

HYBRID MENTORING AS A POST-PANDEMIC HRD STRATEGY: EXAMINING ITS EFFECT ON EMPLOYEE COMPETENCY AND ADAPTIVE RESILIENCE

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Abstract: *The COVID-19 pandemic fundamentally transformed HRD practices, accelerating hybrid mentoring, a blended approach combining face-to-face and technology-mediated developmental interactions as a primary vehicle for employee competency development and resilience building. This study examines the effects of hybrid mentoring quality on employee competency and adaptive resilience in the post-pandemic healthcare sector in Banyumas Regency, Central Java, with employee competency as a mediating variable. Grounded in the Hybrid Sustainable Human Empowerment Framework (HSHEF; Zuhaena, 2026) and Social Learning Theory (Bandura, 1977), four hypotheses were tested using PLS-SEM with 131 healthcare workers from six Puskesmas and two district hospitals in Banyumas Regency. Results show that hybrid mentoring quality significantly affects employee competency ($\beta = 0.452, p < 0.001$) and adaptive resilience directly ($\beta = 0.319, p < 0.001$), employee competency significantly affects adaptive resilience ($\beta = 0.394, p < 0.001$), and employee competency partially mediates the mentoring-resilience relationship (indirect $\beta = 0.178, p < 0.01$). The model explains 64.1% of adaptive resilience variance ($R^2 = 0.641$). Findings provide evidence-based guidance for HRD practitioners designing hybrid mentoring programs in post-pandemic healthcare settings.*

Keywords: *hybrid mentoring; employee competency; adaptive resilience; post-pandemic HRD; healthcare workers; HSHEF model; Banyumas*

1. Introduction

The COVID-19 pandemic (2020–2022) constituted the most disruptive event for global workforce development practices in modern history, abruptly invalidating traditional face-to-face training and mentoring models and compelling organizations to rapidly pivot toward digital and hybrid human resource development (HRD) approaches (UNESCO, 2021; World Bank, 2021; Bagis et al., 2022). In the healthcare sector, which bore the most direct brunt of pandemic-related operational demands the urgency of maintaining employee competency and psychological resilience under unprecedented conditions created an acute need for innovative mentoring approaches that could deliver skill development and resilience support under hybrid work conditions simultaneously (Zuhaena et al., 2021; Bagis et al., 2021; WHO, 2022). Hybrid mentoring, a blended developmental approach integrating face-to-face mentoring sessions with technology-mediated interactions (video conferencing, digital learning modules, messaging platforms), emerged as a promising response, leveraging the relational depth of in-person mentoring while capitalizing on the flexibility and reach of digital communication technologies (Zuhaena, 2026; Johnson & Ridley, 2021).

In Indonesia, the public health sector employs approximately 1.2 million healthcare workers across 10,321 Puskesmas and 2,993 hospitals, making it one of the largest public sector

workforces nationally (Kemenkes RI, 2022). Banyumas Regency with its 39 Puskesmas and three district hospitals serving a population of over 1.7 million provides a representative microcosm of Indonesia's public health workforce development challenges. The post-pandemic recovery period has revealed significant competency gaps among healthcare workers particularly in digital health technologies, complex case management, and psychological self-regulation under sustained pressure that traditional mentoring approaches, disrupted by the pandemic, have been unable to adequately address (Bagis et al., 2020; Triana et al., 2024; Harsuti et al., 2025). Adaptive resilience the dynamic capacity to maintain effective performance and psychological well-being while adapting to sustained adversity and organizational change has emerged as an equally critical post-pandemic outcome, as healthcare workers continue to face elevated workloads, moral distress, and institutional restructuring demands in the recovery period (WHO, 2022; Luthans et al., 2021; Zuhaena et al., 2022).

