DO INTRINSIC AND EXTRINSIC MOTIVATION RELATE TO ENTREPRENEURIAL INTENTION DIFFERENTLY? A SELF-DETERMINATION THEORY PERSPECTIVE

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ABSTRACT

The purpose of the current study was to examine the relationship between motivational factors of self-determination theory (SDT) and entrepreneurial intention through the mediation role of its determinants from the Theory of Planned Behaviour (TPB). Specifically, it aimed at understanding whether different types of motivation (intrinsic and extrinsic) influence entrepreneurial intention differently. Based on a sample of students from one public and three private universities in Malaysia (N=414), a structural model was tested. Results revealed that 72% of the variance on entrepreneurial intention was explained by the integrated model. All the three TPB proximal determinants played a mediating role in the relationship between intrinsic and extrinsic motivation and entrepreneurial intention. While both motivational factors significantly predicted entrepreneurial intention, extrinsic motivation exerted stronger effect than intrinsic. This study supports the theoretical integration of Self-Determination Theory (SDT) and theory of planned behaviour in entrepreneurship research.

Keywords: Intrinsic & Extrinsic Motivation, Self-Determination Theory, Theory of Planned Behaviour, Entrepreneurial Intention.

INTRODUCTION

Entrepreneurship plays a major role in enhancing economic growth and job creation Du, & O'Connor, 2018; Praag & Versloot, 2007). It has become of great interest for policy-makers to promote and support entrepreneurship for potential benefits of individuals and communities as well (Obschonka et al., 2018). The engagement of individuals in entrepreneurial activities seems to be a consequence of entrepreneurial intention as it is considered an immediate best determinant of voluntarily behaviours and a important step in the process (Bird & Jelinek, 1988; Fishbein & Ajzen, 1975; Gelderen et al., 2008; Krueger et al., 2000). In fact, intention is one of the key elements that precedes human actions that require decisional processes and remains crucial in the case of business engagement. What spurs people to engage in entrepreneurial activities becomes dominant topic of research in entrepreneurship (Fuller et al., 2018) and the cognitive intention-based models such as theory of planned behaviour (Ajzen, 1991) have been widely utilized (Kautonen et al., 2015; Schmutzler et al., 2018).

Theory of planned behaviour (TPB) highlights the importance of three factors as predictors of entrepreneurial intention namely: attitude, subjective norms and perceived

behavioural control. These factors are argued to be the proximal determinants of intention (Ajzen, 2011). Although TPB has shown great applicability and validity in many research settings, it has some constrains that may limit its scope (Hagger & Chatzisarantis, 2009) such as its inability to indicate why people would be involved in intentional behaviour: are they acting out of volition and true self or out of compulsion and sense of obligation (Armitage & Conner, 2001). Therefore, self-determination theory (Ryan & Deci, 2017; Ryan & Deci, 2000) could overcome such shortcoming of TBP by offering explanation to its origins (Andersen et al., 2000). That is, SDT may improve the predictability of this intention-based model by evaluating the motivational reasons why people have intended to pursue such activity (Luqman et al., 2018).

In entrepreneurship setting, people would engage in entrepreneurial activities for various reasons such as being passionate, sense of independence, financial reasons or avoiding unemployment or underemployment etc. These motivational reasons are either intrinsic or extrinsic. Both types of motivation are much relevant in entrepreneurship as people would not always start their ventures because of intrinsic reason but because of extrinsic reason as well. Further, those motivational reasons may have varying degrees of influence on entrepreneurial intention. However, there exists only limited research that examines how motivation, from SDT view, shapes entrepreneurial intention (Al-Jubari et al., 2018), despite that SDT and TPB are complementary and have been utilized in other research contexts such as health, exercise and physical activity, social networks etc (Brooks et al., 2017; Hagger & Chatzisarantis, 2009; Hagger et al., 2006; Jacobs et al., 2011; Luqman et al., 2018; Sicilia et al., 2015).

Consequently, the current study aims at integrating self-determination theory and theory of planned behaviour to better understand how different types of motivation may influence entrepreneurial intention differently. Particularly, it aims at testing the indirect effect of intrinsic and extrinsic motivation on entrepreneurial intention through the mediating role of perceived behavioural control, subjective norms and attitude. This is because there is a need for better understanding of this topic among students (Othman & Mansor, 2012) who tend to show different inclinations towards entrepreneurship during and after their graduation. Students may also differ in their interest for entrepreneurship compared to non-students.

