

THE IMPACT OF ORGANIZATIONAL AGILITY, HUMAN RESOURCE FLEXIBILITY, AND ADAPTIVE LEADERSHIP ON EMPLOYEE RESILIENCE THROUGH THE MEDIATION OF PSYCHOLOGICAL CAPITAL (A CASE STUDY OF THE CARTON BOX DIVISION OF TJIWI KIMIA)

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Abstract

This study investigates the impact of organizational agility, human resource flexibility, and adaptive leadership on employee resilience, with psychological capital serving as a mediating variable, within the Carton Box Division of PT Pabrik Kertas Tjiwi Kimia Tbk. Operating in a highly dynamic and pressure-intensive manufacturing environment, organizations are required to develop adaptive capacities that sustain both performance and employee well-being. This research employs a quantitative explanatory design, utilizing data collected from 192 respondents selected through purposive sampling. The analysis is conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine both direct and indirect relationships among variables. The findings reveal that organizational agility, HR flexibility, and adaptive leadership significantly and positively influence employee resilience. Psychological capital emerges as the most dominant predictor and plays a critical mediating role in translating organizational characteristics into individual adaptive capacity. The structural model demonstrates strong explanatory power, with R^2 values of 0.689 for psychological capital and 0.784 for employee resilience. These results confirm that adaptive organizational environments foster positive psychological states—comprising hope, efficacy, resilience, and optimism—which in turn enhance employees' ability to withstand and recover from work-related pressures. This study contributes to the literature by integrating dynamic capabilities, human capital architecture, adaptive leadership, and psychological capital frameworks within a single model, particularly in the context of rigid manufacturing systems. Practically, the findings highlight the importance of human-centered organizational strategies in building sustainable workforce resilience. Organizations are encouraged to promote agility, implement flexible HR practices, and develop adaptive leadership to strengthen employees' psychological resources and long-term performance sustainability.

Keywords: *organizational agility, HR flexibility, adaptive leadership, psychological capital, employee resilience.*

INTRODUCTION

Operating within a rapidly evolving industrial environment, Indonesia's manufacturing sector faces increasingly intense structural and psychosocial pressures. Technological advancements, global market dynamics, and stricter operational standards compel organizations to maintain performance stability without compromising workforce well-being. This condition is particularly evident in labor-intensive industries such as PT Pabrik Kertas Tjiwi Kimia Tbk, especially within the Carton Box Division, which relies on continuous production processes and hierarchical work structures. National data indicate that such pressures are not localized. Statistics Indonesia (BPS, 2023) reports that nearly one-third of industrial workers experience severe stress due to escalating adaptation demands, fluctuating workloads, and operational uncertainty. Recent studies further reveal a rising prevalence of burnout symptoms among manufacturing workers, particularly those in production lines directly exposed to technical burdens and daily performance targets (Coetzee et al., 2023). Within this framework, employee resilience emerges as a strategic psychological capacity that determines individuals' ability to remain productive amid unavoidable pressures.

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These pressures stem not only from workload intensity but also from the imbalance between structural efficiency and adaptive demands. Nababan and Purba (2023) demonstrate that increases in industrial efficiency are not accompanied by workforce expansion, indicating that operational burdens are increasingly concentrated among a relatively stable number of employees. This phenomenon leads to heightened cognitive and emotional demands, which subsequently weaken psychological endurance. Organizations such as Tjiwi Kimia are confronted with a managerial paradox between maintaining process certainty based on standard operating procedures (SOPs) and fulfilling the need for flexibility in responding to environmental changes. This tension reveals a critical issue in developing employee resilience, namely the necessity for structural and psychological mechanisms capable of bridging organizational demands and individual adaptive capacity.

A review of the literature indicates that several studies have highlighted elements influencing employee resilience; however, the relationships among variables remain only partially mapped. Alhosani and Ahmad (2024) find that human resource practices and leadership enhance performance through organizational agility, yet their impact on employee resilience has not been directly examined. Barakat (2021) shows that agility and HR flexibility improve work well-being through work–life balance but does not position psychological capital as an intrinsic mediator. Coetzee et al. (2023) explain the role of career agility and psychological capital (PsyCap) in shaping resilience, but within the context of individual career development, which is relatively more flexible compared to the manufacturing sector. Sari et al. (2025) integrate the concepts of resilience, agility, and adaptive leadership but do not test internal dynamics within rigid SOP-based work environments. Shin et al. (2012) confirm the influence of PsyCap on adaptive performance; however, their study is situated in the e-commerce context, which fundamentally differs in work structure. These gaps highlight the need for research that examines the relationships among organizational agility, HR flexibility, adaptive leadership, and psychological capital in influencing employee resilience within a rigid manufacturing ecosystem.

