

UNDERSTANDING GENERATION Z'S ENTREPRENEURIAL INTENTION AND BEHAVIOR: EVIDENCE FROM INDONESIA

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ABSTRACT

An important issue for entrepreneurship today is to increase the entrepreneurial intention of a country's productive age groups, including Generation Z. This research seeks to explore key components of the Theory of Planned Behavior (TPB) (attitude, subjective norms, and perceived behavioral control) to explain the entrepreneurial intention and behavior of Generation Z in Indonesia. This study employed a quantitative method. The data was collected through a questionnaire distributed using a purposive sampling technique, and a total of 713 respondents were participated in this study. Partial Least Squares – Structural Equation Modeling (PLS-SEM) was utilized to analyze the data. The results confirm that the TPB can predict the entrepreneurial intention and behavior of Generation Z in Indonesia, demonstrating that the attitude, subjective norms, and perceived behavioral control all have a positive influence on the entrepreneurial intention, as do the attitude and perceived behavioral control on the entrepreneurial behavior. Further, entrepreneurial intention has been shown to mediate the positive relationship between attitude, perceived behavioral control, and entrepreneurial behavior among Generation Z in Indonesia.

JEL: E24, E220, I25, I140.

Keywords: *attitudes, subjective norms, perceived behavioral control, entrepreneurial intention, entrepreneurial behavior.*

1. INTRODUCTION

Entrepreneurship in a country is very prominent and important, with the existence of various types of almost entrenched economic problems, such as very high levels of poverty, which are inversely proportional to the availability of employment, resulting in these economic problems being one aspect of the impact recipients (Ahmed, Chandran, Klobas, Liñán, & Kokkalis, 2020). The greatest benefit stems from technological developments (Ahmed *et al.*, 2020). This solution can be achieved by instilling an entrepreneurial spirit in a country's productive age groups, particularly Generation Z. Generation Z has contributed to efforts to solve economic problems through entrepreneurship, which has proven to be one of the most effective alternatives (Chicca & Shellenbarger, 2018). A previous study suggested that a country's prosperity depends on at least 2% of its total population becoming entrepreneurs (Mourão & Locatelli, 2020).

According to data from the 2020 census, Indonesia has the highest percentage of Generation Z, accounting for 27.94% of the total population (74.93 million) (Fairistha, Bernessa, Cen, & Aryuni, 2023). Generation Z accounts for 25.87% of the total population of Indonesia, indicating that the millennial population is smaller than Generation Z (Tarigan, Susanto, Hatane, Jie, & Foedjiawati, 2021). Meanwhile, many members of Generation Z prefer to start their own businesses. In this case, it is believed that Generation Z in Indonesia has great ambitions to become entrepreneurs (Mahapatra, Bhullar, & Gupta, 2022).

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Further, Generation Z in Indonesia is also believed to have great ambitions for entrepreneurship (Tarigan *et al.*, 2021). It is worth noting that Generation Z has a significant impact on the growth and development of the Indonesian economy in practically every sector, both now and in the future (Segaf, 2022). They are significantly more motivated and committed to achieve their goals (Lanier, 2017). They are also more entrepreneurially oriented; they grew up with the complexity of internet and enjoy discovering new products that meet their needs (Dobrowolski, Drozdowski, & Panait, 2022). They are ambitious, self-confident, and entrepreneurial. They tend to seek their dream job. They are open to changes, motivated by opportunities for growth and advancement, and expect to earn a high income while working in a great team (Vlašić, Keleminić, & Šubić, 2022).

The Theory of Planned Behavior (TPB), which was adapted from psychology, has become an important framework for explaining the entrepreneurial behavior (Ajzen & Dasgupta, 2015). According to the TPB, human behaviors are organized with the intentions of achieving certain consequences (Ajzen, 2020). As a result, deciding to be self-employed is entirely voluntary. In addition, the more people plan to pursue entrepreneurship as a career, the higher the potential to become one (Contreras, Dreu, & Espinosa, 2017). In accordance with the TPB, entrepreneurial intention are determined by attitude, subjective norms, and perceived behavioral control (Ajzen, 2020). Empirical research on the entrepreneurial intention has supported the TPB approach, especially in the context of Generation Z (Barrios, Rodriguez, Plaza, Zapata, & Zuluaga, 2022). Individual attitude, subjective norms, and perceived behavioral control all directly predict intentions (Ajzen, 2020). According to the TPB, they have a positive relationship with an individual's intention to perform a behavior (Ajzen & Dasgupta, 2015). Furthermore, the more actual control the individual has over the behavior, the more likely they are to turn their intentions into concrete actions as soon as the opportunity presents (Sarwar, Ahsan, & Rafiq, 2021).

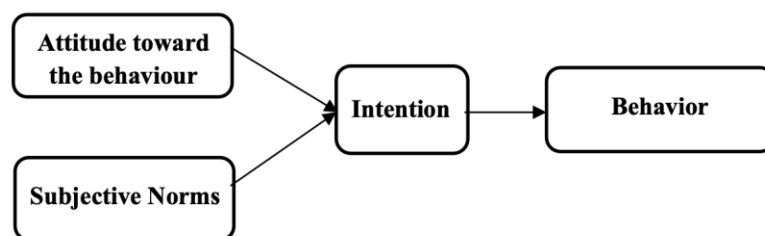
A lot of research has been conducted in relation to the entrepreneurial intention and behavior of Generation Z in several countries with the largest population in the world, such as China (Lavelle, 2021; Shi, Yuan, Bell, & Wang, 2020; Zhang, Wei, Sun, & Tung, 2019), India (Roy, Akhtar, & Das, 2017), Brazil (Moraes, Iizuka, Rocha, & Diaféria, 2022), and the United States (Biraglia & Kadile, 2017). However, there are few researches in the context of Indonesia - a country with the fourth-largest population in the world (Anne, 2023). Despite the fact that Indonesia has a significant population of Generation Z (Anne, 2023), researches on the entrepreneurial intention and behavior of Generation Z in Indonesia are limited. Previous researches had widely implemented TPB key components as mediating variables, such as attitude (Yousaf, Ali, Ahmed, Usman, & Sameer, 2020; Zhang *et al.*, 2019), subjective norms (Villanueva-Flores, Hernández-Roque, Díaz-Fernández, & Bornay-Barrachina, 2023), and perceived behavioral control (Aga & Singh, 2022), to understand entrepreneurial intention and behavior. However, this research provides a novel method by employing the entrepreneurial intention as a mediating variable.