The Hybrid Sustainable Human Empowerment Framework (HSHEF), proposed by Zuhaena (2026) as a patent-protected model for sustainable HRD in hybrid organizational environments, provides the primary theoretical foundation for this study. HSHEF posits that effective hybrid mentoring operates through three integrated mechanisms: workforce preparedness enhancement (building technical and transferable competencies), adaptive resilience building (developing psychological resources for sustained performance under adversity), and hybrid engagement facilitation (leveraging blended interaction modalities to maximize developmental reach). Social Learning Theory (Bandura, 1977) provides the learning mechanism: mentees in hybrid mentoring relationships acquire competencies and resilience-oriented coping behaviors through observation of mentor models in both face-to-face and digital contexts, guided practice with feedback, and self-efficacy development, a learning process that HSHEF argues is more effective in hybrid formats than either exclusively in-person or exclusively digital mentoring (Zuhaena, 2022).

Empirical findings on hybrid mentoring effectiveness reveal notable inconsistencies. Johnson and Ridley (2021) confirm significant positive effects on competency development in Western professional training contexts, attributing these to complementary in-person and digital strengths. However, WHO (2022) and Zuhaena et al. (2025) note that hybrid mentoring effectiveness in Southeast Asian healthcare contexts is contingent on digital infrastructure quality, mentor digital competency, and organizational learning climate conditions that vary substantially across Indonesian Puskesmas and hospital systems. This contextual-contingency gap motivates the present study's focus. On the competency-resilience relationship, while theoretically plausible competent workers deploy greater cognitive resources when facing adversity most existing studies examine resilience as an antecedent rather than an outcome of competency (Luthans et al., 2021; Hobfoll et al., 2018), and few examine the competency-as-mediator hypothesis in hybrid mentoring contexts. The construct of adaptive resilience as distinct from general psychological resilience, has also been operationalized inconsistently across studies, constituting a methodological gap that the present study addresses using Zuhaena's (2026) HSHEF-derived adaptive resilience scale.

The novelty of this study lies in: (1) its application of the HSHEF model to empirically examine hybrid mentoring's dual effects on employee competency and adaptive resilience; (2) the formal mediation test of competency in the mentoring-resilience relationship; and (3) its focus on the post-pandemic Indonesian healthcare sector, a context that is both practically urgent and theoretically underrepresented. Objectives: (1) examine hybrid mentoring quality's effect on employee competency; (2) examine hybrid mentoring quality's direct effect on adaptive resilience; (3) examine employee competency's effect on adaptive resilience; and (4) test the mediating role of competency in the mentoring-resilience relationship.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical Foundation

The Hybrid Sustainable Human Empowerment Framework (HSHEF; Zuhaena, 2026) provides the primary theoretical foundation. HSHEF proposes that sustainable human empowerment in hybrid organizational environments requires integrated development of three interconnected outcomes: workforce preparedness (competency for current and future role demands), adaptive resilience (capacity to maintain effective functioning under sustained adversity and change), and hybrid engagement (active participation in blended developmental interactions). The framework posits that hybrid mentoring, combining face-to-face relational depth with digital platform flexibility, is the optimal HRD modality for simultaneously developing competency and resilience because it provides technical skill modeling (competency pathway) and psychosocial support (resilience pathway) across both in-person and digital interaction formats. Social Learning Theory (Bandura, 1977) operationalizes the learning mechanism: mentees acquire competencies and resilience-oriented coping behaviors through three SLT processes: vicarious learning (observing mentor competency and resilience modeling), guided performance with feedback (practicing competencies with mentor correction), and self-efficacy development (gaining confidence from successful performance experiences). Conservation of Resources Theory (Hobfoll et al., 2018) provides the resilience mechanism: mentoring provides social resources that build resilience resource reservoirs, reducing the depleting impact of adversity on psychological functioning both directly (via psychosocial support) and indirectly (via competency enhancement that builds cognitive resource reserves). These three theories provide a coherent multi-mechanism explanation for the hybrid mentoring-competency-resilience pathway tested in this study.

