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Qualitative Insight of Informal Sector's Wages: In the Case of Home-based Handicraft Workers in Kathmandu Valley

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Abstract

This study examines the qualitative factors influencing wages among informal sector workers in home-based handicraft occupations in the Kathmandu Valley, utilizing a qualitative regression model and primary data from 426 laborers. The findings reveal that age, education, and daily working hours have a positive influence on wages, whereas workers' experience, family involvement, and job-related risks exert a negative impact. Notably, job satisfaction is strongly correlated with an increase in wages, suggesting that improved working conditions directly affected earnings in the informal sector. Again, evidences of the value of R^2, *D-W* statistic, and *ANOVA* results support policies such as providing quality education and vocational training, improving working conditions, and legal protections for informal workers to promote wage growth and job security. The study can be further elaborated on the effects of educational programs on wage disparities by exploring the role of gender and other demographic factors in this workforce, facing the socioeconomic challenges.

Keywords: Qualitative analysis, wages, informal sector, working hours, job satisfaction, work experiences.

Introduction of the Study

Informal workers in developing economies have concentrated in urban areas, as evidenced by recent trends (Sifullah et al., 2023). Most of these workers have been used to migrate to large cities and, seasonally, to India, to support their households economically (Gautam, 2017). Among migrant workers, women have faced wage disadvantages (Taheri & Mirza, 2023), receiving lower wages than men, particularly in sectors that exploit cheap labor (Qin, 2016). The growing informality in Nepal's labor market has been directly influenced by

the open border between Nepal and India (Taneja & Pohit, 2002), facilitated migration, and increased the burden on the informal labor sector (Taneja & Pohit, 2002).

Informal firms in Nepal have been operating as shadow enterprises, producing goods legally without registering their labor with government authorities (Adhikari, 2022), thereby contributing to the nation's economy (Bruton et al., 2012). Despite large trade houses being known to distribute products in international markets, they often bypass job security measures for informal workers (Adhikari, 2022). That's why concerns have been raised about the qualitative attributes of wages in the informal sector, which affect the distribution of incomes among workers.

The features of existing urban informal employment have been identified, including migration, dependence on wage labor, and self-employment. Various qualitative factors, including gender, caste, religion, marital status, and migration, influence informal employment (Breman, 2023), which impacts wages and workers' livelihoods, particularly in developing economies. In addition, institutional quality is critically affected by the challenging, volatile, and diverse nature of the informal labor market (Shapiro, 2015; Shapiro, 2015).

Despite the significant contributions of informal laborers, they have faced numerous challenges, including a lack of capital, limited access to technology, inadequate work divisions, and the absence of formal organizations (Breman, 2023). They migrated primarily from rural areas of the agricultural sector, often regarded as a barrier to development (Pilehvar, 2023).

Wages for informal labor have highlighted multiple issues, particularly regarding the technologies they use and the prevailing skills among workers (Acharya et al., 2022). Regarding earnings and socio-economic status, Dharejo et al. (2023) have stressed that they generate little income for their communities. The previous empirical labor economics analysis reveals that the determinations of the informal sector's labor wage have been primarily influenced by the age of laborers, completed education classes, years of job experience, the average number of working hours, and the participation of multiple family members in the labor force (Adhikari, 2022). Despite prior studies identifying various qualitative factors, such as gender, religion, marital status, property ownership, migration, and job satisfaction, which further impact wage levels (Adhikari, 2023), identifying silence on qualitative influences on wages. Filling these gaps, this study aims to analyze the relationship between labor wages, focusing on age, working hours, education, job experience, participation in contributing to family members, and other relevant factors, as well as qualitative factors in job satisfaction, to examine how various qualitative factors influence economic contributions. A central question raised in the study is how wages, as the primary source of contribution, vary depending on the coefficients of these qualitative categories. Thus, this study presents a new area of inquiry to explore the changes in satisfaction levels with daily wages among the surveyed laborers, depending on the primary source of data collected in December 2019, which gathered primary data for a Ph.D. research work (Adhikari, 2022), specifically for workers in handicraft sectors in the Kathmandu Valley. These workers are classified as home-based and self-employed, relying on piece-rate payments for their labor.

