

The Role of Dark Personality Traits in Shaping Entrepreneurial Intentions Among Indonesian Migrant Workers

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ABSTRACT

Exploring factors influencing an individual's entrepreneurial intentions is crucial in entrepreneurship and entrepreneurial practice. While prior works focus on the influence of positive personality traits such as risk-taking propensity, innovativeness, and locus of control, the dark triad of personality has recently become a spotlight in entrepreneurship research. Building on the theory of planned behavior (TPB), this study aimed to examine the influence of dark tetrad personality traits – Machiavellianism, narcissism, and psychopathy – on entrepreneurial intentions. Moreover, it tests the mediating role of a positive attitude toward entrepreneurship between the dark triad of personality and entrepreneurial intentions.

The paper uses a survey method for data collection, administered in electronic and paper form. The authors use partial least square-structural equation modeling (PLS-SEM) to test the hypotheses on 178 Indonesian diasporas.

The result of this study revealed that Machiavellianism, narcissism, and psychopathy have a positive and significant influence on entrepreneurial intentions, and the positive attitude toward entrepreneurship mediates the effect of dark triad personality on entrepreneurial intentions.

Keywords: Dark Triad; Machiavellianism; Narcissism; Psychopathy; Entrepreneurial Intentions; Positive Attitude toward Entrepreneurship.

1. Introduction

The literature has extensively acknowledged the significant impact of entrepreneurship on the economic and social environment at the national and regional levels (Alvarez & Barney, 2014). As a result, the number of studies on entrepreneurial intentions, which are considered a precursor to actual entrepreneurial action, has increased in recent decades (Huang et al., 2021; Liñán & Fayolle, 2015). Other research has found that entrepreneurial intent influences future



entrepreneurial behavior (Boubker et al., 2021). As a result, the key factors and influencing mechanisms that influence entrepreneurial intentions must be investigated.

Our research adds to the body of knowledge on the mechanisms underlying the influences of the Dark Triad traits — Machiavellianism, psychopathy, and narcissism — on the formation of entrepreneurial intentions. In their recent systematic review, (Brownell et al., 2021) discovered that people with high Dark Triad traits are drawn to entrepreneurship. Previous research, however, found mixed results regarding the direct relationships between the Dark Triad traits and entrepreneurial intentions. For example, McLarty et al. (2021) discovered that psychopathy and Machiavellianism affect entrepreneurial intentions but not narcissism, whereas Li & Wu (2019) reported negative effects of narcissism and psychopathy and a positive effect of Machiavellianism on entrepreneurial intentions. We believe the results differ due to the use of student samples (Gordon et al., 1986), less comprehensive construct measures, and a scarcity of theoretical rationale to explain how entrepreneurial intentions develop (McLarty et al., 2021). As a result, academics called for more research into the mechanisms underlying these associations, which are still understudied and merit further investigation in the entrepreneurship literature (Brownell et al., 2021).

According to our review of the existing literature, some recent empirical studies have discovered mediation mechanisms that channel the Dark Triad traits into entrepreneurial intentions, such as entrepreneurial self-efficacy (Al-Ghazali & Afsar, 2021) moral disengagement (Wu et al., 2020), and positive psychological capital (An et al., 2020). While these findings contributed to our understanding of the relationship between the Dark Triad traits and entrepreneurial intentions, the roles of other TPB dimensions, such as positive attitude toward entrepreneurship, in this relationship have not been adequately understood, despite growing scholarly interest in the contributions of these factors to entrepreneurial intentions (e.g., Feder & Niţu-Antonie, 2017; Munir et al., 2019).

Based on the theory of planned behavior, we propose a research model that examines the mediating effect of a positive attitude toward entrepreneurship on the link between the Dark Triad traits and entrepreneurial intentions. In this way, our research contributes to the entrepreneurship literature in various ways. First, this study investigates and extends the current stream by looking into the mediating pathway of a positive attitude toward entrepreneurship for the Dark Triad entrepreneurial intentions linkage. Second, the findings support the use of TPB in studying entrepreneurial intentions. In addition to developing theories to investigate the relationship between the constructs, the current study filled a research gap on entrepreneurial intention in Indonesia. While entrepreneurial intention has been studied in countries such as the USA and Spain (Wu et al., 2019), it was rarely studied in Indonesia. There are significant cultural differences between Indonesia and the West; will using research samples from Indonesia allow us to reach a consistent conclusion? This question piques our interest, so this study considers additional investigation and verification in the context of Indonesia. Finally, we apply the framework to a variety of samples, most of which are from the Indonesian Diaspora who work abroad.

