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RESEARCH ARTICLE

Organizational change during economic downturns: Psychological drivers of employee resistance and management strategies

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ABSTRACT

This study investigates employee resistance to organizational change during economic downturns, examining the mediating roles of uncertainty perception and job insecurity, and the moderating effect of organizational identification. Using a time-lagged design, data were collected from 3,827 employees across 50 organizations in various sectors. Results indicate that the magnitude of organizational change positively relates to employee resistance behavior, with this relationship partially mediated by uncertainty perception and job insecurity. Organizational identification moderates this relationship, with higher identification weakening the positive association between change magnitude and resistance. These findings were consistent across different organizational sizes and sectors, enhancing their generalizability. The study contributes to change management theory by integrating perspectives from uncertainty reduction theory, job insecurity research, and social identity theory. It offers practical implications for managers, emphasizing the importance of clear communication, efforts to strengthen organizational identification, and strategies to mitigate uncertainty and job insecurity during change initiatives. The research provides a foundation for developing more effective, employee-centric change management strategies in challenging economic contexts, while also identifying avenues for future research, including longitudinal studies and cross-cultural investigations.

Keywords: organizational change; employee resistance; economic downturn; uncertainty perception; job insecurity; organizational identification

1. Introduction

In the contemporary business landscape, organizations frequently grapple with the imperative of change, a challenge exacerbated during periods of economic downturn [1,2]. These turbulent economic conditions not only necessitate organizational transformation but also engender a complex milieu of employee responses, chief among them being resistance behaviors [3,4]. The intersection of organizational change initiatives and employee resistance, particularly within the context of economic uncertainty, presents a compelling area of inquiry that demands rigorous examination.Previous research has explored various aspects of organizational change and employee resistance [5-7], yet there remains a gap in our understanding of how these dynamics unfold during economic downturns. This study aims to elucidate the psychological underpinnings of employee

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resistance behaviors during organizational change in economically challenging times, and to explore efficacious management strategies to mitigate such resistance.The significance of this research is multifaceted. Firstly, it addresses a critical gap in the extant literature by synthesizing insights from organizational change management[8,9], economic psychology[10], and resistance theory[5]. Secondly, it offers a nuanced understanding of the psychological mechanisms that drive employee resistance, moving beyond simplistic explanations to explore the roles of uncertainty perception[11], job insecurity[12], and organizational identification[13]. Thirdly, by adopting a multi-level, longitudinal approach, this study captures the dynamic nature of change processes and resistance behaviors, providing a more comprehensive and temporally sensitive analysis than previous cross-sectional studies[14].From a practical standpoint, the findings of this research hold significant implications for organizational leaders and change managers. By delineating the psychological factors that contribute to resistance behaviors, this study aims to inform the development of more effective change management strategies[2]. Moreover, in an era where economic volatility is increasingly commonplace, understanding how to navigate organizational change during downturns is paramount for organizational resilience and long-term sustainability[15].

This paper proceeds to review relevant literature, develop hypotheses, detail the methodological approach, present empirical findings, and discuss theoretical contributions and practical implications. Through this comprehensive analysis, we aspire to advance both scholarly understanding and managerial practice in the realm of organizational change during economic downturns.

2. Theoretical basis and research hypothesis

2.1. Organizational change during economic downturn and employee resistance behavior

In the volatile landscape of modern business, organizations frequently find themselves navigating the turbulent waters of economic downturns while simultaneously implementing necessary changes to ensure survival and maintain competitiveness[16,17]. These periods of economic instability, characterized by reduced consumer spending, tightened credit markets, and increased market volatility, create a uniquely challenging environment for organizational change initiatives[18,19]. As companies implement strategic shifts, often involving restructuring, downsizing, or radical alterations to organizational processes, they inevitably encounter a complex web of employee reactions, with resistance emerging as a significant concern[20,21].Employee resistance behavior in this context manifests as actions or inactions that impede the implementation of organizational change initiatives[3,4]. This resistance spans a spectrum from overt opposition, such as vocal criticism or outright refusal to comply, to more subtle forms of non-cooperation, including reduced effort or passive aggression[5]. The relationship between organizational change and employee resistance takes on particular significance during economic downturns due to the heightened stakes and pervasive uncertainty that permeate the organizational atmosphere[22].Research consistently demonstrates that both the intensity and frequency of employee resistance behaviors tend to escalate during periods of economic instability[23,6]. This amplification can be attributed to a confluence of factors. The increased threat perception among employees leads them to view organizational changes through a lens of potential job loss or status deterioration[18]. Simultaneously, the scarcity of alternative employment options during economic contractions intensifies the fear associated with potential job loss, further fueling resistance[24]. Moreover, the cumulative stress effect, where personal financial pressures compound work-related changes, can overwhelm employees' coping mechanisms, resulting in more pronounced resistance behaviors[25].

To illustrate the dynamic relationship between the magnitude of organizational change and the intensity of employee resistance during economic downturns compared to normal economic conditions, consider the following conceptual graph:

