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Digital Human Resource Practices and Psychological Empowerment as Drivers of Proactive Customer Service Performance: The Mediating Role of Organizational Climate and the Moderating Role of Job Security

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ABSTRACT

Public hospitals are under pressure to digitalize internal processes while maintaining responsive, patient-centered service. This study examines whether the digital transformation of human resource practices and psychological empowerment enhance proactive customer service performance through organizational climate, and whether job security strengthens the formation of that climate. A census survey was conducted among 230 physicians working in seven Type C government hospitals in the Gerbangkertosusila metropolitan region of East Java, Indonesia. Data were analyzed using partial least squares structural equation modeling. Digital HR practices ($\beta = 0.287$, $P < 0.001$) and psychological empowerment ($\beta = 0.195$, $P = 0.001$) positively predicted organizational climate, which in turn increased proactive customer service performance ($\beta = 0.400$, $P < 0.001$). Organizational climate transmitted the effects of both digital HR practices ($\beta = 0.115$, $P < 0.001$) and psychological empowerment ($\beta = 0.078$, $P = 0.006$). Job security did not significantly moderate either antecedent-climate relationship. The findings position organizational climate as the principal managerial mechanism through which technological and psychological resources become anticipatory service behavior. Public hospital managers should therefore combine digital HR investment with practices that reinforce communication, collaboration, trust, and employee support.

Keywords: Digital Human Resource Management, Psychological Empowerment, Organizational Climate, Job Security, Proactive Customer Service Performance
JEL Classifications: M12, M15, M31, I11

1. INTRODUCTION

Public hospitals are simultaneously health care providers and complicated service organizations. How well public hospitals do is judged not only on clinical results and technical efficiency, but also on the swiftness, responsiveness and connectedness of the service an experience that patients live through. In this environment, proactive customer service performance (PCSP) identifies self- initiating and future-oriented activities in which employees "anticipate needs, deflect service failures, and solve emerging problems before the formal call for action" (Rank et al., 2007; Raub and Liao, 2012). In fact, a recent systematic review finds that proactive behaviors of healthcare employees will become more relevant to employee outcomes and quality of care. The majority of the existing evidence is in the cross-sectional section and we haven't developed enough of the context enough (Lai et al., 2024).

Digitalization has become a key management response to increasing service expectations. Digital HR is able to provide more timely access to HR information; it allows faster delivery of employee training and development and feedback; it ensures

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consistent communications and performance management (Strohmeier, 2020). HR cloud could also facilitate the decrease of administrative delay between units and increase coordination within the organization (Al-Rwaidan et al., 2023). Reports from some hospitals indicate that digitalization of HR can drive innovation in an organization, when it comes with an increase of employee's development and changeful leadership (Al-Shammari and Alzghoul, 2026). But it will not be enough. Human be Employee with the digital activities he will perform located within organization reality environment.

Psychological empowerment is a personal complementary resource. Psychological empowerment is viewed as an employee's perception that work has meaning and that the employee possesses sufficient role-related ability, choice, and ability to impact upon the task (Spreitzer, 1995). Furthermore, met-analytic results support the relationships of psychological empowerment with positive attitude and performance (Seibert et al., 2011), service findings suggest that empowered employees engage in customer-oriented behavior (Peccei and Rosenthal, 2001). It is expected that medical personnel are to be more effective in the public hospital setting in discovering service issues, coordinating solutions, and extending themselves beyond required role expectations. Nevertheless, empowerment may lie dormant, due to the context climate to inhibit initiative, sharing, and cooperation.

The relationship here can well be explained with the SCT model. SCT views behavior as the product of reciprocal interactions among personal factors, environmental conditions, and action (Bandura, 1986). In the present model, digital HR practices constitute an organizational resource, psychological empowerment is a personal cognitive resource, organizational climate represents the perceived work environment, and PCSP is the behavioral outcome. Organizational climate is therefore not treated as a passive background condition. It is the interpretive mechanism through which employees determine whether organizational systems and personal capability can be safely converted into anticipatory service.

