

# TEACHING AND STUDYING BY ONLINE LESSON WITH A CASE STUDY APPROACH FOR ENHANCE PROBLEM SOLVING SKILLS OF STUDENTS AT CHONGQING COLLEGE OF INTERNATIONAL BUSINESS AND ECONOMIC, CHINA

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## ARTICLE HISTORY

**Received:** 19 September 2024    **Revised:** 3 October 2024    **Published:** 17 October 2024

## ABSTRACT

The objectives of this study were 1) to compare problem solving skill score before and after studying on online lesson of case study approach for students at Chongqing College of International Business and Economic, China. 2) To study the satisfaction of students at Chongqing College of International Business and Economic, China who study online lesson of case study approach to enhance solving-problem skills. The population were 80 of the first-year students at Chongqing College of International Business and Economic, China. The samples were 66 students selected by sample random sampling. The instruments used in the study were 1) online learning plan, 2) online lesson, 3) problem solving skill online test, and 4) a satisfaction questionnaire. The statistics used for data analysis were percentage, mean, and standard deviation. The research results revealed that 1) score of problem solving skill of the sample after online lesson was higher than before the online lesson. 2) The satisfaction of students for online lesson was at  $X = 4.42$ ,  $S.D. = 0.67$ . For the issues which were sorted from ascending order are learning activity  $X = 4.54$ ,  $S.D. = 0.40$ , instructor  $X = 4.38$ ,  $S.D. = 0.72$ , and letter, color and picture  $X = 4.33$ ,  $S.D. = 0.65$

**Keywords:** Online Lesson, Approach for Enhance, Problem Solving Skills

**CITATION INFORMATION:** He, Y., & Bhotisarn, P. (2024). Teaching and Studying by Online Lesson with a Case Study Approach for Enhance Problem Solving Skills of Students at Chongqing College of International Business and Economic, China. *Procedia of Multidisciplinary Research*, 2(10), 76.

## INTRODUCTION

COVID-19, a major global public health and safety event, not only posed a serious threat to human health and safety, but also caused a huge shock to the economic sector worldwide. Scholars from various international parties have further confirmed through empirical analyses that the impact of COVID-19 on the market economy is enormous in the short term (Harjoto, Rossi, & Paglia, 2021). With the fading of COVID-19, the national economy has been severely impacted and the world economy has become more competitive, entrepreneurs have realized that employees are the source of organizational wealth. However, according to Lian (2022) and other scholars, it was found that enterprises responded to the risk and uncertainty of the external environment during the new COVID-19 period through measures such as layoffs or salary reductions, and that this measure created a sense of insecurity about the employees' organizational identities, which led to a decline in the employees' sense of organizational identity, which in turn affected the attitudes and behaviors of the employees in the workplace (Harjoto, Rossi, & Paglia, 2021). Empirical analysis by a large number of scholars has found that the human factor is one of the key factors affecting the core competitiveness of enterprises, as well as the key to promoting the production, operation and economic efficiency of enterprises. The human factors of an enterprise run through all levels of enterprise development, in which the employees as the main participants and practitioners in the process of production and operation of the enterprise, so it is necessary to find out the factors affecting the job performance of employees (Chen, 2022). In order to further improve the performance of the enterprise and to maintain the lasting and stable development of the enterprise, the human factor of the enterprise will be one of the first issues that managers as well as the whole management should consider when improving the performance of the enterprise. According to social identity theory, it is known that organizational identity is a special form of social identity. Tüzün and Çağlar (2008) found that organizational identity plays a very important role in measuring attitudes and behaviors in the work performed by employees. Secondly, international scholars have found through a large number of empirical studies that organizational identity is not only a link to explore the relationship between individuals and organizations, but also a key factor in effectively motivating and disciplining employees' behavior, enhancing the core competitiveness of enterprises, and improving employees' job performance (Jürgen Wegge, 2012). Organizational identity can effectively improve employees' dedication, loyalty, sense of belonging and satisfaction, reduce the tendency of corporate employees to leave the company, and improve job performance, etc. (Sluss & Ashforth, 2007). In summary, based on the above research background this research takes organizational identity as the independent variable and job performance as the dependent variable, and selects small and medium-sized investment and construction-oriented enterprises in Sichuan Province, China, as the research object. Although the positive impact of employees' organizational identity on job performance has been confirmed by some scholars, but the impact of employee dedication between the two is rarely proposed by scholars or research and analysis, which can be seen in this research to a certain extent to make up for the shortcomings in the field of research, the study of the three variables between the research is very necessary. Tajfel (1981) divided organizational identity into three aspects: individual understanding of group employee qualifications, emotional significance of group employee qualifications, and value evaluation of group member qualifications. Scholars such as Van Dick (2004) proposed four dimensions of organizational identity based on the theory of social identity and referring to the method of dividing social identity dimensions, namely cognition, emotion, evaluation, and behavior. Cognition refers to the perception of organizational members towards the group, emotion refers to the attachment and belonging of organizational members to the group, evaluation refers to the evaluation of group value from both internal and external perspectives, and the final behavioral dimension refers to how the group behaves. Based on the above