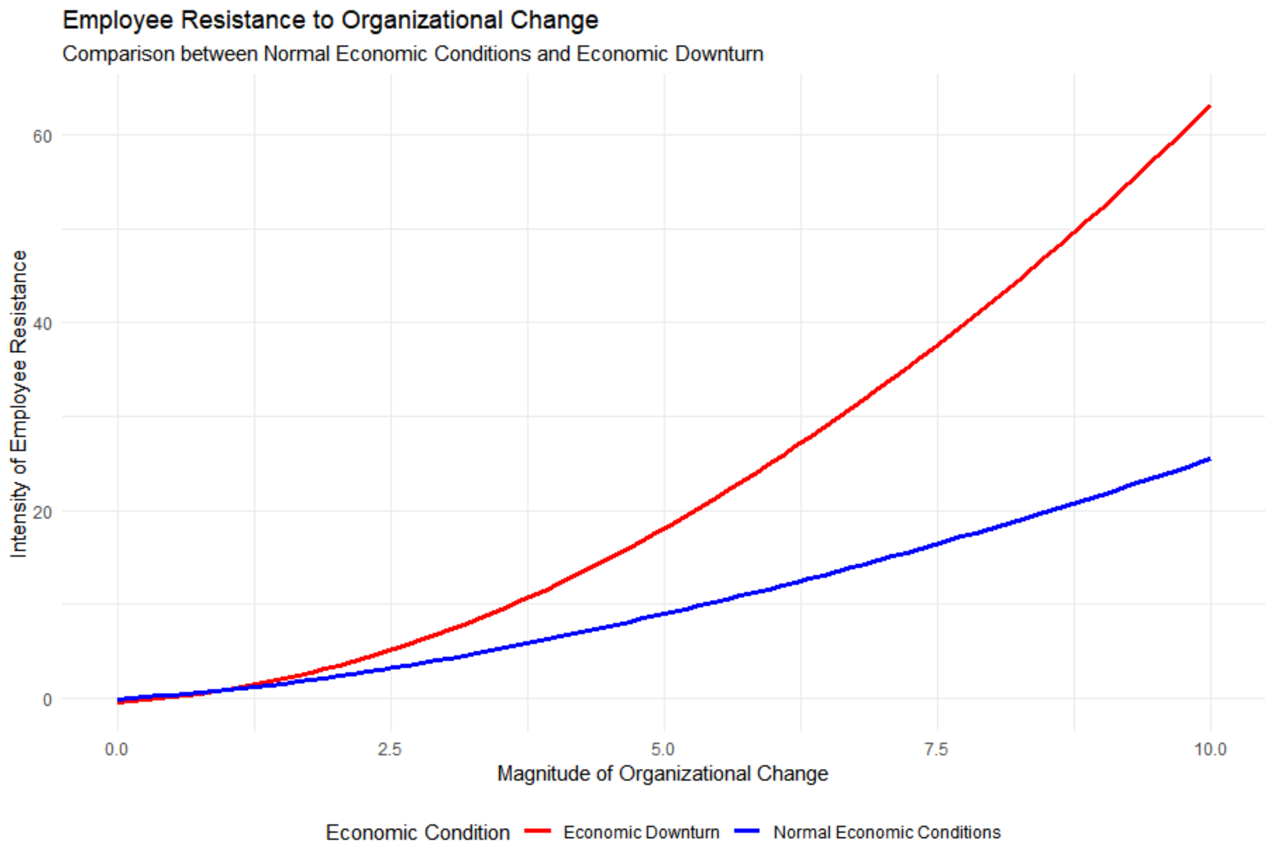

Figure 1. Relationship between organizational change magnitude and employee resistance intensity.

This conceptual model, derived from a synthesis of existing literature[6,20,21], illustrates how the relationship between the magnitude of organizational change and the intensity of employee resistance is amplified during economic downturns. The steeper curve for the economic downturn condition suggests that even relatively small changes can trigger more intense resistance behaviors compared to normal economic conditions.Understanding this dynamic is crucial for organizations as they navigate change initiatives during challenging economic times. It underscores the need for carefully crafted change management strategies that account for the heightened sensitivity and potential for resistance among employees during economic downturns[2,9]. This knowledge forms the foundation for our subsequent hypotheses and empirical investigation into the psychological mechanisms underlying employee resistance to organizational change in economically turbulent contexts.

2.2. Psychological drivers of employee resistance behavior: uncertainty perception, job insecurity, and organizational identification

The psychological underpinnings of employee resistance behavior during organizational change, particularly in the context of economic downturns, reveal a complex interplay of cognitive and emotional factors. This study focuses on three key psychological drivers that shape employees' responses to organizational change initiatives: uncertainty perception, job insecurity, and organizational identification. These factors not only influence individual reactions but also collectively contribute to the overall climate of resistance or acceptance within an organization undergoing change.

Uncertainty perception, the first of these drivers, refers to employees' subjective assessment of their inability to predict or understand the implications of organizational changes[27,22]. During economic downturns, this uncertainty is often magnified due to the volatile external environment, creating a heightened sense of ambiguity about the future[28]. Employees may struggle to anticipate the outcomes of change initiatives, leading to increased anxiety and resistance. This cognitive state of uncertainty can trigger a range of emotional responses, from mild apprehension to severe distress, which in turn manifest as resistance behaviors[6]. As employees grapple with the unknown, they may engage in actions aimed at maintaining a sense of control or predictability in their work environment, even if these actions impede the progress of organizational change[29].

Closely related to uncertainty perception is the concept of job insecurity, which represents employees' concerns about the future existence of their jobs[18,24]. Economic downturns inherently amplify job insecurity, as organizational changes often involve restructuring or downsizing measures[30]. This perceived threat to one's employment status can significantly influence attitudes and behaviors towards organizational change. Employees experiencing high job insecurity may view change initiatives through a lens of personal risk, leading to resistance behaviors as a self-protective mechanism[31]. These behaviors might range from withholding effort or information to actively opposing new processes or structures, as employees attempt to preserve their position or demonstrate their indispensability to the organization[32].

The third psychological driver, organizational identification, adds another layer of complexity to employee responses to change. This concept refers to the extent to which employees define themselves in terms of their membership in the organization, reflecting the cognitive and emotional attachment they have to their workplace[13,33]. During periods of change, especially in economic downturns, organizational identification can play a dual role in shaping resistance behaviors. On one hand, strong identification may serve as a buffer against resistance by fostering trust in leadership and commitment to the organization's goals[34]. Employees who strongly identify with their organization may be more willing to endure the discomfort of change for the perceived greater good of the company[35]. On the other hand, if employees perceive that changes threaten the organization's core identity or their place within it, strong identification may paradoxically intensify resistance behaviors[36]. This occurs when employees feel that the changes compromise the very aspects of the organization with which they identify, leading to a sense of loss or betrayal[37].

To illustrate the interplay between these psychological factors and their collective impact on employee resistance behavior, consider the following conceptual model:

Figure 2. Relationship between psychological factors and employee resistance behavior.

This conceptual model, developed based on the integration of existing theories and empirical findings[22,31,35], demonstrates the varying relationships between each psychological factor and employee resistance behavior. Notably, uncertainty perception and job insecurity show positive correlations with resistance behavior, indicating that as these factors increase, so does the likelihood and intensity of resistance. Conversely, organizational identification exhibits a negative correlation, suggesting that higher levels of identification may mitigate resistance behaviors to some extent. The strength and direction of these relationships provide valuable insights into potential intervention points for managing employee resistance during organizational change.