Job security is another potential influencing factor behind the transformation. The same digital systems might be understood as learning tools by workers that have employment continuity but as means of monitoring, automation or substitution by job insecure workers. Generally, job insecurity leads to worse work attitudes and behaviors (Shoss, 2017; Jiang and Lavaysse, 2018). Several studies have demonstrated that insecure situations could depress proactive behavior of employees (Yao et al., 2021; He et al., 2022). However, its boundary role is not necessarily uniform in public institutions where employment arrangements, professional status, and organizational routines may stabilize employees' responses.

Three gaps motivate this study. First, digital HRM and psychological empowerment are often examined separately even though service performance depends on both organizational systems and employees' perceived agency. Second, research commonly treats climate as a direct predictor, but less often tests it as the mechanism connecting digital and psychological resources to PCSP in healthcare. Third, the moderating role of job security in the formation of organizational climate remains theoretically plausible but empirically uncertain. This disparity makes them especially pertinent to Indonesian Type C public hospitals which require flexible workforce systems to cope with digital innovation and yet providing an integrated public service is their primary role.

Thus, this research investigates how the digitalization of HR practices and psychological empowerment with mediation effect of organizational climate enhancing PCSP, and if job security enhances the links between the two antecedents and organizational climate. The study offers several contributions to the literature by modeling organizational and personal resources in a single SCT-based framework, positioning the organizational climate as the intermediate transmission process, testing job security as boundary condition, and introducing physicians in public hospitals at metropolitan area of emerging economies in a proactive service setting.

2. LITERATURE REVIEW AND HYPOTHESES

2.1. Social Cognitive Theory and the Research Model

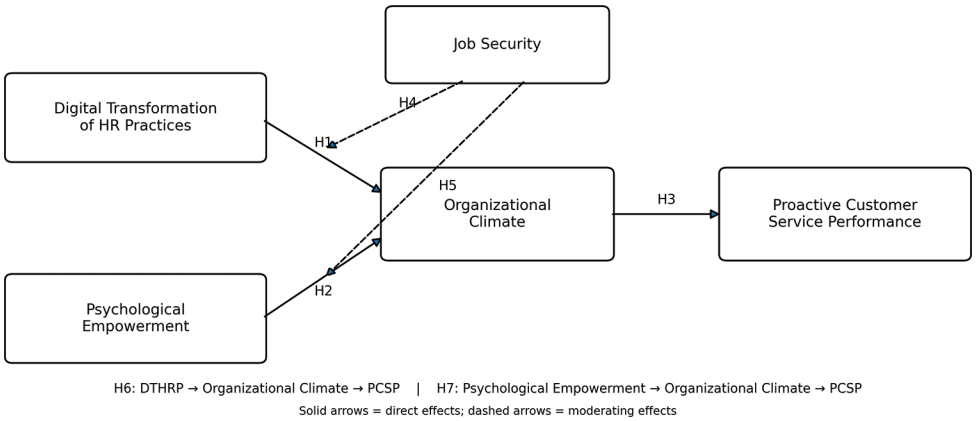
According to SCT, how humans operate can be explained with reciprocal determinism, i.e. Cognition and other personal factors interacts with environment conditions and behavior over time (Bandura, 1986). As anticipated services demands that employees perceived that they would be able to do so, that the environment would permit the job enactment to occur, and they anticipated that their behavior would be able to produce valued results, the theory is well suited to conduct research on this topic. Therefore, Proactivity behaviors cannot be a disposition of employees, or a response to organization policy, it's an interaction between employee motivation and the context (Parker et al., 2010).

In the model digital HR practices, is positioned as organizational resource or signal, psychological empowerment serves as cognitive personal resource, organizational climate is shared/convergently perception of a given organizational environment. PCSP represents resultant service behavior, and JOB security is a contextual appraisement that might mediate the effects that the digitalization has on the usage of personal resources or the perception of digital HR practices, the model summarizes these relationships (directly, indirectly, modulating factors) in Figure 1.

