

## Entrepreneurial Intention among Higher-level Students of Koshi Province, Nepal

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### Abstract

This study aims to explore the perception of entrepreneurship among higher-level students of Koshi province, Nepal. The study employed the theory of planned behavior (TPB) as a theoretical background to understand the personal attitudes, perceived behavioral control, and subjective norms of students towards entrepreneurship. The study has based on a sample of 318 higher-level students of Koshi Province, Nepal. The study applied a quantitative method with the analysis of a partial least square-structural equation model (PLS-SEM) to test the hypotheses by SmartPLS 4. The findings of the study have shown that personal attitudes, perceived behavioral control, and subjective norms have a significant effect on the entrepreneurial intention of higher-level students. Similarly, this study found a significant positive relationship between subjective norms and personal attitudes and perceived behavioral control. Moreover, this study revealed that subjective norm have a moderate effect on entrepreneurial intention through personal attitude and perceived behavioral control. These results should serve as a guide for future theoretical and empirical development, and put existing study outcomes into perspective.

*Keywords:* theory of planned behavior, entrepreneurial intention, personal attitude, subjective norms, perceived behavioral control *JEL Classification:* A14; L26; M19

### Introduction

In today's contemporary global economy, the level of entrepreneurship has a direct impact on various macroeconomic factors, including national income, employment levels, price levels, international trade, and the overall economic environment (Audretsch et al., 2006; Karimi et al., 2010). So, most of the countries are spending a significant portion of the national budget on different programs and policies to enhance the entrepreneurial capacity among the students and stakeholders (Mok, 2005). However, an ongoing debate among economists pertains to the extent to which entrepreneurial capacity is influenced by factors such as family background, education, cognitive ability, and gender (Halaby, 2003; Narayanasamy et al., 2011; Marques et al., 2018). Entrepreneurship is a multifaceted concept that has defined in various ways by economists over different periods. The definitions often revolve around key elements such as innovation, risk-taking, opportunity identification, resource management, and value creation. One notable definition is provided by Schumpeter (1965), who characterizes entrepreneurship as the process of creative destruction. According to him, entrepreneurs play a pivotal role in introducing novel products, technologies, and business models that disrupt established markets and foster

economic growth. Similarly, Zacharakis et al. (1999) defines entrepreneurship as the process of creating value by bringing together a unique combination of resources to exploit an opportunity. These ideas show that individuals with strong entrepreneurial intentions are driven to introduce innovative products, technologies, and business models that disrupt existing markets (Kuckertz & Wagner, 2010).

The level of entrepreneurial intention among college students in underdeveloped and developing countries is often found to be unsatisfactory (Autio et al., 2001). Empirical evidence shows that most of the graduate and post-graduate students from these countries prefer clerical and other technical job opportunities rather than embarking on self-employment ventures (Ng'andwe, 2022; Samaranayake, 2016; Khanka, 2006). According to the World Bank (2021), Nepal exhibits a new business density rate of 1.36. This figure surpasses that of most South Asian countries like India (0.15), Pakistan (0.15), and, Bangladesh (0.04). However, compared to developing countries like Australia (14.27), China (8.58), and Finland (5.88), Nepal demonstrates a relatively lower level of entrepreneurial activities. This makes entrepreneurial intention a significant area of focus for Nepal's economic development and growth potential.

Previous studies have investigated the determining factors associated with entrepreneurial intention, including gender and cultural differences (Shinnar et al., 2012), general and domain attitudes (Schwarz et al., 2009; Davidsson, 1995), creativity, locus of control, need for achievement and risk-taking propensity (Popescu et al., 2016), and personal attitudes towards entrepreneurship, subjective norms, and perceived behavioral control (Pejic Bach et al., 2018). Similarly, Zhang et al. (2014) have investigated the role of education and experience as a predictor of university students' intention and revealed that education has a significant positive impact on entrepreneurial intention. This finding was consistent with the findings of Nabi et al. (2018), Fatoki (2014), and Lorz (2011). In another research, Ibrahim & Mas'ud (2016) has found entrepreneurial skill, environmental factors and entrepreneurial orientation as the significant determinants of entrepreneurial intention. However, most of these studies have primarily focused on developed countries, and little is known about students' entrepreneurial intentions in developing countries like Nepal. Thus, this study believes that filling this research gap will contribute to both academic as well as practice.