The urgency of this research is further reinforced when considering post-pandemic industrial transformation challenges. A survey by PwC Indonesia (2024) indicates that more than 60 percent of workers face adaptive pressures due to digitalization and work restructuring. At the organizational level, findings by Haryawan and Sopiha (2023) confirm that employee satisfaction and retention at Tjiwi Kimia are influenced by increasing work pressures and reskilling demands. Employee resilience can no longer be viewed merely as a personal attribute but rather as a strategic outcome of managerial policies, leadership patterns, and job design. In a manufacturing environment characterized by uncertainty, organizations require a workforce capable of recovering from pressure, adapting quickly, and maintaining intrinsic motivation despite operational constraints imposed by SOPs. This condition positions employee resilience as a foundation of competitive sustainability.

To understand this dynamic, this study employs a conceptual approach that integrates four theoretical domains. First, organizational agility is analyzed through the dynamic capabilities framework, which views agility as an organization's ability to rapidly and accurately reconfigure resources in response to external changes (Alhosani & Ahmad, 2024). Second, HR flexibility is understood through human capital architecture theory, which conceptualizes flexibility as a structural and behavioral capacity enabling role mobility and competency adaptation (De Menezes & Kelliher, 2016). Third, adaptive leadership is explained through the model proposed by Heifetz et al. (2009), which positions leaders as facilitators of change who manage the tension between procedural stability and transformational needs. Fourth, psychological capital is framed within Psychological Capital Theory as formulated by Luthans et al. (2007), where the dimensions of hope, efficacy, resilience, and optimism function to shape individual adaptive capacity.

The integration of these four theories provides an analytical foundation for examining how organizational structural factors translate into individual psychological outcomes through observable and systematically developable mediating mechanisms. This integrative approach offers a comprehensive framework to dissect employee resilience across multiple levels with greater precision. The proposed model not only maps direct relationships among variables but also examines the mediating role of psychological capital as a critical nexus linking organizational dynamics and individual adaptive capacity. Within a rigid manufacturing context such as Tjiwi Kimia, this framework enables an analysis that connects operational demands, HR flexibility, leadership patterns, and employees' psychological conditions into a unified and comprehensive research model.

THEORETICAL FRAMEWORK

The theoretical framework of this study is grounded in the dynamic capabilities perspective, which positions organizations as entities capable of reconfiguring resources to respond to market turbulence. Teece, Pisano, and Shuen (1997) explain that dynamic capabilities are formed through the processes of sensing, seizing, and transforming,

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enabling organizations to identify opportunities, capture them strategically, and reconfigure internal assets to remain relevant. Contemporary literature suggests that organizational agility represents the operational manifestation of these capabilities and plays a critical role in shaping psychosocial conditions that enhance employees' perceptions of control and collective efficacy—factors that underpin the development of psychological capital (Ajgaonkar et al., 2022; Lengnick-Hall, 2011). Empirical findings across service and manufacturing sectors indicate that organizations with strong dynamic capabilities are better prepared to להתמודד disruption and are more effective in fostering individual resilience under high work pressure (Hussain & Malik, 2022).

This perspective is further enriched by Human Capital Architecture, which emphasizes that the workforce is not homogeneous but consists of groups with varying strategic value and knowledge uniqueness. Lepak and Snell (2002) highlight the importance of managerial differentiation to enable organizations to align HR development strategies with the characteristics of their human capital. In the manufacturing context, HR flexibility becomes a strategic instrument that enhances autonomy, role mobility, and access to training, thereby strengthening employees' self-efficacy and work-related hope as core elements of psychological capital. When organizations are capable of designing responsive HR architectures, rigid work structures can evolve into more psychologically supportive systems without compromising efficiency demands (Lepak et al., 2017; Mathews et al., 2020).