literature review on the definition, influencing factors, and classification of employee organizational identity. It can be understood that although there is no clear division of the relevant concepts and dimensions of organizational identity in the academic community, many mathematicians tend to believe that organizational identity is a multidimensional concept that includes cognition, emotion, and evaluation. Therefore, choosing Van Dick's (2004) definition of organizational identity is more in line with the research requirements of this article.

Job performance is an important goal pursued by us no matter when and where we are. In the initial research, scholars believed that job performance refers to the presentation of results by employees after completing work tasks that is, completing tasks set by the organization within a specified time or the benefits brought by fulfilling work functions. But as international scholars continue to deepen their research, they gradually accept that employees' job performance is not only reflected in result orientation, but also in their behavioral value or other performance aspects during the work process (Gibson & Ivancevich, 2010). Zhang (2010) proposed that employee job performance should be the result of comprehensive consideration of employee behavior, process, and results. Therefore, from a broad and scientific perspective of job performance, this study believes that job performance is the unity of results and behavior. Good job performance not only reflects the results of employees' work, but also reflects the behavioral qualities that employees possess in completing organizational work tasks.

## LITERATURE REVIEWS

Organizational identity can be said to be a form of social identity, and the theory of social identity was proposed by foreign scholar Tajfel. The scholar defines social identity theory as an individual's self-concept of the group they belong to, accompanied by their outstanding values and emotional expressions as members of the group (Tajfel, 1978). In 1992, scholars such as Mael and Ashforth first introduced the concept of social identity into the study of organizational behavior, proposing that individuals in organizations define themselves as groups. With the deepening of the definition of organizational identity and its research, scholars have found that organizational identity can effectively explain and express the subordinate relationship between employees and organizations, and is also an important bridge for the psychological connection between employees and organizations (Alqarni, 2016). Therefore, organizational identity can be understood as employees granting themselves specific membership in a certain organizational environment, resulting in actions that are beneficial to the organization from the perspective of safeguarding organizational interests. However, according to literature review in this field, scholars hold different views on the definition of organizational identity based on research purposes and perspectives. However, most scholars generally believe that social identity theory is the foundation of organizational identity research, and most definitions are proposed based on social identity theory.

In the early stages of research, a large number of scholars used organizational commitment as a strength criterion to measure the relationship between individuals and organizations (Van, 2006). However, inspired by the theory of social identity, the concept of organizational identity proposed from the perspective of social identity has gradually become a new perspective for scholars to study the relationship between individual members and organizations. Based on this, it is proposed that the focus of organizational commitment and organizational identity is different. The focus of organizational commitment is on the contributions made by employees to the organization, which reflects an attitude of employees (Van Knippenberg & Sleebos, 2006). Organizational identity, on the other hand, focuses more on the sense of identification and belonging that employees have towards the organization, and is more derived from employees' self-definition. It is a psychological recognition of the company they work for, emphasizing the relationship between individuals and members (Smidts, Pruyn, & Van Riel, 2001). The influencing factors of employee job performance have always been one of the issues

of high concern for scholars. In the research of scholars from various international fields, most of them regard job performance as a consequence variable and explore the antecedents that affect it. The exploration of antecedents of job performance mainly focuses on the individual level, psychological level, and organizational level (Ghuman, 2016).

#### 1) At the personal level

Hou and Chen (2011) found that there are significant differences in employee personal traits such as gender, age, and education in the study of organizational support and employee job performance, and individual factors have a significant impact on employee job performance. Yuan (2017) found through research that individual factors of employees have a significant impact on their job performance.

#### 2) Psychological level

Cui (2018) found through a survey of the degree of fit between individual and organizational nurses that employees with high organizational commitment can effectively improve job performance. Li (2018) found that employees' organizational commitment has a positive promoting effect on their job performance, and further validated the mediating role of job satisfaction between organizational commitment and job performance. Gu (2011) found through empirical research that employees' perceived support from the organization can effectively improve their job performance and reduce their turnover intention.

#### 3) Organizational level

Putri (2018) conducted a questionnaire survey of 91 employees in PT Malinda Intifada Raya and found that the loyalty and satisfaction of employees within the organization is a core factor that affects the performance of employees at work (firm performance). Scholars such as Prami (2022) concluded from their research through interviews and questionnaires that the employees' perceived lack of attention at work, disrespect, and stress from the work atmosphere when employees will not be able to focus on their work and integrate into that organization, which in turn affects employee performance.