This research aims to investigate the determinants of entrepreneurial intention among higher-level students of Koshi province, Nepal. The study encompasses various factors including personal attitudes and perceived behavioral control, and subjective norms to measure the entrepreneurial intention of graduate students.

This study has significant implications for policy formulation and practical implementation. Firstly, this research contributes to the existing body of knowledge by applying the theory of planned behavior (TPB) to examine the determinant of entrepreneurial intention among higher-level students. Similarly, it adds the empirical literature on entrepreneurial intention in the context of higher-level students. The findings of this research would offer insights into the factors that influence entrepreneurial intention among higher-level students in different settings. From a practical perspective, this research would be helpful for informing educational programs, policy implications, career guidance and counseling, and business incubation and support.

## **Theoretical Background and Hypotheses**

### ***Entrepreneurial Intentions***

Entrepreneurial intention refers to the determination and eagerness of a person to undertake a new business venture (Amanamah et al., 2018). Empirical evidence demonstrates that individuals who possess a strong inclination and enthusiasm towards entrepreneurial pursuits exhibit a higher likelihood of engaging in self-employment endeavors as opposed to traditional employment (Tshikovhi & Shambare, 2015; Henderson & Robertson, 1999; Ali et al., 2011; Muliadi & Mirawati, 2020). According to Anggadwita & Dhewanto (2016) personal attitude as mediator of entrepreneurial intention are significantly influenced by psychological characteristics and individual competencies. Furthermore, researchers like Nabi et al. (2018), Fatoki (2014) and Lorz (2011) reveals education and experience as the most significant determinants of entrepreneurial intention. The existing body of literature indicates that numerous factors play a significant role in shaping individuals' entrepreneurial intentions. These factors include personal attitudes and perceptions, education and experience, social norms and social support, personal traits and motivations, environmental factors, job market conditions, and personal networks and resources impact individual's entrepreneurial intention (Schwarz et al., 2009; Lorz, 2011; Shiri et al., 2012; Ward et al., 2019; Ibrahim & Mas'ud, 2016; Herdjiono et al., 2017; Quan, 2012). Douglas (2020) defines entrepreneurial intention as a personal decision formed by individuals after consideration of the perceived desirability and the perceived feasibility of a particular entrepreneurial opportunity. The perceived desirability relates to the individual subjective evaluation of the attractiveness and desirability of pursuing the entrepreneurial venture. It encompasses factors such as the potential for financial rewards, personal fulfillment, autonomy, creativity, and the opportunity to make a meaningful impact (De Clercq et al., 2013; Saeed et al., 2015). In a similar vein, the entrepreneurial intentions have influenced by various environmental factors, including affective environmental factors and rational environmental factors. Affective environmental factors, such as social norms and support, play a role in shaping the perceived desirability of entrepreneurial intentions. Conversely, rational factors, such as financial expectations and perceived technology availability, impact the perceived feasibility, which in turn influences entrepreneurial intentions (Grundstén, 2004).

### ***Theories of Entrepreneurial Intentions***

There are two ways to study human behaviour: direct measurement and indirect measurement (Calderon, 2013). So, entrepreneurial intentions as a motivational factor, researcher commonly use indirect method of measurement (Chen, 2013; Shinnar et al., 2012; Amanamah et al., 2018). It involves assessing intentions through different indicators rather than asking their intention directly (Ajzen, 1991). The theory of planned behaviour developed by Ajzen (1991) suggests that human behaviour is guided by attitudes, subjective norms and perceived behaviour control. According to this theory, an individual's intention to become an entrepreneur is influenced by their attitude towards entrepreneurship, subjective norms (social expectations and influences), and perceived behavioral control (personal beliefs about their ability to succeed as an entrepreneur). TPB assumes that attitudes, norms, and perceived control are shaped by personal experiences, education, and social interactions.