This study has significant gaps in addressing several qualitative aspects of labor attributes, such as education and years of experience. Unlike previous studies that used linear

wage models, this research introduced dummy variables to measure labor satisfaction, categorizing it into three groups: low, never, and high, and explored a new idea of the qualitative determinants of informal sector wages in Kathmandu Valley. The study would provide a new identification of policy interventions for specific areas of the labor market and provide important replication tools for further studies.

Literatures Review

The study reviews the literature from 2002 to 2023, focusing on the qualitative factors of wages for informal sector workers in developing economies and wage differentials. Similarly, the review highlights the patterns of inequality through the historical and structural factors that perpetuate wage disparities among the informal sector labor.

Fundamentally, Khasnabis and Nag (2002) laid out an approach to informal labor markets by tracing their evolution from early European corporate models. Before the advent of mechanized production, labor divisions were minimal, and production processes relied on primitive skills passed down through generations. Merchants, or *Mahajan*, controlled the means of production, dictating both the quantity and quality of output. However, with industrialization, labor became increasingly specialized, a transition that Marxist theorists critiqued as exploitative, given its tendency to devalue manual skills (Khasnabis & Nag, 2002). While Marxist perspectives argue that machinery led to deskilling and wage suppression, non-Marxist scholars have introduced the reskilling hypothesis, suggesting that workers can adapt to the demands of modern manufacturing. In their field study of a handloom factory in West Bengal, India, they found that informal workers remained at the mercy of production controllers, earning subsistence wages—an observation mirrored across many developing economies. Expanding on these ideas, Williams (2002) also found wage disparities in a household survey in Kosovo, where men in informal employment earned 26% more than women, while women earned 14% more than men in these sectors. William & Gashi (2002) also supported this view. Gender disparities in informal wages have been widely documented across various economies, particularly among migrant workers. Qin (2016) noted that female migrants in China's urban informal sector consistently received lower wages than their male counterparts, a pattern reinforced by limited access to formal job opportunities. Similarly, Sifullah et al. (2023) highlighted the vulnerabilities of female migrant workers, emphasizing their lack of access to essential benefits such as healthcare and unemployment insurance, which further limited their economic mobility.

Bruton et al. (2012) described that the structural invisibility of informal labor had complicated efforts to develop comprehensive policy interventions. They showed informal firms as "shadow zones," operating outside government regulations yet making substantial contributions to national economies. The difficulty in standardizing informal employment models was further emphasized by Shapiro (2015), who argued that the sector's volatility prevents a one-size-fits-all approach to policy development. Similarly, Rizzo et al. (2015) studied urban informal employment in Tanzania, noting that both self-employment and wage labor exist in precarious conditions, making the informal labor market highly unpredictable.

Huws (2016) further raised that the digital labor platforms have blurred the lines between formal and informal employment by exploring how the gig economy has transformed

traditional labor structures, fragmenting the workforce into quantifiable units that are subject to continuous surveillance. This phenomenon has created new vulnerabilities for workers across multiple sectors, reinforcing the precarity of informal employment. The growing complexities in defining informal labor have also been reflected in classification frameworks. Once considered primarily as "own-account workers," informal workers are now categorized into four groups: family contributors, employers, employees, and independent self-employed individuals (Chen, 2023).

In Nepal, informal labor has been a significant driver of economic activity, yet it remains largely unprotected. Adhikari (2022) found that informal workers in Kathmandu played a crucial role in the country's economic growth, yet they faced systemic job insecurity, with large trade houses controlling market access for their goods. Similar concerns were echoed by Ackrill (2023), who noted the challenges in accurately measuring the informal sector due to inconsistencies in data collection. These challenges are particularly pronounced for workers who migrate from rural areas. Breman (2023) argued that neoliberal economic policies have failed to address the struggles of these migrants, many of whom remain trapped in informal employment due to capital shortages and poor working conditions.

Informal labor markets in other developing countries have revealed comparable patterns. Pilehvar (2023) examined Iran's informal sector after the 1979 revolution and found that informal workers contributed approximately 35% of the country's GDP, largely through rural-to-urban migration. In Pakistan, Dharejo et al. (2023) studied seasonal informal workers in Sindh Province and reported significant mistreatment, even when these workers operated within the legal framework. Similarly, Ghore et al. (2023) investigated the informal waste sector in developing nations, uncovering hazardous working conditions for plastic waste pickers, who often remain neglected by labor regulations.

