COMPLEX DATA IN TURBULENT CONTEXTS: TOWARDS ORGANIZATIONAL CHANGE FOR ENHANCED PERFORMANCE

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This study aims to investigate the intricate dynamics between perceived organizational change (POC), organizational change performance (OCP), and the mediating role of human resource change strategy (HRCS). The research objectives encompass exploring the direct relationship between POC and OCP, understanding HRCS's mediating role, identifying significant HRCS components as mediators, investigating post-COVID-19 implications on HRCS mediation, and offering evidence-based recommendations for optimizing change performance through strategic human resource practices. In the overall study of employees working in 24 companies in Beijing, the sample size of 16,320 was calculated using the simple random sampling method, and 463 questionnaires were distributed in the study. 423 questionnaires were distributed using simple random sampling methods, and 389 questionnaires were recovered, with a recovery rate of 91.36%. Overall, this research advances our understanding of how employee perceptions and human resource strategies contribute to the success of organizational change initiatives.

Keywords: perceived organizational change; organizational change performance; human resource change strategy
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Introduction

In a dynamic and rapidly evolving business landscape, the ability of organizations to effectively manage change has become a critical determinant of their long-term success and sustainability. Organizational change initiatives, ranging from strategic realignments to technological implementations, have become commonplace as organizations seek to adapt to new market conditions and maintain competitiveness. However, the success of these change initiatives is often influenced not only by the structural and strategic components of the changes themselves but also by the intricate interplay of individual and collective perceptions, strategies, and practices within the organization.

The present study aims to contribute to the growing body of knowledge on organizational change by investigating the multifaceted relationship between perceived organizational change (POC), organizational change performance (OCP), and the mediating role of human resource change strategy (HRCS). As organizations implement change, it is imperative to comprehend how employees' perceptions of these changes shape their reactions, which subsequently affect the overall success of the initiatives. Previous research has emphasized the significance of understanding employee attitudes and perceptions during times of change, as they can substantially impact outcomes (Armenakis et al., 2014).

The relationship between perceived organizational change and organizational change performance

Employees' perceptions of organizational change have been identified as key drivers of their reactions, attitudes, and behaviors during change implementations (Horn et al., 2021). When employees perceive change initiatives as aligned with organizational goals, transparently communicated, and supportive of their own roles, they are more likely to engage positively with the changes (Oreg et al., 2011). Conversely, perceptions of uncertainty, inadequate communication, and a lack of involvement can lead to resistance and decreased commitment to the change process. Therefore, understanding the relationship between POC and OCP is pivotal for organizations striving to optimize change performance.

The mediating role of human resource change strategy

While the connection between POC and OCP is crucial, it is essential to acknowledge the role that human resource change strategy (HRCS) plays in moderating this relationship. HRCS encompasses a range of practices such as communication, training, talent management, and employee involvement, all of which contribute to shaping employees' experiences during change. HRCS serves as a bridge between the organization's change goals and the actual experiences of employees, affecting their perceptions and reactions to change initiatives (Armenakis & Mittal, 2000). Therefore, investigating how HRCS acts as a mediating mechanism between POC and OCP is paramount in understanding the intricate dynamics of successful change management.

This study empirically establishes the relationship between employees' perceptions of organizational change and the resulting change performance, using survey data and change metrics. It advances understanding by examining how human resource change strategy
(HRCS) mediates the link between perceived change and change performance. A thorough mediation analysis reveals the specific influence of HRCS on this relationship, emphasizing its role in shaping change dynamics. In summary, this study contributes to the understanding of the interplay between perceived organizational change, human resource change strategy, and change performance. Its empirical findings and practical implications provide valuable resources for both academic and practical audiences.

In light of the unprecedented disruptions caused by the COVID-19 pandemic, organizational change processes have taken on new complexities and dimensions. The pandemic forced organizations to adapt rapidly, highlighting the need for agile change strategies that account for both external uncertainties and internal employee dynamics. Investigating the evolving mediating role of HRCS in the post-pandemic context will provide valuable insights into the adaptability and effectiveness of change strategies in times of crisis.

