical Ratio is 0.24, which is greater than 1.96. Since there is a significant difference between covariance between variables and zero, covariation matrix table shows the outcome of hypothesis testing and manifested that direct relation between employee work commitment relations was not established because *p* value founded more than 0.05. As direct relationship not founded, it is violation of Baron and Kenny (1986) method, therefore researchers were followed the latest Hollend et al model (2016).

The estimated covariance between organizational performance in the textile industry and employee work commitment was 0.017, which represented an observation on a randomly distributed variable that is roughly normally distributed and had a population covariance with a standard deviation of .020. The estimated correlation was founded between employee training skills and performance in the textile industry was .093, which represents an observation on a randomly distributed variable that is roughly normally distributed and has a standard

Figure 2. Cfa.

Source: AMOS Output, 2023.

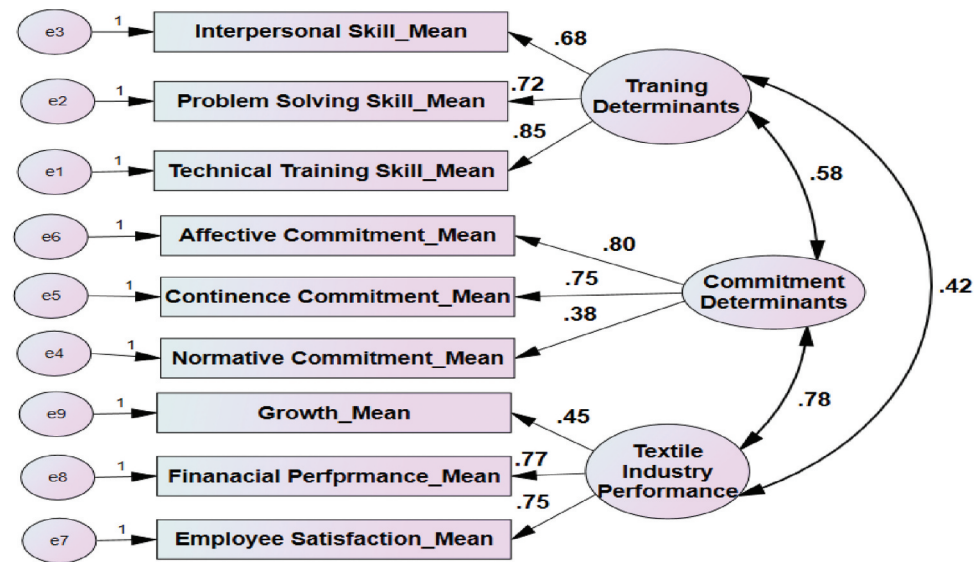


Table 1. Covariation matrix

			Estimate	S.E.	C.R.	P	Hypothesis	Hypothesis Testing
Training skills	<->	Commitment	.190	.024	7.823	***	H3	Relation established
Textile industry Performance	<->	Commitment	.170	.020	8.428	***	H2	Relation established
Textile industry Performance	<->	Training skills	.093	.016	5.803	.071	H1	Relation not established

Source: AMOS Output, 2023.

deviation of .016. The covariance between the variables is substantially different from zero when the critical ratio for the estimated standard error of the covariance, which was 0.016 at the 0.05 level of significance.

4.2. Discriminant validity

The absence of strong correlations between measures of constructs that theoretically should not be significantly linked to one another is evidence of discriminant validity.

Practically, the correlation table's result in Table 2 shows that discriminant validity coefficients should be significantly smaller than convergent validity coefficients.

Table 2. Reliability instrument and confirmatory factor loading

	CR	AVE	MSV	MaxR(H)	Training	Commitment	Performance
Training	0.814	0.595	0.156	0.834	0.771		
Commitment	0.749	0.599	0.157	0.750	0.395	0.774	
Performance	0.701	0.536	0.157	0.699	0.373	0.396	0.732

Source: Gaskination's Plugin (2023).

4.3. Mediation analysis

Baron and Kenny (1987) model was unable to draw the mediation effect because direction relation founded as insignificant because p-value was founded as 0.07, more than acceptance level. Therefore researchers used the latest Hollend el al. (2016) model. In Hollend el al. (2016) model, there is no need to check the direct relation, directly you can measure the indirect relation.