This paper is organized as follows: a review of entrepreneurship research in Malaysia. The theoretical background of the underpinning theories, framework and hypotheses are presented next. It is followed by a discussion on the target sample, measurement and methods. Details on the analytical procedures, study results and discussion are then presented in subsequence sections.

LITARATURE REVIEW

Research on Entrepreneurship intention in Malaysia

Research on entrepreneurship intention in Malaysia seems to have gained momentum in the last decade. Many studies have been conducted to assess intentional propensities of individuals to become self-employed using different theoretical foundations and building on theories like the theory of planned behaviour (Muhammad et al., 2015), the entrepreneurial event model and the entrepreneurial potential model (Ayob, 2013), and the personality traits (Zain et al., 2010) among others. One strength associated with research on student entrepreneurship in Malaysia is the investigation of this aspect within both public and private universities, and across different academic programs; not only business students or students taking entrepreneurship subject. The list includes business and economic students (Ayob, 2013) engineering students

(Abbas, 2015), Information and Technology (Haris et al., 2013). Gender differences were also assessed (Ghazali et al., 2012).

While useful conclusions were drawn based on research evidence, the overall findings did not differ much than evidence and often granted support to the theoretical foundations in use. The proximal determinants of TPB have usually had established effects on intention. Interestingly, Chen et al. (2013) have not found effect of satisfaction and learning efficacy of the curriculum design and teaching with students' entrepreneurial intentions; implying that students do not see entrepreneurship course as suitable entrepreneurial pursuit but they learn it so to be able to apply it in their future jobs. More research is needed to better understand this phenomenon. The current study is just an attempt on this matter.

THEORETICAL BACKGROUND

Theory of Planned Behaviour

According to the theory of planned behaviour, human behaviours, voluntarily in particular, are determined by intention and that intention play a mediation role in the relationship between a behaviour and attitude, subjective norms and control (Ajzen, 1991). These cognitive antecedents refer to: A) attitude which is about personal favourable or unfavourable evaluation of desired behaviour. B) Subjective norms that refer to the agreement or disagreement of social reference groups such as family and friends about individual's engagement in the behaviour. C) Perceived behavioural control related to the personal perception of whether the activity is easy or difficult to engage in (Liñán & Chen, 2009).

Entrepreneurial intention studies have mostly adopted either theory of planned behaviour (Ajzen, 1991) or entrepreneurial event model (Shapero & Sokol, 1982). They overlap with each other to great extent (Kautonen et al., 2015), where attitude and perceived behavioural control of TPB correspond to desirability and feasibility of entrepreneurial event model. Both have been compared and it was found that they are similar in their predictive power (Krueger, Reilly, & Carsrud, 2000). However, this study use TPB as one of the underpinning theories due to its consistency in understanding and predicting entrepreneurial intention in addition to is application across disciplines (Armitage & Conner, 2001; Fayolle, Liñán, & Moriano, 2014; Liñán & Fayolle, 2015).

Attitude towards entrepreneurship and perceived behavioural control have shown strong and consistent effect on entrepreneurial intention in many studies. Subjective norms is usually the weakest or non-significant predicter of entrepreneurial intention (e.g., Al-Jubari, Hassan, & Hashim, 2017; Almobaireek & Manolova, 2012; Farooq et al., 2018; Liñán & Chen, 2009; Alharbi et al., 2018). However, few other studies have not found support for the relationship between attitude and entrepreneurial intention (Siu & Lo, 2013). Conversely, support was found for the effect of subjective norms on intention (Iakovleva et al., 2011; Kautonen et al., 2013; Siu & Lo, 2011). Therefore, based on this discussion, the following hypotheses were formulated:

H1: Perceived behavioural control is positively associated entrepreneurial intention.

H2: Subjective norms are positively associated entrepreneurial intention.

H3: Attitude is positively associated entrepreneurial intention.

