

# NIAT KEUSAHAWANAN DALAM KALANGAN PELAJAR INKUBATOR PERNIAGAAN DI BAWAH JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI (JPPKK): TEORI TINGKAH LAKU TERANCANG

## ENTREPRENEURIAL INTENTION AMONG BUSINESS INCUBATOR STUDENTS UNDER POLYTECHNIC AND COMMUNITY COLLEGE EDUCATION DEPARTMENT (DPCCE): A THEORY OF PLANNED BEHAVIOUR

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**Abstrak:** Walaupun dengan isu pengangguran, keusahawanan berpotensi untuk meningkatkan pertumbuhan ekonomi dan mewujudkan sejumlah besar peluang pekerjaan baharu. Selaras dengan galakan kerajaan terhadap rakyat Malaysia untuk meneruskan kerjaya dalam bidang keusahawanan, kajian ini dijalankan untuk memastikan sama ada pelajar-pelajar inkubator perniagaan di bawah Jabatan Pendidikan Politeknik dan Kolej Komuniti (JPPKK) mempunyai hasrat untuk menjadi usahawan selepas tamat pengajian nanti. Oleh itu, kajian ini mencadangkan niat keusahawanan dalam kalangan pelajar boleh dijelaskan menggunakan Teori Tingkah Laku Terancang (TPB) oleh Ajzen"s (1991). Atas sebab ini, kajian ini cuba menentukan hubungan antara sikap, norma subjektif, kawalan tingkah laku yang dirasakan dalam TPB dan keperluan untuk pencapaian ke arah niat keusahawanan. Kaedah tinjauan diedarkan menggunakan persampelan bukan kebarangkalian kepada pelajar inkubator sebagai responden di bawah Jabatan Pendidikan Politeknik dan Kolej Komuniti (JPPKK) di Malaysia. Analisis berdasarkan korelasi menunjukkan hubungan yang positif di antara sikap, norma subjektif, kawalan tingkah laku yang dirasakan dan keperluan untuk pencapaian ke arah niat keusahawanan.

**Kata Kunci:** Inkubator, niat keusahawanan. TPB, keperluan untuk pencapaian

**Abstract:** *Despite this unemployment issue, entrepreneurship has the potential to boost economic growth and create large number of new job possibilities. In keeping with the government's encouragement of Malaysians to pursue careers in entrepreneurship, the study was carried out to ascertain if business incubator students under Polytechnic and Community College education Department (DPCCE) have the intention to become entrepreneur upon graduation. Therefore, this study proposed the entrepreneurial intention among students can be explained using Theory of Planned Behavior (TPB) by Ajzen's (1991). For this reason, this study is trying to determine the relationship between attitudes, subjective norms, perceived behavioral control in TPB and need for achievement towards entrepreneurial intention. Survey method distributed using non-probability sampling to incubator students as respondents under Polytechnic and Community College Education Department (DPCCE) in Malaysia. Analysis based on correlation indicate the hypothesized in positive relationship between attitudes, subjective norms, perceived behavioral control and need for achievement towards entrepreneurial intention.*

**Keywords:** *Incubator, entrepreneurial intention. TPB, need for achievement*

## Introduction

The field of entrepreneurship is booming worldwide and every country tries to investigate new business opportunities to combat unemployment and economic imbalances. Entrepreneurship is regarded as a crucial element for the economic advancement of a nation and helps enhance a nation's economic outlook. According to Ministry of Higher Education's Strategic Plan (2023-2025) the government has helped a lot to encourage and support students and graduates to become entrepreneurs. Through Ministry of Higher Education (MOHE) has always placed emphasis on entrepreneurship to be applied to polytechnic and community college students to support the government's efforts towards producing more holistic, entrepreneurial and balanced. Meanwhile, the Professional Training and Education for Growing Entrepreneurs (PROTÉGÉ) is a unit under the Ministry of Entrepreneur Development and Cooperatives (KUSKOP) implements initiatives to increase the potential for employability and entrepreneurial skills in line with the National Entrepreneurship Policy (DKN) 2030. PROTEGE has trained 300 participants for the year 2022 which provides specific training for Higher Education Institutions and Public Skills Training Institutions (ILKA) students, including from the B40 and OKU groups who have been running a business while in business or who are interested in doing business through Student Preneur and Biz Apprenticeship (SPACE) and New Gen Entrepreneur Online Bootcamp (N-GENE) to increase the number of entrepreneurs among youth or graduates.