The interplay between formal and informal institutions has also been a critical area of research. Gërxhani and Cichocki (2023) tested the hypothesis that institutional frameworks shape participation in the shadow economy. Their study found that the interaction between formal regulations and informal economic practices plays a crucial role in determining employment structures, particularly in transition economies. The gendered impact of informal labor has also been examined in cross-regional studies. Taheri et al. (2023) analyzed the relationship between informal economies and labor market dynamics in 12 Middle Eastern countries. Their findings indicated that informal employment had a long-term positive impact on male employment rates in countries such as Bahrain, Iran, Qatar, and Turkey, while this trend was only evident for women in Israel.

Despite significant scholarly attention, gaps remain in understanding the qualitative dimensions of wage disparities in informal labor markets. Many studies have highlighted economic and institutional factors, while social and political influences on wage distribution have still been insufficiently explored. Addressing these gaps is vital for developing policies that can enhance economic protections for informal workers and reduce persistent inequalities in the labor market.

Methodology

The study employed statistical techniques for data analysis, focusing on the attributes and measurement scales of the variables. Nominal and ordinal variables were analyzed using frequency distributions and percentages to illustrate categorical trends. For a more in-depth analysis, ratio scale variables were examined through cross-tabulation with independent variables, allowing for comparative insights based on averages. Additionally, ratio scale variables were analyzed independently to assess their interdependence, homoscedasticity, correlation, and the relationship between dependent and independent variables. These statistical approaches ensured a robust examination of the qualitative and quantitative factors influencing informal sector wages.

Data

This study employed a qualitative approach to wage determination among informal home-based workers in four handicraft industries, focusing on urban and semi-urban areas of the Kathmandu Valley. The research was based on primary data collected between November and December 2019 from identified clusters of informal workers. A structured questionnaire was used to gather data through face-to-face interviews, ensuring a comprehensive understanding of the variables relevant to the study. To address the research question, multiple variables were collected, including collective income, expenditure, and savings, which were used as indicators of workers' satisfaction levels.

The data collection process began with an initial assessment of the population size by consulting key organizations involved in the informal labor sector. Visits were made to Home Net Nepal, the Lalitpur Handicraft Association (LHA), the General Federation of Nepal Trade Union (GEFONT), and the Nepal Trade Union Congress (NTUC), where discussions with representatives provided valuable insights into the estimated size of the informal workforce. According to the Chairman of the LHA, approximately 500,000 to 600,000 informal-sector workers were employed in the Kathmandu Valley, with over 2.2 million across Nepal.

Based on these consultations, the study selected home-based workers employed in four handicraft industries: metal craft, wood carving, pottery work, and Dhaka cloth weaving, located in the Lalitpur and Bhaktapur districts. The distribution of workers varied across the Valley—metalworkers were dispersed across all three districts but highly concentrated in Patan-9 (Chyasal); woodcarvers were concentrated in Bungamati, Lalitpur; Dhaka cloth weavers were located in Luvu, Lalitpur; and pottery workers were found in Thimi, Bhaktapur. These locations were identified through consultative meetings with relevant agencies and further verified through field visits.

Given the informal nature of this labor force, no official directory or registry existed for workers in these handicraft occupations. As a result, a quota sampling technique—a form of non-probability sampling—was used to capture the diverse qualitative attributes of laborers and address the research question effectively. Initially, a total of 1,420 workers from the selected handicraft clusters were identified as potential participants. Ultimately, 426 home-based workers were interviewed in person using structured paper questionnaires, ensuring the collection of reliable and detailed data on their working conditions and wage determinants.

Qualitative Wages Model

Wage was taken as the key predicted variable, dependent on predictors including age, years of work experience, daily working hours, household size, completed years of education, number of family members participating in labor, and qualitative risk factors. Additionally, satisfaction levels, categorized as dummy variables, were incorporated to assess their impact on wages. These relationships are detailed in Table (1), providing a comprehensive overview of the factors influencing wage determination among informal laborers.