2.2. Digital Transformation of HR Practices and Organizational Climate

Digital HRM has been defined as the use of information and communication technology for planning, reorganizing and executing all administrative processes and strategic activities that take place within any department of a company and those tasks that contribute to the achievement of the organizational purpose and objectives (Strohmeier, 2020). Unlike earlier studies that focused on the rationale for administrative rationalization and organization integration in e-HRM (Marler and Fisher, 2013), digital HRM now encompasses integrated systems, advanced capabilities in analytics, the use of cloud services, online delivery for learning, and user self-service, as well as a high use of technologically enabled performance measurement (Vrontis et al., 2023). In this study, the digital construct of our digital HRM

Figure 1: Conceptual research model. DTHRP: Digital transformation of HR practices, PCSP: Proactive customer service performance. H_6 and H_7 represent the two specific indirect effects through organizational climate



entails three components, namely; cloud enabled infrastructure, cloud enabled performance service and cloud enabled software services (Al-Rwaidan et al., 2023).

The practices within the organization have implications for climate, through informing management about what is valued, rewarded and expected. When HRM systems are clear and consistently implemented, people have consistent conceptions of organizational priorities (Bowen and Ostroff, 2004). Digitized HRM practices may enhance these signals by providing easier access to information, standardized processes, fast feedback and clear pathways for collaboration and learning, especially important in hospital care work because, work processes are inherently interdependent and timely access to information is crucial for service maintenance.

Within the SCT approach a digital HR system would, therefore, modify the context in which employees evaluate their reception to the organization and coordinate actions together. Effectively adopted, a system that minimizes unnecessary bureaucracy and enables skill development will foster a sense of the organization being communicative, cooperative and trusting; one that is both receptive and responsive. Digitalization implemented in the absence of such characteristics will lead to the contrary conclusion but the assumption is that sound implementation would have facilitated the desired climate perceptions.

- H_1: Digital transformation of HR practices has a positive effect on organizational climate.

2.3. Psychological Empowerment and Organizational Climate

Psychological empowerment consists of three components: meaning, competence, self-determination, and impact (Spreitzer, 1995). Meaning is the alignment of work and the self, competence is confidence in performing work, and self-determination is freedom over work methods, while impact is the perception of ability to influence organizational outcomes. These cognitions increase the probability that employees participate and communicate in order to achieve work improvement; therefore, they have higher sense of accountability for improvement work.

Empowered employees are not just recipients of climate, but they also participate and interact so as to enact climate. Employees, who feel that their work is important and that they could influence, are more likely to share information, work across professional boundaries and construct beneficial interpretation of managerial behaviors. Meta-analysis also connects psychological empowerment to attitudinal and behavioral outcomes (Seibert et al., 2011). Results from services literature show that empowerment is related to customer orientation behavior (Peccei and Rosenthal, 2001); and recent research indicates that psychological empowerment affects customers orientation through psychological support mechanism (Hu, 2025).

Within an SCT approach empowerment affects appraisals of environmental condition - for example where two people are working towards exactly the same policy, one of whom holds higher beliefs regarding their competences and impacts is more likely to perceive avenues for their input and the potential for greater co-ordination. Within the hospital context, these perceptions might serve to heighten feelings of being supported, trusted and being innovative.

- H_2: Psychological empowerment has a positive effect on organizational climate.

2.4. Organizational Climate and Proactive Customer Service Performance

Organizational climate is defined as employees' interpretations of organizational policies, procedures, practices, and behavior expectations (Schneider et al., 2017). The characteristics of a climate representing support, open communication, cooperativeness, confidence, and helpfulness are associated with a positive climate. Climate has been argued to be important since it signals to employees whether an individual will be welcomed, ignored or punished for taking initiative. Results of multidimensional climate study have shown it to be related to management practices, productivity, and innovation (Patterson et al., 2005).

