

Women's employment status in Indonesia: An intersectionality perspective on disability, household responsibilities, and socioeconomic factors

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Article Information	Abstract:
Submitted: 2026-04-03 Revised: 2026-05-25 Published: 2026-07-15	Women's employment in Indonesia continues to be characterized by persistent inequalities influenced by disability, household responsibilities, socioeconomic resources, and spatial location. This study investigates women's economic empowerment through inclusive employment by analyzing the associations between disability status, household characteristics, and socioeconomic factors and women's employment status in Indonesia. Drawing on data from the 2021 Indonesian National Labor Force Survey (Sakernas), which includes 207,276 working-age women, the research adopts an intersectional perspective and uses multinomial logistic regression to examine these relationships. The results indicate that women with disabilities are less likely to obtain salaried employment and are more frequently found in self-employment and unpaid family work, suggesting limited access to formal and protected employment. Household headship and high household workload are associated with greater vulnerability to less secure employment, underscoring the ongoing impact of unpaid domestic responsibilities. Conversely, higher levels of education and digital technology enhance women's access to formal, secure employment, whereas rural residence is associated with a greater likelihood of informal, agricultural-based work. The study concludes that women's employment status is shaped by the intersection of disability status, household characteristics, socioeconomic resources, digital technology use, and place of residence. These findings contribute to the intersectionality perspective by demonstrating that employment status reflects access to decent work. The study further supports the development of gender-responsive and disability-inclusive labor policies by emphasizing the importance of improved accessibility, digital literacy, social protection, and expanded employment opportunities in rural areas.
Keywords: Women's Employment Status; Intersectionality; Disability; Household Responsibilities; Socioeconomic Factors.	



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INTRODUCTION

Women's participation in the labor market is essential for achieving gender equality and empowerment. Structural barriers, unequal gender relations, and prevailing social norms that disproportionately assign domestic and caregiving responsibilities to women continue to restrict their access to formal employment (Emon & Nipa, 2024; Rana et al., 2024). Employment status should be regarded not only as a labor-market outcome but also as a key indicator of empowerment and social inclusion, as women's economic participation contributes to economic growth, poverty reduction, and improved well-being (Bertay et al., 2025; Brago et al., 2025; Gupta et al., 2024). According to the 2021 Indonesian National Labor Force Survey (Sakernas), Indonesian women are predominantly concentrated in self-employment, casual work, and unpaid family work. These disparities are even more pronounced among women with disabilities, who encounter intersecting barriers such as discrimination, limited accessibility, and insufficient skills development (Bechange et al., 2024; Fefoame & Loryman, 2024; Usman et al., 2024; Wu et al., 2024). Furthermore, digital transformation may perpetuate or intensify existing inequalities when access to technology is uneven, particularly among rural women and other vulnerable groups (Ahmad et al., 2024). These barriers do not operate independently; instead, they intersect and reinforce one another, resulting in diverse patterns of women's employment status that remain insufficiently understood.

Prior research has identified three principal categories of factors influencing women's employment status. First, education enhances women's capabilities, broadens access to formal employment and career opportunities, and reduces labor-market inequalities (Hetmańczyk, 2024; Balasubramanian et al., 2024; Nennstiel & Becker, 2025; Emeka et al., 2025). Second, household responsibilities and rural–urban disparities restrict access to formal employment and increase vulnerability to informal-sector work (Taye & Tesfaye, 2024; Valencia-Arias et al., 2025; Haman, 2025). Third, digital technology expands access to information, employment opportunities, and entrepreneurship. However, persistent inequalities in digital access continue to impede women's economic inclusion (Ahmad et al., 2024; Shava & Muringa, 2025; Ferreira & Silva, 2025). Despite these insights, most studies have examined these factors independently and have not addressed their intersectional effects on women's employment status. As a result, the mechanisms underlying women's differentiation across wage employment, self-employment, casual work, and unpaid family work remain insufficiently understood.

This study examines the simultaneous effects of disability status, household characteristics, socioeconomic resources, and place of residence on women's employment status in Indonesia, utilizing data from the 2021 National Labor Force Survey (Sakernas). The research investigates how these factors influence women's employment status in Indonesia. Theoretically, the study contributes to the literature on labor-market segmentation by demonstrating that women's employment status results from the interaction of multiple structural constraints and individual capabilities and therefore cannot be adequately explained by a single social dimension. In practice, the findings provide an empirical foundation for developing more inclusive employment policies. In practice, improved access to education and digital technology, enhanced protection for women by reducing disparities in employment opportunities and enhancing protection in rural and urban areas.