For this reason, this research seeks to explore the key components of TPB (attitude, subjective norms, and perceived behavioral control) and to explain the entrepreneurial intention and behavior of Generation Z in Indonesia. In this study, the entrepreneurial intention is also employed as a mediating variable to determine whether the attitude and perceived behavioral control can indirectly influence the entrepreneurial behavior of Generation Z in Indonesia. Further, practically, the results of this study are expected to provide a better understanding of the drivers of

the entrepreneurial intention and behavior of Generation Z in Indonesia, so that there will be more effective policies to support and increase entrepreneurship among Generation Z to contribute to the economic growth in Indonesia. Meanwhile, theoretically, this study fills the research gap and adds to the literature on entrepreneurship by providing new and challenging insights into understanding the entrepreneurial intention and behavior of Generation Z in Indonesia utilizing the TPB as a theoretical framework.

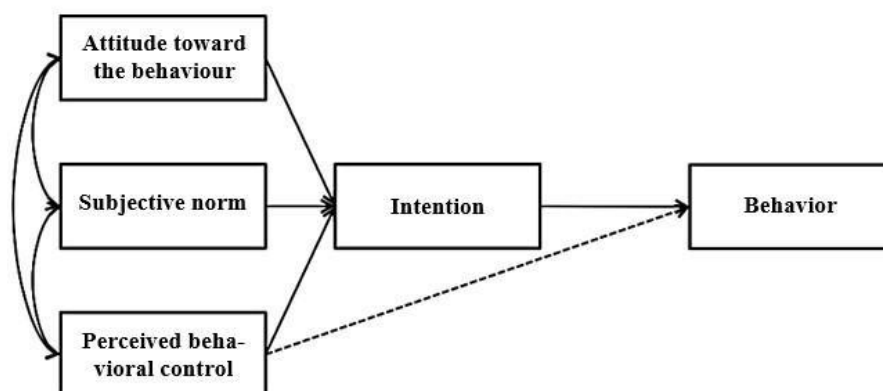
2. THEORETICAL FRAMEWORK AND EMPIRICAL STUDIES

The TPB was developed from the Theory of Reasoned Action (TRA) by Ajzen & Fishbein (2020). This theory was developed in 1967 (Isaid & Faisal, 2015). The TPB is an advanced result and form of development of TRA theory, which Ajzen & Fishbein (2020) revised and expanded on occasion beginning in 1988 (Yadav, Kar, & Rai, 2022). According to Barbera & Ajzen (2020), Ajzen & Fishbein (2020) argued that due to the limited initial framework to explain individual behavior that was free from the will of full control (volitional control), the TRA was revised. The TRA suggests that individual behavior is determined by their intentions and influenced by their attitude and subjective norms. Then, the perceived behavioral control is incorporated into the TPB to expand the scope of TRA (Maheshwari, Kha, & Arokiasamy, 2022; Watch & Wojciechowski, 2016). The following Figure 1 and Figure 2 illustrate the difference between TRA and TPB:



Source: Barbera and Ajzen (2020)

Figure 1. Theory of Reasoned Action



Source: Barbera & Ajzen (2020)

Figure 2. Theory of Planned Behavior

The TPB proposes that the behavior is initiated by intention, and this behavioral intention is determined by the TPB components (attitude, subjective norms, and perceived behavioral

control) (Ajzen, 2020). This present study explicitly explores the factors influencing entrepreneurial intention and behavior based on the TPB (Oré, 2023; Vamvaka, Stoforos, Palaskas, & Botsaris, 2020; Shi *et al.*, 2020) among Generation Z – an important demographic group in the context of entrepreneurship in the digital era (Thangavel, Pathak, & Chandra, 2022). This research subject is different from previous studies as they tended to be general in nature or focused on different age groups, such as Generation Y (Strydom, Meyer, & Synodinos, 2021). Another group that has been widely examined for their entrepreneurial intentions and behavior is students (Majeed, Ghumman, Abbas, & Ahmad, 2021; Fatoki, 2019; Segaf, 2022; Sharahiley, 2020).

In general, Generation Z refers to the generation born between the mid-1990s and the early 2010s (Lanier, 2017). This generation is considered as the true “digital native”, because they were born and raised in a digital and technological environment, learned how to use the technology, interacted in social networks at a young age, and were even inclined to be addicted to the technology (Mahapatra *et al.*, 2022). This generation is also referred to as “Gen Zers”, “post-Millennials”, or “iGen” (Thangavel *et al.*, 2022).

The TPB explains that a positive attitude towards a behavior drives a person’s intention to carry out the behavior (Ajzen, 2020). Developing the awareness of entrepreneurial intention and attitude is very important because both can have an influence and be an initial step to higher-level entrepreneurial intention (Shi, Yao, & Wu, 2020). Furthermore, training and skill development programs can help foster a good attitude toward entrepreneurship among Generation Z (Esfandiar, Sharifi-Tehrani, Pratt, & Altinay, 2019). Research results by Thelken & de Jong (2020) highlighted the importance of self-transcendence values and future orientation for understanding the attitudes towards entrepreneurship. Perceived attitudes, in turn, positively influence the entrepreneurial intention (Bergmann, Hundt, & Stenberg, 2016). Similar findings were also revealed by Gupta, Sharma, & Rajput (2024), Vamvaka *et al.* (2020), and Shi *et al.* (2020). Therefore, the first hypothesis that can be proposed is as follows:

H1: Attitude has a positive influence on the entrepreneurial intention of Generation Z in Indonesia.

