



TEACHING SATISFACTION OF EARLY-CAREER FACULTY UNDER CHINA'S TENURE-TRACK SYSTEM: BETWEEN COMMITMENT AND CONSTRAINT

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Abstract

Escalating performance pressures and limited institutional recognition of pedagogical contributions have become pressing challenges for early-career faculty in transitional higher education systems, particularly under China's tenure-track system (TTS). Research in predominantly Western contexts has largely prioritised research productivity, leaving teaching-related outcomes in performance-driven non-Western settings underexplored. Integrating the Job Demands–Resources (JD-R) model and Self-Determination Theory (SDT), this study employed a mixed-methods design, combining survey data from 116 early-career faculty and in-depth interviews with six participants at a research-intensive Chinese university. Quantitative results revealed moderate overall satisfaction, with significant disparities across academic ranks and disciplines, while qualitative findings highlighted persistent barriers such as excessive workload, limited autonomy, and low institutional recognition. Autonomy emerged as a nuanced factor, with constrained decision-making authority diminishing satisfaction despite partial fulfilment of relatedness and competence needs. Extending the integrated JD-R–SDT framework to a transitional higher education context, the analysis offers policy-relevant directions for embedding teaching quality into evaluation systems, recalibrating workload allocations, and strengthening peer support, with insights transferable to performance-driven TTS in countries including Japan, South Korea, and other emerging systems in Asia and beyond.

Keywords: tenure-track system, early-career faculty, teaching satisfaction, mixed-methods research, higher education policy

Introduction

In recent decades, the growing emphasis on research productivity in global higher education has reshaped the definition of faculty roles, often relegating teaching responsibilities to the periphery. This trend is particularly visible in performance-based appointment systems, where measurable research outputs dominate promotion criteria. While such systems aim to enhance institutional competitiveness, they frequently generate tensions between faculty members' research and teaching responsibilities. These dynamics are not confined to a single national context. Many countries, including the United States, Japan, and South Korea, have adopted tenure-track systems (TTS) to attract academic talent and strengthen competitiveness (Peng & Hu, 2023; Wang & Li, 2023). In China, the TTS typically require early-career faculty to attain promotion within a fixed probationary period (often six years) or face termination. This practice is often referred to as China's version of the "up-or-out" policy (Liu & Wang, 2020; Wang & Li, 2023). To reduce uncertainty in recruitment and advancement, institutions have implemented rigid, publication-based evaluation systems, with clear benchmarks for high-impact journal output (Zhang & Wang, 2020). As a result, academic work is increasingly shaped by a publish-or-perish culture. However, while the research implications of such systems are

well documented, their impact on teaching satisfaction remains underexplored, especially in non-Western and transitional higher education contexts where policy reforms interact with entrenched cultural norms.

China's TTS shares structural similarities with the "up-or-out" models in the United States and South Korea, but imposes more rigid, publication-centred performance benchmarks, making it a particularly revealing case for examining the tensions between research and teaching. China's TTS reflects broader shifts toward performance-based academic systems but shows distinctive rigidity. In Japan, dual-track arrangements, and in South Korea, mechanisms incorporating student feedback illustrate more adaptive ways to recognize multiple dimensions of academic work. Evidence from Japan suggests that fixed-term faculty report higher fatigue than tenure-track peers (Kim et al., 2024). In South Korea, disciplinary disparities in advancement persist, with social-science postdoctoral fellows transitioning more readily than those in the humanities (Jung et al., 2023). In North America and Europe, teaching portfolios and peer evaluations are increasingly included in tenure reviews (Fairweather, 2002; Mäntysaari, 2022), yet research metrics continue to outweigh teaching achievements. Against this backdrop, this study focuses on China's TTS to examine how performance-based regimes shape teaching satisfaction among early-career faculty.

Research Problem

Higher education institutions worldwide expect faculty to balance the "Big Three" responsibilities—teaching, research, and service. However, research continues to receive disproportionate emphasis in institutional evaluation systems (Love et al., 2022). Pedagogical contributions are rarely included in performance appraisals (Crutchley et al., 2024; Geng & Lou, 2022), and tenure decisions often hinge on research metrics, particularly publications in journals indexed by Arts and Humanities Citation Index (AHCI), Science Citation Index (SCI), Social Sciences Citation Index (SSCI), or Chinese Social Sciences Citation Index (CSSCI) (Tumulty, 2024; Xu & Solanki, 2020; Zhang & Wang, 2020). This structural bias marginalises teaching, particularly in institutions where academic prestige is closely tied to quantitative research output, leading early-career faculty to prioritise research over teaching quality (Wang, 2022).