The remainder of the paper is structured as follows. The following section examines the literature. The research methodology is explained in the third section. The fourth section delves into the



findings. The findings are discussed in the fifth section. The final section summarizes the findings, as well as limitations and future research directions.

2. Literature Review

2.1 Dark Triad and EI

Machiavellianism, narcissism, and psychopathy are all offensive but non-pathological traits (Paulhus & Williams, 2002). The Dark Triad traits represent a distinct variation in social values that the Big Five do not account for (McLarty et al., 2021). Scholars argue that understanding the influence of the Dark Triad traits is critical because these personality traits can have a significant impact on people's behaviors and intentions (McLarty et al., 2021).

Machiavellianism is a willingness to utilize immoral methods to achieve personal goals and gain personal interests through manipulating others (al Aïn et al., 2013). Individuals who exhibit a high level of Machiavellianism are prideful, risk-taking, and assertive (Do & Dadvari, 2017). Individuals with Machiavellianism may also be inclined to start a business based on the abovementioned characteristics. First, Machiavellians emphasize that the ends exceed the means and longs for money, control, and competition (Zettler & Solga, 2013). Second, Machiavellians are extremely adaptable and can conceal their real intent and prejudices toward others. Entrepreneurs with this personality exhibit excellent strategic abilities (Rossignoli et al., 2018). Because entrepreneurship is uncertain and unpredictable, this ability is incredibly beneficial for entering the entrepreneurial environment. Entrepreneurs require a specialized strategic vision as well as appropriate response capabilities. Third, Machiavellians can manipulate and employ any means required to accomplish their objectives (al Aïn et al., 2013). They might indeed make unethical decisions and even gain an advantage at the expense of others (Buckels et al., 2013). However, these behaviors can be useful in a new entrepreneurial environment (Klotz & Neubaum, 2016).

Psychopaths are prideful, lack compassion, and are willing to engage in sociopathic behavior (Crysel et al., 2013). Individuals with high psychopathy foresee others like them, making it easy for them to obtain privileges, assurances, gifts, and other materials from those around them (McLarty et al., 2021). Feelings about emotions trouble psychopaths. Because of this flaw, they are insensitive to loss or uncertainty, which reduces or eliminates the risk suppression affiliated with failure fear (Morgan & Sisak, 2015) thus, psychopaths dare to take risks. The performance of psychopaths can often be related to positive attributions (Akhtar et al., 2013). Psychopaths are considered intelligent, charming, and interesting, and there are more "successful" psychopaths in upper executives (Boddy, 2015). Successful psychopaths balance rashness and sociopathic behavior with a greater sense of responsibility, allowing them to play a fairly successful role in the organization (Fennimore & Sementelli, 2016). As a result, having a high level of psychopathy may help individuals become appealing start-up leaders. In summary, the preceding analysis suggests that entrepreneurship offers an adequate and reliable possibility for psychopaths to gratify their personality traits; thus, psychopathy may contribute to entrepreneurship.

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All the while, self-importance, superiority, privilege, and a strong sense of authority over others are typical elements of narcissism (Lee & Ashton, 2014). Narcissistic people also tend to exploit others and exhibit too much exhibitionism, leading to greater conscience (Brownell et al., 2021). They typically have the capabilities of becoming dominant, a strong sense of authority, and a high self-awareness, and some self-centered attributes overlap with those of leaders (O'Reilly et al., 2014). In addition, entrepreneurship has become a remarkable and specialized career choice that satisfies narcissists' psychological needs, namely consciousness and the admiration of others. As a result, people with narcissism can quickly become leaders through entrepreneurship and live fast life (Hmieleski & Lerner, 2016). Individuals with a high narcissism are usually focused on achieving success and authority and are not scared of failing. Furthermore, risky behavior can result in greater benefits, so they are more likely to risk-taking than non-narcissistic individuals (Jones & Figueredo, 2013) or to make higher-risk financial investments (Foster et al., 2011) Therefore, we propose the following:

H1: Dark triad (a) narcissism, (b) psychopathy, and (c) Machiavellianism are positively related to entrepreneurial intentions.

