

Mediating and Moderating Effects of Job Motivation among Frontline Employees in the Nankang Furniture Industry

Lai Song

City Graduate School, City University Malaysia, Jiangxi College of Applied Technology
Email: 1026967605@qq.com

Shairil Izwan Taasim

City Graduate school, City University Malaysia
Email: shairil.izwan@city.edu.my

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v15-i11/27118>

Published Date: 30 November 2025

Abstract

This study takes 395 frontline production employees from the Nankang furniture industry in Ganzhou City, Jiangxi Province, as the sample. Drawing on Herzberg's two-factor theory, self-determination theory, work-family enrichment theory, and social comparison theory, it constructs a comprehensive model that includes Life Satisfaction (LS), Objective Relative Income (ORI), Job Satisfaction (JS), Personality Characteristics (PC), and Job Motivation (JM), and uses PLS-SEM to test both mediating and moderating effects. The results show that JS is the core factor driving JM, and the effects of LS and ORI on JM are fully mediated by JS. ORI exhibits a "suppressor-type" full mediation pattern on JM, highlighting the importance of relative income position and pay equity perceptions. The moderation analysis finds that Neuroticism and Openness weaken the LS→JS path, while Conscientiousness significantly strengthens the JS→JM path; Extraversion and Agreeableness do not show significant moderating effects, indicating the contextual dependence of personality traits in labor-intensive manufacturing. The study reveals the mechanism of "distal life and economic resources → proximal job attitudes → motivational outcomes," emphasizing the need to enhance job satisfaction as a way to translate life resources and income advantages into motivation. It provides important theoretical and practical implications for optimizing frontline employee incentive mechanisms in the Nankang furniture industry and other labor-intensive sectors under resource constraints.

Keywords: Nankang Furniture Industry, Job Motivation, Life Satisfaction, Job Satisfaction, Personality Characteristics, Mediating and Moderating Effects

Research Background and Significance

Under the dual pressures of industrial upgrading and structural adjustment, China's manufacturing sector is shifting from factor-driven growth to quality-driven development. Given the realities of generally low profit margins and relatively weak labor skill structures, the stability, engagement, and job motivation (JM) of frontline employees are increasingly becoming key variables affecting organizational performance and industrial competitiveness. However, existing policies and research have tended to focus on technological equipment, industrial chain structure, and institutional design, while paying insufficient systematic attention to frontline workers' Life Satisfaction (LS), Job Satisfaction (JS), and the mechanisms underlying their motivation. As a result, incentive practices in many firms remain single-dimensional, rough, and short-term oriented.

As a typical labor-intensive industrial cluster, the Nankang furniture industry has achieved considerable scale, yet has long relied on piece-rate pay, with insufficient welfare and social protection and limited career development pathways. Frontline workers generally face high living pressure, low job satisfaction, and high turnover. Against the backdrop of consumption upgrading and intensified regional competition, relying solely on low-cost advantages has become unsustainable. A systematic understanding of how frontline employees' motivation is generated has thus become a practical requirement for high-quality industrial development.

At the theoretical level, existing research on LS, JS, Personality Characteristics (PC), and JM has mainly focused on knowledge-based or service-oriented groups, leaving frontline workers in labor-intensive manufacturing largely in a "neglected" position. Meanwhile, in contexts characterized by low pay transparency and prevalent piece-rate systems, relying only on subjective pay satisfaction is insufficient to explain motivational differences. Introducing Objective Relative Income (ORI) helps more accurately capture employees' positions within the income structure and their sense of fairness, thereby enhancing our understanding of the relationships among satisfaction, fairness perceptions, and motivation.

Integrating LS, JS, PC, and ORI into a unified framework helps reveal how life resources, economic resources, and individual traits jointly shape frontline employees' motivation, overcoming the limitations of single-variable and single-path studies. Based on this, the present research constructs an integrated mediation-moderation model in the specific context of the Nankang furniture industry. It aims to enrich the application of two-factor theory, self-determination theory, and social comparison theory in China's manufacturing sector and provide empirical evidence for enterprises to implement differentiated and precise incentive strategies under resource constraints, thereby offering meaningful support for the sustainable development of the Nankang furniture industry and other labor-intensive sectors.