Compared to traditional contracts, tenure-track positions offer higher salaries and clearer advancement pathways but impose more stringent evaluation demands (Hashmi et al., 2024). The divergence between rhetorical emphasis on teaching excellence and material rewards for research leads to mounting role conflict and motivational strain (Barat & Harvey, 2015; Wolverson, 1998). Faculty who excel in research often do so at the cost of diminished teaching involvement, elevated stress, and deteriorating well-being (Liu et al., 2021; Zhang, 2024). Publication output tends to peak during the pre-tenure period, which coincides with declining engagement in teaching, especially in non-laboratory disciplines (Tripodi et al., 2025). Inconsistent tenure standards across departments exacerbate professional insecurity (Liu & Song, 2023; Niloofar et al., 2020), while caregiving responsibilities, gendered expectations, and institutional bias intensify marginalisation and identity conflict experienced by female faculty members (Hellsten et al., 2011).

Previous studies link teaching satisfaction to organisational climate, development opportunities, and incentive programmes (Gosling et al., 2020; Trower & Gallagher, 2010), as well as to workload, class sizes, infrastructure, and instructional support (Tian et al., 2020). In such environments, relational factors that include collegial recognition and student engagement become important mediators of satisfaction (Dinamling & Depaynos, 2024; Rahmawati et al., 2023). While elements such as institutional support, intrinsic motivation, and teaching identity are known to influence teaching satisfaction (Sumanasena & Nawastheen, 2022), these factors

remain underdeveloped in many TTS environments. In transitional systems like China, reforms often unfold without adequate teaching support, forcing faculty to make challenging trade-offs while working with limited resources (Wang & Pang, 2022).

This gap is especially salient in Global South higher education, where neoliberal reforms intersect with Confucian academic traditions and entrenched performance hierarchies. Prior literature tends to treat structural factors (e.g., policy, workload) and psychological dimensions (e.g., motivation, identity) in isolation, overlooking their interaction. Without addressing this disjunction, TTS reforms risk reinforcing the very disparities they were designed to overcome.

Theoretical Framework

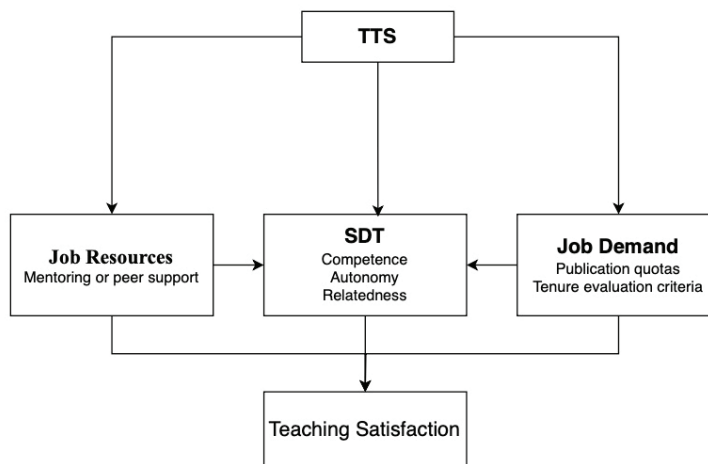
This study employs two complementary theoretical frameworks, Self-Determination Theory (SDT) and the Job Demands–Resources (JD-R) model, to examine the interaction between individual motivation and institutional constraints in influencing teaching satisfaction among early-career faculty. The JD-R model (Bakker & Demerouti, 2018) posits that employee well-being and performance are shaped by the dynamic balance between job demands, such as workload, time pressure and job insecurity, and job resources, such as autonomy, support and developmental opportunities. If employees are faced with demands that exceed the resources available to them, it is likely that they will experience disengagement and emotional exhaustion (Hossan et al., 2023; Ko, 2022). By contrast, SDT emphasises that internal psychological needs are what drive motivation. Ryan and Deci (2024) argue that three fundamental needs, autonomy, competence, and relatedness, must be met for individuals to maintain intrinsic motivation and long-term commitment. When these needs are thwarted, even in the presence of external rewards, motivation tends to decline (Crick et al., 2020; Manninen et al., 2022; Ryan & Deci, 2024).

While the JD-R model focuses primarily on the structural balance between job demands and institutional resources, the SDT model addresses internal psychological mechanisms. In this study, JD-R accounts for institutional workload and recognition gaps, whereas SDT highlights how such structural constraints frustrate faculty autonomy, competence, and relatedness. Together, JD-R and SDT provide a dual-pathway lens through which teaching satisfaction can be understood. The JD-R framework helps identify how structural aspects of TTS, including publication quotas, limited pedagogical support, and standardized evaluations, contribute to pressure and decreased institutional support. Simultaneously, SDT explains how these same structural features erode faculty members' autonomy in course design, competence in teaching, and relatedness within their academic communities. This integrated approach enables a more holistic analysis of how faculty experience teaching under policy-driven constraints.