This framework is closely linked to adaptive leadership theory, which views leaders as facilitators of transformation. Heifetz, Grashow, and Linsky (2009) argue that adaptive leaders manage the tension between procedural stability and the need for change by fostering dialogue, reflection, and collective learning. In environments characterized by uncertainty, such leadership practices create psychologically safe and inclusive conditions that stimulate the development of hope, efficacy, resilience, and optimism. Contemporary studies demonstrate that adaptive leadership enhances engagement and adaptive capacity by strengthening interpersonal relationships and clarifying the meaning of work (Ain et al., 2023; Carmeli & Markman, 2011). This pattern positions adaptive leadership as a crucial variable in the pathway toward the formation of employee resilience.

These organizational dynamics operate through the mechanism of psychological capital as articulated in Psychological Capital Theory. Luthans, Youssef, and Avolio (2007) conceptualize PsyCap as a state-like psychological resource that can be developed through organizational interventions. The dimensions of hope, efficacy, resilience, and optimism function as mental energy that enables individuals not only to endure but also to grow under pressure. Empirical evidence suggests that PsyCap reduces the negative effects of stress and enhances adaptive performance by increasing self-regulation and positive future expectations (Kim et al., 2017; Youssef-Morgan & Stratman, 2017). Within a structural context, PsyCap serves as a psychological pathway through which organizational agility, HR flexibility, and adaptive leadership influence employee resilience.

This approach is further strengthened by Conservation of Resources (COR) Theory, which emphasizes individuals' motivation to preserve and accumulate resources. Hobfoll (1989) explains that resource loss generates greater distress than resource gain, whereas resource gain enhances adaptive capacity under high-pressure conditions. Organizational support through work flexibility and adaptive leadership creates conditions that enrich psychological capital as a form of resource gain, which can be reinvested to cope with work challenges (Farkash et al., 2022; Singh et al., 2022). Thus, COR Theory provides a causal foundation for explaining how organizational characteristics generate psychological resilience through the accumulation of internal resources mediated by psychological capital.

RESEARCH METHOD

This study is designed using a quantitative approach with an explanatory research design to examine the causal relationships among organizational agility, human resource flexibility, and adaptive leadership on employee resilience through the mediating role of psychological capital. This design is rooted in Conservation of Resources Theory, which explains that individuals strive to maintain and accumulate internal resources when facing pressure, while organizational dynamics function as resources that can either strengthen or weaken psychological resilience (Hobfoll, 1989). This approach is integrated with the Dynamic Capabilities Framework, Human Capital Architecture, Adaptive Leadership Theory, and Psychological Capital Theory to construct a structural model that maps cross-level relationships between organizational variables and employees' psychological resources (Teece et al., 1997; Lepak & Snell, 2002; Heifetz et al., 2009; Luthans et al., 2007). The population of this study comprises all permanent employees of the Carton Box Division at PT Pabrik Kertas Tjiwi Kimia, totaling 379 individuals. The sample size was determined using a sample size calculator with a 95 percent confidence level and a 5 percent margin of error, resulting in a minimum requirement of 192 respondents. A purposive sampling technique was employed to ensure that respondents had at least one year of work experience and a sufficient understanding of organizational dynamics within their respective units. This strategy is appropriate for capturing employee perceptions of the research variables

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within a complex structural context. Data were collected through a questionnaire survey using a five-point Likert scale developed from theoretical indicators and prior empirical instruments. The instrument was subsequently adapted to the manufacturing context and validated through expert judgment and a pilot test to ensure content validity and internal consistency. Construct validity was assessed using Confirmatory Factor Analysis (CFA) with a minimum factor loading threshold of 0.50, while reliability was measured using Cronbach's Alpha and Composite Reliability in accordance with contemporary methodological standards (Hair et al., 2019; Nunnally & Bernstein, 1994). Data triangulation was conducted through document analysis and informal interviews to strengthen the measurement context and minimize potential interpretive bias (Creswell & Creswell, 2018).

Data analysis was performed using Path Analysis, which allows for the simultaneous testing of direct and indirect relationships, including the mediating role of psychological capital. This method was selected due to its ability to provide precise causal estimates and its alignment with the study's objective of testing a theoretically grounded structural regression model (Kline, 2016). Prior to analysis, the dataset was examined for normality, multicollinearity, and heteroskedasticity to ensure inferential validity. The interpretation of results was based on path coefficients, statistical significance, and indirect effect estimates to verify the strength of the mediating mechanism within the model.