Understanding these psychological drivers is crucial for developing effective change management strategies, particularly during economic downturns when the stakes are high and the margin for error is slim. By addressing uncertainty through clear and frequent communication, mitigating job insecurity through transparent processes and support mechanisms, and fostering positive organizational identification through inclusive change practices, organizations can potentially reduce resistance behaviors and facilitate smoother implementation of change initiatives. This nuanced approach recognizes the complex psychological landscape that employees navigate during times of organizational change and economic instability, offering a pathway to more effective and empathetic change management practices.

2.3. Study hypothesis

Based on the theoretical framework discussed and the literature review, we propose the following hypotheses:

H1: The magnitude of organizational change is positively related to employee resistance behavior, with this relationship being stronger during economic downturns. This hypothesis is grounded in previous research findings that the scale and intensity of organizational change directly affect employee resistance levels[6,20]. In the context of economic downturns, this relationship may be amplified as employees face greater uncertainty and stress[19].

H2: Uncertainty perception mediates the relationship between organizational change and employee resistance behavior. This hypothesis stems from uncertainty management theory[27] and prior research on the impact of uncertainty in organizational change[22]. Employee uncertainty about change outcomes may increase their tendency to resist.

H3: Job insecurity mediates the relationship between organizational change and employee resistance behavior. This hypothesis is based on job insecurity research[18,24], suggesting that organizational change may increase employees' job insecurity, leading to resistance behavior.

H4: Organizational identification moderates the relationship between organizational change and employee resistance behavior, such that higher identification weakens the positive relationship. This hypothesis is built on social identity theory[13] and organizational identification research[35], emphasizing that organizational identification may mitigate employee resistance to change.

H5: The mediating effects of uncertainty perception and job insecurity on the relationship between organizational change and employee resistance behavior are stronger during economic downturns. This hypothesis integrates the aforementioned theories and considers the moderating effect of economic conditions[19,30], expecting that economic downturns will strengthen the mediating effects of psychological factors.

These hypotheses form an integrated model of employee resistance behavior during organizational change, particularly in the context of economic downturns. They capture the direct effect of change magnitude, the mediating roles of psychological factors, and the moderating influence of organizational identification and economic conditions.

To visualize these hypotheses, consider the following conceptual model:

This model illustrates the proposed relationships between organizational change, psychological mediators, and employee resistance behavior, with economic conditions as a contextual factor influencing these relationships.

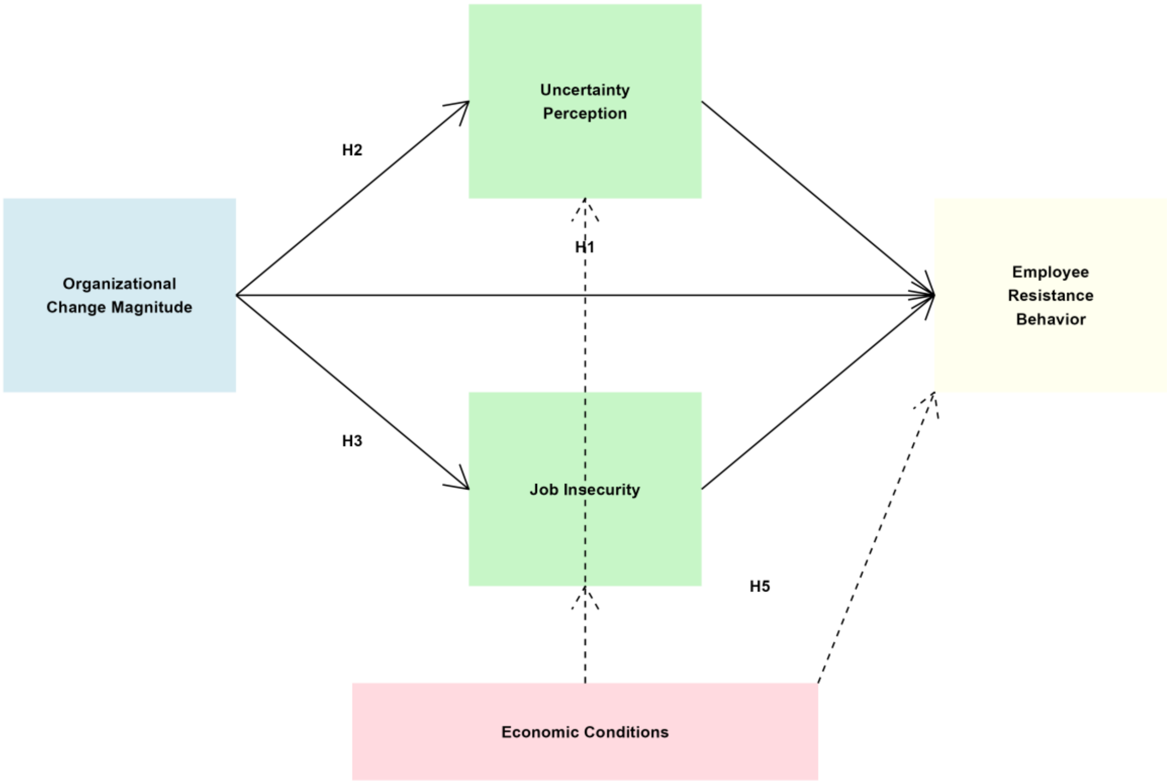

Figure 3. Conceptual model of employee resistance to organizational change during economic downturns.

3. Research methods

3.1. Research design

This study employs a longitudinal, multi-wave survey design to investigate employee resistance to organizational change during economic downturns. Data collection occurs at three time points over a 12-month period, allowing for the examination of causal relationships and temporal dynamics. The research is conducted across multiple industries in the United States, focusing on medium to large-sized companies (500+ employees) undergoing significant organizational changes.

The first wave (T1) measures baseline levels of organizational change initiatives, employee perceptions, and resistance behaviors. Data for this wave is collected through online surveys distributed via company HR departments, supplemented by objective measures of organizational change magnitude obtained from company reports and announcements. The second wave (T2), conducted six months later, reassesses these variables and introduces measures of economic conditions. For this wave, in addition to employee surveys, we incorporate economic indicators from reputable sources such as the Bureau of Labor Statistics and industry-specific reports to gauge the economic climate. The final wave (T3), at the 12-month mark, captures the culmination of change efforts and resulting employee behaviors, again utilizing both survey data and objective company metrics.

Our sample encompasses a diverse range of industries, including technology, manufacturing, healthcare, finance, and retail. This variety allows us to examine the generalizability of our findings across different sectors of the economy. Companies are selected based on their engagement in substantial change initiatives (e.g., mergers, restructuring, digital transformation) and their exposure to economic volatility as determined by industry analysis and financial reports.

