

# Entrepreneurial Intention Among Students During the Covid-19 Pandemic: Exploring Contextual Factor of Entrepreneurial Intention

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## ABSTRACT

A country needs a large number of entrepreneurs to support the resilience of the national economy. The impact of the Covid-19 pandemic, such as the economic recession and the increasing use of technology in the economy and business, can be seen as a barrier or support for students to have the intention to become entrepreneurs. This study aims to determine the entrepreneurial intention of students during the Covid-19 pandemic. Data were collected from 222 students across various degree and universities in Indonesia. This study used Structural Equation Model (SEM) for analyzing the data. The findings showed that personal attitude was found to be mediating the impact of relational support and educational supports towards entrepreneurial intention. It also found the direct impact of perceived recessionary of economy context towards entrepreneurial intention. The result highlights greater attention to encourage entrepreneurial intention of the student by providing more support from family, friends, and university. It also highlights digital technology usage maximizes the support that students had and boosts the student's understanding of possibilities that exist in an unexpected situation like a pandemic.

**Keywords:** *Relational Support, Educational Support, Recessionary of Economy Context, Personal Attitude, Entrepreneurial Intention.*

## 1. INTRODUCTION

Entrepreneurship is an essential driver of economic growth and is considered to contribute to job creation, the emergence of innovation, and stimulating competition in a country [1]. Entrepreneurs who are engaged in Small and Micro Enterprises (SMEs) can absorb 75.33% of Indonesia's workforce or around 59 million people from the non-agricultural workforce [2].

At the end of 2019, Covid-19, caused by the novel coronavirus, emerged and spread throughout the world was declared as a pandemic disease by the World Health Organization (WHO) on March 11, 2020 [3]. The government took some measures to resist the spread of Covid-19, such as closing the social and economic sectors, which cause global pressure on all sectors [4]. As an effect of the pandemic, it can be ascertained that 92% of 180 countries will have negative economic growth and enter into an economic crisis due to Covid-

19 [5]. Indonesia has experienced a prolonged economic slowdown and enters into an economic recession with growth below 5% and slowed down to -2.07% at the end of 2020 [5], [6].

The Covid-19 pandemic also increasing the number of unemployed in Indonesia to 9,77 million people, or 37.61% from the previous year [7]. It is also increasing the unemployment rate of university graduates by 7.35% in 2020 from only 5.88% in 2018 [2]. It also reducing labour wages from 2.91 million rupiahs in 2019 to 2.76 million rupiahs in 2020 or around 5.2% [8] and decreasing the availability of job vacancies advertisements throughout 2020, from 34,4 thousand in the fourth quarter of 2019 to 11,4 thousand in the third quarter of 2020 [9].

Despite many negative effects arise, the Covid-19 pandemic can also be a source of new opportunities. There are many new businesses that are potentially

profitable because of the changes caused by the Covid-19 pandemic, such as e-commerce and online services [8]. In Indonesia, The Covid-19 pandemic, increased buying and selling of products in the marketplace, increasing 3.2 times in March and 4.8 times in April from sales in January 2020 [6]. It becomes an enormous opportunity, because Indonesia has the largest digital economic value in the ASEAN, with predicted to reach 133 billion USD in 2025, also has an enormous digital market potential with 267 million population, with an internet market penetration of 55% in 2018 increasing to 65% in 2019 [10].

Entrepreneurial intention is a significant construct for predicting planned entrepreneurial behavior and specifying the process of business creation [11], [12]. One of the widely used model which provide many empirical supports to predict entrepreneurial intentions is the TPB model [13]–[15]. TPB models explained entrepreneurial intention by three antecedents: attitudes, subjective norms, and perceived behavioral control (PBC) [16]. According to [13], [14], personal attitude (PA) has a strong effect on entrepreneurial intention. In line with this view, the study conducted by [17] found that personal attitude had a much stronger effect on entrepreneurial intention. Therefore, this study only focuses on personal attitude.

