"Understanding the women's digital employment intentions: The role of policies and values"

AUTHORS	Wei Wang 🝺 Songyu Jiang 🍺 Lin Li			
ARTICLE INFO	Wei Wang, Songyu Jiang and Lin Li (2023) employment intentions: The role of policies <i>Perspectives in Management</i> , <i>21</i> (2), 280-29	and values. Problems and		
DOI	http://dx.doi.org/10.21511/ppm.21(2).2023.2	29		
RELEASED ON	Wednesday, 03 May 2023			
RECEIVED ON	Friday, 24 February 2023			
ACCEPTED ON	Monday, 24 April 2023	Monday, 24 April 2023		
LICENSE	(c) EY This work is licensed under a Creative Com License	nmons Attribution 4.0 International		
JOURNAL	"Problems and Perspectives in Managemer	nt"		
ISSN PRINT	1727-7051			
ISSN ONLINE	1810-5467			
PUBLISHER	LLC "Consulting Publishing Company "Bus	LLC "Consulting Publishing Company "Business Perspectives"		
FOUNDER	LLC "Consulting Publishing Company "Bus	LLC "Consulting Publishing Company "Business Perspectives"		
P	G			

NUMBER OF REFERENCES

**49** 

NUMBER OF FIGURES

2

\_ - - -NUMBER OF TABLES

11

© The author(s) 2023. This publication is an open access article.





#### BUSINESS PERSPECTIVES

LLC "CPC "Business Perspectives" Hryhorii Skovoroda lane, 10, Sumy, 40022, Ukraine www.businessperspectives.org

Received on: 24<sup>th</sup> of February, 2023 Accepted on: 24<sup>th</sup> of April, 2023 Published on: 3<sup>rd</sup> of May, 2023

© Wei Wang, Songyu Jiang, Lin Li, 2023

Wei Wang, Ph.D. Candidate, Graduate School, Lyceum of the Philippines University, Malina, Philippines.

Songyu Jiang, Dr., Lecturer, Rattanakosin International College of Creative Entrepreneurship, Rajamangala University of Technology, Thailand. (Corresponding author)

Lin Li, Dr., Lecturer, Graduate School, Lyceum of the Philippines University, Malina, Philippines.



This is an Open Access article, distributed under the terms of the Creative Commons Attribution 4.0 International license, which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Conflict of interest statement:** Author(s) reported no conflict of interest Wei Wang (Philippines), Songyu Jiang (Thailand), Lin Li (Philippines)

# UNDERSTANDING THE WOMEN'S DIGITAL EMPLOYMENT INTENTIONS: THE ROLE OF POLICIES AND VALUES

#### Abstract

The digital economy has enforced women's employment and provided more possibilities for promoting employment for gender equality (SGD5). In order to achieve SDG5, the study aims to explore the role of digital employment policy and digital employment value on digital employment intention based on the support alliance theory and employment behavior theory and to build a model of digital employment for gender equality. 492 women with digital work experience from China participated in the survey. The results reveal that digital employment policy ( $\beta = 0.327$ , p < 0.001) and digital employment value ( $\beta = 0.454$ , p < 0.001) predict digital employment intention. Digital employment policy plays an active role in determining digital employment value ( $\beta$ = 0.546, p < 0.001). At the same time, the study claims the intermediary role of digital employment value in the structural model. This study can inspire the government and relevant departments to design more scientific and diversified employment policies for women, including policy support in economic, educational, and social aspects. Furthermore, women in the digital era should actively participate in training, improve their digital skills, understand the possibilities that digitalization brings to their work and life, and adapt themselves to the development of the digital society. This study encourages women to integrate into the digital society and actively improve their values, thus achieving SDG5.

#### **Keywords**

digital employment, digital economy, sustainable development, women employment, employment intention

JEL Classification

J16, J58, O33, P25

### INTRODUCTION

The digital economy has brought subversive changes to people's production and lifestyle. Women's employment in the digital era has undergone profound changes (Webster, 2014). It is worth noting that the digital gender gap that may aggravate will also cause women's employment trouble (Antonio & Tuffley, 2014). Improving women's competitiveness in employment has become an essential issue of the world's attention to gender equality (SDG5) (Coe et al., 2019).

Countries worldwide attach great importance to the impact of the digital economy on the labor market, especially the employment and entrepreneurship of different groups (Laukkanen & Tura, 2020). Driven by digital technology, digital managers, artificial intelligence engineers, cloud computing engineers, prominent data engineers, and other new professions have emerged on the digital platform, opening a new window for women's employment (Rani & Furrer, 2021). Relying on the digital labor platform ensures labor anonymity and avoids gender discrimination against women in the traditional employment market (Graham et al., 2017). In 2022, women's labor participation rate in China will exceed 70%, which is higher than that of the United States, Japan, Germany, and other major economies worldwide (Verma et al., 2021). China has made remarkable achievements in promoting women's equal exercise of rights following the law, participating in economic and social development, sharing development achievements, ensuring women's equal enjoyment of economic rights and interests, and eliminating gender discrimination in employment (Dai & Menhas, 2020). The digital economy has created 57 million jobs for Chinese women and digital gender dividends to expand women's value in the labor market, reduce women's vulnerability, and supply new employment spaces for women (Olsson & Bernhard, 2021). Women's career development is an important yardstick to measure the quality of labor market operation and an essential mechanism for the healthy operation of society (Novkovic, 2022).

Employment and gender equality are not strange topics. However, only some quantitative research topics exist on employment policy and employment psychology in digital employment. Although traditional employment behavior research has provided much evidence, there may be new results based on the background of the digital economy.

### **1. LITERATURE REVIEW**

This study uses support alliance theory and employment behavior theory and discusses policies, values, and intentions in the context of digital employment, thereby proposing research aims and hypotheses.

Although the policy process is full of various intuitive, practical interests, these interests must be conceptualized as people's policy preferences or policy objectives if they want to exert a beneficial influence on the policy, and specific policy preferences or policy objectives are the reflections of specific belief systems (Vrydagh, 2022). Moreover, interests can only be clearly defined in a specific theoretical system – an interconnected cognitive system. In essence, it is a specific belief system that is more inclusive and verifiable (Badcock et al., 2019).

