

## Research Article

# The Adoption of Planned Behavior and Push-Pull Theories: Predicting Woman's Engagement Self-Employed Modelling

Rauly Sijabat<sup>1\*</sup> and Sih Darmi Astuti<sup>2</sup><sup>1</sup>Faculty of Economics and Business, Universitas PGRI Semarang, 50232, Indonesia<sup>2</sup>Faculty of Economics and Business, Universitas Dian Nuswantoro Semarang, 50419, Indonesia**ORCID**Rauly Sijabat: <https://orcid.org/0000-0003-1514-8668>**Abstract.**

Behavioral theory states that the formation of certain behaviors does not happen suddenly. There are precursor factors that push this behavior. This study investigates how engaged self-employed behavior in women can be formed. Considering that self-employed research on women is still limited and the contradiction in the literature regarding the necessity of entrepreneurship factor as the pushing negative factor and the opportunity of entrepreneurship as the pulling positive factor, this study develops an empirical model that tests the necessity of entrepreneurship and the opportunity of entrepreneurship factors as the motivational factors that push the willingness and self-engagement in women. The research results show that individual personality can be either an opportunity or a necessity of entrepreneurship factor that pushes self-employed willingness. Meanwhile, the environmental barriers factor is the necessity of entrepreneurship factor and the individual socioeconomic is the opportunity of entrepreneurship factor.

**Keywords:** engagement of self-employed, willingness of self-employedCorresponding Author: Rauly  
Sijabat; email:  
raulysijabat@upgris.ac.id**Published** 12 March 2024Publishing services provided by  
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## 1. Introduction

The contribution of entrepreneurship in driving the development economic activities places entrepreneurship at the center of the researchers attention [1–3]. The researchers [4–6] state that countries with high unemployment rates are looking for the alternative economic systems whose policies are focused on facilitating the birth of entrepreneurs, especially from college graduates. A fact was revealed in the studies of [4] and [7] that there is greater tendency that residents who are graduates of higher education have higher proportion of unemployed than unemployed people who come from lower levels of education. The results of this study direct the education system to change the mindset from looking for work to creating jobs so that entrepreneurs are born from college graduates and make entrepreneurship a career choice. Several studies

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show that currently entrepreneurship has become a career choice in various countries [8,9] in several regions [1] and has even become a career choice in several business administration study programs and students [10–12].

The dwindling job opportunities caused by the economic crisis, the increase in unemployment and the erosion of several fields of work due to digitalization have triggered the decision to become self-employed [13]. According to [6,14] researches on entrepreneurial intentions show that the intention to engage in self-employed has a relationship with the decision to start involvement in self-employed. The study [13] states that the decision to engage in self-employed is based on several positive reasons such as market opportunities, improved financial conditions, personal autonomy and the possibility of more significant economic need motives. Motivational factors such as large profits, personal satisfaction as an entrepreneur and being able to work in the desired area can make entrepreneurship an attractive career choice that encourages running one's own business (self-employed) [11,15–18]. However, there are also inhibiting factors that make entrepreneurship less attractive career choice such as lack of capital, lack of skills, and unpleasant realities [11,19,20]. Several literature reviews and empirical studies were carried out in an effort to understand the attitudes, perceptions and behavior that underlie the decision to involve oneself as self-employed person [21]. [13] stated that in practice it is not easy to map the push factors and the pull factors that explain engagement behavior as self-employed.

Several researchers such as [22,23] state the need to focus studies to examine the inhibiting factors as well as the supporting factors that can explain tendencies or preferences to engage as entrepreneurs. However, reality shows that the determining factors for entrepreneurial intentions vary among countries, communities, cultures and even among individual perceptions [8]. This means that there is no established model to explain the involvement in self-employed. There is still a need for studies involving empirical data to determine the antecedents of the involvement in self-employed.

The studies conducted by [8,15,17,24,25] have borrowed from the Theory of Planned Behavior (TPB) [22] as an analytical tool to explain self-employed behavior through self-employed intentions with the predictors of three motivational factors, namely attitudes towards behavior, subjective norms and perceived behavioral control. Even several other studies such as [11,12] emphasize the contextual factors that encourage and inhibit involvement in self-employed using Lu'thje & Franke's Model [23].

## 2. Method

This research used quantitative design approach. The number of samples and sampling technique were determined using non-probability sampling technique with the purposive sampling approach. This means that respondents with certain criteria that have been determined by researchers can become research respondents. The criteria for respondents determined by researchers include being female residents of Semarang City, their employment status is self-employed, and they have been running their business for at least one year. Data collection was carried out through structured interviews using questionnaire. The questionnaire includes statement items developed from indicators adopted and adapted as measuring tools of research variables. This statement is closed in nature and the answer has been provided using the Agree Disagree Scale in the range 1-10 and then data analysis was carried out using the AMOS approach.