RESULTS AND DISCUSSION

Description of Research Respondents

The Carton Box Unit of PT Pabrik Kertas Tjiwi Kimia represents one of the company's strategic production lines within its value chain, operating under a labor-intensive manufacturing structure. The company possesses large-scale production capacity supported by vertical integration, enabling raw material efficiency and strong quality control—characteristics that often determine competitive advantage in the carton-based packaging industry (Tjiwi Kimia, 2024). As part of an industry experiencing significant growth driven by logistics expansion, increased e-commerce activity, and the demand for sustainable packaging, the Carton Box Unit faces complex operational dynamics and market pressures. Market research indicates that the corrugated packaging segment in Indonesia is projected to grow between 6 and 9 percent during the 2025–2029 period, reflecting both competition and opportunities that compel companies to enhance efficiency and product innovation (Wresearch, 2025). This condition positions the work environment within the unit as a critical setting for examining employee resilience, HR flexibility, and organizational agility within the context of modern manufacturing.

The respondent profile reflects a demographic structure typical of large-scale manufacturing organizations. The age distribution indicates the dominance of the mid-productive group, with employees aged 26–35 accounting for 35.9 percent, followed by those aged 36–45 at 29.7 percent. This composition reflects a relatively balanced workforce structure between employees at the peak of skill development and those with mature experience who play strategic roles in maintaining operational stability. The presence of younger employees aged 18–25 (19.8 percent) indicates consistent workforce regeneration, while the 46–55 age group continues to play a vital role as custodians of institutional memory and process consistency. Such an age structure is commonly found in industries with moderate levels of automation and production cycles that demand precision and technical expertise, where a balance between younger and senior employees is essential for organizational sustainability (Montgomery, 2014).

All research respondents are active employees who have been directly involved in work processes over the past three months. This administrative validity ensures the homogeneity of perceptual and experiential contexts underlying the measurement of research variables. In terms of employment status, 65.1 percent of respondents are permanent employees, while 34.9 percent hold internal contract positions. This proportion reflects a combination of a stable core workforce and an adaptive labor segment that supports operational flexibility. Within the context of modern human resource management, such a pattern facilitates the implementation of human capital architecture, which requires workforce differentiation to achieve both structural efficiency and organizational resilience (Lepak & Snell, 2002).

In terms of work experience, respondents are predominantly employees with more than five years of tenure, accounting for 90.6 percent of the sample. This dominance of long tenure indicates high retention rates, consistent competency development, and strong organizational attachment. These characteristics provide significant analytical depth, as experienced employees tend to possess stable understandings of leadership dynamics, organizational culture, and institutional policies. This is particularly relevant in studies examining psychological constructs such as psychological capital and employee resilience, as longer work experience is associated with the development of state-like psychological factors shaped through prolonged exposure to the work environment (Luthans et al., 2015).

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The distribution of respondents' functional roles also reflects a typical manufacturing operational structure. A total of 54 percent of respondents are from the production division, while the remainder are distributed across supporting functions such as maintenance, internal logistics, QA/QC, PPIC, factory office administration, and marketing. This distribution confirms that the study was conducted within a population directly exposed to operational pressures, target-driven work rhythms, and high demands for technological adaptation. This is further reinforced by respondents' work patterns, where 69.8 percent operate within a shift system. Such systems, commonly implemented in industries operating 24 hours a day, often affect biological rhythms, work-related stress, and individual psychological resilience. Ergonomic literature indicates that shift workers are more vulnerable to fluctuations in physical and mental well-being, thereby making variables such as psychological capital and employee resilience particularly significant (Kim et al., 2017). All respondents are part of the organization's internal workforce, with no outsourcing employees or interns included in the sample. This homogeneous employment structure enhances data validity and allows the study to focus on consistent internal organizational dynamics. Such a respondent composition provides a robust empirical foundation for evaluating the relationships among organizational agility, HR flexibility, adaptive leadership, and psychological capital in shaping employee resilience within the Carton Box Unit of Tjiwi Kimia.