The subjective norms, often known as social pressure, are divided into two categories: normative beliefs and motivation for compliance. The former considers whether individuals in positions of power may disapprove or approve of their actions, such as starting a business (Santos & Liguori, 2019). Meanwhile, the latter demonstrates the drive to follow norms and a willingness to embrace the standards of individuals with power (Martínez-González, Kobylinska, García-Rodríguez, & Nazarko 2019). The individuals must comply with outsiders’ perceptions and behave differently in order to conform to the subjective norms imposed by social pressure (friends, colleagues, peers, and society) (Barbera & Ajzen, 2020). Thus, the individuals’ intentions to carry out certain entrepreneurial behaviors will grow as their subjective norms towards the behavior improve (Contreras-Barraza, Espinosa-Cristia, Salazar-Sepulveda, & Vega-Muñoz, 2021). This shows that the subjective norms positively influence the entrepreneurial intention (Zhang & Wang, 2019). Saraih, Aris, Mutalib, Ahmad, & Amulus (2018), Chin, Mustafa, & Nungsari (2024), Barrios *et al.* (2022), and Contreras-Barraza *et al.* (2021) had also found similar findings. Thus, the second hypothesis that can be proposed is as follows:

H2: Subjective norms have a positive influence on the entrepreneurial intention of Generation Z in Indonesia.

The perceived behavioral control plays a significant role in the decision-making process, because the intention to carry out a certain behavior is somewhat dependent on the availability of resources or opportunities (Qiu, Wang, Morrison, Kelly, & Wei, 2022). The entrepreneurial intention can be measured through individual beliefs. The higher their entrepreneurial intention, the stronger the individual beliefs that they are capable of running a business (Zhang *et al.*, 2019). Kobylińska (2022) found that there is a positive relationship between perceived behavioral control and entrepreneurial intentions. Similar results were also discovered by Setiawan, Hafizah, & Sapitri (2024), Esfandiar *et al.* (2019), and Biraglia & Kadile (2017). Hence, the third hypothesis that can be proposed is as follows:

H3: Perceived behavioral control has a positive influence on the entrepreneurial intention of Generation Z in Indonesia.

The entrepreneurial intention is critical in the entrepreneurial process since it is the initial stage and motivation that drives individuals to start their businesses (Esfandiar *et al.*, 2019). This implies that entrepreneurial intention is a significant predictor of future entrepreneurial behavior (Tuan, Ha, Thao, Anh, & Long, 2019). Gieure, Benavides-Espinosa, & Roig-Dobón (2020) confirmed the positive influence of entrepreneurial intentions on entrepreneurial behavior, which was related to both social settings and individual knowledge acquisition. Researches by Duong & Vu (2023), Shirokova, Osiyevskyy, & Bogatyreva (2016), Esfandiar *et al.* (2019), and Ozaralli & Rivenburgh (2016) agreed that entrepreneurial intention has a significant impact on entrepreneurial behavior. As a result, the fourth hypothesis that can be proposed is as follows:

H4: Entrepreneurial intention has a positive influence on the entrepreneurial behavior of Generation Z in Indonesia.

The attitude reflects an individual's assessment process to determine if a certain behavior will benefit them or not (Calza, Cannavale, & Nadali, 2020). It is determined by the beliefs about the outcomes and consequences (extrinsic or intrinsic) of behavior, which are indirectly influenced by the social norms (such as culture) (Turra & Melinda, 2021). This implies that a positive attitude towards entrepreneurship will strengthen an individual's intention to start an entrepreneurial venture (Amofah, Saladrigues, & Akwaa-Sekyi, 2020). This demonstrates that attitude has a positive impact on entrepreneurial behavior. Similar results were also found by Alharbi, Aljojo, Zainol, Alshutayri, Alharbi, Aldhahri, Khairullah, & Almndeel (2021), Meoli, Fini, Sobrero, & Wiklund (2020), and Calza *et al.* (2020). Consequently, the fifth hypothesis that can be proposed is as follows:

H5: Attitude has a positive influence on the entrepreneurial behavior of Generation Z in Indonesia.

The importance of perceived behavioral control is self-evident. Aside from the opportunities and resources available to the individual, one must be aware of their limitations in order to achieve certain behaviors (Bazzy, Smith, & Harrison, 2018). According to the TPB, the perceived behavioral control can be utilized directly to predict the entrepreneurial behavior (Ajzen, 2020). Thu & Hieu (2017) proved that there is a positive and both direct and indirect impact of perceived behavioral control on entrepreneurial behavior. Similar results were also shown by Zhang & Cain (2017), Henley, Contreras, Espinosa, & Barbosa (2017), and Bazzy *et al.* (2018). For this reason, the sixth hypothesis that can be proposed is as follows:

H6: Perceived behavioral control has a positive influence on the entrepreneurial behavior of Generation Z in Indonesia.

Individuals with stronger intentions are more likely to take the actions required to establish a business, referred to as nascent behavior (Yousaf *et al.*, 2020). Mwiya, Wang, Kaulungombe, & Kayekesi (2019) showed that demonstrating the strength of one's intentions increases the likelihood that one will actually wish to start a business. Thorhauge, Cherchi, Walker, & Rich (2019) also confirmed the mediating role of intention between the TPB components, one of which is the attitude toward behavior. Similar results were also found by Salamzadeh, Sangosanya, Salamzadeh, & Braga (2022), Saraih *et al.* (2018), and Yousaf *et al.* (2020). Then, the seventh hypothesis that can be proposed is as follows:

H7: Entrepreneurial intention mediates the positive relationship between the attitude and entrepreneurial behavior of Generation Z in Indonesia.

