

The influence of organizational identity on employees' work competence: Mediating role of improvisational behavior

Qinxi Zhang

Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, Pathum Thani Province

Krisada Chienwattanasook

Faculty of Business Administration, Rajamangala University of Technology Thanyaburi.
Pathum Thani Province.

Correspondence concerning this article should be addressed to **Krisada Chienwattanasook**, Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, Pathum Thani Province.
Email: krisada_c@rmutt.ac.th

Received date: November 27, 2023 Revised date: December 15, 2023 Accepted date: December 16, 2023

ABSTRACT

PURPOSES: To explore the direct influence of organizational identity on employees' work competence and the mediating role of improvisational behavior among employees in the Chinese art education industry. **METHODS:** This study used qualitative research methods to interview eight leaders in the Chinese art education industry. **RESULTS:** Organizational identity had a positive influence on employees' work competence, and it had an indirect influence on it through improvisational behavior. **THEORY/POLICY IMPLICATIONS:** The leaders in the art education industry should provide training and development opportunities for employees, create a positive cultural climate to strengthen employees' organizational identity, and improve work competence.

Keywords: Organizational identity, improvisational behavior, employees' work competence

Introduction

In recent years, with the intensification of competition in the industry, the influence of organizational identity on employees' work competence has received increased attention. Organizational identity can increase employees' work enthusiasm significantly, and this enthusiasm can be transformed into actual work engagement. As an emotional bond between employees and the organization, the stronger the employee's identity with the organization, the more likely they are to be motivated by their connection to the organization's destiny and be motivated to actively improve their work, come up with novel ideas, and generate innovative behavior.

The significance of this study is to reveal the mechanisms by which organizational identity influences employees' work competence in the Chinese art education industry and fills a gap in previous research. First, it contributes to a deeper understanding of the relationship between organizational identity and employees, and it provides a theoretical basis for human resource

management. Second, by examining the mediating role of improvisational behavior between organizational identity and employees' work competence, it enriches the depth and breadth of theoretical research and provides insights for practice. Finally, it is of practical significance to improve employees' work competence and enhance organizational performance.

Based on the above statements, this study analyzed the relationship between organizational identity, improvisational behavior, and employees' work competence through qualitative research methods, summarized the main findings of this study, and offered suggestions on how managers could improve employees' work competence.

Relevant literature and conceptual model

Figure 1 illustrates the conceptual framework of this study. The independent variable is organizational identity, the dependent variable is employees' work competence, and the mediating variable is improvisational behavior.

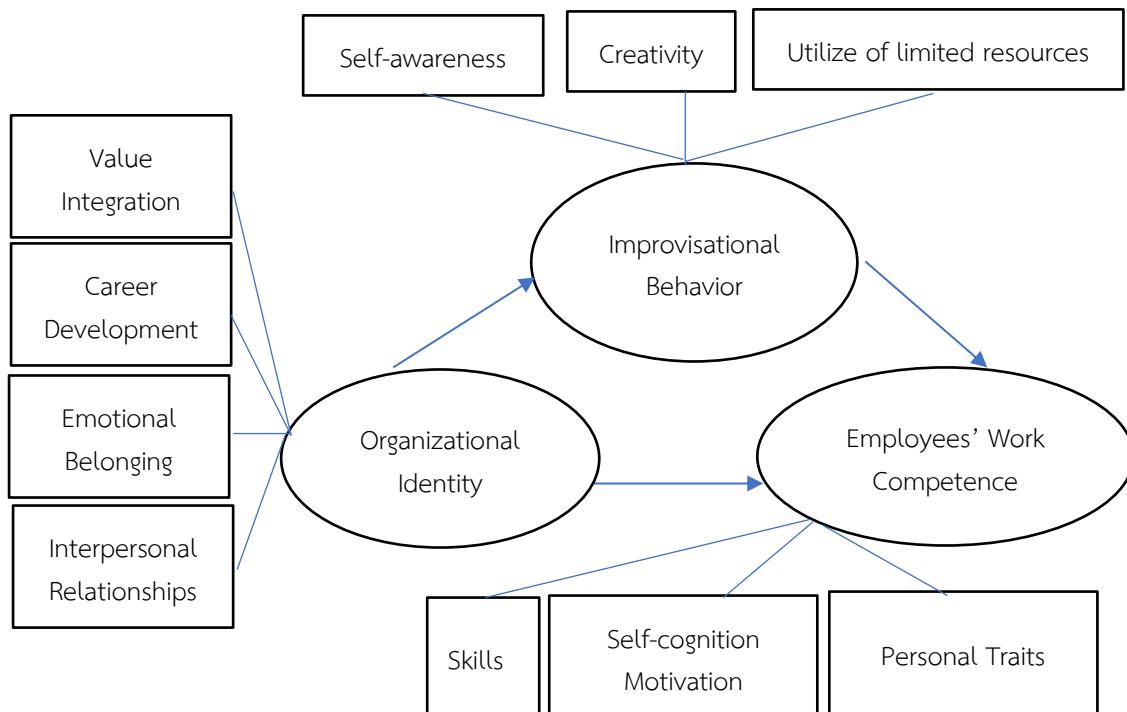


Figure 1 Conceptual Framework

The four factors of organizational identity: Value integration emphasizes the importance of work, dedication, shared goals with the organization, and a positive attitude toward work. Career development refers to employees' desire for career development and advancement within the organization. Emotional belonging refers to employees' sense of solidarity with the organization, identification with the organization's mission, and pride in the organization. Interpersonal relationships refers to collaborative relationships and good team communication within the organization. All four factors are important in influencing employees' work competence.