The SEM (Structure Equation Modeling) under Figure 3 was revealed that commitment results have a significant full mediation impacts in between employee training determinants and textile industry performance.

The cumulative of the direct effect was calculated and found to be 0.56, or the overall effect. The indirect impact of 0.293 at the significance level of 0.05 reflects the work commitment of the employee as well as the connection between the employee's training and the performance of the textile industry. The overall impact of all identified predictors on the performance of the textile industry is 0.56. The presence of a mediator predictor explains the dependent variable or the behaviour of the dependent variable. The outcomes of the mediation analysis are presented in Table 4 together with the overall effect. Figure 3 outlines the outcome of the path analysis result.

4.4. Model fit

According to the results of the following Table 3, the CMIN/DF value is 3.399, which is near to 3, suggesting that the root mean of the residual has a strong model fit. The goodness of fit indices is 0.965, the comparative fit indices are 0.958, and the root mean square approximation is 0.079, all of which are smaller to 0.05. Model was found fit. The value of importance in this case is the Goodness of Fit Index (GFI); hence, GFI received the majority of attention. The GFI for the researchers' projected frame is 0.973, which is higher than 0.95, as shown in Table 3 of the correlation.

ET had a 0.565 direct effect on OP. EW acts as a mediator between ET and OP (Table 4). Predictors with commitment towards the researcher's work were identified using full mediation theory (Hollend et al., 2016). Further research was done on the mediation idea. Researchers first used the AMOS to analyses the connection among predictors and the commitment mediation. The researchers further examined the mediation of commitment in employee training and textile industry performance.

Figure 3. SEM (Hollend el al., 2016 model).

Source: AMOS Output, 2023.

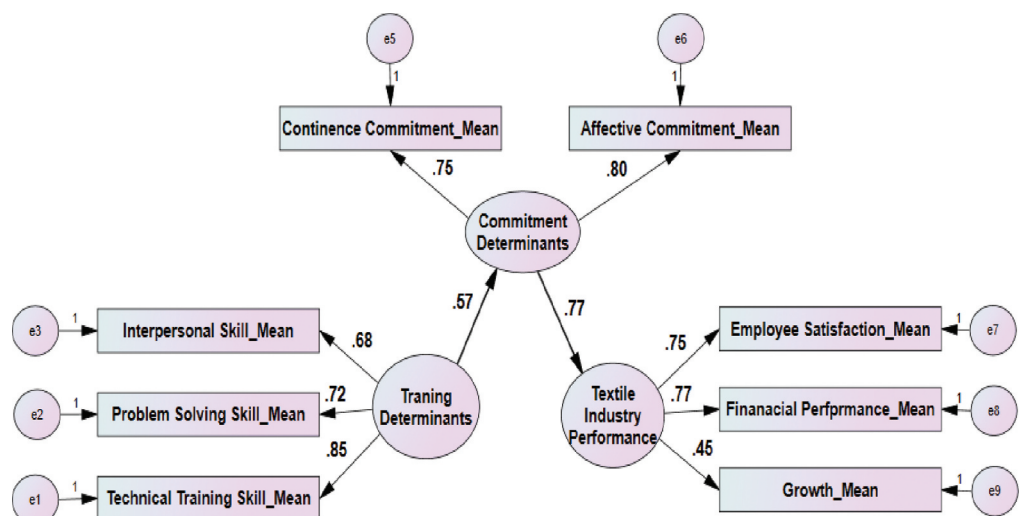


Table 3. Model Fit indicis

Measurement Category	Fit Indices	Model Value	Acceptance Level	Outcome
Chi-Square	CMIN	176.638		
	P-Value	.000	Less than 0.05	Accepted
	CMIN/DF	3.399	Less than 5	Fit
Absolute fit measurement	GFI	.965	More than 0.90	Fit
	RMR	.021	Less than 0.0008	Fit
	RMSEA	.079	Less/equal to 0.08	Confirmed
	Standardized RMR	.0518	Less/equal to 0.08	Confirmed
Incremental fit measurement	CFI	.958	More than 0.90	Fit
	IFI	.947	More than 0.90	Accepted
	RFI	.900	More than 0.90	Confirmed
	TLI	.935	More than 0.80	Fit
Parsimony fit measure	PNFI	.648	More than 0.60	Fit
	PCFI	.660	More than 0.60	Confirmed