According to [8], the effect of the Covid-19 pandemic on entrepreneurial intention is one of the areas of research that are relevant and urgent to study, whether the effect of the pandemic has a positive or negative impact on entrepreneurial intention. Therefore, this study examines one of the impacts, namely an economic recession. The recessionary economy has a dual effect, as an obstacle or opportunity that affects the perception of individuals in choosing a career as an entrepreneur. In the research by [14], it is known that the context of economic recession has a direct influence on entrepreneurial intention. Student's entrepreneurial intention will higher when they perceived the environment (recessionary of economy) as favorable to start a business and become entrepreneurs.

In addition, it cannot be denied that digital technology has influenced people's activities, jobs, culture, needs, and increased opportunities to establish businesses, so it can affect entrepreneurial intention [15], [18]. In the Entrepreneurial Support Model (ESM), contextual factors predicting entrepreneurial intentions are relational, educational, and structural support [19]. Relational support is entrepreneurial support from friends and family [17]. In the research of [15], digitalization such as social media offers opportunities to build social networks that affect entrepreneurial intentions virtually. Educational support refers to the supports obtained from universities. In research of [15], the usage of ICT in higher education can provide skills training to become entrepreneurs and affect

entrepreneurial intentions. In the research of [20], it is known that relational support and educational support are strong predictors of entrepreneurial intentions. Therefore, this study only focuses on relational support and educational support.

Based on the description above, it is interesting to see these two conditions' effect on entrepreneurial intentions, especially among students. Students are a promising segment to become entrepreneurs in the future and are expected to create jobs to increase the number of entrepreneurs in Indonesia [21], [22]. This paper will be presented in a structure that includes an introduction, literature review, methods, results, discussion, and conclusions.

### ***1.1 Entrepreneurial Intention***

Intention describes as a motivational factor that can influence a person's behaviour which is characterized by how much effort is planned to perform that behaviour [16]. In entrepreneurship theory, the intention is proven to be the best element to understanding the process of creating a new business or entrepreneurial behavior in the future [23], [24]. Entrepreneurial intention is defined as the individual's commitment to starting a new business [25], individuals with high entrepreneurial intentions are more likely to start a business than those with lower entrepreneurial intentions [26].

Two core models in the entrepreneurship literature can predict a person's intentions. The first model is the Entrepreneurial Event Model (EEM) proposed by [27], specifically designed to explain entrepreneurship and entrepreneurial intention. The second model is Theory of Planned Behavior (TPB), proposed by [16] which is a general model to explain human behavior. TPB become one of the most used and widely accepted theories in entrepreneurial intention (EI) [28] because TPB enables to predict and understand entrepreneurial intention by paying attention to personal factors and social factors [11].

### ***1.2 Personal Attitude***

[16] defines personal attitude as the total evaluation of an individual in performing behavior. Attitude is an expression of liking or disliking an object that affects individual behavior [12]. Personal Attitude refers to an individual's assessment about being an entrepreneur, either positive or negative [28].

In the TPB model, personal attitude is assumed to be a function of a behavioral belief, which is theorized to produce positive or negative attitudes towards the behavior [29]. Personal attitude is called a strong predictor to explain entrepreneurial intentions [13], [14], [28]. Many studies also linked environmental factors to

personal attitudes, such as relational support and educational support [15], [17], [19].

### ***1.3 Relational Support***

Relational support is defined as support from family and friends who encourage someone to choose a career as an entrepreneur [19]. Entrepreneurs create successful businesses by taking advantage of opportunities and social networks that fit their business [30]. Social media provides opportunities to build social relationships and social capital that provide support for individuals to carry out daily tasks, channel aspirations, and influence individual career choices and entrepreneurial intentions [15].

An Individual's decision to choose a career path is strongly influenced by family members and friends [31]. The likelihood of an individual becoming an entrepreneur increases if there are family members who have become entrepreneurs before [32]. Previous studies found that relational support have a direct influence on entrepreneurial intention [15], [17], [33]. Relational support is also found to influence personal attitude [15], [17]. Research by [17] found that support of the family and friends has significant effect on student in Turkey which has collectivism culture and also personal attitude mediates the relationship between relational support and entrepreneurial intention. Thus, following hypotheses are developed:

*Hypothesis 1: Personal attitude mediates the relationship between relational support and entrepreneurial intention.*

### ***1.4 Educational Support***

Universities can be a powerful source of support for students to become entrepreneurs. Universities as the institution of professional education can provide educational support for student to acquire knowledge about entrepreneurship [19]. Many studies have found a positive relationship between entrepreneurial intentions in young adults and the quality of training opportunities [34], [35].

