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Research paper



The Role of Justice in Workload Management in The Faculty Well-being in Online Education: A Mediational Analysis in Thai Higher Education

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Abstract

This study investigates the relationships between perceived justice in workload management, satisfaction with online education, and employee well-being among faculty members in Thai higher education institutions. Using Adams' Equity Theory as a framework, the research explores how perceptions of workload fairness impact faculty satisfaction with online education and overall well-being. A survey of 412 faculty members across various Thai institutions reveals that perceived justice in workload distribution is positively related to both satisfaction with online education and faculty well-being. Additionally, satisfaction with online education was found to mediate the relationship between workload justice and well-being. These findings underscore the critical role of equitable workload management in fostering faculty satisfaction and well-being, particularly in the context of online education. Practical implications for higher education institutions include the need for transparent workload allocation processes and robust support systems for faculty engaged in online teaching. The study contributes to the growing literature on faculty well-being in online education contexts, particularly in non-Western settings, and highlights the importance of addressing workload fairness to improve faculty satisfaction and overall institutional effectiveness.

Keywords: *Workload Justice, Online Education Satisfaction, Employee Well-being, Higher Education, Equity Theory, Mediational Analysis*

1. Introduction

The global COVID-19 pandemic has fundamentally transformed higher education, accelerating the adoption of online learning modalities at an unprecedented pace 1. This rapid transition has presented significant challenges for educational institutions worldwide, particularly in managing faculty workloads and maintaining employee well-being. In Thailand, higher education institutions have faced unique pressures as they rapidly adapted to online learning platforms while striving to maintain educational quality and support faculty through this transition 2.

The shift to online education has introduced new dimensions to academic workload management, often requiring faculty members to invest additional time and effort in adapting their teaching methods and materials without adequate preparation or support 3. This situation has heightened concerns about workload equity and its impact on faculty well-being, making the perception of fairness in workload allocation more critical than ever. Adams' Equity Theory 4 provides a robust theoretical framework for understanding how individuals perceive fairness in their work environment, particularly regarding the balance between their inputs (efforts) and outputs (rewards). In the context of higher education, this theory helps explain how faculty members evaluate the fairness of their workload allocation, especially when facing new challenges posed by online education. Faculty well-being represents a critical component of occupational health in higher education settings, directly impacting both individual health outcomes and institutional effectiveness 5. This study addresses workload-related stress and psychological well-being as applied health science concerns, examining how organizational factors influence faculty mental health and work-related wellness. The investigation of workload justice and its impact on employee well-being aligns with occupational health principles and contributes to the applied sciences literature on workplace wellness interventions.

Despite the growing body of literature on workload management and employee well-being in higher education, several critical research gaps persist. First, there is limited empirical research examining the relationship between perceived workload management justice and faculty satisfaction with online education, particularly in non-Western contexts 6-8. Second, while previous studies have established connections between workload fairness and well-being separately, the mediating role of satisfaction with online education in this relationship remains underexplored 9, 10. Third, the application of Adams' Equity Theory to understand faculty perceptions of workload fairness,

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specifically in online education contexts, is limited 11. Finally, there is a notable scarcity of research examining these relationships within the Thai higher education system, which has its own cultural and institutional characteristics that may influence these dynamics 12.

This study addresses these gaps by investigating the relationships between perceived justice in workload management, satisfaction with online education, and employee well-being among faculty members in Thai higher education institutions. Drawing on Adams' Equity Theory, we develop and test a comprehensive structural model that examines both direct and indirect relationships between these constructs. Specifically, we hypothesize that justice in workload management positively affects both satisfaction with online education and employee well-being, with satisfaction with online education mediating the relationship between justice and well-being.

The study makes several important contributions to the literature. Theoretically, it extends the application of Adams' Equity Theory to the contemporary context of online education in higher education, providing new insights into its relevance in evolving educational contexts. Empirically, it provides much-needed evidence from a non-Western context using a substantial sample, contributing to the global understanding of faculty experiences in online education. Methodologically, the study employs structural equation modeling (SEM) to test the hypothesized relationships, providing robust analytical insights into these complex direct and mediated relationships. From a practical standpoint, the findings offer valuable guidance for higher education administrators in developing policies for workload allocation, online education support, and faculty well-being initiatives.