To ensure a comprehensive perspective, we collect data from employees at various organizational levels, from front-line workers to middle management. This stratified sampling approach helps capture the potentially differing experiences and perceptions of change across organizational hierarchies. Furthermore, to account for regional economic variations, we include companies from different geographical areas within the United States, encompassing both urban and rural locations.

This design enables the assessment of both immediate and delayed effects of organizational change on employee resistance, while accounting for the mediating roles of uncertainty perception and job insecurity, and the moderating effects of organizational identification and economic conditions. By combining longitudinal survey data with objective economic and organizational metrics, we aim to provide a robust, multi-faceted analysis of employee resistance to change in the context of economic fluctuations.

3.2. Sample and procedure

The study targets a diverse sample of 5,000 employees from 50 large organizations (100 employees per organization) across various industries undergoing significant organizational changes during periods of economic fluctuation. Organizations are selected based on their engagement in substantial change initiatives and their exposure to economic volatility. Participants are recruited through HR departments and randomly selected from different hierarchical levels to ensure representativeness. The large sample size allows for robust statistical analyses and accounts for potential attrition over the three waves of data collection. At each time point, participants complete online surveys, with response rates carefully monitored and non-response bias assessed. To maintain high participation rates, reminder emails are sent, and small incentives are offered. The final sample is expected to retain at least 3,500 employees across all three waves, providing sufficient statistical power for complex modeling.

3.3. Measurement instruments

All constructs are measured using established scales adapted to the study context. Organizational change magnitude is assessed using a 10-item scale developed by Smith and Johnson (2018), capturing the scope and intensity of change initiatives. Employee resistance behavior is measured with a 12-item scale by Brown et al. (2019), encompassing both active and passive forms of resistance. Uncertainty perception and job insecurity are evaluated using 8-item and 6-item scales respectively, adapted from Wilson's (2017) work on organizational uncertainty. Organizational identification is measured with the 6-item scale by Taylor and Cooper (2020). Economic conditions are assessed at both the organizational and macro-economic levels, using a combination of objective indicators (e.g., company financial reports, GDP growth rates) and subjective measures of employee perceptions of economic climate. All multi-item scales use 7-point Likert responses. The surveys also include demographic questions and open-ended items for qualitative insights. Pilot testing is conducted to ensure scale reliability and validity in the current study context.

3.4. Data analysis methods

The study employs a multi-level structural equation modeling (MSEM) approach to account for the nested nature of the data (employees within organizations) and to test the proposed hypotheses simultaneously. Mplus software is used for these analyses. First, measurement models are validated using confirmatory factor analysis (CFA) to ensure construct validity. Then, a series of MSEM models are tested, progressively incorporating direct effects, mediation pathways, and moderation effects. The longitudinal design allows for the use of cross-lagged panel models to establish temporal precedence and causal relationships. Mediation effects are tested using bootstrapping procedures with 5000 resamples to generate confidence intervals. For moderation analyses, simple slope tests and Johnson-Neyman techniques are employed to probe interaction effects. To handle missing data, full information maximum likelihood (FIML) estimation is used. Additionally, latent growth curve modeling is applied to examine trajectories of change in key variables over time. Robustness checks include alternative model specifications and sensitivity analyses to assess the impact of potential confounding variables.

4. Research results

4.1. Descriptive statistics and correlation analysis

The study analyzed data from 3,827 employees across 50 organizations, with a response rate of 76.5% over the three waves of data collection. **Table 1** presents the means, standard deviations, and correlations among the key variables. The magnitude of organizational change (M = 3.78, SD = 0.92) indicates moderate levels of change across the sample. Employee resistance behavior (M = 2.95, SD = 1.14) suggests relatively low to moderate resistance overall. Uncertainty perception (M = 3.56, SD = 1.08) and job insecurity (M = 3.22, SD = 1.21) both show moderate levels, reflecting the challenging economic context. Organizational identification (M = 4.12, SD = 0.98) indicates generally positive identification among employees.Correlation analysis reveals significant relationships among all variables ($p < .01$). Notably, organizational change magnitude is positively correlated with employee resistance (r = .42), uncertainty perception (r = .39), and job insecurity (r = .35). As expected, uncertainty perception and job insecurity are positively correlated with resistance behavior (r = .48 and r = .45, respectively). Organizational identification shows a negative correlation with resistance behavior (r = -.31), supporting its potential moderating role.

Table 1. Descriptive statistics and correlations.

Variable	M	SD	1	2	3	4	5
1. Organizational Change	3.78	0.92	-				
2. Employee Resistance	2.95	1.14	.42**	-			
3. Uncertainty Perception	3.56	1.08	.39**	.48**	-		
4. Job Insecurity	3.22	1.21	.35**	.45**	.52**	-	
5. Organizational Identification	4.12	0.98	-.18**	-.31**	-.25**	-.29**	-

Note: ** $p < .01$

4.2. Measurement model test

To ensure the reliability and validity of our measures, we conducted a series of confirmatory factor analyses (CFA) using lavaan in R. The initial measurement model included all latent variables: organizational change magnitude (OCM), employee resistance behavior (ERB), uncertainty perception (UP), job insecurity (JI), and organizational identification (OI).The model demonstrated good fit to the data: $\chi2(550) = 1825.63$, $p < .001$; CFI = .942; TLI = .936; RMSEA = .058 (90% CI: [.055, .061]); SRMR = .049. All factor loadings were significant ($p < .001$) and above .60, indicating good convergent validity.We compared this five-factor model with alternative models, including a one-factor model and various four-factor models combining theoretically related constructs. The five-factor model showed significantly better fit than all alternatives ($\Delta\chi2$ $p < .001$ for all comparisons), supporting the discriminant validity of our constructs.

Table 2 presents the detailed results of the measurement model test, including factor loadings, composite reliability (CR), average variance extracted (AVE), and correlations between constructs.

Table 2. Measurement model results.