This study contends that inequalities in women's employment status in Indonesia are evident in their disproportionate representation in informal employment, self-employment, and unpaid family work, rather than in formal wage employment. These disparities are shaped by the influences of disability status, household characteristics, socioeconomic resources,

and place of residence, which collectively influence women's employment opportunities. This issue is significant because it undermines both individual and household well-being, constrains inclusive economic growth, and perpetuates structural poverty. Crenshaw's intersectionality framework illustrates that these social positions do not function independently; rather, they interact and reinforce one another, resulting in unequal access to decent work. Accordingly, this study contributes to the literature on labor-market segmentation by demonstrating that the differentiation of women's employment status arises from the interplay between structural barriers and individual capabilities, particularly education and digital technology use, in shaping access to decent employment in Indonesia.

METHOD

Research Approach

A quantitative approach was employed using data from the 2021 National Labor Force Survey (Sakernas) to examine women's employment status in Indonesia. Crenshaw's theory of intersectionality (1989, 1991) informed the conceptualization of women's employment as shaped by the intersection of multiple social positions. The analysis considered how individual characteristics, household conditions, and socioeconomic resources are simultaneously associated with employment outcomes. This methodology is consistent with recent quantitative intersectionality research that emphasizes the combined effects of multiple inequalities on labor-market opportunities (Bauer et al., 2021; Guan et al., 2021). Multinomial logistic regression was used to analyze relationships, as it is suitable for categorical outcomes (Vajari et al., 2020; Hoffman et al., 1988; Ziegler, 2005). Due to the cross-sectional design, the findings indicate associations rather than causality and may be influenced by omitted variables, unobserved characteristics, or potential reverse causality.

Conceptual Framework

This study draws on Crenshaw's intersectionality perspective (1989, 1991) to conceptualize women's employment status as being shaped by the intersection of multiple social positions, including disability status, household conditions, and socioeconomic resources. Within this framework, employment inequality is understood as the outcome of interactions between individual-level factors and broader social structures that shape women's access to decent, protected employment. Disability status is positioned as a structural factor that may restrict access to formal employment through accessibility barriers, discrimination, mobility limitations, and unequal educational and skills-development opportunities (Bechange et al., 2024; Fefoame & Loryman, 2024; Usman et al., 2024).

Household characteristics, including household-head status, the burden of domestic work, and household size, reflect how domestic and economic responsibilities shape women's employment choices. A heavy domestic workload may encourage women to choose more flexible forms of employment, although such jobs generally provide lower levels of protection and economic stability (Wu et al., 2024). In addition, education, social participation, age, digital technology use, and place of residence are conceptualized as socioeconomic resources that may either expand or constrain women's access to formal employment. Education and digital access increase the likelihood of obtaining more formal employment, whereas geographical constraints and socioeconomic disparities may reinforce women's concentration in informal work (Zwar et al., 2021; Leso et al., 2023; Qiu et al., 2021). Based on this framework, the study examines how the intersection of these dimensions is associated with variations in women's employment status using a multinomial logistic regression model.

Data and Variables

This study uses data from the 2021 National Labor Force Survey (Sakernas), conducted by Statistics Indonesia (BPS), comprising a sample of 207,276 working-age women across Indonesia. As a nationally representative labor-force survey, Sakernas provides detailed information on women's employment characteristics, individual and household attributes, and socioeconomic conditions. Table 1 presents the operational definitions and descriptive statistics for all variables included in the analysis.

Drawing on Crenshaw's intersectionality perspective (1989, 1991), the independent variables were selected to represent multiple intersecting social dimensions, including individual characteristics (age and disability status), household characteristics (household-head status, domestic workload, and household size), and socioeconomic resources (education, social participation, place of residence, and digital technology use). The dependent variable, employment status, was classified into seven categories: self-employed, self-employed with non-permanent workers, self-employed with permanent workers, salaried employee, casual agricultural worker, casual non-agricultural worker, and unpaid family worker. A salaried employee was used as the reference category (or base outcome) in the multinomial logistic regression model. Observations with missing values for any of the study variables were excluded from the final analytical sample to ensure consistency in model estimation.