Self-Determination Theory

As a macro theory of human motivation, self-determination theory looks at motivation as a core biological, cognitive and social regulation, involves the energy, direction and persistence of activation and intention (Deci & Ryan, 2000). The extrinsic motivation occurs when people act out of obligations, lack of choices or act because expect some kind of reward or avoid punishment and guilt. On the other hand, people act intrinsically when they derive enjoyment and interest from that particular activity and they act upon it out of volition (Deci & Ryan, 2000). This is much applicable in entrepreneurship domain, where some people would want to start a business merely to get some money or to avoid unemployment or they engage in such behaviour because of the interest and enjoyment derived from it.

Self-determination theory posits that people are curious and vigorous in nature and they always look for opportunities of self-development & growth. Even though not all activities, including entrepreneurship, are interesting and enjoyable, which means not intrinsically motivating, people may engage in such activities for intrinsic reasons. However, SDT, unlike other theories of motivation, conceptualizes motivation along a continuum ranging from amotivation or unwillingness, to passive compliance, to active personal commitment (Ryan & Deci, 2000). These variations in the degrees of motivation reflect how such behaviours are regulated and internalized by individuals. That is, SDT suggests that even though some behaviours are extrinsically motivated, they can still be internalized and transformed to be more autonomous through a developmental process of internalization and integration. Internalization refers to people's taking in value so that externally regulated behaviour is transformed to internal regulation that become of value to them and does not require the presence of external contingencies, so that it becomes a part of the self.

SDT and TPB: The Complementary Role

Researches integrating both is becoming increasingly noticeable in various domains and research settings such as health, exercise, diet, eLearning, social networks, etc. According to Hagger & Chatzisarantis (2009) "*These approaches are deemed to provide complementary explanations of the processes that underlie motivated behaviour*". The link between self-determination theory and the beliefs system underpinning the proximal attitudinal factors of intention perceived behavioural control, subjective norms and attitude, and motivation form the basis of this integration. That is, TPB proposes that these beliefs results in a behavioural engagement but it does not clearly indicate whether such behaviour is performed because of personal choice and true self (intrinsic motivation) or because of obligation and control (extrinsic motivation). Therefore, self-determination motivation operates at a distal predictor of entrepreneurial intention whereas attitudinal factors as proximal predictors. As such, and on this basis, the effect of SDT motivation, intrinsic and extrinsic will influence intention through its proximal determinants (Luqman et al., 2018) (Figure 1).

For instance, in health behaviour meta-analysis, the proximal TPB determinants were found to partially mediate the relationship between SDT motivational factors and entrepreneurial intention (Hagger & Chatzisarantis, 2009). Similarly, in a physical activity and dietary behaviours context, autonomous motivation indirectly influenced intention for both behaviours through attitude and self-efficacy (Jacobs et al., 2011). Likewise, in a recent evidence in social network site research, Luqman et al. (2018) found that TPB determinants of discontinuance intention fully mediated motivational factors of SDT. Based on this background, the following hypotheses are offered:

H4: Intrinsic motivation is positively associated with (a) perceived behavioural control, (b) subjective norms, and (c) attitude towards entrepreneurship.

H5: Extrinsic motivation is positively associated with (a) perceived behavioural control, (b) subjective norms, and (c) attitude towards entrepreneurship.

H6: The relationship between intrinsic motivation and entrepreneurial intention is mediated by (a) perceived behavioural control, (b) subjective norms, and (c) attitude towards entrepreneurship.

H7: The relationship between extrinsic motivation and entrepreneurial intention is mediated by (a) perceived behavioural control, (b) subjective norms, and (c) attitude towards entrepreneurship.