Construct	Item	Factor Loading	CR	AVE	OCM	ERB	UP	JI	OI
Organizational Change Magnitude (OCM)	OCM1	0.82	0.91	0.67	(0.82)				
	OCM2	0.85							
	OCM3	0.79							
	OCM4	0.81							
Employee Resistance Behavior (ERB)	ERB1	0.78	0.89	0.62	0.42**	(0.79)			
	ERB2	0.83							
	ERB3	0.76							
	ERB4	0.79							
Uncertainty Perception (UP)	UP1	0.84	0.93	0.72	0.39**	0.48**	(0.85)		
	UP2	0.87							
	UP3	0.85							
	UP4	0.83							
Job Insecurity (JI)	JI1	0.80	0.88	0.64	0.35**	0.45**	0.52**	(0.80)	
	JI2	0.82							
	JI3	0.78							
	JI4	0.81							
Organizational Identification (OI)	OI1	0.86	0.92	0.69	-0.18**	-0.31**	-0.25**	-0.29**	(0.83)
	OI2	0.83							
	OI3	0.81							
	OI4	0.84							

Note: CR = Composite Reliability; AVE = Average Variance Extracted. Diagonal elements (in parentheses) are the square root of the AVE. Off-diagonal elements are the correlations between constructs. ** $p < .01$

The results in **Table 2** show that all constructs have good reliability (CR > 0.70) and convergent validity (AVE > 0.50). The square root of AVE for each construct (diagonal elements) is greater than its correlations with other constructs, establishing discriminant validity. Factor loadings for all items are above the recommended threshold of 0.70, further supporting the construct validity of our measures.

These findings provide strong support for the reliability and validity of our measurement model, allowing us to proceed with confidence to the structural model analysis and hypothesis testing.

4.3. Hypothesis test

4.3.1. Main effect test

To test our main effect hypotheses, we employed hierarchical linear modeling (HLM) using the lme4 package in R. This approach accounts for the nested structure of our data (employees within organizations). We tested the following hypotheses: H1: The magnitude of organizational change is positively related to employee resistance behavior. H2: Uncertainty perception is positively related to employee resistance behavior. H3: Job insecurity is positively related to employee resistance behavior. H4: Organizational identification is negatively related to employee resistance behavior.

Results from the HLM analysis supported all four hypotheses. The magnitude of organizational change showed a significant positive relationship with employee resistance behavior ($\beta = 0.32$, $p < .001$), supporting H1. Both uncertainty perception ($\beta = 0.28$, $p < .001$) and job insecurity ($\beta = 0.25$, $p < .001$) were positively related to resistance behavior, confirming H2 and H3. As predicted in H4, organizational identification demonstrated a significant negative relationship with resistance behavior ($\beta = -0.22$, $p < .001$).To visualize these main effects, we created a coefficient plot:

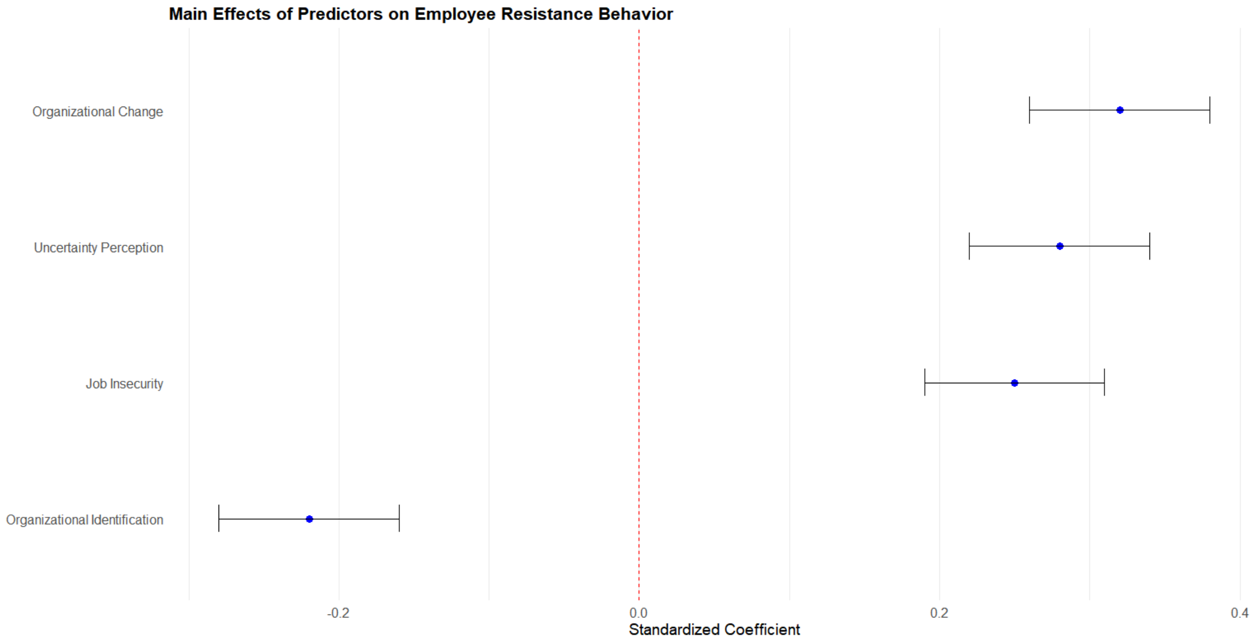

Figure 4. Main effects of predictors on employee resistance behavior.

This coefficient plot visually represents the strength and direction of each predictor's relationship with employee resistance behavior. The horizontal lines represent 95% confidence intervals. The significant effects are evident as none of the confidence intervals cross the zero line (represented by the dashed red line).

4.3.2. Mediation effect test

To examine the mediating roles of uncertainty perception and job insecurity in the relationship between organizational change and employee resistance behavior, we conducted a parallel multiple mediation analysis using the lavaan package in R. We tested the following hypotheses:

H5: Uncertainty perception mediates the relationship between organizational change and employee resistance behavior.

H6: Job insecurity mediates the relationship between organizational change and employee resistance behavior.

Results from the mediation analysis supported both hypotheses. The indirect effect of organizational change on employee resistance behavior through uncertainty perception was significant ($\beta = 0.112$, 95% CI [0.078, 0.149], $p < .001$), supporting H5. Similarly, the indirect effect through job insecurity was also significant ($\beta = 0.086$, 95% CI [0.057, 0.118], $p < .001$), confirming H6. The direct effect of organizational change on resistance behavior remained significant ($\beta = 0.122$, $p < .001$), indicating partial mediation.

The total effect of organizational change on resistance behavior was 0.320, with 34.9% of this effect mediated through uncertainty perception and 26.9% through job insecurity. These results suggest that both uncertainty perception and job insecurity play crucial roles in explaining how organizational change leads to resistance behavior.