Table 1

Definition and summary statistics of variables used in the model

Variable	Measurement Scale	Mean	SD
Employment Status	1 = Self-employed; 2 = Self-employed with non-permanent assistance; 3 = Self-employed with permanent assistance; 4 = Salaried employee; 5 = Agricultural freelance worker; 6 = Non-agricultural freelance worker; 7 = Unpaid family worker	4.016	2.278
Disability Status	1 = Has a disability; 0 = No disability	0.069	0.253
Household Characteristics			
Household Head	1 = Head of household; 0 = Not head of household	0.860	0.347
Household Workload	1 = High workload; 0 = Low workload	0.890	0.313
Household Size	Number of household members	3.997	1.670
Socioeconomic Factors			
Social Participation	1 = Participates; 0 = Does not participate	0.748	0.434
Education	Years of formal education	8.692	4.805
Place of Residence	1 = Urban; 0 = Rural	0.407	0.491
Age	Years	42.184	13.753
Digital Technology Use	1 = Uses at least one digital device; 0 = Does not use any digital device	0.403	0.490

Note. N = 207,276.

Table 1 presents the operational definitions and descriptive statistics for all variables included in the research model. Drawing on the intersectionality perspective (Crenshaw, 1989, 1991), these variables represent three analytical dimensions: individual characteristics, household conditions, and socioeconomic resources. All variables were simultaneously incorporated into the multinomial logistic regression model to examine their associations with women's employment status.

Model Specification

This study employs multinomial logistic regression (Mlogit) to analyse the factors associated with women's employment status. This model was selected because the dependent variable comprises seven nominal employment categories with no inherent ordering

(unordered outcomes) (Vajari et al., 2020; Hoffman et al., 1988). Unlike the ordered logit model, which assumes a hierarchical ordering across outcome categories, the Mlogit model estimates the likelihood of each employment category relative to a designated reference category. It is therefore appropriate for examining variations in women's employment status across categories with distinct characteristics (Ziegler, 2005). The probability that a woman belongs to a particular employment category is expressed as follows:

$$P(Y = j|X) = \frac{e^{X\beta_j}}{\sum_{k=1}^J e^{X\beta_k}}$$

where:

$P(Y = j | X)$ denotes the probability that an individual belongs to employment category j ;

X is the vector of explanatory variables;

β_j is the vector of coefficients associated with employment category j ; and

J denotes the total number of employment categories.

The salaried employee category was used as the reference category (base outcome). The regression results were interpreted using relative risk ratios (RRRs). An RRR greater than 1 indicates an increase in the relative risk of being in a particular employment category rather than in the reference category, whereas an RRR below 1 indicates a decrease in the relative risk associated with a one-unit increase in the independent variable (Vajari et al., 2020).

To ensure the robustness and reliability of the estimates, this study conducted several diagnostic tests and robustness checks. Multicollinearity among the independent variables was assessed using the variance inflation factor (VIF), while model fit was evaluated using the likelihood ratio test, pseudo- R^2 , and the Akaike information criterion (AIC). These tests were performed to verify that the model was adequately specified and free from serious estimation problems.

Given the cross-sectional nature of the data, the results are interpreted as relationships or associations rather than causal effects. Potential limitations include omitted variables, unobserved individual characteristics, and the possibility of reverse causality between digital technology use and employment status. These limitations should be carefully considered when interpreting the study's findings.

RESULTS AND DISCUSSION

Result

Individual characteristics, domestic burdens, and employment inequality among women

Table 2 presents the descriptive statistics for the study variables based on data from 207,276 working-age women included in the 2021 National Labor Force Survey (Sakernas). The variables analyzed comprise employment status, disability status, household characteristics, and socioeconomic resources. These statistics provide an initial overview of the respondents' characteristics and the distribution of factors associated with variations in women's employment status in Indonesia.

Table 2

Descriptive Statistics of Variables Used in the Model

Variable	Obs.	Mean	SD	Min	Max
Employment Status	207,276	4.016	2.278	1	7
Disability Status	207,276	0.069	0.253	0	1
Household Head	207,276	0.860	0.347	0	1
Household Workload	207,276	0.890	0.313	0	1
Household Size	207,276	3.997	1.670	1	20

Social Participation	207,276	0.748	0.434	0	1
Education	207,276	8.692	4.805	1	22
Place of Residence	207,276	0.407	0.491	0	1
Age	207,276	42.184	13.753	15	98
Digital Technology Use	207,276	0.403	0.490	0	1

Note. For binary variables, the meaning represents the proportion coded as 1. Employment status is treated as a nominal outcome in the multinomial logistic regression.

