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RESEARCH ARTICLE

Workplace Telepressure and Turnover Intention in the Chinese Civil Aviation Industry

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Abstract

Digital connectivity in the aviation industry can foster an "always-on" culture, creating workplace telepressure, defined as the urge to respond to work-related messages immediately. Drawing on Conservation of Resources Theory, we examine whether job burnout mediates the association between workplace telepressure and turnover intention using survey data from 201 employees in China's civil aviation industry across multiple occupational categories. Results show that workplace telepressure is positively associated with job burnout, and that job burnout fully mediates the relationship between workplace telepressure and turnover intention. Psychological detachment serves as a key boundary condition: it buffers the effect of workplace telepressure on job burnout and weakens the indirect effect of workplace telepressure on turnover intention through job burnout. These findings suggest that airlines should implement policies that support employees' right to disconnect and strengthen recovery opportunities to reduce the hidden costs of digital connectivity and support retention in high-stakes settings.

Keywords: workplace telepressure, job burnout, psychological detachment, turnover intention, civil aviation industry.

1 Introduction

1.1 Research Background

As a vital part of the global economic system, the civil aviation industry serves not only as a strategic engine for national development but also as a key indicator of economic vitality. As the post-pandemic era draws to a close, China's civil aviation sector is entering an accelerated recovery phase. According to the latest data released by the Civil Aviation Administration of China (CAAC) at the national civil aviation work conference in January 2026, the industry achieved steady growth in total transport turnover, passenger traffic, and cargo/mail volume in 2025, with year-on-year increases of 10.5%, 5.5%, and 13.3%, respectively [1]. However, behind these impressive indicators lies a marked rebound in operational intensity. For both pilots and ground crew, this high-standard operational model has

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placed unprecedented pressure on the civil aviation workforce [2, 3].

With the deep integration of mobile internet technology into civil aviation operations management and the widespread adoption of instant communication tools (ICT), the distribution and communication of work instructions are no longer confined to physical offices or cockpits. Given the aviation industry's inherent characteristics of "high safety and high time-sensitivity," employees are often implicitly expected to remain "online" at all times to address flight delays, sudden schedule changes, or urgent safety notifications, as delays in handling such situations can have serious safety consequences [3]. In this context, rapid responsiveness is not merely a matter of communication efficiency. Rather, it is closely associated with coordination demands and accountability in handling unexpected events. Work-related messages may therefore be perceived not simply as routine requests, but as cues carrying time pressure and responsibility [4]. In civil aviation, such pressures may be particularly salient because delayed responses can be perceived as affecting coordination quality and safety-related responsiveness [5]. This technology was originally intended to enhance workforce flexibility. However, when employees begin to conflate workplace ICT usage with the expectation of real-time responsiveness, this can generate a form of pressure known as workplace telepressure [4]. This form of digital stress can be subtle yet consequential for employee recovery and well-being. Research indicates that when employees cannot mentally disconnect from work during non-working hours over time, their psychological resources become persistently depleted, increasing the risk of job burnout [6, 7]. For the aviation industry, where talent development costs are exceptionally high, job burnout not only affects employees' physical and mental health but is also a major contributor to higher turnover intention and greater flight safety risk [8]. This phenomenon is particularly pronounced among the industry's newcomers. According to the Annual Report on Employment Quality of Graduates from Shanghai Civil Aviation College (2024), early-career employees already exhibit a high early departure rate of 30% [9]. If this high turnover spreads to senior, critical roles, it may pose a serious threat to the industry's talent pipeline and long-term sustainability.

1.2 Research Gap

Although prior research has examined stress management in the civil aviation industry, important gaps remain. First, prior studies have primarily focused on physical environmental stressors (e.g., noise and high-altitude radiation) or organizational stressors (e.g., roster systems) [10, 11], whereas few have examined workplace telepressure—the psychological state in which employees feel compelled to respond quickly to work messages and remain constantly on standby to meet organizational expectations. In an industry where real-time information transmission is critical, this less visible form of pressure may be more disruptive than many technical demands. This may be especially true in civil aviation because employees work in a high-reliability environment in which communication delays may be perceived as having consequences beyond personal inconvenience, potentially affecting coordination quality, service continuity, and safety-related responsiveness [5]. Despite this contextual relevance, the interplay between industry-specific operational demands and workplace telepressure has received limited theoretical attention.