At the same time, the four factors of organizational identity also have a positive influence on improvisational behavior. Value integration refers to the fact that individuals are more likely to exhibit positive improvisational behavior when their values match those of the organization because they identify with and support the organization's goals and mission. Career development is an individual's expectation and pursuit of his/her career development and personal growth within the organization. If the organization can provide good career development opportunities and development paths, employees may be more motivated to display improvisational behavior to show their

abilities and potential. Emotional belonging refers to employees' emotional attachment and identity. When employees feel they are part of the organization and feel respected and valued, they are more likely to exhibit positive improvisational behavior because they want to contribute to the organization. Interpersonal relationships are the relationships between employees and their coworkers and leaders. Good interpersonal relationships foster cooperation and teamwork, which are essential to promoting improvisational behavior.

The three factors of improvisational behavior: Self-awareness is considered to be an important aspect for employees to cope with emergencies and maintain awareness and positive thinking. Creativity is the ability of employees to be able to use immediate creativity to solve urgent problems as well as create new processes and management methods. Utilization of limited resources emphasizes the challenges of employees in allocating limited resources and increasing efficiency, which is conducive to flexibility. All three factors are critical in improving employees' work competence:

Based on the literature review, there are four research questions

1. Whether organizational identity has a positive influence on employees' work competence?

2. Whether improvisational behavior has a positive influence on employees' work competence?

3. Whether organizational identity has a positive influence on improvisational behavior?

4. Whether improvisational behavior plays a mediating role between organizational identity and employees' work competence?

Organizational Identity

Organizational identity is a psychological perception and state of mind, which is an individual's sense of belonging to an organization and a state of self-definition in which an individual classifies himself/herself as a member of an organization. Organizational identity refers to members maintaining congruence with their own organization in order to achieve organizational goals. Employees' organizational identity will affect their attitude and behavior toward their work. The higher degree of organizational identity of an individual, the more he/she will be concerned about the realization of the organization's goals and will link his/her own small goals with the organization's goals in the course of work (Albert & Dutton, 2000).

In this study, organizational identity is defined as employees' sense of belonging to and identity with the organization, i.e. the positive identification and recognition of the organization's value, goals, and culture as well as the emotional connection between

employees and the organization and reflecting employees' loyalty and sense of belonging to the organization. Organizational identity can increase employees' loyalty and sense of responsibility towards the organization, encouraging them to be more committed to their work and improve their own work competence. Companies mobilize employees' motivation by exploring appropriate management methods: firmly involving employees in the company, increasing their loyalty as well as attracting and retaining them by maximizing benefits.

Improvisational behavior

Improvisational behavior mainly refers to real-time creative activities generated by employees, that include both impromptu conceptualization and execution (Kyriakopoulos, 2011). Improvisational techniques have the potential to enhance teaching skills. Improvisational teaching is a teaching process in the classroom, used when facing unexpected teaching situations. The teachers instantly conceived and implemented this with a certain degree of creativity in the teaching behavior in order to expand and realize the potential of students' lives. Issa (2020) found that Improvisational behavior promotes the development of creativity within an organization. This "creativity or inventiveness" is even more important for teaching art, which not only concerns teaching techniques and skills, but

also concerns developing students' creative thinking, imagination, and expression. As Jeffrey (2004) stated, teaching creativity could involve developing an engaging pedagogy, where the learner is encouraged to participate in the identification and exploration of knowledge. Therefore, improvisational behavior is defined as an interactive classroom situation in which teaching actors respond instantly and spontaneously to situations that promote their "survival and growth," forming a "teaching and growth" situation, resulting in a teaching activity that plans and realizes the possibilities of the actor's life. In addition, Hu (2014) found that improvisation is a behavior that emphasizes initiative and real-time use, integrating resources to creatively solve problems. Teaching through improvisation emphasizes teachers' immediate and creative responses to unexpected and generative resources. It is a way of shaping the meaning of an unanticipated situation to suit the learning situation, bringing out the educational significance and giving full play to its educational value (Jiankun, 2023).