Research Objectives and Questions

Focusing on the "mediating and moderating effects of job motivation among frontline employees in the Nankang furniture industry," this study aims to construct a comprehensive model to explain differences in frontline employees' motivation. It particularly examines how Life Satisfaction (LS) and Objective Relative Income (ORI) influence Job Motivation (JM) through Job Satisfaction (JS), and how different Personality Characteristics (PC) moderate this chain of effects. The study seeks to clarify how frontline employees' work motivation is jointly

shaped by four dimensions: life resources, economic status, job attitudes, and individual traits. In doing so, it aims to provide empirical support for optimizing incentive systems and improving employee stability and engagement in labor-intensive manufacturing under constrained resources.

Around these objectives, the study raises three core research questions:

- (1) What are the current levels of LS, JS, ORI, and JM among frontline employees in the Nankang furniture industry? Are there significant differences in JM across different socio-demographic groups and personality profiles?
- (2) Do LS and ORI influence JM via JS, that is, does JS play a mediating role in the LS→JM and ORI→JM relationships?
- (3) Does PC alter the strength of the mediation paths, such that the LS→JS and JS→JM effects differ under different personality conditions?

By answering these questions, this study aims to systematically uncover the psychological mechanisms and heterogeneous patterns underlying frontline employees' motivation, and to offer theoretical and practical references for developing more precise, evidence-based incentive strategies in the Nankang furniture industry and other labor-intensive sectors.

Research Hypotheses

Drawing on two-factor theory, self-determination theory, and work–family enrichment theory, this study posits that frontline employees' Life Satisfaction (LS) and Objective Relative Income (ORI) influence Job Motivation (JM) through Job Satisfaction (JS). LS, as an individual psychological resource, is expected to enhance JS by improving emotional states and cognitive evaluations; ORI reflects employees' relative position in the regional income structure and thus shapes their sense of fairness and overall evaluation of work. Accordingly, the study first hypothesizes that LS and ORI each have a positive effect on JS (H1 and H2), and further proposes that ORI directly and positively influences JM (H3).

Along the motivational pathway, JS is considered a crucial basis for the formation of both intrinsic and extrinsic motivation. Hence, the study hypothesizes that JS positively predicts JM (H4), and that JS mediates the effects of LS and ORI on JM (H5 and H6).

Furthermore, based on the Big Five personality theory and trait activation theory, different personality traits may strengthen or weaken the impact of external resources on attitudes and behaviors. Employees high in Conscientiousness tend to derive stronger satisfaction from positive experiences, while those high in Neuroticism are more susceptible to negative stimuli. Extraversion and Openness may influence how employees interpret and respond to their work environment and life circumstances. Therefore, the study proposes that PC moderates the LS→JS and JS→JM paths, leading to variations in mediation effects under different personality profiles. This gives rise to the moderating hypotheses (H7 and H8), forming a moderated mediation model of job motivation.

Literature Review

Theoretical Foundations of Job Satisfaction, Life Satisfaction, Objective Relative Income, and Job Motivation

The relationships among Job Satisfaction (JS), Life Satisfaction (LS), and Job Motivation (JM) are core topics in organizational behavior research. Two-factor theory distinguishes between hygiene factors and motivators: hygiene factors primarily prevent dissatisfaction and secure basic satisfaction, while motivators directly drive higher levels of motivation. Self-determination theory further emphasizes that intrinsic motivation is grounded in the satisfaction of three basic psychological needs—autonomy, competence, and relatedness—which may be fulfilled not only in the workplace but also through resources gained in other life domains.

Work–family enrichment theory offers a cross-domain explanation for the LS→JS path, suggesting that positive experiences and psychological resources gained in the life domain can spill over into the work domain, improve employees' evaluations of their jobs, and indirectly enhance their motivation by boosting positive emotions and cognitions.

Social comparison theory adds that income satisfaction depends not only on absolute income but also on relative position. Traditional pay satisfaction measures rely largely on self-reports, which are vulnerable to emotional and cognitive biases. Objective Relative Income (ORI) is thus introduced as a complementary indicator that better captures the chain from “position in the income structure → fairness perceptions → satisfaction.” ORI is particularly informative in contexts characterized by large income gaps and piece-rate pay, where frontline employees rely heavily on comparisons with peers rather than on absolute income levels when judging their economic status.