Table 2 indicates that women's employment status in Indonesia is associated with individual characteristics, household conditions, and access to socioeconomic resources. Women with disabilities accounted for 6.9% of the respondents, while the mean age and average years of schooling were 42.18 years and 8.69 years, respectively. In addition, 86.0% of respondents were household heads, and 89.0% reported a high domestic workload. Although 74.8% participated in social activities, only 40.3% used digital technology, while 40.7% resided in urban areas. These descriptive patterns suggest that disability, educational attainment, domestic responsibilities, digital access, and place of residence may jointly contribute to unequal employment opportunities among women.

Based on these findings, social categories do not operate independently; they intersect to shape inequalities in women's employment. Disability may intersect with low educational attainment, limited digital access, and geographical disadvantages, thereby reinforcing barriers to decent employment. At the same time, a heavy domestic workload reflects gendered social arrangements that, when combined with limited access to technology, may channel women into more informal, unstable, and inadequately protected forms of work. An intersectional perspective suggests that these inequalities arise from the cumulative effects of mutually reinforcing social positions. Therefore, women's economic empowerment requires an integrated strategy that simultaneously expands access to education, regional infrastructure, and digital technology while reducing social and domestic barriers to employment opportunities.

Employment distribution by disability status

Table 3 presents women's employment status by disability status. To facilitate clearer comparison, the table reports both the proportions of each employment category in the total sample and the distributions within each disability group. This distinction is important because women with disabilities constitute only a small proportion of the overall sample. Accordingly, within-group percentages allow for a more accurate interpretation of employment patterns among women with and without disabilities.

Table 3
Employment Status of Respondents by Disability Status

Employment Status	Non-Disability		Disability	
	Total (%)	Within Group (%)	Total (%)	Within Group (%)
Self-employed	18.85	20.24	2.13	30.96
Self-employed with non-permanent workers	12.69	13.63	1.33	19.33
Self-employed with permanent and paid workers	1.43	1.54	0.10	1.45
Salaried employee	28.46	30.56	1.00	14.53
Agricultural freelance worker	2.92	3.14	0.29	4.22
Non-agricultural freelance worker	1.43	1.54	0.11	1.60
Unpaid family worker	27.35	29.37	1.91	27.76
Total	93.12	100	6.88	100

Note. total (%) indicates the share of each employment category in the full sample, whereas Within Group (%) indicates the distribution within each disability group. N = 207,276.

Table 3 reveals marked differences in the distribution of employment status between women with and without disabilities. Women without disabilities had a substantially higher proportion of salaried employment (30.56%) than women with disabilities (14.53%). Conversely, women with disabilities were more likely to be self-employed (30.96%) than their non-disabled counterparts (20.24%). When all self-employment categories were combined, they accounted for 51.74% of women with disabilities, compared with 35.41% of women without disabilities. Unpaid family work also remained a prominent employment category in both groups, accounting for 29.37% of women without disabilities and 27.76% of women with disabilities. Overall, these findings indicate distinct employment distributions by disability status, with women with disabilities being more heavily concentrated in employment categories outside salaried work.

From Crenshaw's intersectionality perspective, these differences suggest that women's employment experiences are shaped by the intersection of multiple social positions, including gender and disability. The observed distributional patterns indicate unequal access to more secure and protected forms of employment. Disability status should therefore be considered a critical dimension in analyses of employment inequality and women's economic empowerment.

Multinomial logistic regression analysis

Table 4 presents the results of the multinomial logistic regression analysis, with salaried employment specified as the reference category (base outcome). The model examines the associations between individual characteristics, household conditions, socioeconomic resources, and women's employment status. The explanatory variables include disability status, household-head status, domestic workload, household size, social participation, educational attainment, place of residence, age, and digital technology use. With salaried employment serving as the reference category, each estimated coefficient indicates women's relative likelihood of being in a particular employment category rather than in salaried employment, while holding all other variables in the model constant.

