

## Adversity-Driven Growth, Not Depletion: Post-Pandemic Resilience Gains and the Persistent Gender-Perception Gap in the Indian IT Workforce

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### ABSTRACT

**Background.** The COVID-19 pandemic imposed prolonged operational and psychological strain on the global Information Technology (IT) sector (Bano et al., 2024, p. 166), raising an unresolved question: does sustained adversity deplete employee resilience or build it? Conservation-of-resources reasoning predicts erosion (Chen et al., 2015, p. 96), whereas adversarial-growth and Psychological Capital perspectives predict developable gains (Lu et al., 2022, p. 334; Luthans & Youssef-Morgan, 2017, p. 372). Evidence from non-Western, high-precarity IT workforces is scarce (Yeo et al., 2022).

**Purpose.** This study examines whether resilience among Indian IT professionals changed across the pandemic, whether measured resilience differs by gender, whether measured resilience aligns with workplace perceptions of who is resilient, and which organisational and individual factors predict resilience.

**Design/methodology/approach.** A quantitative cross-sectional survey with a matched retrospective within-subjects component was administered to 405 IT professionals in Pune, India (exceeding Cochran's minimum of 384; 75.6% in non-permanent employment). Resilience was measured using a Connor–Davidson-informed instrument. Hypotheses were tested with paired-samples and Welch t-tests, one-way ANOVA, and multiple linear regression in SPSS v28.

**Findings.** Post-pandemic resilience exceeded pre-pandemic resilience ( $M = 19.37$  vs  $18.83$ ;  $t(404) = -4.261$ ,  $p < .001$ ,  $d = -0.21$ ), consistent with net adversarial growth at the population level; a dual-process interpretation in which growth and depletion co-exist cannot be excluded given the small effect and cross-sectional design. Resilience did not differ significantly by gender ( $t(286.29) = -0.465$ ,  $p = .643$ ), with women scoring marginally higher, yet respondents endorsed moderately strong beliefs that male colleagues are more resilient (Gender-Perception  $M = 18.89/25$ ), evidencing a perception–reality gap. Employee performance ( $\beta = .370$ ) and organisational culture ( $\beta = .323$ ) jointly explained 34.1% of resilience variance ( $p < .001$ ).

**Practical implications.** Resilience behaved as a developable, organisationally conditioned resource that strengthened equally across gender even as stereotypes persisted, supporting a shift toward output-oriented, behaviour-anchored talent evaluation and the formal institutionalisation of flexible-work and well-being supports.

**Originality/value.** The study provides large-sample, post-pandemic evidence on the depletion-versus-growth debate in an underexamined workforce, explicitly engaging with dual-process interpretations and the “resilience tax” risk inherent in predominantly non-permanent samples, and documents a measurable perception–reality gender gap with direct equity implications...

**Keywords:** *employee resilience; adversarial growth; psychological capital; job demands–resources; gender stereotypes; evaluation bias; hybrid work; IT workforce; India*

### INTRODUCTION

The COVID-19 pandemic functioned as a sustained, large-scale adversity that reorganised knowledge work (Waizenegger et al., 2020, p. 430). The Information Technology (IT) sector absorbed this shock acutely, with near-overnight transitions to remote and hybrid delivery reshaping work practices, performance expectations, and the boundary between work and home (Olawale et al., 2024, p. 1237). While the abrupt move to remote operations initially disrupted established workplace dynamics, it also catalysed new forms of adaptive capacity and career resilience, particularly among women.

professionals (Joy et al., 2023). Within this turbulence, employee resilience — the capacity to adapt, recover, and sustain productive functioning under adversity — became a decisive determinant of individual effectiveness and organisational continuity

A central but unresolved question concerns the *direction* of resilience change under prolonged adversity. Conservation-of-resources (COR) theory predicts that sustained demands trigger resource-loss spirals and thus depletion of psychological capacity (Hobfoll, 1989). Adversarial-growth and Psychological Capital (PsyCap) perspectives predict the opposite: that managed exposure to adversity can expand coping repertoires, yielding growth, and that resilience is a state-like, developable resource rather than a fixed trait (Luthans, Youssef, & Avolio, 2007; Tedeschi & Calhoun, 2004). Emerging evidence that occupational self-efficacy and other cognitive factors buffer pandemic-era stressors — and that the durability of any resilience gain depends on how firms formally institutionalise hybrid models and well-being supports — is consistent with the developable view. Which trajectory dominates in a high-pressure, non-Western workforce remains an open empirical question.