Second, in civil aviation—an industry characterized by high safety sensitivity and substantial human-capital barriers—the progression from perceived stress to the decision to leave is rarely immediate or linear; instead, it often unfolds through a less visible process of resource depletion (i.e., job burnout). Unlike many service industries, civil aviation employees' performance in this "intermediate state" is directly tied to aviation safety. If research focuses only on the starting point (stress) and the end point (turnover) while overlooking the role of burnout, it cannot fully explain why civil aviation employees develop turnover intention. From a conservation of resources (COR) perspective [12], clarifying how prolonged stress depletes psychological resources and leads to burnout, which in turn increases turnover intention, is crucial for developing early warning mechanisms. However, this mechanism has not been systematically tested in the existing literature.

Third, the literature has largely focused on the negative consequences of stress, with relatively limited attention to moderating factors that may alleviate or interrupt these effects [6, 13]. This gap may lead airlines to rely on reactive management responses rather than proactive interventions tailored to employees' needs.

1.3 Research Objectives and Significance

Building on the background and practical issues described above, this study examines the mechanisms through which workplace telepressure is associated with turnover intention among civil aviation professionals in China amid digital transformation.

Specifically, we pursue three objectives. First, we examine whether workplace telepressure is directly associated with turnover intention among aviation staff, assessing whether this emerging form of technology-related pressure contributes to talent attrition in the industry. Second, grounded in conservation of resources (COR) theory, we test job burnout as a mediator to clarify how workplace telepressure depletes psychological resources, increases burnout, and ultimately contributes to turnover intention. Third, we examine psychological detachment as a boundary condition by testing its moderating role in these relationships, thereby identifying recovery-related capacities that may help employees cope with high digital demands and informing more targeted interventions in airlines.

Theoretically, this study extends stress and recovery research to the civil aviation context by addressing the relationship between workplace telepressure and turnover intention in a safety-critical industry. Practically, the findings may inform airline policies on after-hours communication norms and resource recovery practices to protect employee well-being, support aviation safety, and reduce turnover risk.

2 Theoretical Foundations and Research Hypotheses

2.1 Theoretical Foundations: Conservation of Resources Theory

This study is grounded in conservation of resources (COR) theory. Proposed by Hobfoll, COR theory posits that individuals have an innate tendency to acquire, retain, develop, and protect valued resources. These resources include material resources (e.g., income), condition resources (e.g., marital status and job position), personal resources (e.g., self-efficacy), and energy resources (e.g., time and physical strength). Two core principles follow from this framework [12].

- **Loss Spiral:** When individuals face stressors such as excessive work demands or role conflict (e.g., workplace telepressure), their cognitive resources may be rapidly depleted. If these resources are not replenished promptly, individuals may enter a state of resource exhaustion. This depletion can undermine well-being and trigger defensive behaviors aimed at limiting further loss (e.g., withdrawal or disengaged work behavior).
- **Gain Spiral:** When individuals have sufficient resources or can replenish them through recovery experiences (e.g., psychological detachment), they are better equipped to cope with future stressors, thereby creating a virtuous cycle.

For civil aviation employees, work is characterized by high workload, high risk, and substantial emotional demands. Flight delays, operational support during adverse weather, and stringent safety assessments can create ongoing resource depletion [17]. In addition to these traditional operational stressors, employees are embedded in a work environment where safety requirements and time-sensitive coordination are tightly intertwined. Under such conditions, digital communication is not merely a tool for convenience but a critical channel for transmitting operational updates, schedule adjustments, and safety-related information. Consequently, employees may perceive a stronger obligation to remain constantly reachable and to respond promptly to work messages. From a COR perspective, this persistent expectation of responsiveness can accelerate the depletion of cognitive and emotional resources, particularly when employees have limited opportunities for recovery during nonwork time. When resources are overextended without timely replenishment, employees may experience burnout. To conserve remaining resources, employees may disengage from the stressor, which can manifest as turnover intention [15].