The era of digitalization will further bring changes in the educational environment. The usage of ICT in the university can affect student's entrepreneurial intentions, with the digitization of teaching materials, the ease of accessing information and knowledge on an international scale, which provides skills training to become entrepreneurs [15]. Students can also be motivated by media coverage of successful entrepreneurship in several sectors [15]. Educational support is found to have a positive influence on a student's intention to become entrepreneurs [15], [19], [22]. Educational support is also found to influence

personal attitude [15]. Thus, following hypotheses are developed:

*Hypothesis 2: Personal attitude mediates the relationship between educational support and entrepreneurial intention.*

### ***1.5 Recessiary of Economy Context***

Individual's decisions to start a business cannot be separated from the economic environment in which the business will operate [19], [36]. The economic conditions have a dual effect on individual perceptions of choosing a career as an entrepreneur. In times of economic recession, the obstacles that occur, including financial difficulties, reduced customer demand, and low returns from the business [37], can reduce an individual's intention to become entrepreneurs because the economic recession is considered unfavorable for starting a new business [14].

On the other hand, an economic recession can be seen as new opportunities or considered the best choice due to joblessness and high unemployment [37], [38]. Therefore, it will be increasing an individual's intention to become an entrepreneur [14]. Research conducted by [22] also supports this by saying that the economic crisis influenced individual entrepreneurial intention. Other studies are also in line with the view that the environmental context, especially the recession, is directly related to becoming entrepreneurs [39], [40]. Thus, following hypotheses are developed:

*Hypothesis 3: Recessiary economy context influences entrepreneurial intention.*

## **2. METHOD**

### ***2.1 Sample***

This study collected data from online questionnaires, self-administrated by respondents. From 278 students who participated, 56 students did not meet the respondent's criteria such as, "currently, active as a student and in the last year/semester of their study", leaving sample of n = 222 students. The majority of respondents is female (70.7%). Respondent's ages ranged from 18 years to 49 years with majority respondent's ages is 21 years (19.4%).

The majority of students, study at state universities 73.4%, while 21.6% attend private universities. The majority of students undertake undergraduate education (49.1%), followed by graduate education (41%), diplomas (7.7%), and postgraduate education (2.3%). Students who get/ will get entrepreneurship courses is 65.8%, the entrepreneurship courses namely introduction of Business, Entrepreneurship and Business Initiation. Student who has working experience 68.4%, while who has entrepreneurship experience 56.3%.

## 2.2 Measures

Respondents had to indicate variables in 7-point Likert scale from strongly disagree to strongly agree. *Entrepreneurial Intention and Personal Attitude* were measured using the Entrepreneurial Intention Questionnaire (EIQ) developed by [28]. *Entrepreneurial Intention* consist of 6 items and *Personal Attitude* consist of 5 items (Table 1).

*Relational and Educational Support* were measured using a questionnaire developed by [15] which included

a digitalization aspect to entrepreneurship support model scale developed by [19] in their items. *Relational Support* consist of 5 items and *Educational Support* consist of 7 items (Table 1).

*Recessionary Economy Context* was measured using 4 items (Table 1) developed by [14]. The newly developed scale consists 9 items of recessionary economy context being factor analyzed and checked for unidimensionality, 4 items were used to further analysis in the research of [14].