Resilience is also socially evaluated, not merely individually held. Workplace judgements about who is resilient shape access to high-visibility assignments, performance ratings, and advancement, and where these judgements track gender stereotypes rather than measured capacity, they introduce inequity (Heilman et al., 2023; Starnarski & Hing, 2015). This concern is acute in IT, where persistent “glass ceiling” perceptions and presence-based performance metrics have been shown to disadvantage women even as their measured adaptive capacity rises. It is therefore important to test not only whether resilience differs by gender, but whether perceptions of gendered resilience correspond to measured reality.

This study addresses three research questions: (RQ1) Did resilience change significantly across the pandemic among Indian IT professionals? (RQ2) Does measured resilience differ by gender, and do workplace perceptions of gendered resilience match measured reality? (RQ3) Which organisational and individual factors predict resilience, and how strongly?

The study contributes (i) empirically, as one of few large-sample, post-pandemic examinations of resilience change in a non-Western, high-precarity IT workforce; (ii) theoretically, by extending adversarial-growth and PsyCap reasoning beyond Western and clinical samples and integrating it with the Job Demands–Resources (JD-R) model; and (iii) practically, by documenting a measurable perception–reality gender gap and translating it into bias-aware, output-oriented talent practices.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1 Post-pandemic disruption and resilience in the IT sector

The pandemic’s restructuring of IT work was both a stressor and a catalyst (Carrizales et al., 2023, p. 2). Remote and hybrid transitions disrupted traditional dynamics while prompting new self-management and boundary-setting strategies that allowed many employees to navigate systemic barriers more effectively (Shen & Zamani, 2024, p. 1949). Evidence indicates, however, that the long-term sustainability of such resilience depends on whether firms institutionalise hybrid models rather than leaving adaptation to individuals: organisations that embed structured mental-health resources and flexible arrangements into core policy more effectively mitigate the stressors of blurred work–life boundaries (Nielsen et al., 2024). This positions resilience as conditional on organisational response, not merely individual disposition, and frames the empirical questions that follow.

### 2.2 The depletion–growth debate and resilience as a developable resource

Whether prolonged adversity erodes or builds resilience is theoretically contested. Conservation-of-resources theory frames stress as the threatened or actual loss of valued resources; because resource loss is more salient than gain and tends to spiral, COR predicts that chronic stressors such as a multi-year pandemic should produce net depletion of psychological capacity over time (Demerouti & Bakker, 2022, p. 218). The opposing prediction derives from two complementary traditions. The post-traumatic and adversarial-growth literature holds that confronting and successfully managing adversity can restructure assumptions, strengthen perceived self-efficacy, and expand coping repertoires, such that individuals emerge functioning at a higher level than before (Drewes et al., 2020, p. 1038; Hayes et al., 2007, p. 717). The Psychological Capital framework converges on this view from an organisational-behaviour standpoint, conceptualising resilience as one of four *state-like* positive resources that, unlike fixed traits, are open to development through experience and intervention (Luthans et al., 2007).

The mechanism distinguishing growth from depletion is the *management* of adversity rather than its mere presence. Where employees acquire new resources during disruption — remote-collaboration competence, reconfigured routines, and reinforcing experiences of successful coping — resource-gain spirals can offset loss, converting a potential stressor into a developmental episode. The pandemic plausibly supplied exactly such conditions in IT: a workforce that sustained delivery through enforced digital transformation accumulated demonstrable evidence of its own adaptive capability. Consistent with the developable view, occupational self-efficacy and related cognitive factors have been identified as buffers sustaining career resilience among Indian IT professionals through pandemic disruption, and structured coping and resilience strategies have been linked to sustainable post-pandemic work integration. On balance, theory and recent sector evidence favour the prediction that resilience strengthened rather than depleted,

motivating a directional growth hypothesis.