PCSP is an anticipatory type of service behavior. It involves employees taking initiative to anticipate needs, preventing

service problems and initiating solutions, without being asked by customers or a manager (Rank et al., 2007). There has been found to be evidence that initiative climate leads to PCSP which influences customer satisfaction through aggregation of PCSP into customer focused proactiveness (Raub and Liao, 2012). Other service research indicates that favorable learning environments lead to maintenance of service proactiveness (Hwang and Han, 2025).

In public hospitals, such an open organizational environment that fosters trust and teamwork may decrease the personal and interpersonal risk for employees of proactively addressing issues. Trust enable people to express opinions and concerns: assistance gives a greater capacity to work and norms that encourages and support changes make acceptable actions outside the traditional course of business. In this context, SCT thus makes the strong assumption that positive organizational environment will raise the chances that employees in this environment translate their intentions to pro-active service delivery behavior.

- H_3: Organizational climate has a positive effect on proactive customer service performance.

2.5. The Moderating Role of Job Security

Job security refers to a person's belief regarding the continuation of employment (De Witte, 2005). Therefore, insecurity in relation to one's job implies uncertainty about keeping the position and desired features in the job. Evidence reviewed so far, particularly through meta-analysis, suggests job insecurity is a source of stress in the workplace, with significant negative implications for well-being, commitment and performance (Shoss, 2017; Jiang and Lavaysse, 2018). Also, it should decrease proactivity since employee is more likely to conserve his/her energy and to pursue short term protection of himself/herself, without taking risks (Yao et al., 2021; He et al., 2022).

Thus, the same digital HR practice may induce very different climate perceptions, as the case of job security would determine how much employees trust the intent behind the HR practice. Feeling job secured allows employee to consider digital learning, feedback or performance systems as long-term beneficial instruments, while insecurity implies possible surveillance and restructuring schemes. Higher job security should thus lead to a reinforcement of the positive relationship between the various digital HR practices and the Organizational Climate.

Furthermore, it's likely that Job Security explains whether motivated employees are prepared to behave on their initiative. This doesn't directly suggest whether participation will occur, as we found empowerment related positively to work meaning, competency, autonomy and impact -all indicators of willingness to participate. However, taking the initiative has interpersonal and career costs, to which secure employees might invest their psychological assets in cooperation and amelioration - hence their resulting more positive atmosphere.

- H_4: Job security positively moderates the relationship between digital transformation of HR practices and organizational climate; the relationship is stronger when job security is high
- H_5: Job security positively moderates the relationship between psychological empowerment and organizational climate; the relationship is stronger when job security is high.

2.6. The Mediating Role of Organizational Climate

Whereas digitally mediated HR systems can provide information or development, active and ongoing behavior development will not emerge when internal systems of communication remain close-minded, there are Poor cross-group support; and the work processes do not support pro activity. In this case, it is argued here that workplace climate explains this association between formal digital HR processes and employee proactive service behaviors PCSP.

The climate serves as interpretation of the context that influences employees' behavior. As an interpretation of the context, the digital HR systems have a role to play through their effects on the social climate of the workplace that influences the development of proactive PCSP behaviors that occur outside explicit digital information providing functions. The mechanism is also similar to that the mechanism of developing psychological empowerment, although different.

- H_6: Organizational climate mediates the relationship between digital transformation of HR practices and proactive customer service performance
- H_7: Organizational climate mediates the relationship between psychological empowerment and proactive customer service performance.

3. METHODOLOGY

3.1. Research Design and Context

The study employed a descriptive, explanatory, cross-sectional research design. The individual medical employees were the unit of analysis. The real-world phenomenon included Type C government hospitals in the region of Gerbangkertosusila (a greater Surabaya area involving gresik, bangkalan, mojokerto, surabaya, sidoarjo, lamongan) which are strategic providers in the Indonesian referral and public service system and are simultaneously challenged with a demand for digital transformation, administrative accountability, and patient's sensitivity.