CMIN/DF =chi square; GFI= goodness of fit indices; SRMR =Standardized Root Mean Square Residual; CFI=Comparative fit index; IFI= Incremental Fit Index; NFI=Normed Fit Index; RFI=Relative Fit Index, PNFI= Parsimony Normed Fit Index; PCFI = Parsimony Comparative Fix Index.

Source: AMOS Output, 2023.

Table 4. Mediation analysis and total effect

	Training	Commitment	Performance
Commitment	.565	.000	.000
Performance	.293	.519	.000

Source: AMOS Output, 2023.

5. Conclusion and Implication

The article specifically examined industrial parks and assessed how employee work commitment mediates the relationship between interpersonal, problem-solving, and technical abilities and the performance of Ethiopia's textile industry in accordance with Allen and Meyer's three component model, RBV, and social exchange-based theory. Cross-sectional data from 426 respondents who collected questionnaire in 2023 were used in the study. As a result, the study discovered complete mediation by employee work attitude, showing that technical skill and problem-solving abilities had a complete impact on the performance of the textile industry through the mediating variable. In this sense, the study's empirical findings have consequences for theory, practice, and policy (Dai et al., 2023). By demonstrating the mediating role of continuance, normative and affective commitment in employee behavior in the relationship between problem solving and technical skill of business performance, findings theoretically contribute to the resource-based view of industries in the context of businesses in the textile industries state. In perspectives of harmonize RBV theory, researchers analyzed the problem solving and technical skills effect in study area and explain better performance with inclusion of employee commitment (Pereira et al., 2023) the research thus expands the existing literature on the mediating role of continuance, normative and affective commitment in the problem solving and technical skill business performance. Because normative commitment's factor loading was under .40, it was amputated or deleted. Its purpose normative commitment as an observed item was unable to account for commitment as a latent variable.

In this context, the study fill the knowledge gap on the mediating roles of continuance, normative and affective commitment in the problem solving and technical skill business performance by perspectives of RBV theory, the most well-liked existing organization point of views in problem solving and technical skill. These perspectives are complementary and help to explain better performance based on employees' more mature work attitudes. This research has also practical applications for problem-solving and technical expertise on the performance of industries. In order to increase employee commitment and improve performance, the paper seeks to encourage employees' behavior to recognize the significance of problem solving and technical expertise. Since higher education institutions are crucial for obtaining problem-solving and technical skill through training, the findings also encourage businesses to collaborate closely with them.

Additionally, as it reduces information asymmetry when firms want formal continuance and emotive commitment, training that focuses on interpersonal, problem-solving, and technical abilities is essential for performance and a competitive economy. As a result, managing the formal provision of problem solving and technical expertise has the potential to improve firms' operational capacities (Anser et al., 2021). Therefore, small businesses should place a high priority on developing their employees' problem-solving and technical skills in order to help them make decisions and improve their chances of success. On the other hand, Ethiopia Industrial Park's textile industries should think about skill-based training to boost employee capacity and enhance retention and commitment. In order to improve both their performance and dedication, legislators should think about enacting laws that support interpersonal, problem-solving, and technical skills.

6. Limitations and recommendations for next studies

In order to analyze the impact of internal resources on the performance of the textile industry, this study solely employs commitment and training skills; other forms of resources may not apply. Additionally, the study only included information from workers and managers in Ethiopia's textile industry, which restricts the applicability of the findings to other textile sectors in Industrial Park.

Future research can examine the effects of different human resource practices on performance and conduct research in various Ethiopian regions to consider how demographic characteristics, social ties, employee perceptions, and decision-making styles can influence employee behaviors, tactical choices, and performance in order to address the limitations of the current study (Adenutsi & Whajah, 2023). Researchers may also conduct longitudinal studies to examine the relationship between training and textile industry performance.

