

The Relationship between Individual Learning Capability and Intention to Remain: A Case Study of The Semiconductor Industry in The Yangtze River Delta, China

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Abstract

This research assesses the collective influence of organizational change cognition, organizational trust, and cynicism toward organizational change on employees' intention to remain in the organization within the semiconductor industry in the Yangtze River Delta, China. Then intention to remain, while analyzing the mediating role of organizational change cognition and organizational trust. Data were collected from 405 full-time employees working in semiconductor companies in the Yangtze River Delta, China. The study employed Confirmatory Factor Analysis (CFA) via AMOS to assess the model fit indices, yielding strong goodness-of-fit results, confirming the reliability and validity of the measures.

The findings reveal a significant correlation between individual learning capability and intention to remain, indicating both direct and indirect connections with change cognition and organizational trust acting as mediating variables. The interaction among learning capability, trust, and cynicism collectively affects employees' intention to remain, whereas change cognition shows no significant direct correlation with intention to remain.

Keywords: Individual learning capability, intention to remain, organizational change, semiconductor industry

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Introduction

Background

In today's fast-paced and ever-changing business landscape, companies are frequently thrust into profound transformations, confronting heightened levels of ambiguity, uncertainty, instability, and complexity. Among the industries at the forefront of this tumultuous environment is the semiconductor industry, a pivotal driver of technological innovation and economic growth. The relentless pace of change in this sector demands constant adjustments to goals, structures, and functions, which are crucial for maintaining competitive advantage. Yet, despite the clear necessity of organizational change, achieving successful outcomes remains an elusive goal. Empirical evidence starkly reveals that only 30.00 to 50.00 percent of such initiatives meet their intended objectives (Burnes & Jackson, 2011; McGinnis, 2015). The development of China's semiconductor industry, already fraught with challenges, has been further complicated by the Covid-19 pandemic and the imposition of stringent restrictions by the United States on China's access to advanced semiconductor technologies.

This precarious scenario underscores the significant challenges faced by human resource management within the semiconductor industry. Resistance to change is a substantial obstacle deeply embedded within organizational structures, impeding the successful implementation of change initiatives (Kotter, 2009). Beyond these organizational barriers, personal resistance to change also emerges as a critical impediment to progress (Lines, Selart, Espedal, & Johansen, 2007). Among the most formidable forms of resistance is employee cynicism, which serves as a major barrier to successful organizational change. Cynicism is often fueled by evaluative judgments rooted in personal experiences within the organization, leading cynically-minded employees to view change as futile and to distrust management's motives. These employees frequently attribute change failures to implementation inadequacies (Wanous, Reichers, & Austin, 2000).

As Chinese semiconductor companies strive to navigate a rapidly evolving environment, they face the dual challenge of mitigating resistance and fostering positive employee attitudes. This issue is not just a managerial concern but a strategic imperative, given the critical role of employee perceptions in the success of organizational change initiatives. Despite extensive research on the antecedents of cynicism toward organizational change, there remains a notable gap in understanding the role of

individual learning capability in this dynamic. Previous studies have primarily linked individual learning capability to cognitive and learning psychology, rarely examining it from the perspective of organizational behavior, particularly in the context of organizational change. Given that a lack of understanding about change contributes to unsupportive attitudes and disengagement from change-related behaviors (Bovey & Hede, 2001) and recognizing that personal learning plays a pivotal role in shaping one's cognition and attitude, this study seeks to bridge this gap. It aims to explore how personal factors, with learning capability as the focal point, influence cynicism during organizational change. By doing so, this research intends to provide insights that can inform strategies to mitigate cynicism, enhance employee retention, and ultimately improve the success rate of organizational change in China's semiconductor sector.

The Research Questions

The research objectives are to assess the collective influence of organizational change cognition, organizational trust, and cynicism toward organizational change on employees' intention to remain in the organization within the semiconductor industry in the Yangtze River Delta, China.

The Objectives of this Research Study

We will assess the collective influence of organizational change cognition, organizational trust, and cynicism toward organizational change on employees' intention to remain in the organization within the semiconductor industry in the Yangtze River Delta, China.

Literature Review

Organizational Learning Theory

Nevertheless, consensus remains elusive regarding the preferred perspective for examining organizational learning. Argyris and Schön (1978) view organizations holistically, defining learning as a continuous iterative process of error correction and laying the foundation for organizational learning theory. Alternatively, it is perceived as refining action through enhanced comprehension. Senge (1990) defines it as an ongoing endeavor by organizations to cultivate capabilities continuously.

However, alternative viewpoints position organizational learning as a facet of knowledge management rather than solely as a process. It is seen as a dynamic process rooted in knowledge acquisition and integration, described as a three-stage knowledge processing cycle (Nevis, Dibella, & Gould, 1995). Knowledge is managed to enhance organizational performance through creation, acquisition, transfer, and integration (Jerez-Gómez, Céspedes-Lorente, & Valle-Cabrera, 2005). Advocates like Wan Hooi and Sing Ngui (2014) stress managerial intervention to ensure the efficiency and efficacy of organizational learning. They emphasize the consistent prioritization of knowledge development and utilization, aligning with organizational objectives to facilitate goal attainment.

The perspective focuses on hierarchical transformation, defining organizational learning as orchestrating knowledge transfer for improved behaviors (Garvin, 1993). The distinction between individual and organizational learning levels is highlighted, emphasizing the role of individual mental model evolution in organizational change. Organizations possess distinct identities beyond individual members, extending organizational learning beyond mere integration of individual learning (Crossan, Lane, White, & Djurfeldt, 1995). The centrality of teams in organizational learning is stressed by Murray and Moses (2005). Organizational learning encompasses the learning processes of individuals, groups, and the organization, wherein learning behaviors at any hierarchical level can catalyze learning at other levels.

Organizational Change Theory

Organizations and collaborative entities formed to facilitate social interactions and achieve common objectives, evolve with societal dynamics, undergoing change to optimize efficiency and competitiveness. This process, drawing upon behavioral science, values, and technology, modifies workflows and behaviors. Originating in the 1940s, organizational change gained prominence through Lewin's three-stage model, emphasizing equilibrium and the interplay of driving and restraining forces. Driving forces include technological advancements, shifts in competitive models, organizational restructuring, policy, and environmental issues, while restraining forces involve organizational norms, culture, and regulations. These forces interact in stages of unfreezing, changing, and refreezing (Lewin, 1947).

Kast and Rosenzweig (1985) introduced systems theory into organizational change research, conceptualizing organizations as organic wholes with subsystems interacting with the environment. Organizational survival and development depend on adapting internal elements, especially those constraining change. Miles, Snow, Meyer, and Coleman Jr (1978) presented a cyclical model of organizational change, aligning mission/strategy, technology strategy, and structural functionality. Organizations position themselves within the external environment and relationship structures through adaptive cycles.

Identifying obstacles to organizational change is crucial in change theory. Resistance arises at individual, group, and organizational levels. Individual resistance stems from entrenched professional identities unable to adapt; group resistance involves maintaining stable relationships and opposing benefit redistribution; organizational resistance arises from entrenched conventions unable to meet change demands. Therefore, organizations achieve new strategic goals by incorporating various change elements and preparing for change.

Organizational change, influenced by internal and external factors, demands proactive adaptation and strategic alignment with objectives. Crucially, it hinges on individual learning. The ability of individuals to acquire, process, and apply new knowledge drives and sustains change initiatives. As individuals learn and grow, they catalyze organizational transformation, injecting fresh perspectives, innovative ideas, and adaptive behaviors into the organizational culture.

Cognitive theory

Social cognitive theory highlights interactive relationships among individuals, environments, and behaviors. Through personal characteristics and environmental factors, individuals elicit specific behaviors (Bandura, 1997), emphasizing reciprocal influences among them, driven by subjective agency. This framework enables active engagement with the environment and corresponding changes.

Unlike behaviorism, which portrays individuals as passive recipients of environmental stimuli, social cognitive theory recognizes individuals' agency in shaping their environments. Bandura's subsequent refinements incorporated individual psychological and cognitive processes as a third element, forming an analytical model where environment, behavior, and individual psychology jointly determine human activities. Emphasizing the intricate process of individuals processing environmental

information and reinforcing behaviors, social cognitive theory underscores the synergistic interplay between cognition and behavior. Additionally, it elucidates observational learning's components: attention, retention, reproduction, and motivation, where individuals assimilate others' behaviors and apply them (Bandura, 1997).