2.2 Dark Triad and Positive Attitude toward Entrepreneurship

This study relies on one of the prominent theories that explain the process of forming intentions to commit a specific action. It is a theory of planned behavior developed by Ajzen (1991). The TPB is relevant to our study because the goal of this research is to develop theories about how and why people engage in entrepreneurial behaviors. This theory has been used in numerous studies in the entrepreneurship literature to generate ideas about business intentions (e.g., McLarty et al., 2021).

Dark Triad traits can influence a person's positive attitude toward entrepreneurship, or in other words, their perception of their own behavior. For example, narcissistic people are overconfident, rate themselves greatly, and tend to be leaders, but they require constant confirmation of their greatness. They seek to be admired by others (Chatterjee & Hambrick, 2007). Entrepreneurship appears to be an appealing profession for narcissists because it can bring them reputation and social prestige (Wu et al., 2019), which can boost the appreciation of others.

Psychopaths are enthusiastic about entrepreneurship because they dislike routine, mundane tasks. Because of the variety and diversity of tasks, entrepreneurship can help them avoid boredom (Nicolaou et al., 2011). Furthermore, psychopaths are not afraid of risk or loss, which is why they are not afraid to start their own business, which is a risky venture (Morgan & Sisak, 2004).

Finally, Machiavellians place a high value on authority, money, and competition (Zettler & Solga, 2013). These values may be associated with entrepreneurship. They have a tendency to exert control over others to benefit themselves. They can think strategically, which is useful when making decisions (Max et al., 2018). However, these decisions are sometimes immoral because they are made solely for their own benefit (Wu et al., 2019). As a result, it is assumed that people who adhere to Machiavellianism have a positive attitude toward entrepreneurship. According to all of the preceding, the second hypothesis is as follows:





H2: Dark triad (a) narcissism, (b) psychopathy, and (c) Machiavellianism are positively related to a positive attitude toward entrepreneurship

2.3 Dark Triad, Positive Attitude toward Entrepreneurship, and Entrepreneurial Intentions

A person's self-evaluation of the actions as preferable is measured by a positive attitude toward the behavior. We argue in our study that the Dark Triad predicts entrepreneurial intentions for the following reasons. First, individuals with the Dark Triad traits may have ambitious, aggressive, and overconfident attitudes and tend to have a positive attitude toward future business ventures and expect favorable results from entrepreneurial activities, according to the TPB attitude component (McLarty et al., 2021). As a result, these individuals are more likely to notice market gaps and opportunities that others overlook (Santos et al., 2020) as well as, as a result, establish favorable assessments of their behavioral intentions toward entrepreneurial behavior (Brownell et al., 2021). In brief, the TPB implies that when people evaluate a behavior positively, they intend to perform it. As a result, the following hypothesis is formulated using the theory of planned behavior:

H3: Positive attitude toward entrepreneurship is positively related to entrepreneurial intentions

H4: The positive relations between the dark triad (a) Narcissism, (b) Psychopathy, and (c) Machiavellianism and entrepreneurial intentions are mediated by a positive attitude toward entrepreneurship

The hypothesized model is shown in figure 1 below.

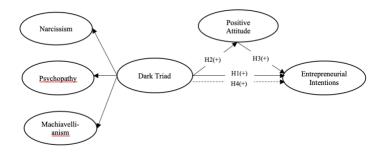


Figure 1. Hypothesized model

3. Research Methodology

3.1 Data Collection and Sample



This study used anonymous paper-based and online form surveys to collect information on the dark triad, positive attitude toward entrepreneurship, and entrepreneurial intentions of Indonesian Diasporas working abroad. The reason for using this group as a research sample is that previous research generated inconsistent results. This could be partly related to the student sample used in earlier studies (Gordon et al., 1986).