Taken together, LS, JS, ORI, and JM form a cross-domain, cross-resource motivational process: life resources are translated into job attitudes through satisfaction; economic resources shape satisfaction via fairness perceptions; and these attitudes are further transformed into motivation through internal and external incentive needs. The strength of these effects is moderated by Personality Characteristics (PC): within the Big Five framework, Conscientiousness tends to strengthen the translation from satisfaction to motivation, while Neuroticism may weaken the transfer of resources from the life domain to the work domain. This integrated framework provides a theoretical basis for analyzing motivation mechanisms in labor-intensive manufacturing and underpins the logic of how frontline workers' motivation is generated in this study.

Empirical Research on the Relationships among the Core Variables

Existing studies generally support the interconnections among LS, JS, and JM. Numerous cross-industry studies indicate that higher LS enhances positive emotions and psychological resources, improves employees' overall evaluations of their work, and consequently increases JS. JS, in turn, is a key antecedent of work engagement, organizational commitment, and sustained motivation. However, much of the empirical evidence comes from knowledge workers, public-sector employees, or service workers, while systematic examinations of frontline employees in labor-intensive manufacturing remain limited. In sectors dominated by piece-rate pay, the satisfaction–motivation chain may be more strongly shaped by resource conditions and contextual factors.

Regarding pay, prior research has gradually shifted from focusing solely on subjective pay satisfaction to emphasizing “relative income.” A substantial body of evidence shows that employees’ relative income position significantly influences their fairness perceptions and satisfaction, with low-income groups being particularly sensitive to such relative comparisons. Compared to subjective perceptions, ORI better reflects individuals’ objective position within the income distribution, thereby improving the explanatory power for differences in pay fairness and satisfaction. In labor-intensive jobs that are monotonous and offer limited growth prospects, frontline workers rely more heavily on economic resources than workers in other sectors; in such contexts, income comparisons more readily translate into motivational differences.

With respect to mechanisms, many studies support the indirect path whereby LS influences JM via JS, but there is no consensus on the strength of LS’s direct effect on JM. Some studies report a significant direct effect, while others suggest that the direct impact is weak and that motivation is primarily driven by JS. In addition, socio-demographic characteristics (e.g., age, marital status, number of children) and economic pressures jointly shape the satisfaction–motivation chain. For example, among manufacturing frontline employees facing heavy family and financial burdens, income and life stress may exert more immediate effects on satisfaction and motivation, though the specifics of these mechanisms are still debated.

In terms of organizational context, labor-intensive jobs are typically highly standardized, with limited growth opportunities, restricted promotion channels, and insufficient training. Such environments weaken sources of intrinsic motivation and cause employees to rely more on external factors—such as pay equity, job security, and interpersonal support—to sustain their motivation. Consequently, the motivational structure of manufacturing frontline workers differs markedly from that of knowledge workers, which further underscores the need to re-examine the relationships among LS, JS, ORI, and JM in this specific context.

Effects of Life Satisfaction, Job Satisfaction, and Objective Relative Income on Job Motivation
Current research generally views LS as a cross-domain positive resource. Its associated positive emotions, perceived quality of life, and social support enhance employees’ psychological energy and resilience, thereby laying a foundation for work engagement. Many studies have found a positive effect of LS on JM. However, in labor-intensive industries characterized by low job autonomy and limited growth opportunities, this direct effect may be attenuated, and greater emphasis is placed on the mediating role of JS—namely, that life resources must first be transformed into a positive job attitude before they can further enhance motivation.

The mechanisms linking JS to JM are robust across multiple theoretical perspectives. From two-factor theory, social exchange theory, and equity theory, pay, promotion opportunities, fairness, supervisory support, and coworker relationships are all critical antecedents of motivation. Empirical evidence indicates that fair pay systems, transparent promotion channels, and supportive leadership styles can significantly increase both intrinsic and extrinsic motivation.