Table 1
Demographic Profile of Respondents

Respondent Characteristics	Category	Frequency (n)	Percentage (%)
Age	18–25 years	38	19.8
	26–35 years	69	35.9
	36–45 years	57	29.7
	46–55 years	28	14.6
	Total	192	100
Employment Status	Permanent employee	125	65.1
	Contract employee	67	34.9
	Total	192	100
Work Experience	> 5 years	174	90.6
	≤ 5 years	18	9.4
	Total	192	100
Department	Production	104	54.0
	Non-production	88	46.0
	Total	192	100
Work System	Shift-based	134	69.8
	Non-shift	58	30.2
	Total	192	100

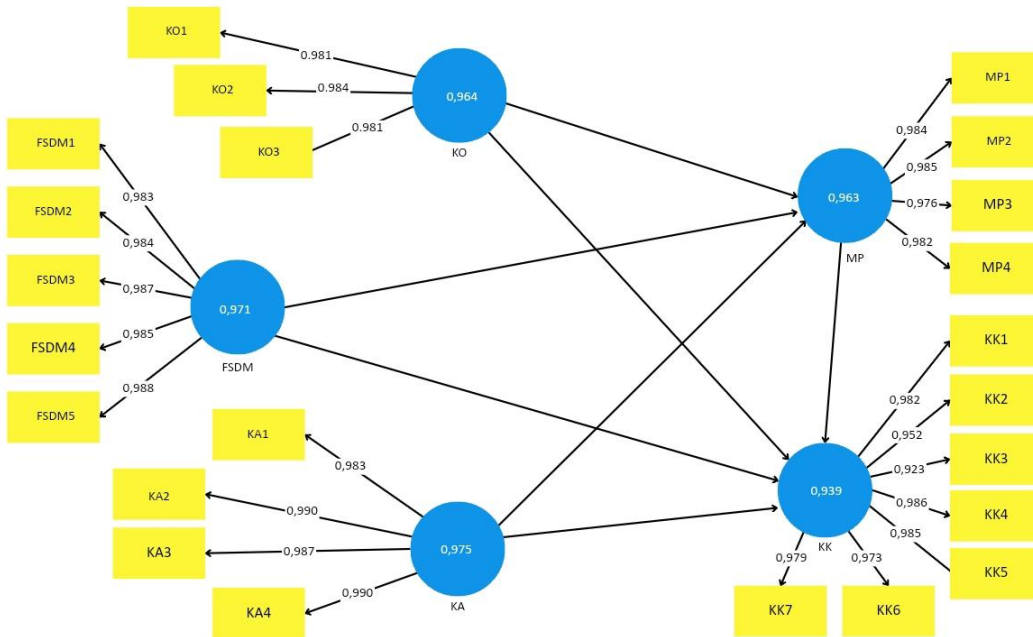
RESEARCH RESULTS

The research findings reveal a consistently strong response pattern across all analyzed variables, both at the descriptive level and within the structural modeling using PLS-SEM. Descriptive measurement indicates that employees' perceptions of organizational agility fall within the "agree" category, with a grand mean of 3.83, suggesting that most respondents perceive the organization as capable of moving quickly, responding effectively, and adapting to change. This pattern aligns with the dynamic capabilities framework, which emphasizes the importance of sensing, seizing, and transforming in maintaining organizational relevance amid industrial volatility (Teece et al., 2016). A similar tendency is observed in the human resource flexibility variable, which achieved a grand mean of 3.97, reflecting a high level of role adaptability and work readiness—forms of human capital agility that are theoretically considered prerequisites for organizational agility (Lepak & Snell, 2002). Respondents' positive perceptions are further reinforced in the adaptive leadership dimension, which recorded a grand mean of 4.01. This value indicates that leaders are perceived as capable of maintaining strategic clarity, managing tensions, and facilitating adaptive processes within teams—leadership characteristics that, according to the literature, enhance learning capacity and readiness to להתמודד complexity (Heifetz et al., 2009). Employees' psychological capital also demonstrates a high score, with a grand mean of 4.12, reflecting strong internal conditions across the dimensions of hope, efficacy, resilience, and optimism. Empirically, this finding supports the notion that PsyCap functions as a psychological resource that develops within supportive work environments (Luthans et al., 2015). At the outcome