### ***Personal Attitude***

Personal attitude is the independent variable in the theory of planned behaviour developed by Ajzen (1991). The personal attitude gauges the extent to which an individual holds a positive or negative evaluation of a particular behavior. Specifically, in the context of entrepreneurship, "Personal Attitude" reflects the degree to which an individual perceives entrepreneurship as favorable or unfavorable as a career option (Mwiya et al., 2017). The theory posits that an individual's attitudes towards entrepreneurship shape their behavioral beliefs, leading to characteristics that are either supportive or inhibitive of pursuing entrepreneurship as a career path (Maes et al., 2014). It shows that the personal belief about entrepreneurship directly influence the individual's entrepreneurial intention. A research conducted by Pejic Bach et al. (2018) revealed that the personal attitudes towards entrepreneurship intention is positively related to one's entrepreneurial intentions. Similarly, Anggadwita & Dhewanto (2016) examine the influence of personal attitude and social perception on women entrepreneurial intention in Indonesia and found personal attitude as a significant determinant of women entrepreneurial intention. Many other researchers (Iakovleva et al., 2011; Al-Jubari, 2019; Maes et al., 2014; Robledo et al., 2015; Guo et al., 2022; Al-Mamary et al., 2020; Aditya, 2020; Muliadi & Mirawati, 2020) show the positive relationship between personal attitude towards entrepreneurship and entrepreneurial intention. The evidence, therefore, shows a personal attitude towards entrepreneurship plays a significant role to start a new startup. However, many evidences (Siu & Lo, 2013) indicate that the personal attitude toward entrepreneurship is an insignificant determinant of entrepreneurial intention. Based on this literature, the following hypothesis has proposed:

**Hypothesis 1 (H<sub>1</sub>):** Personal attitude towards entrepreneurship has a positive impact on entrepreneurial intention.

### ***Perceived Behavioral Control***

Perceived Behavioral Control (PBC), as conceptualized by Ajzen (1991), refers to an individual's assessment of the ease or difficulty of performing a behavior. If a task is perceived as easy, there is a greater likelihood of engagement, while a perception of high difficulty increases the probability of non-engagement. The concept of PBC is very similar to the self-efficiency. Many researchers replaced PCB by self-efficiency in their studies (Krueger Jr et al., 2000; Van Gelderen et al., 2008). The influence of perceived behavioral control on entrepreneurial behavior extends to both the initiation of a business venture and its intermediary role in shaping entrepreneurial intentions (Al-Jubari, 2019). Many researchers revealed that the perceived behavioral control has a positive and significant effect on the entrepreneurial intention (Dinc & Budic, 2016; Majeed et al., 2021; Vamvaka et al., 2020; Santoso, 2021; Villanueva-Flores et al., 2023; Xiu et al., 2020; Aditya, 2020). On the contrary, some studies reported an insignificant relationship between perceived behavioral control and entrepreneurial intention (Mohammed et al., 2017; Kolvereid & Isaksen, 2006). Based on these findings, the following hypothesis has proposed:

**Hypothesis 2 (H<sub>2</sub>):** Perceived Behavioral Control has a significant positive impact on entrepreneurial intention.