2.2 Hybrid Mentoring Quality and Employee Competency (H1)

Hybrid mentoring quality refers to the effectiveness of blended mentoring in delivering career guidance, technical skill development, psychosocial support, and performance feedback across face-to-face and digital interaction modalities (Zuhaena, 2026; Johnson & Ridley, 2021). Employee competency encompasses integrated knowledge, skills, and attitudes enabling effective job performance, including technical competencies (clinical skills), interpersonal competencies (communication, teamwork), and adaptive competencies (learning agility, problem-solving) (Noe et al., 2020). High-quality hybrid mentoring develops all three competency dimensions through SLT mechanisms across interaction modalities. Johnson and Ridley (2021) demonstrated significant hybrid mentoring-competency relationships in professional training programs. Zuhaena et al. (2025) found that hybrid community mentoring significantly improved financial and entrepreneurial competencies among Indonesian workers. Surveyandini and Zuhaena (2022) confirmed training quality as a significant competency predictor in Banyumas programs. Therefore, H1: Hybrid mentoring quality has a significant positive effect on employee competency.

2.3 Hybrid Mentoring Quality and Adaptive Resilience (H2)

Adaptive resilience refers to the dynamic capacity to maintain effective psychological functioning, role performance, and adaptive behavior under sustained adversity and uncertainty (Hobfoll et al., 2018; Luthans et al., 2021). HSHEF identifies three mechanisms through which hybrid mentoring builds resilience: psychosocial support provision (mentors provide emotional validation and coping guidance), resilience modeling (mentors demonstrate adaptive coping strategies observable by mentees via SLT), and self-efficacy enhancement (successful developmental experiences build confidence in overcoming adversity). These mechanisms

operate across both in-person and digital interaction formats, potentially amplifying resilience development compared to single-modality mentoring. Luthans et al. (2021) demonstrated that developmental relationships significantly predicted psychological capital resilience components. Zuhaena (2026) identified adaptive resilience as a primary HSHEF outcome. Zuhaena et al. (2025) found that hybrid mentoring significantly improved adaptive coping in Indonesian community programs. Therefore, H2: Hybrid mentoring quality has a significant positive direct effect on adaptive resilience.

2.4 Employee Competency and Adaptive Resilience (H3)

The theoretical link between employee competency and adaptive resilience operates through cognitive resource and self-efficacy mechanisms (Bandura, 1977; Hobfoll et al., 2018): competent employees deploy greater technical and cognitive resources when facing adversity, reducing resource depletion and enabling faster adaptive responses. In healthcare settings specifically, clinical competency provides nurses and midwives with procedural fluency and technical confidence that reduces cognitive overload in complex situations, preserving psychological resources for sustained resilience (WHO, 2022). Competency also builds domain-specific self-efficacy: employees who know they can perform their jobs effectively are more confident in overcoming job-related adversity, a key resilience component (Luthans et al., 2021). Hobfoll et al. (2018) theorized knowledge and skill resources as primary personal resource predictors of resilience under sustained demand. Zuhaena (2026) explicitly identifies competency development as a prerequisite for adaptive resilience in the HSHEF model. Therefore, H3: Employee competency has a significant positive effect on adaptive resilience.

2.5 Mediating Role of Employee Competency (H4)

The mediation hypothesis posits that hybrid mentoring quality enhances adaptive resilience through two complementary pathways: (1) directly, through psychosocial support and resilience modeling mechanisms (H2); and (2) indirectly, by building employee competency, which then serves as a cognitive and self-efficacy resource for resilience (H4). Partial mediation is expected because the direct psychosocial support pathway (H2) operates independently of competency development. Luthans et al. (2021) found competency as a partial mediator in developmental relationship-resilience pathways. Zuhaena (2026) theorizes competency as a key intermediate outcome through which hybrid mentoring achieves sustained resilience development. Therefore, H4: Employee competency partially mediates the relationship between hybrid mentoring quality and adaptive resilience.

2.6 Research Framework

Figure 1 presents the research framework grounded in the HSHEF model (Zuhaena, 2026), Social Learning Theory (Bandura, 1977), and Conservation of Resources Theory (Hobfoll et al., 2018). Hybrid mentoring quality (HMQ) serves as the independent variable, with employee competency (EC) as the mediating variable and adaptive resilience (AR) as the dependent variable. Four hypotheses are proposed: H1 (HMQ → EC positive), H2 (HMQ → AR direct positive), H3 (EC → AR positive), and H4 (HMQ → EC → AR partial mediation). The framework illustrates both the direct motivational/psychosocial resilience pathway and the indirect competency-building resilience pathway through which hybrid mentoring achieves its developmental outcomes.