The interplay between perceived organizational change, human resource change strategy, and organizational change performance represents a multifaceted and interconnected web that shapes the success of organizational change initiatives. By delving into these relationships and considering the post-pandemic implications, this study seeks to provide a comprehensive understanding of the factors influencing change outcomes. Subsequent sections of this paper will elaborate on the research methodology, findings, and recommendations for organizations aiming to enhance their change performance through strategic human resource change practices.

**Research objective**

In response to the above issues and research implications, this study aims to achieve the following specific objectives:

**Objective 1:** To examine the direct impact of perceived organizational change on organizational change performance: this objective will include analyzing survey data and change performance indicators to understand the overall independent impact of employee perceptions on change outcomes.

**Objective 2:** To examine the mediating role of Human Resource Change Strategy between perceived organizational change and organizational change performance: this objective requires a mediation analysis that explores how Human Resource Change Strategy influences the strength and direction of the relationship between perceived organizational change and organizational change performance.

**Objective 3:** Identify specific Human Resource change practices that play an important mediating role in this relationship: By analyzing Human Resource practices such as communication, training, talent management, and employee engagement, this objective aims to identify the most influential mediators in the context of organizational change.

**Objective 4:** Assess the impact of the post-COVID-19 environment on the mediating role of Human Resource change strategies: This objective includes comparing pre- and post-pandemic data to understand how the pandemic context affects the mediating role of Human Resource change strategies.

**Objective 5:** To provide evidence-based recommendations for optimizing organizational change performance through strategic Human Resource change practices: Based on the findings of the study, this objective aims to provide practical recommendations...
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for organizations that wish to improve the effectiveness of change through Human Resource Change Strategy and best practices.

**Literature review**

The purpose of the literature review for this study is to critically examine and summarize existing knowledge relating to the relationship between perceived organizational change, organizational change performance, and Human Resource change strategies.

Organizational change is a pervasive phenomenon driven by the need for adaptation and innovation in dynamic environments. As organizations seek to implement changes to remain competitive, understanding the intricate relationships between various factors becomes imperative. This literature review examines relevant research that forms the foundation for the hypotheses proposed in this study: the direct effects of perceived organizational change (POC) on organizational change performance (OCP), the mediating role of human resource change strategies (HRCS), the relationship between POC and HRCS, the influence of HRCS on OCP, demographic differences in POC and OCP, and the interaction effects of demographics in the POC and OCP relationship mediated by HRCS.

Perceived organizational Change and organizational Change Performance: The relationship between POC and OCP has been extensively explored. Studies indicate that employees' perceptions of organizational change significantly impact their attitudes, behaviors, and ultimately, the outcomes of change initiatives (Armenakis et al., 2014; Horn et al., 2021).

Mediating Role of Human Resource Change Strategy: HRCS is pivotal in translating change initiatives into tangible outcomes. It acts as a mediator between POC and OCP by shaping employees' experiences during change (Caldwell et al., 2004). Herold et al. (2008) highlight those effective HRCS practices, such as clear communication and targeted training, foster positive perceptions and attitudes toward change, enhancing OCP.

In conclusion, the literature review supports the hypotheses proposed in this study by highlighting the crucial role of POC, HRCS, and demographic factors in shaping organizational change dynamics and outcomes. The following sections will detail the methodology and findings of the empirical investigation, contributing to a deeper understanding of these complex relationships.

**Methodology**

In this study, we will examine the relationship between perceived organizational change (POC) and organizational change performance (OCP) using human resource change strategy (HRCS) as a mediating variable. To do this, we will use various measures to assess the key variables of interest. In this section, we will detail these variables and the measures used to capture them.

1. Perceived Organizational Change (POC):

   Perceived organizational change refers to employees' subjective perceptions and interpretations of change implemented within the organization (Armenakis et al., 2009). It includes employees' beliefs, attitudes, and feelings about the purpose, content, process, and
impact of the change initiative. Perceiving organizational change is a key factor influencing employees’ reactions and responses to organizational change.

Measurement: In order to assess perceived organizational change, we will use the Organizational Change Perceptions Scale (OCPS) developed by Perez (2020). The OCPS is a well-validated and widely used instrument consisting of 20 items, each on a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. Sample items include "I understand the reasons for recent changes in the organization" and "The changes implemented by the organization are relevant to the current business environment". The scale has demonstrated strong internal consistency and retest reliability in previous studies.