Author details

Metasebia Adula¹

E-mail: metti807@gmail.com

ORCID ID: <http://orcid.org/0000-0001-5732-2850>

Zerihun A. Birbisa²

ORCID ID: <http://orcid.org/0000-0003-0897-7011>

Shashi Kant¹

ORCID ID: <http://orcid.org/0000-0003-4722-5736>

¹ Department of Management, Bule Hora University, Bule Hora, Ethiopia.

² Department of Management, Jimma University, Jimma, Ethiopia.

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Supplementary data

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References

- Abisuga, O. A., & De Beer, D. (2022). A Systematic Literature Review and prospects for the additive manufacturing in the creative industries. *Additive Manufacturing, Modeling Systems and 3d Prototyping*, 9.
- Abualigah, A., Koburtay, T., Bourini, I., Badar, K., & Gerged, A. M. (2022). Towards sustainable development in the hospitality sector: Does green human resource management stimulate green creativity? A moderated mediation model. *Business Strategy and the Environment*, 32(6), 3217–3232. <https://doi.org/10.1002/bse.3296>
- Adenutsi, D. E., & Whajah, A. (2023). A PLS-SEM approach to enterprise risk Management and performance of smes in Ghana. *International Journal of Business & Economics (IJBE)*, 8(1), 175–201. <https://doi.org/10.58885/ijbe.v08i1.175.da>
- Adula, M., Ayenew, Z., & Kant, S. (2023). How employee's work commitment mediate in between employee