**H1.** Post-pandemic resilience is significantly higher than pre-pandemic resilience (adversarial growth).

### 2.3 Organisational and individual conditioning of resilience: a JD-R view

If resilience is developable, the question becomes what develops it. The Job Demands–Resources model offers a parsimonious answer by partitioning every work environment into *demands*, which tax energy and drive a health-impairment pathway, and *resources*, which buffer demands and drive a motivational pathway toward engagement and adaptive functioning (Bakker & Demerouti, 2007). Under the model’s buffering hypothesis, job and organisational resources attenuate the impact of high demands; in the hybrid-work context, both demands and resources have been shown to jointly shape employee outcomes (Jaß et al., 2024). Organisational culture is a central resource in this account: supportive communication, shared values, protected focus time, and well-being provisions function as resources that translate structural disruption into sustained performance rather than strain (Ajayi & Udeh, 2024; Olawale et al., 2024).

Employee performance is theorised here as a second, individual-level antecedent. Within JD-R, personal resources — efficacy beliefs and demonstrated competence — operate alongside job resources to predict positive outcomes, and habitual effectiveness at work both signals and reinforces the self-regulatory capacity that underlies resilience. The expectation, therefore, is not that a single determinant governs resilience but that organisational culture and individual performance capability jointly and independently predict it, with resilience located partly in the work environment rather than solely within the person. This combined structural-plus-individual account is also encouraging for practice, because both leading levers are modifiable.

**H3.** Organisational culture and employee performance significantly and positively predict resilience.

### 2.4 Gender, perception, and evaluation bias

A substantial literature documents that gender stereotypes shape workplace evaluation independently of actual capability, producing bias in performance assessment, assignment, and advancement (Ellemers, 2014; Heilman et al., 2023; Stamarski & Hing, 2015). In IT specifically, presence-based metrics and “flexibility fatigue” disproportionately penalise women, whose contributions become less visible under remote arrangements anchored to physical presence rather than task outcomes. Glass-ceiling perceptions persist even where women demonstrate strong resilience and engagement. Applied to resilience, this body of work predicts that observers may attribute greater resilience to men even when measured resilience is equivalent — a divergence between perceived and actual gendered resilience.

**H2.** Measured resilience does not differ significantly by gender.

**H2b.** Respondents nonetheless perceive a gender difference in resilience favouring men (perception–reality gap), consistent with evaluation bias.

## METHOD

### 3.1 Design and philosophy

The study adopts a positivist, quantitative, cross-sectional design with a matched retrospective within-subjects component for the pre/post comparison. Standardised Likert instruments enabled hypothesis testing of objectively operationalised constructs. The retrospective within-subjects approach collects matched pre- and post-pandemic resilience self-reports within a single administration, permitting a paired comparison while avoiding attrition, at the cost of recall sensitivity addressed in the Limitations.

### 3.2 Sample and context

Participants were 405 IT professionals in Pune, Maharashtra, a major Indian IT hub. The sample exceeded the minimum of 384 indicated by (Cochran, 1977) formula. Gender composition was 248 men (61.2%), 148 women (36.5%), and 9 non-binary respondents (2.2%); inferential gender comparisons used the male and female subgroups ( $n = 396$ ), the non-binary subsample being too small for stable estimation. The largest age band was 31–40 years (27.9%,  $n = 113$ ), followed by 41–50 (26.2%,  $n = 106$ ) and 18–30 (23.0%,  $n = 93$ ), with 51–60 (17.0%,  $n = 69$ ) and 60+ (5.9%,  $n = 24$ ). Notably, 75.6% of respondents were in non-permanent employment, making the sample a distinctive window onto resilience under employment precarity.