Table 4
Multinomial Logistic Regression Results

Variables	Self-employed	Self-employed with Non-permanent Assistance	Self-employed with Permanent Assistance	Agricultural Freelance Worker	Non-agricultural Freelance Worker	Unpaid Family Worker
Disability Status	0.185*** (0.032)	0.027 (0.035)	-0.188** (0.078)	-0.162*** (0.053)	0.023 (0.077)	0.128*** (0.034)
Household Head	-0.300*** (0.021)	-0.228*** (0.024)	-0.762*** (0.047)	0.124*** (0.038)	-0.174*** (0.052)	3.111*** (0.043)
Household Workload	0.488*** (0.024)	0.664*** (0.030)	0.230*** (0.062)	0.585*** (0.057)	0.285*** (0.062)	0.044** (0.021)
Household Size	-0.019*** (0.005)	0.128*** (0.005)	0.012 (0.012)	-0.034*** (0.009)	0.027** (0.012)	0.000 (0.005)
Social Participation	0.116*** (0.016)	0.192*** (0.018)	0.043 (0.043)	0.197*** (0.032)	0.104** (0.042)	0.132*** (0.016)
Education	-0.207*** (0.002)	-0.212*** (0.002)	-0.112*** (0.005)	-0.297*** (0.004)	-0.270*** (0.005)	-0.252*** (0.002)
Place of Residence	-0.109*** (0.014)	-0.506*** (0.016)	0.144*** (0.039)	-0.916*** (0.033)	0.452*** (0.038)	-0.929*** (0.014)
Age	0.022*** (0.001)	0.032*** (0.001)	0.046*** (0.002)	0.015*** (0.001)	-0.004** (0.002)	0.000 (0.001)

Digital Technology Use	-0.532*** (0.016)	-0.637*** (0.018)	0.506*** (0.045)	-1.768*** (0.045)	-0.928*** (0.044)	-1.315*** (0.016)
Constant	1.006*** (0.049)	-0.495*** (0.057)	-3.712*** (0.133)	0.137 (0.099)	-0.224* (0.124)	0.313*** (0.059)

Model Fit Statistics

Indicators	Values
Log-likelihood	-270328.470
LR chi2(54)	106623.960
Prob > chi2	0.000
Pseudo R ²	0.165
McFadden's R ²	0.165
Maximum Likelihood R ²	0.402
Cragg & Uhler's R ²	0.421
AIC	2.609

Note. Base outcome: Salaried employee. Coefficients are reported with standard errors in parentheses. $p < .10$, $p < .05$, $p < .01$.

Source: Authors' calculation based on Sakernas 2021.

Table 4 shows that the multinomial logistic regression model was jointly significant in explaining variations in women's employment status (LR $\chi^2 = 106623.960$; $p < 0.001$), ($p < 0.001$). The McFadden's (R^2) value of 0.165 and the Cragg–Uhler (R^2) value of 0.421 indicate that the explanatory variables in the model meaningfully account for variations in women's employment status. These values reflect an acceptable model fit for multinomial logistic regression, as pseudo- R^2 measures the relative improvement of the fitted model over the null model rather than explaining variance as R^2 does in linear regression (McFadden, 1987). With salaried employment specified as the reference category, the estimated coefficients represent women's relative likelihood of being in each alternative employment category rather than in salaried employment, after controlling for the other independent variables in the model.

Disability status was significantly associated with women's employment status. Compared with salaried employment, women with disabilities were more likely to be self-employed ($\beta = 0.185$; $p < 0.01$), ($p < 0.01$) and to engage in unpaid family work ($\beta = 0.128$; $p < 0.01$). Household-head status was also strongly associated with unpaid family work ($\beta = 3.111$; $p < 0.01$), while a heavier domestic workload increased women's relative likelihood of being engaged in self-employment and other flexible forms of work rather than salaried employment.

In contrast, education was negatively associated with all non-wage employment categories, with the strongest effect observed for agricultural freelance work ($\beta = -0.297$, $p < 0.01$), indicating that higher educational attainment increased women's likelihood of entering salaried employment. Digital technology use also significantly reduced the likelihood of women engaging in agricultural freelance work ($\beta = -1.768$, $p < 0.01$) and unpaid family work ($\beta = -1.315$, $p < 0.01$). Furthermore, women residing in urban areas were less likely to be employed as unpaid family workers ($\beta = -0.929$, $p < 0.01$) or agricultural freelance workers ($\beta = -0.916$, $p < 0.01$) than their rural counterparts.