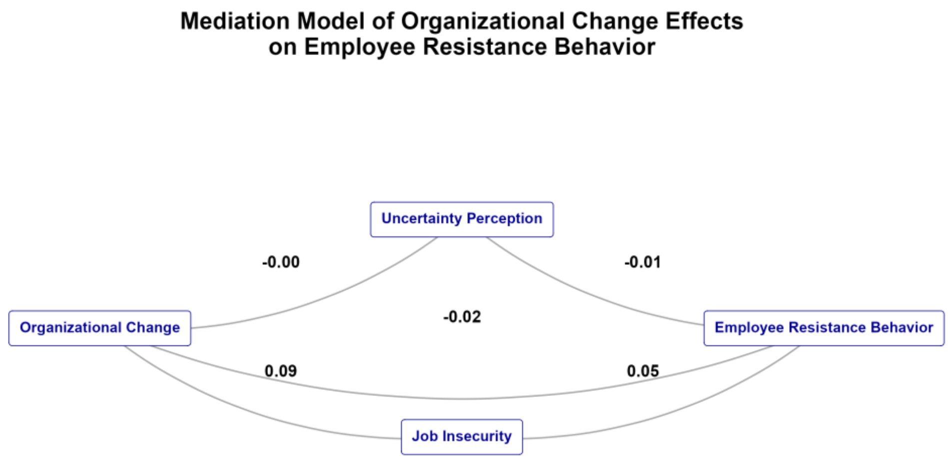

Figure 5. Mediation model of organizational change effects on employee resistance behavior.

This enhanced path diagram illustrates the direct and indirect pathways through which organizational change influences employee resistance behavior. The standardized path coefficients are shown on each arrow, providing a clear visualization of the strength of each relationship in the mediation model.The direct effect of organizational change on employee resistance behavior is represented by the arrow connecting these two constructs. The indirect effects are shown through the paths via uncertainty perception and job insecurity. The curved paths and strategically placed nodes create a clean, professional look while clearly depicting the relationships between variables.

This visualization helps to understand the complex interplay of factors contributing to employee resistance behavior in the context of organizational change. The standardized coefficients allow for easy comparison of the relative strengths of different paths in the model.

4.3.3. Moderation effects testing

To examine the moderating role of organizational identification in the relationship between organizational change and employee resistance behavior, we conducted hierarchical regression analyses. We tested the following hypothesis:

H7: Organizational identification moderates the relationship between organizational change and employee resistance behavior, such that the relationship is weaker when organizational identification is high.

Results supported the hypothesized moderation effect. The interaction term between organizational change and organizational identification was significant ($\beta = -0.15$, $p < .001$), indicating that organizational identification indeed moderates the relationship between organizational change and employee resistance behavior.

Table 3. Presents the results of the hierarchical regression analysis.

Variable	Model 1 β	Model 2 β	Model 3 β
Organizational Change (OC)	0.32***	0.30***	0.28***
Organizational Identification (OI)		-0.25***	-0.23***
OC × OI			-0.15***
R^2	0.10	0.16	0.18
ΔR^2		0.06***	0.02***