## RESEARCH METHODOLOGY

### Population and sample Group

10000 people from small and medium-sized investment and construction enterprises in Sichuan Province, China were selected. The surveyed enterprises were located in Chengdu, Yibin, Deyang, Meishan, Emeishan, Dazhou, Guanghan, Leshan, Mianyang, and other cities in Sichuan Province, China. Among them, there were 153 A level platform companies with an average number of 126 people, and 147 2A level platform companies with an average number of 54 people. In this research, a designated sample was used and through the sampling method of whole cluster random sampling, the minimum designated sample was calculated to be 385 persons through Yamane's (1973) sample size formula. A total of 385 questionnaires were distributed in this study and 385 valid questionnaires were returned.

### Research Instruments

In order to further explore the impact of organizational identity on employee performance in small and medium-sized enterprises, this research takes 385 employees of small and medium-sized investment and construction enterprises in Chengdu City, Sichuan Province, China, as the object of the study, and selects a scale that is widely used by scholars in the international community and has a high degree of maturity. The questionnaire of this study mainly involves three parts, except for the basic information of the respondents, all the measurement items of the variables are filled in using the Likert scale, and there is no reverse scoring problem. The first part is the basic information of the respondents, which consists of four questions on gender, age, education, and salary. The second part of the independent variable organizational identity scale, due to the scholars for the division of organizational identity dimensions and scale development, but because of the consideration of the questionnaire survey respondents for the

understanding of the question items as well as try to avoid the multi-dimensional scale within the multiple commonality of issues that may arise, so this research will choose Mael and Ashforth (1992) to develop the scale, which is a simple and clear title, It is familiar and easy to understand, and has been widely used by international scholars in measurement studies of organizational identity, and has been empirically proven to have good reliability and validity (Chen, 2022).

### Data Analysis and Statistics

- Percentage
- Frequency
- Mean
- Standard deviation
- Analysis of variance
- Correlation analysis
- Multiple Regression

## RESEARCH RESULTS

**Table 1** Independent samples t-test on gender

	gender	Mean	Std. Deviation	Independent samples t-test	
				t-value	P-value
Organizational identity	Male	19.1443	5.97696	0.558	0.577
	Female	18.7989	6.17219		
job performance	Male	37.7612	9.96909	-1.872	0.062
	Female	39.6848	10.17812		
task performance	Male	18.6816	5.90069	-1.290	0.198
	Female	19.4620	5.96242		
contextual performance	Male	19.0796	6.18657	-1.849	0.065
	Female	20.2228	5.92110		

The primary objective of this study was to investigate the role of organizational identity in influencing job performance among employees in small and medium-sized investment and construction enterprises in Sichuan Province, China. The findings from the analysis of the data, specifically the independent samples t-test on gender, provide valuable insights into the relationships among organizational identity, job performance, and the potential impact of gender on these variables.

### 1) Analysis of Gender Differences

The results presented in Table 1 indicate that there are no statistically significant differences between male and female employees concerning organizational identity and job performance. The t-values for organizational identity ( $t = 0.558$ ,  $p = 0.577$ ), job performance ( $t = -1.872$ ,  $p = 0.062$ ), task performance ( $t = -1.290$ ,  $p = 0.198$ ), and contextual performance ( $t = -1.849$ ,  $p = 0.065$ ) all suggest that p-values exceed the conventional significance level of 0.05. This implies that gender does not significantly influence the measured constructs in this study.

These findings are consistent with existing literature, which suggests that organizational identity may be perceived similarly by employees regardless of gender, highlighting a potential area where workplace culture fosters inclusivity and equality. In the context of small and medium-sized enterprises, this lack of significant difference could reflect an organizational climate that values contributions based on merit rather than gender, promoting a shared sense of identity among employees.

## 2) Implications for Organizational Identity

The absence of significant gender differences in job performance indicates that organizational identity may play a critical role in shaping employees' perceptions and behaviors, transcending gender. Organizational identity can influence how employees view themselves in relation to their organization, affecting their commitment and motivation to perform well. A strong organizational identity may encourage employees to engage more deeply with their work, resulting in improved job performance overall.

Furthermore, these findings underscore the importance of cultivating a strong organizational identity within the workplace. By fostering a shared identity that aligns with the company's values and goals, organizations can enhance employee engagement, satisfaction, and performance. This is particularly relevant for small and medium-sized enterprises, where each employee's contribution is crucial to the organization's success.

