

An Analysis of Variance in Pay Satisfaction and Employee Work Engagement among Faculty and Staff at Guangzhou Huashang University

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Abstract

With increasing higher education, this study considers how teachers' pay satisfaction (level, raises, benefits, structure) influences work engagement in Guangzhou Huashang University, a private university with prevalent issues of dissatisfied pay and ambiguous structures. A quantitative questionnaire survey of 311 teachers employed descriptive and analysis correlation analysis. All pay satisfaction dimensions and results were moderately to strongly positively correlated with work engagement, with the strongest results for the pay level dimension. The solutions suggested are to pay structure with higher clarity, performance pay and other. These outcomes create actionability for Guangzhou Huashang University and other private universities to refine their compensation policies and HR management.

Keywords: Pay Satisfaction, Work Engagement, Maslow's Hierarchy of Needs Theory, Equity Theory, Expectancy Theory

Introduction

Work engagement with commitment, dedication, and enthusiasm is central to organizational success as it reduces turnover and enhances performance. Pay satisfaction, based on Maslow's theory of fundamental needs, has a direct impact on engagement through fulfillment of material and psychological needs (Taormina & Gao, 2013). The COVID-19 pandemic deepened wage precariousness, which makes decent pay policies essential (ILO, 2020). In China, 60% of university teachers are dissatisfied with their salaries due to workload-cost-of-living disequilibria and opaque pay structures (Chinese Ministry of Education, 2022). Satisfied employees exhibit higher work attachment and loyalty and lower turnover intentions (Jung & Yoon, 2015).



Guangzhou Huashang University, which comes 14th in China's 2024 private college research competitiveness ranking, is a microcosm of the difficulties that China's 'Double First Class' policy faces in higher education. The case of Guangzhou Huashang University with its heterogeneous teachers (both the local and international teachers) and focus on practical education is a convincing case to analyze pay satisfaction in private universities.

Based on China's higher education sector, this research fills the knowledge gaps regarding the impact of pay systems on engagement. This research will serve to provide compensation reforms and HR practices at Guangzhou Huashang University and other institutions like theirs, as well as national efforts to improve teachers' well-being, and increase institutional competitiveness.

Objectives

As compensation becomes increasingly important for both teachers and higher education institutions, understanding its influence on various aspects of employment is crucial. The study objectives are as follows:

- 1. Explaining the levels of pay level, pay rise, benefits, and pay structure satisfaction at Guangzhou Huashang University.
- 2. To explore the level of employee work engagement at Guangzhou Huashang University.
- 3. To examine the relationship between Pay satisfaction and employee work engagement at Guangzhou Huashang University.

Concept theory framework

Concept and Measurement of Pay Satisfaction

Pay satisfaction is a key motivator and retention driver of employees. Lawler (1971) formulated construction as employees' satisfaction with their pay in fairness and adequacy. Heneman and Schwab (1985) extended it by formulating a multidimensional measure, e.g., pay level, pay rises, benefits, and pay structure. Subsequent studies (e.g., Singh & Loncar, 2010; Jung & Yoon, 2015; Alam, 2022) emphasized its impact on work engagement and turnover intention.

Pay Satisfaction Questionnaire (PSQ) is the most common measuring tool, assessing satisfaction in all four facets (Heneman & Schwab, 1985). The PSQ has also been established to be valid across various industries like healthcare and education (Khalid, 2020; Alam, 2022). In the current study, PSQ will be utilized to measure pay satisfaction and its impact on employee outcomes.

Concept and Measurement of Work Engagement

According to Kahn (1990), work engagement is the employees' integration of



identity with their work role, their investment of emotions, cognitions, and physicality in their work role. In this case, Schaufeli et al. (2002) described this as a positive state having vigor, dedication, and absorption. High energy and resilience equate to vigor, committed and enthusiast translates as dedication, absorption is deep focus. Work engagement improves job satisfaction, productivity, and engagement in workplace culture (Han & Wang, 2021; Corbeanu & Iliescu, 2023).

Schaufeli et al. (2006) developed the Utrecht Work Engagement Scale (UWES), which they later refined to a 9-item version for measurement of work engagement. Further, based on confirmatory factor analysis, validity and reliability were performed for the tool across different countries. In Viljevac et al. (2012), they also compared numerous scales, but it was UWES more effective. This study uses the UWES-9 given that it has strong psychometric properties.