In organizational contexts, individuals' characteristics influence their cognitive processes and contents, impacting attitudes and behaviors related to cognition. Divergent perspectives on organizational phenomena exist among individuals in such contexts, reflecting varying levels of enthusiasm and commitment to organizational change initiatives (Baron, 2004; Walsh, 1995).

The Conceptual Framework

This research focuses on full-time employees within the semiconductor manufacturing sector, constituting the population of interest. Specifically, the target population encompasses individuals currently holding staff positions within the semiconductor industry in the Yangtze River Delta, China.

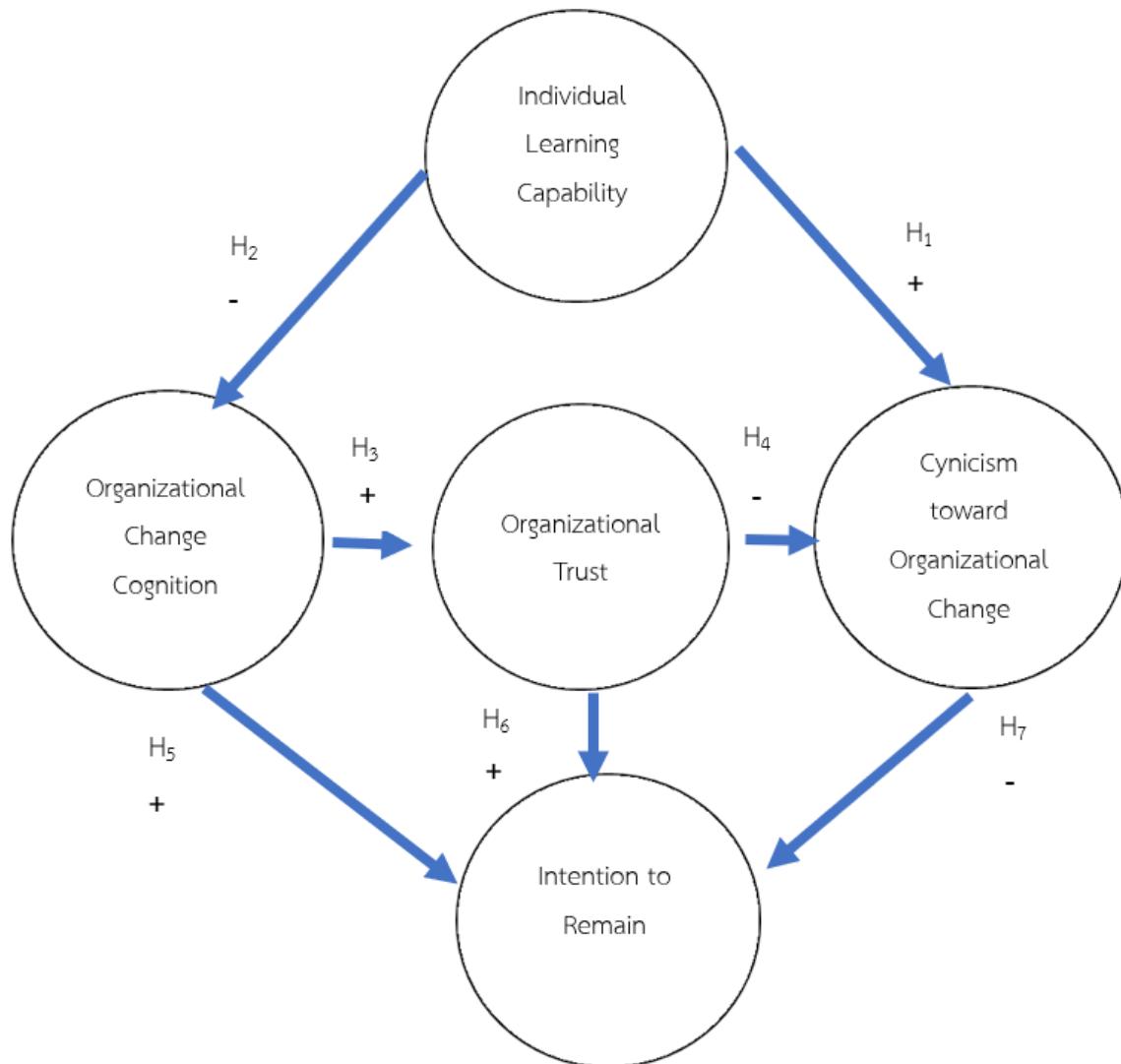


Figure 1. Conceptual Framework

Hypotheses of Research

Hypotheses 1: Individual learning capability is negatively related to cynicism toward organizational change. (-)

Hypotheses 2: Individual learning capability is positively related to organizational change cognition. (+)

Hypotheses 3: Organizational change cognition is positively related to organizational trust. (+)

Hypotheses 4: Organizational trust is negatively related to cynicism toward organizational change. (-)

Hypotheses 5: Organizational change cognition is positively related to intention to remain. (+)

Hypotheses 6: Organizational trust is positively related to intention to remain. (+)

Hypotheses 7: Cynicism toward organizational change is negatively related to intention to remain.

(-)

Research Methodology

Research Methods

This research aims to clarify the relationship between individual learning capability and intention to remain within the semiconductor industry in the Yangtze River Delta, China. It was conducted using a quantitative approach. A questionnaire was used as a measurement instrument to test how each factor – individual learning capability, organizational change cognition, and organizational trust – affects cynicism toward organizational change and employees' intention to remain in the organization within the semiconductor industry in the Yangtze River Delta, China. A quantitative approach is more appropriate than a qualitative one for this research, as it aims to assess the relationships between the variables and scientifically test the hypotheses. The questionnaire is shown in the appendix.

The statistical method used for this research to test the hypotheses and to determine the causal relationships between variables is based on the structural equation modeling (SEM) technique. SEM is a multivariate statistical analysis technique used in situations where the key constructs are complex and multi-faceted.

The structural model was used to clarify the relationship between Individual Learning Capability and Cynicism toward Organizational Change, to investigate the role of Organizational Change Cognition and Organizational Trust in the relationship, and to assess the collective influence of Organizational Change Cognition, Organizational Trust, and Cynicism toward Organizational Change on employees' intention to remain in the organization of the semiconductor sector.

Cronbach's alpha test was performed as a preliminary statistical analysis of this study in order to assess the reliability of the data. Cronbach's alpha test was conducted with the individual-level data using the SPSS program. For evaluation of Cronbach's alpha, the work of Nunnally (1978) provided that the lower cut-off (0.70) was appropriate in the early stages of research such as for exploratory

research during scale development, and more stringent cut-offs should be used for basic research (0.80 or higher) and applied research (0.90 or higher) (Lance, Butts, & Michels, 2006).

To assess construct validity, defined as “the degree to which a set of measure items actually assess the identical construct” (Hair, Black, Babin, Anderson, & Tatham, 2006), analyses were conducted for five key constructs in this research model. This involved factor analysis aiming to assess factor loadings exceeding the recommended value of 0.50 or not, affirming the validity of the proposed framework. Likewise, the structural accuracy should be revealed by Composite Reliability (CR) of latent variables. Molina, Lloréns-Montes, and Ruiz-Moreno (2007) suggested that CR should have a minimum value of 0.70. Subsequently, convergent validity was adopted to assess the degree to which dimensional measures of the same concept are correlated (Byrne, 1994). In other words, the higher value of convergent validity the better the proposed framework. Byrne (1994) and Xie (2011) further emphasized that the scale should be strongly loaded on a common construct. Fornell and Larcker (1981) suggested three conditions for evaluating the convergent validity: (1) all factor loadings should be significant at the p-value of less than 0.01, (2) CR should be higher than 0.60, and (3) an average variance extracted (AVE) should be higher than 0.50.

Units of Analysis, Data Sources and Target Samples

The population of the workforce in the semiconductor industry in the Yangtze River Delta was approximately 310,000, according to data from the National Bureau of Statistics of China (2022), Jiangsu Provincial People’s Government (2022), People’s Government of Anhui Province (2022), People’s Government of Zhejiang Province (2022), and Shanghai Municipal People’s Government (2022). Therefore, the estimated population of workers who are actively engaged in the semiconductor industry in the Yangtze River Delta, China, is 310,000.