Integrating JD-R and SDT offers a dual-pathway lens for understanding teaching satisfaction in performance-driven academic contexts. This approach is particularly relevant in the Chinese TTS, where high demands and uneven support necessitate examining how external constraints and internal motivations interact to shape faculty experiences. Figure 1 maps how specific TTS policies translate into job demands and resources (JD-R) and how these, in turn, influence psychological need fulfilment or frustration (SDT). This integrated model not only guides the analysis but also provides a transferable framework for similar contexts in other transitional higher education systems (van den Broeck et al., 2010).

This study further proposes that job resources and psychological needs interact reciprocally: resource scarcity not only directly reduces teaching satisfaction through structural constraints (JD-R) but also indirectly undermines it by frustrating autonomy, competence, and relatedness (SDT). This compounded erosion effect suggests that interventions addressing structural resources without attending to psychological needs may be insufficient. Conversely, enhancing psychological fulfilment without mitigating excessive job demands may have a limited impact on sustaining teaching engagement.

Figure 1
Conceptual Model



Note. The figure illustrates how TTS policies influence faculty teaching satisfaction through two parallel pathways: structural job demands and institutional resources (JD-R), and the satisfaction or frustration of basic psychological needs (SDT). Mentoring enhances job resources and supports relatedness, while publication and evaluation pressures increase job demands, undermining competence and autonomy.

Research Aim and Research Questions

This study examines how institutional constraints and psychological needs jointly influence teaching satisfaction among early-career faculty working under China's TTS. Drawing on the integrated JD-R and SDT frameworks, the research explores both structural pressures and motivational dynamics that shape faculty engagement with teaching. Specifically, it aims to address the following research questions (RQs):

1. What is the overall level of teaching satisfaction among early-career faculty under China's tenure-track system?
2. How does teaching satisfaction vary across key dimensions such as workload, institutional support, and teaching identity?
3. How do early-career faculty members interpret and contextualize their experiences of teaching satisfaction or dissatisfaction within the broader institutional and cultural landscape?

By answering these questions, the study contributes to the global literature on faculty development, offering both theoretical insights and policy recommendations for improving teaching satisfaction in performance-oriented academic environments.

Research Methodology

Design

This study, grounded in the JD-R model and SDT, adopted a mixed-methods design (Creswell & Creswell, 2018) to examine teaching satisfaction among early-career faculty under China's TTS. Data were collected in two sequential phases between January and March 2025. Phase 1 involved a structured online survey, while Phase 2 comprised semi-structured interviews with a sub-sample of survey respondents. The rationale for this design was twofold: (1) quantitative findings could reveal broad satisfaction patterns and key predictors, and (2)

qualitative insights could contextualise these patterns, offering nuanced explanations for statistical trends. This integration of methods enhances both internal validity and contextual depth, making the approach transferable to studies of academic work in other transitional higher education systems.

Participants and Sampling

The quantitative phase employed a census-based sampling strategy targeting all full-time early-career faculty (fewer than six years of service) under TTS at a leading research-intensive university in eastern China, referred to here as University C. University C was selected because it is a representative “Double First-Class” research-intensive university. It exemplifies the core characteristics of China’s TTS, including high publication benchmarks, competitive tenure timelines, and pronounced research-teaching tensions. The diversity of disciplines, gender balance, and rank composition within the sample broadly mirrors national patterns for early-career faculty in comparable institutions, enhancing the transferability of findings despite the single-site design.

Institutional records indicated approximately 430 eligible faculty members. An invitation containing the survey link and informed consent form was distributed via internal email and yielded 116 valid responses (response rate = 27%). This rate is consistent with standards for voluntary surveys in high-pressure academic contexts. Participants represented diverse backgrounds: 30.2% were from Science, Technology, Engineering, and Mathematics (STEM), 69.8% from the humanities and social sciences (HSS); gender distribution was 51.7% male and 48.3% female. Most respondents (92.2%) held assistant professor positions, and the majority were aged between 31 and 34 years.

Table 1
Demographic Characteristics of the Sample

Category	Subcategory	Percentage
Gender	Male	51.7
	Female	48.3
Age	<=30	32.8
	31-34	58.6
	>=35	8.6
Years of Service	1-2 years	33.6
	3-4 years	31.9
	5-6 years	34.5
Academic Title	Assistant Professor	92.2
	Associate Professor	7.8
Discipline	STEM	30.2
	HSS	69.8

Note. Percentages (%) are calculated based on the total sample size (N = 116).