It has been widely proven that the intention to perform a certain behavior is somewhat dependent on the adequacy of the resources or opportunities, and therefore the perceived behavioral control is important in the decision-making process (Qiu *et al.*, 2022). The entrepreneurial intention is the most reliable and best predictor of entrepreneurial behavior and activities (Ajzen, 2020). It is an internal driving force that directs individuals to seize opportunities and take entrepreneurial actions (Kim & Park, 2018). The TPB assumes that the intention can mediate the perceived behavioral control to promote entrepreneurial behavior. Similar results were also shown by Zhang & Zhang (2022), Jenkins, Durcikova, & Numaker (2021), and Conner, McEachan, Lawton, & Gardner (2016). Accordingly, the last hypothesis that can be proposed is as follows:

H8: Entrepreneurial intention mediates the positive relationship between perceived behavioral control and entrepreneurial behavior of Generation Z in Indonesia.

3. RESEARCH METHODS

This study was done using a quantitative method. The data was collected by distributing questionnaires developed based on valid and reliable measurement scales found in the literature. The questionnaire was measured using a 5-point Likert Scale, ranging from (1) for "strongly disagree" to (5) for "strongly agree". The following Table presents the measurement of research variables.

Table 1. Measurement of Research Variables

Variable	Operational Definition	Indicator	Source
Attitude	Attitude is one's view of the positive or negative consequences of a behavior. The perception that a behavior is beneficial leads to the development of a positive attitude (Ajzen & Dasgupta, 2015).	ATT1	Being interested in opportunities.
		ATT2	Thinking positively about failure.
		ATT3	Having the characteristics of an entrepreneur.
Subjective Norms	Subjective norms are one's views or feelings about the beliefs of others in their life that influence the intention to do or not perform certain behaviors, as well as their sense of social pressure to do or not perform certain behaviors (Farrukh, Khan, Khan, Ramzani, Soladoye, & Akeem, 2017).	SN1	The importance of family's role and support in life.
		SN2	The importance of friends' role and support in life.
		SN3	The importance of important persons' role and support in life.
Perceived Behavioral Control	Perceived behavioral control is a sense of the presence of elements that potentially influence a person's ability to carry out a behavior (Al-Mamary & Alraja, 2022).	PBC1	Having the potential to establish a business.
		PBC2	Self-confidence in entrepreneurship.
		PBC3	Mental maturity.
Entrepreneurial Intention	Entrepreneurial intention is an individual's plan and motivation to carry out an action or behavior, which refers to a person's desire for entrepreneurial behavior, such as creating a new business venture to become an entrepreneur (Majeed <i>et al.</i> , 2021).	EI1	Entrepreneurial career.
		EI2	Income.
		EI3	Increasing social status as an entrepreneur.
Entrepreneurial Behavior	Entrepreneurial behavior is individual behavior that eventually leads to the creation of innovation, new competition, new jobs, and new income streams (Shi <i>et al.</i> , 2020).	EB1	Entrepreneurial decisions.
		EB2	Running a business.
		EB3	Current business development plans.

Source: Blazar & Kraft (2017), Lasut *et al.* (2022), Zampetakis *et al.* (2017), Esfandiar *et al.* (2019), Valencia-Arias & Restrepo (2020).

The following Figure 1 presents the research model of this study as follows:

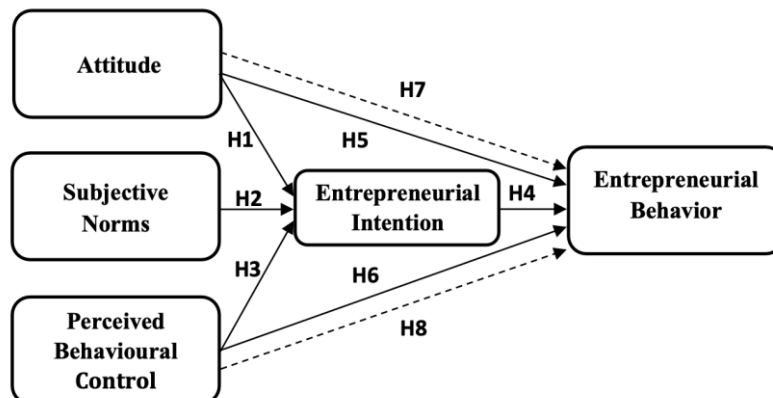


Figure 3. Research Model

In this study, the data was collected using a purposive sampling technique based on certain criteria (Campbell, Greenwood, Prior, Shearer, Walkem, Young, Bywaters, & Walker, 2020). The research criteria in this study are as follows: (1) respondents should be between 18–28 years old; (2) respondents should have a family with a business background; (3) respondents should be from Generation Z, and (4) respondents should be entrepreneurs. The questionnaire was distributed online through social media over a period of four months, starting from March 2023 to June 2023. A total of 800 questionnaire links were sent to respondents who met the criteria, and 765 of them were returned. However, only 713 responses were valid for analysis, with a response rate of 95.62%.

Then, the data was analyzed using partial least squares – structural equation modelling (PLS-SEM) using SmartPLS 4. This method was chosen for this research because it employed a model with multiple independent variables (attitude, subjective norms, and perceived behavioral control), dependent variables (entrepreneurial intention and entrepreneurial behavior), and mediating variables (entrepreneurial intention). In addition, the PLS-SEM performed well with mediation models well, making it ideal for analyzing complex relationships between the variables involved. Considering that the research variables were measured using the Likert scale, this PLS-SEM was also the best method for dealing with ordinal data (not normally distributed) (Hair, Howard, & Nitzl, 2020). The SEM-PLS data were analyzed in two steps: measurement model analysis and structural model analysis. The measurement model analysis was primarily a test of validity and reliability. The validity test was determined by convergent validity and discriminant validity. A loading factor value of > 0.7 and an average variance extracted (AVE) value of > 0.5 indicated that an indicator met the convergent validity criteria (Hair, Matthews, Matthews, & Sarstedt, 2017). Meanwhile, the validity test employed discriminant validity, which combined the cross-loading criteria and Fornell-Larcker criteria. The cross-loading criteria were used if each indicator had a higher value compared to the other indicators in the variable. The Fornell-Larcker criteria were used if the correlation between variables with the squared AVE was higher than the correlation of other variables in the research model (Hair *et al.*, 2020). The data was considered reliable if their Cronbach's alpha, ρ_c , and ρ_a values were > 0.7 (Hair *et al.*, 2020). Similarly, the structural analysis must meet several criteria, including having a weighted P-value of < 0.05 (the basis for concluding); an R^2 value of either 0.75 (strong), 0.50 (moderate), and 0.25 (weak); and an F^2 value of either 0.02 (weak effect), 0.15 (moderate effect), and 0.35 (strong effect) (Hair *et al.*, 2017).