The structural model posits that HR transformations and psychological empowerment are both antecedents of organizational climate which is a mediator, job security is a moderator of the two antecedent-climate effect paths, and that PCSP is the dependent variable. Thus, this design enabled direct effects, two interaction effects, and two specific indirect effects to be tested.

3.2. Population, Sample, and Data Collection

The study population consisted of 230 physicians employed in seven Type C government hospitals in the study area. The respondent profile in the source data comprises 94 general practitioners and 136 medical specialists; accordingly, the population is reported as medical staff rather than paramedical staff. Because the population was manageable and fully identifiable, a census approach was used. All 230 members of the population provided usable responses.

Primary data were collected using a structured, self-administered questionnaire distributed directly to respondents. This consisted of data on sex, age, years of education and profession. The second part contained a section in which the study constructs were assessed. Before field distribution, academic experts and healthcare practitioners reviewed the questionnaire for content relevance and contextual clarity. Participation was voluntary, and respondents were informed that their answers would be treated confidentially and reported only in aggregate.

3.3. Measures

All construct items employed the five-point Likert response scales which ranged from 1 (strongly disagree) to 5 (strongly agree). The dimensions were derived from the extant conceptualizations, and adapted to the public-hospital environment without changing the original constructs' meaning.

HR digitalization dimensions used to assess digital transformation of HR practices were perceived cloud-supported HR infrastructure, performance services, and software services which, similar to Al-Rwaidan et al. (2023), assess the extent to which the digital environment facilitated access to HR information, learning, communication, performance processes, and services to workforce.

Psychological empowerment was evaluated in the Spreitzer (1995) 4 dimensions which were meaning, competence, self-determination and impact. Organizational climate variables were perceived organizational support, communication, cooperation and teamwork, trust, innovation according to existing literatures of multidimensional organizational climate (Patterson et al., 2005; Schneider et al., 2017).

Job security was operationalized as respondents' beliefs concerning job stability and the confidence about whether their employment will last, based on De Witte (2005). PCSP reflected the anticipatory and initiative service actions (anticipating and initiating problem-solving actions which extend beyond roles and routine), which was based on the construct developed by (Rank et al., 2007).

3.4. Data Analysis

The hypotheses were tested with partial least squares structural equation modeling (PLS-SEM) using SmartPLS. PLS-SEM was chosen since the hypothesized model contains both mediation and moderation and our model are geared to explain variances in key endogenous variables. For purposes of reporting PLS-SEM findings we followed the standard two-stage approach to estimating a PLS model (Hair et al., 2019).

Reliability and validity the measurement model was evaluated on its internal consistency (Cronbach's alpha) and composite reliability as well as convergent validity (average variance extracted – AVE). We use at least 0.70 as criteria to establish satisfactory level of internal-consistency and AVE has to exceed 0.50. Structural path analysis and indirect effects were analyzed with 5,000 resamples for bootstrapping. The significance at a 5% level was set at $P < 0.05$. Testing for moderating effects through the examination of interaction terms by multiplying the job security variable with the three predictor variables.

4. RESULTS

4.1. Respondent Profile

As shown in Table 1, 66.52% of respondents were male and 33.48% were female. The largest age category was 31-40 years (40.43%), followed by 41-50 years (33.48%). Most respondents reported a master's-level education (59.13%). Medical specialists represented 59.13% of the sample and general practitioners 40.87%. The profile indicates that the analysis represents experienced medical professionals across multiple career stages.

4.2. Measurement Model Assessment

As shown in Table 2, all constructs exceeded the recommended internal-consistency threshold. Cronbach's alpha ranged from 0.783 to 0.895, and composite reliability ranged from 0.859 to 0.916. AVE values ranged from 0.563 to 0.608, exceeding the 0.50 criterion. The available measurement statistics therefore support construct reliability and convergent validity.