The employment behavior theory results from the long-term application of the planned behavior theory to discussing employment situations (Meira & Hancer, 2021). Employment behavior is a social interaction process conducted by people with labor needs, capabilities, and aspirations to be met, including the first employment behavior oriented to employment opportunity acquisition and the multiple employment behavior oriented to ideal job acquisition (Enciso-Santocildes et al., 2021).

The theory of employment behavior believes that the influence of age, profession, education, ability, personality, and values may predict workers' behavior (Sürücü et al., 2019). It focuses on the employment intention of labor suppliers and the matching degree of individual characteristics and occupational needs (Schor & Attwood-Charles, 2017). Employment intention is an essential category in the theory of employee behavior. Social capital, employment policy, economic structure, and culture often affect employment intention and behavior as external factors (Jayachandran, 2021).

The purpose of digital employment policy is to promote the development of digital employment and the digital economy and provide convenience for employment from the perspectives of education, investment, training, and policy (Chetty et al., 2020). Women's primary employment in Africa and the Middle East has recently been widely mentioned (Jayashree et al., 2020). Many countries attach importance to the opportunities for women to continue to develop, so they actively increase investment in education, knowledge, and skills and even actively change the concept of family employment to promote sustainable economic development (Pu & Jiang, 2021). Therefore, the digital employment policy that this study focuses on is investigated from this dimension, which shows the connotation of digital employment policy from multiple dimensions.

Employment values are an essential part of values, and employment values, like other individual values,

constitute life values (Sugiarti et al., 2021). Therefore, the theoretical clarification of employment values should return to people's understanding of the external world they adapt to and transform (Klein & Todesco, 2021). Establishing the value ideal of digital employment can effectively stimulate the incentive and cohesion function of value orientation to obtain the courage and continuous power to overcome difficulties and achieve the unity of personal and social values (Sahut et al., 2021).

The proposal of employment intention can be traced back to the early 20th century (Lee & Chao, 2013). Due to the different personality characteristics of each person, the differences between individuals are universal. After understanding their professional characteristics, individuals can analyze the requirements of each occupation with the help of an instructor and then choose an occupation that closely matches their characteristics (Lee & Chao, 2013).

The theory of employment behavior believes that individuals will be affected by interest and personality factors when selecting careers (Hodder, 2020). It emphasizes that people can fully realize themselves at the career stage. Digital employment intention is a new sublimation of the research on employment intention under the digital background (Serkova, 2020). Although the current research on employment intention is wealthy, the discussion on digital employment intention needs to be more profound.

Women's employment intention in the era of the digital economy refers to the vague and straightforward needs of women in the process of digital employment choice (Alon et al., 2020). It is uncertain and will be affected by personal subjective consciousness, but it may also evolve into reality in the future. Women's digital employment intention can be narrow and broad (Jayachandran, 2021). The narrow sense refers specifically to women's direction of digital employment. The broad sense includes not only the narrow sense of digital career, but also the choice of digital employment area and the choice of digital employment salary expectation (Webster, 2014).

The new technology provides new ideas for employment and another more convenient and efficient way for workers to obtain employment and self-employment (Hodder, 2020). Many policies on digital employment provide a framework for employment in the 21st century to embrace digitalization and establish a relationship of sustainable employment.

The theory of planned behavior is often used to test the factors that affect job-hunting intention (Chansuk et al., 2022). The policy is already the premise that affects job-hunting self-efficacy, subjective norms, and job-hunting attitude (Jayachandran, 2021). At the same time, the support alliance framework theory suggests that policy is the pre-factor that affects employment (Hudson et al., 2019).

The development of digital infrastructure has increased the number of digital jobs, which are essential for the digital transformation of employees in the SME sector (Aly, 2022). Encouraged by the female policy dividend, female workers may be more inclined to enter small and medium-sized enterprises for employment (Sovbetov, 2018). Evidence from the employment survey of female college students in China shows that governments at all levels, from the bottom to the top, actively release their official accounts to show their work interestingly to promote women's employment and cultivate their positive intention of employment.

China has an important strategic position in the global labor market. The talent introduction policy and the preferential policies for car and house purchases have apparent potential to attract employment (Chiang, 2019). The employment policy under the digital economy differs from the content proposed in the traditional sense (McConnell & Hart, 2019). The consistency of the digital employment policy, including the compensation method, employment status, and work schedule, may positively affect women's employment intention and retention.

The development of employment behavior theory insists that employment value is one of the factors of employment choice (Chansuk et al., 2022). At the same time, the support alliance theory determines the critical role of policy on employment psychological factors (Hudson et al., 2019). The employment protection policy allows more people to see the significance of current employment, such as corporate cash-holding decisions, integration into joint corporate development, and even efficient appreciation plans (Enciso-Santocildes et al., 2021). Economic growth and urbanization are the main achievements of the digital economy, which has significantly reduced the poverty rate (Graham et al., 2017). Because employees have found employment policy's value in changing their status quo, they should try to move toward digital employment or entrepreneurship (Galperin & Arcidiacono, 2021).

All EU member states have deployed various policies to increase the total employment rate of various industries (Graham et al., 2017). Due to the influence of the environmental economy, economic policies in different political backgrounds aim to reduce entrepreneurship's direct and indirect impact on domestic income inequality by solving employment problems (Akter et al., 2017). Therefore, no matter what the favorable employment policy makes the employees feel the value of employment, the actual and preferred employment policy is optimistic for the employment of multiple industries (Banerjee, 2019). The relationship between digital employment policy and employment value may also be the same in the digital economy.

The relationship between value and behavior intention has been widely studied in employment behavior theory and its development (Zhang et al., 2019). Based on the situation of employment behavior research, employment intention may be affected by employment value and attitude (Al-Jubari et al., 2019). Based on this, one of the determinants of female doctors' employment behavior is the practitioners' perception of the value of medical skills (Munir et al., 2019). This conclusion helps more women be willing to engage in medical work and take active medical assistance actions (Akter et al., 2017). Although, in recent years, there has been much discussion on the impact of digitalization on employment, there needs to be more discussion on the value and intention of employment as a driving force for employment (Galperin & Arcidiacono, 2021).