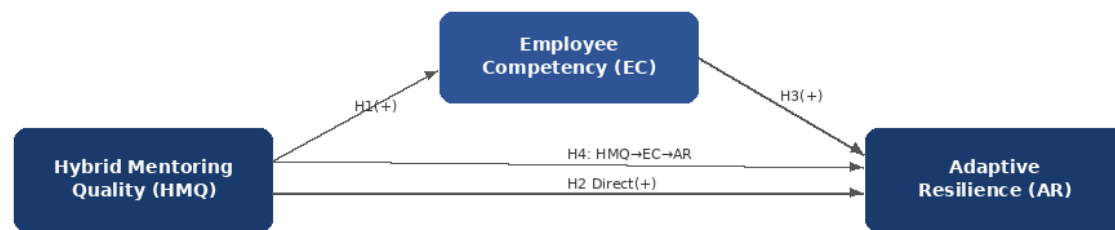


Figure 1. Research Framework: Hybrid Mentoring Quality, Employee Competency (Mediator), and Adaptive Resilience (HSHEF Model, Zuhaena, 2026)

3. Research Method

A quantitative mediation research design was employed. The population comprised healthcare workers (nurses, midwives, and health technicians) from six Puskesmas (Puskesmas Purwokerto Selatan, Purwokerto Utara, Purwokerto Timur, Ajibarang, Sokaraja, and Baturaden) and two district hospitals (RSUD Banyumas and RSUD Prof. Dr. Margono Soekarjo) in Banyumas Regency who had participated in at least one hybrid mentoring program combining in-person and digital components in the 12 months preceding data collection. Total eligible population was estimated at approximately 380 workers. Purposive sampling criteria: (1) participation in hybrid mentoring within the past 12 months; (2) minimum 1-year employment tenure; and (3) active clinical or technical role (excluding administrative staff). A sample of 131 respondents was obtained, satisfying Hair et al.'s (2019) PLS-SEM minimum requirements.

Hybrid mentoring quality was measured using 8 items adapted from Johnson and Ridley (2021) and Zuhaena (2026), covering face-to-face interaction quality (3 items), digital interaction quality (3 items), and integrated feedback quality (2 items). Employee competency was measured using 6 items adapted from Noe et al. (2020) and the Indonesian National Healthcare Competency Standard (Kemenkes RI, 2022), covering technical competency (2 items), interpersonal competency (2 items), and adaptive competency (2 items). Adaptive resilience was measured using 6 items adapted from Luthans et al.'s (2021) psychological resilience scale and Zuhaena's (2026) HSHEF adaptive resilience dimensions, covering bounce-back capacity (2 items), uncertainty tolerance (2 items), and performance sustainability under pressure (2 items). All items used a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Measurement model assessed via outer loadings (≥ 0.70), CR (≥ 0.70), AVE (≥ 0.50), and HTMT (< 0.85). Mediation assessed via bootstrapped indirect effects (5,000 iterations) with 95% bias-corrected confidence intervals. Analysis in SmartPLS 4.0 (Ringle et al., 2022).

4. Results

4.1 Respondent Profile

Of 131 respondents, 78.6% were female ($n=103$) and 21.4% male ($n=28$), consistent with the female-dominated healthcare workforce in Indonesia. Professional role: nurses (51.9%, $n=68$), midwives (29.0%, $n=38$), health technicians (19.1%, $n=25$). Age: ≤ 30 years (32.1%, $n=42$), 31–40 years (44.3%, $n=58$), >40 years (23.7%, $n=31$). Education: diploma D3 (48.1%, $n=63$), bachelor's degree S1/Ners (43.5%, $n=57$), master's degree (8.4%, $n=11$). Employment tenure: 1–5 years (38.2%, $n=50$), 6–10 years (31.3%, $n=41$), >10 years (30.5%, $n=40$). Institution: Puskesmas (63.4%, $n=83$), district hospital (36.6%, $n=48$). The respondent profile is consistent with Banyumas Regency's healthcare workforce demographics (Kemenkes RI, 2022).