Maslow's Hierarchy of Needs Theory

According to Maslow's theory, the needs of human behavior are on the level of Maslow's hierarchy with physiological, safety, social, belonging, esteem, and self-actualization (Maslow, 1943). When lower-level needs are met, the people try to meet up the higher-level needs (Trivedi et al., 2019). In the workplace, inadequate pay might lessen employees' motivation (Li, 2022) as they cannot meet their basic needs. The hierarchy is supported by empirical studies which reveals that motivation (Taormina & Gao, 2013) correlated positively with need satisfaction.

Equity Theory

In Adams' (1965) equity theory, Adams argues that the perceived fairness in compensation is something that employees would compare their amount of input to reward to how much others receive on average to measure equity. If there appears to be an imbalance, dissatfullment and effort can be reduced (Adams & Jacobson, 1964). Low pay satisfaction regarding Chinese teachers is related to poor correlation between effort and compensation (Meng, 2022). Fair pay distribution hence also means a key element of employee motivation and retention.

Expectancy Theory

According to Vroom's expectancy theory, motivation is related to expectancy, instrumentality, and valence (Vroom, 1964). Quite simply, employees exercise effort when they think that effort leads to performance and its rewards. Xu and an (2016) suggested strengthening these relationships through a fair reward system and well optimized work environment. In a study by Saeed et al. (2023), it is inferred that higher pay is associated with reduced turnover intention. This theory stresses how drawing employee expectations in straight line and infusion of employee incentives contribute to motivation and employment satisfaction.



Relationship between Pay Satisfaction and Work Engagement

Pay satisfaction has a strong impact on employees' work engagement, motivation, and organizational commitment. Maslow's hierarchy indicates that pay satisfaction guarantees employees' lower-level physiological and safety needs, which will allow them to strive for upper-level objectives like self-actualization. Additionally, Adams's equity theory describes that perceptions of fair pay have a significant impact on employees' behaviors and attitudes, and therefore their work engagement (Sypniewska et al., 2023).

In the academic field, pay satisfaction is not only a function of pay levels but also of openness and fairness in pay structures. Memon et al. (2021) confirmed that work satisfaction with training and performance appraisal results in work engagement, reducing intention to leave. Satisfaction with pay level has a positive correlation with work engagement because employees satisfied with their pay level are more enthusiastic about work (Jung & Yoon, 2015). Also, periodic salary raises, and performance-based allowances enhance economic security, increasing engagement (Memon et al., 2017). Allowances also make a significant contribution to pay satisfaction and work engagement (Ekinci, 2022). Finally, open, and fair compensation systems promote trust, and this also increases engagement (Alam, 2022).

Consistent with these findings and drawing on Maslow's hierarchy of needs, equity theory, and expectancy theory, this study examines how pay satisfaction influences work engagement. Maslow's theory links basic needs to engagement, equity theory focuses on fairness perceptions, and expectancy theory highlights reward expectations. These theoretical frameworks provide a foundation for exploring how pay level, pay increases, benefits, and pay structure impact the work engagement of faculty and staff at Guangzhou Huashang University. The research formulates the following hypotheses:

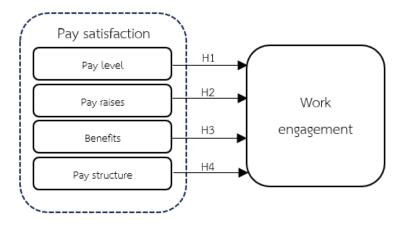
H1: There is a statistically significant relationship between pay level and work engagement among faculty and staff of Guangzhou Huashang University.

H2: There is a statistically significant relationship between the pay increase of faculty and staff of Guangzhou Huashang College and work engagement.

H3: There is a statistically significant relationship between the benefits of faculty and staff of Guangzhou Huashang College and work engagement.

H4: There is a statistically significant relationship between the pay structure of faculty and staff of Guangzhou Huashang University and work engagement.







Materials and Methods

Quantitative research design was employed in this study to examine the relationship between pay satisfaction and work engagement among Guangzhou Huashang University's faculty and staff. 311 participants, who were recruited by stratified sampling from 12 secondary colleges, were surveyed using a questionnaire survey. The sample size was taken from a total population of 1,400 faculty and staff, and a margin of error of 5% was applied based on the Yamane formula. Both online (on QQ and WeChat) and offline (on site) data were collected with a 99.7% response rate (311 valid responses among a total of 320). Two parts of the survey were included: (1) Demographics (gender, age, work experience, education, and income) and (2) Pay satisfaction and work engagement scales.