4. DATA ANALYSIS AND DISCUSSIONS

Table 2 presents the respondent profile of this study which consisted of 713 respondents. The results show that most of them are female (61.3%), 22–25 years old (52%), and lived in Sulawesi (31.3%). It could also be confirmed that all respondents are entrepreneurs and have a family with a business background. Table 2 is as follows.

Table 2. Respondent Profile

Characteristic	Frequency	Percentage	
Gender	Female	437	61.3%
	Male	276	38.7%
Age	18-21 years old	119	16.7%
	22-25 years old	371	52.0%
	26-28 years old	223	31.3%
Origin of domicile	Java	205	28.7%
	Kalimantan	157	22.0%
	Sumatra	128	18.0%
	Sulawesi	223	31.3%
Entrepreneurship/business ownership	Yes	713	100%
	No	0	-
Having a family with a business background	Yes	713	100%
	No	0	-

Source: Processed data (2023)

Measurement Model

In the initial stage, the validity and reliability tests were performed to assess the quality of the data in the research model. Table 3 and Figure 4 show the loading factor value of > 0.7 and AVE value of > 0.5, indicating that the research model meets the requirements for convergent validity. In addition, based on the cross-loading criteria and Fornell-Larcker criteria in Table 3, the latent variable indicator has a larger construct than the other indicator constructs and the square root of the AVE is greater than the sum of all construct relationships, indicating that the research model meets the requirements for discriminant validity. Table 3 displays the reliability test results with Cronbach's alpha, rho_c, and rho_a values of > 0.7. Therefore, it can be concluded that all latent variables are reliable.

Structural Model

In this study, the structural model analysis was conducted using SmartPLS 4. Table 5 shows the R² and F² values – which illustrate how the independent variable contributes to the dependent variable. The results show that attitude, subjective norms, and perceived behavioral control contribute 0.894 (or 89.4%) to entrepreneurial intention. Meanwhile, the attitude and perceived behavioral control contribute 0.870 (or 87%) to the entrepreneurial behavior. In this study, the F² values indicate that there is a weak and moderate influence of attitude and perceived behavioral control on the entrepreneurial intention and behavior sequentially; a weak influence of subjective norms on the entrepreneurial intention; and a weak influence of entrepreneurial intention on the entrepreneurial behavior. Further, the results of this study also support all hypotheses proposed empirically. The first hypothesis proposing that the attitude has a positive influence on the entrepreneurial intention of Generation Z in Indonesia can be supported empirically, with $\beta = 0.307$, $t = 4.093$, and $p < 0.000$. The second hypothesis proposing that the subjective norms have a positive influence on the entrepreneurial intention of Generation Z in Indonesia can be supported empirically, with $\beta = 0.256$, $t = 2.310$, and $p < 0.021$. The third hypothesis proposing that the perceived behavioral control has a positive influence on the entrepreneurial intention of Generation Z in Indonesia can be supported empirically, with $\beta = 0.409$, $t = 4.089$, and $p < 0.000$. The fourth hypothesis proposing that the entrepreneurial intention has a positive influence on the entrepreneurial behavior of Generation Z in Indonesia can be supported empirically, with $\beta = 0.244$, $t = 3.093$, and $p < 0.002$. The fifth hypothesis proposing

that the attitude has a positive influence on the entrepreneurial behavior of Generation Z in Indonesia can be supported empirically, with $\beta = 0.194$, $t = 2.193$, and $p < 0.028$. The sixth hypothesis proposing that the perceived behavioral control has a positive influence on the entrepreneurial behavior of Generation Z in Indonesia can be supported empirically, with $\beta = 0.519$, $t = 7.047$, and $p < 0.000$.