## 3. Results and Discussion

### 3.1. Results

In data analysis using the Structural Equation Modeling (SEM) approach, there are three stages carried out, namely confirmatory analysis, goodness of fit testing and hypothesis testing.

### 3.2. Confirmatory Analysis

To measure the indicators of latent variable tested, using confirmatory factor analysis. Confirmatory factor analysis analyzed by the value of standardized regression weight, variance extracted and reliability construct. The result as below.

#### 3.2.1. 1. Standardized Regression Weight Analysis

Standardized Regression Weight analysis analyzed by the value Regression Weight and probability. The followings are the results of the analysis of the Standardized Regression Weight values on the research variables.

The results of the confirmatory analysis for each measuring indicators of the research variables presented in the table above provide information to the researchers regarding

TABLE 1: Standardized Regression Weight Analysis for Research Variables.

			Std Estimate	C.R.	P
X1	<—	Individual_Socioeconomic	.752		
X2	<—	Individual_Socioeconomic	.727	8.852	***
X3	<—	Individual_Socioeconomic	.753	8.719	***
X4	<—	Individual_Socioeconomic	.810	9.314	***
X5	<—	Individual_Socioeconomic	.736	8.642	***
X6	<—	Individual_Personality	.139		
X7	<—	Individual_Personality	.166	1.303	.192
X8	<—	Individual_Personality	.856	1.648	.099
X9	<—	Individual_Personality	.879	1.649	.099
X10	<—	Individual_Personality	.874	1.653	.098
X11	<—	Individual_Personality	.854	1.651	.099
X12	<—	Individual_Personality	.075	.775	.438
X13	<—	Environmental_Barriers	.147		
X14	<—	Environmental_Barriers	.810	1.702	.089
X15	<—	Environmental_Barriers	.850	1.703	.089
X16	<—	Environmental_Barriers	.882	1.713	.087
X17	<—	Entrepreneurship_Necessity	.842	10.960	***
X18	<—	Entrepreneurship_Necessity	.780	9.960	***
X19	<—	Entrepreneurship_Necessity	.861	11.741	***
X20	<—	Entrepreneurship_Necessity	.797		
X21	<—	Entrepreneurship_Opportunity	.124		
X22	<—	Entrepreneurship_Opportunity	.750	1.450	.147
X23	<—	Entrepreneurship_Opportunity	.882	1.446	.148
X24	<—	Entrepreneurship_Opportunity	.894	1.453	.146
X25	<—	Willingness	.894		
X26	<—	Willingness	.857	14.009	***
X27	<—	Willingness	.893	14.808	***
X28	<—	Engaged	.039	.452	.651
X29	<—	Engaged	.799		
X30	<—	Engaged	.776	10.368	***
X31	<—	Engaged	.864	11.440	***
X32	<—	Engaged	.778	10.136	***
X33	<—	Engaged	.793	10.687	***

Source: Processed primary data, 2023

the accuracy of the indicators as measuring tools. The standardized regression weight values that do not meet the required criteria indicate that the indicators adopted are not appropriate indicators to reflect the variables studied. Referring to these results, the indicators that did not meet were excluded and were not included as measuring tools for research variables.

### 3.2.2. 2. Reliability Construct and Variance Extracted

To measure the relatively measurement using reliability test. The acceptable score for reliability construct is above 0.70 while Variance Extract is above 0.50. The results of the Reliability Construct and Variance Extracted calculations are below.

TABLE 2: Reliability Construct and Variance Extracted.

Variable	Reliability	Variance
Individual socioeconomic	0.869	0.572
Individual personality	0.923	0.749
Environmental barriers	0.884	0.718
Necessity of entrepreneurship	0.892	0.674
Opportunity of entrepreneurship	0.882	0.714
Willingness of self-employed	0.912	0.775
Engaged to self-employed	0.900	0.644

Source: Processed Primary Data, 2023

According to the measurement of *Reliability Construct and Variance Extracted* can be concluded each indicators observed reflects the research variables.

### 3.3. Research Model Feasibility Testing

Below the estimation research of empirical model using Structural Equal Modeling (SEM) analysis.