Because it is more convenient for the author to pass it directly to the respondents, the paper-based questionnaire was distributed to Indonesian diasporas working in Taiwan. Other countries, such as Hong Kong, Japan, and Singapore, received an online questionnaire via a Google form link from the author. Because of the large population and the difficulty in reaching them, this study collects data through convenience sampling. The author also asked respondents to share the questionnaire link with their friends in their communities or online forums.

150 paper-based questionnaires were distributed to the Indonesian diaspora in Taiwan. Only 120 questionnaires were returned, however. The author distributed the online questionnaire to all Indonesian diaspora community online groups in Taiwan, Hong Kong, Japan, and Singapore. In the end, 195 questionnaires were collected. Despite this, 17 questionnaires were discarded due to incompleteness, leaving a final sample of 178 usable questionnaires.

3.2 Measures

The questionnaire in our survey used a seven-point Likert scale for each question. *Entrepreneurial intentions* were evaluated using the six-item measure by Liñán et al. (2011) (e.g., "I am ready to do anything to be an entrepreneur"). *A positive attitude toward entrepreneurship* was evaluated with a five-item scale by Liñán & Chen (2009) (e.g., "Being an entrepreneur implies more advantages than disadvantages to me"). Several studies have confirmed that dark personality traits are widely accepted and gaining attention in entrepreneurship research and play an important role in predicting entrepreneurial intentions. They also effectively describe individuals' entrepreneurial behavior. This study looked at three dark personality traits, including narcissism, as measured by Jonason & Webster's (2010) four-item scale, and the other two dark personalities, *psychopathy*, and *Machiavellianism*, were measured using the four-item scale in each, respectively, derived from Jonason & Webster (2010) (e.g., "I tend to lack remorse" and "I have used deceit or lied to get my way").

3.3 Data Analysis

Smart PLS 4.0, one of the most well-known software packages for SEM-based analysis, measured the model using the partial least squares approach to structural modeling (PLS-SEM) (Ringle et al., 2014). In most business management studies, SEM has been the most preferred method (Sarstedt et al., 2014). Two methods have been used in the SEM method: covariance-based (CB-SEM) and PLS-SEM (Hair et al., 2012). The authors chose PLS-SEM over CB-SEM because it is better suited for exploring theoretical levels and complex relationships between latent constructs (Hair et al., 2012). This method is suitable for determining whether complex relationships exist



and has been widely used in theory confirmation and testing (Fornell & Larker, 1981). It enabled the authors to investigate how dark personality traits and TPB predict entrepreneurial intentions. In terms of sample size, PLS has no restrictions (Chin,1998). It also has the advantage of demonstrating discriminant validity.

4. Results

The result consists of three-part, measurement model analysis (outer model), structure model, and hypothesis.

4.1 Outer Model Analysis (Measurement Model)

4.1.1 Convergent Validity

Convergent validity has the function of testing the validity of the indicators used to measure variables. An indicator is valid if the outer loading value is above 0.70 (Hair et al, 2017). The value of the outer loading or loading factor can still be tolerated up to 0.40, while the loading factor value below 0.40 can be dropped or eliminated as a measurement indicator (Guadagnoli & Velicer, 1988; Zavaleta et al., 2017). All of the indicators used in this research are valid since they all have a value of more than 0.50. The convergent validity value can be seen based on the Average variance extracted (AVE) value in which each construct must be above more than 0.5. Fornell & Larker (1981) explain that the AVE value can be less than 0.5 if the Composite Reliability value is more than 0.6, as shown in Table 1 below.

Table 1. Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)	Composite Reliability
Positive Attitude toward Entrepreneurship	0.714	0.926
Entrepreneurial Intentions	0.472	0.833
Machiavellianism	0.761	0.927
Narcissism	0.744	0.921
Psychopathy	0.586	0.849
Total Average	0.655	0.891

4.1.2 Discriminant Validity

Discriminant validity tests that each concept of each latent variable is different from other variables. A model has good discriminant validity if the correlation value of the construct with the



measurement item is greater than the correlation value with other constructs (Ghozali and Latan, 2015). This study uses HTMT to test discriminant validity. According to Gold et al. (2001), Heterotrait Monotrait Ratio of Correlation (HTMT) has a high level of sensitivity compared to

cross loading and the (*Fornell & Larker*, n.d.) criterion. Based on discriminant validity, a variable is valid if the HTMT value is less than 0.90. The results of the HTMT test are as table 2.