### ***Subjective Norms***

Social norms are the external factors that reflect the expectations of friend, relatives, and, society regarding individual behavioral performance (Anggadwita & Dhewanto, 2016). In the theory of planned behaviour, Ajzen

(1991) defined social norms as the perceived societal or group expectation regarding specific behaviour that influence an individual attitude and intention toward performing a particular behaviour. Ajzen (1991) categorized subjective norms as a normative belief and motivation to comply. The normative component assesses whether influential individuals would endorse or condemn one's actions, such as launching a business. The second component measures the drive to adhere to these norms and the willingness to conform to the expectations of these influential figures while following the established standards. Many empirical evidences show that subjective norms is insignificant and less significant determinants of entrepreneurial intention (Krueger Jr et al., 2000; Kalyoncuoğlu et al., 2017; Zulfikar et al., 2019; Almobaireek & Manolova, 2012; Mohammed et al., 2017; Muliadi & Mirawati, 2020). However, many studies have found support for subjective norms as a strong determinant of entrepreneurial intention (Al-Jubari, 2019; Peng et al., 2013; Santoso, 2021). Based on this literature, the following hypothesis has proposed:

**Hypothesis 3 (H<sub>3</sub>):** Subjective norms has a significant positive impact on entrepreneurial intention.

Evidences shows that the subjective norms have positive and significant influence on the personal attitude in reference to the entrepreneurship. Alessa (2019) has revealed that students' personal attitude, subjective norms, perceived behavioral control were related to each other. Similarly, researchers Heuer & Liñán (2013), Al-Swidi et al. (2014), and Anggadwita & Dhewanto (2016) have revealed that the social perception have significant influence on personal attitude and perceived behavioral control. On this ground, the following hypotheses have proposed:

**Hypothesis 4 (H<sub>4</sub>):** Subjective norms has a significant positive impact on personal attitude.

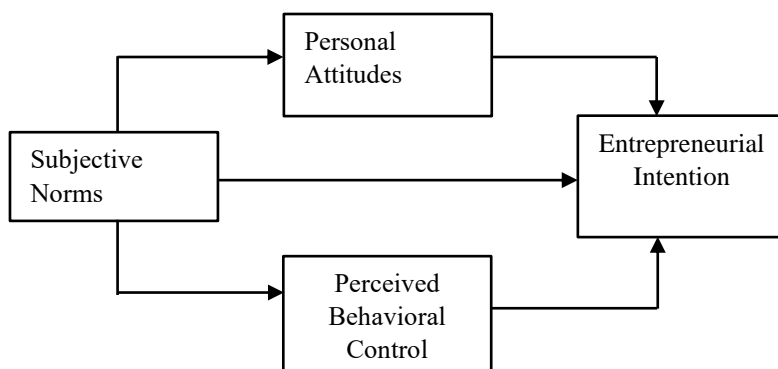
**Hypothesis 5 (H<sub>5</sub>):** Subjective norms has a significant positive impact on perceived behavioral control.

**Hypothesis 6 (H<sub>6</sub>):** The relationship between subjective norms and entrepreneurial intention is mediated by personal attitudes.

**Hypothesis 7 (H<sub>7</sub>):** The relationship between subjective norms and entrepreneurial intention is mediated by perceived behavior control.

Figure 1

*Conceptual Framework*



## **Methods and Materials**

### ***Sample and Procedures***

The sample comprises university students from government, public, and private campuses in Koshi Province, Nepal. The rationale for selecting university students stems from their status as a crucial demographic representative of the educated youth population. Employing a purposive sampling technique, the 318 respondents were intentionally selected based on the specific criterion of being higher-level students in Koshi Province (Johnson, 2018). To collect data, online survey instruments, specifically Google Forms, were employed. This deliberate approach ensures that the study's findings are contextually relevant to the entrepreneurial intention of the Koshi Province.