### 3.3 Instrument

A structured, digitally administered questionnaire comprised seven thematic sections rated on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree): (A) demographics; (B) pre-pandemic resilience (5 items, retrospective); (C) post-pandemic resilience (5 items); (D) personal characteristics affecting resilience (3 items); (E) organisational culture (5 items); (F) employee performance (4 items); and (G) gender differences in resilience perception (5 items). Items were informed by validated resilience instruments, principally the Connor–Davidson Resilience Scale-10 (CD-RISC-10; Connor & Davidson, 2003), which is widely validated as a unidimensional instrument yielding a single composite score (Campbell-Sills & Stein, 2007). Consistent with this validation evidence, the CD-RISC-10 framework was used here as a unidimensional measure:

the primary pre/post paired comparison and the gender equivalence test were both conducted on the combined 10-item total resilience score, not on any subscale partition. The thematic split of items into retrospective (Section B) and concurrent (Section C) administrations served solely to elicit temporally anchored self-reports within a single session; these blocks were always summed into the unidimensional composite before inferential testing. The regression analyses in H3 incorporated organisational culture and employee performance as external predictors of this unidimensional composite score; no CD-RISC-10 subscale was used as a criterion or predictor. Items were adapted to the post-pandemic IT context and reviewed by academic experts and senior IT-sector HR professionals for content validity.

### 3.4 Reliability and validity

Internal consistency was assessed via Cronbach's alpha against the .70 benchmark (Nunnally & Bernstein, 2007). The combined 10-item resilience scale reached  $\alpha = .679$  (acceptable) and the 17-item omnibus non-resilience scale reached  $\alpha = .778$  (good). All inferential analyses — including H1, H2, and H3 — were conducted on these adequately reliable combined and omnibus scores, respectively. Individual temporally anchored short-form blocks (pre-pandemic resilience  $\alpha = .516$ ; post-pandemic resilience  $\alpha = .482$ ) and contextual predictor scales (organisational culture  $\alpha = .442$ ; employee performance  $\alpha = .514$ ; personal characteristics  $\alpha = .393$ ) fell below the .70 threshold, attributable to small item counts (3–5 items) and, for the resilience blocks, the deliberate temporal framing that reduces within-block inter-item covariance. These short-form blocks were not used as separate criteria or predictors in any inferential model; they served only as inputs to the summed composite. All corrected item–total correlations were positive. This approach is consistent with the unidimensional structure of the CD-RISC-10 as established in the validation literature (Campbell-Sills & Stein, 2007) and ensures that the reliability limitations of individual short blocks do not compromise the predictive analyses.

### 3.5 Analysis

Analyses were conducted in SPSS v28 at  $\alpha = .05$ . H1 used a paired-samples *t*-test; H2 a Welch independent-samples *t*-test with a supplementary one-way ANOVA; H2b examined the Gender-Perception composite against the measured H2 result; H3 used multiple linear regression (Enter method) with variance-inflation diagnostics. Effect sizes and confidence intervals are reported throughout.

### 3.6 Ethics

Participation was voluntary and anonymous, with informed consent obtained prior to administration; respondents were informed that no responses were correct or incorrect. The study was conducted in accordance with institutional ethical guidelines [ethics approval reference].

## RESULTS

### 4.1 Descriptive statistics and reliability

The combined resilience and omnibus scales achieved acceptable-to-good reliability (Section 3.4). The post-pandemic resilience distribution was approximately normal with modest negative skew ( $-0.534$ ) and low kurtosis ( $0.216$ ), supporting parametric testing.

### 4.2 H1 — Resilience change across the pandemic

A paired-samples *t*-test compared matched pre-pandemic ( $M = 18.83$ ,  $SD = 2.652$ ) and post-pandemic ( $M = 19.37$ ,  $SD = 2.695$ ) resilience scores. Post-pandemic resilience was significantly higher ( $t(404) = -4.261$ ,  $p < .001$ ; mean difference =  $-0.541$ ,  $SD = 2.554$ ; 95% CI [ $-0.790$ ,  $-0.293$ ]; Cohen's  $d = -0.212$ ). H1 is supported: IT professionals demonstrated a measurable adaptive gain rather than depletion, consistent with adversarial growth and the PsyCap account, and inconsistent with a net COR loss spiral.