However, according to the statistic of Tracer Study reported by Malaysian Ministry of Higher Education (MOHE) for 2023 shows that polytechnic graduates that are not working yet is 2.9 % while community college graduates is 2 %. Although the unemployment rate is declining compared to 2022, the percentage of graduates who become entrepreneurs just 9.8% of Polytechnic graduates and 12% of Community College graduates as shown in Table 1. However, the Table 2 below shows the Key Performance Indicators (KPIs) indicate that the percentage of Graduate Entrepreneurs for Higher Education Institutions (HEIs) exceeds the yearly target and has been rising every year except in 2019. (PTK IPT 2021-2025, 2020.). MOHE's support through entrepreneurship programmes conducted in HEIs nationwide has proven to be fruitful including incubator programmes.

**Table 1: Number and Percentage of Malaysian Graduates Based on Employment Status**

Number and Percentage of Malaysian Graduates based on Employment Status by HEIs of TVET, 2023												
Categories of HEIs	Employment Status										Total	
	Employed		Further Study		Upgrading Skills		Waiting for Work Placement		Not Working Yet			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Public Universities	11,581	72.4	2,629	16.4	776	4.9	441	2.8	560	3.5	15,987	100
Polytechnics	21,757	76.6	5,142	18.1	142	0.5	555	2.0	8.11	2.9	28,407	100
Community Colleges	4,230	69.1	1,747	28.5	8	0.1	16	0.3	120	2.0	6,121	100

**Table 2: Four Key Performance Indicator by MOHE**

Key Performance Indicator	2016		2017		2018		2019		2020
	TARGET	ACHIEVED	TARGET	ACHIEVED	TARGET	ACHIEVED	TARGET	ACHIEVED	TARGET
Entrepreneurship awareness among students	60%	60% 309,834	70%	75% 390,372	80%	82% 427,343	90%	96.01% 531,513	100%
Graduate entrepreneurs	2.50%	2.50% 3,756	3%	3.10% 4,840	3.50%	5% 6,447	4%	4.63% 7,148	5%
Student businesses	3%	3% 9,998	6%	5% 19,024	9%	7% 30,888	10%	10.20% 49,983	15%
Educators with entrepreneurship expertise	300	2,206	600	1,260	900	1,988	1,200	2,079	1,500

Meanwhile, the study found that business incubators assist in developing new ventures and that they are effective in new venture creation in Kenya (Karitu & Muathe, 2023). Lukes et al. (2019) questioned if business incubators genuinely help to boost the number of entrepreneurial endeavours. Propensity-score matching, Tobit and Poisson regression analyses all indicate that incubator tenancy has a substantial negative impact on sales revenues, but incubation has no discernible impact on employment generation. Thus, to fill the gap, using the Theory of Planned Behaviour (TPB), this study will explore entrepreneurial intention among business incubator students under Polytechnic and Community College Education Department (DPCCE).

## Literature Review

There are five point will be discussed in Literature Review includes incubator, entrepreneurial intention (EI), attitudes towards entrepreneurship (ATE), subjective norms (SN), perceived behavioural control (PBC) and need for achievement (NFA).

### Incubator

Incubators are one of the concepts introduced to train and prepare entrepreneurs to face challenges in business. Business incubators are considered to be promising policy mechanisms

that support entrepreneurial growth by nurturing new firms through their developmental lifecycle. They are viewed as preferred tools by policymakers for promoting the development of technology-based and growth-oriented firms (Mian et al., 2016). It is well understood that innovative start-ups can create and shape new industries and generate considerable economic and societal benefits, therefore, a variety of such policy initiatives are aimed at promoting the establishment, growth, and impact of innovative start-ups (Audretsch et al., 2020). Hence, economic conditions may force university's management to take initiative for creation of such start-ups or business incubators which ultimately contribute to reducing unemployment rate of a country (Huda & Rejito, 2020). Furthermore, regarding to reduce unemployment rates, business incubators play a vital role in creating businesses, which also offer numerous market plans, business capital collection and specialized professional service (Sharma, 2019). Business incubators and the practice of business incubation boost the chances of new venture survival in the early phases of development. It aims to foresee and clarify how the likelihood that a new enterprise will survive the early phases of development is increased by business incubators and the process of business incubation (Njau et al., 2019).