Positive Attitude Machiavellianis Entrepreneuria Narcissis 1 Intentions toward m m Entrepreneurshi p Positive Attitude toward Entrepreneurship 0.799 Entrepreneurial **Intentions** Machiavellianism 0.106 0.434 0.332 Narcissism 0.833 0.430 **Psychopathy** 0.487 0.377 0.265 0.645

Table 2. Discriminant Validity

4.1.3 Reliability

The composite reliability value is to ensure that there are no reliability measurement problems. It is intended to evaluate the outer model or unidimensionality test. The cut-off value used in this measurement is composite reliability > 0.7, as shown in Table 1.

4.1.4 Collinearity

The collinearity test, according to Ghozali & Latan (2015), for formative constructs is absolutely necessary to calculate Variance Inflation Factor (VIF). The cut-off value for the VIF value must be less than 10. There is no multicollinearity in this model. All of the VIFs show value of less than 10.

4.2 Structure Model Analysis

Inner model or model structure analysis is used to ensure that the model is accurate or robust. The value of the inner model can be seen through the value of R square, F Square, which is then processed to see its predictive relevance. F-Square is the change in R-Square when exogenous variables are excluded from the model. The cut-off F square is the effect size (>0.02 small; >0.15 medium; >0.35 large) (Cohen, 1988). Based on table 3, it can be concluded that the F square value for the entrepreneurial intention model is large (0.452 > 0.15).



Table 3. R Square and F Square

	R Square	F Square
Positive Attitude towards Entrepreneurship	0.128	0.266
Entrepreneurial Intentions	0.804	
Machiavellianism		0.116
Narcissism		1.403
Psychopathy		0.025
Total Average	0.466	0.452

Inner model testing can be done by looking at the value of Q2 (predictive relevance). Prediction relevance (Q square) otherwise known as Stone-Geisser's. This test was conducted to determine the predictive capability of the blindfolding procedure. If the values obtained are 0.02 (small), 0.15 (medium) and 0.35 (large) (Gozali, 2006; Jaya et.al, 2008). The last test of the model is to find the value of Goodness of Fit (GoF). The GoF value in the PLS test must be searched manually, so the author uses a formula that refers to (Tenenhaus et al., 2014). Based on the calculations, it can be concluded that overall, the model selection in this study has a large GoF value, so it can be concluded that the model formed is robust.

$$GoF = \sqrt{AVE}x R^2$$

 $GoF = \sqrt{0.655}x \ 0.466$

GoF = 0.552 (large)

4.3 Hypothesis Analysis

Figure 2 shows an analysis of the hypothesis or the effect of the independent variable on the dependent variable. This research model consists of direct and mediation models. The test results are said to be significant if the p Value < 0.05 (Significant at 0.05) or p Value < 0.1 (Significant at 0.1) or T statistic > T table (1.96). Then if the effect is significant, then the magnitude of the effect can be seen in the coefficient value.



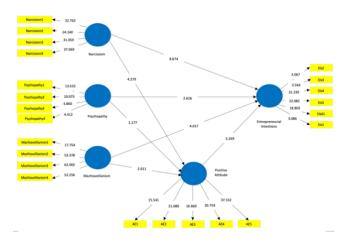


Figure 2. Hypothesis Analysis

Based on Figure 4.1, it can be concluded as follows:

Table 4. Direct Effect

Direct Effect	Origina l Sample (O)	T Statistics (O/STDEV	P Values	
Attitude toward Entrepreneurship -> Entrepreneurial Intentions	0.340	3.589	0.000	H3 accepted
Machiavellianism -> Attitude toward Entrepreneurship	0.168	1.997	0.024	H2c accepted
Machiavellianism -> Entrepreneurial Intentions	0.173	3.778	0.000	H1c accepted
Narcissism -> Attitude toward Entrepreneurship	0.283	4.198	0.000	H2a accepted
Narcissism -> Entrepreneurial Intentions	0.677	8.493	0.000	H1a accepted
Psychopathy -> Attitude toward Entrepreneurship	0.152	2.148	0.016	H2b accepted
Psychopathy -> Entrepreneurial Intentions	0.084	2.086	0.019	H1b accepted