The remainder of this paper is organized as follows. The next section reviews relevant literature and develops our theoretical framework and hypotheses. We then describe our methodology, including data collection procedures and the SEM analytical approach. The results section presents our findings from the structural equation modeling analysis, followed by a discussion of theoretical and practical implications. Finally, we conclude with limitations and directions for future research.

2. Literature Review

2.1 Adams' Equity Theory

The theoretical foundation of this study is rooted in Adams' Equity Theory 4, which provides a robust framework for understanding perceptions of fairness in the workplace. Adams posited that individuals evaluate fairness by comparing the ratio of their inputs (effort, time, skills) to outcomes (rewards, recognition, benefits) with those of relevant others 13. When individuals perceive inequity, they experience tension and are motivated to restore balance through various means, including adjusting their inputs, seeking different outcomes, or changing their comparison referents.

In higher education contexts, equity theory has proven particularly relevant for understanding faculty job satisfaction and organizational commitment. 14 expanded Adams' work by introducing organizational justice dimensions—distributive, procedural, and interactional justice—which have been extensively studied in academic settings 15. Recent research has demonstrated that perceived equity in workload allocation significantly influences faculty job satisfaction, with implications for both individual well-being and institutional effectiveness 16, 17.

The transition to online education has introduced new complexities to equity perceptions in academic workload management. Faculty members must now navigate additional responsibilities related to technology adaptation, online pedagogy development, and virtual student engagement, often without corresponding increases in recognition or support 18. This context makes equity theory particularly relevant for understanding how perceptions of fairness in workload management influence faculty satisfaction with online education and overall well-being 19.

2.2 Workload Management, Justice, and Faculty Well-being

Workload management in higher education encompasses teaching, research, administration, and service activities, with the balance and fairness of these allocations being critical to faculty satisfaction 20. Research consistently demonstrates that perceived fairness in workload allocation significantly impacts faculty job satisfaction and performance. 21 found that excessive workload and perceived inequity were major contributors to burnout among university faculty, while 22 showed that fair workload distribution was associated with higher levels of job satisfaction and organizational commitment.

Employee well-being in academic contexts encompasses physical health, psychological well-being, and work-life balance 5. Studies have established strong connections between organizational justice and employee well-being, with fair treatment contributing to better physical and psychological health outcomes 23. In higher education specifically, faculty well-being has been linked to improved teaching effectiveness and research productivity 24, highlighting its importance for both individual and institutional success.

In the context of online education, the perception of justice in workload management becomes even more crucial. 25 highlighted that the rapid transition to online teaching during the COVID-19 pandemic has led to increased workload for many faculty members, potentially exacerbating issues of perceived inequity. This situation underscores the need for fair and transparent workload allocation processes in higher education institutions, especially as they continue to navigate the challenges of online and hybrid learning environments 26. However, existing research on workload justice in online education offers mixed conclusions. Some studies report that technology-mediated teaching can ease traditional workload pressures 27, whereas others contend that it exacerbates faculty responsibilities without commensurate compensation 28. These divergent findings point to the importance of conducting context-specific investigations that consider cultural and institutional dynamics.

2.3 Satisfaction with Online Education

Faculty satisfaction with online education has emerged as a critical factor in the success of digital learning initiatives. This satisfaction encompasses comfort with technology, perceived effectiveness of online teaching methods, quality of student interactions, and institutional support 29. Research has shown that faculty satisfaction with online teaching correlates positively with instructional quality and student outcomes 30.

However, the rapid transition to online education has created challenges for many faculty members. Studies indicate that perceptions of fairness in how additional online teaching workload is managed and compensated significantly influence satisfaction with online education 31. This suggests a strong connection between workload justice and online education satisfaction, supporting the application of equity theory to this relationship.