Its primary goal is to increase the nation's capacity for cost-effective growth by assisting start-up companies as they advance through the growth stage of their development. Consequently, student business incubator offers a value-added element in a Higher Education Institution's entrepreneurial ecosystem. Through the establishment of business incubators in polytechnics and community colleges, students' potential to become entrepreneurs can be polished and will produce graduates with entrepreneurial characteristics after graduation. As a result of this, majority of the institutions offer entrepreneurship as a specialized course and provide students with business incubator facility.

### **Entrepreneurial Intention (EI)**

Entrepreneurial intention is the deliberate mental state that comes before take action and focuses on a goal, like launching a new company (Bird, 1988; Krueger and Carsrud, 1993). Entrepreneurial intention is related to the individual's conviction and intention to start a new business after screening and planning for the future (Kumar & Das, 2019). The urge to create a novel idea is linked to an entrepreneurial intention (Mensah et al., 2021; Rueda et al., 2021; Sadat & Lin, 2020). The intention is the motivation of the individual for certain behaviours (Alshebami et al., 2020) while the desire to start a business as impacted by perceptions of entrepreneurial behavior is known as entrepreneurial intention (Mensah et al., 2021).

In literature, variable of intention has been excessively used by researchers to explain human behaviour under study (Alam et al., 2019). In addition to entrepreneurship training, other factors are known to affect students' entrepreneurial intentions (Rijati et al., 2022). According to research, exposure to entrepreneurship education is linked to entrepreneurial intention (Draksler & Sirec, 2021).

In fact, the Theory of Planned Behaviour (TPB) provides a logical and broadly applicable theoretical framework that allows us to comprehend and forecast entrepreneurial intention by accounting for both social and personal elements (Rueda et al., 2015). TPB was proposed by Ajzen (1985) and further developed and supported by empirical evidence by Ajzen (1991). Originally developed to describe human behaviour, TPB has been used to several significant disciplines, such as psychology, sociology, health, sports, and higher education (Erten & Köseoğlu, 2022).

### **Attitudes towards entrepreneurship (ATE)**

According to Ajzen's (1991) the attitude of an individual, whether instrumental/cognitive (beliefs, thoughts, or logical reasoning) or affective/experiential (feelings of joy or satisfaction), is a crucial factor in starting any activity. The evaluation of an individual's ATE reveals how they view the advantages or disadvantages of pursuing entrepreneurial endeavors (Esfandiar et al., 2019). An individual weigh a variety of possible outcomes while evaluating different career options, including financial gain, risk factors, and degree of independence (Gibson et al., 2021; Douglas and Shepherd, 2002).

Lumpkin and Dess (1996) assert that entrepreneurship entails a range of hazards, including psychological, social, and personal risks; independence refers to the degree of autonomy in decision-making; and income includes both tangible and intangible rewards of entrepreneurship. While some research has looked at the connection between ATE and EI (Gultom et al., 2020; Zahid and Haji Din, 2019; Zainuddin and Mukhtar, 2022), this study proposed the following hyphotesis:

H1: Attitude towards entrepreneurship has a positive relationship with entrepreneurial intention.

### **Subjective norms (SN)**

Subjective norms are related to the perceived social pressure to perform or not to perform a certain behaviour' (Ajzen, 1991). They relate to an individual's views on the values that other people think are significant in relation to that individual's decision to start a business in an entrepreneurial context (Gieure et al., 2019). For those without entrepreneurship experience, subjective norms are decisive (Zhang et al., 2015). Several studies with empirical data have demonstrated that subjective norms have an influence on entrepreneurial intention. (Gieure et al., 2019; Rambe et al., 2017; Rueda et al., 2021)

Subjective norms relate to individual perceptions of whether or not the environment and the people around them will support the endeavour (Sadat & Lin, 2020). In other words, entrepreneurial intention is influenced by extrinsic factors such as the opinions of friends, family, or colleagues (van Gelderen et al., 2008; Contreras-Barraza et al., 2021).