Employees' work competence

The term "work competence" in this study refers to teachers' work competence. The core literacy involved in work competence as a teacher is educational competence, which includes professional competence, specialized knowledge, basic

philosophy, and professional ethics (Haixia, 2020). Improvisational behavior is an indispensable competence in arts education. Personal improvisational competence has a significant influence on the performance of teachers (Angmalisang, 2011). Improvisational teaching is a kind of spontaneous behavior that requires teachers to have a spirit of adventure and creativity in the teaching process, to be sensitive to grasp fleeting teaching situations and opportunities, to flexibly control the various elements of the situation and their relationship with the teaching method, and to have a spontaneous response. Hakim (2015) said the quality of teaching competence plays an important role in creating and establishing the quality of the learning process of students and shows the teacher's ability to teach, according to the level of specialization in their field.

Research design and methodology

1. Selection of the research scope and population

The aim of this study was to investigate the influence of organizational identity on employees' work competence and the mediating role of improvisational behavior. It applied qualitative research methods to uncover the mechanism of influence between organizational identity, improvisational behavior, and employees' work competence by analyzing the relationship between them.

On the one hand, the researchers selected eight school leaders belonging to the Chinese art education industry, those who have a good social reputation and influence as interviewees, to ensure the representativeness and reliability of the sample.

On the other hand, during the study, the researchers conducted structured interviews with selected respondents to understand their feelings and perceptions regarding organizational identity, improvisational behavior, and employees' work competence. The interview included the following seven questions:

Q1 . Please tell us about your understanding of organizational identity and its role in employees' work.

Q2. To the best of your knowledge, how does employees' identity with the organization influence their performance and competence in their position?

Q3. Has it been found that identity makes employees more inclined to display positive work attitudes and positive emotions? Does this influence their improvisational behavior?

Q4. In your opinion, how does identity with the organization motivate employees to work and take pride in their work, which in turn influences their improvisational behavior?

Q5 . In your opinion, what is improvisational behavior? How has it manifested itself in your work experience?

Q6 . Have you found that improvisational behavior improves employees' problem-solving skills? How has improvisational behavior helped you overcome challenges in your experience?

Q7. Why do you think improvisation plays a mediating role between organizational identity and work competence? What mechanisms might explain this relationship?

2 Research Methodology

In this study, qualitative research methodology is used to explore in depth the influence of organizational identity on employees' work competence and the mediating role of improvisational behavior in this context.

Results

These interviews, which lasted approximately 40 to 45 minutes each, were recorded in audio format. The audio tapes were then transcribed and converted into text files, formatted as Word documents, and then analyzed by the Atlas-ti program, according to the principles of Grounded Theory. The analysis results can be categorized into three sections: Organizational identity, Improvisational behavior, and Employee work competence, all of which are linked to the conceptual framework.

The overall perspective was analyzed, and it was found that all interviewees confirmed the consistency of the relationships between the conceptual framework employed in the study with the actual working conditions in the education business. Furthermore, additional elements of the variables within the conceptual framework were identified through the interviews. This discovery sets this research on the Art education industry apart from previous studies.

Organizational identity

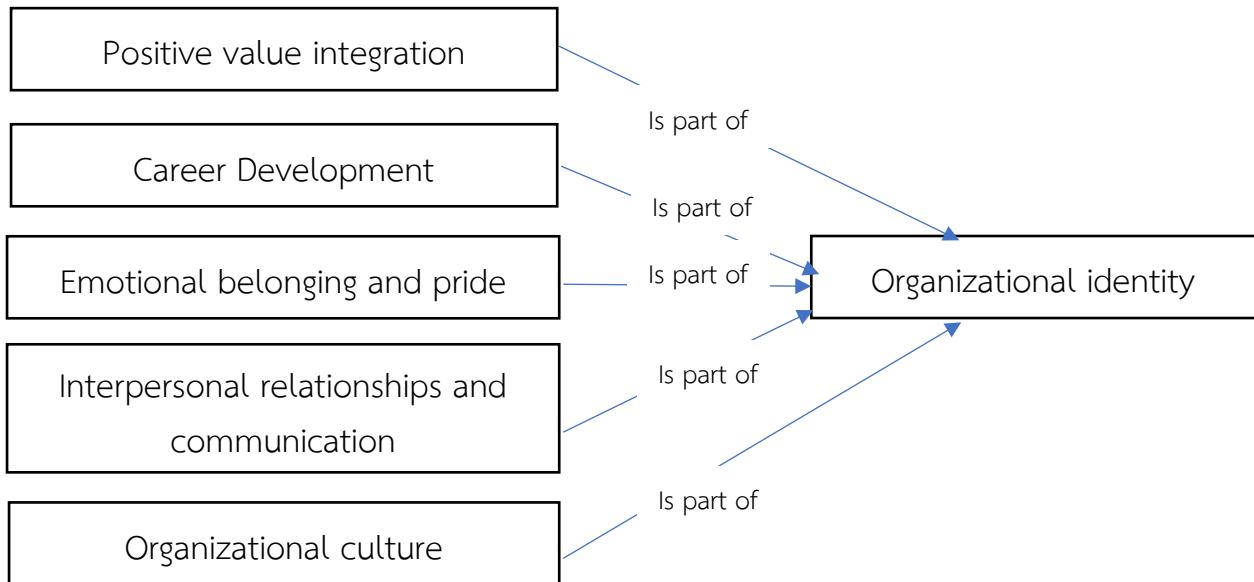


Figure 2 Organizational identity

Figure 2 illustrates organizational identity.