In the qualitative phase, purposeful sampling was used to select six interviewees from the survey pool, based on maximum variation in (1) discipline, (2) gender, (3) age group, and (4) self-reported teaching satisfaction. This approach enhanced diversity and ensured multiple perspectives. Sampling continued until thematic saturation was reached after the fifth interview, with one additional interview conducted for confirmation. Table 2 provides a profile of the six interviewees. For added transparency, Table 3 presents an example of the coding process, showing the evolution from raw quotes to initial codes and final themes.

Table 2
Demographic and Professional Profiles of Interview Participants

Pseudonym	Age	Academic Title	Discipline
H1	34	Assistant Professor	Philosophy (HSS)
H2	31	Associate Professor	Literature (HSS)
H3	29	Assistant Professor	History (HSS)
S1	30	Assistant Professor	Mechanical Engineering (STEM)
S2	32	Assistant Professor	Chemical Engineering (STEM)
S3	28	Assistant Professor	Physics (STEM)

Table 3
Coding Process Example

Raw Data Excerpt (Interview Quote)	Initial Code	Sub-theme	Overarching Theme
"Limited access to laboratories and specialised equipment frequently compromises the quality of practical teaching." (S1)	Lack of laboratory access; Inadequate teaching equipment	Resource constraints in STEM	Structural and resource constraints
"Even if teaching is not institutionally valued, it remains personally important. Seeing students grasp complex concepts is a reward in itself." (S2)	Personal value of teaching; Student learning as motivation	Intrinsic teaching motivation	Teaching identity and intrinsic motivation
"Positive student feedback and teaching achievements are rarely translated into tangible rewards or advancement." (H2)	Lack of recognition for teaching; Promotion criteria favour research	Institutional devaluation of teaching	Institutional valuation of teaching
"Teaching-related tasks are often delayed due to long administrative chains, leaving little room for reflection or improvement." (H1)	Bureaucratic delays; Administrative overload	Procedural inefficiencies	Structural and resource constraints

Data Collection

The survey instrument was adapted from the Faculty Satisfaction Questionnaire developed by Gil (1991) and translated into Chinese. An expert panel of three education scholars reviewed

the translation for clarity, cultural fit, and construct coverage. Psychometric properties were tested using SPSS. The 11-item scale showed high internal consistency (Cronbach's $\alpha = .853$). Exploratory factor analysis indicated good construct validity (KMO = .816; Bartlett's test: $\chi^2 = 553.476$, $df = 55$, $p < .001$), revealing three latent factors that collectively explained 66.77% of the total variance. These results confirmed the instrument's reliability and validity for assessing faculty teaching satisfaction in the Chinese context.

Semi-structured interviews were conducted either face-to-face or via encrypted video conferencing platforms, depending on participants' availability. The interview protocol explored the following themes:

1. Faculty perceptions of the TTS and its implications for teaching responsibilities;
2. Sources of satisfaction and dissatisfaction in teaching;
3. Experiences with institutional support, mentoring, and workload;
4. Suggestions for enhancing teaching support and recognition.

Each interview lasted 30–60 minutes, was audio-recorded with participant consent, and transcribed verbatim. Maximum variation sampling was operationalised by stratifying the pool along the four criteria listed above. This strategy enhanced the representativeness of qualitative insights.

Data Analysis

Descriptive statistics (e.g., means, frequencies) were used to summarise demographics and satisfaction levels. Inferential analyses—including t-tests, one-way ANOVA, and multiple linear regression—examined associations between satisfaction and variables such as gender, discipline, rank, and tenure. Statistical significance was set at $p < .05$.

Interview transcripts were analysed using Braun and Clarke's (2006) six-phase thematic analysis: familiarisation, coding, theme generation, review, definition, and reporting. NVivo 12 supports data management and coding. In line with the convergent parallel design, quantitative and qualitative results were interpreted jointly. Converging findings were used to triangulate conclusions, while divergent results were explored for contextual explanations.

Ethical Considerations

Ethical approval was obtained from the Institutional Review Board of University C. All participants provided informed consent and were assured of confidentiality, voluntary participation, and the right to withdraw at any stage. All data were anonymised and securely stored and used exclusively for academic research purposes.

Research Results

Overall Teaching Satisfaction

Quantitative analyses indicated that overall teaching satisfaction among early-career faculty was moderate ($M = 3.12$, $SD = 0.68$; 5-point scale). A multiple linear regression was conducted to examine the predictive effects of demographic and professional characteristics on teaching satisfaction (T_Mean). The model included five predictors: gender, age, career tenure, academic title, and disciplinary affiliation, selected based on prior research and preliminary correlations.