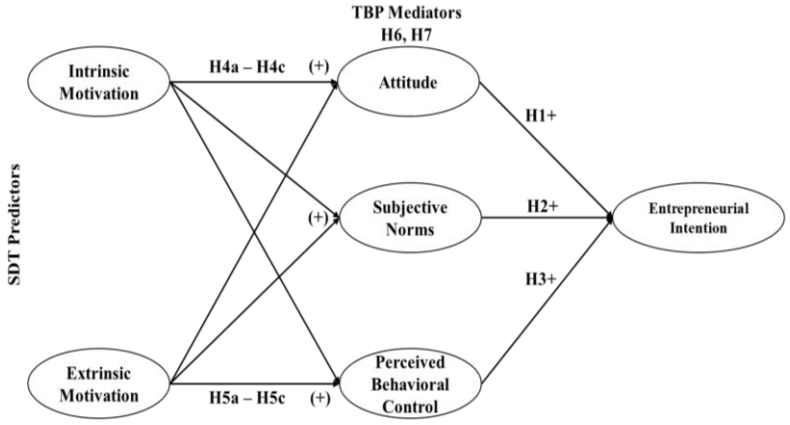

FIGURE 1
THE STUDY FRAMEWORK

METHODOLOGY

Participants

The convenience sample of this study (N=414) of undergraduates from three private universities and one public university in the state of Selangor, Malaysia consisted of 56% females and 44% males with an average age of 22.97 (SD1.13). Participants ethnicities were 75.4% Malay, 14.7% Chinese, 7.7% Indians and 2.2% others. They were enrolled in various programs and most of them were final year students (75.8).

Measures

TPB Instruments: Entrepreneurial intention and TPB constructs were measured using the entrepreneurial intention questionnaire (EIQ) (Liñán & Chen, 2009). A five-point Likert scale was used ranging from 1 (totally disagree) to 5 (totally agree). Entrepreneurial intention was measured by 6 items, followed by attitude 5 items, SN 3 items and PBC 6 items. The scale has been validated by many studies and showed good reliability ranging from 0.77-0.94 (Liñán & Chen, 2009). See the Table 1 below for summary.

SDT Instruments: To assess the intrinsic motivation and controlled extrinsic motivation (extrinsic regulation) variables, we opted for a slight adaptation of the situational motivation

scale (SIMS) to suit the current study. A five-point Likert scale was used ranging from 1 (totally disagree) to 5 (totally agree). Students were asked why they would want to be entrepreneur. Intrinsic motivation was assessed by 4 items and extrinsic regulation (controlled extrinsic motivation) was assessed by 4 items as well. The reliability was .86 and .73 respectively (Guay, Vallerand, & Blanchard, 2000). See the Table 1 below for summary.

Table 1
SUMMARY OF MEASUREMENT

No	Variable	No of items	Sample item	Source
1	Entrepreneurial intention	6	"My professional goal is becoming an entrepreneur"	(Liñán & Chen, 2009).
2	Attitudes towards entrepreneurship	5	"Being an entrepreneur implies more advantages than disadvantages to me"	
3	Subjective norms	3	"My immediate family would approve my decision to start a business"	
4	Perceived behavioural control	6	"I can control the creation process of a new firm"	
5	Intrinsic motivation	4	"Because I think I will feel good when I become an entrepreneur"	(Guay et al., 2000)
6	Extrinsic regulation	4	"Because I don't have any choice"	

RESULTS

Table 2 shows descriptive statistics and inter-constructs correlations. Mean values are moderately high in a scale of 5 and all constructs showed accepted reliabilities ranging from (0.84-0.94). The correlations analysis shows strong associations among the study constructs ranging from 0.515 (intrinsic motivation and extrinsic regulation) to 0.761 for perceived behaviour al control and entrepreneurial intention.

Table 2
MEANS, STANDARD DEVIATIONS, ALPHA AND CORRELATIONS

Variables	Mean (SD)	1	2	3	4	5	6
1. Entrepreneurial intention	3.95 (0.80)	**(0.94)**					
2. Attitudes towards entrepreneurship	4.07 (0.70)	0.622**	**(0.89)**				
3. Subjective norms	3.91 (0.82)	0.655**	0.612**	**(0.84)**			
4. Perceived behaviour al control	3.84 (0.77)	0.761**	0.646**	0.640**	**(0.94)**		
5. Intrinsic motivation	3.88 (0.68)	0.669**	0.579**	0.581**	0.587**	**(0.87)**	
6. Extrinsic regulation	3.81 (0.93)	0.680**	0.571**	0.618**	0.732**	0.515**	**(0.91)**

** *P <0.01*; Diagonals are Cronbach alpha coefficients

Measurement Model

Structural equation modelling using Amos (version 22) was utilized to test both measurement and full structural model. The measurement model of this study contains 28 unobserved variables (items) reflecting six unobserved latent variables. As depicted in Figure 2, the model has achieved an acceptable fit to the dada: χ^2 =1091.854, df=335, CFI=0.925,

RMSEA=0.074. All loadings were above 0.70 and significant at P<0.001. Consequently, after fitting the measurement model and testing the convergent and discriminant validity, the full structural model was then evaluated to test the hypothesized relationships.