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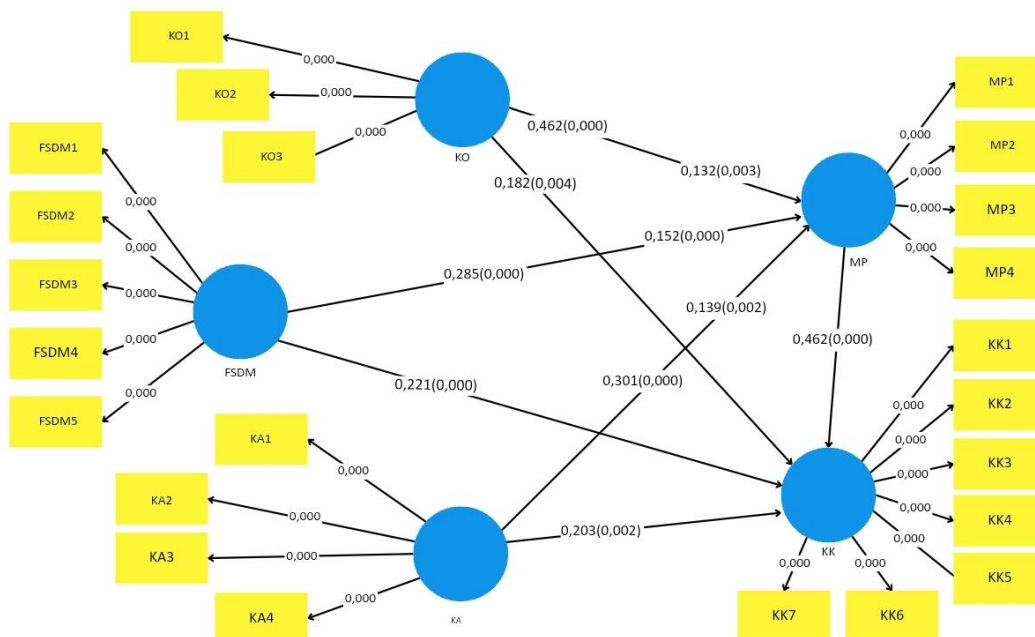
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level, employee resilience shows a grand mean of 3.96, indicating that the majority of employees possess adequate capacity to remain stable, recover, and sustain performance under work pressure.



Picture 1. Outer Model

The measurement model testing indicates that all indicators are valid and reliable, as evidenced by outer loadings well above the minimum threshold of 0.70 and Average Variance Extracted (AVE) values ranging from 0.939 to 1.000. These findings confirm that each construct exhibits very strong internal consistency and satisfies discriminant validity criteria based on the Fornell–Larcker Criterion, where the square root of AVE exceeds inter-construct correlations. Methodologically, these results affirm that the instrument effectively captures each variable without conceptual overlap, consistent with the recommendations of Hair et al. (2021) for reflective PLS-SEM analysis.



Pictue 2. Inner Model

The inner model results show an R² value of 0.689 for psychological capital, indicating that organizational agility, HR flexibility, and adaptive leadership collectively explain approximately 69 percent of the variance in PsyCap. This value falls within the substantial category, reinforcing the view that adaptive and flexible work environments serve as primary drivers of psychological capital development (Youssef-Morgan & Luthans, 2017).

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Meanwhile, employee resilience exhibits an R^2 value of 0.784, indicating a very strong predictive capability of the combined exogenous variables and mediator in explaining individual resilience. This suggests that the combination of structural and psychological factors contributes significantly to resilience within an intensive manufacturing context. The f^2 values identify psychological capital as the strongest predictor in the model, exerting a large effect on employee resilience (0.386). Moderate effects are observed for organizational agility, HR flexibility, and adaptive leadership on both psychological capital and employee resilience. This pattern is theoretically consistent with Conservation of Resources (COR) Theory, which emphasizes that the enrichment of psychological resources enhances individuals' capacity to cope with pressure (Hobfoll, 2015). The evaluation of model fit through an SRMR value of 0.067 and an NFI value of 0.914 further indicates that the model demonstrates strong empirical fit without significant structural deviations.

Hypothesis testing results demonstrate a consistently strong and statistically confirmed pattern of relationships across all estimated causal paths. The direct effects between organizational variables and employee resilience indicate that organizational agility, HR flexibility, and adaptive leadership each make significant contributions to individual resilience in the workplace. Organizational agility shows a positive coefficient of 0.182 ($p = 0.004$), indicating that the more responsive and adaptive the organization is in managing change, the higher employees' ability to maintain performance stability. This finding aligns with the dynamic capabilities argument that organizational processes internalized within systems strengthen employees' psychological readiness to להתמודד operational turbulence (Tece et al., 2016). HR flexibility records a coefficient of 0.221 ($p < 0.001$), indicating that employees' ability to adjust roles, manage change, and perform cross-functional tasks serves as a crucial foundation for resilience, as emphasized in Human Capital Architecture theory (Lepak & Snell, 2002). The effect of adaptive leadership, with a coefficient of 0.203 ($p = 0.002$), also demonstrates that leadership capable of interpreting system dynamics, mobilizing teams, and maintaining emotional stability plays a significant role in strengthening employees' coping capacity, consistent with Heifetz et al. (2009).