For ORI, social comparison theory suggests that individuals evaluate satisfaction more in terms of comparisons with reference groups than in terms of absolute income. Many

empirical studies show that higher relative income increases employees' perceptions of fairness and value, thereby improving JS and JM; conversely, low relative income tends to trigger dissatisfaction, heightened stress, and reduced motivation. In the Nankang furniture industry, frontline workers generally have low overall income levels, so the influence of ORI on satisfaction and motivation is likely to be particularly pronounced and structurally embedded.

Research Progress on Mediating and Moderating Effects

Regarding mediation, existing studies broadly support the role of JS as a bridge in the LS→JM and pay-related→motivation paths. Structural equation modeling results commonly indicate that satisfaction is a key mediator through which life and economic resources are transformed into motivation. However, the strength of this mediating chain varies across industries and job types: in knowledge-based roles, LS tends to have a relatively strong direct effect on JM, whereas in labor-intensive jobs, JS often plays a more central mediating role.

In terms of moderation, Personality Characteristics (PC) are thought to alter the strength of the relationship between satisfaction and motivation. Conscientiousness typically strengthens the JS→JM path, making high satisfaction more likely to translate into sustained motivation; Neuroticism may weaken the LS→JS “spillover” effect, making life resources less easily converted into positive job attitudes. Extraversion, Openness, and Agreeableness often show positive moderating effects in team-based, innovation-supportive environments, but in highly standardized, low-interaction manufacturing contexts, their moderating roles may be weaker or unstable.

Overall, most studies still focus on single-path tests and pay insufficient attention to integrated models that consider both mediation and moderation. Moreover, existing samples are largely drawn from high-skill or service-oriented occupations, with limited validation of these mechanisms in labor-intensive industries. Against this backdrop, introducing PC as a moderator and identifying motivational differences across personality profiles in a specific industrial context becomes an important direction for further research.

Research Gaps and Contributions of This Study

Synthesizing the existing literature, three main gaps emerge:

- (1) In studies on the multivariate relationships among LS, JS, ORI, and JM, most research remains at the level of fragmented path testing and lacks a unified, integrated theoretical model—especially systematic validation of the full cross-domain “LS→JS→JM” chain from life satisfaction to job attitudes to motivation.
- (2) Research on moderating effects has largely focused on service sectors, public institutions, or knowledge-based occupations, with insufficient attention to frontline workers in labor-intensive jobs, who face low autonomy and high economic pressure; whether existing mechanisms can be generalized to these groups remains unclear.
- (3) Studies on income differences generally rely on subjective pay satisfaction and have not fully recognized the complementary explanatory power of ORI in the “income structure → fairness perceptions → motivation” chain, resulting in a structural blind spot in explaining motivational differences.

On this basis, the main contributions of this paper are as follows:

It constructs a comprehensive model that includes LS, JS, ORI, PC, and JM, integrating life resources, economic resources, personality traits, and motivation within a single analytical framework; uses frontline workers in the Nankang furniture industry as the sample to systematically test mediating and moderating effects, thereby providing contextualized evidence for labor-intensive manufacturing; introduces ORI to better capture how relative income position and pay equity shape motivation; and proposes actionable managerial implications to support the design of more efficient and segmented incentive strategies for labor-intensive industries operating under resource constraints.

Research Methodology

Research Design

This study adopts a quantitative, correlational, cross-sectional research design to systematically analyze the structural relationships among Life Satisfaction (LS), Job Satisfaction (JS), Objective Relative Income (ORI), Personality Characteristics (PC), and Job Motivation (JM). The research setting is the Nankang furniture industrial cluster in Ganzhou City, Jiangxi Province, with frontline production employees as the primary respondents. Stratified random sampling was used to obtain a representative sample. The design aims to use large-sample statistical inference to examine direct, mediating, and moderating effects among the variables and, under resource constraints, to reveal the mechanisms underlying motivation formation among frontline workers in manufacturing through a cross-sectional snapshot.

Measures and Data Collection

This study employs several internationally recognized and validated scales to measure the key constructs: the PWI-A to assess Life Satisfaction, the JSS to measure Job Satisfaction, the IMI to evaluate Job Motivation, and the IPIP-NEO 50 to capture Personality Characteristics. ORI is constructed as a supplementary income-related variable. All scales were translated and back-translated, reviewed by experts, and contextually adapted to ensure cultural appropriateness.