Table 1

The Qualitative Model Frame

Dependent Variables	Measures	Independent Variables
Labors Wages	Scale with dummy-coded satisfaction	Age, Working hours, population, education, participant workers, and risk factors are included, with dummy categories for the level of satisfaction as high, never, and low.

The qualitative wages model has been placed as:

$$\varpi = \alpha_o + \beta_1 age + \beta_2 Ex + \beta_3 Hr + \beta_4 Po + \beta_5 Edu + \beta_6 part + \beta_7 Risk + \beta_8 d_1 + \beta_9 d_2 + \beta_{10} d_3 + u_i \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1).$$

Where, ϖ = Wages per day per worker, age = Age of respondents, Exp = Years of working experiences, Hr = Working hours per day, Po = Respondents' family size, Edu = Respondent's completed classes of education, Part = Labors' participation in work, Risk = Average risk factors, d_1, d_2, and d_3 indicating the dummy categories of levels of satisfaction low, never, and high satisfaction respectively.

The functioning equation has been written as:

$$\widehat{\varpi} = \alpha_o + \beta_1 \widehat{age} + \beta_2 \widehat{Exp} + \beta_3 \widehat{Hr} + \beta_4 \widehat{Po} + \beta_5 \widehat{Edu} + \beta_6 \widehat{par} + \beta_7 \widehat{Risk} + \beta_8 d_1 + \beta_9 d_2 + \beta_{10} d_3 + u_i \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.. (2).$$

Interactive Model

After the interaction was made by d_3 to age, experience, hours, population, education, participation, and risk factors, the new model was formed:

$$\widehat{\varpi} int = \alpha_o + \beta_1 \hat{a} + \beta_2 \widehat{Exp} + \beta_3 \widehat{Hr} + \beta_4 \widehat{Po} + \beta_5 \widehat{Edu} + \beta_6 \widehat{par} + \beta_7 \widehat{Risk} + \beta_{11} a * d_3 + \beta_{12} Exp * d_3 + \beta_{13} Hr * d_3 + \beta_{14} Po * d_3 + \beta_{15} Edu * d_3 + \beta_{16} par * d_3 + \beta_{17} Risk * d_3 + u_i \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.. (3).$$

Where the coefficients β_{11}, β_{12}, β_{13}, β_{14}, β_{15}, β_{16}, and β_{17} are interactive variables of age, experiences, working hours, population, education, and participation with high satisfaction levels, respectively. Further, this study highly valued the reliability and validity of data collection tools and techniques using paper questionnaires with scientific rigor.

An Analysis of the Findings

The first part of the study describes the employment process of surveyed respondents employed in four handicraft sectors: metal crafts, wood carving, pottery, and Dhaka clothes weaving. Next, the qualitative wages regression model has been used with the level of satisfaction as the dummy characteristic. Finally, the conclusion has been drawn after the interactive model.

Workers Employment Process

The study examines the employment process of informal-sector laborers across four handicraft industries: metal crafts, wood carving, pottery work, and Dhaka cloth weaving. Among the 426 workers surveyed, employment was distributed across own-account work (26.3%), wage labor (39.7%), piece-rate work (29.6%), and contract-based handicraft work (4.5%), as detailed in the Table (2). These sectors are found to contribute significantly to economic activities through diverse employment arrangements.

Table 2

Handicraft Firms Wise Workers Distribution by Occupation Status

Occupation/Handicrafts	Handicraft Firms				Total
	Metal Work	Wooden Work	Dhaka Clothes	Pottery Work	
own account work/self-employment	2 (.5)	16 (3.8)	0 (0.0)	94 (22.1)	112 (26.3)
Wage labor	79 (18.5)	84 (19.7)	0 (0.0)	6 (1.4)	169 (39.7)
Piece rate worker	25 (5.9)	0 (0.0)	101 (23.7)	0 (0.0)	126 (29.6)
Handicraft Contract Worker	19 (4.5)	0 (0.0)	0 (0.0)	0 (0.0)	19 (4.5)
Total	125 (29.3)	100 (23.5)	101 (23.7)	100 (23.5)	426 (100)

Note. Figures in parentheses show the percent compiled from primary data collected in 2019.