### ***Measurement***

To measure the entrepreneurial intension and its determinants such as personal attitude, social norms, and perceived behavioral control, modified questionnaire was used. The ideas of questionnaire were taken from the previous work of researchers (Ajzen, 1991; Al-Swidi et al., 2014; Rueda et al., 2015; Al-Jubari, 2019). The structural questionnaire is divided into five sections comprising 24 questions. The first section consists of four questions related to demographic characteristics, including age, gender, employment status, and experience of businesses. The second section encompasses the construct of personal attitude through 5 questions designed with a five-point Likert scale ranging from strongly disagree to Strongly agree. Similarly, third section of questionnaire includes the construct the social norms included five items. Moreover, the fourth section allocates for perceived behavioral control included five items. In addition, final section consists the construct for the entrepreneurship intention included five items. All the items were evaluated with a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

### ***Statistical Analysis Techniques***

In this study, the partial least square structural equation model (PLS-SEM) has applied to measure the relationship between the personal attitude, social norms, perceived behavioral control, and entrepreneurial intention among university students of Koshi province, Nepal. Many researchers have applied the PLS-SEM model for the entrepreneurship and management research (Shinnar et al., 2012; Mahmoud et al., 2020). Preceding the analysis of the structural model, an assessment of the measurement model was conducted. This encompassed the examination of multicollinearity, internal consistency, convergent validity, and discriminant validity to establish construct validity at the measurement model stage. Following the confirmation of construct validity, the structural model underwent scrutiny to test hypotheses and assess overall model fit.

## **Findings and Discussion**

This section delineates the demographic characteristics of the respondents, facilitating an exploration of their demographic diversity. Subsequently, various assumptions inherent in the Partial Least Squares Structural Equation Modeling (PLS-SEM) model were scrutinized employing diverse statistical instruments. Finally, the validation of hypotheses is undertaken through the application of the PLS-SEM model, followed by a comprehensive discussion of the findings.



### ***Demographic Characteristics of the Respondents***

Table 1 shows the demographic characteristics of the respondents, offering insights into the composition of the study sample. Gender distribution reveals a notable predominance of female participants, constituting 62.26 percent of the respondents. Age-wise, the majority falls within the 21-23 age group (35.85%), while the 15-17 age category has the smallest representation (2.83%). Unemployment is prevalent among the respondents, encompassing 54.72 percent of the sample, with 18.87 percent employed, 15.09 percent part-time employed, and 11.32 percent self-employed. In terms of experience, a significant portion (34.91%) reports prior experience working with entrepreneurs or small business, while 65.09 percent lack such experience.

**Table 2**

*Demographic characteristics of respondents*

Demographic characteristic		Frequency	Percentage
Gender	Male	120	37.74
	Female	198	62.26
Age	15-17	9	2.83
	18-20	102	32.08
	21-23	114	35.85
	24-26	60	18.87
	26 and above	33	10.38
Employment Status	Employed	60	18.87
	Unemployed	174	54.72
	Part-time Employed	48	15.09
	Self Employed	36	11.32
Experience	Yes	111	34.91
	No	207	65.09

### ***Measurement Model***

Measurement model shows the relationship between indicator variable and the constructs of the study. The Smart-PLS 4 has used to measure the construct reliability and validity, convergent validity and discriminant validity.

**Construct Reliability and Validity.** In the evaluation of construct reliability and validity, the internal consistency reliability criteria were employed. The criteria stipulated that both composite reliability and Cronbach's alpha should fall within the range of 0.70 to 0.95. Table 2 indicate that both measures for latent variables surpass this threshold, thereby substantiating the establishment of construct reliability. Convergent validity was assessed by scrutinizing outer loadings and the average variance extracted (AVE). The outer loadings, signifying the strength of correlations, should range from -1.0 to +1.0; all items in Table 2 exhibit loadings exceeding 0.5. The AVE,

representing the grand mean value of squared loadings, should exceed 0.5, and all latent variables meet this stipulated criterion.