The model was statistically significant, $F(5, 110) = 2.638$, $p = .027$, explaining 10.7% of the variance in teaching satisfaction ($R^2 = .107$, Adjusted $R^2 = .066$), which is within the expected range for attitudinal research in social sciences where multiple contextual factors

remain unmeasured. As shown in Table 4, academic title ($B = .414, p = .031$) and disciplinary affiliation ($B = -.233, p = .039$) were significant predictors.

Faculty with higher academic ranks reported greater satisfaction, whereas STEM faculty reported lower satisfaction than those in the HSS. Standardized coefficients showed that academic title had a moderate effect ($\beta = .198$), while disciplinary affiliation had a smaller, negative effect ($\beta = -.191$).

These findings support the JD-R model's proposition that job satisfaction emerges from the interplay between individual resources and structural demands. Despite intrinsic motivation, structural inequalities in institutional support across disciplines and ranks significantly shape teaching satisfaction.

Table 4
Multiple Linear Regression Predicting Teaching Satisfaction (T_Mean)

Predictor	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
(Constant)	2.670	0.361	—	7.393	<.001
Gender	0.058	0.103	0.051	0.558	.578
Age	0.141	0.086	0.150	1.650	.102
Career Tenure	0.031	0.061	0.045	0.499	.619
Academic Title	0.414	0.190	0.198	2.183	.031
Discipline	-0.233	0.111	-0.191	-2.094	.039

Note. Dependent variable: Teaching Satisfaction (T_Mean); $R^2 = .107$, Adjusted $R^2 = .066$, $F(5, 110) = 2.638$, $p = .027$.

Teaching Satisfaction Across Key Dimensions

Table 5 maps the 11 teaching satisfaction items based on the JD-R model and SDT, accompanied by descriptive statistics. Variation across items reflects the multidimensional character of early-career faculty members' teaching experiences.

The highest satisfaction was reported for T1: Teaching as a Professional Career ($M = 3.78, SD = 0.99$), indicating strong professional identification and intrinsic motivation. The lowest scores were for T8: Specialized Teaching Facilities ($M = 2.67, SD = 0.76$), T9: Class Size ($M = 2.75, SD = 0.70$), and T10: Teaching Workload ($M = 2.85, SD = 0.94$), signalling resource scarcity and workload intensification—key job demands in the JD-R model. Moderate scores for T3: Academic Freedom in Course Design ($M = 3.34, SD = 0.90$) and T6: Departmental Teaching Methods ($M = 3.01, SD = 0.79$) suggest partial autonomy and inconsistent collegial support. T11: Institutional Teaching Rewards ($M = 3.21, SD = 1.08$) reflected ambivalence toward institutional recognition.

Overall, the tension between internal professional commitment and externally imposed constraints underscores the role of resource adequacy, autonomy, and recognition in shaping satisfaction, as highlighted in both the JD-R and SDT frameworks.

Table 5

Mapping of Teaching Satisfaction Items to JD-R and SDT Dimensions with Descriptive Statistics

Item No.	Item Content (Abbreviated)	JD-R Category	SDT Need	<i>M</i>	<i>SD</i>
T1	Teaching as a professional career	-	Competence	3.78	0.994
T2	Teaching in the classroom	-	Competence	3.35	0.971
T3	Academic freedom in course design	Job Resource	Autonomy	3.34	0.904
T4	Constructing examinations	Job Resource	Autonomy	3.27	0.878
T5	Evaluation procedures appropriateness	Job Resource	Competence	2.95	0.893
T6	Departmental teaching methods	Job Resource	Relatedness	3.01	0.786
T7	Advising of students	Job Demand	Relatedness	3.09	0.746
T8	Specialized teaching facilities	Job Resource	-	2.67	0.755
T9	Class size	Job Demand	-	2.75	0.696
T10	Teaching workload	Job Demand	-	2.85	0.944
T11	Institutional teaching rewards	Job Resource	Relatedness	3.21	1.084

Note. Scale: 1 = very dissatisfied; 5 = very satisfied.

Qualitative Insights into Teaching Satisfaction

Although the interview protocol explored four major areas—faculty perceptions of the TTS, sources of teaching satisfaction and dissatisfaction, experiences with institutional support and workload, and suggestions for improving teaching recognition—thematic analysis identified three overarching themes: (1) institutional valuation of teaching, (2) structural and resource constraints, and (3) teaching identity and intrinsic motivation. These findings address RQ2 and RQ3 by illustrating lived experiences and meaning-making processes.