4.3. Structural Model and Hypothesis Testing

As shown in Table 3, digital transformation of HR practices had a positive effect on organizational climate ($\beta = 0.287$, $t = 5.165$, $P < 0.001$), supporting H_1. Psychological empowerment also positively affected organizational climate ($\beta = 0.195$, $t = 3.264$, $P = 0.001$), supporting H_2. Organizational climate, in turn, positively predicted PCSP ($\beta = 0.400$, $t = 6.162$, $P < 0.001$), supporting H_3.

The two interaction effects were not statistically significant. Job security did not strengthen the effect of digital HR practices on organizational climate ($\beta = 0.047$, $t = 0.779$, $P = 0.436$), and it did not strengthen the effect of psychological empowerment on organizational climate ($\beta = 0.022$, $t = 0.425$, $P = 0.671$). H_4 and H_5 were therefore not supported.

Table 1: Respondent profile

Characteristic	Category	Frequency	Percentage
Gender	Male	153	66.52
	Female	77	33.48
Age	≤30 years	4	1.74
	31-40 years	93	40.43
	41-50 years	77	33.48
	51-60 years	46	20.00
	>60 years	10	4.35
Education	Bachelor's degree	94	40.87
	Master's degree	136	59.13
Professional status	General practitioner	94	40.87
	Medical specialist	136	59.13

n=230. Percentages are based on the complete census responses

Table 2: Measurement model assessment

Construct	Cronbach's alpha	Composite reliability	AVE
Digital transformation of HR practices	0.845	0.886	0.563
Psychological empowerment	0.895	0.916	0.577
Organizational climate	0.847	0.887	0.567
Job security	0.783	0.859	0.604
Proactive customer service performance	0.871	0.903	0.608

AVE: Average variance extracted. Recommended minimums are 0.70 for Cronbach's alpha and composite reliability and 0.50 for AVE

Table 3: Structural model and hypothesis tests

Hypothesis	Path relationship	β	t-value	P-value	Decision
H_1	DTHRP → Organizational climate	0.287	5.165	<0.001	Supported
H_2	Psychological empowerment → Organizational climate	0.195	3.264	0.001	Supported
H_3	Organizational climate → PCSP	0.400	6.162	<0.001	Supported
H_4	DTHRP×Job security → Organizational climate	0.047	0.779	0.436	Not supported
H_5	Psychological empowerment×Job security → Organizational climate	0.022	0.425	0.671	Not supported
H_6	DTHRP → Organizational climate → PCSP	0.115	3.949	<0.001	Supported
H_7	Psychological empowerment → Organizational climate → PCSP	0.078	2.771	0.006	Supported

DTHRP: Digital transformation of HR practices, PCSP: Proactive customer service performance. H_6 and H_7 are specific indirect effects based on 5,000 bootstrap resamples

Both specific indirect effects were significant. Digital HR practices influenced PCSP through organizational climate (β = 0.115, t = 3.949, P < 0.001), supporting H_6. Psychological empowerment also influenced PCSP through organizational climate (β = 0.078, t = 2.771, P = 0.006), supporting H_7. Because the source results do not report the corresponding direct effects from the antecedents to PCSP, the findings establish significant indirect effects but do not distinguish between full and partial mediation.

5. DISCUSSION

5.1. Digital HR Practices and Psychological Empowerment as Climate Antecedents

Digital HR practices' relationship with organizational climate offers evidence that digitalizing organizations may involve more than a quick-fix solution. When the digital HR systems grant easy access to relevant information, better opportunities for learning and communication, they provide signals to employees in terms of how the organization works and what it prioritizes. This is in accordance with the HR systems strength theory (Bowen and Ostroff, 2004), empirical literature studying the digitalization of HR functions into the cloud (Al-Rwaidan et al., 2023) and aligned with the findings from the IRMM work that the developmental and leadership support are essential for organization specific effects of digital HR Min hospitals (Al-Shammari and Alzghoul, 2026).