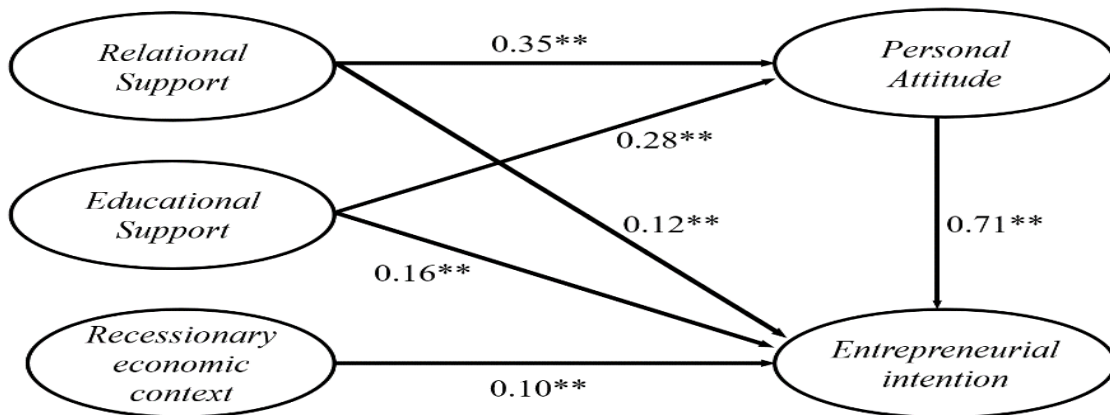
**Table 1.** Descriptive Statistics

| <b>Measurement of constructs</b>   |                   |                 |              |                  |            |
|--|-------------------|-----------------|--------------|------------------|------------|
| <b>Latent Variable</b>   | <b>Indicators</b> | <b>Loadings</b> | <b>Means</b> | <b>Std. Dev.</b> | <b>AVE</b> |
| <b>Relational Support</b>  |                   |                 |              |                  |            |
| If I decide to be an entrepreneur, my close network (from work, school, and neighborhood) will support me.   | RS1               | 0.68            | 5.710        | 1.194            | 0.512      |
| If I decide to be an entrepreneur, my friends will support me.   | RS2               | 0.84            |              |                  |            |
| If I decided to be an entrepreneur, my family members will support me.   | RS3               | 0.55            |              |                  |            |
| If I decide to be an entrepreneur, my friends on the Social Networks will support me.  | RS4               | 0.76            |              |                  |            |
| <b>Educational Support</b>   |                   |                 |              |                  |            |
| The education in university encourages me to develop creative ideas for being an entrepreneur.   | ES1               | 0.72            | 5.456        | 1.333            | 0.570      |
| My university develops my entrepreneurial skills and abilities.  | ES2               | 0.69            |              |                  |            |
| My university provides the necessary knowledge about entrepreneurship.   | ES3               | 0.64            |              |                  |            |
| The knowledge acquired from Internet helps me to become an entrepreneur.   | ES4               | 0.56            |              |                  |            |
| ICT usage in university encourages me to develop creative ideas for being an entrepreneur.   | ES5               | 0.84            |              |                  |            |
| Availability of ICT tools at the university (Desktop computer, Laptop, Tablet computer, Printer, USB (memory) stick, Interactive whiteboard, E-book reader (e.g., Amazon Kindle) increases chances for me to become an entrepreneur. | ES6               | 0.73            |              |                  |            |
| Access to the Internet at the university increases chances for me to become an entrepreneur.   | ES7               | 0.69            |              |                  |            |
| <b>Recessionary of Economy Context</b>   |                   |                 |              |                  |            |
| For me, starting up a business in the current recession is a serious barrier. (R)  | REC2              | 0.76            | 3.710        | 1.568            | 0.663      |
| Starting a business in the current economic climate would pose serious financial difficulties for me. (R)  | REC3              | 0.82            |              |                  |            |
| I see the current economic climate as unfavorable for me to start a business. (R)  | REC4              | 0.86            |              |                  |            |
| <b>Personal Attitude</b>   |                   |                 |              |                  |            |
| A career as entrepreneur is attractive for me.   | PA2               | 0.83            | 5.680        | 1.336            | 0.664      |
| If I had the opportunity and resources, I'd like to start a firm.  | PA3               | 0.77            |              |                  |            |
| Being an entrepreneur would entail great satisfactions for me.   | PA4               | 0.84            |              |                  |            |
| Among various options, I would rather be an entrepreneur.  | PA5               | 0.82            |              |                  |            |
| <b>Entrepreneurial Intention</b>   |                   |                 |              |                  |            |
| I am ready to do anything to be an entrepreneur.   | EI1               | 0.83            | 5.198        | 1.520            | 0.721      |
| My professional goal is to become an entrepreneur.   | EI2               | 0.72            |              |                  |            |
| I will make every effort to start and run my own firm.   | EI3               | 0.89            |              |                  |            |
| I am determined to create a firm in the future.  | EI4               | 0.88            |              |                  |            |
| I have very seriously thought of starting a firm.  | EI5               | 0.89            |              |                  |            |
| I have the firm intention to start a firm someday.   | EI6               | 0.87            |              |                  |            |