Component 1 : Positive value integration: Positive value integration in the work environment includes an emphasis on the importance of work, dedication, shared goals with the organization, and positive attitudes toward work. These factors are critical to organizational growth and employees' performance.

Component 2: Career development: It represents the desire to advance within the organization, including the need to align personal development with job responsibilities. This finding confirms

existing concepts and theories in the literature.

Component 3: Emotional belonging and Pride: Emotional belonging and pride built between employees and the organization are important sources of employee loyalty and job satisfaction, including a sense of solidarity and feeling of indispensability to the organization's mission, which leads to a sense of pride in the employee.

Component 4 : Good interpersonal relationships and communication skills have a significant influence on the overall effectiveness of an organization.

Component 5: Organizational culture
: In order to make employees identify with it, organization must maintain a unique

culture or strengths to gain competitive advantage.

Improvisational behavior

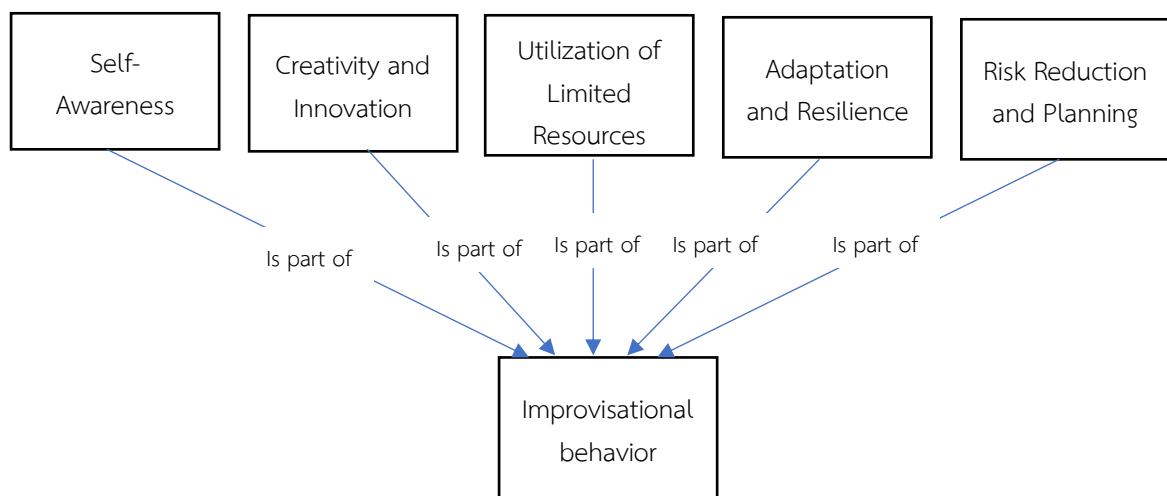


Figure 3 Improvisational behavior

For the "improvisational behavior," (Figure 3) the data analysis shows:

Component 1: Self-awareness: This emphasizes the importance of awareness, positive thinking, and reacting to unexpected events without undue shock. Self-awareness can help employees cope with challenges, problems, and stress while staying calm.

Component 2 : Creativity and innovation: This was the second-most frequently mentioned element. Creativity and innovation involve the use of immediate creativity to solve urgent problems. This includes the creation of

new processes, novel management approaches, and innovation. In addition, creativity and innovation are important tools for meeting challenges and moving organizations forward.

Component 3: Utilization of limited resources and challenges: This means that employees are tasked with finding ways to maximize efficiency while minimizing the use of resources, which is a challenge for management.

Component 4 : Adaptation and resilience: This is the most important aspect, which emphasizes the staff's ability to adapt in situations of crisis or tension. In

such situations, immediate solutions are needed, which require flexibility and adaptability, rather than rigid adherence to rules and regulations.

Component 5 : Risk reduction and planning: This is a factor that was not

addressed in the literature review. This refers to reducing current or potential risks and minimizing their impact on the organization. A robust, adaptable plan that adapts to the changing external environment is critical.