Data were collected online via the WenJuanXing platform. With organizational approval and informed consent from employees, the research team organized unified questionnaire administration. Logical skip patterns, attention checks, and mandatory responses for core items were implemented to ensure data quality. A total of 395 valid responses were obtained.

Data Analysis Procedures

Data analysis proceeded in three stages. First, SPSS 26.0 was used to conduct descriptive statistics and difference tests, presenting the overall levels and group differences of the main variables. Second, SmartPLS 4.0 was used to assess the measurement models, including reliability, convergent validity, discriminant validity, and collinearity diagnostics for the formative construct (ORI). Third, a Partial Least Squares Structural Equation Model (PLS-SEM) was constructed to test the direct effects among LS, JS, ORI, and JM, as well as the mediating role of JS and the moderating effects of the big-five PC dimensions. Path significance and effect sizes were estimated using Bootstrapping (5,000 resamples) to ensure the robustness of the model.

Methodological Innovations and Contextual Fit

This study features two methodological innovations. First, it introduces Objective Relative Income (ORI) in place of traditional subjective pay satisfaction, which better aligns with the income structure of frontline workers in the Nankang furniture industry and enhances the explanatory power of pay equity in relation to motivation. Second, LS, JS, and JM are modeled as second-order latent constructs, using the repeated indicators approach in PLS-SEM to retain their multidimensional information and more accurately reflect the psychological structures of satisfaction and motivation.

In addition, all scales were localized and pilot-tested in factory workshops to align the measurement tools with the language environment, job characteristics, and cultural context of labor-intensive manufacturing. This improves both the contextual validity and the practical relevance of the research findings.

Results and Analysis*Relationship Analysis among Life Satisfaction, Job Satisfaction, Objective Relative Income, and Job Motivation*

Based on the PLS-SEM analysis, significant structural relationships were observed among Life Satisfaction (LS), Job Satisfaction (JS), Objective Relative Income (ORI), and Job Motivation (JM). LS showed a strong positive effect on JS ($\beta = 0.468$, $p < 0.001$), and JS exerted the strongest influence on JM ($\beta = 0.637$, $p < 0.001$). ORI positively predicted JS ($\beta = 0.330$, $p < 0.001$), but its direct path to JM was not significant ($\beta = -0.065$, $p = 0.116$). Meanwhile, LS $\rightarrow$ JM was also not significant.

Overall, JS demonstrated the closest relationship with JM, indicating that workers' motivational states are primarily driven by their evaluation of job-related factors rather than life satisfaction or income level. Both LS and ORI affect JM only indirectly through JS.

Table1

Path Coefficients among LS, JS, ORI and JM

Variables (Path)	β	p	Significance	Level
JS $\rightarrow$ JM	0.637	< .001	Significant	Strong
LS $\rightarrow$ JS	0.468	< .001	Significant	Strong
ORI $\rightarrow$ JS	0.33	< .001	Significant	Moderate
LS $\rightarrow$ JM	0.055	0.227	Not Significant	—
ORI $\rightarrow$ JM	-0.065	0.116	Not Significant	—

Note: Strong ($\beta \geq 0.50$), Moderate (0.30–0.49), Weak (0.10–0.29). N = 395.

Mediation Effect of Job Satisfaction

PLS-SEM with Bootstrapping (5,000 samples) was used to test the mediating role of JS. Results revealed that JS fully mediated both LS $\rightarrow$ JM and ORI $\rightarrow$ JM.

For LS, the direct effect on JM was not significant ($\beta = 0.055$, $p = 0.227$), while the indirect effect via JS was significant ($\beta = 0.298$, $p < 0.001$), with a Variance Accounted For (VAF) of 84.4%, indicating full mediation.

For ORI, the direct effect on JM remained non-significant ($\beta = -0.065$, $p = 0.116$), while the indirect effect through JS was significant ($\beta = 0.210$, $p < 0.001$). The VAF exceeded 80%, confirming full mediation accompanied by a suppression effect (direct effect negative; indirect effect positive).