Data Collection and Analysis

Based on the SEM requirements, many researchers recommend the use of at least 200 participants as the sample size, or 5–15 respondents per item (Kline, 2016). This study has obtained a sample size of 384 participants. There were 405 managers and employees working in the semiconductor industry in the Yangtze River Delta, China, who participated in the questionnaire.

The questionnaire was distributed to managers and employees who are currently employed by companies in the semiconductor industry within the Yangtze River Delta, China. The questionnaire was distributed directly to the participants, with managers' consent, through instant messaging apps, including Wechat, QQ, and Dingtalk.

Research Results

This research employed the SEM approach to analyze the data, following the two-step modeling process recommended by previous scholars, namely the measurement model and the structural model (Hair, Anderson, Tatham, & Black, 1998). The initial step involved testing the measurement model's validity and reliability through confirmatory factor analysis (CFA), while the second step explored the structural relationships between the independent and dependent variables.

The key advantage of SEM, surpassing multiple regression analysis, lies in its ability to simultaneously investigate relationships between constructs within the entire model. Additionally, SEM offers a comprehensive examination of the relationships between independent and dependent variables. Furthermore, SEM can elucidate unobservable concepts and identify estimation errors not detectable by multiple regression analysis (Prajogo & Cooper, 2010). This study utilized SEM, aligning with the recommendation of employing multivariate analysis to test the research hypotheses within the proposed framework (Lee et al., 2010). Figure 2 illustrates the model configuration for the performance framework investigated using SEM.

To assess construct validity, defined as "the degree to which a set of measure items actually assess the identical construct" (Hair et al., 2006), analyses were conducted for five key constructs in this research model. Results in Table 4.10 indicate that all indicators had factor loadings exceeding the recommended value of 0.50, affirming the validity of the proposed framework.

Likewise, the structural accuracy can be revealed by Composite Reliability (CR) of latent variables. Molina et al. (2007) suggested that CR should have a minimum value of 0.70. In Table 1, it is observed that all indicators had CR values within such acceptable levels. It can be concluded that the proposed framework can measure what it intended to measure based on the theory (Nunnally, 1978).

Byrne (1994) stated that “convergent validity assesses the degree to which dimensional measures of the same concept are correlated”. In other words, the higher the value of convergent validity the better the proposed framework. Byrne (1994) and Xie (2011) further emphasized that the scale should be strongly loaded on a common construct. Hence, Fornell and Larcker (1981) suggested three conditions for evaluating the convergent validity: (1) all factor loadings should be significant at the p-value of less than 0.01, (2) CR should be higher than 0.60, and (3) an average variance extracted (AVE) should be higher than 0.50.

The loadings for the measurement model, shown in Table 1 below, indicate that the factor loadings for each item are greater than 0.50, suggesting that the convergent validity is adequate for all constructs. The AVE of each construct exceeds 0.50, which suggests convergent validity and reliability. CR was used to measure the internal consistency of scale items in the questionnaire. The CR values of each dimension were above the criteria of 0.70 (Molina et al., 2007): individual learning capability equaled to 0.936; organizational change cognition equaled to 0.934; organizational trust equaled to 0.912; cynicism toward organizational change equaled to 0.899 and intention to remain equaled to 0.778. This means that all scales ranged within such acceptable limits and implies that the measures were good and ensured the accuracy of strong convergence.

Table 1. Descriptive statistics for each questionnaire item

| ID | LIST | Mean | SD | Loadings | AVE* | CR** |
|------|--|------|-------|----------|-------|-------|
| LC1 | Recognizes new changes, trends, and work-related opportunities promptly and accurately. | 3.61 | 1.245 | 0.751 | 0.594 | 0.936 |
| LC2 | Identifies potential work-related issues, challenges, or hazards in a timely and precise manner. | 3.60 | 1.248 | 0.744 | | |
| LC3 | Promotes the development of creative strategies and solutions in response to work-related changes. | 3.58 | 1.307 | 0.784 | | |
| LC4 | Exhibits proficiency in making well-informed decisions when confronted with multiple considerations or options at work. | 3.56 | 1.307 | 0.808 | | |
| LC5 | Ensures efficient translation of ideas into practical actions and successful implementation in the workplace. | 3.60 | 1.291 | 0.783 | | |
| LC6 | Encourages the application of work-related experiences on a broader scale and embraces learning from work-related mistakes. | 3.59 | 1.325 | 0.755 | | |
| LC7 | Maintains the practice of summarizing work experiences and reflecting on past work-related experiences. | 3.58 | 1.300 | 0.787 | | |
| LC8 | Demonstrates proficiency in acquiring relevant work-related knowledge and expertise from external sources. | 3.63 | 1.267 | 0.806 | | |
| LC9 | Efficiently communicates and conveys ideas, knowledge, and experiences through verbal and written means in the workplace. | 3.66 | 1.269 | 0.752 | | |
| LC10 | Demonstrates proficiency in recording and managing knowledge and experiences, ensuring their organization, storage, and accessibility for use. | 3.64 | 1.216 | 0.736 | | |

Table 1. Descriptive statistics for each questionnaire item (continued)

| ID | LIST | Mean | SD | Loadings | AVE* | CR** |
|------|--|------|-------|----------|-------|-------|
| CC1 | The company's change is essential to prevent potential business crises. | 3.90 | 1.118 | 0.71 | 0.561 | 0.934 |
| CC2 | Change contributes to enhancing the company's competitiveness and overall performance. | 3.76 | 1.186 | 0.742 | | |
| CC3 | The change aligns with upcoming trends and developmental prospects. | 3.81 | 1.128 | 0.675 | | |
| CC4 | Confidence is placed in the company's ability to set reasonable and feasible change goals and management's ability to achieve them. | 3.75 | 1.276 | 0.765 | | |
| CC5 | The anticipated outcomes of this change in the company are expected to outweigh the associated costs, ensuring a favorable cost-benefit ratio. | 3.78 | 1.245 | 0.775 | | |
| CC6 | Concerns exist regarding the fairness and transparency toward employees during the change process. | 3.83 | 1.247 | 0.818 | | |
| CC7 | There is concern that communication between the company and employees during the change process may become superficial. | 3.80 | 1.187 | 0.732 | | |
| CC8 | Worries have emerged about decreased benefits and job security due to the change. | 3.81 | 1.183 | 0.76 | | |
| CC9 | Apprehensions are present about adapting to new job roles or acquiring new skills after the change. | 3.78 | 1.213 | 0.777 | | |
| CC10 | There is concern about the challenge of adjusting to the new cultural and interpersonal environment after the change. | 3.81 | 1.172 | 0.741 | | |
| CC11 | There is fear about the inability to fully leverage professional strengths after the change. | 3.75 | 1.178 | 0.737 | | |

Table 1. Descriptive statistics for each questionnaire item (continued)

| ID | LIST | Mean | SD | Loadings | AVE* | CR** |
|------|---|------|-------|----------|-------|-------|
| OT1 | The organization is relied upon to provide employee benefits and ensure their well-being. | 3.61 | 1.312 | 0.783 | 0.596 | 0.912 |
| OT2 | Confidence persists that the company will not take actions harmful to its employees, even in uncertain future circumstances. | 3.57 | 1.362 | 0.801 | | |
| OT3 | Based on collective perceptions, the majority of colleagues consider the company trustworthy and express unwavering confidence in its growth. | 3.60 | 1.262 | 0.733 | | |
| OT4 | Supervisors are perceived as highly competent in their roles. | 3.58 | 1.289 | 0.761 | | |
| OT5 | Confidence is placed in the supervisor's commitment to fair treatment. | 3.57 | 1.315 | 0.793 | | |
| OT6 | Support and assistance from my supervisor are assured, regardless of the circumstances. | 3.57 | 1.299 | 0.769 | | |
| OT7 | There is full confidence in colleagues' job capabilities. | 3.56 | 1.276 | 0.764 | | |
| COC1 | Most of the programs that are supposed to solve problems around here will not do much good. | 2.25 | 1.238 | 0.774 | 0.561 | 0.899 |
| COC2 | Attempts to make things better around here will not produce good results. | 2.30 | 1.239 | 0.743 | | |
| COC3 | Suggestions and change plans are unlikely to result in substantial improvements. | 2.26 | 1.188 | 0.708 | | |
| COC4 | The people responsible for solving problems around here do not try hard enough to solve them. | 2.39 | 1.263 | 0.756 | | |
| COC5 | The people responsible for making things better around here do not care enough about their jobs. | 2.44 | 1.314 | 0.756 | | |
| COC6 | The people responsible for making improvements lack the necessary knowledge or skills. | 2.33 | 1.297 | 0.773 | | |

Table 1. Descriptive statistics for each questionnaire item (continued)

| ID | LIST | Mean | SD | Loadings | AVE* | CR** |
|-----|--|------|-------|----------|-------|-------|
| CO7 | The people responsible for fixing problems around here cannot really be blamed if things do not improve. | 2.33 | 1.274 | 0.731 | | |
| IR1 | I have no intentions of voluntarily leaving the organization in the upcoming year. | 3.79 | 1.185 | 0.728 | 0.538 | 0.778 |
| IR2 | I consider the organization I work for to be a recommended place of employment. | 3.69 | 1.222 | 0.735 | | |
| IR3 | Regardless of the situation, I aim to stay employed with this organization for an extended period. | 3.80 | 1.184 | 0.738 | | |

Note: * AVE = Average variance extracted. Calculated according to Fornell and Larcker (1981).