Convergent and Discriminant Validity

Convergent validity is assessed using two approaches: the reliability scores (Cronbach alpha and composite reliability) and the average variance extracted (AVE). constructs demonstrate convergent validity when the AVE value is greater than 0.5 (Fornell & Larcker, 1981) and CR and alpha higher than 0.70 (Hair, Black, Babin, & Anderson, 2010). In the current study and as shown in Table 3, all constructs exceeded these threshold values and thus they convergent validity is established. Discriminant validity can be assessed by comparing the square root of AVE with the correlation of each constructs. Since the CFA result show that the square root of AVE is greater than off diagonal correlations, then discriminant validity is demonstrated. In addition, strong factor loadings of all items are indicative of discriminant validity. Table 3 displays convergent and discriminant validity in the current study.

Table 3
RESULTS OF THE CONFIRMATORY FACTOR ANALYSIS

Constructs	Items	Standardized Loading	Cronbach Alpha	CR	AVE
Entrepreneurial intention	EI6	0.849	0.94	0.946	0.743
	EI5	0.853			
	EI4	0.877			
	EI3	0.879			
	EI2	0.865			
	EI1	0.850			
Perceived behaviour al control	PBC6	0.850	0.94	0.941	0.725
	PBC5	0.844			
	PBC4	0.880			
	PBC3	0.863			
	PBC2	0.867			
	PBC1	0.803			
Attitudes towards entrepreneurship	ATE5	0.822	0.89	0.898	0.639
	ATE4	0.841			
	ATE3	0.769			
	ATE2	0.828			
	ATE1	0.731			
Subjective norms	SN3	0.827	0.84	0.855	0.665
	SN2	0.907			
	SN1	0.699			
Intrinsic motivation	AIM4	0.786	0.87	0.871	0.629
	AIM3	0.804			
	AIM2	0.822			
	AIM1	0.758			
Extrinsic regulation	CEM4	0.868	0.91	0.910	0.717
	CEM3	0.820			
	CEM2	0.888			
	CEM1	0.808			

P <0.001.