Pay satisfaction was evaluated on a new Pay Satisfaction Questionnaire (PSQ) containing 16 items across four dimensions (pay amount, pay rise, benefits, and pay structure). Work engagement was evaluated with the Utrecht Work Engagement Scale (UWES-9), assessing vigor, dedication, and absorption with a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Validity was achieved through expert review and pre-testing, and Cronbach's Alpha confirmed high reliability (0.845–0.936 for single scales, 0.975 overall). Data analysis, including descriptive analysis, correlation analysis, to examine the correlations between pay satisfaction dimensions and work engagement was conducted using SPSS.

Results

This study distributed 320 questionnaires, collecting 311 valid responses. The respondents were mostly young males, aged 25 to 35, with moderate work experience and an important level of education. Their salaries were primarily in the medium-to-low range. Overall, respondents expressed high satisfaction with their current pay level, with

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an average score of 3.51 (SD= 1.31). Satisfaction with pay raises was high, with an average score of 3.50 (SD = 1.22), indicating a strong belief that pay is proportional to effort. Satisfaction with benefits was slightly lower at 3.53 (SD = 1.25), while satisfaction with the pay structure was 3.52 (SD = 1.27). Regarding work engagement, the average score was 3.54 (SD = 1.26), reflecting a cheerful outlook toward work, with respondents feeling energetic, enthusiastic, inspired, and able to maintain high focus even under pressure.

Before performing correlation analysis, the Kolmogorov-Smirnov test results indicate that all variables (pay level, pay raises, benefits, pay structure, and work engagement) significantly deviate from a normal distribution (p < 0.05). This suggests potential non-normality in the data. Given this, the study employed Spearman's rank correlation to ensure reliable analysis of the relationships between pay satisfaction dimensions and work engagement.

	X1	X2	X3	X4	Y
X1: Pay level	1.000				
X2: Pay raises	0.512**	1.000			
X3: Benefits	0.620**	0.636**	1.000		
X4: Pay structure	0.634**	0.532**	0.577**	1.000	
Y: Work Engagement	0.940**	0.604**	0.607**	0.599**	1.000

Table 1: Correlation analysis test

**Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis indicated that pay satisfaction dimensions were all positively correlated with work engagement. Correlation between pay level and work engagement was 0.940 (p < 0.01), indicating a near perfect positive correlation. Pay raises were also highly correlated with work engagement (0.604, p < 0.01), which indicates its direct effect. In addition, benefits (0.607, p < 0.01) and pay structure (0.599, p < 0.01) were positively correlated with work engagement, suggesting that increased levels of these factors enhance employee commitment. These findings demonstrate how a good compensation system is a key factor in the function of motivating employees to be more engaged and committed. The hypothesis test determined that all pay satisfaction dimensions—pay level, pay raises, benefits, and pay structure were statistically correlated with work engagement.



Thus, H1-H4 are confirmed, indicating a statistically significant relationship between pay satisfaction (including pay level, pay rises, benefits, pay structure) and work engagement among Guangzhou Huashang University teachers.

Conclusions and Discussion

The respondents expressed general satisfaction with the company's compensation policies, including pay level, pay raises, benefits, and pay structure. They are satisfied with the pay level, believing that pay rises align with performance and market levels, and that the benefits offered are diverse and valuable. However, concerns about pay discrepancies for the same position and dissatisfaction with recent pay raises highlight areas for improvement. While the benefits are appreciated, some respondents feel they do not fully meet personal needs, and there is slight dissatisfaction with the pay structure. Despite these concerns, respondents demonstrate high work engagement, feeling energetic, enthusiastic, and proud of their work, maintaining a cheerful outlook under pressure, which contributes to improved work performance and company growth.

The results from this study suggest that there is a significantly strong relationship between pay satisfaction and work engagement among teachers, with pay level being the most important determinant. These results highlight the significance of a well-structured and transparent pay system in encouraging faculty engagement in higher education institutions. It is confirmed by the study that teachers who are satisfied with their pay are more enthusiastic and dedicated to their work. This echoes past work such as Jung and Yoon (2015) who found that work engagement is positively linked to pay satisfaction. Additionally, the findings reveal that satisfaction with pay raises and benefits is another principal factor, making clear that universities should rely on a balance of current salaries and end payback period to long-term growth opportunities in the design of their compensation policies. From a practical point of view, pay transparency, performancebased compensation and different incentive structures for faculty demographics and disciplines should be adopted by the higher education Institutions. Another way is to improve communication on pay policies and benefits to increase faculty engagement and retention.