2.2 Hypothesis Proposal

2.2.1 Workplace Telepressure and Job Burnout

Workplace telepressure refers to an intense urge to respond promptly to work-related messages via information and communication technologies (ICT) [4]. Job burnout is a psychological syndrome arising from prolonged exposure to emotional and interpersonal stressors and is characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment [16]. From a conservation of resources (COR) perspective, perceived stress reflects an individual's response to threatened resource loss, whereas burnout represents the downstream outcome of sustained resource depletion. Civil aviation is a highly interdependent, complex system with minimal tolerance for error. For pilots, air traffic controllers, maintenance technicians, and ground

service personnel, constant connectivity and on-call readiness are often expected [17]. Prolonged exposure to such high-demand environments with limited recovery opportunities may contribute to job burnout. Recent empirical studies have reported a significant positive association between workplace telepressure and burnout symptoms [6, 13, 18]. Accordingly, we propose the following hypothesis:

- **H1:** Workplace telepressure is positively associated with job burnout.

2.2.2 *Job Burnout and Turnover Intention*

Turnover intention is typically defined as an employee's conscious and deliberate desire to leave an organization [19]. Turnover intention is widely considered one of the strongest predictors of actual turnover [20]. From a conservation of resources perspective, burnout-related resource depletion can heighten individuals' motivation to prevent further loss. Leaving a stressful environment may serve as a defensive strategy to halt further resource loss and protect physical and mental health. Research suggests that emotional exhaustion can undermine work motivation, making withdrawal behaviors more likely [21]. In organizational settings, this tendency may manifest as turnover intention and, ultimately, resignation [15]. Accordingly, we propose the following hypothesis:

- **H2:** Job burnout is positively associated with turnover intention.

2.2.3 *Mediating Mechanisms of Job Burnout*

Building on the preceding sections, workplace telepressure, as a resource-depleting stressor, may increase turnover intention through job burnout. An "always-on" work state and blurred work–family boundaries can compel employees to expend additional cognitive and emotional resources. When resource depletion exceeds replenishment, individuals may experience emotional exhaustion and depersonalization [12]. Under these conditions, turnover intention may reflect a defensive strategy to prevent further depletion of physical and mental resources rather than mere job dissatisfaction. In other words, workplace telepressure may not directly lead to immediate resignation; instead, it may first increase job burnout, which in turn contributes to turnover intention. Prior research suggests that job burnout is a key mediator between job demands and organizational outcomes, representing a pathway through which external stressors translate into psychological states and subsequent behavioral intentions [22]. Accordingly, we propose the following hypothesis:

- **H3:** Job burnout mediates the relationship between workplace telepressure and turnover intention.

2.2.4 *The Moderating Role of Psychological Detachment*

Psychological detachment refers to a state in which individuals mentally disengage from work during nonwork hours and stop thinking about work-related matters [23]. COR theory emphasizes the importance of resource replenishment. Psychological detachment can function as a "power-off" mechanism by interrupting resource depletion associated with workplace telepressure and facilitating recovery [7]. For employees with high psychological detachment, the link between workplace telepressure and job burnout may be weaker because they can replenish resources after work, thereby buffering the negative effects of digital stress. Conversely, for those with low psychological detachment, workplace telepressure may continue to deplete resources during nonwork hours, accelerating job burnout. Accordingly, we propose the following hypothesis:

- **H4:** Psychological detachment moderates the relationship between workplace telepressure and job burnout such that the positive association is weaker at higher levels of psychological detachment.

2.2.5 *Moderated Mediation Model*

Finally, we integrate the mediation hypothesis (H3) and the moderation hypothesis (H4) to propose a moderated mediation model. Because psychological detachment mitigates the impact of workplace telepressure on job burnout, it should also attenuate the indirect effect of workplace telepressure on turnover intention via job burnout. Specifically, employees who can psychologically detach from work should be less likely to experience job burnout that contributes to turnover intention, even under high workplace telepressure. Accordingly, we propose the following hypothesis and present the corresponding research model (Figure 1).

- **H5:** Psychological detachment moderates the indirect effect of workplace telepressure on turnover intention via job burnout, such that the indirect effect is weaker at higher levels of psychological detachment.

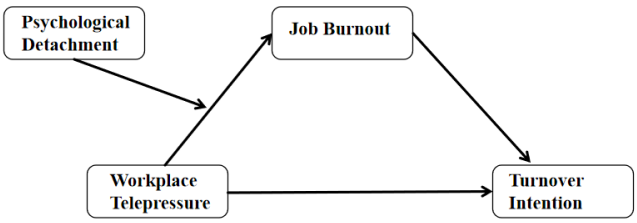

Figure 1. Research model.