Table 2

Mediation Effect Analysis (LS → JS → JM and ORI → JS → JM)

Path Component	Coefficient	Calculation	Result
LS → JS (a)	0.468	—	—
JS → JM (b)	0.637	—	—
LS → JM (c')	0.055	—	Not significant
Indirect Effect (a×b)	—	0.468×0.637	0.298
Total Effect (c)	—	$0.055 + 0.298$	0.353
VAF (%)	—	$0.298 \div 0.353$	84.4% (Full Mediation)
ORI → JS (a)	0.33	—	—
ORI → JM (c')	-0.065	—	Not significant
Indirect Effect (a×b)	—	0.330×0.637	0.21
Total Effect (c)	—	$-0.065 + 0.210$	0.146
VAF (%)	—	$0.210 \div 0.146$	144% (Full Mediation + Suppression)

Moderating Effects of Personality Characteristics

Moderation analysis examined the Big Five traits on the LS → JS and JS → JM paths. Results showed differentiated patterns.

(1) LS → JS Moderation

Neuroticism and Openness significantly weakened the LS → JS relationship, whereas Conscientiousness strengthened it. Extraversion and Agreeableness showed no significant moderation.

Table 3

Moderating Effects of Personality Characteristics on LS → JS

Interaction Term	β	t-value	p-value	Effect Size (f^2)
LS × Neuroticism → JS	-0.112*	3.501	< .001	0.025
LS × Extraversion → JS	-0.013	0.405	0.685	0
LS × Openness → JS	-0.124*	3.447	0.001	0.03
LS × Agreeableness → JS	0.026	0.714	0.475	0.001
LS × Conscientiousness → JS	0.081*	3.204	0.001	0.019

Note: * $p < .05$. Effect size: $f^2 < 0.02$ (no effect), 0.02–0.15 (small), 0.15–0.35 (medium).

(2) JS → JM Moderation

Among all personality traits, only Conscientiousness significantly strengthened the JS → JM path, indicating that employees with high conscientiousness are more likely to convert job satisfaction into job motivation. All other traits showed no moderating effect.

Table 4

Moderating Effects of Personality Characteristics on JS → JM

Interaction Term	β	t-value	p-value	Effect Size (f^2)
JS × Neuroticism → JM	0.019	0.492	0.623	0.001
JS × Extraversion → JM	0.031	0.917	0.359	0.002
JS × Openness → JM	0.025	0.688	0.492	0.001
JS × Agreeableness → JM	-0.055	1.435	0.151	0.005
JS × Conscientiousness → JM	0.136*	4.676	< .001	0.054

Note: * $p < .05$. Effect size: $f^2 < 0.02$ (no effect), 0.02–0.15 (small), 0.15–0.35 (medium).

Discussion and Conclusion

Discussion

Based on a sample of 395 frontline production employees in the Nankang furniture manufacturing industry, this study examined the mechanisms linking Life Satisfaction (LS), Objective Relative Income (ORI), Job Satisfaction (JS), and Job Motivation (JM), and explored the moderating effects of Big Five Personality Characteristics (PC). Overall, the findings exhibit clear domain-specific and context-dependent features: on the one hand, they are broadly consistent with the core propositions of two-factor theory, self-determination theory, and work–family enrichment theory; on the other hand, they also reveal patterns that are distinctive to labor-intensive manufacturing.

First, regarding main effects and mediation, JS plays a fully mediating role in both the LS→JM and ORI→JM paths. This indicates that life resources and economic resources do not directly translate into frontline employees' motivation, but must be converted via job attitudes as a "proximal cognition." Under conditions of repetitive tasks, high physical demands, and limited promotion opportunities, employees rely more heavily on their subjective evaluations of pay fairness, supervisory support, and job experience to form motivation. This pattern reinforces the mechanism in two-factor theory whereby hygiene factors affect motivation indirectly through satisfaction, and is also aligned with the "resource cross-domain → psychological evaluation → motivational outcomes" logic posited by work–family enrichment theory and self-determination theory.

Second, ORI does not show a significant direct effect on JM, but influences JM indirectly via JS, suggesting that in traditional piece-rate settings employees care more about their relative income position, distributive fairness, and managerial support than about absolute income levels. Only when income advantages are accompanied by a sense of fairness and positive work experiences can they translate into higher motivation. This result differs from some studies on manufacturing sectors in emerging economies and underscores the importance of contextual factors.