Table (2) indicates that own-account workers/self-employed included 2 laborers in metal crafts, 16 in wood carving, none in Dhaka cloth weaving, and 94 in pottery work, accounting for 0.5%, 3.8%, 0%, and 22.1%, respectively. Similarly, wage laborers comprised 79 in metal crafts, 16 in wood carving, none in Dhaka cloth weaving, and 6 in pottery work, sharing 19%, 20%, 0%, and 1.4%, respectively. Likewise, piece-rate workers included 25 in metal crafts, none in wood carving, 101 in Dhaka cloth weaving, and none in pottery work, representing 6%, 0%, 24%, and 0%, respectively.

Workers' Distribution of Handicraft Production Process-wise Job

As laborers were engaged in four handicraft industries, qualitative open-ended observations revealed distinct occupational distributions. Eighteen male engaged in carpenters accounted for 4.25% of the total workforce, while 15 male workers specialized in carving, representing 3.5%. Among female laborers, 14 were involved in conning/grossing, making up 3.3% of the total. Additionally, 90 workers (82 males and 8 females) were engaged in cutting and washing, contributing 21.1% to the total workforce.

In design and carving jobs, 23 male laborers participated, representing 5.4% of the workforce. In Dhaka cloth weaving, 66 workers were involved in machine weaving, comprising 15.5% of the total. Wood carving included 25 female workers in polishing and washing, accounting for 5.9% of the workforce. In the pottery sector, 70 male workers handled preparation, coloring, and burning, contributing 16.3%, while 30 female workers focused on preparation, polishing, and drying, representing 7%.

Furthermore, 18 female workers participated in shining and carving, making up 4.2% of the total, while 21 female laborers were engaged in thread drafting as Dhaka cloth weaving, accounting for 4.9%. In metal crafts, 33 workers were employed for trainers for washing, which accounted for 7.7%, with males comprising 6.8% and females 0.9%. More detailed distributions are presented in Table (3).

Table 3

Gender-Wise Workers' Distributions by the Jobs Quality and Employment Process

Serial No.	Jobs Particulars	Male	Female	Total
1	Carpenter	18 (4.2)	0 (0)	18 (4.2)
2	Carving	15 (3.5)	3 (.7)	18 (4.2)
3	Conning/grossing	0 (0)	14 (3.3)	14 (3.3)
4	Cutting, washing	82 (19.2)	8 (1.9)	90 (21.1)
5	Design, Carving	23 (5.4)	0 (0)	23 (5.4)
6	Machine weaving	66 (15.5)	0 (0)	66 (15.5)
7	Polishing/washing	0 (0)	25 (5.9)	25 (5.9)
8	Prepare, burn, and colouring	70 (16.3)	0 (0)	70 (16.3)
9	Preparing, polishing, drying,	0 (0)	30 (7)	30 (7)
10	shining, carving	0 (0)	18 (4.2)	18 (4.2)
11	Thread drafting	0 (0)	21 (4.9)	21 (4.9)
12	Trainer of washing	29 (6.8)	4 (.9)	33 (7.7)
Total		303 (71.1)	123 (28.9)	426 (100)

Note. Figures in parentheses show the percent compiled from primary data collected in 2019.

Table (3) shows that 12 types of jobs were observed, supplying laborers to jobs in four handicrafts sectors of occupations.

Qualitative Regression Results

Descriptive statistics of the study variables indicate that the average daily wage of the 426 informal workers was NRs 632.65. The mean age of the respondents was 34.44 years, with an average work experience of 10.35 years. On average, workers had 3.34 family members, with a literacy level of 6.19 completed classes and 1.55 family members participating in labor. Additionally, the average perceived risk factor was 3.32 per respondent. Further details are presented in Table (4).

Table 4

Descriptive Statistics of Dependent and Independent Variables

Descriptive Statistics	Mean	Std. Deviation	N
Daily Wage	632.65	264.95	426
Age of Informant	34.44	13.25	426
Working experience of Job in Years	10.56	9.17	426
Average Working Hours	8.28	1.009	426
Population size of Respondents' Family	3.49	1.858	426
Completed years of Education	6.19	3.479	426
Numbers of Participant Workers in a Family	1.55	0.498	426
Average Risk Factor	3.23	0.762	426

Note. Figures compiled from primary data collected in 2019.

Table (4) shows that the standard deviation of each variable was higher in each observation.