Overall, these findings indicate that women's employment status is associated with a combination of individual characteristics, domestic responsibilities, and socioeconomic resources. From Crenshaw's intersectionality perspective, the observed patterns suggest that inequalities in women's employment are shaped by the intersection of multiple social conditions, including disability, domestic workload, educational attainment, digital access, and geographical location. Together, these factors influence women's opportunities to obtain more decent, secure, and protected forms of employment.

Relative risk ratio analysis

Table 5 presents the relative risk ratios (RRRs), with salaried employment specified as the reference category (base outcome). The RRRs indicate women's relative likelihood of being in each non-salaried employment category rather than in salaried employment. An RRR greater than 1 indicates a higher relative likelihood, whereas an RRR below 1 indicates a lower relative likelihood. The RRRs are used to interpret the associations of disability status, household characteristics, and socioeconomic resources with women's employment status.

Table 5

Relative Risk Ratios (RRRs) of Women's Employment Status

Variable	Self-employed	Self-employed (NP)	Self-employed (P)	Agri. Freelance	Non-agri. Freelance	Unpaid Family
Disability Status	1.203***	1.027	0.829**	0.851***	1.023	1.136***
Household Head	0.741***	0.796***	0.467***	1.132***	0.840***	22.450***
Household Workload	1.629***	1.943***	1.259***	1.796***	1.330***	1.045**
Household Size	0.981***	1.136***	1.012	0.967***	1.027**	1.000
Social Participation	1.123***	1.212***	1.044	1.218***	1.110**	1.141***
Education	0.813***	0.809***	0.894***	0.743***	0.763***	0.777***
Place of Residence	0.897***	0.603***	1.155***	0.400***	1.571***	0.395***
Age	1.022***	1.033***	1.047***	1.015***	0.996**	1.000
Digital Technology Use	0.587***	0.529***	1.659***	0.171***	0.395***	0.269***

Base Outcome Category: Salaried Employee

Note(s): RRR denotes relative risk ratio. *, **, and *** denote significance levels at 10%, 5%, and 1%, respectively.

Source(s): Authors' creation, 2026.

Table 5 presents the Relative Risk Ratios (RRRs), indicating that women's employment status was shaped by the combined effects of individual characteristics, household conditions, and socioeconomic resources. Using salaried employment as the reference category, women with disabilities were more likely to be self-employed (RRR = 1.203) and to work as unpaid family workers (RRR = 1.136), suggesting relatively limited access to salaried and protected employment. Household headship was also strongly associated with unpaid family work (RRR = 22.450), while greater household responsibilities increased the likelihood that women would engage in self-employment and other more flexible forms of employment.

In contrast, education and digital technology use exhibited patterns that were more supportive of women's labor market inclusion. Higher educational attainment reduced the relative likelihood of women being employed in all non-salaried employment categories, including self-employment (RRR = 0.813), agricultural freelance work (RRR = 0.743), and unpaid family work (RRR = 0.777). Similarly, digital technology use substantially reduced the likelihood of women engaging in agricultural freelance work (RRR = 0.171) and unpaid family work (RRR = 0.269), although it increased the likelihood of self-employment with permanent paid workers (RRR = 1.659). Furthermore, place of residence revealed persistent spatial disparities: women living in urban areas were less likely than their rural counterparts to work as unpaid family workers or agricultural freelancers.

From Crenshaw's intersectionality perspective, these findings suggest that inequalities in women's employment are not shaped by a single factor but by the intersection of multiple social conditions, including disability, household responsibilities, educational attainment, digital access, and geographic location. Accordingly, women's employment status reflects the

interaction between structural vulnerabilities and empowering resources, which together shape their opportunities to obtain decent, secure, and inclusive employment.

Model robustness and diagnostic test

Several diagnostic tests were conducted to assess the robustness and reliability of the multinomial logistic regression model. The mean Variance Inflation Factor (VIF) was 1.25, indicating that multicollinearity among the independent variables was not a concern. The likelihood ratio test confirmed the model's overall significance ($LR \chi^2(54) = 106,623.960$, $p < 0.001$), indicating that the included predictors jointly improved the model relative to the null model. Furthermore, the model demonstrated acceptable goodness-of-fit, with McFadden's R^2 of 0.165, Cragg and Uhler's R^2 of 0.421, and an AIC value of 2.609.