Third, the moderating results show that personality traits exert selective effects. Neuroticism and Openness weaken the LS→JS path, whereas Conscientiousness strengthens the translation from JS to JM, while Extraversion and Agreeableness do not significantly moderate the key paths. This pattern reflects, on the one hand, the “trait–task mismatch” experienced by individuals with high emotional volatility or high openness in monotonous, high-pressure jobs, and on the other hand, the limited room for social-oriented traits to operate in low-interaction production-line environments.

Finally, socio-demographic variables reveal structural differences in JM across groups. Younger employees, males, married workers, and those with lower educational levels show relatively higher motivation, whereas tenure and industry experience do not exhibit significant differences. This suggests that in labor-intensive industries where tenure-based incentives are lacking, seniority does not naturally evolve into a source of motivational advantage. Taken together, the findings confirm the main mechanism of “distal resources → proximal cognition → motivational output” in labor-intensive manufacturing and highlight the boundary roles played by personality characteristics and demographic factors.

Conclusion

Focusing on Job Motivation (JM) among frontline production employees in the Nankang furniture manufacturing industry, this study constructed a comprehensive model incorporating Life Satisfaction (LS), Objective Relative Income (ORI), Job Satisfaction (JS), and Personality Characteristics (PC), and tested it using PLS-SEM on a sample of 395 respondents. The results show that the main path of “distal resources → proximal job attitudes → motivational output” is robustly supported in the context of labor-intensive manufacturing, with important theoretical and practical implications.

First, the model confirms that job satisfaction is the core factor driving job motivation. The JS→JM path coefficient is highly significant and of the greatest magnitude, indicating that frontline employees’ motivation primarily derives from job experience, supervisory support, fairness perceptions, and coworker relationships, rather than from life happiness or income level per se. In other words, in labor-intensive settings, motivation depends more on “whether the job itself is good” than on “whether life is happy” or “whether income has increased.”

Second, both LS and ORI exhibit a full mediation structure, meaning that neither directly enhances JM; both must operate through changes in employees’ subjective evaluations of their work (JS) to drive motivation. Whether the resource stems from the life domain or from a relatively advantageous position in the income structure, it needs to be transformed into the psychological state of “I am more satisfied with my job” before it can strengthen the willingness to exert effort. This distal and indirect pattern is a key feature distinguishing labor-intensive jobs from many high-skill or service roles.

Third, the study reveals the selective moderating role of personality traits. Conscientiousness significantly strengthens the translation from JS to JM, indicating that self-disciplined, goal-oriented individuals are more likely to convert satisfaction into sustained effort. In contrast, Neuroticism and Openness weaken the LS→JS relationship, reflecting the “trait–task mismatch” faced by individuals with high emotional volatility or strong innovation needs in

monotonous, high-pressure jobs. The non-significant moderating effects of Extraversion and Agreeableness further suggest that the low-interaction production-line environment dampens the impact of social-oriented personality traits.

Finally, socio-demographic differences indicate that motivation has distinct structural patterns across groups: for example, younger employees show stronger motivation, middle-aged employees attach more importance to stability, and workers with lower educational levels may display higher enthusiasm when job–skill fit is favorable. These findings imply that firms have strong reasons to adopt segmented incentive strategies. Overall, this study proposes a systematic motivational mechanism model suited to labor-intensive manufacturing, highlights the central role of JS, and uncovers differentiated paths under varying personality and economic resource conditions, thereby contributing to both theoretical development and managerial practice.

Limitations and Future Research Directions

Although this study offers some innovation in theoretical integration and empirical testing, several limitations remain. First, the sample is drawn solely from the Nankang furniture industry in Jiangxi Province, whose industrial structure, management practices, and regional culture have distinctive features, thus limiting the generalizability of the findings. Future research could conduct comparative studies in other furniture clusters (such as Xianghe, Xianyou, Yuhuan, Ningjin, etc.) and other labor-intensive sectors (e.g., textiles, leather goods, electronics assembly) to examine whether the main “LS/ORI → JS → JM” path holds across industries and how it varies by context.