** CR = Composite reliability. Calculated according to Fornell and Larcker (1981).

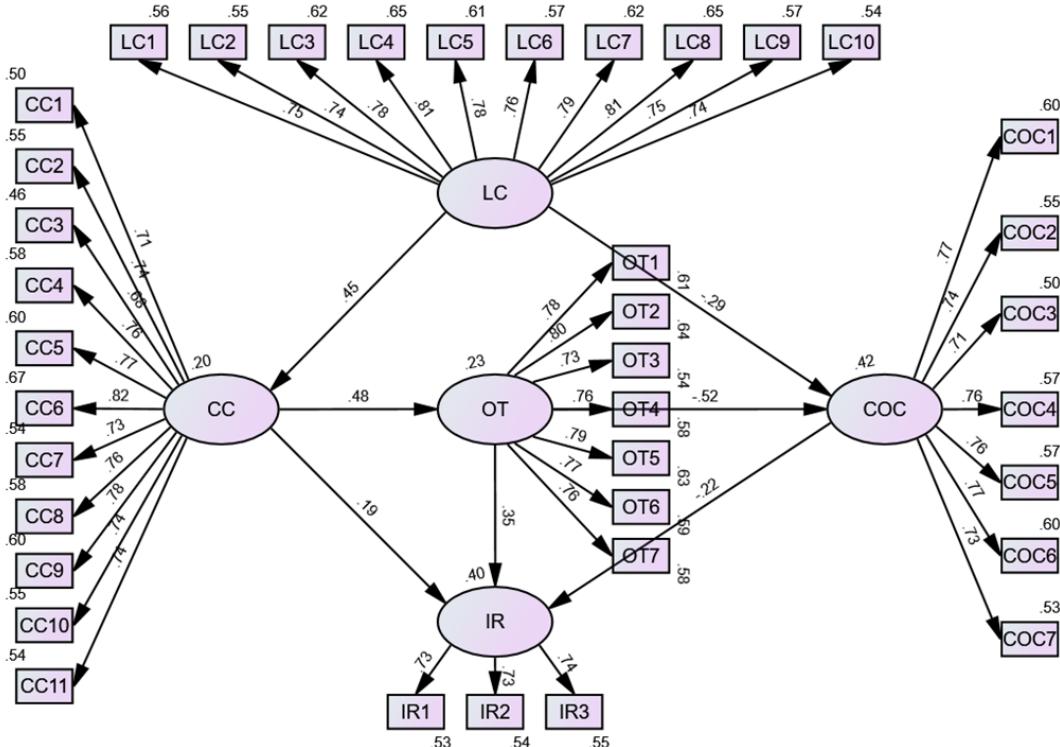


Figure 2. Research framework with coefficient.

Note: CMIN/DF = 1.233 Chi-Square/df= 0.003 df= 404

GFI= 0.909, CFI= 0.983, RMSEA=0.024

Table 2. Model fit summary

| Model Fit Summary | | | |
|-------------------------|-------|----------|----------------------------------|
| Goodness-of-Fit Indices | Value | Criteria | References |
| CMIN/DF | 1.233 | ≤ 3 | Hair et al. (2006) |
| CFI | 0.983 | ≥ 0.90 | Hu and Bentler (1999) |
| GFI | 0.909 | ≥ 0.90 | Jöreskog and Sörbom (1993); |
| | | | Hu and Bentler (1999) |
| AGFI | 0.897 | ≥ 0.90 | Bagozzi and Yi (1988) |
| TLI | 0.982 | ≥ 0.90 | Hu and Bentler (1999) |
| NFI | 0.918 | ≥ 0.90 | Bagozzi and Yi (1988) |
| RMSEA | 0.024 | ≤ 0.08 | Browne and Cudeck (1993); |
| | | | Diamantopoulos and Siguaw (2000) |

Note: CMIN/DF = minimum discrepancy function by degrees of freedom divided; CFI = comparative fit index; GFI = goodness-of-fit index; AGFI = adjusted goodness of fit index; TLI = Tucker-Lewis Index; NFI = normed fit index; and RMSEA = root mean square error of approximation.

Key Research Findings

Bootstrap technique (2,000 draws) was performed to execute the mediation analysis within SPSS AMOS and evaluate the model's indirect effect and significance. The mediation model includes four paths representing the indirect effects from the independent variable, individual learning capability, to the dependent variable, intention to remain. These paths are distinctly designated and quantified. Path 1, denoted as SIE1, delineates the indirect effect mediated by cynicism. Similarly, Path 2, labeled SIE2, signifies the indirect effect mediated through change cognition. Moving forward, Path 3, referred to as SIE3, captures the indirect effect through change cognition and organizational trust. Lastly, Path 4, identified as SIE4, represents the indirect effect through change cognition, organizational trust, and cynicism. Table 2 provides a comprehensive overview, presenting the numerical values for each indirect effect, the total indirect effect, the total effect, and the proportional contribution of each indirect effect.

The path of SIE1 represents the indirect effect of individual learning capability on intention to remain through the mediation of cynicism. The result indicates that this indirect effect is statistically significant ($p<0.05$). Therefore, cynicism does not play a mediating role in the relationship between individual learning capability and intention to remain. The path of SIE2 signifies the indirect effect of individual learning capability on intention to remain mediated through change cognition. The result shows that this indirect effect is not statistically significant ($p>0.05$), suggesting that change cognition significantly mediates the relationship between individual learning capability and intention to remain. The path of SIE3 captures the indirect effect through change cognition and organizational trust. The result indicates that this indirect effect is statistically significant ($p<0.05$). This implies that both change cognition and organizational trust jointly mediate the relationship between individual learning capability and intention to remain. The path of SIE4 represents the indirect effect through change cognition, organizational trust, and cynicism. The result shows that this indirect effect is statistically significant ($p<0.05$). Therefore, the combined mediation of change cognition, organizational trust, and cynicism is significant in explaining the relationship between individual learning capability and intention to remain.

The path of SIE1 represents the indirect effect mediated by cynicism. The lack of statistical significance for SIE1 suggests that the indirect effect of individual learning capability on intention to remain, mediated through cynicism, is not supported by the data. This result implies that, in the context of this model, cynicism does play a mediating role in the relationship between learning capability and intention to remain. It suggests that the influence of learning capability on intention to remain is channeled through the mechanism of cynicism. The support for Hypotheses 1 and 7 suggests that there is a direct relationship between individual learning capability, cynicism toward organizational change, and intention to remain, while cynicism does not play a mediating role in the overall relationship, though it might still have a direct influence on intention to remain. This indicates that there are possibly other factors or mediators influencing the relationship between individual learning capability and intention to remain.

The result indicates that both indirect effects, SIE2 and SIE3, can be observed, while neither SIE1 nor SIE4 is significant. It's important to note that the SEM result suggests a significant indirect effect, despite hypothesis 5 being rejected proposing a direct positive relationship between organizational change cognition and intention to remain. This implies that while the direct relationship may not be supported, there is evidence of an indirect effect through other variables in the model, such as the

mediating role of cynicism or the combined influence of change cognition and organizational trust. Considering the path of SIE4 proved to be insignificant, the significant indirect effect should be mediated by the combined influence of change cognition and organizational trust, as indicated by the path of SIE3. Since the path of SIE3 represents the indirect effect through change cognition and organizational trust, the statistical significance of this indirect effect suggests that there is a meaningful relationship between individual learning capability, change cognition, organizational trust, and intention to remain. The significant SIE3 implies that organizational trust acts as a mediator in the relationship between individual learning capability and intention to remain. It suggests that the influence of learning capability on intention to remain is not direct but operates through the mediating role of both change cognition and organizational trust. Thus, for individuals with high learning capability, the positive effect on intention to remain is realized through a sequence involving change cognition and organizational trust.