Furthermore, satisfaction with online education appears to influence broader outcomes related to faculty well-being. When faculty feel satisfied with their online teaching experience, they report lower stress levels and better work-life balance 32. This suggests that satisfaction with online education may serve as a mechanism of mediating between workload justice and overall well-being.

2.4 Hypothesis Development

Based on the comprehensive review of literature and guided by Adams' Equity Theory 4The study proposes a set of hypotheses that explore the relationships between perception of justice in workload management, satisfaction with online education, and employee well-being in the context of higher education.

The foundation of these hypotheses lies in the principles of equity theory, which suggests that individuals seek balance between their inputs and outcomes in comparison to others 13. In the academic context, this theory helps explain how faculty members evaluate the fairness of their workload, particularly in the rapidly evolving landscape of online education. The perception of fairness in workload allocation has been shown to significantly influence job satisfaction and organizational commitment among academics 33.

Furthermore, research has consistently demonstrated the interconnected nature of workload management, job satisfaction, and employee well-being. Studies have shown that when faculty members perceive their workload as fair and manageable, they report higher levels of job satisfaction and lower levels of burnout 34. This is particularly relevant in the context of online education, where the transition has often led to increased workload and stress for many faculty members 25, 35.

The satisfaction with online education itself has been linked to various positive outcomes, including improved teaching effectiveness and student outcomes 30, 36. Moreover, job satisfaction, including satisfaction with teaching modalities, has been shown to contribute significantly to overall employee well-being 5, 37.

Organizational justice research further supports the direct relationship between perceptions of fairness and employee well-being. Studies have demonstrated that when employees perceive organizational processes as fair, they experience better physical and psychological health outcomes 38.

Lastly, the proposed mediation effect is grounded in the understanding that the impact of workload justice on well-being may be partially explained by its effect on satisfaction with online education. This draws on the complex interplay between these constructs as suggested by previous research in higher education settings 39, 40.

H1: Perception of justice in workload management is positively related to employee well-being.

H2: Perception of justice in workload management is positively related to satisfaction with online education.

H3: Satisfaction with online education is positively related to employee well-being.

H4: Satisfaction with online education mediates the relationship between perception of justice in workload management and employee well-being.

These hypotheses form the basis of our research model, which aims to elucidate the relationships between workload management perceptions, satisfaction with online education, and employee well-being in the context of Thai higher education.

Figure 1 is the conceptual framework of the research; it indicates the relationship between three variables and also the foundation of the theory.