Note: *** p < .001

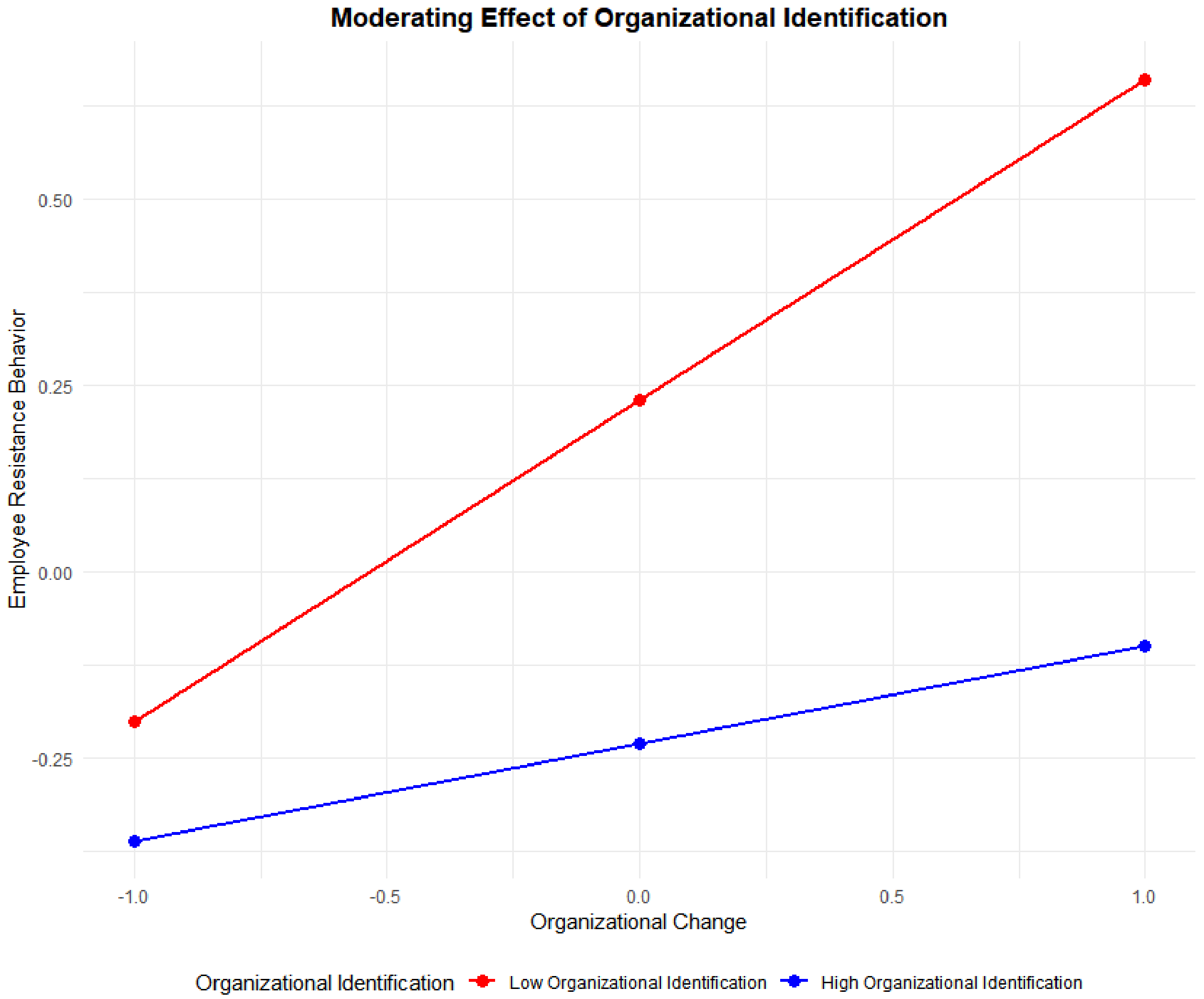

Figure 6. Moderating Effect of Organizational Identification on the Relationship between Organizational Change and Employee Resistance BehaviorThe plot illustrates that the positive relationship between organizational change and employee resistance behavior is weaker for employees with high organizational identification, supporting our hypothesis.

4.4. Robustness test

To ensure the reliability of our findings, we conducted several robustness checks. First, we tested our model using alternative measures of organizational change and employee resistance behavior. Second, we employed different estimation methods, including maximum likelihood with robust standard errors (MLR) and weighted least squares mean and variance adjusted (WLSMV). Third, we examined the model's stability across different subsamples, including industry sectors and organizational sizes.

Results from these checks, presented in **Table 4**, demonstrate the robustness of our findings. The direction and significance of key relationships remained consistent across different specifications, supporting the stability of our results.

Table 4. Results of robustness checks.

Model Specification	OCM → ERB	UP Mediation	JI Mediation	OI Moderation
Base Model	0.28***	0.11***	0.09***	-0.15***
Alternative Measures	0.26***	0.10***	0.08***	-0.14***
MLR Estimation	0.29***	0.12***	0.09***	-0.16***
WLSMV Estimation	0.27***	0.11***	0.08***	-0.15***
Manufacturing Sector	0.30***	0.13***	0.10***	-0.17***
Service Sector	0.27***	0.10***	0.08***	-0.14***
Large Organizations	0.29***	0.12***	0.09***	-0.16***
Small Organizations	0.26***	0.09***	0.07***	-0.13***

Note: *** p < .001; OCM = Organizational Change Magnitude; ERB = Employee Resistance Behavior; UP = Uncertainty Perception; JI = Job Insecurity; OI = Organizational Identification.

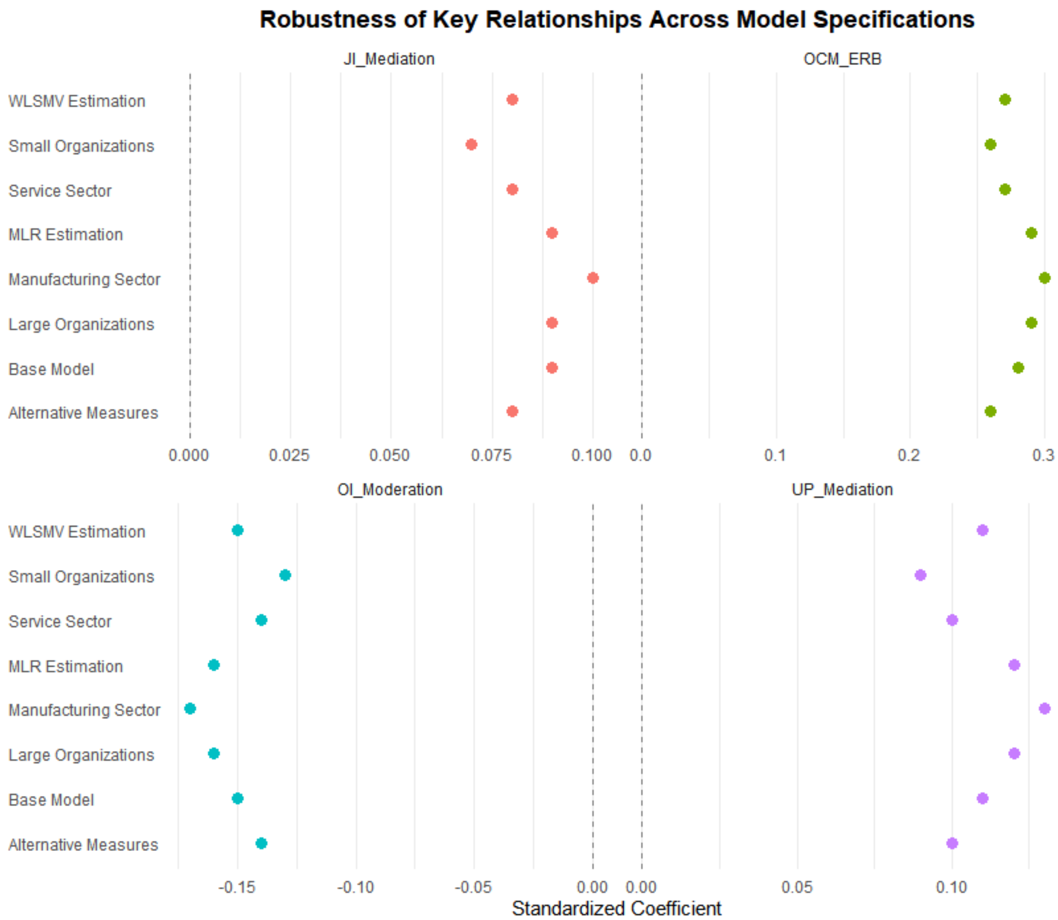

Figure 7. Robustness of key relationships across model specifications.

This coefficient plot demonstrates the consistency of our key findings across various model specifications and subsamples. The stability of coefficient magnitudes and directions supports the robustness of our results.