Further analysis reveals that psychological capital is the most dominant predictor of employee resilience, with a path coefficient of 0.462 ($p < 0.001$). This indicates that psychological strengths—comprising hope, efficacy, optimism, and resilience—serve as key determinants driving individuals' ability to recover and endure under work pressure, consistent with the Psychological Capital Theory framework (Luthans et al., 2015). The three organizational variables—organizational agility, HR flexibility, and adaptive leadership—are also found to have significant effects on psychological capital, with coefficients of 0.285, 0.329, and 0.301, respectively (all $p < 0.001$). These findings demonstrate that agile, flexible, and adaptively led work environments are capable of fostering positive psychological conditions essential for resilience.

The mediation effects tested through indirect paths indicate that psychological capital significantly mediates the relationships between the three organizational variables and employee resilience. The largest mediation effect is observed in the path HR flexibility \rightarrow psychological capital \rightarrow employee resilience ($\beta = 0.152$; $p < 0.001$), confirming that HR flexibility primarily operates through strengthening psychological capital, which in turn enhances resilience. This finding supports the view that flexible work structures create opportunities for resource gain accumulation, as explained by Conservation of Resources Theory (Hobfoll, 2015). The paths organizational agility \rightarrow psychological capital \rightarrow employee resilience ($\beta = 0.132$; $p = 0.003$) and adaptive leadership \rightarrow psychological capital \rightarrow employee resilience ($\beta = 0.139$; $p = 0.002$) are also significant, indicating a consistent pattern whereby organizational effects on resilience largely operate through internal psychological mechanisms. The consistent significance across all paths, combined with R^2 values of 0.689 for psychological capital and 0.784 for employee resilience, reinforces the argument that the structural model possesses strong explanatory power and stability within the context of intensive manufacturing organizations.

DISCUSSION

This discussion section integrates the empirical findings with the theoretical framework to explain the substantive mechanisms linking organizational agility, human resource flexibility, and adaptive leadership to employee resilience through psychological capital. The results indicate that these three organizational variables play a significant role in strengthening employee resilience, a pattern consistently reflected in both direct and indirect path coefficients. These findings enrich the academic discourse on the role of organizational context as a psychosocial antecedent in shaping the adaptive capacity of the workforce within intensive manufacturing sectors. The influence of organizational agility on employee resilience emerges as a stable and systematic relationship. In the context of pressure-intensive packaging production, organizational agility creates a work environment that is responsive, coordinated, and less rigid, thereby providing psychological conditions that reinforce individual resilience. This

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pattern is consistent with the argument that organizational agility enables employees to construct positive meaning from change, rather than perceiving it as a threat (Doz & Kosonen, 2010). Agile environments also reduce procedural uncertainty through clearer cross-functional communication, a factor shown to enhance emotional resilience across various industrial contexts (Tallon et al., 2019). Nevertheless, the literature also highlights the paradox of excessive agility, which may lead to adaptive exhaustion and change fatigue when shifting priorities are not supported by adequate structural systems (Sherehiy & Karwowski, 2014). Thus, the positive findings of this study suggest that agility practices within the Carton Box Division are managed proportionally—not as a source of structural volatility, but as a facilitator of employees' psychological stability.

Human resource flexibility also demonstrates a crucial role in building individual resilience. The significant effect of this variable indicates that employees' ability to adapt roles, skills, and work patterns serves as a key foundation for mental endurance when facing dynamic demands. This finding aligns with the framework proposed by Wright and Snell (1998), which conceptualizes HR flexibility as a strategic capability that enhances the alignment between competencies and environmental demands. Previous studies confirm that skill and behavioral flexibility strengthen perceptions of control and mastery experiences—two psychological prerequisites for resilience formation (Lee & Huang, 2022). However, this result must also be interpreted critically, as some studies suggest that excessive flexibility may create role ambiguity and reduce psychological safety (Kalleberg, 2011). The consistently positive effect observed in this study indicates that the implementation of flexibility at PT Tjiwi Kimia operates within a constructive framework, where role expansion is accompanied by adequate training and leadership support.