3 Research Methodology

3.1 Research Design

This study employs a quantitative design to test the hypotheses proposed in Section 2. Given the study's aim of examining the relationships among the variables and the proposed moderation mechanism, we used a questionnaire survey as the primary data collection method. This approach allows us to quantify employees' subjective psychological states in a relatively large sample and to test the proposed relationships using statistical analyses [14].

The participants were employees in China's civil aviation industry, including personnel in flight operations, cabin service, aircraft maintenance, and ground support. This group was selected because civil aviation operates around the clock under high intensity and involves substantial safety responsibilities. Employees are often expected to receive schedule changes and safety bulletins at any time via instant messaging tools [3], making this context well-suited for examining workplace telepressure and its consequences.

3.2 Variable Measurement

To ensure the reliability and validity of the measures, all scales were drawn from established instruments used in prior peer-reviewed research. Because the sample consisted of civil aviation professionals in China, we used Chinese-language versions of the scales that had been translated, adapted, and validated in the Chinese context. Except for the job burnout scale, which used a 7-point frequency scale (0 = never, 6 = every day), all other measures were assessed on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Representative items and sources for each construct are provided in Table 1.

3.3 Data Collection and Sampling

3.3.1 Sample Characteristics

This study surveyed civil aviation employees in China. To reach employees distributed across different regions and work schedules, we used Credamo, a professional online survey platform widely used in China for academic research. Credamo was chosen because it supports targeted participant recruitment based on occupational tags and provides multiple quality-control functions, making it suitable for accessing working adults in the civil aviation sector. In addition, the platform allows researchers to implement attention checks, monitor completion time, and screen invalid responses, thereby improving data reliability and sample relevance. To ensure data quality, we implemented the following screening procedures:

- **Identity targeting:** We used Credamo's tagging features to invite only verified civil aviation professionals to participate.
- **Attention checks:** We inserted attention-check items to screen out careless responses.
- **Response-time screening:** The system recorded completion time, and questionnaires finished in under 120 seconds were excluded.

3.3.2 Determination and Characteristics of Samples

Following recommendations by Mundfrom and Shaw and by Hair et al. [24, 25], an adequate sample size for multivariate analyses is often suggested to be 5–10 times the number of measurement items to support stable estimates and acceptable model fit. This study included 29 measurement items. Accordingly, 201 valid questionnaires exceeded the minimum sample size requirement (145) and provided adequate statistical power.

We distributed 269 questionnaires via the Credamo platform. After data screening, 201 valid questionnaires remained, yielding a response rate of 74.7%. Among valid respondents, 58.21% were male and 41.79% were female. The largest age groups were 26–30 (37.81%) and 31–35 (20.90%). Respondents with a bachelor's degree or higher accounted for 82.59% of the sample. The sample included employees across multiple occupational categories, although administrative staff constituted the largest subgroup. Regarding job roles, administrative staff constituted 41.79%, and ground support personnel accounted for 24.38%. The remaining respondents held specialized technical roles such as pilots and flight attendants. Regarding tenure, employees with 5–10 years of service represented the largest segment (27.86%), and the overall distribution was relatively balanced.

Table 1. Measurement items and sources of scales.

Construct	Items (Representative)	Source
Workplace Telepressure (6 items)	It's hard for me to focus on other things when I receive a message from work; I feel a strong need to respond to messages from work immediately; I feel guilty if I do not respond to work messages immediately …	Original version from [4]; applied and validated in Chinese samples following [27]
Job Burnout (MBI-GS; 16 items)	I feel emotionally drained from my work; I doubt the significance of my work; I can effectively solve the problems that arise in my work …	Original MBI-GS by Schaufeli et al. [22, 28]; Chinese version adapted based on the cross-cultural validation in [29]
Psychological Detachment (4 items)	I forget about work completely when I am at home; I distance myself from my work …	Original version from [23]; translated and adapted into Chinese for the present study
Turnover Intention (4 items)	I often think about quitting my present job; I do not intend to develop my career in this organization for a long time.	Original version from [20]; adapted into Chinese based on [30]

4 Data Analysis and Results

4.1 Reliability and Validity Analysis

This study employed SPSS 26.0 and Amos 24.0 to systematically examine the reliability and validity of the measurement tools.