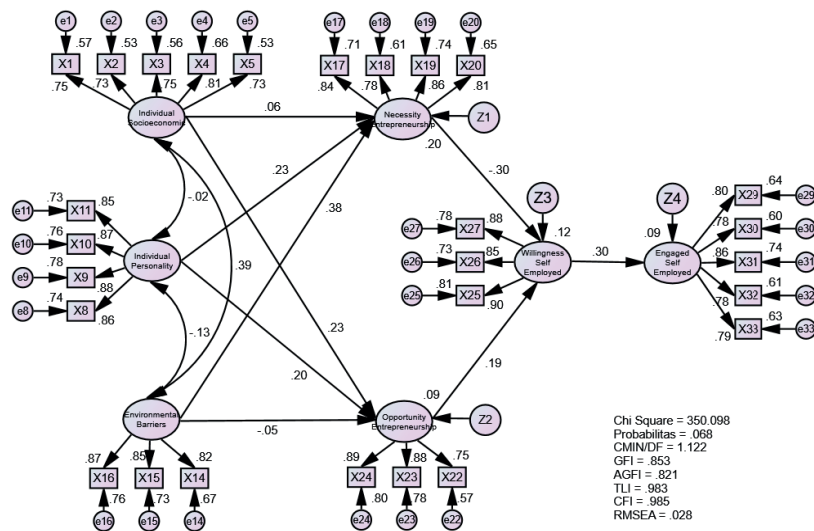
The feasibility of the empirical research model testing was carried out by analyzing the Chi Square value.

TABLE 3: Results of Research Model Feasibility Testing.

Goodness of Fit Index	Cut off Value	Result	Model Evaluation
Chi-Square (df = 312)	< 354.194	350.098	Good
Probability	≥ 0.05	0.068	Good
CMIN/DF	≤ 2.00	1.122	Good
GFI	≥ 0.90	0.853	Marginal
AGFI	≥ 0.90	0.821	Marginal
TLI	≥ 0.95	0.983	Good
CFI	≥ 0.95	0.985	Good
RMSEA	≤ 0.08	0.028	Good

Source: Processed primary data, 2023

The research model testing developed in this study using empirical data produced calculated Chi-Square value of 350,098 with the probability value of 0.068. The Chi



Source: Processed primary data, 2023

Figure 1: Research Model Testing.

Square table value for this research at df of 312 is 354,194. Because the calculated Chi-Square value (350.098) is smaller than the critical/ table value (354.194), it can be concluded that the engaged self-employed modeling developed and tested in this study is not different from the estimated population or in other words, the model is considered good. (accepted).

### 3.4. Hypothesis Testing

To test the research hypothesis by analyzed the Critical Ratio (CR) value and the probability. The result as below.

#### 1. The Influence of Individual Socioeconomic on Necessity of Entrepreneurship Testing

The individual socioeconomic and the necessity of entrepreneurship variables testing resulted in CR value = 0.663 with significance value of 0.507. Because the CR value (0.663) is < 1.980 and the significance value 0.507 is > 0.05, it means that individual Socioeconomic is proven to have positive and insignificant effect on the necessity of entrepreneurship.

TABLE 4: Hypothesis Testing.

			Std Estimate	C.R.	P
Entrepreneurship_Necessity	<—	Individual_Socioeconomic	.063	.663	.507
Entrepreneurship_Necessity	<—	Individual_Personality	.232	2.746	.006
Entrepreneurship_Necessity	<—	Environmental_Barriers	.384	3.913	***
Entrepreneurship_Opportunity	<—	Individual_Socioeconomic	.232	2.272	.023
Entrepreneurship_Opportunity	<—	Individual_Personality	.204	2.285	.022
Entrepreneurship_Opportunity	<—	Environmental_Barriers	-.047	-.476	.634
Self_Employed_Willingness	<—	Entrepreneurship_Necessity	-.298	-3.376	***
Self_Employed_Willingness	<—	Entrepreneurship_Opportunity	.187	2.146	.032
Engaged_Willingness_Employed	<—	Self_Employed_Willingness	.300	3.410	***

Source: Processed primary data, 2023

## 2. The Influence of Individual Personality on Necessity of Entrepreneurship Testing

The individual personality and the necessity of entrepreneurship variables testing resulted in CR value = 2.746 with significance value of 0.006. Because the CR value (2,746) is > 1.980 and the significance value 0.006 is < 0.05, it means that individual personality is proven to have significant positive effect on the necessity of entrepreneurship.

## 3. The Influence of Environmental Barriers on Necessity of Entrepreneurship Testing

The environmental barriers and the necessity of entrepreneurship variables testing resulted in CR value = 3.913 with significance value of 0.000. Because the CR value (3.913) is > 1.980 and the significance value 0.000 is < 0.05, it means that environmental barriers are proven to have significant positive effect on the necessity of entrepreneurship.