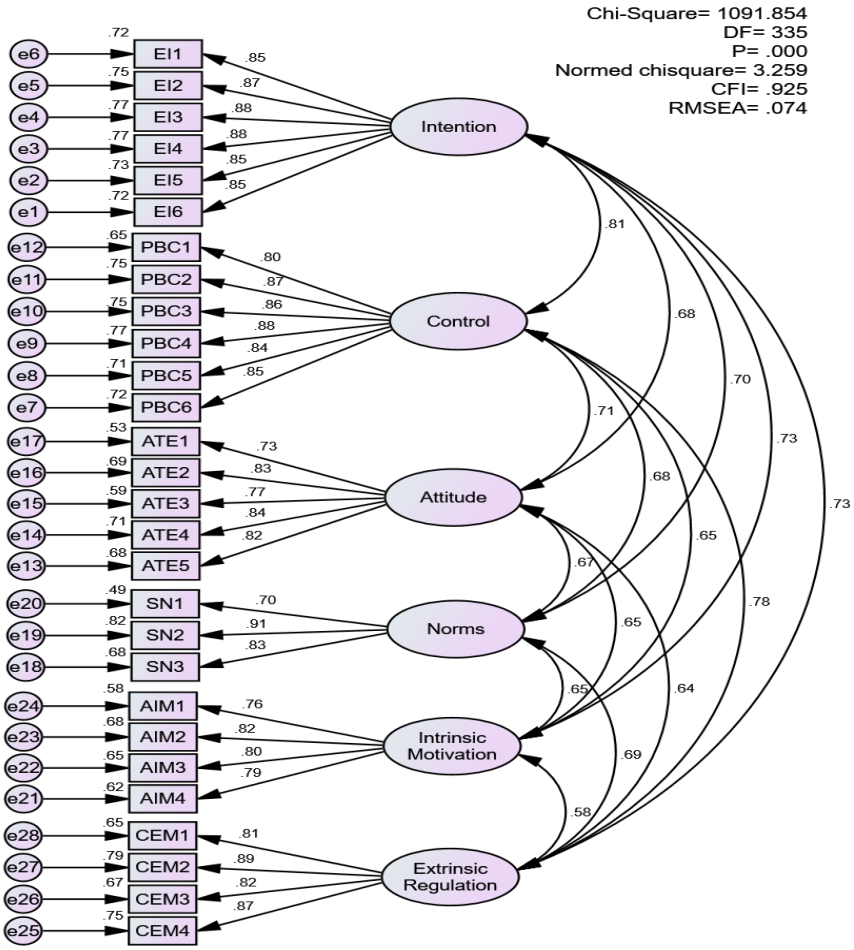

FIGURE 2
MEASUREMENT MODEL

The structural Model

A structural model was estimated modeling intrinsic motivation and extrinsic regulation as predictors of the outcome variable, entrepreneurial intention, through the mediating roles of attitudes, subjective norms and perceived behaviour al control. The structural model results revealed an acceptable model fit: χ^2=1163.620, df =340, CFI=0.919, TLI =0.910, RMSEA =0.077. The covariance of intrinsic motivation & extrinsic regulation is significant (β =0.361, p < 0.001). As presented in Table 4, the results reveal that hypotheses *H1, H2 and H3* are fully supported as TPB factors positively predict entrepreneurial intention. The path coefficients of perceived behavioural control, subjective norms and attitude were all significant: (β = 0.55, p < 0.001), (β = 0.25, p < 0.001) and (β = 0.16, p < 0.001) respectively. Also, full support for *H4 and H5* was found as well, where intrinsic motivation and extrinsic regulation were hypothesized to positively influence perceived behavioural control, subjective norms and attitude. Path coefficients were all significant (*H4a*) (intrinsic motivation with perceived behavioural control (β = 0.32, p<0.001), (*H4b*) intrinsic motivation with subjective norms (β=0.41, p<0.001) and lastly (*H4c*) (β=0.44, p<0.001) for intrinsic motivation with attitude). In the same manner, all coefficients of H5 were significant: (*H5a*) (extrinsic regulation with perceived behavioural

control (β=0.62, p<0.001), (*H5b*) extrinsic regulation with subjective norms (β=0.47, p<0.001) and lastly (*H5c*) (β=0.41, p<0.001) for extrinsic regulation with attitude) (Figure 3).