The study of the digital economy has clarified the brand employment value and the willingness to promote the digital brand promotion industry (Litvinenko, 2020). In the field of agricultural engineering, the value of environment-friendly agriculture has become the primary basis for the intention of female employees to engage in environment-friendly agricultural products (Akter et al., 2017).

As an intermediary, value is essential to discussion and verification based on behavioral theory, carried out in multiple contexts (Jiang et al., 2022). The value of digital technological innovation has produced many new results under capitalist policies, which formally guide the employment of the opportunity to cultivate employment intention (Lee & Chao, 2013). Spain paid particular attention to the new technology policy's impact on Libyan workers' employment and self-employment (Lieu et al., 2020). It determined the role of the economic value brought by technology on employment intention. China's industrial policy has had a massive impact on the digital economy (Chiang, 2019).

However, the employment opportunities brought by economic value have increased significantly, and the promotion of industrial policy is of great significance to the employment value (Laukkanen & Tura, 2020). Employment education and training enable more women to pay attention to the possibility and opportunity of future employment (Jiang et al., 2022). Different employment values often lead to different degrees of employment intention (Lee & Chao, 2013).

This study aims to discuss the role of digital employment policy on digital employment intention based on the research status of digital female employment and further verify the intermediary role of digital employment value. Moreover, based on hypotheses verification, it constructs a structural equation model of digital employment for gender equality, which inspired the development of women's digital employment, the government's digital employment behavior, and public policy.

Hence, the study proposes the following hypotheses:

- H1: Digital employment policies positively affect digital employment intention.
- *H2: Digital employment policies positively affect digital employment value.*

- H3: Digital employment value positively affects digital employment intention.
- *H4:* Digital employment value mediates the relationship between digital employment policies and digital employment intention.

### 2. METHODS

The study uses an online questionnaire to obtain 492 valid responses. Table 1 illustrates the respondents' demographics.

	Item		Percent
	< 20	110	22.4
	20-25	104	21.1
A = -	26-30	75	15.2
Age	31-35	72	14.6
	36-40	67	13.6
	> 40	64	13.0
	< 10,000 USD	114	23.2
Annual	10,000 USD-20,000 USD	102	20.7
family	20,000 USD-30,000 USD	94	19.1
income	30,000 USD-40,000 USD	91	18.5
	> 40,000 USD	91	18.5
	Rural district	272	55.3
Location	Urban district	220	44.7
	< 1 year	153	31.1
Digital work	1-2 years	95	19.3
experience	3-4 years	123	25.0
	4-5 years	121	24.6
	Without degree	133	27.0
Education	Bachelor's degree	204	41.5
level	Master's degree	74	15.0
	Doctor's degree	81	16.5

Table 1. Demographics of the respondents

Table 1 describes participants by age, family annual income, location, digital work experience, and education level. All the participants are women with digital work experience. Participants are mainly under 25 years old and potential employees in the digital economy. Most are from annual family income under 20,000 USD; however, annual family income over 20,000 USD averages around 90 persons. More samples are from rural areas (272) than cities (220). Participants mainly gather digital work experience < 1 year. Surprisingly, although participants are not old, their work experience is not inferior because there are 244 participants with more than three years of work experience, accounting for nearly 50% of the total population. Furthermore, it means that many students who may be in school are also engaged in digital part-time jobs for a long time. Finally, the majority of participants with a bachelor's degree (133) and below (204) means that digital work is not a privilege of a high degree in the era of the digital economy. On the contrary, the proportion of master's and doctor's degree participants is insignificant. Of course, this may be related to the level of national education, and a master's degree or above is not a large group in social development.

The studies were done using random sampling, so the distribution of demographics was not uniform. However, demographic differences could also help further investigate the role of demographic variables on the digital employment intention of women.

The questionnaire design originates from discussions on related topics, including four parts. Firstly, the study surveys the respondent's basic information, including age, annual family income, location, digital work experience, and education level. The second part refers to a survey of digital employment policies from Rhodes et al. (2015), consisting of seven questions. Then, the study investigated the digital employment value using six questions derived from Kenney et al. (2019). The fourth part aims to measure digital employment intention based on seven questions of Wang et al. (2020). The study is adapted and modified based on the original scale to study digital employment intention. The questions use a 7-point Likert scale, from 1-7, "strongly disagree - strongly agree."

After the data collection, SPSS 26 and Amos 26 were the main tools for statistical data analysis. Firstly, SPSS was used to complete the descriptive statistical analysis and the questionnaire's overall reliability and validity analysis. Then Amos 26 helps the study to complete the confirmatory factor analysis, model fit analysis, aggregation validity and discrimination validity analysis, path analysis, and finally, build a diagram of the structural equation model of digital employment intention for women.

### 3. RESULTS

Reliability refers to the stability and consistency of the questionnaire results when the same method is used to survey the same object, that is, whether the measuring tool (questionnaire or scale) can measure the measured things or variables stably (Griffin et al., 2022). Cronbach's  $\alpha$  value is the most commonly used reliability coefficient at present. Generally speaking, Cronbach's  $\alpha$  greater than 0.7 is acceptable; Cronbach's  $\alpha > 0.9$  means the scale has good validity (Griffin et al., 2022). Table 2 found that the scale included 20 questions with Cronbach's  $\alpha = 0.933$ , meaning the scale has good validity.

#### Table 2. Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.933	.933	20

Validity refers to the degree to which measuring tools or means can accurately assess the things. Generally, KMO > 0.6 indicates a correlation, and Sig < 0.05 has significance, which means that the scale meets the requirements of factor analysis (Griffin et al., 2022). If KMO > 0.9 and Sig = 0.000, the internal consistency of the questionnaire data is relatively good. The selection of all questions in each dimension is the same, and the dimension division is relatively good. Table 3 illustrates that KMO = 0.984 (> 0.9) and Sig = 0.000, indicating that the data in the questionnaire are valid and suitable for factor analysis.