Institutional Valuation of Teaching

The perceived devaluation of teaching in institutional reward systems was a recurrent theme in both the survey data and the qualitative interviews. Although early-career faculty demonstrated strong intrinsic motivation and teaching identity around teaching, they consistently reported that teaching excellence had little bearing on career progression.

All six interviewees emphasised that research output remains the primary metric for promotion, with teaching contributions often ignored regardless of quality or student impact. H1 noted, “Despite the rhetoric of ‘teaching excellence,’ actual career progression depends overwhelmingly on publication records.” H2 stated, “Positive student feedback and teaching achievements are rarely translated into tangible rewards or advancement.” H3 remarked, “Tenure applications require SSCI papers, but there’s no formal credit for teaching awards or student evaluations.” STEM faculty expressed similar sentiments. S2 shared, “Although I am passionate about teaching, colleagues and mentors advise me to focus on publications to get tenure.” S3 described teaching as “a necessary obligation rather than a valued role.” S1 explained, “There are no bonuses or awards for teaching—so naturally, people shift their energy to research.”

These views help contextualise the survey result that institutional teaching rewards (T11) received only a neutral mean score ($M = 3.21$), despite teaching being perceived as a core aspect of faculty identity. The regression analysis also indicated that academic title significantly predicted satisfaction, suggesting that only those in higher ranks may be able to reconcile teaching contributions with institutional expectations, while junior faculty are left unsupported. This misalignment reflects a systemic disincentive for early-career faculty to invest in teaching beyond minimum requirements. The institutional reward structure prioritises research at the expense of pedagogy, creating what JD-R theory identifies as a resource asymmetry and what SDT describes as frustration of competence and relatedness needs.

Professional Commitment and Teaching Identity

Despite the structural pressures, all interviewees expressed a strong teaching identity and intrinsic motivation. Teaching was described as a meaningful responsibility deeply connected to students' intellectual development. For example, H1 stated, "Teaching goes beyond administrative obligations—it's about contributing to students' growth," while H2 noted, "Student progress is the most rewarding aspect of my work." H3 added, "Teaching helps me find meaning in academia."

STEM faculty echoed these sentiments despite resource constraints. S1 remarked, "Though resources are limited, I enjoy teaching and try to adapt." S2 observed, "Even if teaching is not institutionally valued, it remains personally important." S3 emphasised, "The joy of witnessing students' growth is irreplaceable." These narratives reinforce the survey finding that T1 scored highest, highlighting intrinsic motivation as central to faculty work, consistent with SDT.

Structural and Resource Constraints

Despite their strong professional commitment, all six participants identified structural and resource-related constraints that negatively impacted their teaching satisfaction. These concerns were consistent with the lowest-rated items in the survey (see Table 5, T8–T10). Faculty across both disciplinary groups described how limited infrastructure and excessive responsibilities compromised the quality of instruction and their professional well-being. For example, STEM faculty highlighted tangible deficiencies, while HSS faculty pointed to administrative and symbolic barriers.

STEM faculty, particularly S1, S2, and S3, emphasized persistent shortages of laboratory space, instructional equipment, and technical assistance. S1 explained, "Limited access to laboratories and specialised equipment frequently compromises the quality of practical teaching. This not only affects student learning outcomes but also increases faculty workload due to the need for constant improvisation. S2 described managing "three large classes per semester," severely restricting his ability to provide personalized feedback. S3 noted that "there is barely enough infrastructure to support teaching requirements, yet expectations remain high—it's unsustainable."

HSS faculty reported parallel frustrations, though focused more on institutional support and administrative burden. H3 stated, "The increasing workload, without corresponding administrative support or recognition, leads to chronic exhaustion and limits pedagogical innovation." H1 remarked, "Teaching-related tasks are often delayed due to long administrative chains, leaving little room for reflection or improvement." H2 noted, "While I'm committed to teaching, there's no dedicated support—no assistant, no course design aid—everything is self-managed."

These qualitative accounts enrich and contextualize the regression finding that disciplinary affiliation was a significant predictor of teaching satisfaction ($B = -.233$, p

= .039; see Table 4), with STEM faculty reporting lower satisfaction than their humanities counterparts. While the quantitative model explained only 10.7% of the variance in satisfaction, the interview data help illuminate the mechanisms underlying these differences. STEM faculty experience structural challenges that are material in nature, including infrastructural deficits and high student-teacher ratios, while humanities faculty face symbolic exclusion, including a lack of recognition and persistent bureaucratic inefficiencies. STEM faculty often adopted practical coping strategies in response to institutional pressures, such as streamlining feedback, simplifying assessments, or standardizing instruction. In contrast, academics in the humanities generally resisted these demands in theory, often devoting more time to teaching in spite of the lack of institutional support. According to H3, this resistance manifested as “quietly pushing back” against publication expectations by spending more time preparing for classes, which was seen as a sign of professional autonomy.