**Table 2.** Latent Variable Correlations

|                                 | Personal Attitudes | Entrepreneurial Intention | Relational Support | Educational Support | Recessionary of Economy Context |
|---------------------------------|--------------------|---------------------------|--------------------|---------------------|---------------------------------|
| Personal Attitudes              | <b>0.888</b>       |                           |                    |                     |                                 |
| Entrepreneurial Intention       | 0.83               | <b>0.939</b>              |                    |                     |                                 |
| Relational Support              | 0.44               | 0.51                      | <b>0.804</b>       |                     |                                 |
| Educational Support             | 0.40               | 0.47                      | 0.33               | <b>0.901</b>        |                                 |
| Recessionary of Economy Context | 0.02               | 0.11                      | 0.19               | -0.15               | <b>0.854</b>                    |

Note: Diagonal elements (in bold) are the Construct Reliability (CR)



**Figure 1.** The hypothesized structural model result  
\*\* $p < 0.01$

### 3. RESULTS AND DISCUSSION

The model fit and hypotheses was tested using Structural Equation Model (LISREL 8.80). According to [41], convergent validity is indicated by significant high factor loadings with estimates  $\geq 0.50$ . Outputs showed satisfactory results with the exception of three indicators, item 5 of relational support, item 1 of recessionary of economy context and item 1 of personal attitude, thus they were excluded from further analysis. Good reliability shown if average variance extracted (AVE)  $> 0.50$  and construct reliability (CR)  $\geq 0.70$  [41]. All variables met the criteria of AVE (Table 1) and CR (Table 2).

To describe the strength of the model’s predictions, several measures were employed. According to [41], to provide a sufficient information, the model needs to have absolute and incremental index which shows good fit ( $>0.90$ ). In this model, absolute fit measures of  $\chi^2 = 575.86$  ( $p$ -value = 0.00);  $df = 241$ ; Root Mean Square Error of Approximation (RMSEA) = 0.079, and incremental fit measures showed Comparative Fit Index (CFI) = 0.96; Normed Fit Index (NFI) = 0.93, and Incremental Fit Index (IFI) = 0.96, which indicated that the model is fit.

The structural model in Figure 1 showed that relational support ( $\beta = 0.12$ ;  $p < 0.01$ ), educational support ( $\beta = 0.16$ ;  $p < 0.01$ ), recessionary of economy context ( $\beta = 0.10$ ;  $p < 0.01$ ), and personal attitude ( $\beta = 0.71$ ;  $p < 0.01$ ) positively affect entrepreneurial intention. Therefore, *H3* that recessionary of economy context has a positive effect on entrepreneurial intention is supported. Relational support ( $\beta = 0.35$ ;  $p < 0.01$ ), and educational support ( $\beta = 0.28$ ;  $p < 0.01$ ) positively affect personal attitude. The result also showed significance of mediation role of personal attitude in fully mediating the impact of relational support ( $\beta_{indirect} = 0.25$ ;  $p < 0.01$ ), and educational support ( $\beta_{indirect} = 0.20$ ;  $p < 0.01$ ) towards entrepreneurial intentions. Therefore, *H1* and *H2* that personal attitude mediates the relationship between relational support (*H1*) and educational support (*H2*) to entrepreneurial intention are supported.