**Table 3**

*Measurement Model*

Variables	Items	Loadings	Cronbach's Alpha	rho_A	Composite Reliability (CR)	Average Variance Extracted (AVE)
Entrepreneurial Intention	EI1	0.870	0.917	0.919	0.938	0.752
	EI2	0.871				
	EI3	0.871				
	EI4	0.843				
	EI5	0.881				
Personal Attitude	PA1	0.915	0.93	0.932	0.947	0.783
	PA2	0.899				
	PA3	0.862				
	PA4	0.872				
	PA5	0.873				
Perceived Behavioral Control	PBC1	0.844	0.902	0.904	0.928	0.72
	PBC2	0.873				
	PBC3	0.822				
	PBC4	0.816				
	PBC5	0.884				
Subjective Norms	SN1	0.781	0.917	0.926	0.938	0.752
	SN2	0.844				
	SN3	0.922				
	SN4	0.899				
	SN5	0.883				

*Discriminant Validity.* Discriminant validity was assessed using the Fornell-Larcker criteria, comparing the square root of the Average Variance Extracted (AVE) with latent variable correlations. The results, as shown in Table 3, confirm discriminant validity, with the bolded square root of AVE exceeding correlations with other constructs.



**Table 4**

*Measurement of Distribution Validity Established on Fornell-Larker Criterion*

	EI	PA	PBC	SN
EI	<b>0.867</b>			
PA	0.674	<b>0.885</b>		
PBC	0.764	0.669	<b>0.848</b>	
SN	0.722	0.742	0.737	<b>0.867</b>

Cross loading, a technique for discerning discriminant validity, involves ensuring that a construct's outer loading significantly surpasses its cross-loadings on related constructs. In Table 4, each item exhibits the highest loading with its corresponding construct, confirming discriminant validity as all construct items score higher on their respective constructs than on others.