#### Table 3. KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure	.984	
	Approx. Chi-Square	6561.953
Bartlett's Test of Sphericity	df	190
	Sig.	.000

Aggregation validity is the degree of similarity when measuring the same feature using different measurement methods. CR value greater than 0.7 is acceptable. AVE is the calculation of the average explanatory power of latent variables. The higher the AVE value, the higher the convergence validity of the latent variable; the AVE value should be greater than 0.5, and the AVE value is 0.5 acceptable threshold between 0.36-0.50 (Mueller & Hancock, 2018).

Confirmatory factor analysis uses composite reliability (CR) and mean-variance extraction (AVE) as the evaluation criteria of convergence validity. When the CR value of each factor is more significant than 0.7 and the AVE value is greater than 0.50, the convergence validity is considered good. The criterion for passing the discrimination validity is that the square root value of each factor AVE is greater than the correlation coefficient of this and other factors (Mueller & Hancock, 2018). Tables 4 and 5 show the aggregation and differentiation validity; AVE, CR, and other indicators meet the standard. Figure 1 shows the results of the confirmatory factor analysis.

Latent variables	Items	Factor loading	CR	AVE	
	DEP1	0.770			
	DEP2	0.733			
	DEP3	0.749			
DEP	DEP4	0.781	0.877	0.511	
	DEP5	0.428			
	DEP6	0.687			
	DEP7	0.786			
	DEV1	0.782			
	DEV2	0.766	0.874 0.5		
DEV	DEV3	0.757		0.581	
	DEV4	0.718			
	DEV5	0.787			
	DEI1	0.809			
	DEI2	0.765			
	DEI3	0.566			
DEI	DEI4	0.786	0.000	0 5 4 0	
DEI	DEI5	0.769	0.903	0.540	
	DEI6	0.593			
	DEI7	0.802		-	
	DEI8	0.748			

*Note:* DEP: digital employment policy; DEV: digital employment value; DEI: digital employment intention.

Table 5. Differentiation validity test

Latent variable	DEP	DEV	DEI
DES	0.715	-	-
DEV	0.560	0.762	-
DEI	0.631	0.000	0.735

*Note:* The diagonal line is the square root of the corresponding AVE dimension. DEP: digital employment policy; DEV: digital employment value; DEI: digital employment intention.

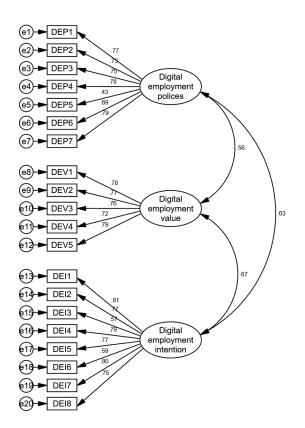


Figure 1. Confirmatory factor analysis

lable	ь.	iviodification	indices

Residual	Path	Correction index	МІ	Par Change
e1	$\leftrightarrow$	e7	78.163	0.393
e15	$\leftrightarrow$	Digital_employment_ intention	41.73	-0.305
e18	$\leftrightarrow$	Digital_employment_polices	40.923	0.316
e15	$\leftrightarrow$	Digital_employment_value	33.359	0.256
e18	$\leftrightarrow$	Digital_employment_ intention	32.183	-0.276
e15	$\leftrightarrow$	e18	31.396	0.325
e8	$\leftrightarrow$	e12	25.411	0.197
e15	$\leftrightarrow$	Digital_employment_polices	25.362	0.242
e5	$\leftrightarrow$	e7	19.632	-0.243
e18	$\leftrightarrow$	e19	18.405	-0.215
e2	$\leftrightarrow$	e19	13.266	0.176
e13	$\leftrightarrow$	e15	13.061	-0.175
e9	$\leftrightarrow$	e10	12.606	0.155
e5	$\leftrightarrow$	Digital_employment_polices	11.742	-0.18
e5	$\leftrightarrow$	e8	10.941	0.17
e5	$\leftrightarrow$	Digital_employment_value	10.618	0.159
e18	$\leftrightarrow$	Digital_employment_value	10.568	0.148
e11	$\leftrightarrow$	e17	10.497	-0.141

Table 6 reveals the output results of modification indices. By sorting the MI values from the largest to the smallest, the residuals e5, e15, e18, and oth-

er latent variables corresponding to DEP5, DEI3, and DEI6 have high MI values. Hence, the study deletes the three items for optimal fitting. Among the model-relevant indicators,  $\chi 2/df < 3$ , GFI and CFI are always smaller than 1. The model fitting effect is good when they are more significant than 0.9. RMSEA less than 0.1 indicates a good fit; below 0.05, the fitting is good (Mueller & Hancock, 2018). However, Table 7 indicates that  $\chi 2/df$ , GFI, and NFI do not meet the standard.

The fitting index of the confirmatory factor has been improved to a certain extent after deleting the items. Table 7 uncovers the  $\chi^2/df = 2.604$  (< 3), GFI = 0.931(> 0.9) and NFI = 0.938 (> 0.9). Thus, the fitting indexes meet the reference standards.

Table 8 presents the results of the aggregate validity analysis after deleting the items. In terms of convergence validity, the AVE value extracted from the mean-variance of each variable is 0.567-0.618, which is greater than the standard of 0.5, and CR is 0.874-0.907, which is more than 0.7, indicating that the convergence validity is reliable.

	Index	χ2/df	RMSEA	GFI	AGFI	NFI	TLI	CFI
Standard	index	< 3	< 0.08	> 0.9	> 0.85	> 0.9	> 0.9	> 0.9
	Before correlation	3.547	0.072	0.887	0.858	0.895	0.911	0.922
Results	After correlation	2.604	0.057	0.931	0.909	0.938	0.954	0.961

#### Table 7. Confirmatory factor analysis model fitting index

**Table 8.** Aggregate validity test (after deletionand correction)

Latent variables	Items	Factor loading	CR	AVE
	DEP1	0.779		
	DEP2	0.735		
DEP	DEP3	0.744	0.887	0.567
DEP	DEP4	0.775	0.887	0.507
	DEP6	0.679		
	DEP7	0.800		
	DEV1	0.783	0.874	0.582
	DEV2	0.766		
DEV	DEV3	0.757		
	DEV4	0.718		
	DEV5	0.787		
	DEI1	0.824		
	DEI2	0.767		
DEI	DEI4	0.788	0.007	0.610
	DEI5	0.770	0.907	0.618
	DEI7	0.819		
	DEI8	0.747		

*Note:* DEP: digital employment policy; DEV: digital employment value; DEI: digital employment intention.