Also, psychological empowerment had an effect on organizational climate, which implies that part of the organizational climate is enactment process that is enabled through participation of its members and their cognition rather than through policies implemented from scratch. The physicians who feels meaningfulness, competence, self-determination, impact on results and decision make is more likely to constructively engage with organizational processes and co-members of it. This is in agreement with the wide range of organizational and performance outcome effects found in the literature on empowerment in the workplace (Seibert et al., 2011) and on organizational commitment and behavior in the service industry literature (Hu, 2025), including research on patient-oriented behavior (Peccei and Rosenthal, 2001).

The DTHRP coefficient was larger than the psychological empowerment coefficient (0.287 vs. 0.195), although no formal test of coefficient differences was reported. Descriptively, the pattern suggests that institutional systems may be especially salient for climate formation in public hospitals, where work is highly interdependent and governed by formal procedures. This does not reduce the relevance of empowerment; instead, it indicates that personal agency is more likely to improve climate when organizational systems also provide consistent channels for action.

5.2. Organizational Climate as the Mechanism for Proactive Service

Organizational climate had the largest reported direct path in the model (=0.400). This further emphasizes the reliance on employee interpretation of the work context in proactive service; in a supportive environment of communication, cooperation, trust and innovation, health care staff are able to escalate problems before an actual service failure becomes a formal complaint and the service provider is able to coordinate across professional fields and innovate solutions earlier.

The significant indirect paths are crucial theoretically to understand why it is not guaranteed that the combination of both digital investment and empowerment will result in service improvement; digital HR practices resulted in PCSP via climate. This shows how the value of technology is achieved in terms of creating a positive work culture where learning is valued, information is readily available to employees, and a sense of fairness exists. Similarly, psychological empowerment achieved PCSP via climate which suggests that a belief in one's capabilities and autonomy is realized in proactive service to patient only if the job context appears to signal that initiative and risk-taking is encouraged. Both results elaborate further on SCT showing a sequence from organizational resources and self-resources through environmental perceptions to service outcomes.

These findings align with the cross-level finding regarding initiation climate and self-efficacy predicting PCSP (Raub and Liao, 2012) and findings in service literature that Organizational support contributes to proactive service through learning (Hwang and Han, 2025), and findings in health care literature that show a means by which organizational support can improve quality of care via employees' behavior responses (Garcia-Pereyra and Matute, 2024). The current study advances service and health care literature by examining digital HR practices and psychological empowerment in the same path model.

5.3. Why Job Security Did Not Moderate the Relationships

Contrary to H_4 and H_5, job security did not significantly alter either path to organizational climate. The result does not imply that job security is unimportant. Rather, it suggests that within this sample, the benefits of digital HR practices and psychological empowerment for climate operated similarly across observed levels of job security.

One plausible explanation is institutionalization. Government hospitals may provide relatively stable employment expectations, professional career structures, and formal rules that limit meaningful variation in job security. If most respondents already perceive employment continuity, job security has little capacity to operate as a boundary condition. A second explanation is professional identity: general practitioners and specialists may evaluate digital systems primarily through their effects on work quality, coordination, and patient service rather than through fear of displacement. These interpretations remain provisional because the available results do not include the distribution of job-security scores or subgroup tests.

Similarly, the null interaction effect further complicates recent studies that indicated that job insecurity curbs proactivity (Yao et al., 2021; He et al., 2022). The impact of insecurity may more strongly appear in contexts in which insecurity functions primarily as a direct stressor, in which the type of employment relationships diversifies considerably or when insecurity of continuing in a job seems to be jeopardized due to rapid digital technological transformations. Future research should clearly differentiate between employees with stable, permanent and contract employees, highlight the differences between public and private health care systems, as well as examine which of the forms, or any other form-e.g. Fear of digital threat, technostress-is a more proximate boundary condition, serves as more potent source of stress and hence impedes to a greater extent the manifestation of employees' proactive behaviors.