Table 5. Indirect Effect





Indirect Effect	Original Sample (O)	T Statistics (O/STDEV	P Value s	
Narcissism -> Attitude toward Entrepreneurship -> Entrepreneurial Intentions	0.096	2.547	0.006	H4a accepted
Psychopathy -> Attitude toward Entrepreneurship -> Entrepreneurial Intentions	0.052	1.847	0.033	H4b accepted
Machiavellianism -> Attitude toward Entrepreneurship -> Entrepreneurial Intentions	0.057	1.684	0.047	H4c accepted

5. Discussion

This research investigates the effect of the dark triad personality of entrepreneurs in the formation of entrepreneurial intentions through the mechanism suggested by the theory of planned behavior. As one of the research results, it is revealed that there is a significant positive relationship between a positive attitude toward entrepreneurship and entrepreneurial intentions. Thus, the theory of planned behavior within this research is confirmed in the context of entrepreneurship in philosophy.

Unlike the study of McLarty et al. (2021), which shows the insignificant result between narcissism and entrepreneurial intentions, among Dark Triad traits, narcissism shows a highly significant positive relationship with attitude towards entrepreneurship in this study. It is also different from the study of Wu et al. (2019), which stated that narcissism has a negative relationship to entrepreneurial intentions. Narcist individuals strive for success and to achieve their goals. Moreover, they are highly motivated. Aspirations may lead them to a positive attitude to creating their own business, as this can become a way to get attention and respect from others. Narcissistic people are confident, even overconfident, rate themselves highly, and tend to be leaders. Still, at the same time, they need constant confirmation of their superiority and seek admiration from others (Chatterjee & Hambrick, 2007). Being an entrepreneur seems an attractive career path for narcissists as it can give them prestige and high status (Wu et al., 2019), adding more admiration from others.

Like narcissism, psychopathy has a significant relationship with a positive attitude toward entrepreneurship and entrepreneurial intentions. Entrepreneurship can help them to avoid boredom due to the variety and diversity of tasks to perform (Nicolaou et al., 2011). Moreover, psychopaths are not afraid of risks or losses, which is why they are not afraid of starting their businesses (Morgan & Sisak, 2014)).

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Machiavellianism also positively relates to positive attitudes toward entrepreneurship and entrepreneurial intentions. Since they like to compete, engaging in entrepreneurship can be an advantage for them (Zettler & Solga, 2013).

Therefore, similar to Santos et al. (2020) and Brownell et al. (2021), the dark personality in individuals can be a good driver of entrepreneurial activity. These personalities tend to recognize the market gaps and opportunities neglected by others and, in turn, establish positive evaluations of the behavioral intentions toward entrepreneurship.

6. Conclusion

Research conducted gave insight into the stated research question, which was to define the impact of Dark Triad traits on entrepreneurial intentions among Indonesian Diasporas. The study is based on the theory of planned behavior, which, moreover, has been clarified in the context of entrepreneurship, has a significant positive effect on entrepreneurial intentions.

Considering Dark Triad traits, it was revealed that all of the constructs have a significant positive relationship with attitude towards entrepreneurship. More importantly, positive attitudes toward entrepreneurship work as mediators in the relationship between the dark triad and entrepreneurial intentions.

This research contributes to the range of studies concerning the entrepreneurship field and the Indonesian Diaspora stream, which will be participating in entrepreneurial activity in the country shortly. The subsequent research can be extended by choosing another sample of respondents or changing to different countries.

Undeniably, analysis of Dark Triad traits is popular nowadays in the context of not positive personality traits affecting entrepreneurial intentions. Still, the research can also be done with other features such as overconfidence, attention deficit hyperactivity disorder (ADHD) (Wiklund et al., 2017), bipolar traits (Johnson et al., 2018), mood disorders (Bogan et al., 2013) and others. It is worth finding out, as the heading of one of the articles by Wiklund (2018) says, when differences can be an advantage.

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