Work competence

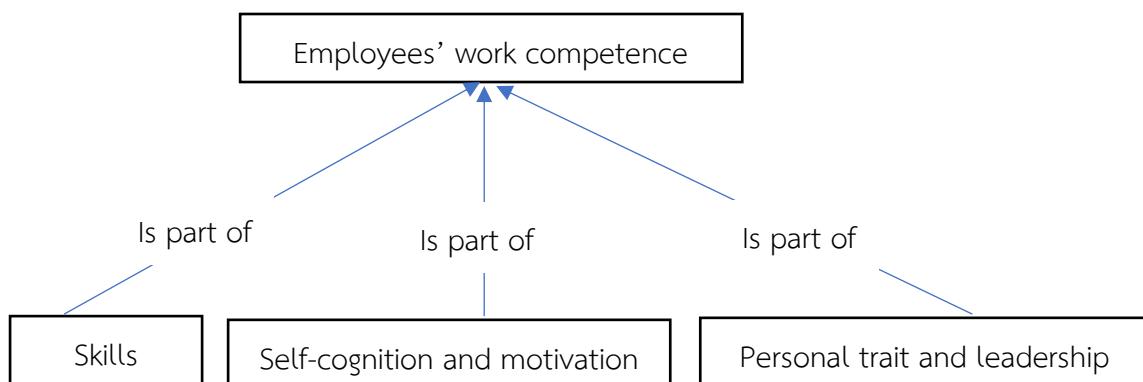


Figure 4 Employees' work competence

For employees' work competence, (Figure 4) the data analysis shows:

Component 1: Skill: This involves the skills required for their respective positions, demonstrating professionalism and problem-solving skills consistent with improvisational behavior. However, employees are encouraged to develop new skills, especially in adapting to new technologies.

Component 2 : Self-cognition and motivation: This involves an understanding

of one's own position and capabilities as well as an awareness of intrinsic motivation that drives individuals to work for the organization. Therefore, employees should be motivated to perform their tasks effectively.

Component 3 : Personal traits and leadership : These emphasize a positive personality, a strong work ethic, and a sense of responsibility. Respondents emphasized the importance of leadership skills, noting that both employees and

managers should be able to lead teams to overcome challenges faced by the organization or their particular department.

Structured plans for problem-solving were emphasized

The influence of organizational identification and improvisational behavior on work competence

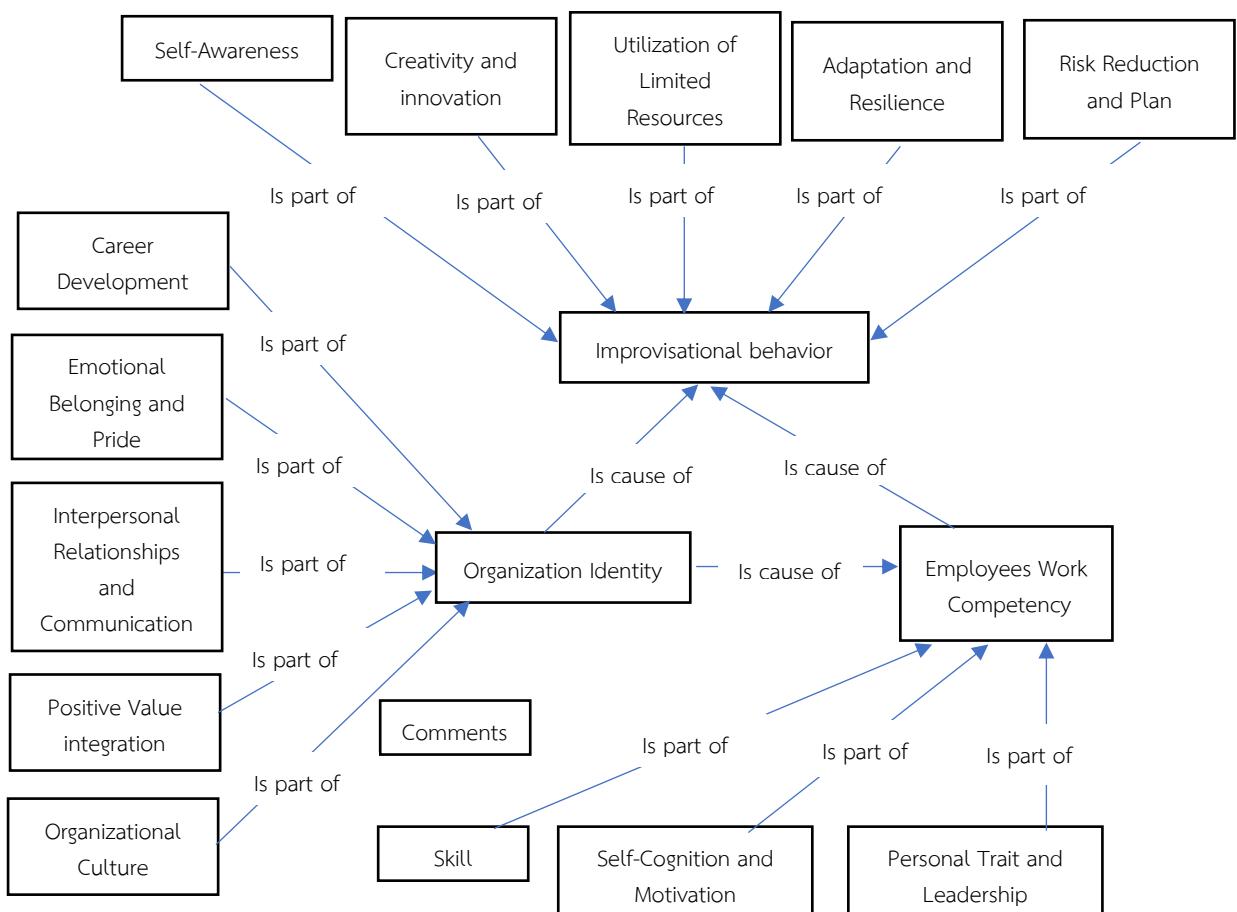


Figure 5 Full model

Combining the results of the three main variables under investigation yields the results shown in Figure 5, which are based on the analysis of the data obtained from the interviews. An interesting