Collectively, these trends show how structural and relational demands that are unequally distributed across disciplines can impede faculty members' psychological needs for autonomy, competence, and social connection. This observation is supported by the JD-R model and SDT, which both emphasize the interplay between internal motivations and external constraints. Therefore, to increase early-career faculty members' satisfaction, institutional initiatives that recognize the disciplinary contexts in which they work are required. In order to address disparities in workload, infrastructure, and recognition, such reforms must address both the tangible and intangible aspects of academic life.

Synthesis of Quantitative and Qualitative Findings

Integrating both datasets provides a richer explanation than either method alone. While the regression model explained only 10.7% of the variance, interviews illuminated unmeasured factors such as disciplinary workload norms, informal mentoring, and departmental decision-making styles. The evidence shows that structural constraints (JD-R) and psychological needs (SDT) jointly shape satisfaction, suggesting reforms that address both tangible resources and intangible recognition. These dynamics are likely to resonate in other performance-driven systems, extending the applicability of the dual-pathway framework beyond China's TTS.

Discussion

This discussion addresses three dimensions: disciplinary disparities, motivational tensions, and systemic evaluation mechanisms. These are interpreted through the JD-R and SDT frameworks. Rather than restating statistical details, this section focuses on interpreting the mechanisms behind the observed patterns and their broader theoretical and policy implications. Before interpreting the substantive findings, it is important to note that the explanatory power of the regression model ($R^2 = .107$) is relatively modest. This is not uncommon in social science research on attitudinal and behavioural outcomes, which are influenced by numerous unmeasured interpersonal and contextual variables. In this study, qualitative evidence captured several of these unobserved determinants—such as departmental culture, mentoring practices, and collegial support—providing richer explanatory depth than the quantitative model alone could achieve. This mixed-methods design thus allows for a more comprehensive interpretation of teaching satisfaction within the Chinese TTS context.

Teaching Satisfaction Is Moderate and Varies by Academic Title and Discipline

Findings reveal that teaching satisfaction is unevenly distributed across academic ranks and disciplines, reflecting entrenched structural inequities in China's TTS. Senior faculty enjoy more institutional resources and informal privileges, while early-career STEM academics face persistent infrastructural shortages and heavier workloads. These disparities suggest that satisfaction is not merely an outcome of personal motivation but is structurally produced through the uneven allocation of resources and opportunities. This dynamic aligns with the JD-R model's emphasis on the balance between demands and resources. It also aligns with concerns raised by Liu et al. (2021) and Wang and Li (2023) that China's TTS favours research over teaching, particularly disadvantaging faculty in STEM. While enthusiasm for teaching persists among early-career faculty, it is increasingly constrained by systemic neglect of teaching. This pattern is consistent with the resource asymmetries identified in Peng and Hu (2023). The limited explanatory power of the regression model ($R^2 = .107$) further suggests that unmeasured factors such as departmental leadership, collegial collaboration, and academic community membership, as highlighted in Gosling et al. (2020), likely play critical roles in shaping satisfaction.

Structural Constraints Undermine Satisfaction Despite Strong Teaching Identity

While faculty expressed a strong teaching identity (T1: $M = 3.78$), satisfaction declined sharply in areas like workload (T10: $M = 2.85$), resources (T8: $M = 2.67$), and class size (T9: $M = 2.75$). These patterns echo broader trends in Asian higher education (Sumanasena & Nawastheen, 2022; Tian et al., 2020). From a JD-R perspective, such persistent demands erode engagement when they exceed the resources available to meet them. SDT further explains that even highly motivated faculty lose energy when their core needs—autonomy, competence, and relatedness—are repeatedly thwarted (Ryan & Deci, 2024). Internal values alone cannot sustain engagement when institutional environments remain unsupportive (Crick et al., 2020). In this context, resilience should not be interpreted as evidence of institutional effectiveness but rather as an indicator of individual coping within an unsupportive environment. These material and symbolic constraints are closely intertwined, as resource shortages are often compounded by institutional undervaluation of teaching efforts.