Adaptive leadership emerges as a significant determinant of employee resilience, reflecting the central role of leaders in creating psychologically stable conditions within high-pressure work environments. Adaptive leaders not only provide direction but also facilitate sense-making and collective learning, thereby enhancing individuals' ability to interpret pressure as an opportunity (Heifetz et al., 2009). This finding is consistent with contemporary research indicating that adaptive leadership enhances resilience through strengthening self-efficacy and job control (Ahmad & Umrani, 2019). Although the literature warns that adaptability without clear direction may lead to ambiguity (Desmidt & Prinzie, 2019), the empirical pattern in this study suggests that leaders within the Carton Box Division are capable of maintaining a balance between flexibility and value consistency, thereby creating a psychologically safe work environment.

Psychological capital emerges as a strong and consistent mediating mechanism. Increases in self-efficacy, optimism, hope, and resilience serve as the primary channels through which organizational characteristics are translated into employees' coping capacity. This finding supports the Psychological Capital framework (Luthans et al., 2015), which posits that positive psychological states enhance individuals' adaptive capacity under work pressure. The significant mediation effect of psychological capital across all structural relationships indicates that organizations influence resilience not merely through structural instruments, but primarily through the accumulation of internal psychological resources. This pattern is consistent with the principles of Conservation of Resources Theory, which explains that individuals with higher psychological resources are better equipped to להתמודד resource loss and environmental pressure (Hobfoll, 1989). The integration of these findings confirms that organizational agility, HR flexibility, and adaptive leadership operate through psychosocial mechanisms—rather than purely structural ones—in strengthening employee resilience. Psychological capital acts as the convergence point among these variables, functioning as a reservoir of psychological energy that enables employees to maintain performance and emotional stability amid dynamic work demands.

CONCLUSION

This study confirms the systematic relationships among organizational agility, human resource flexibility, and adaptive leadership in influencing employee resilience, with psychological capital serving as a key mediating variable within the Carton Box Division of PT Pabrik Kertas Tjiwi Kimia Tbk. The analysis demonstrates that organizational agility has a positive effect on employee resilience, as a responsive work environment characterized by rapid decision-making and openness to innovation enhances individuals' adaptive capacity. This finding is consistent with empirical evidence suggesting that organizational agility fosters resilient behavior through clarity of direction and internal support. Human resource flexibility also positively influences resilience, where policies such as job rotation, role adjustment, and opportunities for skill development enhance employees' ability to manage pressure and uncertainty. This pattern aligns with the strategic human resource flexibility framework, which positions flexibility as a critical adaptive mechanism. Adaptive leadership is shown to strengthen resilience through an empathetic, situational, and facilitative leadership style. Adaptive leaders foster employees' confidence and hope through open communication and emotional support.

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Psychological capital exerts the strongest influence on employee resilience, indicating that self-efficacy, optimism, hope, and mental toughness serve as the primary foundations for individuals facing work-related pressure. Furthermore, organizations that are agile, flexible, and adaptively led are proven to enhance psychological capital. The mediation results confirm that psychological capital functions as a crucial linkage that transforms organizational characteristics into individual resilience capacity, reinforcing the argument that human-centered organizational interventions are capable of sustainably developing employee resilience.

RECOMMENDATIONS

The findings of this study recommend that the management of PT Pabrik Kertas Tjiwi Kimia strengthen organizational agility through rapid decision-making, collaborative work structures, and a culture of continuous learning. Human resource flexibility should be implemented as a capacity development strategy rather than merely an efficiency tool, through job rotation, cross-functional training, and flexible work arrangements. Adaptive leadership should be further developed through training programs emphasizing empathy, empowerment, and open communication to enhance employees' psychological capital. HR practitioners are also encouraged to develop psychological capital programs such as mindfulness training, resilience coaching, and counseling support.

The theoretical implications of this study reinforce the relevance of Positive Organizational Behavior and Social Cognitive Theory in explaining the relationship between organizational characteristics and individual resilience. Practically, the findings demonstrate that long-term productivity depends on employees' adaptive and psychological capacities. From a policy perspective, the study highlights the necessity of balancing productivity demands with psychological well-being through adaptive learning cultures, open communication, and the strengthening of psychological safety as the foundation of workforce resilience.

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