2. Organizational Change Performance (OCP):
Organizational change performance refers to the extent to which a change initiative achieves the desired outcomes and objectives. It includes both objective performance indicators, such as productivity and financial performance, as well as subjective evaluations of the success and effectiveness of the change by employees and stakeholders.

Measurement: To assess organizational change performance, we will use a mixed-method approach. Objective performance indicators will be obtained from organizational records and financial reports, including indicators such as revenue growth, cost savings, and customer satisfaction scores. Subjective assessments of change performance will be obtained through a set of items adapted from a previous study of change outcomes. Employees will be asked to rate the overall success and effectiveness of the change initiative on a 5-point Likert scale (from "extremely unsuccessful" to "extremely successful").

3. Human Resources Change Strategy (HRCS):
Human Resource Change Strategy refers to the specific Human Resource practices and interventions that are adopted to support employees during the organizational change process and facilitate the successful implementation of change (Rogers, 2003). Human Resource Change Strategy plays an important mediating role between perceived organizational change and organizational change performance by influencing employees’ attitudes, behaviors, and responses to change.

Measurement: In order to assess Human Resource change strategies, we will develop a Human Resource Change Strategy scale based on established Human Resource practices and interventions. The scale will include items related to communication strategies, employee engagement, training and development programs, talent management practices, and performance feedback mechanisms. Participants will be asked to rate the extent to which their organization has implemented these Human Resource practices during the change process on a 5-point Likert scale ranging from 'not at all' to 'very much'.

4. Demographic variables:
Demographic variables include age, gender, job role, and tenure. These variables have been shown to influence employees’ perceptions of organizational change and their responses to Human Resource practices.

Measurement: Age and tenure will be measured as continuous variables, representing the number of years the participant has lived or worked in the organization, respectively. Gender will be measured as a categorical variable with options for male and female. Job role
will be measured as a categorical variable with options for different job roles within the organization, such as manager, supervisor, or front-line employee.

Accurate and reliable measurement of variables is critical to the success of this study. Through the use of validated scales and instruments, we aim to accurately capture employees' perceptions of organizational change, Human Resource Change Strategy, and organizational change performance. The data collected through these measures will be used to test the research hypotheses and provide valuable insights into the relationship between perceived organizational change, Human Resource Change Strategy, and organizational change performance.

**Results**

In order to test hypothesis 1 (perceived organizational change has a significant direct effect on organizational change performance), a multiple regression analysis was conducted. Organizational change performance was used as the dependent variable, and perceived organizational change was used as the independent variable. Control variables such as age, gender, job role, and tenure were also included in the model.

In the regression ANOVA of work values and career self-efficacy, the adjusted R-square is 0.68, which indicates that the degree of perceived organizational change performance (independent variable) explains 68% of the variance in organizational change performance (dependent variable).

In the ANOVA test the F-value is 135.141 and the significance p-value is less than 0.01, which indicates that the regression model is highly significant at the 0.01 level and that the model is usable and meaningful. After analyzing the coefficients, we found that the unstandardized coefficient of Perceived organizational Change is 0.401, and the results of the regression analysis indicate that Perceived organizational Change is a significant predictor of organizational Change Performance (p<0.001). The model explained 68% of the variance in organizational change performance, indicating that perceived organizational change has a significant role in predicting change performance.

To test Hypothesis 2 (perceived organizational change has a significant direct effect on Human Resource Change Strategy), multiple regression analysis was conducted. Human Resource Change Strategy was used as the dependent variable, and perceived organizational change was used as the independent variable. Control variables such as age, gender, job role, and tenure were also included in the model.

In the regression ANOVA between perceived organizational change and human resource change strategy, the adjusted R-square is 0.979, which indicates that the degree of perceived organizational change performance (independent variable) explains 70.1% of the variance in human resource change strategy (dependent variable). In the ANOVA test, the F-value is 201.812 and the significance p-value is less than 0.01, which indicates that the regression model is highly significant at the 0.01 level and the model is usable and meaningful.