Institutional Devaluation of Teaching Limits Recognition and Advancement

Interviews consistently indicated a “recognition gap” between rhetorical affirmation of teaching and material rewards, echoing critiques by Barat and Harvey (2015) and Tumulty (2024). While research output remains the dominant criterion for promotion, teaching contributions are consistently treated as symbolic rather than material, regardless of quality. Faculty responses varied: STEM faculty often standardize instruction to manage demands, whereas humanities faculty frame teaching as a form of moral resistance. This discrepancy between professional dedication and institutional recognition mirrors the structural tensions highlighted by Love et al. (2022). Within the JD-R framework, this gap reduces access to key institutional resources; from an SDT perspective, it frustrates relatedness and competence needs, thereby eroding intrinsic motivation. Persistence in teaching should therefore be interpreted not as evidence of resilience but as an adaptive response to systemic misalignment between motivation and support.

Theoretical Synthesis and Contribution to the Literature

This study demonstrates how JD-R and SDT jointly explain the interplay of structural constraints and intrinsic motivation. Beyond parallel application, this study integrates JD-R and SDT into a composite explanatory framework. Resource asymmetries in the Chinese TTS context operate as dual stressors: structurally, they increase job demands and reduce institutional resources (JD-R); psychologically, they frustrate core needs (SDT), amplifying dissatisfaction through both direct and indirect pathways. This dual-mechanism explanation extends the predictive capacity of both models and offers a transferable analytical lens for similar performance-driven systems. In China, credentialism and academic massification reinforce a symbolic hierarchy privileging research over teaching, reflecting broader patterns of academic capitalism (Hellsten et al., 2011; Love et al., 2022).

By integrating sociocultural analysis into JD-R and SDT, this study offers a transferable framework for analysing teaching satisfaction in other transitional and performance-driven systems. These findings collectively address the three research questions by quantifying satisfaction levels (RQ1), identifying key dimensions and disparities (RQ2), and contextualising faculty perceptions within institutional and cultural settings (RQ3).

Limitations and Future Directions

While the findings provide valuable insights, certain design and scope constraints limit their generalisability. First, the single-site design and relatively small sample size ($N = 116$ for the survey; $N = 6$ for interviews) may restrict applicability to other institutional contexts. Although thematic saturation was achieved, caution is warranted in extrapolating the results. Future studies could adopt multi-institutional or longitudinal designs to capture broader patterns and track changes over time.

Second, the low explanatory power of the regression model ($R^2 = .107$) suggests that key determinants of teaching satisfaction were not captured. Relational and organizational factors—such as departmental leadership style, peer mentoring, student engagement, perceptions of collegiality, and participation in academic communities—may play a critical mediating role. Incorporating these variables into future models could yield a more comprehensive understanding of how structural and interpersonal dynamics jointly shape satisfaction.

Finally, future research should also examine how dissatisfaction with institutional support structures affects not only faculty well-being but also classroom practices and student learning outcomes. Mixed-methods and longitudinal approaches would be particularly well suited to tracing the evolving experiences of early-career faculty as they navigate the demands and uncertainties of the TTS.

Conclusions and Implications

This study identified a clear gap between early-career faculty members' intrinsic motivation for teaching and their actual satisfaction levels under China's TTS. Structural constraints—including excessive workload, limited autonomy, and insufficient recognition—emerged as critical barriers to sustained engagement. Quantitative results revealed moderate overall satisfaction, with significant disparities by academic title and discipline, while qualitative insights illuminated how institutional demands undermine autonomy, competence, and relatedness. By integrating the JD-R model and SDT, this study developed a dual-pathway framework that explains how structural pressures and unmet psychological needs jointly erode teaching satisfaction. The framework advances JD-R by identifying discipline-specific resource asymmetries as a core determinant of satisfaction and extends SDT by contextualising need frustration within performance-based academic cultures. These contributions broaden the theoretical utility of both models in non-Western and transitional higher education systems.

Institutions should recalibrate performance metrics to incorporate robust indicators of teaching quality—such as peer evaluations, student learning outcomes, and teaching portfolios—into promotion and tenure criteria. This recalibration must be discipline-sensitive, recognising that STEM and HSS fields face distinct infrastructural and pedagogical demands. Workload allocation models need to be adjusted accordingly, ensuring that resource-intensive fields receive adequate infrastructure and manageable class sizes. Fostering peer support systems through mentoring and collaborative teaching initiatives can strengthen faculty relatedness and resilience. Beyond China, these findings offer transferable lessons for other performance-driven systems, such as South Korea, Japan, and emerging systems in Southeast Asia, where research dominance risks marginalising teaching. The dual-pathway model provides a diagnostic tool for identifying where job demands outstrip resources and where psychological needs are systematically frustrated, guiding both policy and institutional interventions.

Declaration of Interest

The authors declare no competing interest.

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