The path of SIE4 represents the indirect effect through change cognition, organizational trust, and cynicism. The non-significant SIE4 suggests that the inclusion of cynicism as a mediator does not contribute significantly to the relationship between individual learning capability and intention to remain. That is, in the context of this model, cynicism does not play a mediating role in the relationship between learning capability and intention to remain. It might indicate that the influence of learning capability on intention to remain is not channeled through the mechanism of cynicism.

In this regard, the results of SEM for the research model can be seen in Figure 3, and the indirect effects are shown in Table 2.

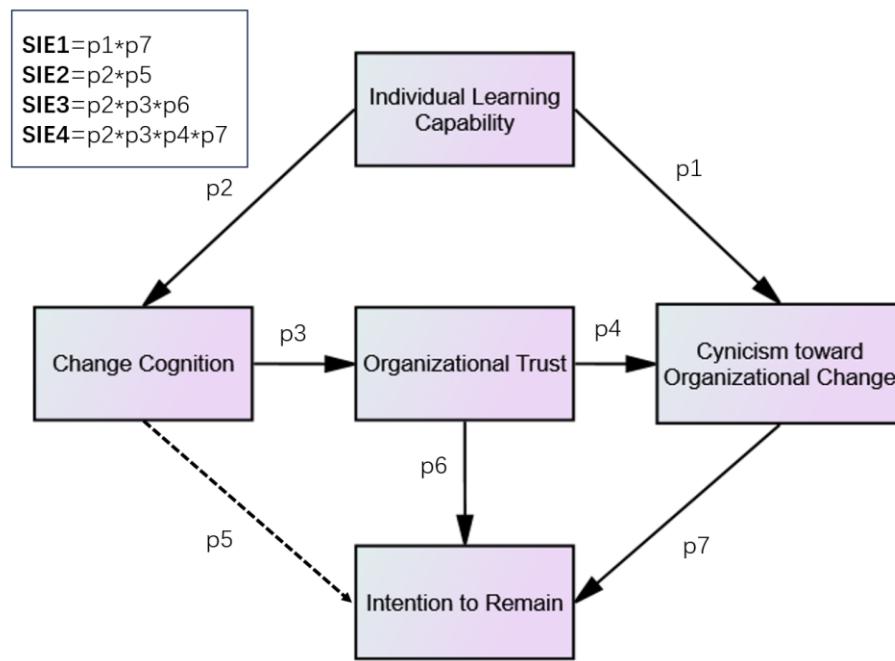


Figure 3. Path analysis of the model

Table 3. Path analysis user-defined estimands.

| Indirect effects: User-defined estimands | | | |
|--|-----------------------|-------|---------|
| SIE1 | Indirect effect 1 | 0.044 | 12.00 % |
| SIE2 | Indirect effect 2 | 0.062 | 16.90 % |
| SIE3 | Indirect effect 3 | 0.059 | 16.20 % |
| SIE4 | Indirect effect 4 | 0.017 | 4.60 % |
| TIE | Total indirect effect | 0.182 | 49.60 % |
| TE | Total effect | 0.367 | 100 % |

The estimated model obtained from the square multiple correlation analysis, shown in Figure 4, indicated that the learning capability model influences cynicism toward organization change at 42.40 percent change cognition at 20.10 percent and organizational trust at 22.80 percent. In addition, it influences intention to remain at 3.96 percent. The findings indicated that this model can be used to predict employees' intention to remain in the organization of the semiconductor industry in the Yangtze River Delta, China.

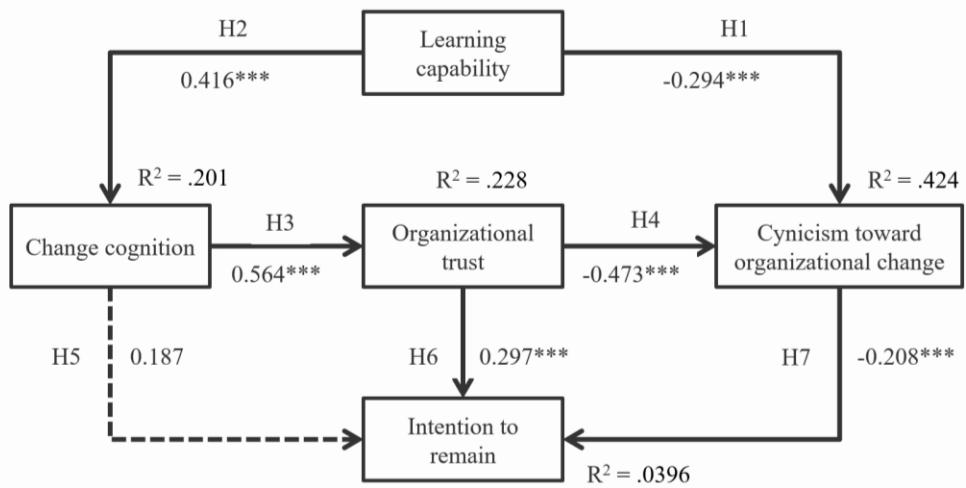


Figure 4. Path coefficients of hypotheses testing.

Note: CMIN/DF = 1.233 Chi-Square/df= 0.003 df= 404

GFI= 0.909, CFI= 0.983, RMSEA=0.024

Moreover, the internal consistency test was carried out, and the results showed a high level of consistency between the variables. in terms of the fitness index values, the Chi-square divided by the df value (CMIN/DF) was 1.233, which met the criteria that a CMIN/DF value of less than 3.00 indicates a good fit (Hair et al., 2010). The structural equation analysis also demonstrated that GFI = 0.909, IFI = 0.983, TLI = 0.982, CFI = 0.983, NFI = 0.918, and RMSEA = 0.024. According to the criteria (Hu & Bentler, 1999), GFI, IFI, TLI, CFI, and NFI must be above 0.90, and RMSEA lower than 0.08. The findings revealed that all values passed the required standards. Thus, it could be said that the independent and mediating variables, comprising learning capability, change cognition, organizational trust, and cynicism toward organizational change, in the structural equation model had a significant impact on intention to remain. The model fit well with theoretical model and was consistent with the empirical data. All values met the criteria, indicating that the developed structural equation model provided a good fit to the data.

Discussion of Results

The Relationship between Individual Learning Capability and Cynicism toward Organizational Change

The results of testing Hypothesis 1 demonstrated that individual learning capability had a negatively significant relationship to cynicism toward organizational change. The findings corroborate with Organizational Learning Theory, which posits that continuous learning enhances employees' adaptability and openness to change (Senge, 2006). Individuals who actively engage in learning are more likely to perceive organizational changes positively, viewing them as opportunities for growth rather than threats. The significant impact of individual learning capability on reducing cynicism is supported by the idea that education and critical thinking can counteract cynicism. Duarte (2010) argues that reflection and critical thinking enable shifts in consciousness, leading to a deeper understanding and appreciation of ethical conduct in management. Stavrova and Ehlebracht (2018) further confirm this by showing that education is associated with lower levels of cynicism over extended periods. Similarly, Mihailidis (2009) suggests that teaching critical analysis skills can help reduce negative thinking, turning students into active, engaged citizens. Additionally, Kroll and Pasha (2021) highlight the importance of information sharing and knowledge creation, noting that learning forums should focus on actionable insights to mitigate reform cynicism among middle managers. Moreover, this study's results align with prior research indicating that employees with higher learning capabilities tend to have better problem-solving skills and decision-making abilities, which reduces their resistance to change (Christensen, Dyer, & Gregersen, 2011). The ability to understand and adapt to new situations minimizes feelings of uncertainty and fear, key drivers of cynicism toward organizational change.