The summary results indicate that $R^2 = 0.454$ and Durbin-Watson = 1.385, suggesting that the model is well-fitted and reliable for prediction. Similarly, ANOVA statistics F (9) = 376, significantly at p = 0.00, confirm the validity of the relationship between dependent and independent variables. These findings demonstrate that the model effectively captures the impacts of age, experience, labor hours, family size, education, participation numbers, and risk factors, including the dummy-coded satisfaction levels—low satisfaction (d_1) and high satisfaction (d_3)—relative to the reference category, never satisfied (d_2), as specified in Model (2).

The estimated equation (2) has been expressed as:

$$\widehat{\varpi} = 360.39 + 7.12\,\hat{a} - 10.19\widehat{Exp} + 27.98\widehat{Hr} + 12.64\widehat{Po} + 13.09\widehat{Edu}$$

t = 2.78	4.22	-4.41	2.29	1.48	3.89
P = 0.006	0.000	0.000	0.022	0. 139	0.000

$$-186.44\widehat{par} - 39.35\widehat{Risk} + 12.69d_1 + 365.10d_3$$

-6.02	-2.82	0.41	12.05
0.000	0.005	0.667	0.000

$R^2 = 0.454$, and Durbin-Watson = 1.385.

The interpretation of results of equation (2)

The qualitative wage model (2) estimates the conditional mean wage at NRs 360.39, which is statistically significant. The coefficient for age is 7.12, indicating that an additional year in age increases daily wages of workers by 7.12 units above the conditional mean. Similarly, daily working hours significantly increase wages by 27.98 times, while completed years of education provided a positive impact on wages by 13.09 times at a significant level.

Conversely, work experience of the labor negatively affects wages, with a coefficient of -10.19, suggesting that wages decrease by this amount with increased experience. Additionally, the number of participating family members (-186.44) and average risk factors (-39.35) have significant negative effects. Family size has a positive but insignificant impact, increasing wages by 12.64 times.

Regarding satisfaction levels, low satisfaction (d1) positively influences wages by 0.41 times, but this effect is insignificant. However, high satisfaction (d3) significantly increases wages by 12.05 times, using never satisfied (d2) as the reference category. The model's R^2 value (0.454) and Durbin-Watson statistic (1.387) indicate that 45% of the wage variations are explained by the independent variables after including dummy-coded satisfaction variables. The model's reliability is further supported by the zero mean of standard residuals and a standard deviation close to one (0.989).

The study finds that age, daily working hours, and education levels significantly and positively impact wages, while work experience, family labor participation, and risk factors have significant negative effects. Family size shows a positive but insignificant impact. Among all factors, daily working hours exert the most substantial influence on earnings. Additionally, the interaction between wages and higher satisfaction levels alters the impact of independent variables, highlighting the importance of job satisfaction in wage determination.

The interactive qualitative wage model (3) estimated as:

$\widehat{\omega}int =$	$697.26 +$	$3.61\hat{a}$	$+ 14.19\widehat{Exp}$	$- 41.43\widehat{Hr}$	$+ 33.97\widehat{Po}$	$+ 12.03\widehat{Edu}$
t =	5.716	1.893	4.056	-3.085	2.652	2.745
P =	0.000	0.059	0.000	0.002	0.008	0.006
$-171.36\widehat{par}$	$+ 0.51\widehat{Risk}$	$+2.59a * d_3$	$- 26.95Exp * d_3$	$+ 102.22Hr * d_3$		
t = -4.860	0.029	0.920	-6.504	8.357		
p = 0.000	0.977	0.977	0.000	0.000		
$-21.82Po * d_3$	$+ 1.55Edu * d_3$	$- 92.10par * d_3$	$- 52.80Risk * d_3$			
t= -1.380	0.262	-2.278	-1.992			
p = 0.168	0.793	0.023	0.047			
$R^2 = 0.568$, D-W = 1.421, F (14) = 38.521 at p = 0.000						

The interactive model reveals that when wages interacted with high satisfaction (d_3), the conditional mean wage increased to NRs 697.27, a significant improvement over the previous model. Age has a positive but insignificant effect (3.61), indicating that at higher satisfaction levels, age does not significantly impact wages. In contrast, work experience has a positive and significant impact (14.19), suggesting that experienced workers receive higher wages when satisfaction levels are high.