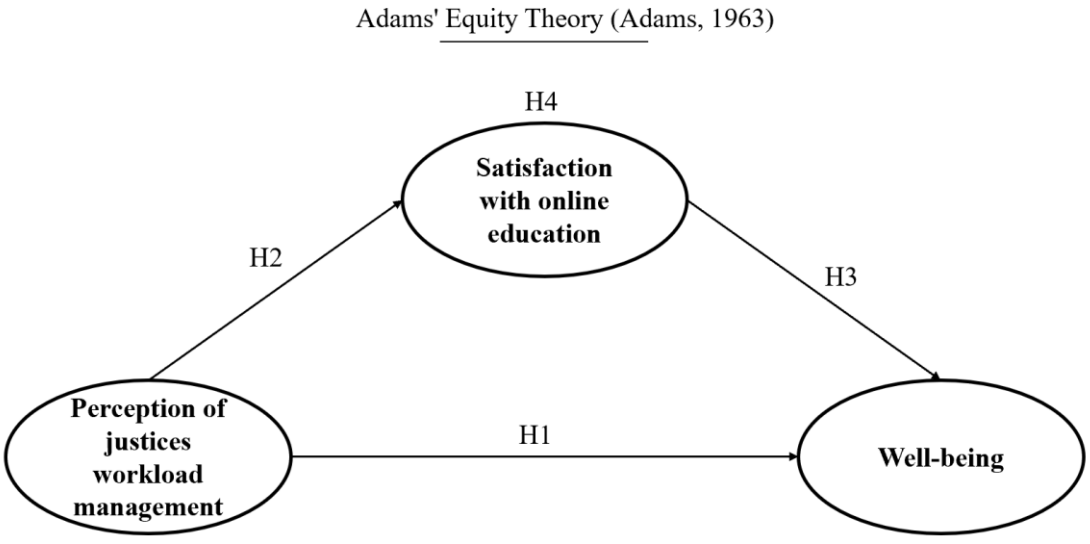


Fig. 1: Research framework

Figure 1 illustrates the conceptual framework showing the hypothesized relationships between justice in workload management (independent variable), satisfaction with online education (mediator), and employee well-being (dependent variable). The framework demonstrates both direct effects (H1, H2, H3) and the proposed mediation effect (H4).

3. Methodology

3.1 Research Design

This study employs a quantitative research design using a cross-sectional survey approach to investigate the relationships between perceived justice in workload management, satisfaction with online education, and employee well-being among faculty members in Thai higher education institutions. The quantitative approach is appropriate for testing the proposed theoretical model and hypotheses, allowing for statistical analysis of complex relationships and providing generalizable results 41. The cross-sectional design enables the collection of data at a single point in time from a large sample, which is suitable for examining structural relationships using structural equation modeling (SEM).

3.2 Population and Sampling

The target population for this study consists of faculty members employed in higher education institutions across Thailand, including public and private universities, colleges, and other tertiary education institutions that have implemented online education programs. A stratified random sampling technique was employed to ensure adequate representation across different types of institutions, academic disciplines, and faculty ranks. Following the guidelines of 10-15 observations per estimated parameter 42Considering the complexity of the proposed model, a target sample size of 400 was established. After data cleaning and validation procedures, a final sample of 412 valid responses was obtained, which exceeds the minimum requirements for robust SEM analysis.

3.3 Data Collection Procedures

Data collection was conducted through an online survey administered via a secure web-based platform over eight weeks. The survey was distributed through institutional partnerships with participating higher education institutions, professional networks within Thai higher education associations, and academic networks to maximize response rates and ensure broad representation. Prior to full-scale data collection, a pilot study was conducted with 30 faculty members to test the survey instrument's clarity and functionality. Ethical approval was obtained from the relevant institutional review board, and all participants provided informed consent before completing the survey, with anonymity and confidentiality assured throughout the process.

3.4 Measurement Instruments

All constructs in this study were measured using established scales from previous research, adapted for the Thai higher education context using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Perception of justice in workload management was measured using a five-item scale adapted from organizational justice and workload management studies 15, 39, assessing faculty perceptions of fairness in workload allocation, calculation methods, performance evaluation, and compensation systems. Satisfaction with online education was assessed using a five-item scale based on previous online teaching satisfaction research 29, measuring satisfaction with student engagement, technological support, interaction quality, assessment methods, and institutional support. Employee well-being was measured using a four-item scale adapted from established well-being instruments 43 assessing both psychological and social aspects of workplace well-being, including organizational care, colleague support, organizational pride, personal efficacy, and overall well-being levels. The instrument was originally developed in English and translated into Thai using a back-translation procedure to ensure accuracy and cultural appropriateness.

3.5 Data Analysis

Data analysis was conducted using a two-step approach recommended for SEM analysis 44, employing SPSS 26.0 for preliminary analyses and AMOS 29.0 for structural equation modeling. Initial data screening included missing data analysis, outlier detection, normality assessment, and common method bias evaluation using Harman's single-factor test. The measurement model was first evaluated using confirmatory factor analysis (CFA) to assess the reliability and validity of the measurement instruments, including internal consistency through Cronbach's alpha coefficients, composite reliability, average variance extracted, convergent validity through factor loadings, and discriminant validity using the Fornell-Larcker criterion. After establishing a satisfactory measurement model, the structural model was tested to examine hypothesized relationships, including direct effects testing for H1, H2, and H3, and mediation analysis for H4 using the bootstrap method with 5,000 bootstrap samples to generate bias-corrected confidence intervals 45.