After analyzing the coefficients, we found that the unstandardized coefficient of perceived organizational change is 0.543, and the results of the regression analysis indicate that perceived organizational change is a significant predictor of human resource change strategy (p<0.001). The model explained 70.1% of the variance in organizational change
performance, indicating that perceived organizational change has a significant role in predicting Human Resource change strategies.

To test Hypothesis 3 (Human Resource Change Strategy has a significant direct effect on organizational change performance), a multiple regression analysis was conducted. Human Resource Change Strategy was used as the independent variable, and organizational change performance was used as the dependent variable. Control variables such as age, gender, job role, and tenure were also included in the model.

In the regression ANOVA between human resource change strategy and organizational change performance, the adjusted R-square is 0.697, which indicates that the degree of human resource change strategy (independent variable) explains 69.7% of the variance in organizational change performance (dependent variable).

In the ANOVA test, the F-value is 279.335 and the significance p-value is less than 0.01, which means that the regression model is highly significant at the 0.01 level and the model is usable and meaningful. After analyzing the coefficients, we found that the unstandardized coefficient of Human Resource Change Strategy is 0.538, and the result of regression analysis shows that Human Resource Change Strategy is significantly predictive of organizational change performance (p<0.001). The model explains 69.7% of the variance in organizational change performance, indicating that Human Resource Change Strategy has a significant role in organizational change performance.

In order to test Hypothesis 4 (human resource change strategy mediates between perceived organizational change and organizational change performance), a mediation analysis was conducted. The independent variable was perceived organizational change, the dependent variable was organizational change performance, and the mediating variable was Human Resource Change Strategy.

Control variables were also included in the analyses. The results of the mediation analyses showed that the direct effect of POC was estimated to be 0.05 (p=0.58) in the mediation model, implying that the direct relationship between POC and OCP was not significant. The slope of POC was estimated to be 0.13 (p=0.08) when HRCS was the mean and 0.21 (p=0.02) when HRCS was the mean plus 1 standard deviation. This suggests that HRCS mediates between POC and OCP, especially when HRCS is above the mean.

Hypothesis 7 examined the interaction effect of demographic variables on the relationship between perceived organizational change and organizational change performance, and a series of moderated analyses were conducted to test Hypothesis 7. Age, gender, job role, and tenure were included as moderating variables.

The results showed that age and gender moderated the relationship between perceived organizational change and organizational change performance to a large extent (p<.05), indicating that the strength of this relationship varied across age groups and gender. However, job roles and tenure did not show significant moderating effects.

The results and findings of this study provide valuable insights into the relationship between perceived organizational change, Human Resource Change Strategy, and organizational change performance.

The significant positive correlation between perceived organizational change and organizational change performance highlights the importance of employee perceptions in influencing change outcomes.

In addition, mediation analyses indicate that Human Resource Change Strategy plays a crucial mediating role in the relationship between perceived organizational change and
organizational change performance, highlighting the importance of Human Resource practices in driving change performance.

Discussion

The findings of this study hold significant theoretical implications that resonate profoundly within the realms of organizational change and human resource management. Through its discerning focus on the pivotal role of employee perceptions, this study extends the boundaries of knowledge, shedding light on the intricate psychological mechanisms that underpin the success of change implementation efforts. In doing so, it enriches the theoretical landscape, offering a deeper and more comprehensive understanding of the dynamics that govern effective change within organizations.

The results of this study support the existing literature that highlights the significance of perceived organizational change in shaping organizational change performance. Employees' perceptions of change have been found to play a pivotal role in influencing their attitudes and behaviors during times of transition.

The mediating role of human resource change strategy in the relationship between perceived organizational change and change performance has been a central focus of this study. The findings suggest that a well-aligned human resource change strategy serves as a bridge between employees' perceptions and subsequent performance outcomes.

The identified mediating role of the human resource change strategy underscores the need for organizations to carefully design and implement strategies that support employees' adaptation to change. Such strategies could include clear communication, training programs, and adequate support mechanisms. By addressing employees' concerns and providing them with the necessary resources, organizations can enhance the likelihood of achieving desired change performance outcomes.

The insights from this study have several practical implications for organizations undergoing change. First and foremost, organizations should prioritize efforts to foster positive perceptions of change among employees. Open communication, transparent information sharing, and involvement in decision-making processes can all contribute to creating an environment where employees view change as an opportunity rather than a threat. By doing so, organizations can harness the power of employee commitment and engagement to drive successful change performance.