## 4. The Influence of Individual Socioeconomic on Opportunity of Entrepreneurship Testing

The individual socioeconomic and the opportunity of entrepreneurship variables testing resulted in CR value = 2.272 with significance value of 0.023. Because the CR value

(2.272) is  $> 1.980$  and the significance value 0.023 is  $< 0.05$ , it means that individual socioeconomic is proven to have significant positive effect on the opportunity of entrepreneurship.

### **5. The Influence of Individual Personality on Opportunity of Entrepreneurship Testing**

The individual personality and the opportunity of entrepreneurship variables testing resulted in CR value = 2.285 with significance value of 0.022. Because the CR value (2.285) is  $> 1.980$  and the significance value 0.022 is  $< 0.05$ , this means that individual personality has been proven to have significant positive effect on opportunity of entrepreneurship.

### **6. The Influence of Environmental Barriers on Opportunity of Entrepreneurship Testing**

The environmental barriers and the opportunity of entrepreneurship variables testing resulted in CR value = -0.476 with significance value of 0.634. Because the CR value (-0.476) is  $< 1.980$  and the significance value 0.634 is  $> 0.05$ , this means that environmental barriers have been proven to have negative and insignificant effect on opportunity of entrepreneurship.

### **7. The Influence of Entrepreneurship Necessity on Self-Employed Willingness Testing**

The entrepreneurship necessity and self-employed willingness variables testing resulted in CR value = -3.376 with significance value of 0.000. Because the CR value (-3.376) is  $> 1.980$  and the significance value 0.000 is  $< 0.05$ , this means that the necessity of entrepreneurship has been proven to have significant negative effect on self-employed willingness.

## **4. Discussion**

### **4.1. Necessity of Entrepreneurship**

The results of this study show that the necessity of entrepreneurship or “push motivation” factors are positively and significantly explained by individual personality factors



and environmental barriers, while individual economic factors are proven to have positive and insignificant effect on the necessity of entrepreneurship. According to Oxenfeldt (1943), unemployed individuals or individuals with low-wage job prospects are necessity factors that encourage someone to engage in self-employed. Then it was explored and classified by Knight (1921) that work activities can be classified into three groups, namely unemployment, self-employed and wage employment.

The impact of unemployment is lowering the opportunity costs of entrepreneurship, thus encouraging individuals to start their own entrepreneurial businesses—is often referred to as the push effect of unemployment. The evidence of the drive for unemployment or the “escape from unemployment” effect has been applied by several studies [26–32]. In research explaining the decision to become self-employed, the push motivation is usually associated with unemployment. However, there are other factors that may push individuals toward new venture creation, for example family pressure to transfer the business to a new generation [33] or job dissatisfaction [34]. Sarasvathy (2004) proposed various types of necessity of entrepreneurship, including individuals being fired from their jobs; individuals who decide to leave paid employment because their employers do not want to commercialize their ideas or inventions; and individuals who are “unemployable”, for example due to lack of educational or language skills (immigrant entrepreneurs) or criminal background.

## 4.2. Opportunity of Entrepreneurship

In this study, it was found that opportunity of entrepreneurship or “pull motivation” factors can be significantly positively explained by individual socioeconomic factors and individual personality. Meanwhile, environmental barriers are statistically proven to have insignificant negative effect on entrepreneurship opportunities. According [35], individual characteristics (including sociocultural factors and economic, social and human capital) determine how individuals experience, appreciate and understand the ‘disturbing’ events or those that are perceived as opportunities and guide how they react.

## 4.3. Self-Employed Willingness

The results of this study show that self-employed willingness can statistically be explained by the necessity of entrepreneurship factor and the opportunity of entrepreneurship factor. Furthermore, the empirical evidence in this study shows that the necessity of entrepreneurship factor has negative impact on self-employed

willingness. This evidence strengthens the results of the study by [35] stated that the necessity of entrepreneurship is negative factor that “pushes” individuals (push motivation) towards the growth of self-employed willingness. Push motivation or necessity of entrepreneurship arises from long periods of not working or being unemployed, family pressure and individual dissatisfaction with current conditions.

Other findings from this study also show that opportunity of entrepreneurship is a positive “pull motivation” factor in explaining self-employed willingness. According to [35], Pull motivation or opportunity of entrepreneurship includes the need for achievement, the desire to be independent and the opportunity to build social power (reputation, etc.).

#### 4.4. Engaged to Self-Employed

The results of this study empirically show that engaged to self-employed is driven by self-employed willingness. Referring to the Theory of Planned Behavior from Ajzen (1991), the important factor of driving engaged self-employed behavior is the motivation factor to engage in the behavior in question (self-employed) which in this study is conceptualized as the willingness of self-employed factor. The results show that empirically engaged self-employed is statistically proven to be explained by the willingness of self-employed factor.

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