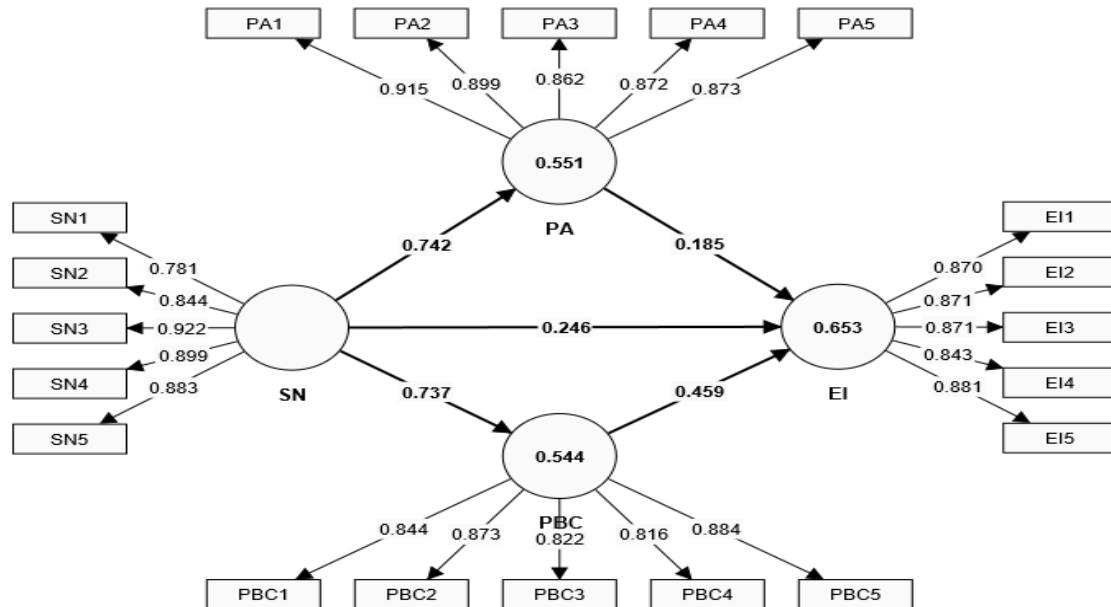
**Table 5**

*Discriminant Validity based on Cross-loading Criterion*

	EI	PA	PBC	SN
EI1	<b>0.87</b>	0.592	0.635	0.598
EI2	<b>0.871</b>	0.686	0.691	0.68
EI3	<b>0.871</b>	0.533	0.691	0.59
EI4	<b>0.843</b>	0.527	0.622	0.619
EI5	<b>0.881</b>	0.574	0.669	0.636
PA1	0.643	<b>0.915</b>	0.64	0.677
PA2	0.612	<b>0.899</b>	0.585	0.713
PA3	0.614	<b>0.862</b>	0.581	0.602
PA4	0.522	<b>0.872</b>	0.581	0.658
PA5	0.586	<b>0.873</b>	0.569	0.63
PBC1	0.695	0.586	<b>0.844</b>	0.604
PBC2	0.668	0.554	<b>0.873</b>	0.637
PBC3	0.573	0.502	<b>0.822</b>	0.6
PBC4	0.626	0.541	<b>0.816</b>	0.616
PBC5	0.67	0.644	<b>0.884</b>	0.669
SN1	0.557	0.53	0.542	<b>0.781</b>
SN2	0.539	0.604	0.568	<b>0.844</b>
SN3	0.635	0.699	0.677	<b>0.922</b>
SN4	0.73	0.668	0.723	<b>0.899</b>
SN5	0.647	0.701	0.666	<b>0.883</b>

**Figure 2**

*Measurement Model of the Study*



### Structural Model Assessment

**Collinearity Test.** Collinearity was assessed using the Variance Inflation Factor (VIF) test, where a VIF value exceeding 5 suggests the presence of collinearity. Table 6 reveals that all VIF values for the constructs are below 5, signifying the absence of collinearity among the predictors.

**Table 6**

*Inner VIF*

	EI	PA	PBC	SN
EI				
PA	2.400			
PBC	2.361			
SN	2.910	1.000	1.000	

**Model Predictive Capacity.** The R-squared ( $R^2$ ) of 0.653 in the PLS model suggests that 65.3% of the variation in entrepreneurial intention among higher level students is explained by personal attitudes, perceived behavioral control and subjective norms, leaving 33.7% unexplained.

**Model Fit.** The SRMR is a widely used criterion in PLS-SEM path modeling for assessing data and model fit. A good fit is indicated with SRMR values of 0.055 for the saturated model and 0.064 for the estimated model. An SRMR under 0.08 suggests a good fit, meeting the criteria outlined by various scholars.

### Path Analysis

In terms of path analysis, Figure 2 and Table 7 present the path coefficients and p-values for each hypothesis, which specified a positive significant relationship between personal attitude and entrepreneurial

intention of the higher-level students ( $\beta=0.185$ ,  $t = 3.455$  and  $p = 0.001$ ), this support the hypothesis H1. Similarly, the effect of perceived behavioral control and subjective norms on the entrepreneurial intention of higher-level students of Koshi province was significant at the 0.001 level of significance with indicators ( $\beta =0.459$ ,  $t = 7.349$  and  $p = 0.000$ ) and ( $\beta =0.246$ ,  $t = 4.190$  and  $p = 0.001$ ). Moreover, it indicates that the subjective norms have positive and significant influence on both personal attitudes and perceived behavioral control at the 0.001 level of significance. These results affirmed the support for hypotheses H2, H3, H4 and H5.

**Table 7**

*Hypothesis Testing*

Hypotheses	Original sample		Standard deviation	T statistics	P values
	(O)	Sample mean (M)	(STDEV)	( O/STDEV )	
(H1) PA -> EI	0.185	0.186	0.053	3.455	0.001
(H2) PBC -> EI	0.459	0.456	0.062	7.349	0.000
(H3) SN -> EI	0.246	0.246	0.059	4.190	0.000
(H4) SN -> PA	0.742	0.743	0.037	20.251	0.000
(H5) SN -> PBC	0.737	0.737	0.033	22.018	0.000

Accordingly, the moderating effect of subjective norms, personal attitudes, perceived behavioral control and entrepreneurial intention were significant at 0.001 level of significance, this therefore stipulates the acceptance of hypotheses H6 and H7.