5.4. Theoretical Contributions

Specifically, the research incorporates digital HR adoption and psychological empowerment as complementary drivers, thus beyond technology-only and individual-only conceptualizations of employee service proactivity. Specifically, it defines organizational climate as the key environmental enabler of an SCT sequence. The high indirect effects suggest the mechanisms by which individual differences in technological and personal resources facilitate behavior, the latter through an employee's perception of their employer providing unconditional support and norms.

Third, the study contributes to service marketing by linking internal management conditions to anticipatory frontline behavior. PCSP is strategically important because proactive employees prevent service breakdowns and respond to needs before patients must escalate them. Fourth, the nonsignificant moderation results specify a boundary to job-security theory: in an institutionalized public-hospital context, job security may not condition the formation of climate in the expected manner.

Finally, the study extends the geographic and occupational coverage of proactive service research. Evidence from Indonesian physicians demonstrates that climate-based mechanisms are relevant in a public, professional, and emerging-market context that differs from the hospitality and private-service settings in which PCSP has most often been examined.

5.5. Managerial Implications

Hospital managers should regard digital HR transformation not as a software-procurement issue but rather as an organizational design effort. The digital implementation of easy access to the learning environment, performance feedback systems, worker information, and communications must be complemented with clear descriptions of purposes, non-stigmatizing work processes, and an atmosphere of listening to doctors' feedback. These steps will lead to workers feeling that the system will give them support and transparency.

Psychological empowerment will be enhanced with the implementation of meaningful role communications, the development of expertise and skills, autonomy within a defined professional and organizational scope, and opportunities that will facilitate physician opportunities to impact service improvements.

Empowerment needs to be paired with a climate of support for constructive voice and a reward system that encourages early action. The implementation of interunit service huddles, fast escalation mechanisms and recognition of preventive actions can translate empowerment into observable PCSP. Since job security did not strengthen the model relationships, managers can't expect that secure employment will alone elicit receptiveness to digital change or proactively contribute to service improvement efforts. Other workable levers such as quality of communication, collaboration, trust, support and the perceived credibility of the improvement initiatives will be the management lever for achieving receptiveness and proactivity in service provision. Managers should assess changes in climate along with adoption measures in evaluating the impacts of digital HR implementation endeavors.

5.6. Limitations and Future Research

Several limitations need to be considered in interpreting these results. The cross-sectional nature of the study is unable to determine the direction of causal influences, and use of self-reported measures is likely to inflate relationships due to common source effects. Longitudinal or time-lagged models and use of data both from the employees and with supervisor ratings, from patients or based on objective service indicators would overcome these limitations in future research.

Although the study achieves representative coverage of the target population, generalizations must be made cautiously beyond private hospitals, other types of hospitals, nurses, administrative personnel or other locales. Comparative studies are needed to see if the model holds regardless of hospital ownership type, worker-status, professional grouping, or digital-ness.

The model described contains two proposed indirect effects but do not appear to offer both direct effect paths (DTHRP to PCSP and empowerment to PCSP) needed to determine if mediation is complete or partial. These direct effects should be estimated and comparison made with alternative structural solutions in future analyses.

6. CONCLUSION

This study shows that digital transformation of HR practices and psychological empowerment contribute to proactive customer

service performance through a shared managerial mechanism: organizational climate. Digital systems and empowered employees are more likely to produce anticipatory patient service when the work environment is experienced as supportive, communicative, collaborative, trustworthy, and open to improvement.

Job security did not significantly strengthen either antecedent-climate relationship. The finding suggests that, in these Indonesian public hospitals, employment stability was not the primary condition governing whether digital and psychological resources improved climate. The practical priority is therefore to embed digital HR initiatives and empowerment practices within a deliberately cultivated organizational climate. By doing so, hospitals can move beyond administrative digitalization toward a workforce capable of anticipating needs and preventing service problems.

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