4.2 Descriptive Statistics

Table 1. Descriptive Statistics (n = 131; Category: 3.40–5.00 = High; 2.60–3.39 = Moderate)

Variable	N	Min	Max	Mean	SD	Category
Hybrid Mentoring Quality	131	2.25	5.00	3.76	0.64	High
Employee Competency	131	2.33	5.00	3.71	0.62	High
Adaptive Resilience	131	2.17	5.00	3.69	0.67	High

All three constructs are perceived at high levels (means 3.69–3.76). Hybrid mentoring quality (M=3.76) is the highest-rated, suggesting that healthcare workers in Banyumas's Puskesmas and hospitals generally perceive their hybrid mentoring interactions as meaningful and effective. Adaptive resilience (M=3.69) is the lowest-rated construct consistent with the documented post-pandemic psychological toll on Indonesian healthcare workers (WHO, 2022) and confirming that resilience development, while substantially advanced by hybrid mentoring, remains a continuing developmental priority in this context.

4.3 Measurement Model Assessment

Table 2. Measurement Model Results

Construct	Items	Min. Loading	CR	AVE	HTMT Max	Validity
Hybrid Mentoring Quality	8	0.714	0.918	0.551	0.812	Valid
Employee Competency	6	0.721	0.889	0.543	0.824	Valid
Adaptive Resilience	6	0.708	0.882	0.529		Valid

All indicator outer loadings exceeded the 0.70 threshold, confirming indicator reliability (Hair et al., 2019). CR values ranged from 0.882 (Adaptive Resilience) to 0.918 (Hybrid Mentoring Quality), all exceeding 0.70, confirming internal consistency. AVE values ranged from 0.529 (Adaptive Resilience) to 0.551 (Hybrid Mentoring Quality), all exceeding 0.50, confirming convergent validity. The maximum HTMT ratio was 0.824 (Employee Competency Adaptive Resilience), below the 0.85 threshold (Henseler et al., 2015), confirming discriminant validity. The measurement model is fully valid and reliable for structural analysis.

4.4 Structural Model and Hypothesis Testing

R² for Employee Competency = 0.407, indicating hybrid mentoring quality explains 40.7% of competency variance, a substantial level that confirms the developmental impact of hybrid mentoring on this multi-dimensional competency construct. R² for Adaptive Resilience = 0.641, indicating the model explains 64.1% of resilience variance, a high level of explanatory power that positions hybrid mentoring quality and employee competency as the dominant predictors of post-pandemic adaptive resilience among Banyumas healthcare workers. Q² for employee competency = 0.214 and for adaptive resilience = 0.338, both substantially above zero, confirming predictive relevance.

Table 3. Direct Effect Hypothesis Testing (Bootstrapping n = 5,000)

Hypothesis	Path	β	SE	t-stat	p-value	f ²	Decision
H1	HMQ → EC	0.452	0.078	5.781	0.000	0.257 (Lrg)	Supported
H2	HMQ → AR	0.319	0.082	3.912	0.000	0.136 (Med)	Supported
H3	EC → AR	0.394	0.082	4.812	0.000	0.196 (Lrg)	Supported

Notes: f² effect size: Small ≥ 0.02 ; Medium ≥ 0.15 ; Large ≥ 0.35 (Cohen, 1988)

Table 4. Indirect Effect Mediation Analysis (Bootstrapping n = 5,000)

Indirect Effect (Mediation)	β Indirect	SE	t-stat	p-value	95% CI
H4: HMQ → EC → AR	0.178	0.052	3.421	0.001	[0.079, 0.281]