4.1.1 Reliability

We first assessed the reliability of all scales. As shown in Table 2, Cronbach's α values for all scales exceeded 0.90, surpassing the recommended threshold of 0.70. These results indicate excellent internal consistency.

Table 2. Results of reliability and convergent validity analysis.

Variable	Items	Cronbach's α	CR	AVE
Workplace Telepressure	6	0.905	0.912	0.635
Job Burnout	15	0.959	0.961	0.612
Psychological Detachment	4	0.927	0.928	0.765
Turnover Intention	4	0.927	0.929	0.766

Note. CR = Composite Reliability; AVE = Average Variance Extracted.

4.1.2 Validity

We conducted confirmatory factor analysis (CFA) to assess construct validity, including convergent and discriminant validity. Regarding convergent validity, most standardized factor loadings exceeded 0.70 ($p < 0.001$). Composite reliability (CR) values for all constructs exceeded 0.90, and average variance extracted (AVE) values exceeded 0.50. Taken together, these results provide evidence of adequate convergent validity.

Table 3. Comparison of measurement models.

Fit Index	Four-factor Model	Single-factor Model
χ^2	1192.822	2170.995
df	371	377
χ^2/df	3.215	5.759
RMSEA	0.105	0.154
CFI	0.848	0.668
TLI (NNFI)	0.833	0.642

Note. The four-factor model includes workplace telepressure, job burnout, psychological detachment, and turnover intention. The single-factor model loads all items onto one latent factor.

Discriminant validity was further evaluated using

Table 4. Means, standard deviations, and correlations ($N = 201$).

Variable	Mean	SD	1	2	3	4
Workplace Telepressure	3.337	0.864	(0.797)			
Job Burnout	3.068	1.196	0.486***	(0.782)		
Psychological Detachment	3.050	0.687	−0.507***	−0.434***	(0.875)	
Turnover Intention	2.417	0.867	0.370***	0.816***	−0.254***	(0.875)

Note. Diagonal elements (in parentheses) are the square roots of the AVE. *** $p < 0.001$.

multiple indicators. As shown in Table 3, although the four-factor model demonstrated substantially better fit than the single-factor model, its absolute fit indices were below commonly recommended benchmarks, suggesting that the overall model fit was not optimal. In addition, as shown in Table 4, the square root of the AVE for each construct generally exceeded its correlations with other constructs. However, the correlation between job burnout and turnover intention ($r = 0.816$) was higher than the square root of the AVE for job burnout (0.782), indicating a potential discriminant validity concern between these two constructs. Taken together, these results provide partial support for the discriminant validity of the four constructs, although the distinction between job burnout and turnover intention should be interpreted with caution.

4.1.3 Common Method Bias

Because all data were self-reported by civil aviation personnel, common method bias may be a concern. To assess this concern, we used a CFA-based approach by comparing a four-factor model with a single-factor model, which provides greater diagnostic value than the Harman single-factor test. Specifically, we compared model fit for the four-factor and single-factor models. As shown in Table 3, the single-factor model fit the data poorly ($\chi^2/\mathrm{df} = 5.759$, CFI $= 0.668$, TLI $= 0.642$) relative to the four-factor model. This pattern suggests that a single latent factor does not adequately account for the covariance among the items. Therefore, common method bias is unlikely to be a serious threat in this study.

4.2 Descriptive Statistics and Correlation Analysis

As shown in Table 4, the mean workplace telepressure score was 3.337 (SD $= 0.864$), the mean job burnout score was 3.068 (SD $= 1.196$), and the mean turnover intention score was 2.417 (SD $= 0.867$). These descriptive statistics suggest that, in a digitalized work context, Chinese civil aviation employees may experience pressure associated with expectations of being "always online."

As shown in Table 4, workplace telepressure was positively correlated with job burnout ($r = 0.486$, $p < 0.001$), providing preliminary support for H1, and job burnout was positively correlated with turnover intention ($r = 0.816$, $p < 0.001$), providing preliminary support for H2. Workplace telepressure was also positively correlated with turnover intention ($r = 0.370$, $p < 0.001$). Psychological detachment was negatively correlated with workplace telepressure ($r = -0.507$, $p < 0.001$) and job burnout ($r = -0.434$, $p < 0.001$), providing a basis for testing the proposed moderation effects.