Therefore, university students who were surrounded by close friends and/or family members who supported them in starting a business had higher entrepreneurial intention. Similar results were found in a study that used TPB to analyse entrepreneurial intention in Malaysian university students (Al-Jubari, 2019) and also in a study of Spanish university students. Khadri et al. (2020), however, discovered no meaningful connections between subjective norms and entrepreneurial intention. Based on this, the following hypothesis is proposed:

H2: Subjective norms have a positive relationship with entrepreneurial intention.

### **Perceived behavioural control (PBC)**

Perceived behavioural control is significantly linked to student intentions to become entrepreneurs (Khadri et al., 2020). According to Ajzen, 1991 perceived behavioural control (PBC), which refers to people's perception of the ease or difficulty of performing the behaviour of interest. It relates to a person's control over their actions to engage in particular behaviours (assessment of skills, intellectual capacity, ability to overcome difficulties, coping with hurdles) (Gieure et al., 2019). Moreover, Bandura (1991) stated that PBC is defined as people's beliefs about their capabilities to exercise control over their own level of functioning and over the



events that affect their lives. Perceived control is the personal perception of controlling certain behaviours (Sadat & Lin, 2020).

Based on the assumptions of TPB, PBC has positive effects on the entrepreneurial intention of students (Bayona-Oré, 2023). Moreover, PBC has a significant effect on the intention to become an entrepreneur as supported by Barba-Snchez et al. (2022) who demonstrate the significant influence of this factor on entrepreneurial intention. Based on this, the following hypothesis is proposed:

H3: Perceived behavioural control has a relationship with entrepreneurial intention.

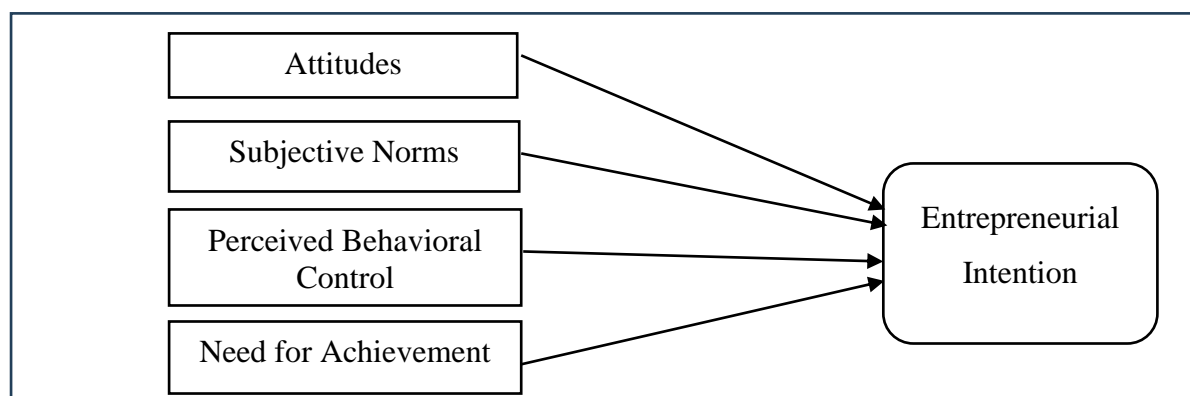
### Need for achievement (NFA)

One of the motivators when students are thinking about their future is their need for achievement, according to a prior study. According to free enterprise studies, management students who score exceptionally high on the demand for achievement are more likely to pursue an entrepreneurial career and start their own business (Akhtar et al., 2020).

As a fundamental psychological process, the need for achievement is a drive or strength within people who always place a high value on achievement behavior (McClelland, 1986; Owoseni, 2014). According to Bux and Honglin (2015), the need for achievement is the drive for personal action in order to succeed and get a competitive edge in the corporate world. According to Ferreira et al. (2014), entrepreneurs differ from one another in their achievement behavior because they have a greater drive for success than people in other occupations. Need for achievement correlating with entrepreneurial intentions impact the short, medium, and long-term professional ambitions (Swain & Olsen, 2011). Small enterprise owners are observed possetting a higher need for achievement in entrepreneurial studies (Lam, Azriel, & Swanger, 2017)

Small and Medium Enterprise (SME) personnel in Bali have developed the strength to act in a way that leads to business success because of their need for achievement (Kusumawijaya, 2019). So that entrepreneurial intention is determined by the need for achievement, optimism, attitudes of value, and the value of business success as a function of the behavior of SME employees in Bali in combining creativity, innovation, hard work, and courage to face risks to obtain opportunities (McClelland, 1986; Francoise et al., 2017; Kerr et al., 2017). Based on this, the following hypothesis is proposed:

H4: Need for achievement has a positive relationship with entrepreneurial intention.