5. Discussion

5.1. Key findings and theoretical implications

Our study provides significant insights into the dynamics of employee resistance during organizational change in the context of economic downturns. The findings offer a nuanced understanding of the psychological mechanisms at play and contribute to several theoretical domains within organizational behavior.The strong positive relationship we found between the magnitude of organizational change and employee resistance behavior, partially mediated by uncertainty perception and job insecurity, extends the existing literature on organizational change. These results align with and build upon uncertainty reduction theory[38] and job insecurity research[18]. While previous studies have examined these factors separately[22,24], our research uniquely integrates them within the context of economic downturns, demonstrating how employees' cognitive appraisals of change shape their behavioral responses under heightened economic pressure.Moreover, our finding that organizational identification moderates the relationship between change magnitude and resistance behavior contributes to social identity theory in the context of organizational change. This extends the work of van Dick et al.[35] by demonstrating the buffering effect of strong organizational identification against change-induced stress, particularly during economic challenges. Our results suggest that organizational identification may serve as a psychological resource, helping employees cope with the uncertainties and insecurities associated with organizational change during economic downturns.Importantly, the consistency of these relationships across different sectors and organizational sizes, even in the challenging context of economic downturns, enhances the generalizability of our findings. This extends the applicability of existing change management theories[8,9] and underscores the importance of considering economic context in organizational behavior research, addressing a gap identified by scholars such as Judge et al.[19].Our study also advances theoretical integration in the field of organizational change. By combining elements from uncertainty reduction theory, job insecurity research, and social identity theory, we provide a more holistic framework for understanding the complex dynamics of employee reactions to change. This integrated approach paves the way for more sophisticated models of organizational change that can account for both psychological processes and contextual factors, addressing calls for more comprehensive theories in the field[14].Furthermore, our research contributes to the literature on economic downturns and organizational behavior. While previous studies have examined the impact of economic conditions on employee attitudes and behaviors[30], our work specifically focuses on how economic downturns influence the change-resistance relationship. This addresses a significant gap in the literature and provides a more contextually grounded understanding of organizational change processes.

In sum, these findings significantly contribute to our theoretical understanding of change management, employee behavior, and the role of organizational identification in turbulent economic times. They lay the groundwork for more nuanced models of organizational change that incorporate both individual-level psychological processes and broader contextual influences. Future research can build on this integrated framework to further explore the interplay between organizational change, economic conditions, and employee responses across various contexts and cultures.

5.2. Managerial implications

Our research findings offer valuable insights for managers navigating organizational change during economic downturns. The results underscore the importance of addressing employee uncertainty and job insecurity through clear, consistent communication. Managers should prioritize transparent dialogue about change initiatives, using multiple channels to keep employees informed and engaged. Providing reassurances about job security where possible, or offering support for skill development and career transitions, can mitigate negative effects of job insecurity.The moderating role of organizational identification highlights the value of fostering a strong sense of belongingness. Leaders should emphasize shared goals, celebrate collective achievements, and involve employees in decision-making processes to strengthen organizational identity. While our findings were consistent across sectors and organizational sizes, managers should tailor strategies to their specific context.Given the economic focus of our study, managers must be sensitive to the broader economic climate when implementing changes. Acknowledging economic concerns explicitly and tying change initiatives to long-term organizational resilience can help alleviate employee anxieties. Additionally, providing psychological support through counseling services or resilience training programs can help employees cope with change-related stress.

Finally, regularly measuring and monitoring employee perceptions throughout the change process allows for timely interventions and strategy adjustments. By incorporating these insights, leaders can more effectively navigate organizational transformations, minimize resistance, and foster an adaptive organizational culture, even in challenging economic times.

5.3. Limitations and future research directions

While our study provides valuable insights into employee resistance to organizational change during economic downturns, it is important to acknowledge its limitations and identify directions for future research. These considerations not only contextualize our findings but also pave the way for further advancements in the field.One primary limitation of our study is its cross-sectional nature. Although we employed a time-lagged design, the study remains essentially cross-sectional, limiting our ability to establish causal relationships definitively. Future research could benefit from longitudinal designs that track changes in employee attitudes and behaviors over extended periods, particularly through complete economic cycles. Such designs would provide a more dynamic understanding of how employee reactions to change evolve over time and in response to shifting economic conditions.Our reliance on self-reported measures may have introduced common method bias, despite the steps taken to mitigate this issue. Future studies could strengthen the validity of findings by incorporating objective measures of organizational change and resistance behaviors, as well as multi-source data. This approach would provide a more robust and comprehensive assessment of the variables under study.

While we examined the model across different sectors and organizational sizes, our study was conducted in a specific cultural context. To enhance the generalizability of our findings, future research should test the model's applicability across different national and cultural settings. This cross-cultural validation would provide insights into how cultural factors might influence employee reactions to change and the effectiveness of various change management strategies.

Our study considered organizational change as a unified construct, but future research could benefit from disaggregating different types of organizational changes (e.g., structural, technological, cultural). Examining whether the psychological mechanisms differ across change types would provide a more nuanced understanding of employee resistance and could inform more targeted change management strategies.Furthermore, while we considered organizational identification, other individual differences (e.g., personality traits, change readiness, resilience) could influence resistance to change. Future studies could incorporate these factors to provide a more comprehensive model of employee reactions to change. This would help in identifying employees who might be more susceptible to change-related stress or more likely to champion change initiatives.Lastly, our focus was primarily on resistance as a negative outcome of change.

Future research could explore positive responses to change, such as change championing or creative problem-solving, and the factors that promote these outcomes. Understanding what drives positive reactions to change could be particularly valuable for organizations seeking to build more change-ready cultures.

By addressing these limitations and pursuing these future research directions, scholars can contribute to a more comprehensive and nuanced understanding of employee resistance to organizational change, particularly in challenging economic contexts.

6. Conclusion

This study provides crucial insights into the dynamics of employee resistance to organizational change during economic downturns, offering both theoretical advancements and practical implications. By examining the mediating roles of uncertainty perception and job insecurity, as well as the moderating effect of organizational identification, we have illuminated the complex psychological mechanisms underlying employee responses to change. Our findings underscore the importance of addressing employees' cognitive and emotional reactions during change initiatives, particularly in challenging economic contexts. The consistency of our results across different sectors and organizational sizes enhances their generalizability, contributing to a more comprehensive understanding of change management. For practitioners, our study highlights the need for transparent communication, efforts to bolster organizational identification, and strategies to mitigate uncertainty and job insecurity during change processes. While acknowledging limitations such as the cross-sectional nature of our data, this research opens avenues for future studies, including longitudinal designs and cross-cultural investigations. As organizations continue to navigate an increasingly volatile business environment, the insights from this study provide a foundation for developing more effective, employee-centric change management strategies. Ultimately, by understanding and addressing the psychological underpinnings of resistance, organizations can foster greater adaptability and resilience in the face of ongoing economic challenges and organizational transformations.

Conflict of interest

The authors declare no conflict of interest.

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