From the perspective of industrial-organizational psychology, the negative relationship between individual learning capability and cynicism toward organizational change suggests that enhancing employees' learning capabilities can mitigate cynical attitudes. This finding aligns with theories of self-efficacy and psychological empowerment, which posit that individuals who feel capable of learning and adapting are less likely to develop negative attitudes toward organizational change. It underscores the importance of psychological factors in how employees perceive and react to change initiatives. By understanding this dynamic, industrial-organizational psychologists and managers can better appreciate the role of individual competencies in shaping organizational outcomes and the psychological underpinnings of employee resistance to change.

From the organizational behavior perspective, the relationship highlights the critical role of fostering a culture of continuous learning and development. A learning-oriented culture can enhance employees' cognitive and emotional readiness for change, reducing cynicism and promoting a more positive attitude toward organizational transformations. This relationship also emphasizes the importance of organizational support in facilitating learning opportunities and integrating them into the fabric of the organization's change management strategies. Understanding how individual learning capabilities influence attitudes toward change can help elucidate the mechanisms through which organizational practices impact employee behavior and attitudes, providing deeper insights into the drivers of successful organizational change.

The Relationship between Individual Learning Capability and Organizational Change

Cognition

The results of testing Hypothesis 2 demonstrated that individual learning capability had a positively significant relationship to organizational change cognition. This finding aligns with existing literature, emphasizing the critical role of individual learning in enhancing employees' understanding and perception of organizational changes. Learning encompasses or enables all the features that have been listed as capacities or mechanisms of cognition, so any system with the capacity to learn can be described as a cognitive system (Ginsburg & Jablonka, 2021). Previous studies have highlighted that employees with higher learning capabilities are better equipped to comprehend and adapt to organizational changes (Schraeder, Jordan, Self, & Hoover, 2016). This is consistent with the proposition that reflection and critical thinking are vital skills for fostering an appreciation of organizational changes (Duarte, 2010).

Organizational learning theory posits that continuous individual and organizational learning is crucial for adapting to change, as it builds a knowledge base that enhances understanding and implementation of change initiatives (Argyris & Schön, 1978). Similarly, cognitive learning theory highlights the role of mental processes like perception, memory, and problem-solving in learning (Bandura, 1986). The findings of this study support these theories, showing that employees with higher learning capabilities can effectively process, internalize, and apply information about organizational changes, leading to a deeper understanding, reduced uncertainty, and increased acceptance of change.

The relationship between individual learning capability and organizational change cognition is significant for several reasons. First, it highlights the importance of fostering a learning-oriented culture within organizations. Employees who continuously learn and develop their skills are better equipped to understand and support organizational changes. Second, this relationship underscores the need for organizations to invest in training and development programs that enhance individual learning capabilities. By doing so, organizations can improve employees' cognitive readiness for change, leading to more effective and successful change implementation.

From the perspective of industrial-organizational psychology, the relationship between individual learning capability and organizational change cognition indicates that learning capability is crucial for employees to effectively process and understand organizational changes. By focusing on developing employees' cognitive resources, such as critical thinking, problem-solving, and adaptability, employees can better comprehend and navigate organizational changes. This emphasis on cognitive enhancement ensures that employees are well-equipped to understand the nuances of change, leading to smoother transitions and reduced resistance.

From the perspective of organizational behavior, the positive relationship highlights the importance of fostering an organizational culture that prioritizes continuous learning and development. By embedding learning opportunities into daily operations, employees continuously enhance their cognitive skills, creating a workforce that is perpetually prepared for change. This culture of learning ensures that employees are always ready to adapt to new organizational dynamics. Additionally, designing change management strategies that incorporate learning and development as core components ensures that employees have the necessary cognitive tools to understand changes. It enhances the organization's adaptability and responsiveness to change, leading to more effective and sustainable change initiatives.

The Relationship between Organizational Change Cognition and Organizational Trust

The results of testing Hypothesis 3 demonstrated that organizational change cognition had a positively significant relationship to organizational trust. The significant impact of organizational change cognition on organizational trust aligns with social exchange theory, organizational justice theory, and Lewin's change management model. These theories suggest that when employees understand organizational changes clearly, they perceive the changes as fair and transparent, reducing uncertainty

and fostering trust in the organization and its leadership (Blau, 1964; Greenberg, 1990; Lewin, 1947). This enhanced understanding and perception of justice build a positive exchange relationship, thereby strengthening organizational trust.

Empirical findings support these theoretical perspectives. Zayim and Kondakci (2015) demonstrated that intentional, emotional, and cognitive readiness for change significantly influences perceived trust in colleagues and principals in school settings. Lines et al. (2007) found that ideological accounts and employee participation during organizational change positively correlate with trust in management afterward. Kaltiainen, Lippinen, and Petrou (2018) examined perceptions of justice and cognitive trust during mergers, highlighting the positive impact of planned change on organizational trust. Gustafsson, Gillespie, Hailey, Ros, and Dietz (2020) identified trust preservation practices critical for maintaining trust during changes, emphasizing the importance of organizational members' understanding and mobilization of trust foundations. McLeary and Cruise (2015) expanded the theoretical framework of organizational trust to include cognitive and socio-affective components, further supporting the relationship between change cognition and organizational trust observed in this study among semiconductor industry employees.

From the perspective of industrial-organizational psychology, the relationship between organizational change cognition and organizational trust indicates that understanding how change cognition influences trust can inform interventions aimed at reducing employee stress and enhancing well-being. When employees perceive organizational changes clearly and trust the organization, they are likely to experience less anxiety and stress. Management can develop programs that help employees understand and process changes, thereby fostering trust and reducing the psychological burden associated with organizational transformations. This approach not only enhances employee well-being but also contributes to a more supportive and trusting organizational environment. Management can also design training programs that focus on enhancing employees' cognitive understanding of organizational changes. These programs can include modules on effective communication, critical thinking, and problem-solving, all aimed at building trust by ensuring employees fully comprehend the rationale, benefits, and processes involved in changes.

From the perspective of organizational behavior, the relationship implies that effective change management practices that focus on improving employees' understanding of changes can build trust. This includes involving employees in the change process, providing ample information, and addressing their concerns and questions. Organizational behavior specialists can develop frameworks and models that guide organizations in implementing change in a way that enhances both cognition and trust. By ensuring that employees are well-informed and their feedback is valued, organizations can foster a trusting and collaborative atmosphere.

The Relationship between Organizational Trust and Cynicism toward Organizational Change

The results of testing Hypothesis 4 demonstrated that organizational trust had a negatively significant relationship to cynicism toward organizational change. The significant impact of organizational trust on cynicism toward organizational change highlights crucial dynamics in managing change within organizations. In today's dynamic business environment, companies must continually evolve their strategies, structures, and processes to maintain a competitive edge. Understanding how trust influences responses to these changes is essential for successful implementation.

Research has demonstrated that trust in an organization is negatively related to resistance to change, with psychological capital mediating this relationship (Saruhan, 2013). Additional studies indicate that organizational trust negatively correlates with organizational cynicism, with locus of control serving as a mediator (Bahadir & Levent, 2022). This aligns with Bobbio's findings, which show that trust in leadership and the organization negatively correlates with emotional exhaustion and cynicism, two key factors of job burnout (Bobbio & Manganelli, 2015). Moreover, social science research highlights that trust in organizational leadership and processes positively influences employee attitudes toward change. Organizations that build and maintain trust through consistent actions and policies are better positioned to mitigate resistance and promote acceptance of change initiatives (Zayim & Kondakci, 2015).

The significance of the relationship between organizational trust and cynicism toward organizational change lies in several key aspects. First, trust acts as a buffer against cynicism by fostering positive perceptions of organizational intentions and decision-making processes during periods of change. This aligns with findings that trust reduces negative attitudes and enhances positive outcomes such as organizational learning and creativity (Kaltiainen et al., 2018; Kroll & Pasha, 2021). Second, trust

enhances communication and transparency within the organization. Clear, transparent communication about the reasons for change, its potential impacts, and the decision-making process builds confidence among employees. This transparency helps employees understand and support change initiatives rather than resist them. Thirdly, organizational trust promotes a sense of psychological safety among employees. When employees feel psychologically safe, they are more likely to engage constructively with change initiatives rather than adopting a defensive or cynical stance. This sense of safety encourages open dialogue, feedback, and collaboration, which are crucial for successful change implementation. Lastly, trust fosters a positive organizational culture characterized by mutual respect, collaboration, and openness. In such a culture, employees are more likely to view change as an opportunity for growth and improvement rather than a threat to their interests or well-being (Zayim & Kondakci, 2015). This positive cultural environment not only reduces cynicism but also enhances overall organizational performance and adaptability.