**Figure 1: Research framework**

### Research Methodology

The measurement items for this study will adopt from established articles specific to the study area. The items will adopted from Rueda et al., 2015 and Mokhtar & Zainuddin, 2017. However, it should be noted that the use of single-source data from study respondents answering both dependent and independent variables may lead to single-source bias. According to MacKenzie & Podsakoff (2012) and Ngah et al. (2020), this can result in common method bias issues. To address this, respondents were asked to indicate their agreement using a five-point Likert scale for independent and dependent variable (Ngah, Thurasamy, et al., 2019). According to Sekaran and Bougie (2010), the most popular test of inter-item consistency reliability is Cronbach's Alpha Coefficient. The analysis of the instrument will carry out for 30 respondents. The values for the constructs were ranged from 0.774 to 0.900 and acceptable since they exceed the minimum recommended level of 0.6 (Sekaran, 2003). Table 3 shows the Cronbach scale for each variable set.

**Table 3: Cronbach Alpha Score for Questionnaire Items**

Item	Cronbach's Alpha
Entrepreneurial Intention	0.846
Attitude	0.861
Subjective Norms	0.900
Perceived behavioural control	0.845
Need for achievement	0.774

Non-probability sampling refers to any form of sampling where some elements of the population have a low chance of selection, or where it is not possible to determine the probability of selection reliably (Muhammad & Kabir, 2018). Therefore, the study justifies the use of non-probability sampling with the convenience sampling technique where the researcher announces the study and participants self-select if they wish to participate or depends on their own motivation (Stratton, 2021). Additionally, the study employed an online survey to collect data from students that handle or have experience handling incubator in Polytechnic and Community College. The questionnaire link was shared through various platforms such as WhatsApp and Telegram in two months. We received a total of 106 valid and usable data points for analysis using Statistical Package for the Social Sciences (SPSS). Based on Hair et al. (2006) a sample size of 100 is considered sufficient to carry out the analysis.

### Results and Analysis

For demographic factors, female respondents (67.9%) slightly outnumbered male respondents (32.1%). As expected, majority of respondents identified as Malay (81.1%), with other races representing a minority. In terms of education level, the largest group of respondent study in semester 5 (24.5%), while the smallest group study in semester 6 (7.5%). In terms of business, only 35% have experience in manage business while 67 % have no experience in business.

**Table 4: Profile of Respondents**

Characteristics	Item	Frequency	%
<b>Gender</b>	Male	34	32.1
	Female	72	67.9
<b>Study in semester</b>	1	11	10.4
	2	25	23.6
	3	20	18.9
	4	16	15.1
	5	26	24.5
	6	8	7.5
<b>Race</b>	Malay	86	81.1
	Chinese	4	3.8
	Indian	7	6.6
	Other	9	8.5
<b>Experience in business</b>	Yes	35	33
	No	71	67

**Table 5: Mean and Standard Deviation**

Items	Mean	Standard. Deviation
Entrepreneurial Intention	4.12	0.69
Attitudes towards entrepreneurship	4.01	0.59
Subjective Norms	4.10	0.46
Perceived behavioural control	3.68	0.64
Need for achievement	4.03	0.59

Table 5 show that the mean values for entrepreneurial intention on high side which is 4.12 and standard deviation is 0.69. Meanwhile, the lowest value of mean is perceived behavioural control which is 3.68 and standard deviation is 0.64. According to Mohd Najib (2003), the score for each item indicate high level which is in range 3.67 till 5.00.