- reward System and performance: In case of Ethiopian textile and cloth industries. *Horn of African Journal of Business and Economics (HAJBE)*, 1(1), 1–14. <https://doi.org/10.31098/aqr.v1i1.1349>
- Agarwal, V., Mathiyazhagan, K., Malhotra, S., & Saikouk, T. (2022). Analysis of challenges in sustainable human resource management due to disruptions by industry 4.0: An emerging economy perspective. *International Journal of Manpower*, 43(2), 513–541. <https://doi.org/10.1108/IJM-03-2021-0192>
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18.
- Almulla, M. A., & Al-Rahmi, W. M. (2023). Integrated social cognitive theory with learning input factors: The effects of problem-solving skills and critical thinking skills on learning performance sustainability. *Sustainability*, 15(5), 3978. <https://doi.org/10.3390/su15053978>
- Anser, M. K., Yousaf, Z., Usman, M., Yousaf, S., Fatima, N., Hussain, H., & Waheed, J. (2021). Strategic business performance through network capability and structural flexibility. *Management Decision*, 59(2), 426–445. <https://doi.org/10.1108/MD-06-2019-0741>
- Arcadio, R. D. (2023). Manufacturing and construction workforce: Unveiling the backbone of industry leading towards TechEnriching humanity. *European Journal of Innovation in Nonformal Education*, 3(7), 203–208.
- Azam, M. S. (2023). How can we build Human Resources (HR) that deliver value? A systematic literature review of traditional and transformational HR roles. *Global Business and Organizational Excellence*, 42(4), 81–92. <https://doi.org/10.1002/joe.22191>
- Azinga, S. A., Obeng, A. F., Ellis, F. Y., & Ansah, M. O. (2023). Assessing the effects of transformational leadership on innovative behavior: the role of affective commitment and psychological capital. In *Evidence-based HRM: a Global Forum for Empirical Scholarship*. Emerald Publishing Limited.
- Barnes, H., Faraz Covelli, A., & Rubright, J. D. (2023). A confirmatory factor analysis of the novice nurse practitioner role transition scale. *Research in Nursing & Health*, 46(1), 127–135. <https://doi.org/10.1002/nur.22277>
- Billett, S. (2023). Learning across working life: Educative experiences. In *Sustaining employability through work-life learning: Practices and policies* (pp. 191–208). Springer Nature. <https://doi.org/10.1080/0158037X.2023.2221650>
- Björndahl, A., & Nilsson, V. (2023). *Strategic Management of organizational resilience in SMEs: A multiple case study of SMEs from a resource-based view and dynamic capabilities view*.
- Blake-Beasley, M. S. (2023). *The relationship between leadership styles and subordinates' job satisfaction, affective commitment, and continuance commitment within Police Departments* [Doctoral dissertation, Trevecca Nazarene University].
- Cam, S. & Tumkaya, S. (2007). Kısilerarasi problem gozme envanteri'nin (KPCE) gehstirilmes: Gegerlik ve guvenirlik galismasi [developing the interpersonal problem-solving inventory: The validity and reliability process]. *Turk Psikolojik Dani'a ma ve Rehberlik Dergisi*, 28(3), 95–111.
- Contreras-Cruz, A., Kirbac, A., Dennett, C., & Daim, T. U. (2023). Human-centered design as a tool to improve employee experience: The case of a US plant-based food manufacturer. *Technology in Society*, 73, 102248. <https://doi.org/10.1016/j.tech.soc.2023.102248>