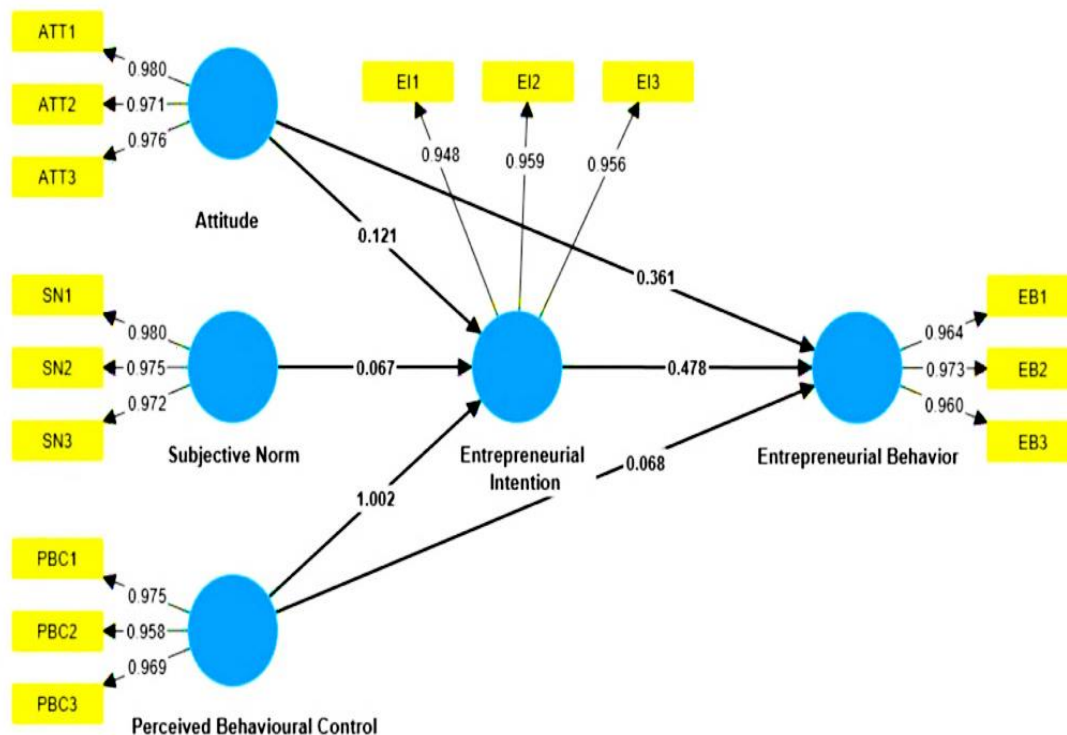


Figure 4. Structural Model Result

Table 3. Convergent Validity and Reliability

Construct	Item	Convergent Validity		Reliability		
		Loading Factor	AVE	Cronbach's Alpha	Rho_C	Rho_A
ATT	ATT1	0.980	0.952	0.975	0.983	0.976
	ATT2	0.971				
	ATT3	0.976				
SN	SN1	0.980	0.952	0.975	0.984	0.975
	SN2	0.975				
	SN3	0.972				
PBC	PBC1	0.975	0.936	0.966	0.978	0.966
	PBC2	0.958				
	PBC3	0.969				
EI	EI1	0.948	0.911	0.964	0.976	0.964
	EI2	0.959				
	EI3	0.956				
EB	EB1	0.964	0.932	0.951	0.968	0.952
	EB2	0.973				
	EB3	0.960				

Source: Processed data (2023)

Table 4. Discriminant Validity

Construct	Item	Cross-Loading					Fornell-Larcker				
		ATT	SN	PBC	EI	EB	ATT	SN	PBC	EI	EB
ATT	ATT1	0.980	0.958	0.925	0.855	0.876	0.976				
	ATT2	0.971	0.925	0.894	0.789	0.825					
	ATT3	0.976	0.947	0.918	0.830	0.876					
SN	SN1	0.944	0.980	0.928	0.833	0.891	0.967	0.976			
	SN2	0.936	0.975	0.907	0.832	0.856					
	SN3	0.952	0.972	0.927	0.839	0.874					
PBC	PBC1	0.918	0.934	0.975	0.849	0.940	0.935	0.943	0.967		
	PBC2	0.875	0.878	0.958	0.809	0.908					
	PBC3	0.921	0.926	0.969	0.840	0.915					
EI	EI1	0.825	0.843	0.884	0.789	0.948	0.846	0.855	0.861	0.966	
	EI2	0.826	0.843	0.908	0.820	0.959					
	EI3	0.870	0.877	0.933	0.854	0.956					
EB	EB1	0.808	0.819	0.810	0.964	0.796	0.881	0.896	0.952	0.861	0.954
	EB2	0.835	0.838	0.843	0.973	0.834					
	EB3	0.807	0.820	0.840	0.960	0.863					

Source: Processed data (2023)

Table 5. Structural Models

Hypothesis Testing Results	Hypothesis	Std. β	T Statistics	P Value	Decision	Model Parameter	Variable	Value and Category
Direct Effect	ATT -> EB	0.194	2.193	0.028	Supported	R^2	EI	0.894 (strong)
	ATT -> EI	0.307	4.093	0.000	Supported		EB	0.870 (strong)
	SN -> EI	0.256	2.310	0.021	Supported	F^2	ATT -> EB	0.040 (weak)
	PBC -> EB	0.519	7.047	0.000	Supported		ATT -> EI	0.124 (weak)
	PBC -> EI	0.409	4.089	0.000	Supported		SN -> EI	0.067 (weak)
Indirect Effect	EI -> EB	0.244	3.093	0.002	Supported		PBC -> EB	0.246 (moderate)
	ATT -> EI -> EB	0.075	2.191	0.029	Supported		PBC -> EI	0.183 (moderate)
	PBC -> EI -> EB	0.100	2.363	0.018	Supported		EI -> PBC	0.051 (weak)

Source: Processed data (2023)

Additionally, bootstrapping PLS-SEM was applied to examine the indirect or mediation effect. Based on Table 5, the seventh hypothesis proposing that entrepreneurial intention mediates the positive relationship between the attitude and entrepreneurial behavior of Generation Z in Indonesia can be supported empirically, with $\beta = 0.075$, $t = 2.191$, and $p < 0.029$. Similarly, the eighth hypothesis proposes that Entrepreneurial intention mediates the positive relationship between perceived behavioral control and entrepreneurial behavior of Generation Z in Indonesia can be supported empirically, with $\beta = 0.100$, $t = 2.363$, and $p < 0.018$.

In this study, the TPB was implemented and examined to understand the entrepreneurial intentions and behavior of Generation Z in Indonesia. The first hypothesis has a statistic of $\beta = 0.307$, $t = 4.093$, and $p < 0.000$. The regression coefficient (β) of 0.307 indicates that a one-unit increase in the positive attitude would result in an increase of 0.307 units in the entrepreneurial intention of Generation Z in Indonesia. The entrepreneurial intention of Generation Z grew as they would always look for business opportunities, and consider or even take active efforts to establish their own business. They were also not afraid of failure when trying to become an entrepreneur. They also had the characteristics of an entrepreneur while starting a business (Blazar & Kraft, 2017). This reflected the difference between Generation Z's understanding of their personal ambition to work for themselves and their desire to work for a company. The strong positive attitude towards self-employment indicated that they preferred the benefits of self-employment

over working for someone else (Sharahiley, 2020; Shi *et al.*, 2020; Turra & Melinda, 2021). This finding is also supported by other researchers, such as Gupta *et al.* (2024), Vamvaka *et al.* (2020), Procter, Angus, Blaszczyński, & Gainsbury (2019), and Shi *et al.* (2020).