observation emerges regarding the relationship between the three variables, particularly regarding organizational identity, which is considered a crucial element for educational institutions. This

includes a distinct identity that sets them apart from other institutions in the same industry. Organizational identity is an important driving force that contributes to employees' work competence and their desirability in their respective roles, especially under normal circumstances. However, in extraordinary situations, improvisational behavior takes on a pivotal role in mitigating potential damage. At best, it facilitates transforming a crisis into an opportunity that enables the organization to realign itself.

An additional insight gleaned from interviewees is that organizational identity enhances efficiency through management development. Consequently, organizations are encouraged to establish an evaluation system and compensation mechanisms that are aligned with the elements of organizational identity encompassing all five elements. Furthermore, interviewees underscored that organizational identity contributes to employees' higher work satisfaction.

Discussion and conclusion

Discussion

1 . Organizational identity has a positive influence on employees' work competence.

When employees identify with the organization to a high degree, they are

more likely to perform well at work. This organizational identity can strengthen employees' commitment and sense of responsibility and make them pay more attention and dedication to their work to improve their work competence. The research of organizational identity showed that the higher identity with the organization, the more employees internalize the values, norms, and interests of the organization in their self-concept. In addition, the interests of the collective are seen as the interests of the individual, which increases the individual's intrinsic motivation to contribute to the collective (Haslam, 2001). The study by Huang (2019) found that organizational identity increases employees' work satisfaction and, thus, increases their emotional and cognitive commitment to work. A high level of organizational identity promotes employees' trust, emotional maintenance, loyalty, and other aspects relating to the organization, and it behaviorally enhances their own work commitment to promote the development of the organization. The research findings of Karanika et al. (2015) support this view. In addition, Pratt and Kaufman (2006) argued that organizational identity can promote employees' emotional commitment, which in turn stimulates the employee's initiative to

work and increases the employee's work commitment.

2 . Organizational identity has a positive influence on employees' improvisational behavior.

Organizational identity promotes a positive working climate in teams and encourages employees to be creative and improvisational. In the context of innovation, "improvisation" is the spontaneous and creative use of new methods to solve objective problems, and it reflects the organization's ability to continuously adapt to a volatile market and technological environment as well as respond quickly to create new products or services. Baer (2012) also confirmed that employees are more willing to put their new ideas into practice when they believe that their innovative efforts will bring them positive results. Improvisational behavior is related to creativity and innovativeness, both of which involve developing new ideas, solutions, or behavior in unexpected situations (Ma, 2018). When employees experience trust and support from the organization, they are more willing to try new and improvised ideas and are able to develop new ideas and solutions more freely, which leads to improvisation.

3 . Improvisational behavior has a positive influence on employees' work competence.

Seham (2001) argued that improvisation is a mixture of "doing" and "letting go." This requires employees to be able to react quickly and deal with unforeseen situations, which promotes problem-solving skills and better coping with emergencies and challenges. Improvisational behavior is a type of behavior that is mainly characterized by "unplannedness," "creativity," and "spontaneity" and manifests itself in the form of immediate responses to unexpected situations, using the available resources to improve the efficiency of the organization and solve the dilemmas it faces in a completely different way than before. Improvisational behavior has been positively correlated with employees' work competence. As confirmed by the study of Ribeiro and Gomes (2011), improvisation is a common way of coping when individuals and groups find themselves in situations where they need to take action but do not have the time to plan and understand the environment. In this way, existing resources, skills, and knowledge are optimally utilized to solve real problems successfully. In situations where employees need to be able to perform tasks in uncertain, dynamic, or fast-paced work environments successfully, the combination of improvisational behavior and work competence can have a positive

impact on both the individual and the organization as well as help employees to adapt better to complex work requirements.

4. Improvisational behavior plays a mediating role in the influence of organizational identity on employees' work competence.

Our findings showed that organizational identity could improve employees' work competence indirectly by stimulating their improvisational behavior. This is because organizational identification increases employees' self-efficacy and autonomy, giving them more confidence and flexibility to cope with various challenges and changes in the workplace. Meanwhile, encouraging employees' improvisational behavior can increase their creativity and flexibility, which can improve their work competence and contribute to the overall performance of the organization. Individual improvisation benefits the team's innovation performance. This confirms the conclusion of this study (Haidong, 2011). In addition, work satisfaction is another important outcome of improvisational behavior (Hmielecki, 2008) because employees' improvisational behavior is related to immediate response, coping ability, and attitude to deal with unexpected events in the workplace as well as employees'

positive attitude and ability to improvise to influence their work satisfaction. This positive emotional climate can trigger individual's positive emotions and help to increase their psychological resilience so that they can quickly and effectively regain their former vitality in times of stress. Individuals who have a positive, enthusiastic, and energized attitude towards life and work, and are curious about new experiences they have, are more open and creative (Fredrickson, 2001).