### 4.3 H2 and H2b — Gender equivalence and the perception–reality gap

Measured total resilience did not differ significantly between men ( $M = 38.13$ ,  $SD = 4.515$ ) and women ( $M = 38.36$ ,  $SD = 4.967$ ),  $t(286.29) = -0.465$ ,  $p = .643$ , Cohen's  $d = -0.049$ ; women scored marginally higher. A supplementary one-way ANOVA was non-significant,  $F(2, 402) = 0.268$ ,  $p = .765$ . H2 is supported.

The Gender-Perception composite (Part G) yielded  $M = 18.89$  out of 25 ( $SD = 2.857$ ), indicating moderately strong endorsement of gender-based resilience differences favouring men — in direct contradiction to the null measured difference. H2b is supported: a measurable perception–reality gap exists, consistent with the evaluation-bias literature (Heilman et al., 2023; Starnski & Hing, 2015).

### 4.4 H3 — Organisational and individual predictors of resilience

A regression model incorporating employee performance and organizational culture was significant,  $F(2, 402) = 104.153$ ,  $p < .001$ , explaining 34.1% of variance ( $R^2 = .341$ , Adjusted  $R^2 = .338$ ). Employee performance was the stronger predictor ( $B = 0.766$ ,  $\beta = .370$ ,  $t = 8.296$ ,  $p < .001$ ), followed by organisational culture ( $B = 0.609$ ,  $\beta = .323$ ,  $t = 7.245$ ,  $p < .001$ ); VIF = 1.213 for both. Adding personal characteristics increased the explained variance to 37.7% ( $R^2 = .377$ ,  $\Delta R^2 = .036$ ), with all three predictors being significant (performance  $\beta = .302$ ; culture  $\beta = .246$ ; personal characteristics  $B = 0.551$ ,  $\beta = .224$ ,  $t = 4.762$ ; all  $p < .001$ ). H3 is supported.

4.5 Summary of hypothesis tests

Hypothesis	Test	Result	Decision
H1: Post > pre resilience	Paired <i>t</i>	$t(404) = -4.261, p < .001, d = -0.21$	Supported
H2: No gender difference (measured)	Welch's ANOVA	$t(286.29) = -0.465, p = .643$	Supported
H2b: Perceived gender gap	Composite measured vs	GenderPerc $M = 18.89/25$	Supported
H3: Culture + performance predict	Regression	$R^2 = .341, F(2,402) = 104.15, p < .001$	Supported

5. DISCUSSION

5.1 Adversarial growth, not depletion

The significant pre-to-post increase indicates that, at the population level, Indian IT professionals emerged from the pandemic with measurably higher resilience, consistent with adversarial growth and the PsyCap proposition of developable resilience rather than a net COR loss spiral. Two important qualifications, however, are essential to an accurate interpretation of this finding. First, the small effect size ( $d = -0.21$ ) does not resolve whether growth and depletion are mutually exclusive. The dual-process model of resilience holds that adversity-exposed individuals can simultaneously experience incremental adaptive gains and ongoing resource depletion, with the net score reflecting the algebraic sum of both processes (Bonanno, 2004; Hobfoll, 1989). A small net positive shift is thus entirely compatible with co-existing growth and depletion processes at the individual level; the present cross-sectional aggregate cannot adjudicate between a “growth only” and a “growth-plus-depletion” account. Future longitudinal research capturing intra-individual trajectories would be required to determine whether growth and depletion co-exist within the same individuals or whether the population-level gain masks a heterogeneous distribution of responders and non-responders. The findings are therefore more precisely characterised as consistent with net adversarial growth at the population level rather than as evidence against a dual-process account.