4. Results

4.1 Sample Characteristics

A total of 412 valid responses were obtained from faculty members across Thai higher education institutions. The sample comprised 58.3% female and 41.7% male participants, with ages ranging from 28 to 65 years. In terms of academic rank, 34.5% were lecturers, 28.2% were assistant professors, 24.8% were associate professors, and 12.5% were full professors. Teaching experience ranged from 2 to 35 years. The sample included faculty from both public universities (62.4%) and private institutions (37.6%), representing diverse academic disciplines including STEM fields (28.9%), social sciences (24.3%), humanities (22.1%), business and management (16.5%), and other fields (8.2%). All participants had experience with online teaching, with 89.3% having taught online courses during the COVID-19 pandemic transition period.

4.2 Descriptive Statistics and Correlations

Table 1 presents the means, standard deviations, and correlation coefficients for all study variables. The mean scores indicate that faculty generally reported moderate to high levels of perceived justice in workload management, satisfaction with online education, and employee well-being. All correlations were significant and in the expected directions, with perceived justice in workload management showing strong

positive correlations with both satisfaction with online education ($r = 0.154$, $p < 0.01$) and employee well-being ($r = 0.326$, $p < 0.01$). Satisfaction with online education was also significantly correlated with employee well-being ($r = 0.186$, $p < 0.01$).

Table 1: Correlations

Variable	1	2	3
1. Justice in Workload Management	**0.717**		
2. Satisfaction with Online Education	0.154**	**0.785**	
3. Employee Well-being	0.326**	0.186**	**0.763**

*Note: **p<0.01. The numbers on the diagonal are the square roots of AVE.*

4.3 Measurement Model Evaluation

Before testing the structural relationships, the measurement model was evaluated using confirmatory factor analysis to assess the reliability and validity of the measurement instruments. The initial measurement model demonstrated acceptable fit to the data ($\chi^2/df = 1.725$; CFI = 0.94; TLI = 0.92; RMSEA = 0.044; SRMR = 0.051), indicating that the proposed factor structure adequately represented the observed data. All factor loadings were significant and exceeded the recommended threshold of 0.50, ranging from 0.67 to 0.89, providing evidence of convergent validity.

Reliability analysis revealed satisfactory internal consistency for all constructs, as shown in Table 2. Cronbach's alpha coefficients were 0.841 for justice in workload management, 0.906 for satisfaction with online education, and 0.847 for employee well-being, all exceeding the recommended threshold of 0.70. Composite reliability values were similarly robust (>0.8), and average variance extracted (AVE) values met the 0.50 criterion for all constructs, supporting convergent validity.

Table 2: Measurement Model Parameters

Variable	Items	Factor Loading	Cronbach's alpha	Composite reliability
Perception of Justice in Workload Management	JUST1	0.718	0.841	0.840
	JUST2	0.693		
	JUST3	0.759		
	JUST4	0.714		
	JUST5	0.700		
Satisfaction with Online Education	SATIS1	0.789	0.906	0.906
	SATIS2	0.782		
	SATIS3	0.796		
	SATIS4	0.789		
	SATIS5	0.802		
	SATIS6	0.753		
Well-being	WELL1	0.772	0.847	0.848
	WELL2	0.756		
	WELL3	0.769		
	WELL4	0.754		

4.4 Hypothesis Testing

Following the satisfactory measurement model assessment, the structural model was tested to examine the hypothesized relationships. The structural model demonstrated good fit to the data ($\chi^2/df = 2.207$, $p < 0.001$; CFI = 0.964; TLI = 0.957; RMSEA = 0.054; SRMR = 0.040), indicating that the proposed theoretical model adequately explained the relationships among the constructs.

The results provided strong support for three of the four hypotheses. H1, which proposed a positive relationship between perceived justice in workload management and employee well-being, was strongly supported ($\beta = 0.360$, $p < 0.001$). This direct effect explained a substantial portion of the variance in employee well-being, indicating that faculty who perceived their workload management as fair reported significantly higher levels of well-being.

H2, proposing a positive relationship between perceived justice in workload management and satisfaction with online education, was also strongly supported ($\beta = 0.174$, $p < 0.01$). This finding suggests that when faculty perceive fairness in workload allocation and management, they are more likely to report satisfaction with their online teaching experiences.