Further, the second hypothesis has a statistic of $\beta = 0.256$, $t = 2.310$, and $p < 0.021$. The regression coefficient (β) of 0.256 indicates a one-unit increase in the subjective norms would contribute to an increase of 0.256 units in the entrepreneurial intention of Generation Z in Indonesia. The perceptions and influences of the social environment, such as support from family and friends, had a significant role in developing Generation Z's entrepreneurial intention. When they felt encouraged by their family and friends, they would be more motivated to become entrepreneurs (Lasut *et al.*, 2022). This social support would instil a sense of self-confidence and the belief that starting a business was a viable option supported by their environment (Boubker, Arroud, & Ouajdouni, 2021). In the TPB, it was argued that the subjective norms drove the behavioral intention (Ajzen, 2020). In the context of this research, the subjective norms reflected the support from a reference group (Laguía *et al.*, 2019). In this case, close social relationships and community support played an important role (Oré, 2023). The presence of an extended family system allowed people to seek financial, emotional, and psychological assistance from a wide number of people when necessary. If the extended family members – as important persons for Generation Z (Laguía, Moriano, & Gorgievski, 2019; Boubker *et al.*, 2021) – encouraged them, they might find it easier to get through difficult times. The extended family's influence on the business was developed based on the trust, interdependence, loyalty, stability, and traditions shared among individual members (Roy *et al.*, 2017). This present study also highlights the importance of family background in fostering entrepreneurial attitudes. As noted by Farrukh *et al.* (2017), children with successful entrepreneurial parents learned the importance of entrepreneurship and develop a desire to follow in their footsteps. This finding is also supported by other researchers, such as Chin *et al.* (2024), Oré (2023), Barrios *et al.* (2022), Contreras-Barraza *et al.* (2021), and Laguía *et al.* (2019).

Furthermore, the third hypothesis has a statistic of $\beta = 0.409$, $t = 4.089$, and $p < 0.000$. The regression coefficient (β) of 0.409 indicates that a one-unit increase in the perceived behavioral control would contribute to an increase of 0.409 units in the entrepreneurial intentions of Generation Z in Indonesia. Generation Z with a higher perceived behavioral control, especially in terms of having the potential to start a business, self-confidence in entrepreneurship, and mental maturity would have a higher level of entrepreneurial intention (Zampetakis *et al.*, 2017). This demonstrates that the self-confidence and belief in Generation Z's ability to control the results of their actions in the context of entrepreneurship were very important. The confidence in their ability could motivate them to establish their own business (Laguía *et al.*, 2019). According to the TPB, the higher level of perceived behavioral control explained why Generation Z was confident in translating their intentions into actions (Biraglia & Kadile, 2017). In addition, they also perceived the ease of carrying out entrepreneurial behavior based on previous experiences and difficulties (Laguía *et al.*, 2019).

A previous study argued that individuals would only engage in activities if they believed that they could achieve the intended goals (Laguía *et al.*, 2019). The belief that every member of Generation Z had the potential to become an entrepreneur was such a factor that influenced the development of entrepreneurial intentions (Gieure *et al.*, 2020). Generation Z possessed a self-confidence and self-assured attitude, allowing them to rely on their own abilities and thus be

independent to achieve their goals (Arar & Öneren, 2018). This finding is also supported by other research, such as Setiawan *et al.* (2024), Esfandiar *et al.* (2019), and Biraglia & Kadile (2017).

In addition, the fourth hypothesis has a statistic of $\beta = 0.244$, $t = 3.093$, and $p < 0.002$. The regression coefficient (β) of 0.244 indicates that a one-unit increase in entrepreneurial intention would contribute to an increase of 0.244 units in the entrepreneurial behavior of Generation Z in Indonesia. The higher the level of entrepreneurial intention, the more likely they were to engage in entrepreneurial behavior. This suggests that entrepreneurial intention, especially when measured in terms of a career as an entrepreneur, income potential, and increasing social status as an entrepreneur, were important factors in influencing individuals to actually engage in entrepreneurial activities (Esfandiar *et al.*, 2019). In the context of this study, the professional goal of several members of Generation Z was to become entrepreneurs, which made them take the action to create new businesses instead of relying solely on their intentions. They believed that any business idea would be meaningless, idle, and worthless until it could be translated into reality or action. Therefore, they were willing to do whatever it took to become entrepreneurs and strive with their passion (Duong & Vu, 2023).

Generation Z viewed their intention as the first step in the business development process, arguing that it was a prerequisite for engaging in entrepreneurial behavior (Esfandiar *et al.*, 2019). A substantial body of literature demonstrated that the intention was critical to an individual's decision to establish a business (Lavelle, 2021). According to the TPB, there was a relationship between entrepreneurial intentions and entrepreneurial actions. The higher the intention to carry out planned entrepreneurial behavior (i.e., starting a new business), the higher the possibility of success (Ajzen, 2020). This finding is in line with several previous studies, such as Duong & Vu (2023), Shirokova *et al.* (2016), and Ozaralli & Rivenburgh (2016).

Moreover, the fifth hypothesis has a statistic of $\beta = 0.194$, $t = 2.193$, and $p < 0.028$. The regression coefficient (β) of 0.194 indicates that a one-unit increase in the entrepreneurial attitude would contribute to an increase of 0.194 units in the entrepreneurial behavior of Generation Z in Indonesia. The positive attitude towards entrepreneurial entrepreneurship might inspire Generation Z to take meaningful action whether when running a business or planning the business development. This shows that entrepreneurial attitudes, reflected in the attitudes towards entrepreneurial decisions, readiness to run a business, and willingness to plan the business development, had an important influence in developing entrepreneurial behavior.

Generation Z believed that their attitude towards entrepreneurial behavior could provide opportunities for success if they became entrepreneurs. They also believed that being an entrepreneur would highly benefit them; there were interesting aspects to entrepreneurship; and they felt satisfied when promoting a business or product (Blazar & Kraft, 2017). In general, the attitude towards entrepreneurial behavior was influenced by both feelings and beliefs (Laguía *et al.*, 2019). According to Al-Mamary & Alraja (2022), the TPB model was employed to assess entrepreneurial intentions in order to help Generation Z build their entrepreneurial skills. This finding is also supported by other researchers, such as Alharbi *et al.* (2021), Meoli *et al.* (2020), Gieure *et al.* (2020), and Al-Mamary & Alraja (2022).