**Table 6: Correlation Analysis**

		Intention	Attitudes towards entrepreneurship	Subjective Norms	Perceived behavioural control	Need for achievement
Intention	Pearson Correlation	1	0.538**	0.422**	0.567**	0.533**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	106	105	106	106	106

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

In terms of correlation coefficients in Table 6 show that the correlations reveal significant positive relationships between entrepreneurial intention and other variables. Perceived behavioural control is the highest item that significantly and positively correlated with entrepreneurial intention in weak relationship. Similar with attitudes towards entrepreneurship and need for achievement that significantly and positively correlated with entrepreneurial intention respectively 0.538 and 0.533. Meanwhile the subjective norms indicate positively correlated with entrepreneurial intention but in lowest value that show weak in relationship. This suggests that as individuals exhibit more favorable attitudes, stronger subjective norms, higher perceived control, and a greater need for achievement, their entrepreneurial intentions



also increase. The strongest correlation is with perceived behavioral control, indicating its critical role in shaping entrepreneurial intentions. All correlations are statistically significant, emphasizing the robustness of these associations in the data.

## Discussion

The purpose of this study is to investigate the relationship between attitudes towards entrepreneurship, subjective norms, perceived behavioural control in the TPB model and need for achievement. The findings of the study support all four hypotheses, which means that the objectives of the study have been achieved. The variables of attitudes towards entrepreneurship, subjective norms, perceived behavioural control, and need for achievement have a positive effect on entrepreneurial intention among incubators students under Polytechnic and Community College Education Department (DPCCE) consistent with previous research. The findings of this study confirm H1 by demonstrating that attitudes have a positive impact on entrepreneurial intention (Turra & Melinda, 2021; Al-Mamary & Alraja, 2022). Meanwhile, the findings indicated that the factor had no positive effect on the relationship (Khadri et al. 2020).

However, the findings show that entrepreneurial is significantly impacted by the subjective norms but the relationship is very weak. This outcome is in line with previous research, such as that conducted by Al-Jubari (2019) and Sampene et.al (2022). This outcome, however, differs with that of Su et al. (2021) and Sadat & Lin (2020).

Previous research explained that the need for achievement has a positive and significant impact on entrepreneurial intentions (Lam et al., 2017). Similar with the earlier study (Naushad & Malik, 2018), this study also demonstrates that the need for achievement has a positive and significant impact on entrepreneurial intention when the link is mediated by self-efficacy behavior.

The finding of this study demonstrate that perceived behavioural control has significant with entrepreneurial intention, which is in line with earlier studies, Turra & Melinda (2021). The level of perceived ease or difficulty in doing the behaviour is referred to as perceived behavioural control. Individuals who choose entrepreneurship over working for someone else and believe in their abilities to manage their own business demonstrate behaviour control. Students with the confidence to take on new challenges, accomplish their objectives, and overcome setbacks may start their own firm. Students at universities who have confidence in their skills are more independent, in charge, and more equipped to handle difficulties.

Similarly, the findings of this study show that attitudes have a positive impact on entrepreneurial intention, which is consistent with previous research such as Al-Jubari (2019) and Turra & Melinda (2021). Meanwhile, the findings from Khadri et al. (2020) indicated that the attitude factor had no positive effect on entrepreneurial.

To enhance future entrepreneurs' attitudes and perceived behavioral control, entrepreneurial education should be improved towards the student's incubator Entrepreneurial intention is fostered by perceived behavioural control over the fulfilment of one's goals and by the encouragement of family, colleagues and friends.

Future studies that incorporate new respondents such as university students can build on the findings of this one. Furthermore, entrepreneurial intention disparities between students at public and private colleges should be investigated. Similar studies with other characteristics

should be repeated and research may also be done with students who are graduating from college.

### **Conclusion**

Entrepreneurship is a key element for the economic development of countries, contributing to the generation of jobs and decrease unemployment. As a result and the need to train future job generators, the word ‘entrepreneurship’ has gained significance. To this end, it is important to understand the entrepreneurial intentions of DPCCE students. The findings of this research indicate that there is a need to strengthen students’ entrepreneurial attitudes and venture creation in programmes preparing students for diverse careers.

This research emphasizes the significance of attitudes towards entrepreneurship, subjective norms, perceived behavioural control, and need for achievement towards entrepreneurial intention. The study supports hypotheses H1-H4. However, it is important to acknowledge the limitations of this research, such as the sample being limited to incubator’s students under DPCCE. Therefore, future research should encompass a broader range of variables related to need for achievement.

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