H3, which hypothesized a positive relationship between satisfaction with online education and employee well-being, received significant support ($\beta = 0.150$, $p < 0.01$). Faculty members who reported higher satisfaction with online education also demonstrated better overall well-being outcomes.

Table 3 presents the complete results of the hypothesis testing, including standardized path coefficients, standard errors, significance levels, and hypothesis support status.

Table 3: Hypothesis test

Hypothesis	Path	Estimate	S.E.	C.R.	P	Result
1	JUST→WELL	0.360	0.063	3.056	0.002	Supported
2	JUST→SATIS	0.174	0.052	2.759	0.006	Supported
3	SATIS→WELL	0.150	0.064	5.930	0.000	Supported

Note: JUST=Justice in Workload Management, SATIS=Satisfaction with Online Education, WELL=Employee Well-being, Estimate=standardized path coefficient.

4.5 Mediation Effect Analysis

H4 proposed that satisfaction with online education mediates the relationship between perceived justice in workload management and employee well-being. The mediation analysis was conducted using the bootstrap method with 5,000 bootstrap samples to generate bias-corrected confidence intervals. The results revealed a significant indirect effect of perceived justice in workload management on employee well-being through satisfaction with online education ($\beta = 0.21$, 95% CI [0.14, 0.29], $p < 0.001$). Since the confidence interval did not

include zero, the mediation effect was considered statistically significant, providing strong support for H4. Figure 2 presents a visual summary of the results for the four hypotheses tested in this study.

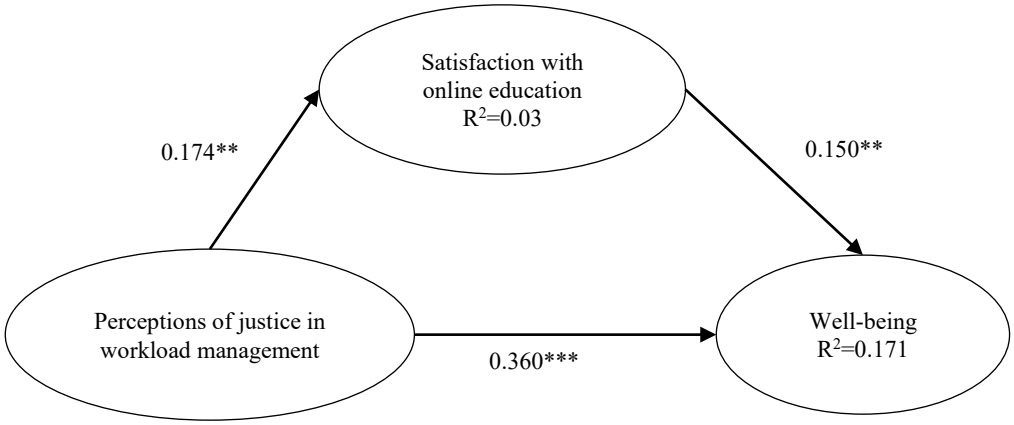


Fig. 2: Research result

Figure 2 presents empirical results with standardized path coefficients, showing significant relationships between all constructions and confirming the proposed mediation model.

5. Conclusion

5.1 Discussion

This study examined the relationships between perceived justice in workload management, satisfaction with online education, and faculty well-being within Thai higher education institutions. The findings provide important insights into how fairness in workload distribution affects faculty satisfaction and well-being, especially in the context of the rapid transition to online education during the COVID-19 pandemic.

The results strongly support the proposed hypotheses. First, a significant positive relationship between perceived justice in workload management and faculty well-being was identified (H1). This aligns with existing research that indicates fair workload distribution is vital for faculty job satisfaction and psychological well-being 20. Faculty members who perceive fairness in workload allocation report higher levels of well-being, confirming the principles of Adams' Equity Theory, which suggests that equitable input-output relations help alleviate stress and burnout. This finding is consistent with studies by 33 and 17, which highlight the critical role of equity in fostering well-being in academic settings.