4.3 Mediation Effect Testing

This study utilized the PROCESS macro developed by Hayes. Analyses were based on ordinary least squares (OLS) regression. We used percentile bootstrap confidence intervals with 5,000 resamples to test the indirect effect of workplace telepressure on turnover intention via job burnout [26].

As shown in Table 5, workplace telepressure positively predicted job burnout ($B = 1.670$, standardized $\beta = .416$, $p < .001$), providing support for H1. Job burnout positively predicted turnover intention ($B = 0.604$, standardized $\beta = .833$, $p < .001$), providing support for H2. When job burnout was included in the model, workplace telepressure was no longer a significant predictor of turnover intention ($B = -0.035$, standardized $\beta = -.035$, $p = .461$), suggesting full mediation. Bootstrap results indicated a significant indirect effect (effect $= 0.348$, 95% CI $[0.209, 0.469]$). In addition, the model predicting turnover intention explained a substantial proportion of variance ($R^2 = 0.667$), while the model predicting job burnout explained 31.3% of the variance ($R^2 = 0.313$), suggesting that the proposed framework has meaningful explanatory power. Together, these results indicate that workplace telepressure is indirectly associated with turnover intention through job burnout, providing support for H3.

Table 5. Testing the moderated mediation model.

	Job Burnout (M)			Turnover Intention (Y)		
Predictors	***B***	***β***	***t***	***B***	***β***	***t***
Constant	−1.343	—	−0.874	0.680	—	4.702***
Workplace Telepressure (X)	1.670	0.416	4.011***	−0.035	−0.035	−0.739
Psychological Detachment (W)	0.781	—	1.782	—	—	—
X × W	−0.359	−0.178	−2.898**	—	—	—
Job Burnout (M)	—	—	—	0.604	0.833	17.751***
R^2	0.313			0.667		
Adjusted R^2	0.299			0.662		
F	29.875***			198.213***		

Note. B = unstandardized regression coefficient estimated from the original model; β = standardized regression coefficient estimated from the model using standardized variables. M = job burnout; W = psychological detachment; Y = turnover intention. ** $p < .01$, *** $p < .001$.

4.4 Moderated Mediation Testing

Next, we conducted moderated mediation analyses to test H4 and H5. As shown in Table 5, the interaction between workplace telepressure and psychological detachment significantly predicted job burnout ($B = -0.359$, standardized $\beta = -.178$, $p < .01$). This finding indicates that psychological detachment buffers the effect of workplace telepressure on job burnout, supporting H4. To illustrate the interaction, we plotted simple slopes (Figure 2). As shown in Figure 2, the positive association between workplace telepressure and job burnout was weaker at higher levels of psychological detachment than at lower levels.

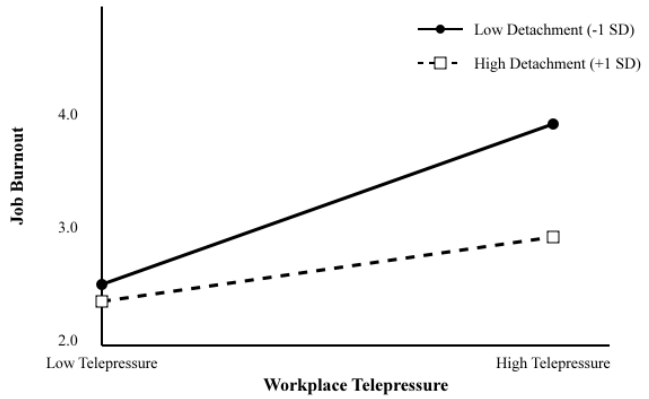

Figure 2. Simple slope analysis.

We then examined conditional indirect effects at different levels of psychological detachment (Table 6). When psychological detachment was low (−1 SD), the indirect effect of workplace telepressure on turnover intention via job burnout was stronger (effect = 0.497, 95% CI [0.270, 0.676]). When psychological detachment was high (+1 SD), the indirect effect was weaker (effect = 0.199, 95% CI [0.090, 0.321]). The index of moderated mediation was −0.217 (SE = 0.077), with a 95% CI [−0.353, −0.049]. This pattern indicates that psychological detachment moderated the indirect effect of workplace telepressure on turnover intention via job burnout. Specifically, the indirect effect was weaker at higher levels of psychological detachment, providing support for H5.