Table 9 claims that the absolute value of the correlation coefficient between any two factors is less than the square root of the corresponding AVE factor after deleting the question. This means there is a certain degree of discrimination between the three factors in the study. Hence, the discrimination validity of the deleted scale is reliable.

# **Table 9.** Differentiation validity test(after correction)

Latent variables	DEP	DEV	DEI
DEP	0.753	-	—
DEV	0.546	0.763	-
DEI	0.575	0.632	0.786

*Note:* The diagonal line is the square root of the corresponding AVE dimension. DEP: digital employment policy; DEV: digital employment value; DEI: digital employment intention.

Based on reliability and validity analysis and validation of factor analysis results, the study continued to conduct path analysis. After the establishment of the structural equation model (SEM), through the model fitting of the software, the estimated value of the detection path, the standardized path coefficient, the standard error (SE), CR value, and the significance p-value are obtained.

In general, if CR is more significant than 1.96, the p-value is less than 0.05, it can be considered that the path coefficient can pass the significance test within the 95% confidence interval, indicating that the corresponding path hypothesis of the preset model is valid; otherwise the assumption is untenable (Mueller & Hancock, 2018). Table 10 describes the test results.

Digital employment policy has a significant positive impact on DEV ( $\beta = 0.546$ , p < 0.001). Thus, *H1* is supported. Digital employment value has a significant positive impact on digital employment intention ( $\beta = 0.454$ , p < 0.001). Thus, *H2* is confirmed. Finally, digital employment policy significantly positively affects digital employment intention ( $\beta = 0.327$ , p < 0.001), supporting *H3*.

#### Table 10. Structural equation model path test

Hypothesis	Path	Estimate	β	SE	CR	Р
H1	DEP→DEV	0.507	0.546	0.049	10.383	***
H2	DEV→DEI	0.533	0.454	0.063	8.453	***
H3	DEP→DEI	0.357	0.327	0.056	6.380	***

*Note*: \*\*\*: P<0.01, the result is significant. DEP: digital employment policy; DEV: digital employment value; DEI: digital employment intention.

After verifying the direct effects, the study further tests the intermediary effect. Table 11 summarizes the results of the indirect effect. The study used the boosting method in Amos 26.0, set the confidence interval at 95%, and conducted the indirect effect test. The study found that:

• The 95% upper and lower range of the total effect of "DEP → DEI" is [0.495, 0.644], excluding 0, indicating that the total effect between DEP and DEI is significant, with the practical value of 0.575;

Effects	Path	Effect value	Standard error	Bootstrapping (N = 2000)		
			Standard error	95% CI		
Gross effect	DEP→DEI	0.575	0.038	0.495	0.644	
Direct effect		0.327	0.047	0.234	0.415	
Indirect effect	DEP→DEV→DEI	0.248	0.034	0.186	0.319	

Table 11. Summary of mediation effect

*Note*: DEP: digital employment policy; DEV: digital employment value; DEI: digital employment intention.

- The 95% upper and lower intervals of the direct effect path of "DEP → DEI" are [0.234, 0.415], excluding 0, indicating that the direct effect between DEP and DEI is significant, with the practical value of 0.327;
- The 95% upper and lower intervals of the intermediate path "DEP → DEV → DEI" are [0.186, 0.319], excluding 0, indicating that DEV has a significant mediating effect between DEP and DEI, with a practical value of 0.248.

According to the results of the path analysis, Figure 2 constructs SEM of women's digital employment intention, which fully demonstrates the intermediary role of digital employment value in digital employment policy and digital employment policy. Hence, *H4* is supported.

### 4. DISCUSSION

The study explored a model that may provide more possibilities for women's digital employment, namely the structural equation model of digital employment for gender equality. In this model, the paper emphasizes the role of digital employment policy and digital employment value on digital employment intention, reflecting the intermediary role of digital employment value.

Digital employment is no longer a strange topic. The digital economy provides many possibilities for digital employment (Graham et al., 2017). Therefore, improving digital skills has become an essential task at present. In order to achieve the goal of the digital economy, the literature on employment institutions, employment directions, and skills from the perspective of employment has gradually emerged (Galperin & Arcidiacono, 2021). Moreover, actively encouraging the combination of digital employment and artificial intelligence to promote economic development has become the economic goal that the world is pursuing (Hodder, 2020).

On the other hand, digital employment services significantly affect digital employment's transformation, and providing rich and diverse digital

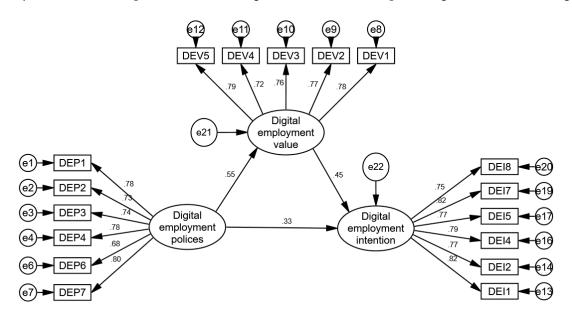


Figure 2. Structural equation model of digital employment for gender equality

employment services has become an essential part of the digital economy era (Aly, 2022). However, from the perspective of employment behavior intention, the study demonstrated the impact of the support alliance theory and employment behavior theory on women's employment behavior. It made the research results of digital employment go deep into the level of sustainable development goals (SDG5). It proposed new ideas to solve the problems of digital employment and gender equality.

The research results on employment intention and behavior are vibrant, developed, and contributed to many fields (Munir et al., 2019). However, achievements in this field are relatively rare, although digital employment is an advanced concept and research frontier. This paper provides a new idea for researching digital employment as an employment issue and a comprehensive concept of sustainable economic development and gender equality.