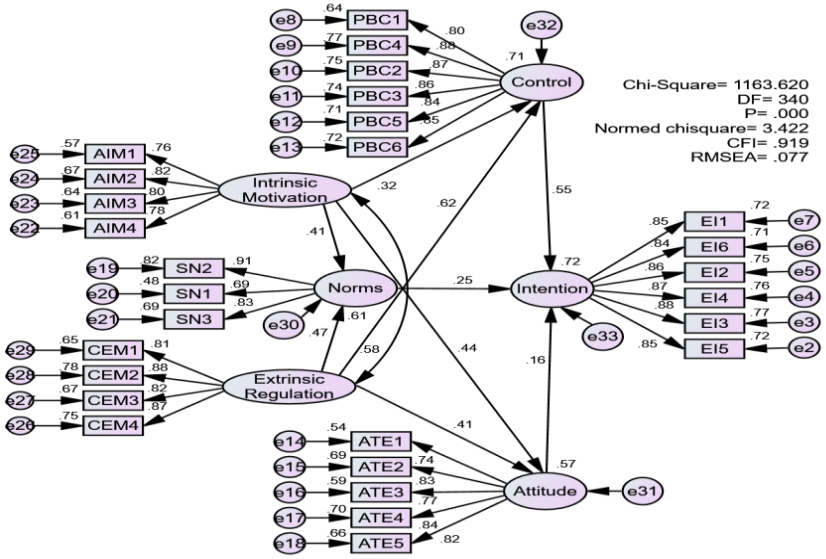

FIGURE 3
THE STRUCTURAL MODEL

TABLE 4
STANDARDIZED ESTIMATES

Path	Std Estimates	Critical Ratio	P-Value	Findings
Perceived behavioural control → Intention	0.546	10.263	***	Supported
Subjective norms → Intention	0.254	5.295	***	Supported
Attitude → Intention	0.156	3.432	***	Supported
Intrinsic motivation → Perceived behavioural control	0.317	6.833	***	Supported
Intrinsic motivation → subjective norms	0.411	7.599	***	Supported
Intrinsic motivation → attitude	0.441	7.589	***	Supported
Extrinsic regulation → Perceived behavioural control	0.615	12.166	***	Supported
Extrinsic regulation → subjective norms	0.465	8.902	***	Supported
Extrinsic regulation → attitude	0.411	7.464	***	Supported

Further, to investigate whether TPB factors mediate the relationships between entrepreneurial intention and intrinsic motivation and extrinsic regulations, a mediation analysis was conducted using Mplus version 7 (Muthén & Muthén, 1998-2012). The bootstrapping procedure with bias-corrected intervals procedure was used to test magnitude and significance of the mediations effects (Shrout & Bolger, 2002). Mplus provides results for specific mediation effects, unlike Amos which just test for total effect only.

Table 5 presents the mediation analysis results, where all the TPB factors play a significant mediation role expect for one hypothesis. The indirect effects of intrinsic motivation on entrepreneurial intention via perceived behavioural control (*H6a*), subjective norms (*H6b*) and attitudes (*H6c*) were (β=0.173, p<0.001; β=0.104, p<0.001; β=0.069, p <0.066) respectively. As such, attitude didn't show to have a significant mediation role and thus hypothesis (*H6c*) is rejected. Similarly, perceived behavioural control (β=0.336, p<0.001), subjective norms (β = 0.118, p<0.001) and attitudes (β=0.064, p<0.01) were all significant mediators in the relationship

between extrinsic regulation and entrepreneurial intention, which support *H7a*, *H7b and H7c*. Overall, the model accounts for about 72% of variance in the entrepreneurial intention.

Table 5
Mediation Results

				Bootstrapping	
Path				**BC95% Confidence interval**	
	Estimates	**Z-Score**	**P-Value**	**Lower**	**Upper**
Sum of Indirect	0.346	6.646	0.000	0.244	0.448
IM → PBC → INT	0.173	4.124	0.000	0.091	0.255
IM → SNs → INT	0.104	3.338	0.001	0.043	0.166
IM → ATE → INT	0.069	1.835	0.066	-0.005	0.142
Sum of Indirect	0.518	12.322	0.000	0.436	0.601
EM → PBC → INT	0.336	7.208	0.000	0.245	0.427
EM → SNs → INT	0.118	3.512	0.000	0.052	0.184
EM → ATE → INT	0.064	2.055	0.040	0.003	0.125

DISCUSSION

Based on dual theoretical perspectives, an integrated research model was presented. The model aimed at examining whether different types of motivation influence entrepreneurial intention differently. Since people would like to engage in entrepreneurial activity for various reasons; intrinsic or extrinsic, it was assumed that both would trigger entrepreneurial intention positively. Further, we argued that the immediate antecedents of entrepreneurial intention namely perceived behavioural al control, subjective norms and attitudes will act as mediators of these motivational mechanisms. The integration of intentional (theory of planned behaviour) and motivational (self-determination theory) models adds distinctiveness to the current study.

Motivation is a crucial factor in determining entrepreneurial intention (Fayolle et al., 2014) and it may can come in any form but mainly from two places: internal (within the person) or external reasons to the person (Benzing et al., 2009; Carsrud et al., 2009). That is, people would have different motivational reasons to be engaged in any entrepreneurially activity. Either people start business because of limited options they have and out of obligation for example to avoid unemployment or to expect more income or because they have higher purpose and they want to be entrepreneurs because they enjoy being entrepreneurs or they want to have more autonomy and achievement.