Table 6. Conditional indirect effects at different levels of detachment.

Statistic	Low (−1 SD)	Mean	High (+1 SD)	Index
Indirect Effect	0.497	0.348	0.199	−0.217
Boot SE	0.103	0.065	0.059	0.077
Boot LLCI	0.270	0.209	0.090	−0.353
Boot ULCI	0.676	0.469	0.321	−0.049

5 Discussion and Conclusions

5.1 Discussion of Findings

This study develops a moderated mediation model grounded in conservation of resources (COR) theory. Using survey data from civil aviation employees in

China, we examine the mechanisms and boundary conditions through which workplace telepressure relates to turnover intention. Based on the results reported in Section 4, we draw the following conclusions.

First, workplace telepressure was positively associated with job burnout among civil aviation employees (H1). The results indicate that workplace telepressure positively predicted job burnout. This suggests that, for civil aviation personnel, an "always-on" state enabled by mobile technologies is not cost-free convenience but a persistent source of stress that depletes cognitive and emotional resources. Given the safety-critical nature of the aviation industry, employees may experience heightened tension when receiving work notifications. Without adequate recovery, persistent resource depletion may lead to emotional exhaustion. This pattern is consistent with prior work by Santuzzi and Barber [6], suggesting that urgency induced by digital connectivity can contribute to employee exhaustion.

Second, job burnout played a mediating role in the relationship between workplace telepressure and turnover intention (H2, H3). The results showed that job burnout was positively associated with turnover intention and mediated the association between workplace telepressure and turnover intention. Together, these findings point to a resource-depletion pathway from technology-related pressure to turnover intention, in which workplace telepressure is associated with greater burnout. These results are consistent with Hobfoll's COR framework, in which resource loss can prompt defensive withdrawal, and suggest that job burnout may be a proximal predictor of turnover intention [11]. Notably, the direct effect of workplace telepressure on turnover intention became non-significant after job burnout was included, suggesting that the influence of telepressure may operate primarily through a resource-depletion process rather than through an immediate withdrawal response. This pattern may be understandable in the civil aviation context, where many positions involve substantial training requirements, licensed or specialized preparation, and occupation-specific skills [31]. Under such conditions, employees may be less likely to develop turnover intention in direct response to a single stressor. Instead, workplace telepressure may first erode psychological resources and contribute to burnout, with turnover intention becoming more salient only after strain has accumulated over time. From this perspective, job burnout may serve as a more proximal mechanism linking digital work pressure to withdrawal intention in the civil aviation industry.

Third, psychological detachment served as a key buffering condition (H4, H5). The interaction between psychological detachment and workplace telepressure was negatively associated with job burnout. This pattern indicates that psychological detachment can interrupt the stress process. For employees who are better able to detach after work, the association between workplace telepressure and job burnout was weaker. Conversely, for those with lower psychological detachment, the association was stronger. These findings suggest that in the high-pressure aviation context, relying solely on employees to "endure" digital demands is unlikely to be sufficient. Supporting employees' ability to psychologically detach during nonwork hours may help prevent burnout and reduce turnover risk.

5.2 Theoretical Implications

This study's contributions extend beyond testing specific hypotheses. By applying Conservation of resources (COR) theory to the civil aviation context, we contribute to research on stressors, mechanisms, and recovery-related boundary conditions.

At the level of stressors, this study highlights workplace telepressure as an increasingly salient source of strain in civil aviation. Prior research on stress among airline employees has largely emphasized physical environmental demands or traditional organizational stressors. Here, we shift attention to technology-enabled "connection anxiety" in the digital era. The findings suggest that such "connection anxiety" may meaningfully deplete employees' psychological resources. In round-the-clock, high-pressure operations, the psychological toll of digital connectivity may be as consequential as physical fatigue. This finding is also in line with recent research showing that workplace telepressure can contribute to job burnout and undermine employee outcomes in digitally connected work settings [18, 32].

With respect to underlying mechanisms, our results clarify how this digital pressure relates to turnover intention. Specifically, expectations of immediate responsiveness may not be directly associated with turnover intention; instead, they appear to operate indirectly by increasing job burnout, consistent with a resource-depletion process. From

a COR perspective, turnover intention may reflect a loss-mitigation strategy aimed at preventing further resource depletion following psychological exhaustion. Together, these findings illustrate how technology-related demands can translate into psychological strain and, in turn, withdrawal-related intentions.