These diagnostic results indicate that the model specification provides a statistically adequate basis for examining variations in women's employment status. The absence of substantial multicollinearity suggests that each predictor provides distinct explanatory information, while the significant likelihood-ratio test confirms the collective relevance of the independent variables. Nevertheless, given the cross-sectional nature of the data, the findings should be interpreted as robust associations rather than causal effects.

Discussion

The findings indicate that women's employment status in Indonesia is shaped by the intersection of disability status, household characteristics, socioeconomic resources, and place of residence. First, women with disabilities are less likely to be engaged in salaried employment and are more likely to be concentrated in self-employment or unpaid family work. Second, household-head status and a heavy domestic workload are associated with women's greater concentration in less secure and inadequately protected forms of employment, whereas education and digital technology use tend to strengthen their access to more formal and secure employment. Third, place of residence also plays an important role, as rural women are more vulnerable to informal and agricultural employment than their urban counterparts. These findings demonstrate that women's employment status is not merely an outcome of individual-level labor-market dynamics but also reflects unequal access to resources, employment protection, and inclusive work opportunities.

The social relevance of these findings lies in the persistence of gender-based employment disparities in Indonesia. The high concentration of women in informal employment, unpaid work, and jobs offering limited protection indicates the presence of structural barriers that restrict access to decent work (Padonou et al., 2023; Sharma et al., 2025). These inequalities are even more complex for women with disabilities, who face multiple and intersecting barriers, including gender- and disability-based discrimination, limited physical accessibility in the workplace, and social stigma. Previous studies have shown that women's labor-market participation remains constrained by caregiving responsibilities, unequal divisions of domestic labor, limited access to formal employment, and discriminatory employment structures (Harris & Patacchini, 2024; Wu et al., 2024). For women with disabilities in particular, these barriers are further exacerbated by inaccessible workplaces, inadequate policy implementation, and exclusion from the formal labor market (Bechange et al., 2024; Fefoame & Loryman, 2024; Noor, 2024). Employment inequality, therefore, concerns not only women's level of labor-force participation but also the quality, security, and inclusiveness of the employment opportunities available to them.

These findings reinforce Crenshaw's intersectionality thesis (1989, 1991), which holds that women's experiences of inequality cannot be understood through a single axis of identity

but must instead be examined through the simultaneous intersections of gender, disability, household status, and geographical location, which collectively shape positions of vulnerability or advantage within the labor market (Abdulla & Serikbayeva, 2024; Hussein, 2025). The study critically demonstrates that disability status does not operate in isolation but intersects with domestic responsibilities and household-head status, increasing women's relative likelihood of entering informal and inadequately protected forms of employment. By contrast, resources such as education and digital technology function as enabling factors that may mitigate these disadvantages by facilitating access to formal employment (Ye & Cai, 2024; Singh et al., 2025). The study, therefore, challenges individualistic reductionism by highlighting how patriarchal structures, ableism, and spatial inequalities reproduce occupational segregation. It also questions uniform policy approaches and calls for coordinated interventions across the household, technological, and geographical domains (Andriani & Yustini, 2021; Kabbara, 2024).

This study demonstrates that women's participation in employment should not automatically be interpreted as evidence of economic empowerment (Ghosh & Chopra, 2019; Fincham, 2025). Certain forms of work, including self-employment, casual work, and unpaid family work, may provide income-generating or livelihood opportunities, but they may also reflect constrained choices resulting from exclusion from salaried employment, limited accessibility, domestic responsibilities, or inadequate institutional support (Chacko, 2017). This distinction is particularly important for women with disabilities and those bearing heavy domestic workloads, whose employment decisions may be driven more by necessity than by genuine opportunity (Chan & Hutchings, 2023). Economic empowerment should therefore be understood not merely in terms of employment participation, but also in relation to access to decent work, income security, labor protection, workplace accessibility, and the capacity to make meaningful economic choices (Sarfraz et al., 2021; Chan & Hutchings, 2023). This understanding reinforces the argument that employment inclusion must encompass both access to the labor market and the structural conditions that shape women's employment choices (Chacko, 2017; Deshpande & Kabeer, 2023).