From the perspective of industrial-organizational psychology, the relationship between organizational trust and cynicism toward organizational change demonstrates that trust is a crucial factor in fostering change readiness and adaptability among employees. When employees trust that their organization has their best interests at heart, they are more likely to be open to change and willing to adapt. This trust reduces resistance and cynicism, making employees more receptive to new initiatives. Enhancing trust through transparent communication and inclusive practices can create a workforce that is more agile and responsive to change. From the perspective of organizational behavior, the relationship implies that involving employees in the change process can significantly reduce cynicism. When employees have a voice in decisions and are part of the change planning, they are more likely to trust the organization and support the change. Participation fosters a sense of ownership and accountability, which can enhance trust and reduce resistance. By promoting employee involvement, organizations can build a collaborative environment that supports effective change management.

The Relationship between Change Cognition and Intention to Remain

Organizational change cognition was not significantly related to the intention to remain, as shown by the results of testing Hypotheses 5. The absence of a significant direct relationship between change cognition and the intention to remain within the semiconductor industry warrants further exploration. This outcome invites careful consideration of various potential explanations.

One possibility lies in the critical role of transparent communication and opportunities for self-expression in ensuring a cultural fit between employees and the organization (Ghosh, Satyawadi, Prasad Joshi, & Shadman, 2013). When communication about the purpose, scope, and expected outcomes of changes is unclear or lacks transparency, employees may struggle to connect their cognitive understanding of these changes to their long-term commitment to the organization. Clear, consistent, and honest communication helps bridge the gap between understanding the change and feeling secure enough to commit to the organization. Without this, employees may comprehend the changes but fail to see how these changes align with their personal and professional growth, leading to a weakened intention to remain.

Another explanation is the influence of emotional and affective factors. While understanding the rationale behind organizational changes is important, emotional and affective responses play a more significant role in shaping employees' intentions to remain. Factors such as emotional attachment to the organization, trust in management, and job satisfaction often have a stronger influence on turnover intentions than cognitive understanding alone (Benevne et al., 2018; Ghosh et al., 2013). Emotional responses can overshadow cognitive assessments, meaning that even if employees intellectually understand the necessity and benefits of change, negative emotions like fear, anxiety, or lack of trust can still drive their decision to leave.

Furthermore, intention to remain in an organization is influenced by numerous factors beyond just organizational change cognition. Employees in the semiconductor industry may prioritize various aspects over their perception and understanding of organizational changes. Elements such as pay level, job satisfaction, promotion opportunities, organizational justice, job security, talent development, and employee engagement could take precedence (Alkahtani, 2015; Biswakarma, 2016; Hassan, 2014; Öztürk, Eryeşil, & Bedük, 2016; Rani & Kumar, 2014; Rehman, 2012; Škerháková, Korba, Harničárová, & Taha, 2022; Sokhanvar, Hasanpoor, Hajishahemi, & Kakemam, 2016; Tulasi Das & Amala, 2016). The employee-organization relationship is reciprocal; if employees feel well taken care of by the organization, they are more likely to repay with loyalty and a tendency to stay (Alkahtani, 2015). Given the complexity and interplay of these various factors, cognitive understanding of changes alone may not be sufficient to influence an employee's intention to remain.

Additionally, the nature of business must be taken into account (Alkahtani, 2015). The dynamic and innovative nature of the semiconductor industry fosters a work environment where change is constant and expected. Employees in this industry may perceive change as an integral part of their professional landscape, influencing their intentions to remain in ways that differ from industries with more stable environments. The cultural context of the semiconductor industry in China might also influence the relationship. Cultural factors, such as collectivism, respect for authority, and job security concerns, could overshadow the cognitive understanding of organizational changes, thereby affecting the intention to remain differently than in other contexts. Similarly, the impact of organizational change cognition may vary depending on the nature and scale of the change. Minor or incremental changes might not significantly affect employees' intentions to remain, whereas major transformational changes could have a more pronounced impact.

The Relationship between Organizational Trust and Intention to Remain

The results of testing Hypothesis 6 demonstrated that organizational trust had a positively significant relationship to intention to remain. The significant impact of organizational trust on intention to remain highlights a crucial aspect of employee retention. Employee turnover poses a significant challenge to any company's overall performance, necessitating the identification and addressing of factors that heighten employees' intentions to leave (Urieş, 2019). Numerous research studies have consistently validated the existence of a positive and statistically significant relationship between organizational trust and intention to remain (Gharbi, Aliane, & Sobaih, 2022; Reçica & Doğan, 2019; Rodwell, McWilliams, & Gulyas, 2017; Urieş, 2019; van den Heuvel, Freese, Schalk, & van Assen, 2017). Additionally, further investigations have delved into the mediation mechanisms shaping this relationship, highlighting the crucial roles played by factors such as job embeddedness (Purba, Ostrom, Born, & van der Molen, 2016), psychological ownership (Olckers & Enslin, 2016), cynicism factor (A. Bobbio & A. M. Manganelli, 2015), and employee engagement (Bellamkonda, Santhanam, & Pattusamy, 2020). The literature underscores the pivotal significance of organizational trust and employee motivation in influencing employees' intentions to stay. A compelling argument suggests that a workplace fostering trust sustains employees' desire to cooperate, thereby decreasing their intention to leave (Paillé, Bourdeau, & Galois, 2010). This aligns with the notion that motivated employees contribute optimally to the organization's interests, driving growth, success, and productivity.

From the perspective of industrial-organizational psychology, the relationship between organizational trust and intention to remain underscores the importance of building and maintaining trust to enhance employee retention. Trust can be seen as a pivotal element in creating a loyal workforce, which is crucial for organizational stability and growth. Trust is also a fundamental component of job satisfaction and employee engagement. High levels of trust lead to increased job satisfaction and a more engaged workforce. Employees who trust their organization are more likely to be motivated, committed, and productive, reducing turnover rates and fostering a positive work environment.

From the perspective of organizational behavior, the relationship between organizational trust and intention to remain indicates that a culture of trust is integral to employee retention. Organizations that promote values such as integrity, fairness, and respect create a supportive environment where employees feel valued and secure. This cultural foundation supports long-term employee commitment and reduces the likelihood of turnover.

The Relationship between Cynicism toward Organizational Change and Intention to Remain

The results of testing Hypothesis 7 demonstrated that cynicism toward organizational change had a negatively significant relationship to intention to remain. The significant impact of cynicism toward organizational change on intention to remain highlights an important dynamic in employee retention. Turnover intention remains a critical issue, particularly in high-technology industries where skilled individuals have numerous appealing alternatives (Cicek, Turkmenoglu, & Ozbilgin, 2021). Organizational cynicism, characterized by negative attitudes and distrust toward organizational practices, has been extensively studied for its impact on employee behavior. Literature indicates that employees exhibiting organizational cynicism are more likely to leave their organizations (Dean et al., 1998; Leiter & Maslach, 2009). Previous research has consistently identified organizational cynicism as a predictor of turnover intention, highlighting its negative consequences (Chiaburu et al., 2013; Spence Laschinger, Leiter, Day, & Gilin, 2009).

Recent studies reinforce these findings. Khan (2014) found that organizational cynicism directly influences turnover intention among bankers, a conclusion echoed by Çınar's research in the same year (Çınar, Karcioğlu, & Aslan, 2014). Andrea Bobbio and Anna Maria Manganelli (2015) demonstrated a negative association between cynicism and the intention to stay within the organization. Abugre (2017)

positioned cynicism as a psychological threat that moderates negative workplace relations, thereby increasing the likelihood of employees intending to leave. Additionally, Cicek et al. (2021) emphasized the significant role of the cognitive and affective dimensions of cynicism in predicting turnover intention, with organizational support acting as a crucial mediator in this relationship.

Summary of Research Results and Recommendations

Building on the findings of this research, this section offers comprehensive recommendations tailored to policy makers, managers, and future researchers to deepen the understanding of the complex dynamics at play in the semiconductor industry in the Yangtze River Delta, China. The study's insights into the relationship between individual learning capability, intention to remain, organizational trust, cynicism toward organizational change, and intention to remain provide a robust foundation for these recommendations.