In the current condition of the Covid-19 pandemic, students who get support (from university, family and friends) and perceived the support as favorable to them, with appropriate attitude toward entrepreneurship, will increase their intention to start a business and becoming an entrepreneur.



The results showed that relational support has a positive effect on entrepreneurial intentions, and personal attitude mediates the relationship between them. This result is in line with the findings of previous studies by [15], [17] and [33]. Student's positive perception of relational support can be expected to positively influence their attitudes towards entrepreneurship [27]. When student's perception of social or network they had as favorable to entrepreneurship, their attitude to start business may be more favorable [33]. Table 1 showed that RS2 and RS4 had higher loading factors on relational support, 0.84 and 0.76 respectively, which explained that support from friends in general or from social networks had greater impact. Digital technology offers the opportunity for students to have virtual networks and build social relationships in the digital world that can influence their career decisions [15]. In line with research by [15], this study also emphasizes that adding the context of digitization to relational support has a positive effect on entrepreneurial intentions.

On educational support, this study confirms a positive influence on entrepreneurial intentions, and personal attitude mediates the relationship between educational support and entrepreneurial intentions. This result is in line with the findings of previous studies by [15], [22] and [19]. When university as environmental condition seen by students as a favorable condition to entrepreneurship, their attitudes towards becoming an entrepreneur may be more favorable as well and influence their intention to become entrepreneur [33]. The university is expected to provide entrepreneurial skills with various lectures, courses, and training. Digital technology changes the way of learning at universities and affects students' entrepreneurial intentions. In line with previous study by [15], this study also emphasizes that adding the context of digitization to educational support has a positive effect on entrepreneurial intentions.

As a promising segment to become potential entrepreneur, student's entrepreneurial intention needs to be encouraged by universities and relations around them. Item which explained the digital technologies on relational and educational support had high loading factor's score such as RS4 and ES5, 0.76 and 0.84 respectively explained the latent variable (Table 1). The usage of digital technologies will grant the access of information student's need to enter entrepreneurship and help them to build social capital. In addition, digital technologies share online reports of successful entrepreneurs that can motivate the student to enter the entrepreneurial activity [15].

Significance was also found in the relationship between recessionary economic context and entrepreneurial intentions. In line with previous studies by [14] and [22], students who see economic recession

as favorable have stronger entrepreneurial intentions. Further explained by [22], students who have expectations of the possibility to start a business are more affected by their perceived economic conditions than students who actually have an interest in entrepreneurship as a possible career choice.

#### **4. CONCLUSION**

Studying student entrepreneurial intentions is interesting, considering the economic recession caused by the Covid-19 pandemic and the increasing use of technology in student life. The findings of this study showed that all three hypotheses are supported. In line with the study by [15], this study confirms that the dimensions of relational support and education have been changed using digital technology. This study also confirms that the recession in the economic context has an impact on students' interest in entrepreneurship.

This study has several recommendations that future research can address. This study tries to determine the direct effect of one of the effects of the Covid-19 pandemic, namely the economic recession on students' entrepreneurial intentions. Future research might consider involving a mediating effect on the relationship between the recessionary economic context on students' entrepreneurial intentions. This can be tested with the TPB model, whether perceptions of economic recession affect student attitudes towards entrepreneurship or perceived behavioral control. It is also interesting to include the overall impact of the Covid-19 pandemic on students' entrepreneurial intentions, in line with [8]. This research is cross-sectional study, which collects data from respondents only once. It is interesting to conduct a longitudinal study to fully determine the effect of unexpected conditions (before, during, and after) on entrepreneurial intentions.

Future research may also consider studying the effect of digital use on entrepreneurial intentions as an independent variable, which in this study included explicitly in relational and educational support. Respondents come from different college backgrounds and education levels, which specific one can describe a different perspective. Future research can also compare entrepreneurial intention between two different university or education levels to study other perspectives.

#### **AUTHORS' CONTRIBUTIONS**

Eva M.G. as the first author was designed and performed this research. Aryana S. as lecture of first author supervised, guided and reviewed this research.

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