Table 5. Model Fit: R² and Q² Values

Endogenous Variable	R ²	Q ²	Interpretation
Employee Competency	0.407	0.214	Substantial
Adaptive Resilience	0.641	0.338	Substantial

Hypothesis 1 (H1: HMQ → EC, $\beta = 0.452$, $t = 5.781$, $p < 0.001$, $f^2 = 0.257$) is SUPPORTED with a large effect size, the strongest direct relationship in the model. Hybrid mentoring quality is a powerful predictor of employee competency development, explaining 40.7% of competency variance. This confirms that blended mentoring combining face-to-face and digital modalities is an effective competency development vehicle for Banyumas healthcare workers. Hypothesis 2 (H2: HMQ → AR, $\beta = 0.319$, $t = 3.912$, $p < 0.001$, $f^2 = 0.136$) is SUPPORTED with a medium effect size. Hybrid mentoring quality has a significant direct positive effect on adaptive resilience, confirming that the psychosocial support and resilience modeling mechanisms predicted by HSHEF (Zuhaena, 2026) operate independently of competency development. Hypothesis 3 (H3: EC → AR, $\beta = 0.394$, $t = 4.812$, $p < 0.001$, $f^2 = 0.196$) is SUPPORTED with a large effect size. Employee competency is a powerful predictor of adaptive resilience, confirming that technically competent healthcare workers deploy greater cognitive resources and self-efficacy when facing post-pandemic adversity. Hypothesis 4 (H4: Indirect HMQ → EC → AR, $\beta = 0.178$, 95% CI [0.079, 0.281], $t = 3.421$, $p = 0.001$) is SUPPORTED. Employee competency significantly mediates the mentoring-resilience relationship; the CI excludes zero, and the direct effect (H2) remains significant, confirming partial rather than full mediation. Total effect of HMQ on AR = 0.319 (direct) + 0.178 (indirect via EC) = 0.497, demonstrating the comprehensive resilience-building impact of hybrid mentoring.

Discussion

The large effect of hybrid mentoring quality on employee competency (H1: $\beta = 0.452$, $f^2 = 0.257$), the strongest relationship in the model, validates HSHEF's core proposition that hybrid mentoring is an effective competency development vehicle in post-pandemic healthcare settings (Zuhaena, 2026). The combined face-to-face and digital modalities appear to provide Banyumas healthcare workers with comprehensive developmental coverage: in-person sessions facilitate

hands-on clinical skill modeling and immediate corrective feedback, leveraging the observational learning mechanism central to Social Learning Theory (Bandura, 1977), while digital interactions enable ongoing guidance, knowledge sharing, and reflective practice that extend the mentoring relationship beyond scheduled meetings. This finding directly corroborates Johnson and Ridley's (2021) and Zuhaena et al.'s (2025) evidence on hybrid mentoring's competency development effectiveness, and is consistent with HSHEF's prediction that hybrid modality integration produces superior competency outcomes compared to single-modality approaches (Zuhaena, 2026). Surveyandini and Zuhaena (2022) provided similar Indonesian-context evidence that training quality significantly predicted competency enhancement in community programs, reinforcing the findings' contextual validity.

The significant direct effect of hybrid mentoring quality on adaptive resilience (H2: $\beta = 0.319$, $f^2 = 0.136$, medium effect) confirms that mentoring provides psychosocial resources, emotional support, resilience modeling, and coping guidance that build healthcare workers' resilience capacity independent of competency enhancement. This direct pathway is consistent with the Conservation of Resources Theory's prediction that social resource provision (mentoring) builds resilience resource reservoirs (Hobfoll et al., 2018), and with Luthans et al.'s (2021) evidence that developmental relationships significantly predict psychological resilience components. For Banyumas healthcare workers navigating the post-pandemic recovery characterized by elevated patient loads, staff shortages, and moral distress, the direct resilience-building function of hybrid mentoring is practically significant: it justifies investment in mentoring programs as resilience-building initiatives beyond their competency development value alone. This dual value proposition, competency development, and resilience building in a single HRD modality make hybrid mentoring particularly cost-effective for resource-constrained Indonesian public health institutions (WHO, 2022; Kemenkes RI, 2022).