- Dai, Y., Luan, L., & Lin, X. (2023). The effects of online learning readiness on self-regulated learning for the first-time online learning students. *Asian Journal of Distance Education*, 18(2), 42–62.
- Dalal, R. (2022). *Examination of relationship between talent management practices and employee job-related outcomes* [Doctoral dissertation, Purdue University Graduate School].
- De Clercq, D., Aboramadan, M., & Kundi, Y. M. (2023). How employee pandemic fears may escalate into a lateness attitude, and how a safe organizational climate can mitigate this challenge. *Personnel Review*. <https://doi.org/10.1108/PR-11-2022-0764>
- Dooley. (1945). A record of the development of management techniques for improvement of supervision, their use and the results. War manpower commission, bureau of training, training within industry service.
- Dubey, K., & Monu Bhargava, D. N. (2023). Cultural diversity in organizations and human resource development programs: A psychological analysis. *Journal for ReAttach Therapy and Developmental Diversities*, 6 (7s), 283–292.
- Dwikat, S. Y., Arshad, D., & Mohd Shariff, M. N. (2023). Effect of competent human capital, strategic flexibility and turbulent environment on sustainable performance of SMEs in manufacturing industries in palestine. *Sustainability*, 15(6), 4781. <https://doi.org/10.3390/su15064781>
- Elvis, N. T., Cheng, H., & Providence, B. I. (2023). Exploring the Optimistic Approaches and directives of Cameroon's textile sector for reliable development. *Sustainability*, 15(7), 5896.
- Endrejat, P. C., & Burnes, B. (2022). Kurt Lewin's ideas are alive! But why doesn't anybody recognize them?. *Theory & Psychology*, 32(6), 931–952.
- Eryarsoy, E., Özertorgaloğlu, A., Acar, M. F., & Zaim, S. (2022). A resource-based perspective of the interplay between organizational learning and supply chain resilience. *International Journal of Physical Distribution & Logistics Management*, 52(8), 614–637. <https://doi.org/10.1108/IJPDLM-07-2021-0299>
- Ewnetu, M., & Gzate, Y. (2023). Assembly operation productivity improvement for garment production industry through the integration of lean and work-study, a case study on Bahir Dar textile share company in garment, Bahir Dar, Ethiopia. *Heliyon*, 9 (7), e17917. <https://doi.org/10.1016/j.heliyon.2023.e17917>
- Fernandes, A. T., Pereira, L. F., Dias, A., & Gupta, V. (2023). Strategic problem-solving: A state of the art. *IEEE Engineering Management Review*.
- Gagne, M. R., Stern, C. L., & Marks, T. J. (1992). Organolanthanide-catalyzed hydroamination. A kinetic, mechanistic, and diastereoselectivity study of the cyclization of N-unprotected amino olefins. *Journal of the American Chemical Society*, 114(1), 275–294.
- Gu, M., Zhang, Y., Li, D., & Huo, B. (2023). The effect of high-involvement human resource management practices on supply chain resilience and operational performance. *Journal of Management Science and Engineering*, 8(2), 176–190. <https://doi.org/10.1016/j.jmse.2022.12.001>
- Haldorai, K., Kim, W. G., & Garcia, R. F. (2022). Top management green commitment and green intellectual capital as enablers of hotel environmental performance: The mediating role of green human resource