This study corroborates previous findings concerning the association between domestic responsibilities and informal employment (Ali et al., 2024; Wu et al., 2024), the barriers posed by disability to formal employment (Bechange et al., 2024; Fefoame & Loryman, 2024; Usman et al., 2024), and the role of education and digital technology in expanding employment opportunities (Ahmad et al., 2024; Hetmańczyk, 2024; Roy et al., 2024; Tunçsiper, 2025). However, the principal contribution of this study lies in integrating six dimensions of disability status, household responsibilities, socioeconomic resources, digital technology use, age, and rural-urban location into a unified empirical framework. This integrative approach provides a more comprehensive explanation of how the intersection between structural vulnerabilities and access to resources simultaneously shapes women's employment status in Indonesia. It also extends the analysis of employment inequality beyond the partial and fragmented approaches that have predominantly characterized the existing literature.

The findings of this study have significant implications for the formulation of gender-responsive and disability-inclusive employment policies. These policies should not only encourage women's participation in the labor force but also enhance the quality, security, and inclusiveness of their employment. Women with disabilities require accessible workplaces, reasonable accommodations, vocational training, digital literacy initiatives, and incentives for employers to implement inclusive recruitment and employment practices. Female heads of households with substantial domestic responsibilities need access to childcare support, social protection, community-based care services, and flexible working arrangements that ensure

adequate labor protection. Furthermore, educational and digital inclusion programs should be expanded, particularly for rural women and those with limited access to technology. In rural contexts, employment strategies should be reinforced through local enterprise development, skills training, digital infrastructure, and pathways to formal employment. Addressing disability-related inequalities, domestic responsibilities, educational disparities, technological exclusion, and geographical disadvantages in a comprehensive manner will enable employment policies to more effectively advance women's economic empowerment through decent and inclusive work.

CONCLUSION

The findings indicate that women's employment status in Indonesia is determined by the intersection of disability status, household responsibilities, socioeconomic resources, and area of residence. Women with disabilities are less likely to secure paid employment and are disproportionately represented in self-employment or unpaid family work, which highlights persistent barriers to formal and protected employment. Serving as the head of a household and managing substantial domestic responsibilities often compels women to pursue more flexible yet less secure forms of employment. Conversely, higher educational attainment and the use of digital technology expand women's access to formal, secure, and protected employment opportunities, while residence in rural areas increases susceptibility to informal and agricultural work. Overall, these results underscore that women's employment status is shaped by the interplay of multiple vulnerabilities and available resources, which together influence access to decent work, economic security, and inclusive employment opportunities.

This study advances gender scholarship by integrating disability status, household characteristics, educational attainment, digital technology use, social participation, age, and rural–urban residence within a unified empirical framework. The results demonstrate that women's employment status is influenced by the intersection of various vulnerabilities and socioeconomic resources. Consequently, employment status reflects not only women's participation in the labor market but also their access to decent work, economic security, and inclusive employment opportunities. In practice, these findings provide an empirical basis for developing gender-responsive and inclusive employment policies. Such policies should emphasize workplace accessibility, reasonable accommodation, vocational training, digital literacy, childcare services, social protection for female-headed households, and the expansion of employment opportunities in rural areas.

This study has several limitations. First, the cross-sectional design of the 2021 National Labor Force Survey (Sakernas) limits causal inference regarding the relationships among disability status, household characteristics, socioeconomic factors, and women's employment status. Second, the analysis does not capture unobserved factors, including employer discrimination, workplace accessibility, caregiving intensity, local labor demand, and job quality. Third, digital technology use is measured broadly and does not distinguish access, digital skills, or productive use. Future research should employ longitudinal data, mixed methods, or interaction models to examine changes in women's employment over time. It should also investigate the lived experiences of women with disabilities and female heads of household to better understand the structural barriers they face and the pathways for empowerment in the Indonesian labor market.

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AUTHOR CONTRIBUTIONS

Putri Meliza Sari: Conceptualization; Data Curation; Formal Analysis; Methodology; Visualization; Writing Original Draft. **Rowiyah Asengbaramae:** Conceptualization; Data Curation; Formal Analysis; Supervision; Validation. **Egi Kurniawan:** Formal Analysis; Supervision; Validation; Writing Review & Editing.

AVAILABILITY of DATA and MATERIALS

The data used in this study were obtained from Badan Pusat Statistik (BPS), the government agency responsible for collecting, processing, analyzing, and disseminating official statistics in Indonesia. The dataset is not publicly available because it was accessed under a research license. However, the data may be obtained from the corresponding author upon reasonable request, subject to BPS's approval.

COMPETING INTEREST

The authors declare that they have no competing interests.

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