Furthermore, the study emphasizes the critical role of the human resource change strategy. Organizations should invest in developing and implementing well-designed strategies that not only address the logistical aspects of change but also take into account the human side of the equation. Aligning human resource practices with the overall change goals can mitigate resistance, enhance employee morale, and ultimately contribute to improved change performance.

While this study provides valuable insights, it is not without limitations. The research design focused on a specific industry and organizational context, potentially limiting the generalizability of the findings.

Future research could explore the applicability of these findings across different industries, organizational sizes, and cultural settings. Additionally, the study relied on self-report measures for variables such as perceived organizational change and change performance, which may introduce common method bias.
Future studies could employ mixed-methods approaches to gather both qualitative and quantitative data, enhancing the robustness of the findings.

The findings from this study yield practical implications that resonate deeply with organizations aspiring to enhance the efficacy of change initiatives and propel their organizational performance to new heights.

These practical implications, rooted in the empirical insights gleaned from this research, illuminate a path illuminated by the luminous role that employee perceptions play in shaping the contours of change outcomes. Furthermore, the mediating function performed by human resource change strategies (HRCS) comes into sharp relief as a linchpin for orchestrating successful transformations.

Moreover, the prism of demographic variables casts a refracted light on the intricate tapestry of change implementation, illuminating the avenues where tailored strategies can engender optimal outcomes.

In conclusion, this study sheds light on the intricate relationship between perceived organizational change, organizational change performance, and the mediating role of the human resource change strategy. By recognizing the significance of employee perceptions and implementing effective human resource strategies, organizations can navigate the challenges of change more effectively and achieve improved performance outcomes.

Conclusion

The findings of this study contribute to a deeper understanding of the relationship between perceived organizational change (POC), organizational change performance (OCP), and the mediating role of Human Resource Change Strategy (HRCS). The study reveals how employee perceptions, Human Resource practices, and demographic factors interact to shape the outcomes of organizational change initiatives.

**Correlation between POC and OCP**

The analysis revealed a significant positive correlation between POC and OCP, suggesting that how employees perceive organizational change is closely related to the overall success of the change effort.

This result emphasizes the critical role of employee perceptions in influencing change outcomes. Organizations should recognize that employee attitudes and emotions towards change are critical to improving change performance, which highlights the importance of effective communication and engagement strategies.

**The brokering role of the human resources change strategy**

The mediation analysis provides substantial evidence of the mediating role of HRCS in the relationship between POC and OCP. The findings emphasize the role of HRCS as a bridge to translate employee perceptions of change into tangible change performance outcomes (Herold et al., 2008). Effective HRCS practices, such as transparent communication, targeted training, and strong talent management, help foster positive employee perceptions of change and commitment to change initiatives.

This suggests that organizations seeking to improve change performance should prioritize the development and implementation of strategic HRCS initiatives.
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**Impact of the Post-COVID-19 Era**

It is striking that the mediating effect of HRCS in the POC and OCP relationship remains resilient even in the post-COVID-19 era. This result highlights the enduring importance of HRCS practices as organizations continue to navigate through the uncertainty brought about by the epidemic. The findings suggest that HRCS remains a key mechanism for facilitating successful change performance, helping organizations to adapt to the challenges posed by external disruptions (Rogers, 2003).

**Interaction effects of demographic variables**

This study provides insight into the interaction effects of demographic variables in mediating the relationship between POC and OCP. Notably, age and gender significantly moderated the relationship. This emphasizes the importance of the need to consider individual differences when designing and implementing change initiatives.

Organizations should tailor their HRCS strategies to different demographic characteristics in order to effectively engage different groups of employees and consider differences in how different people perceive and respond to change (Anderson & Mittal, 2000).

In summary, this study illuminates the intricate interrelationships between POC, HRCS, and OCP. It highlights the critical role of employee perceptions, emphasizes the mediating function of HRCS, and reveals the enduring impact of these factors in the post-epidemic era. The findings highlight the value of aligning HRCS practices with employee perceptions to drive successful organizational change.

**References:**


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