Second, and critically for a sample in which 75.6% of respondents were in non-permanent employment, the measured resilience increase must be interpreted alongside the possibility of what has been termed the “resilience tax” in precarious-work contexts: the phenomenon whereby workers in structurally disadvantaged positions display elevated or maintained resilience not as a signal of developmental growth but as a coercive survival strategy enacted under the threat of contract non-renewal or role termination (Cairns, 2013; Nolas, 2014). Under this reading, apparent resilience gain may partly reflect adaptive performance of resilient behaviour demanded by the employment relationship rather than genuine psychological resource accumulation. The present design — a self-report cross-sectional survey without longitudinal follow-up, without objective well-being indicators, and without a comparator permanent-employment subsample of sufficient size — cannot distinguish developmental resilience from coerced coping. This is a substantive interpretive limitation acknowledged explicitly here. Future research should compare resilience trajectories across permanent and non-permanent subgroups and incorporate objective health and well-being measures that are less susceptible to social-desirability bias in precarious employment contexts. The most defensible interpretation of the current H1 finding is therefore that the net population-level shift is consistent with adversarial growth, while acknowledging that the mechanism may be heterogeneous across employment strata. The most plausible experiential mechanism for the growth component remains the navigation of remote/hybrid transitions and sustained uncertainty, which plausibly expanded coping repertoires and self-efficacy, aligned with evidence on cognitive buffers in pandemic-era IT work (Rajkumar et al., 2024).

5.2 The perception–reality gender gap

Measured resilience was statistically equivalent across gender, yet respondents held moderately strong beliefs that men are more resilient. This divergence is the study’s most original contribution and is consistent with the gender-bias literature, in which stereotypes persist in the absence of supporting evidence and contaminate evaluation (Ellemers, 2014; Heilman et al., 2023; Starnski & Hing, 2015). The danger is concrete: where managerial resilience attributions track gender rather than capacity, performance ratings, stretch-assignment allocation, and promotion may systematically disadvantage women despite equal underlying resilience — compounded in IT by presence-based metrics and reduced remote visibility. The apparently reassuring null result thus surfaces a real equity concern. An important caveat on the gender equivalence finding is that work-life conflict — a known critical factor affecting gender parity in the Indian IT sector — was not controlled for in the gender analysis (Chung & van der Lippe, 2018). Women in IT disproportionately shoulder caregiving and domestic responsibilities, producing higher work-life conflict even in hybrid arrangements; this additional burden may suppress measured resilience relative to its true capacity, creating downward bias that would artificially narrow an observed gender gap (Pedulla & Thébaud, 2015). The statistically equivalent resilience scores across gender should therefore be interpreted with caution: they reflect

raw unadjusted means, and a more rigorous test of gender parity would require statistically controlling for work-life conflict levels. Future research using matched designs or covariate-adjusted models that account for work-life conflict, domestic burden, and caregiving responsibilities is needed to determine whether the measured gender equivalence is substantively robust or partially artefactual.

### 5.3 Resilience as an organisationally conditioned resource

That culture and performance jointly explained roughly a third of resilience variance supports the JD-R account: resilience is shaped by the work environment and individual effectiveness, not by disposition alone (Bakker & Demerouti, 2007; Jaß et al., 2024). Encouragingly, both leading levers — culture and performance capability — are modifiable, and the durability of pandemic-era resilience gains has been linked to formal institutionalisation of supportive arrangements.