Surveys from many countries and regions have shown the positive effect of employment policy and employment value on employment intention. In digital employment, social support alliance and employment behavior theory have reliable explanatory power and recognize the intermediary role of digital employment value.

Digital technology also become an effective tool to improve the status of women and promote gender equality (Leal Filho et al., 2022). It is necessary to promote the external empowerment of digital technology and women's self-energization and seize the crucial opportunities brought by emerging technologies and industries to promote the realization of gender equality.

Based on this, the findings affirm the positive effect of digital employment policy on digital employment. First, the government should strengthen policy support for digital employment, create a gender-inclusive learning and training environment, and externally empower women with digital technology. Secondly, women should use various ways to receive training and achieve digital technology empowerment. Although there are some obstacles for women and girls to receive training and learning related to digital technology, digital technology has also created favorable conditions for self-learning and self-training. Online learning and training have become a new trend. It is vital to fully seize digital transformation opportunities and realize women's full participation in emerging industries. The role played by the value of digital employment reminds more female practitioners to participate in digital employment actively, actively learn relevant digital technologies, try to get rid of the cage of family and the shackles of social rules, and better use the digital platform to realize their value further.

Digital transformation creates new employment space (Luo et al., 2022). Because of the short generation time, new employment forms, no direct historical reference, and no special rigid requirements for academic qualifications, these new spaces can be separated from the impact of traditional gender role positioning to a certain extent (Aly, 2022). Women should seize the equal digital opportunity to enter the future work and strive to achieve gender equality in the future work field to create an equal future.

Although the results make some breakthroughs, limitations have also emerged. First, from the perspective of the samples, the analysis only focuses on the issue of women's digital employment equality. These samples are mainly from online surveys collected via the random sampling method. Therefore, future research can become more universal by choosing other sampling approach. Secondly, the results announced the potential of social support alliance and employment behavior theory to explain digital employment behavior. However, other variables involved in these two theories have not been proposed or verified in the paper, which provides opportunities for future research.

Future studies may continue to add more scientific and accurate sampling methods to women's employment research and even compare women's digital employment in different countries. Further refinement and verification of other variables that may have an impact can enrich the energy of social support alliance and employment behavior theory on digital employment behavior. Finally, it may further clarify the meaning of digital employment for gender equality, which can frame and process this macro concept.

## CONCLUSION

This study aims to uncover the relationship between digital employment policy, digital employment value, and digital employment intention based on the social support alliance and employment behavior theory and construct a digital employment model for gender equality, which verifies the intermediary role of digital employment value. Finally, the study put forward proposals for the government and women to promote digital employment and inspire their possibilities in digital employment.

The digital employment policy emphasizes the impact of macro and micro economic policies on digital employment. The education policy aims to discuss how to provide more women with digital skills training and development opportunities. Employment policy is a broad concept essential for society to promote employee development and solve employment problems. Therefore, a scientific employment policy is conducive to making more groups aware of the importance of women's employment.

The value of digital employment makes women realize the possibilities of digital work, including increasing income, having a good working environment, making more friends, and mastering more skills. These women in the digital economy era have more possibilities and opportunities. The study encourages them to enter the digital society actively, but this is also an essential part of current school education and enterprise development.

Improving women's digital employment intention is a channel conducive to achieving gender equality. Therefore, multi-dimensional and multifaceted attention to women's digital employment intention should become an essential field of scientific research. In the process of promoting the realization of sustainable development goals, digital empowerment has become one of the main ways to solve the employment problem. The digital economy industry is one of the emerging industries in the world, and digital employment is a significant breakthrough in promoting high-quality economic development. As one of the main components of digital employment, women have created tremendous value for developing the digital economy and sustainable development. Therefore, it has become the responsibility of all parts of society to actively attach importance to women's digital employment behavior.

## **AUTHOR CONTRIBUTIONS**

Conceptualization: Wei Wang, Songyu Jiang, Lin Li. Data curation: Wei Wang, Songyu Jiang, Lin Li. Formal analysis: Wei Wang, Songyu Jiang, Lin Li. Funding acquisition: Wei Wang, Songyu Jiang, Lin Li. Investigation: Wei Wang, Songyu Jiang, Lin Li. Methodology: Wei Wang, Songyu Jiang, Lin Li. Project administration: Wei Wang, Songyu Jiang. Resources: Wei Wang, Songyu Jiang. Software: Songyu Jiang. Supervision: Wei Wang, Songyu Jiang. Validation: Wei Wang, Songyu Jiang. Visualization: Wei Wang, Songyu Jiang. Writing – original draft: Wei Wang, Songyu Jiang. Writing – review & editing: Wei Wang, Songyu Jiang.

### REFERENCES

- Akter, S., Rutsaert, P., Luis, J., Htwe, N. M., San, S. S., Raharjo, B., & Pustika, A. (2017). Women's empowerment and gender equity in agriculture: A different perspective from Southeast Asia. *Food Policy*, 69, 270-279. https://doi.org/10.1016/j.foodpol.2017.05.003
- Al-Jubari, I., Hassan, A., & Liñán, F. (2019). Entrepreneurial intention among university students in Malaysia: Integrating self-determination theory and the theory of planned behavior. *International Entrepreneurship and Management Journal*, 15(4), 1323-1342. https://doi.org/10.1007/ s11365-018-0529-0
- Alon, T., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020). *This time it's different: the role* of women's employment in a pandemic recession (Working Paper No. 27660). National Bureau of Economic Research. https://doi.org/10.3386/w27660
- 4. Aly, H. (2022). Digital transformation, development and productivity in developing countries: Is artificial intelligence a curse or a blessing? *Review* of Economics and Political Science, 7(4), 238-256. https://doi. org/10.1108/REPS-11-2019-0145
- Antonio, A., & Tuffley, D. (2014). The gender digital divide in developing countries. *Future Internet*, 6(4), 673-687. https://doi. org/10.3390/fi6040673
- Badcock, P. B., Friston, K. J., Ramstead, M. J. D., Ploeger, A., & Hohwy, J. (2019). The hierarchically mechanistic mind: An evolutionary systems theory of the human brain, cognition, and behavior. *Cognitive, Affective,* & *Behavioral Neuroscience,* 19(6), 1319-1351. https://doi. org/10.3758/s13415-019-00721-3
- Banerjee, M. (2019). Gender equality and labour force participation: Mind the gap. *ANTYAJAA: Indian Journal* of Women and Social Change, 4(1), 113-123. https://doi. org/10.1177/2455632719831827