The finding of the current study reveals that motivation plays a significant role in students' intentions to be entrepreneurs. Particularly, both types of motivation, intrinsic motivation and extrinsic regulation (motivation) have significant effects on entrepreneurial intention through its proximal predictors; perceived behavioural al control, subjective norms and attitudes. Extrinsic regulation has stronger effect than intrinsic motivation on these predictors. This lends to the self-determination theory, which differentiates the types of motivation and not the amount (Ryan & Deci, 2000), both types of motivation could lead to entrepreneurial intention and eventually actual enactment of such intentions (Al-Jubari et al., 2018).

Our findings also support the applicability of theory of planned behaviour. Interestingly in this study, the strongest predictor was perceived behavioural control (correspond to feasibility) and not attitude (desirability) (weakest predictor here) as mostly reported (Al-Jubari et al., 2018; Farooq et al., 2018; Liñán & Chen, 2009; Salman & Jamil, 2017). Further, the link between subjective norms and entrepreneurial intention showed fairly moderate significance, which is line

with (Kautonen et al., 2013; Siu & Lo, 2011). It seems that social norm, in the Malaysian context, plays a vital role on influencing individuals' intentionality and subsequent behaviours. For instance, subjective norms exerted moderate effect on people's purchasing intentions (Salem & Chaichi, 2018). However, it has shown weak or no significance in many entrepreneurship studies (Almobaireek & Manolova, 2012; Krueger et al., 2000). This is to say that social influence is important in deciding to be an entrepreneur and students may experience conformity pressure to with social values and norms. Further, though attitude has shown consistent strong effect on previous studies (e.g., Al-Jubari et al., 2018; Almobaireek & Manolova, 2012; Lechuga et al., 2018; Liñán & Chen, 2009). It showed the weakest effect among all the three entrepreneurial intention proximal predictors. This could indicate that as long as students perceive themselves have control on the creation of business venture and approval from social groups, their perception towards entrepreneurship (positive or negative) may not matter a lot.

LIMITATIONS OF THE STUDY

Though our study gives support to the integration of self-determination theory and theory of planned behaviour, but it is subject to some limitations. First, our study is cross-sectional in nature, which make it difficult to claim causality. A different design such as longitudinal would be more appropriate to find out whether the intention will be translated in action. Future research utilizing such design will be impactful. Second, the study has been conducted in one locality in Malaysia and claiming generalizability of finding to the entire university students in the country would be exaggerating. Probably future research should consider involving students from different parts of the country or better from the region to see if such results hold. Finally, our study has incorporated two classifications of motivation based on self-determination theory, which are intrinsic and extrinsic. However, motivation, according to this theory, is conceptualized a long a continuum of different types of motivations from the lack of motivation (amotivation) through least determined motivation (intrinsic regulation) to the most self-determined intrinsic motivation. Therefore, future research examining all these types of motivation on the motivational continuum will provide more information on motivational reasons. This of a particular interest to be explored as internalization and regulation of motivation is one of the core propositions of self-determination theory, which is most relevant in entrepreneurship research. People may start a business out of obligation and lack of choices, but then later in the process they start realizing the value of what they do and thus internalizing the motivational reasons from the extrinsic (controlled motivation) to the probably the intrinsic (autonomous motivation).

CONCLUSION AND RECOMMENDATIONS

As a conclusion, this study set out to examine how different types of motivation related to entrepreneurial intention among university students in Malaysia. For this purpose, self-determination theory of motivation was integrated with the intention theory of planned behaviour. This findings give support to this theoretical integration (Chan et al., 2013; Hagger & Chatzisarantis, 2009) to predict intention to be entrepreneurs (Al-Jubari et al., 2018). It has been found that extrinsic type of motivation exerts more effect on entrepreneurial intention via its proximal antecedents perceived behavioural control, subjective norms and attitude.

This study highlights few practical recommendations: policy-makers and educators who are involved in promoting entrepreneurial behaviours among students may focus on enhancing students' intrinsic motivation to be entrepreneurs. This because intrinsically motivated individuals tend to be more creative and persistent, and these attributes are highly related to entrepreneurship. This may lead to high probability of succeeding. Further, attitude in this study seems not to be a strong predictor of intention. Therefore, again educators and policy-makers should provide more awareness programs and incentives to make entrepreneurship looks attractive and advantageous to the students. The more the value of entrepreneurial activity is valued, the more likely we can see enterprising individuals in the society.

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