Additionally, a positive relationship was found between justice in workload management and satisfaction with online education (H2), which is a crucial finding. As institutions worldwide shifted to online education, faculty faced increased workloads, often without sufficient support or recognition. This added pressure emphasized the importance of perceived fairness in workload distribution for faculty satisfaction with online teaching. These results are consistent with those of 26 and 31, who demonstrated that fairness in workload allocation positively influences satisfaction with online teaching, particularly when institutional support is factored in. Faculty members who felt their workload was managed were more likely to report satisfaction with online education, underscoring the need for transparent and equitable workload policies in online learning environments.

Finally, satisfaction with online education was found to mediate the relationship between workload justice and faculty well-being (H4). Faculty satisfaction with online teaching experiences significantly influenced well-being, suggesting that the impact of workload justice extends not only through direct effects but also via its influence on faculty satisfaction with online education. This result aligns with 32, who found that faculty satisfaction with online education can buffer the negative effects of increased workload, improving overall well-being.

While this study focuses specifically on Thai higher education, the principles of workload justice and their impact on well-being may have broader applications. The findings suggest that similar equity-based interventions could be relevant for other developing countries with comparable educational systems and cultural contexts. Future research should examine how these relationships manifest across different cultural and institutional settings to enhance global applicability.

5.2 Theoretical Implications

This study extends the application of Adams' Equity Theory to the field of online education, an area that has been underexplored in prior research. By investigating the mediating role of satisfaction with online education, the research contributes to the theoretical understanding of how perceptions of fairness in workload allocation influence faculty well-being. The findings suggest that Adams' Equity Theory remains highly relevant in contemporary educational settings, especially in the evolving environment of online and hybrid learning.

Previous applications of Equity Theory in higher education primarily focused on traditional, face-to-face teaching environments 39, 40. However, the shift to online education due to the COVID-19 pandemic introduced new complexities in workload management. This study demonstrates that fairness in workload allocation within online education has a significant impact on faculty satisfaction and well-being, further emphasizing the importance of equity in non-traditional teaching formats. By extending Equity Theory to online education, the study provides a novel theoretical framework for understanding faculty satisfaction and well-being in this context.

The identification of satisfaction with online education as a mediator offers new insights into the mechanisms through which fairness in workload management affects faculty well-being. This mediation suggests that fairness in workload distribution impacts faculty well-being

both directly and indirectly, by enhancing satisfaction with online education. This contribution is particularly important in the current era, where faculty members are increasingly expected to engage in online teaching with limited preparation and support 3.
Additionally, the focus on Thai higher education institutions contributes to the generalizability of Adams' Equity Theory beyond Western educational systems. The research provides empirical evidence from Thailand, a non-Western context, offering insights that may inform both local and global discussions on faculty management and well-being. The cultural and institutional differences within Thailand likely influence faculty perceptions of fairness and their responses to workload demands, providing a unique perspective that enriches the broader application of Equity Theory in diverse educational settings 12.
In conclusion, this study makes a significant theoretical contribution by applying and extending Adams' Equity Theory to the domain of online education in Thai higher education. It underscores the importance of workload justice in shaping faculty satisfaction and well-being, offering a comprehensive theoretical model that can inform future research on workload management and employee well-being in higher education institutions worldwide.