In total, this study is particularly useful in elaborating on the link between pay satisfaction and work engagement that can inform universities to shape strategic HRM policies to strengthen a motivated faculty workforce.



References

- Alam, A. A. S. (2022). Does compensation satisfaction influence turnover intention? A study among junior executives in Bangladesh. Management Development, 33(2), 19-32.
- Bakker, A., & Demerouti, E. (2008). Towards a model of work engagement. Career Development International, 13, 209-223.

https://doi.org/10.1108/13620430810870476

- Ekinci, E. (2022). Correlations of turnover: Pay and bonuses. Journal of Business Research – Turk, 14(2), 1628-1642. https://doi.org/10.20491/isarder.2022.1461
- Guang, H. (2024). School profile-Guangzhou Huashang University. Gdhsc.edu.cn. https://www.gdhsc.edu.cn/xygk/xyjj.htm
- Han, Y., & Wang, Y. (2021). Investigating the correlation among Chinese EFL teachers' selfefficacy, work engagement, and reflection. Frontiers in Psychology, 12, 763234.
- Heneman, H., & Schwab, D. (1985). Pay satisfaction: Its multidimensional nature and measurement. International Journal of Psychology, 20(1), 129-141. https://doi.org/10.1080/00207598508247727
- International Labor Organization. (2020). Global Wage Report 2020/21: COVID-19 and wages. Ilo.org. https://webapps.ilo.org/digitalguides/zhcn/story/globalwagereport#introduction
- Jung, H., & Yoon, H. (2015). Understanding pay satisfaction: The impacts of pay satisfaction on employees' work engagement and withdrawal in deluxe hotels. International Journal of Hospitality Management, 48, 22-26. https://doi.org/10.1016/j.ijhm.2015.04.004
- Khalid, K. (2020). The impact of managerial support on the association between pay satisfaction, continuance and affective commitment, and employee task performance. Sage Open, 10(1), 1-13. https://doi.org/10.1177/2158244020914591
- Li, H., & Zhang, Y. (2021). College affiliation and work engagement: A study of Chinese universities. Higher Education Research and Development.
- Ministry of Education of China. (2023, August 31). [Workers Daily] Ministry of Education: Education investment will be more inclined towards teacher treatment and teachers' pay income level will be continuously improved - Government Portal of the Ministry of Education of the People's Republic of China.http://www.moe.gov.cn/fbh/live/2023/55499/mtbd/202309/t20230901_10777 68.html
- Memon, M. A., Salleh, R., Mirza, M. Z., Cheah, J.-H., Ting, H., Ahmad, M. S., & Tariq, A. (2020). Satisfaction matters: The relationships between HRM practices, work



engagement and turnover intention. International Journal of Manpower, 42(1), 21-50. https://doi.org/10.1108/ijm-04-2018-0127

- Memon, M. A., Salleh, R., & Baharom, M. N. R. (2017). The mediating role of work engagement between pay satisfaction and turnover intention. International Journal of Economics, Management and Accounting, 25(1), 43-69.
- Meng, X., Wang, X., & Li, G. (2022). An empirical study on the pay satisfaction and influencing factors of primary and secondary school teachers in my country from the perspective of equity theory: Based on the survey data of "China Teacher Development Report 2019." Modern Education Forum, 2022(1), 75–85.
- Saeed, F., Mir, A., Hamid, M., Ayaz, F., & Iyyaz, U. (2023). Employees pay and employee turnover intention: A key evaluation considering work satisfaction and work performance as mediators. International Journal of Management Research and Emerging Sciences, 13(1). https://doi.org/10.56536/ijmres.v13i1.234
- Sypniewska, B., Baran, M., & Kłos, M. (2023). Work engagement and employee satisfaction in the practice of sustainable human resource management – based on the study of Polish employees. International Entrepreneurship and Management Journal, 19(3), 1069–1100. https://doi.org/10.1007/s11365-023-00834-9
- Taormina, R., & Gao, J. (2013). Maslow and the motivation hierarchy: Measuring satisfaction of the needs. The American Journal of Psychology, 126(2), 155-177. https://doi.org/10.5406/amerjpsyc.126.2.0155