The strong effect of employee competency on adaptive resilience (H3: $\beta = 0.394$, $f^2 = 0.196$, large effect) reveals that technically and interpersonally competent healthcare workers are substantially more resilient to adversity, consistent with Bandura's (1977) self-efficacy mechanism and Hobfoll et al.'s (2018) resource theory. Healthcare workers who possess robust clinical competencies approach challenging situations with greater confidence and reduced cognitive overload, preserving psychological resources for adaptive coping and performance maintenance under pressure. This finding reframes competency development as not merely a performance improvement investment but simultaneously a resilience-building investment a dual-value framing with important implications for Indonesian healthcare workforce development policy, which has traditionally siloed clinical competency development and psychological well-being programs (WHO, 2022; Kemenkes RI, 2022). Triana et al. (2024) provided indirect corroboration in their finding that skill-related variables predicted healthcare worker performance and coping outcomes at RSUD Ajibarang a healthcare institution within the Banyumas regional system.

The partial mediation finding (H4: indirect $\beta = 0.178$, 95% CI [0.079, 0.281], significant) integrates both pathways, direct psychosocial resilience and indirect competency-building resilience into a coherent dual-mechanism HSHEF model: hybrid mentoring builds resilience through psychosocial support (direct) and through competency development that then serves as a cognitive resource for resilience (indirect). Zuhaena's (2026) HSHEF model explicitly theorizes this dual mechanism, and the present study provides the first quantitative empirical validation of the model's core mediation hypothesis in a healthcare sector application. Luthans et al. (2021) found analogous partial mediation in developmental relationship-resilience pathways in other organizational contexts, providing cross-contextual validation. The total HMQ effect on AR ($\beta = 0.497$) demonstrates the comprehensive and clinically meaningful resilience impact of high-

quality hybrid mentoring programs a finding that should inform HRD investment decisions in Banyumas Regency's Puskesmas network and district hospital system.

5. Conclusion

This study examined the effects of hybrid mentoring quality on employee competency and adaptive resilience, and the mediating role of competency, among 131 healthcare workers across six Puskesmas and two district hospitals in Banyumas Regency using PLS-SEM. All four hypotheses were supported: H1 (HMQ → EC: $\beta=0.452$, large effect, Supported), H2 (HMQ → AR direct: $\beta=0.319$, medium effect, Supported), H3 (EC → AR: $\beta=0.394$, large effect, Supported), H4 (HMQ → EC → AR indirect: $\beta=0.178$, partial mediation, Supported). The model explained 64.1% of adaptive resilience variance ($R^2=0.641$; $Q^2=0.338$), demonstrating substantial predictive power. Total HMQ effect on AR = 0.497 (direct + indirect).

Theoretically, this study provides the first empirical validation of Zuhaena's (2026) HSHEF model in a healthcare sector context, demonstrating that hybrid mentoring simultaneously develops competency and adaptive resilience through complementary direct and indirect mechanisms, a dual-pathway structure that advances the HRD literature beyond single-outcome mentoring models. The study also advances Conservation of Resources Theory by documenting the competency-as-resilience-resource pathway in a healthcare adversity context. Practically, healthcare HR managers in Banyumas and similar Indonesian regencies are advised to: (1) invest in structured hybrid mentoring programs combining regular face-to-face clinical supervision with digital platforms (video mentoring, case discussion apps, competency tracking dashboards); (2) prioritize mentoring quality through systematic mentor selection criteria, mentor training programs, and program quality evaluation; (3) integrate competency development and resilience-building objectives within unified hybrid mentoring program designs; and (4) leverage WHO's post-pandemic healthcare workforce resilience framework alongside HSHEF as dual reference frameworks for program development. Limitations: cross-sectional design; single-regency focus; restriction to workers with hybrid mentoring experience. Future research should employ longitudinal designs tracking competency and resilience trajectories across full mentoring program cycles, examine digital infrastructure quality as a moderator, and test HSHEF in other Indonesian healthcare contexts.

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