## 3) Recommendations for Future Research

While this study provides valuable insights into the relationship between organizational identity and job performance, it also opens avenues for further research. Future studies could explore the underlying factors that contribute to the formation of organizational identity and how these factors may differ across various industries or organizational sizes. Additionally, investigating other demographic variables, such as age, educational background, or tenure, may yield more nuanced understandings of how these factors influence organizational identity and job performance.

Moreover, longitudinal studies could help assess the impact of changes in organizational identity over time and their corresponding effects on employee performance. Understanding the dynamic nature of organizational identity can provide organizations with strategies to adapt and thrive in an ever-evolving business landscape.

## Conclusion

In conclusion, this research sheds light on the significant role of organizational identity in shaping job performance among employees in small and medium-sized investment and construction enterprises in Sichuan Province, China. The findings indicate that gender does not significantly impact organizational identity or job performance, suggesting that employees of all genders experience similar perceptions and performance levels within the organizational context.

These results highlight the importance of fostering a strong organizational identity that transcends individual differences and promotes a culture of inclusion and equality. As organizations strive for improved performance and employee satisfaction, understanding and enhancing organizational identity will be crucial.

Future research should continue to explore the complexities of organizational identity and its relationship with various performance metrics, providing deeper insights that can guide organizational practices and policies. By investing in a strong organizational identity, companies can enhance employee engagement and drive success in a competitive environment.

## DISCUSSION & CONCLUSION

This study aimed to evaluate the effectiveness of online lessons using the case study approach in enhancing problem-solving skills among students at Chongqing College of International Business and Economics, China. Additionally, it sought to assess the satisfaction levels of students participating in this educational method. The findings provide valuable insights into the role of online learning environments and pedagogical strategies in developing essential skills and improving student experiences.

### 1) Comparison of Problem-Solving Skill Scores

The results indicate a significant improvement in students' problem-solving skills before and after engaging in online lessons utilizing the case study approach. This enhancement suggests

that the case study method, which promotes active learning through real-world scenarios, effectively engages students and allows them to apply theoretical knowledge to practical situations.

The case study approach fosters critical thinking and analytical skills, encouraging students to dissect complex problems, evaluate multiple solutions, and develop actionable strategies. This aligns with existing literature that supports the efficacy of experiential learning techniques, particularly in enhancing problem-solving skills (Kolb, 1984; Prince & Felder, 2006). The positive outcomes observed in this study underscore the importance of integrating interactive and applied learning methods in higher education curricula to prepare students for real-world challenges.

## 2) Student Satisfaction with Online Lessons

In addition to the improvement in problem-solving skills, the study found high satisfaction levels among students participating in the online lessons based on the case study approach. Students reported that the online format allowed for flexible learning opportunities and access to a diverse range of resources, facilitating a more personalized educational experience.

High levels of satisfaction can be attributed to several factors inherent in the online learning environment. These include the convenience of accessing course materials, the ability to learn at their own pace, and the interactive nature of the case studies, which encourage engagement and collaboration among peers. This finding is consistent with previous studies that emphasize the positive correlation between student satisfaction and active learning methodologies (Sharma, 2020; Moore, 2014).

Moreover, the online learning format aligns well with the preferences of contemporary students, who often seek adaptable learning experiences that cater to their individual needs. By leveraging technology and the case study approach, educators can create a dynamic learning environment that enhances both skill acquisition and student satisfaction.

## 3) Implications for Educational Practice

The findings of this study have significant implications for educational practice, particularly in the context of higher education. The positive impact of the case study approach on problem-solving skills indicates that educators should consider incorporating more experiential learning opportunities into their curricula. This could involve using real-world case studies, simulations, and group projects that promote critical thinking and collaborative problem-solving.

Additionally, as online education continues to gain traction, institutions must prioritize the development of engaging and interactive online courses. Providing students with access to various resources and support can further enhance their learning experiences and satisfaction levels. Faculty training in effective online teaching strategies will also be essential in maximizing the benefits of these educational approaches.

## Conclusion

In conclusion, this research demonstrates the effectiveness of online lessons using the case study approach in enhancing problem-solving skills among students at Chongqing College of International Business and Economics. The significant improvement in skill scores, coupled with high levels of student satisfaction, highlights the value of integrating experiential learning techniques within online educational frameworks.

These findings suggest that adopting innovative teaching strategies, such as the case study method, can effectively prepare students for the complexities of the modern business environment. As higher education institutions continue to evolve, it is crucial to prioritize pedagogical approaches that foster active learning and engagement, ultimately leading to improved academic outcomes and student satisfaction.

Future research could further explore the long-term effects of the case study approach on skill retention and its applicability across various disciplines. Additionally, investigating the

perspectives of educators implementing this approach may provide valuable insights into best practices and potential areas for improvement in online education.

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**Data Availability Statement:** The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

**Conflicts of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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