Interpreting events from a positive perspective can infect team members with the ability to tackle difficulties head on and push their boundaries (Gamache, 1998). To achieve exceptional performance, individuals must have sound professional knowledge, skills, and behaviors in their field or position. Improvisational behavior affects employees' work competency and self-assessment by regulating their emotional and behavioral performance, which in turn affects their work competence.

Conclusion

From the results of the interviews, interviewees described that a high level of organizational identity helps to motivate employees to engage in improvisational behavior. When employees identify with

the organization, they are more likely to show initiative, creativity, and adaptability in their work to meet organizational needs better. Improvisational behavior usually requires flexibility, creativity, and problem-solving skills. The skills and talents that employees demonstrate through improvisational behavior can reflect their work competence. At the same time, respondents believed that identification with the organization increases employees' work competence by encouraging improvisational behavior. In other words, the stronger that employees identify with the organization, the more they encourage improvisational behavior, and this behavior further enhances employee work competence.

Another finding was that employees are more likely to participate in the positive values of improvising behavior and feel that they are aligned with the company's goals, values, and culture. Respondents believed that organizational identity can inspire employees' spontaneity to make them go beyond the formal requirements of work and make additional contributions to the organization. This is in line with previous research findings that the more an employee identifies with an organization, the more the organization's values, norms, and interests are incorporated into their self-concept (Zhang, 2020). Cable and

DeRue (2002) argued that a person identifies with a group when they feel they belong to that group. At the same time, employees' behavior, emotion, and attitude are positively influenced when their identification increases.

This study also examined the extent that employee's identification with the organization leads to higher commitment and work engagement. When employees feel connected to the organization, they are more willing to invest time and effort in improving their work skills, and identification with the organization influences their work attitude and behavior. The higher the level of identity with the organization, the more he/she will care about achieving the organization's goals and link his/her own small goals to the larger goals of the organization in the workplace (Albert & Dutton, 2000). Improving employees' work competence can strengthen employees' identity with the organization, and successful work experiences and feelings of accomplishment can motivate employees to connect more closely with the organization. The findings also showed that employees' improvisational behaviors can have a positive influence on work competence and that improvisational behavior allow employees to deepen their commitment to the organization by

demonstrating their commitment to the organization and their support for the organization's values. The research by Tammy (2015) confirmed that organizational support contributes positively to employee learning behavior and organizational member behavior. This strengthens employees' work motivation, i.e., the stronger an employee's intrinsic work motivation is, the more likely he/she is motivated to perform a certain behavior, which is likely to stimulate employees' innovativeness to perform improvised behavior since the behavior is completely spontaneous (Zheng, 2019). Studies have found that improvisational behaviors are immediate responses to new problems or challenges that require employees to be flexible and creative. The successful execution of these improvisational behaviors can show employees' work competence.

Finally, the interviewees named organizational identification as an important factor that helps to promote improvisational behavior and work competency. Employees who have adequate work competence are more likely to exhibit improvisational behavior at work and are more confident in tackling unfamiliar situations because they have the necessary skills and knowledge to deal with challenges. These results are in line

with research findings related to Hmielecki et al. (2013), in which employees with high levels of improvisational behavior often have a strong ability to effectively complete tasks and are more creative, innovative, and persistent than others, thus, promoting employee development. This helps organizations to remain competitive while promoting employees' professional development. Establishing a positive relationship between organizational identity, improvisational behavior, and work competence can help create a dynamic and productive work climate that fosters employee potential while improving organizational stability and innovation.

Recommendations

First, on an industry-wide level, the arts education sector should be aware that organizational identity and improvisational behavior can help stimulate employees' desire to improve their professional skills and work competence, promote professional development, help provide training and development opportunities for employees to reduce turnover, and lower the cost of hiring and training employees as well as help promote employees' competence by creating a positive organizational culture. Wiesenfeld and Garud (2001) showed that when

employees have a strong sense of organizational identity, their individual sense of teamwork increases and collaboration among employees improves performance while reducing turnover. This helps to create a positive, stable, and dynamic work environment that strengthens the industry's competitiveness.

Second, on management level, the manager should actively create opportunities for employees to participate in professional development. Zingheim (2009) illustrated that training and development have a significant influence on employees' competence. Zingheim (2009) also pointed out that the most common way to acquire employees' competence is through training and development. At the same time, employees' contributions are recognized and rewarded through the establishment of effective communication mechanisms and information sharing between all levels. Additionally, online platforms or social media can be used to share employees' achievements and strengthen their sense of identity with the company.