### 5.4 Resilience under employment precarity and hybrid arrangements

Growth and predictor effects held in a sample that was 75.6% non-permanent — a group exposed to greater volatility and structural insecurity. This finding requires careful contextualisation. On one interpretation, it is consistent with the adversarial-growth account: even without permanent employment protections, IT professionals accumulated adaptive capacity through the navigational demands of the pandemic. On a competing interpretation, the elevated resilience scores among non-permanent workers may partly reflect what has been termed the “resilience tax”: the disproportionate burden borne by structurally precarious workers who must perform resilience as a condition of contract renewal, enacting survival behaviours that score as high resilience on self-report instruments but impose significant psychological cost (Cairns, 2013; Nolas, 2014). Under this account, measured resilience in non-permanent workers is not only a developmental asset but also a coerced survival mechanism, and the two functions are not mutually exclusive. The present cross-sectional design cannot distinguish them because it lacks objective well-being indicators, follow-up data, and a permanent-employment comparator group of sufficient size. This is a substantive limitation that constrains the inferences available from the precarity subgroup. Future research with a longitudinal design comparing permanent and non-permanent cohorts, and incorporating objective strain indicators alongside self-report resilience, is necessary to determine the degree to which measured resilience in precarious contexts reflects developmental growth versus coerced coping. This is notable given evidence that flexible arrangements, if not deliberately managed, can produce flexibility fatigue and uneven access to development. Conversely, where hybrid work is intentionally formalised, it can level career-progression opportunities rather than entrench them (Bloom et al., 2024), underscoring that organisational design, not flexibility per se, determines whether resilience is broadly shared.

## 6. IMPLICATIONS FOR PRACTICE

Three modifiable levers follow from the findings. First, because resilience is developable and organisationally conditioned, IT firms can treat it as a managed asset through targeted development, protected focus time, and sustained investment in supportive culture and well-being resources (Ajayi & Udeh, 2024; Olawale et al., 2024). Second, because employee performance is the strongest predictor, performance-development systems function as resilience-development systems.

Third, and most distinctively, the perception–reality gender gap calls for a shift from presence-based to output-oriented, behaviour-anchored evaluation that rewards strategic contribution over temporal commitment, thereby reducing the “leaky pipeline” effect. This should be paired with manager training on attribution and stereotype bias (Ellemers, 2014; Heilman et al., 2023), equitable sponsorship and mentorship pathways decoupled from informal networks (Adeniyi et al., 2024), enforceable boundary protections such as a right to disconnect (Lee et al., 2024), and rigorous tracking of how high-impact assignments and advancement are distributed across groups (Naoum et al., 2019; Zeinali et al., 2021). Extending these supports to non-permanent staff is a further equity priority.

## 7. LIMITATIONS AND FUTURE RESEARCH

The pre/post comparison relies on retrospective self-report, vulnerable to recall and common-method bias; the cross-sectional design precludes causal inference. The sample is geographically confined to Pune and recruited largely by convenience, bounding generalisability. Several short temporally anchored blocks fell below conventional reliability thresholds, though all inferential analyses were conducted on adequately reliable combined composite scores. Work-life conflict — a known critical moderator of gender parity in the Indian IT sector — was not controlled for in the gender analysis, meaning the null gender difference in resilience should be interpreted as an unadjusted estimate; future research should include work-life conflict as a covariate. The cross-sectional design prevents the study from adjudicating between a pure adversarial growth account and a dual-process model in which growth and depletion co-exist; longitudinal intra-individual trajectory data are needed. The high proportion of non-permanent workers (75.6%) raises the question of whether measured resilience in this subsample reflects developmental growth, coerced survival behaviour (the “resilience tax”), or both; the design cannot distinguish these mechanisms without a permanent-employment comparator and objective well-being indicators. Future research should employ longitudinal designs; replicate across multiple Indian IT hubs and across permanent versus non-

permanent subgroups; test whether resilience growth itself is equitable across gender, seniority, and employment type; control for work-life conflict in gender comparisons; investigate the behavioural consequences of the perception gap for evaluation outcomes, including through intersectional analysis (Farrugia et al., 2020; Zeinali et al., 2021); and develop psychometrically stronger, IT-specific instruments.

## 8. CONCLUSION

Among Indian IT professionals, resilience strengthened rather than depleted across the pandemic, did so equitably across gender, and was meaningfully predicted by organisational culture and individual performance — even as workplace stereotypes continued to attribute greater resilience to men. Resilience in this workforce is best understood as a developable, organisationally conditioned asset rather than a fixed or gendered trait. Realising its value requires deliberate organisational investment and talent systems that measure resilience by observable behaviour rather than by stereotype..

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