5.3 Practical Implications

The findings of this study have several important practical implications for higher education institutions, particularly in managing faculty workloads and enhancing employee well-being in the context of online education. Given the growing reliance on digital learning platforms and the increasing demands on faculty to adapt to these new teaching environments, institutions must implement fair and transparent workload allocation systems. Faculty satisfaction and well-being are closely linked to perceptions of workload justice, and addressing inequities in workload distribution can significantly improve both teaching quality and faculty retention.
First, higher education administrators should prioritize equity in workload management by ensuring that faculty workloads are distributed fairly across teaching, research, and service responsibilities. Transparent processes for allocating teaching loads, research time, and administrative duties should be developed to ensure that faculty members perceive fairness in the distribution of their responsibilities. This is particularly important in online education, where faculty often face increased pressures and responsibilities related to technology adaptation, online pedagogy, and student engagement. Institutions should consider providing adequate support for faculty, including training, technological tools, and resources that facilitate online teaching, thus mitigating the added burden of online teaching duties.
Second, fostering faculty satisfaction with online education can be achieved by focusing on enhancing the support systems for faculty. These include improving institutional support for online teaching, offering professional development opportunities, and ensuring that faculty receive sufficient recognition for their contributions. By addressing workload justice and improving faculty satisfaction with online education, institutions can not only enhance faculty well-being but also improve teaching outcomes. Research by 30 has consistently shown that faculty satisfaction is a key predictor of instructional quality in online education. Therefore, supporting faculty in their online teaching roles can have a positive cascading effect on the overall quality of online education and student outcomes.
Additionally, institutions should consider incorporating workload justice into their overall faculty well-being strategies. Faculty well-being programs should be designed to address both physical and psychological health, with particular attention given to the stressors related to online teaching. By aligning well-being initiatives with perceptions of fairness in workload distribution, institutions can create a supportive environment that promotes faculty retention, job satisfaction, and a more positive organizational culture.
In summary, the findings of this study emphasize the importance of fair workload management and faculty satisfaction with online education in promoting faculty well-being. Higher education administrators should take proactive steps to ensure that workload allocation is perceived as equitable, provide adequate support for online teaching, and align faculty well-being programs with the principles of fairness and transparency. Such initiatives can contribute to a more engaged and satisfied faculty, ultimately enhancing the quality of education provided. These findings may extend beyond higher education to other knowledge-intensive sectors, including K-12 education, healthcare, and professional services organizations. The principles of workload justice and their impact on employee well-being could inform organizational policies in various contexts where professionals face increasing demands for technological adaptation and skill development.

5.4 Limitations and Future Research

While this study contributes valuable insights into the relationships between workload justice, satisfaction with online education, and faculty well-being, several limitations should be acknowledged, and directions for future research should be considered.
First, the cross-sectional design of the study limits the ability to infer causal relationships between the variables. Although significant relationships were found between perceived justice in workload management, satisfaction with online education, and faculty well-being, future research should consider mixed-methods approaches, combining quantitative surveys with qualitative interviews to capture the nuanced experiences of faculty in online education contexts. Such approaches could provide deeper insights into the mechanisms through which workload justice influences well-being.
Second, this study focused exclusively on Thai higher education institutions, which may limit the generalizability of the findings to other cultural or institutional contexts. While the study provides valuable insights into the specific dynamics of workload justice in Thai higher education, future research should explore similar models in other countries or educational systems to examine the universality of the findings. Comparative studies between countries with different educational and cultural backgrounds could provide a deeper understanding of how workload justice and faculty well-being are perceived across diverse settings.
Additionally, this study relied on self-reported data, which may be subject to social desirability biases or inaccuracies in faculty perceptions. Future research could incorporate objective measures of workload and well-being, such as time-tracking systems or institutional records of workload distribution, to provide a more comprehensive and accurate assessment of workload justice. Combining subjective and objective data could enhance the reliability of the findings and provide a more nuanced understanding of the factors influencing faculty well-being.
Another area for future research is the exploration of the specific mechanisms through which satisfaction with online education influences faculty well-being. While this study identified satisfaction as a mediator between workload justice and well-being, further research could investigate the specific aspects of online education that contribute most to faculty satisfaction. For instance, examining how different dimensions of online teaching (e.g., technological support, student engagement, instructional design) impact faculty satisfaction and well-being could help identify targeted interventions for improving online teaching experiences.
Finally, future studies could explore the role of individual differences in shaping faculty perceptions of workload justice and their subsequent impact on well-being. Factors such as faculty rank, discipline, and previous experience with online teaching may influence how faculty perceive their workload and the fairness of its distribution. Examining these moderating variables could offer a more individualized

perspective on the relationship between workload justice and faculty well-being, providing insights that are specific to different faculty subgroups.

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