Recommendations on Policy and Strategy are as Follows:

- 1) Organizations should establish policies that emphasize the importance of continuous learning and development. By mandating regular training programs, workshops, and access to diverse learning resources, organizations can enhance individual learning capabilities. Tailored learning paths that align with employees' career aspirations and strengths can foster engagement and reduce resistance to change.
- 2) Transparent communication policies are crucial during periods of change. Leaders should be required to provide comprehensive and clear information regarding the reasons behind changes, expected outcomes, and processes involved. This transparency can reduce uncertainty, build trust, and mitigate employee cynicism towards organizational change.
- 3) Policies should encourage a culture of openness and innovation. By implementing regular feedback sessions, town hall meetings, and suggestion boxes, organizations can create a transparent and inclusive environment. Encouraging open communication and providing platforms for employees to share ideas and concerns can mitigate cynicism and foster a positive attitude towards change.

4) Trust-building should be a strategic imperative. Policies should promote fairness, consistency in leadership decisions, and transparent communication. Trust-building initiatives such as leadership training programs, team-building activities, and formal and informal feedback channels can enhance organizational trust, leading to higher employee retention and engagement.

Recommendations on Management Practices are as Follows:

1) Management should design and implement training programs that enhance employees' learning capabilities. These programs should cover not only job-specific skills but also critical thinking, problem-solving, and adaptability. By improving employees' cognitive understanding of organizational changes, organizations can foster a more adaptable and resilient workforce.

2) Management should focus on improving employee well-being and mental health by addressing cynicism towards organizational change. This can be achieved through interventions aimed at reducing stress and burnout, such as resilience training, stress management programs, and counseling services. These practices can enhance overall job satisfaction and reduce negative psychological outcomes.

3) Management practices should prioritize mutual respect, fairness, and collaboration. Promoting openness, honesty, and integrity in all interactions and decisions can reduce cynicism. Inclusive decision-making processes and leadership development programs that emphasize empathy and ethical behavior can foster a culture of trust and collaboration.

4) Regular monitoring of employee attitudes through surveys and other diagnostic tools is essential. Management should continuously assess levels of cynicism and related attitudes to identify at-risk employees and areas where trust is lacking. Proactive measures, such as targeted interventions and regular feedback sessions, can address these issues early, enhancing overall employee engagement and retention.

Recommendations for Further Research are as Follows:

1) Future research should consider longitudinal studies to track changes over time, providing comprehensive insights into the long-term effects of individual learning capability and organizational change cognition on cynicism and employee retention. These studies would offer a deeper

understanding of how these variables evolve and interact over extended periods, thus offering a more nuanced perspective on their impact.

2) Additional studies should delve into identifying and analyzing mediating and moderating variables that might influence the relationships between organizational change cognition, organizational trust, cynicism toward organizational change, and the intention to remain. Specifically, emotional, affective, and contextual factors warrant further investigation to uncover their potential roles in shaping these dynamics. Such research could reveal critical insights into the underlying mechanisms at play.

3) Given the distinctive characteristics of the semiconductor industry, future research should focus on industry-specific factors that may influence employee attitudes toward organizational change. Areas such as technological innovation cycles, market competition, and regulatory environments are particularly pertinent. Understanding these factors could provide a richer, more contextualized understanding of employees' attitudes and behaviors within the industry.

4) Future research should examine how crisis events, such as economic downturns or global pandemics, impact the relationships between change cognition, trust, cynicism, and employee retention. Understanding these dynamics during times of crisis can aid organizations in developing more resilient and adaptable change management strategies.

Research Results Selection

Construct validity was analyzed using the multitrait-multimethod technique. The data obtained from the questionnaire survey were used to analyze convergent validity. The square root of AVE was calculated and then compared to the variable correlation. According to Fornell and Larcker (1981), \sqrt{AVE} must be greater than the variable correlation to ensure appropriate discriminant validity, as detailed in Table 3.

Table 3. Assessment of discriminant validity (Fornell-Larcker criterion)

| Variable | AVE | \sqrt{AVE} | LC | CC | OT | COC | IR |
|---|-------|--------------|--------|--------|--------|--------|-------|
| Learning capability (LC) | 0.594 | 0.771 | 1.000 | | | | |
| Change cognition (CC) | 0.561 | 0.749 | 0.448 | 1.000 | | | |
| Organizational trust (OT) | 0.596 | 0.772 | 0.214 | 0.477 | 1.000 | | |
| Cynicism toward organizational change (COC) | 0.561 | 0.749 | -0.406 | -0.381 | -0.584 | 1.000 | |
| Intention to remain (IR) | 0.538 | 0.734 | 0.250 | 0.441 | 0.572 | -0.500 | 1.000 |

The research results unveiled a significant negative correlation between learning capability and cynicism toward organizational change ($\beta=-0.294, ***p<0.001$), substantiating the acceptance of Hypotheses 1. Likewise, Hypotheses 2 found support, as learning capability exhibited a significant positive correlation with change cognition ($\beta=0.416, ***p<0.001$). Hypotheses 3 was validated, as change cognition demonstrated a significant positive correlation with organizational trust ($\beta=0.564, ***p<0.001$). Consistent with expectations, Hypotheses 4 was affirmed, showcasing a significant negative correlation between organizational trust and cynicism toward organizational change ($\beta = -0.473, ***p<0.001$). Furthermore, Hypotheses 6 garnered support, revealing a significant positive correlation between organizational trust and intention to remain ($\beta=0.297, ***p<0.001$). Correspondingly, Hypotheses 7 was upheld, portraying a significant negative correlation between cynicism toward organizational change and intention to remain ($\beta=-0.208, ***p<0.001$). However, Hypotheses 5 was rejected, as change cognition did not exhibit a significant correlation with intention to remain. Detailed statistics are presented in Table 4.

Table 4. Hypotheses testing

| Hypotheses | Estimate | S.E. | t-value | p-value | Result |
|--------------|----------|--------|---------|---------|---------------|
| H1: LC → COC | -0.294 | -0.295 | -6.148 | *** | Supported |
| H2: LC → CC | 0.416 | 0.448 | 8.023 | *** | Supported |
| H3: CC → OT | 0.564 | 0.477 | 8.516 | *** | Supported |
| H4: OT → COC | -0.473 | -0.521 | -9.681 | *** | Supported |
| H5: CC → IR | 0.187 | 0.188 | 3.19 | .001 | Not supported |
| H6: OT → IR | 0.297 | 0.352 | 4.907 | *** | Supported |
| H7: COC → IR | -0.208 | -0.223 | -3.366 | *** | Supported |

Note: S.E. = standardized estimates; t-value = critical ratio; p-value = the level of marginal significance within a statistical hypothesis test; *** = statistically significant, $p < .001$

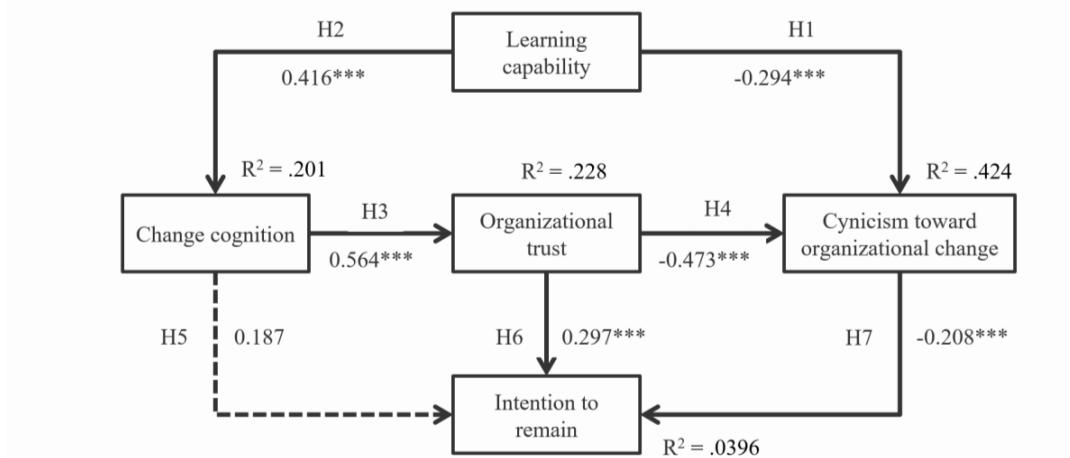


Figure 5. Path coefficients of hypotheses testing.

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