- management. *Tourism Management*, 88, 104431. <https://doi.org/10.1016/j.tourman.2021.104431>
- Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*, 17, 100–110.
- Hung, N. T., & Huy, D. X. (2023). The influence of human resource policy on job satisfaction in predicting organizational commitment. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8 (6), 23.
- Iftikar, T., Hussain, S., Malik, M. I., Hyder, S., Kaleem, M., & Saqib, A. (2022). Green human resource management and pro-environmental behaviour nexus with the lens of AMO theory. *Cogent Business & Management*, 9(1), 2124603. <https://doi.org/10.1080/23311975.2022.2124603>
- Ilevbare, M. A. (2023). *Employee engagement strategies in manufacturing organizations in Nigeria* [Doctoral dissertation, Walden University].
- Islam, M. S., Hoque, I., Rahman, S. M., & Salam, M. A. (2023). Evaluating supply chain resilience using supply chain management competencies in the garment industry: A post COVID analysis. *Journal of Industrial and Production Engineering*, 40(5), 323–342. <https://doi.org/10.1080/21681015.2023.2197907>
- Jailani, M. S. (2023). Teknik Pengumpulan Data Dan Instrumen Penelitian Ilmiah Pendidikan Pada Pendekatan Kualitatif dan Kuantitatif. *Jurnal IHSAN: Jurnal Pendidikan Islam*, 1(2), 1–9. <https://doi.org/10.61104/ihsan.v1i2.57>
- Jianguo, D., & Solangi, Y. A. (2023). Sustainability in Pakistan's textile industry: Analyzing barriers and strategies for green supply chain management implementation. *Environmental Science and Pollution Research*, 30(20), 58109–58127. <https://doi.org/10.1007/s11356-023-26687-x>
- Julie Yazici, H. (2005). A study of collaborative learning style and team learning performance. *Education+ Training*, 47(3), 216–229.
- Kabish, A. K. (2023). Textile and clothing production and trading-the way to industrial economy development. *Ethiopian Journal of Science and Technology*, 16 (Special), 1–12.
- Kitsaras, G., Asimakopoulou, K., Henshaw, M., & Borrelli, B. (2023). Theoretical and methodological approaches in designing, developing, and delivering interventions for oral health behaviour change. *Community Dentistry and Oral Epidemiology*, 51(1), 91–102. <https://doi.org/10.1111/cdoe.12817>
- Kossyva, D., Theriou, G., Aggelidis, V., & Sarigiannidis, L. (2023). Retaining talent in knowledge-intensive services: Enhancing employee engagement through human resource, knowledge and change management. *Journal of Knowledge Management*. <https://doi.org/10.1108/JKM-03-2022-0174>
- Lodahl, T. N., & Kejner, N. (1965). The definition and measurement of job development. *Journal of Applied Psychology*, 54(4), 305–312.
- Ly, B. (2023). Inclusion leadership and employee work engagement: The role of organizational commitment in Cambodian public organization. *Asia Pacific Management Review*. <https://doi.org/10.1016/j.apmr.2023.06.003>
- Maarouf, H. (2019). Pragmatism as a supportive paradigm for the mixed research approach: Conceptualizing the ontological, epistemological, and axiological stances of pragmatism. *International Business Research*, 12(9), 1–12. <https://doi.org/10.5539/ibr.v12n9p1>
- Mady, K., Battour, M., Aboelmaged, M., & Abdelkareem, R. S. (2023). Linking internal environmental capabilities to sustainable competitive advantage in manufacturing SMEs: The mediating role of eco-innovation. *Journal of Cleaner Production*, 417, 137928. <https://doi.org/10.1016/j.jclepro.2023.137928>
- Mariano, R. P., & Tantoco, L. F. (2023). Assessment of Employability skills of Technical-Vocational Education and Training (TVET) graduates: Basis for an enhancement program. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(5), 1734–1747. <https://doi.org/10.11594/ijmaber.04.05.34>
- Marsh, H. W., Fraser, M. I., Rakhimov, A., Ciarrochi, J., & Guo, J. (2023). The bifactor structure of the Self-Compassion scale: Bayesian approaches to overcome Exploratory Structural Equation Modeling (ESEM) limitations. *Psychological Assessment*, 35(8), 674–691. <https://doi.org/10.1037/pas0001247>
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89.
- Moussa, N. B., & El Arbi, R. (2020). The impact of Human Resources Information Systems on individual innovation capability in Tunisian companies: The moderating role of affective commitment. *European Research on Management and Business Economics*, 26(1), 18–25.
- Nagpal, P. (2022). Organizational commitment as an outcome of employee engagement: A social exchange perspective using a SEM model. *International Journal of Biology, Pharmacy and Allied Sciences*, 11(1), 72–86.
- Naqvi, S. U. E. L., Sharif, I., & Khan, I. (2023). Uncovering teachers' perceptions, overcoming barriers, and introducing an effective framework for incorporating and evaluating 21st Century skills in classrooms. *Global Educational Studies Review*, VIII(8), 302–317.
- Nasiri, M., Saunila, M., Ukko, J., Rantala, T., & Rantanen, H. (2023). Shaping digital innovation via digital-related capabilities. *Information Systems Frontiers*, 25(3), 1063–1080. <https://doi.org/10.1007/s10796-020-10089-2>
- Ngcobo, S. D. (2022). The role of training and development on organisational performance in the footwear industry in South Africa. *Technium Social Sciences Journal*, 35, 418. <https://doi.org/10.47577/tssj.v35i1.6058>
- Nguyen, N. (2023). *Bridging the gap between fashion design curricula and industry requirements* [Doctoral dissertation, Kent State University].
- Nogueira, M., Silva, B., & Gomes, S. (2023). The impact of customer-centric Sustainability on brand relationships. *Sustainability*, 15(16), 12212. <https://doi.org/10.3390/su151612212>
- Nwokolo, L. U., & Onuoha, B. C. (2023). Change oriented leadership style and organizational commitment of Private hospitals in Rivers State, Nigeria. *Open Access Journal of Management Sciences Research*, 1(1), 1–17.
- Oamen, T. E. (2023). The impact of firm-based organizational citizenship behavior on continuance and normative commitment among pharmaceutical executives: An SEM approach. *Journal of Economics and Management*, 45, 47–67. <https://doi.org/10.22367/jem.2023.45.04>
- Olwor, N. (2023). Industrialization of economies with low level of manufacturing base: Case study of Uganda. *SSRN Electronic Journal*. Available at SSRN 4323103. <https://doi.org/10.2139/ssrn.4323103>