Additionally, the sixth hypothesis has a statistic of $\beta = 0.519$, $t = 7.047$, and $p < 0.000$. The high regression coefficient (β) of 0.519 indicates that a one-unit increase in the perceived behavioral control would result in an increase of 0.519 units in the entrepreneurial behavior of

Generation Z in Indonesia. Generation Z with a strong sense of perceived behavioral control exhibited higher levels of entrepreneurial behavior. This indicates that their belief in their ability to control their actions, including in the context of entrepreneurship, greatly influenced their decision to pursue entrepreneurship. They were also more confident in their abilities and less worried about their personal weaknesses (Bazzy *et al.*, 2018). They were also optimistic about running the business as they believed they would have favorable effects (Neneh, 2022). This finding confirms that the perceived behavioral control was an intrinsic characteristic of individuals that influenced their self-confidence to start a new business (Bazzy *et al.*, 2018). There have been a number of studies that supported the significant relationship between entrepreneurial attitude and entrepreneurial behavior, such as Zhang & Cain (2017), Henley *et al.* (2017), Bazzy *et al.* (2018), and Li, Ahmed, Qalati, Khan, & Naz (2020).

Besides, the seventh hypothesis has a statistic of $\beta = 0.075$, $t = 2.191$, and $p < 0.029$. The regression coefficient (β) of 0.075 indicates that a one-unit increase in entrepreneurial intention would strengthen the relationship between attitude and entrepreneurial behavior by 0.075 units among Generation Z in Indonesia. The higher the level of entrepreneurial intentions, the stronger the relationship between a positive attitude towards entrepreneurial behavior and actual business activities. The intention, as a mediating variable, served as a behavioral plan that connected the relationship between attitude and behavior (Saraih *et al.*, 2018). This relationship explained the degree of individual stance towards favorable or unfavorable evaluations of entrepreneurial behavior (Duong & Vu, 2023). Overall, a person's positive attitude towards entrepreneurial behavior was directly proportional to the strength of their intention to engage in such behavior (Alshebami, 2022). The intention to become an entrepreneur could be defined as a person's desire or belief in their entrepreneurial capability in the future, which was often referred to as the entrepreneurial intention (Shirokova *et al.*, 2016). This intention was a conscious process prior to a person's actual involvement in entrepreneurship (Alferaih, 2022). A number of studies have found similar findings, such as those by Salamzadeh *et al.* (2022); Saraih *et al.* (2018); Yousaf *et al.* (2020); and Do & Dadvari (2017).

Lastly, the eighth hypothesis has a statistic of $\beta = 0.100$, $t = 2.363$, and $p < 0.018$. The regression coefficient (β) of 0.100 indicates that a one-unit increase in entrepreneurial intention would strengthen the relationship between perceived behavioral control and entrepreneurial behavior by 0.100 units among Generation Z in Indonesia. This means that the higher the level of entrepreneurial intention, the stronger the relationship between perceived behavioral control and actual business actions (Valencia-Arias & Restrepo, 2020). In this study, Generation Z's perceived behavioral control was proven to have potential if driven by strong intentions, allowing them to recognize the desire and feasibility of starting a new business (Zhang & Zhang, 2022). Therefore, the most important issue was how people perceived control over their behavior, which determined their intentions and subsequent behavior (Valencia-Arias & Restrepo, 2020).

Non-motivational elements associated with the availability of opportunities, skills, abilities, and resources could limit an individual's ability to make decisions when engaging in certain behaviors under certain circumstances (Conner *et al.*, 2016). This suggested that if an individual believed that they could not control variables outside their control, then it would be difficult to generate the intention to take action. Their intention would be higher if they had a high level of ability to control their behavior (Zhang & Zhang, 2022). The more confident an individual was in the face of a situation, the more likely they were to perform the behavior with a strong

motivational intention (Ingersoll, Straiton, Casagrande, & Pickard, 2018). Generation Z preferred to run their business instead of working for others. They believed in their ability to manage their own businesses, demonstrating a positive perceived behavioral control (Blazar & Kraft, 2017). This finding is supported by Zhang & Zhang (2022), Jenkins *et al.* (2021), Conner *et al.* (2016), and Doanh & Bernat (2019).

5. CONCLUSIONS, SUGGESTIONS, AND LIMITATIONS

This research confirms that the TPB components (attitude, subjective norms, and perceived behavioral control) are proven to be able to predict the entrepreneurial intention and behavior of Generation Z in Indonesia, with the entrepreneurial intention serving as a mediating variable. The perceived behavioral control is the TPB component with the highest regression coefficient (β) value and strongest driver for predicting entrepreneurial intentions and behavior. The findings suggest that the attitude, subjective norms, and perceived behavioral control all have a positive influence on the entrepreneurial intention of Generation Z in Indonesia. In addition, the attitude and perceived behavioral control also have a positive influence on the entrepreneurial behavior of Generation Z in Indonesia. Further, the entrepreneurial intention is proven to be able to mediate the relationship between attitude and perceived behavioral control on the entrepreneurial behavior of Generation Z in Indonesia positively.

This present study has faced two major limitations. First, this study only examined Generation Z as the research sample. For this reason, the results of this study cannot be generalized to populations of other generations. Second, this study had more female respondents than male respondents. Although the sample size was quite large, a larger sample size consisting of different sub-groups (people from different religions, caste groups, levels of education, and urban backgrounds) is required to generate different results. Nevertheless, the findings of this study add to the field of science and theory, which strengthen and support the TPB regarding factors influencing the entrepreneurial intention and behavior. Future researches are suggested to analyze the entrepreneurial behavior variable deeper by employing other variables. In addition, future researches are also suggested to include a wider range of respondents with different profile, allowing the researches to serve as a source for discovering solutions for economic growth.

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