Second, this study adopts a cross-sectional design, which can only reveal correlational structures and cannot fully establish causal directions. Subsequent studies could incorporate longitudinal data, experimental designs, or action research to explore the dynamic evolution of motivation, satisfaction, and personality, and to evaluate the effectiveness of interventions such as pay transparency, job rotation, and psychological support programs.

At the variable level, although this study includes personality traits and relative income position, it does not integrate broader contextual factors such as organizational climate, leadership style, job demands and resources (JD-R framework), and team interactions into a unified model. Future work could employ multilevel models (e.g., HLM) to analyze how organizational-level factors amplify or attenuate the motivation path through JS.

Moreover, the IPIP-NEO instrument used to measure personality may not fully capture the culturally specific personality profiles of Chinese manufacturing workers. Future research could consider the HEXACO model or develop more localized personality measures. Finally, while this study identifies the central role of JS, it does not directly assess the causal impact of specific incentive strategies. Future studies should incorporate practice-based managerial intervention experiments to enhance the applied value of the research and promote deeper integration between theory and practice.

References

- Afsar, B., Badir, Y., & Kiani, U. S. (2016). Linking spiritual leadership and employee pro-environmental behavior: The influence of workplace spirituality, intrinsic motivation, and environmental passion. *Journal of Environmental Psychology*, 45, 79–88. <https://doi.org/10.1016/j.jenvp.2016.01.001>
- Alexander, B., Nainggolan, E. E., & Muslikah, E. D. (2023). Big Five Personality Traits dan Work Engagement Karyawan di Surabaya. *INNOVATIVE: Journal Of Social Science Research*, 3(4), 10443–10455. <https://doi.org/10.31004/innovative.v3i4.8050>
- Ahamed, F., Kaur, A., Sengupta, P., & Ghosh, T. (2021). Perception of safety from workplace violence affects job satisfaction among doctors practicing modern medicine in India: A nationwide survey. *Journal of Family Medicine and Primary Care*, 10(6), 2252–2258. https://doi.org/10.4103/jfmpc.jfmpc_2416_20
- Abd Hamid, A., Mohamad, M., Bahrin, F. S. K., et al. (2020). Assessing the relationship between work-life balance and employee job satisfaction. *European Proceedings of Social and Behavioural Sciences*, 100, 797–802. <https://doi.org/10.15405/epsbs.2020.12.05.86>
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Brandt, N. D., Israel, A., Becker, M., & Wagner, J. (2021). The joint power of personality and motivation dynamics for occupational success: Bridging two largely separated fields. *European Journal of Personality*, 35(4), 480–509. <https://doi.org/10.1177/0890207021996965>
- Buric, I., Kovacic, M. P., & Jaksic, K. (2024). Modeling the hierarchy of teacher personality: The predictive power of domains and incremental facets for teacher job-related outcomes. *Personality and Individual Differences*, 219, 112496. <https://doi.org/10.1016/j.paid.2023.112496>
- Chen, F., & Luistro, E. J. A. (2024). High-performance work systems and employee emotional well-being in the manufacturing industry in China. *International Journal of Research Studies in Management*, 12(5), 27–38. <https://doi.org/10.5861/ijrsm.2024.1062>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Erdogan, B., & Bauer, T. N. (2021). Overqualification at work: A review and synthesis of the literature. *Annual Review of Organizational Psychology and Organizational Behavior*, 8, 259–283. <https://doi.org/10.1146/annurev-orgpsych-012420-055831>
- Fukuzaki, T., & Iwata, N. (2022). Association between the five-factor model of personality and work engagement: A meta-analysis. *Industrial Health*, 60(2), 154–163. <https://doi.org/10.2486/indhealth.2021-0051>
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362. <https://doi.org/10.1002/job.322>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (p. 197). Springer Nature. <https://library.oapen.org/handle/20.500.12657/51463>
- He, J., & Guo, X. (2022). The impact of neuroticism on workplace stress and motivation in

Chinese manufacturing workers. *Journal of Organizational Psychology*, 15(2), 45-61. <https://doi.org/10.1108/EBR-11-2018-0203>