- Pereira, V., Bamel, U., Temouri, Y., Budhwar, P., & Del Giudice, M. (2023). Mapping the evolution, current state of affairs and future research direction of managing cross-border knowledge for innovation. *International Business Review*, 32(2), 101834. <https://doi.org/10.1016/j.ibusrev.2021.101834>
- Quan, K. N., & Liangputtong, P. (2023). Social Surveys and Public Health. In *Handbook of Social Sciences and Global Public Health* (pp. 1–19). Cham: Springer International Publishing.
- Rasoolimanesh, S. M., Seyfi, S., Rather, R. A., & Hall, C. M. (2022). Investigating the mediating role of visitor satisfaction in the relationship between memorable tourism experiences and behavioral intentions in heritage tourism context. *Tourism Review*, 77(2), 687–709.
- Remenyi, D., & Sherwood-Smith, M. (1998). Business benefits from information systems through an active benefits realisation programme. *International Journal of Project Management*, 16(2), 81–98.
- Robbins, S. P. (2003). *Organizational behaviour, third Canadian edition. Instructor's resource manual with CBC video Guide*. Prentice Hall.
- Ruteri, J. M. (2023). Overview on textile and fashion industry in Tanzania: A need to realize its potential in poverty alleviation. In Yan, X., Chen, L., & Memon, H. (Eds.), *Quality education and international partnership for textile and fashion: Hidden potentials of East Africa* (pp. 175–197). Springer Nature. https://doi.org/10.1007/978-981-99-1320-6_9
- Sarangal, R. K., Sharma, P., & Manhas, P. S. (2020). Organizational commitment, talent management and performance in hospitality industry. *Journal of Tourism, Hospitality & Culinary Arts*, 12(3), 65–83.
- Saunders, W., Sutherland, W. J., Maddox, S. J., Keeble, O., Oliver, S. J., Rowan-Robinson, M., & Hawkins, M. R. S. (2000). The PSC z catalogue. *Monthly Notices of the Royal Astronomical Society*, 317(1), 55–63.
- Shin, J., Mollah, M. A., & Choi, J. (2023). Sustainability and organizational performance in South Korea: The effect of digital leadership on digital culture and employees' digital capabilities. *Sustainability*, 15(3), 2027. <https://doi.org/10.3390/su15032027>
- Silva, C. A. D., & Rosa, F. S. D. (2023). Control and motivation in task performance of public servants at home office in the face of the COVID-19 pandemic. *Revista de Gestão*, 30(3), 267–281. <https://doi.org/10.1108/REGE-06-2021-0093>
- Smith, R. A. (1969). State and Local Advisory Reports on Public Employment Labor Legislation: A comparative analysis. *Michigan Law Review*, 67(5), 891–918.
- Su, J., Hodges, N., Wu, H. J., & Iqbal, M. A. (2022, September). Rethinking Global textile and apparel supply chain Management: Considering the impact of the COVID-19 pandemic. *International Textile and Apparel Association Annual Conference Proceedings*, Itaa (Vol. 78, No. 1). Iowa State University Digital Press. <https://doi.org/10.31274/itaa.13577>
- Swanson, R. A., & Torraco, R. J. (1994). Technical training's challenges and goals. *Technical & Skills Training*, 5(7), 18–22.
- Tafesse, M. (2021). Organizational learning practices in public higher education institutions of Ethiopia. *Technium Education and Humanities*, 1(1), 55–78.
- Taherdoost, H. (2022). Different types of data analysis; data analysis methods and techniques in research projects. *International Journal of Academic Research in Management*, 9(1), 1–9.
- Taylor, W. J. (1909). *A syllabus of the history of education*. DC Heath.
- Teame, K., Debie, A., & Tullu, M. (2022). Healthcare leadership effectiveness among managers in public Health institutions of Addis Ababa, Central Ethiopia: A mixed methods study. *BMC Health Services Research*, 22(1), 1–11. <https://doi.org/10.1186/s12913-022-07879-6>
- Wójcik, P. (2015). Exploring links between dynamic capabilities perspective and resource-based view: A literature overview. *International Journal of Management and Economics*, 45(1), 83–107.
- Wong, D. T., & Ngai, E. W. (2023). The impact of advanced manufacturing technology, sensing and analytics capabilities, and planning comprehensiveness on sustained competitive advantage: The moderating role of environmental uncertainty. *International Journal of Production Economics*, 265, 109007. <https://doi.org/10.1016/j.ijpe.2023.109007>
- Zakiy, M. Kinasih, P. & As'ad, S.(2023). Organizational changes and the impact on the performance of sharia bank employees through affective commitment. *Jurnal Ekonomi & Bisnis Islam*, 9(1).
- Zelalem, A., Abegaz, K., Kebede, A., Terefe, Y., & Vipham, J. L. (2023). Targeted training-based interventions to improve food safety practices in municipal abattoirs of Ethiopia. *Journal of Consumer Protection and Food Safety*, 18(3), 281–290. <https://doi.org/10.1007/s00003-023-01434-z>
- Zhao, F., Hu, W., Ahmed, F., & Huang, H. (2023). Impact of ambidextrous human resource practices on employee innovation performance: The roles of inclusive leadership and psychological safety. *European Journal of Innovation Management*, 26(5), 1444–1470.
- Zhou, A. J., Fey, C., & Yildiz, H. E. (2020). Fostering integration through HRM practices: An empirical examination of absorptive capacity and knowledge transfer in cross-border M&As. *Journal of World Business*, 55(2), 100947. <https://doi.org/10.1016/j.jwb.2018.05.005>