Other variables show mixed effects. Working hours negatively impacted wages (-41.43) at a significant level, while family size positively affected wages (33.97) at a significant level. Education continues to have a positive and significant impact (12.036). However, family labor participation (-171.36) has a significant negative impact, and average risk factors (0.51) have a positive but insignificant effect.

Regarding the interaction effects, age and education positively influenced wages, but remained insignificant. Work experience (-26.95) has a negative and significant effect, while working hours (102.22) positively impact wages at a significant level. Family size (-21.82) shows a negative but insignificant impact, while education (1.55) has a positive but insignificant effect. Family labor participation (-92.10) and risk factors (-52.80) both show negative and significant impacts.

The interactive model performs better than the linear qualitative wage model. The R^2 value (0.568) indicates 56.8% explanatory power, an improvement over the previous model. Additionally, the Durbin-Watson statistic (1.421) is more reliable, and F-statistics ($F(14) = 38.521$, $p = 0.00$) confirm the model's validity. The standard residual mean of zero and a standard deviation close to one (0.983) further support the model's robustness, demonstrating a well-fitted predictive framework for wage determination.

Discussion

The qualitative analysis of wages among home-based handicraft workers in the Kathmandu Valley's informal sector has provided important insights into the socio-economic factors shaping this labor group. Consistent with previous studies, this research finds that age, daily working hours, and education positively impact wages, while work experience, family participation, and job-related risks have negative effects. Thapa & Pant (2023) similarly highlighted that older and more educated workers tend to earn higher wages due to their accumulated skills and market knowledge, reinforcing this study's findings.

However, a key contrast emerges in the relationship between experience and wages. While traditional economic theories suggest that longer experience should lead to higher earnings, this study finds a negative correlation, indicating wage stagnation in low-skill informal jobs. This contradicts the reskilling hypothesis proposed by Khasnabis & Nag (2002), who argued that informal workers adapt to modern demands and develop new skills over time. Instead, the findings align with Yadav (2021) and ILO (2021), who argue that informal workers face stagnation due to limited opportunities for skill advancement and oversupply in labor markets, which depresses wages. This study's results suggest that experience alone is insufficient for wage growth, especially in informal sectors with limited mobility and structural constraints.

Job satisfaction emerges as another crucial determinant of wages, with higher satisfaction correlating with better earnings. This supports the findings of Sifullah et al. (2023), who emphasized that improving working conditions enhances wage outcomes. However, this study extends the discussion by incorporating dummy-coded satisfaction variables, demonstrating that higher satisfaction significantly increases wages, while low satisfaction has an insignificant effect.

The vulnerabilities of informal workers are also highlighted, particularly concerning job insecurity and lack of legal protections, which contribute to wage suppression. Bruton et al. (2012) and Adhikari (2022) similarly noted that informal workers often lack formal job security, leading to economic instability. However, unlike Chen (2023)—who classified informal workers into four categories (family contributors, employers, employees, and own-account workers)—this study focuses specifically on home-based laborers, showing that they face additional challenges related to piece-rate earnings and informal contractual arrangements.

Moreover, while Ackrill (2023) and Breman (2023) discussed the difficulties in measuring informal employment due to inconsistent data collection, this study's structured quantitative approach strengthens the validity of qualitative wage determinants by integrating both direct wage variables and qualitative job satisfaction metrics.

Conclusions

This qualitative analysis of wages among home-based handicraft workers in Kathmandu Valley identifies key wage determinants in the informal sector. Age, daily working hours, and education positively impact wages, while work experience, family involvement, and job-related risks have negative effects. The unexpected negative correlation between experience and wages highlights stagnation and limited skill advancement, restricting upward mobility. Job satisfaction emerges as a significant factor, with higher satisfaction linked to better earnings, underscoring the need for improved working conditions. However, job insecurity and lack of legal protections further destabilize informal workers' economic standing. Policy interventions should focus on education, vocational training, and legal protections to enhance employment prospects and wage security.

Future research should explore the impact of education and training on wages, regional variations in informal labor markets, and gender-based wage disparities. Addressing these vulnerabilities is crucial to ensuring higher job satisfaction and economic stability for informal workers in developing economies.

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