Finally, as individual employees, they should actively integrate themselves into the cultural climate of the industry, strengthen their sense of organizational identity, establish good interpersonal

relationships, actively participate in the work of the organization, and make constructive comments and suggestions for organizational development and teaching improvement. In the field of teaching, one should maintain innovation and flexibility in teaching, timely adjust teaching methods, and actively utilize new discoveries and ideas in the teaching process to adapt to the needs of students and the environment. In the face of teaching uncertainties and challenges, one should maintain a positive attitude and flexibility, adjust teaching strategies and methods, make adjustments in response to student feedback and performance, and convey positive emotions to students to encourage them to face challenges.

Limitations

Although the results of this study answer the research questions, there is some limitation regarding the sample. Future research may consider combining quantitative with qualitative research methods to expand the research sample and scope so that the influence of organizational identity on employees' work competence and the mediating influence of improvisational behavior can be evaluated more comprehensively and objectively.

References

Albert, A., & Dutton, J. E. (2000). Organizational identity and identification: Charting new waters and building new bridges. *The Academy of Management Review*, 25(1), 13-17.

Angmalisang, P. A. (2011). The effect of teacher personality on teaching performance. *Elektomatika* 11(1), 28-32.

Baer, M. (2012). Putting creativity to work: The implementation of creative ideas in organizations. *Academy of Management Journal*, 55(5), 1102-1119.

Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87(5), 875.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218.

Gamache, S. (1998). The process of improvisation. *Organization Science*. 9(5), 560-561.

Haidong, Z. L. (2011). Organizational improvisation: A field that needs further research. *The Management Journal (Academic Edition)*, 3(12), 45-58.

Haixia, W. (2020). Research on teachers' core literacy educational competency curriculum. *Teaching Methods*, 40(2), 132-138.

Hakim, A. (2015). Contribution of competence, teacher pedagogical, personality, and professional competence on the performance of learning. *The International Journal of Engineering and Science*, 4(2), 1-12.

Haslam, S. (2001). *Psychology in organizations: The social identity approach*. Sage.

Hmielecki, C. (2008). The contrasting interaction effects of improvisational behavior with entrepreneurial self-efficacy on new venture performance and entrepreneur work satisfaction. *Journal of Business Venturing*, 23(4), 482-496.

Hmielecki, K. M., Corbett, A. C. & Baron, R. A. (2013). Entrepreneurs improvisational behavior and firm performance: A study of dispositional and environmental moderators. *Strategic Entrepreneurship Journal*, 7(2), 138-150.

Hu, B. (2014). Linking business models with technological innovation performance through organizational learning. *European Management Journal*, 32(4), 587-595.

Huang, L. (2019). A study on the mechanism of work security's influence on employees' work engagement - The mediating role of organizational identity and the moderating role of work complexity. *Knowledge Economy*, (28), 111-115.

Issa, H. E. (2020). The impact of improvisation and financial bootstrapping strategies on business performance. *EuroMed Journal of Business*, 16(2), 171-194.

Jeffrey, C. (2004). Teaching creatively and teaching for creativity: Distinctions and relationships. *Educational Studies*, 30(1), 77-87.

Jiankun, C. (2023). Connotation interpretation, value clarification and practice suggestions of improvisation teaching curriculum. *Teaching Methods*, 43(6), 62-68.

Karanika, M., Pontes, D., & Griffiths, M.D. (2015). Organizational identification, work engagement, and work satisfaction. *Journal of Managerial Psychology*, 30(8), 1019-1033.

Kyriakopoulos, K. (2011). Improvisation in product innovation: The contingent role of market information sources and memory types. *Organization Studies*, 32(8), 1051-1078.

Ma, H. (2018). The formation mechanism of improvisational behaviors to practices in start-ups: Based on entrepreneurial learning perspective. *Foreign Economy and Management*, 40(11), 116-128.

Pratt, R., & Kaufman, B. (2006). Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal*, 49(2), 235-262.

Ribeiro, C., & Gomes, J. F. S. (2011). HRM strength, situation strength and improvisation behavior. *Management Research : The Journal of the Euromerican Academy of Management*, 9(2), 118-136.

Seham, A. E. (2001). *Whose improv is it anyway? Beyond second city*. Press of Mississippi.

Tammy, T. (2015). Developing the theater of leadership. *Human Resources*, 17(3), 337 -347

Wiesenfeld, B., & Garud, R. (2001). Organizational identification among virtual workers: The role of need for affiliation and perceived work-based social support. *Journal of Management*, 27(2), 213-229.

Zhang, Q. (2020). The effect of values matching on work engagement: A double mediating effect based on organizational identity and job satisfaction. *Journal of Liaoning University*, 48(2), 59-68.

Zheng, Q. (2019). The relationship between improvisation behavior and innovation performance based on AMO theory. *Modern Enterprise*, 8, 77-78.

Zingheim, S. (2009). Competencies replacing jobs as the compensation-HR foundation. *World Work* 18(6), 20.