Finally, our findings speak to recovery-related boundary conditions by identifying psychological detachment as an important buffer that may interrupt the stress process. Even under similar levels of workplace telepressure, individuals who can detach during nonwork hours may restore resources; consequently, the association between workplace telepressure and job burnout—and the indirect link to turnover intention—appears weaker. These results underscore the role of recovery experiences in stress processes and suggest that strengthening psychological detachment may be a viable direction for interventions aimed at reducing burnout and turnover risk. Future human resource practices may benefit from greater attention to employee recovery and psychological resource restoration.

5.3 Management and Policy Implications

Based on these findings, we propose several practical recommendations. First, airlines should establish clearer after-hours communication rules by distinguishing urgent operational communication from nonurgent routine messaging. For example, organizations may introduce post-work communication silence policies for noncritical matters while reserving after-hours contact for safety-related or time-sensitive situations. Clear escalation rules can help reduce unnecessary interruptions and lower the sense of constant responsiveness pressure.

Second, given the mediating role of job burnout, airlines should strengthen early identification and prevention mechanisms for burnout. In addition to routine physical health checks, organizations could incorporate periodic burnout screening, psychological risk monitoring, and employee assistance programs (EAPs) to identify employees who may be experiencing sustained resource depletion before stronger withdrawal intentions develop.

Third, airlines should actively support employees' psychological detachment during nonwork time. This may include training programs on recovery skills, such as mindfulness, boundary management, and attention-shifting strategies, as well as managerial practices that discourage unnecessary off-duty contact. For employees in high-demand positions, recovery-support interventions could be integrated into broader well-being and retention programs. Overall, more explicit organizational support for recovery may help reduce the hidden costs of digital connectivity and improve employee retention in high-stakes aviation settings.

5.4 Limitations and Prospects

Despite its theoretical and empirical contributions, this study has several limitations. First, the cross-sectional design can identify associations among variables but cannot capture how job burnout evolves over time in response to workplace telepressure. Future research could use longitudinal designs or diary methods to better capture these dynamics. Second, although the sample size ($N = 201$) met basic statistical requirements, it was modest relative to China's civil aviation workforce. This may limit the generalizability of the findings.

Third, all measures were self-reported, which may introduce concerns about subjectivity and social desirability. Future research could incorporate additional data sources (e.g., family ratings of employees' psychological detachment or administrative records) to improve measurement objectivity. Fourth, although the sample covered multiple occupational categories within civil aviation, administrative staff constituted the largest subgroup. Therefore, caution is needed when generalizing the findings to safety-critical roles such as pilots and maintenance personnel, whose work characteristics may differ substantially in terms of safety demands, operational urgency, and communication requirements. Because subgroup sizes in the present dataset were relatively uneven, we did not conduct multi-group analysis. Future research should collect more balanced samples across occupational categories and use multi-group analysis to examine whether the proposed relationships vary across job types.

Taken together, these findings highlight a central point: amid digital transformation, building a stable and sustainable aviation system requires not only technological and service upgrades but also sustained attention to employee mental well-being. By identifying less visible technology-related pressures and institutionalizing safeguards for employee resource recovery, airlines can better support flight safety while retaining critical talent.

Data Availability Statement

Data will be made available on request.

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Conflicts of Interest

Hongtaijia Hou is affiliated with the Beijing Andawell Science & Technology Co., LTD, Beijing 101300, China. The authors declare that this affiliation had no influence on the study design, data collection, analysis, interpretation, or the decision to publish, and that no other competing interests exist.

AI Use Statement

The authors declare that no generative AI was used in the preparation of this manuscript.

Ethical Approval and Consent to Participate

This study involved an anonymous, non-interventional questionnaire survey of adult participants. Participation was entirely voluntary. Prior to completing the questionnaire, all participants were informed of the study's purpose, the voluntary nature of participation, and the confidentiality of their responses. Informed consent was obtained from all participants through their voluntary completion of the questionnaire, which included a consent statement on the first page. No personally identifiable information was collected. In accordance with the institutional review requirements of the authors' affiliated institutions, formal ethical approval was not required for this anonymous, minimal-risk survey study.

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