- 8. Chansuk, C., Arreeras, T., Chiangboon, C., Phonmakham, K., Chotikool, N., Buddee, R., Pumjampa, S., Yanasoi, T., & Arreeras, S. (2022). Using factor analyses to understand the post-pandemic travel behavior in domestic tourism through a questionnaire survey. *Transportation Research Interdisciplinary Perspectives*, *16*, 100691. https://doi.org/10.1016/j. trip.2022.100691
- Chetty, R., Friedman, J. N., Hendren, N., Stepner, M., & The Opportunity Insights Team. (2020). How did COVID-19 and stabilization policies affect spending and employment? A new realtime economic tracker based on private sector data (Working Paper No. 27431). National Bureau of Economic Research. https://doi. org/10.3386/w27431
- Chiang, M.-H. (2019). China-ASEAN economic relations after establishment of free trade area. *The Pacific Review*, 32(3), 267-290. https://doi.org/10.1080/09512748. 2018.1470555
- Coe, I. R., Wiley, R., & Bekker, L.-G. (2019). Organisational best practices towards gender equality in science and medicine. *The Lancet*, 393(10171), 587-593. https://doi.org/10.1016/S0140-6736(18)33188-X
- Dai, J., & Menhas, R. (2020). Sustainable development goals, sports and physical activity: The localization of health-related sustainable development goals through sports in China: A narrative review. *Risk Management* and Healthcare Policy, 13, 1419-1430. https://doi.org/10.2147/ RMHP.S257844
- Enciso-Santocildes, M., Echaniz-Barrondo, A., & Gómez-Urquijo, L. (2021). Social innovation and employment in the digital age: The case of the connect employment shuttles in Spain. *International Journal of Innovation Studies*, 5(4), 175-189. https://doi.org/10.1016/j. ijis.2021.11.001
- 14. Galperin, H., & Arcidiacono, M. (2021). Employment and the

gender digital divide in Latin America: A decomposition analysis. *Telecommunications Policy*, 45(7), 102166. https://doi. org/10.1016/j.telpol.2021.102166

- Graham, M., Hjorth, I., & Lehdonvirta, V. (2017). Digital labour and development: Impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European Review of Labour and Research*, 23(2), 135-162. https://doi. org/10.1177/1024258916687250
- Griffin, M., Martino, R. J., LoSchiavo, C., Comer-Carruthers, C., Krause, K. D., Stults, C. B., & Halkitis, P. N. (2022). Ensuring survey research data integrity in the era of internet bots. *Quality* & *Quantity*, 56(4), 2841-2852. https://doi.org/10.1007/s11135-021-01252-1
- Hodder, A. (2020). New technology, work and employment in the era of COVID-19: Reflecting on legacies of research. *New Technology, Work and Employment, 35*(3), 262-275. https://doi.org/10.1111/ ntwe.12173
- Hudson, B., Hunter, D., & Peckham, S. (2019). Policy failure and the policy-implementation gap: Can policy support programs help? *Policy Design and Practice*, 2(1), 1-14. https://doi.org/10.1080/ 25741292.2018.1540378
- Jayachandran, S. (2021). Social norms as a barrier to women's employment in developing countries. *IMF Economic Review*, 69(3), 576-595. https://doi. org/10.1057/s41308-021-00140-w
- Jayashree, P., Lindsay, V., & McCarthy, G. (2020). Career capital development of women in the Arab Middle East context: Addressing the pipeline block. *Personnel Review*, 50(4), 1253-1278. https://doi.org/10.1108/PR-10-2018-0436
- Jiang, S., Jotikasthira, N., & Pu, R. (2022). Toward sustainable consumption behavior in online education industry: The role of consumer value and social

identity. Frontiers in Psychology, 13, 865149. https://doi.org/10.3389/ fpsyg.2022.865149

- Kenney, M., Rouvinen, P., & Zysman, J. (2019). Employment, work, and value creation in the era of digital platforms. In S. Poutanen, A. Kovalainen, & P. Rouvinen (Eds.), *Digital work and the platform economy* (pp. 13-30). Routledge. https://doi. org/10.4324/9780429467929
- Klein, V. B., & Todesco, J. L. (2021). COVID-19 crisis and SMEs responses: The role of digital transformation. *Knowledge* and Process Management, 28(2), 117-133. https://doi.org/10.1002/ kpm.1660
- Laukkanen, M., & Tura, N. (2020). The potential of sharing economy business models for sustainable value creation. *Journal* of Cleaner Production, 253, 120004. https://doi.org/10.1016/j. jclepro.2020.120004
- Leal Filho, W., Kovaleva, M., Tsani, S., Țîrcă, D.-M., Shiel, C., Dinis, M. A. P., Nicolau, M., Sima, M., Fritzen, B., Lange Salvia, A., Minhas, A., Kozlova, V., Doni, F., Spiteri, J., Gupta, T., Wakunuma, K., Sharma, M., Barbir, J., Shulla, K., ... Tripathi, S. (2022). Promoting gender equality across the sustainable development goals. *Environment, Development and Sustainability*. https://doi. org/10.1007/s10668-022-02656-1
- Lee, C.-S., & Chao, C.-W. (2013). Intention to "leave" or "stay" – The role of internship organization in the improvement of hospitality students' industry employment intentions. Asia Pacific Journal of Tourism Research, 18(7), 749-765. https://doi.org/10.1080/10941665. 2012.695290
- Lieu, J., Sorman, A. H., Johnson, O. W., Virla, L. D., & Resurrección, B. P. (2020). Three sides to every story: Gender perspectives in energy transition pathways in Canada, Kenya and Spain. *Energy Research & Social Science*, 68, 101550. https://doi.org/10.1016/j. erss.2020.101550
- 28. Litvinenko, V. S. (2020). Digital economy as a factor in the technological development of the

mineral sector. *Natural Resources Research*, 29(3), 1521-1541. https://doi.org/10.1007/s11053-019-09568-4

- Luo, C., Jiang, S., Pu, R., Li, L., & Yang, H. (2022). Knowledge map of digital tourism: A bibliometric approach using CiteSpace. *Problems and Perspectives in Management*, 20(4), 573-587. http://dx.doi.org/10.21511/ ppm.20(4).2022.43
- McConnell, A., & 't Hart, P. (2019). Inaction and public policy: Understanding why policymakers 'do nothing'. *Policy Sciences*, 52(4), 645-661. https://doi.org/10.1007/ s11077-019-09362-2
- Meira, J. V. d. S., & Hancer, M. (2021). Using the social exchange theory to explore the employeeorganization relationship in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 33(2), 670-692. https://doi.org/10.1108/ IJCHM-06-2020-0538
- Mueller, R. O., & Hancock, G. R. (2018). Structural equation modeling. In G. R. Hancock, L. M. Stapleton, & R. O. Mueller (Eds.), *The reviewer's guide to quantitative methods in the social sciences* (pp. 445-456). Routledge. https://doi. org/10.4324/9781315755649
- Munir, H., Jianfeng, C., & Ramzan, S. (2019). Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing country. *International Journal* of Entrepreneurial Behavior & Research, 25(3), 554-580. https://doi.org/10.1108/IJE-BR-05-2018-0336
- Novkovic, S. (2022). Cooperative identity as a yardstick for transformative change. Annals of Public and Cooperative Economics, 93(2), 313-336. https://doi. org/10.1111/apce.12362
- 35. Olsson, A. K., & Bernhard, I. (2021). Keeping up the pace of digitalization in small businesses – Women entrepreneurs' knowledge and use of social media. *International Journal* of Entrepreneurial Behavior

#### & Research, 27(2), 378-396. https://doi.org/10.1108/IJE-BR-10-2019-0615

- Pu, R., & Jiang, S. (2021). Understanding the consumption behaviors in online education towards promoting the sustainable development goals (SDGs). Academy of Entrepreneurship Journal, 27(6), 1-16. Retrieved from https://www.abacademies. org/articles/Understanding-theconsumption-behaviors-in-online-education-towards-promoting-1528-2686-27-6-630.pdf
- Rani, U., & Furrer, M. (2021). Digital labour platforms and new forms of flexible work in developing countries: Algorithmic management of work and workers. *Competition & Change*, 25(2), 212-236. https://doi. org/10.1177/1024529420905187
- Sahut, J.-M., Iandoli, L., & Teulon, F. (2021). The age of digital entrepreneurship. *Small Business Economics*, 56(3), 1159-1169. https://doi.org/10.1007/s11187-019-00260-8
- Rhodes, S. D., Mann, L., Song, E., Alonzo, J., Downs, M., Sun, C. J., Simán, F. M., Lawlor, E., Martinez, O., O'Brien, M. C., Reboussin, B. A., & Hall, M. A. (2015). The Impact of Local Immigration Enforcement Policies on the Health of Immigrant Hispanics/ Latinos in the United States. *American Journal of Public Health*, 105(2), 329-337. https://doi. org/10.2105/AJPH.2014.302218
- Schor, J. B., & Attwood-Charles, W. (2017). The "sharing" economy: Labor, inequality, and social connection on for-profit platforms. *Sociology Compass*, 11(8), e12493. https://doi.org/10.1111/ soc4.12493
- Serkova, V. (2020). The digital reality: Artistic choice. *IOP Conference Series: Materials Science and Engineering*, 940(1), 012154. https:// doi.org/10.1088/1757-899X/940/1/012154
- 42. Sovbetov, Y. (2018). Impact of digital economy on female employment: Evidence from Turkey. *International Economic*

*Journal*, 32(2), 256-270. https:// doi.org/10.1080/10168737.2018.1 478868

- Sugiarti, E., Finatariani, E., & Rahman, Y. T. (2021). Earning cultural values as a strategic step to improve employee performance. Scientific Journal of Reflection: Economic, Accounting, Management and Business, 4(1), 221-230. https://doi.org/10.37481/ sjr.v4i1.270
- 44. Sürücü, Ö., Öztürk, Y., Okumus, F., & Bilgihan, A. (2019). Brand awareness, image, physical quality and employee behavior as building blocks of customer-based brand equity: Consequences in the hotel context. *Journal of Hospitality* and Tourism Management, 40,

114-124. https://doi.org/10.1016/j. jhtm.2019.07.002

- 45. Verma, P., Dumka, A., Bhardwaj, A., Ashok, A., Kestwal, M. C., & Kumar, P. (2021). A statistical analysis of impact of COVID19 on the global economy and stock index returns. SN Computer Science, 2(1), 27. https://doi. org/10.1007/s42979-020-00410-w
- 46. Vrydagh, J. (2022). Measuring the impact of consultative citizen participation: Reviewing the congruency approaches for assessing the uptake of citizen ideas. *Policy Sciences*, 55(1), 65-88. https://doi.org/10.1007/s11077-022-09450-w
- 47. Wang, C., Xu, J., Zhang, T. C., & Li, Q. M. (2020). Effects of

professional identity on turnover intention in China's hotel employees: The mediating role of employee engagement and job satisfaction. *Journal of Hospitality and Tourism Management*, 45, 10-22. https://doi.org/10.1016/j. jhtm.2020.07.002

- 48. Webster, J. (2014). Shaping women's work: Gender, employment and information technology. Routledge.
- Zhang, F., Wei, L., Sun, H., & Tung, L. C. (2019). How entrepreneurial learning impacts one's intention towards entrepreneurship: A planned behavior approach. *Chinese Management Studies*, 13(1), 146-170. https://doi. org/10.1108/CMS-06-2018-0556