**Table 8**

*Indirect Effect*

	Original sample		Standard deviation	T statistics	P values
	(O)	mean (M)	(STDEV)	( O/STDEV )	
(H5) SN -> PA -> EI	0.137	0.139	0.041	3.330	0.001
(H6) SN -> PBC -> EI	0.338	0.336	0.048	7.063	0.000

**Discussion**

This paper analyses the impact of personal attitudes, perceived behavioral control, subjective norms, and entrepreneurial intention among higher-level students of Koshi province, Nepal by applying the theory of planned behavior (TPB). This study reveals that all the constructs have a positive and significant relation with the entrepreneurial intention, confirming many previous findings in the literature. The results depict a significant positive relationship between personal attitude and entrepreneurial intention of higher-level students of Koshi province. It is in line with the findings of several studies (Iakovleva et al., 2011; ; Maes et al., 2014; Robledo et al., 2015; Al-Jubari, 2019; Al-Mamary et al., 2020; Aditya, 2020; Muliadi & Mirawati, 2020; Guo et al., 2022). This result underscores the significance of personal attitudes in shaping entrepreneurial intentions among students in the

region, contributing to the broader understanding of entrepreneurial behavior in educational contexts. Similarly, the study found that perceived behavioral control has a significant and positive role in shaping the entrepreneurial intention of the higher-level students of Koshi province. It indicates that individuals' confidence in their ability to overcome obstacles and effectively execute entrepreneurial actions contributes substantially to fostering entrepreneurial intentions among higher-level students in the Koshi province. This is consistent with the findings of previous studies (Dinc & Budic, 2016; Al-Jubari, 2019; Vamvaka et al., 2020; Xiu et al., 2020; Aditya, 2020; Majeed et al., 2021; Santoso, 2021; Villanueva-Flores et al., 2023). However, this finding is inconsistent with the findings of Mohammed et al. (2017) and Kolvereid & Isaksen (2006). Their findings indicate no direct relationship between perceived behavioral control and entrepreneurial intention. Moreover, the present study found that the subjective norms have a significant and positive relation with the entrepreneurial intention of higher-level students. This suggests that the social and normative influences perceived by these students play a crucial role in shaping their inclination toward entrepreneurial activities. It is aligned with the findings of previous studies (Peng et al., 2013; Al-Jubari, 2019; Santoso, 2021). However, many studies denied the direct role of subjective norms on entrepreneurial intention (Krueger Jr et al., 2000; Almobaireek & Manolova, 2012; Kalyoncuoglu et al., 2017; Mohammed et al., 2017; Zulfiqar et al., 2019; Muliadi & Mirawati, 2020). In this study, the subjective norms have a significant positive effect not only on entrepreneurial intention but also on the perceived behavioral control and personal attitude of the higher-level students. This finding is consistent with the findings of previous studies (Heuer & Liñán, 2013; Al-Swidi et al., 2014; Anggadwita & Dhewanto, 2016; Alessa, 2019). Furthermore, the study revealed that subjective norms have a moderating effect on the relationship between perceived behavioral control and entrepreneurial intention and the higher-level students' personal attitude and entrepreneurial intention. It is aligned with the findings of previous studies (Krueger Jr et al., 2000; Autio et al., 2001; Dinc & Budic, 2016).

This study has limitations that warrant consideration in interpreting its findings. Firstly, the exclusive focus on higher-level students from the Koshi province may limit the generalizability of the results to a broader context. Secondly, the Theory of Planned Behavior (TPB), though a robust theoretical framework, was modified for this study, potentially impacting the comparability with studies using the conventional TPB. Lastly, the adaptation of questionnaires for local context introduces potential biases, emphasizing the need for caution when extrapolating the outcomes. Future research should address these limitations by including a more diverse range of participants and employing standardized theoretical frameworks.

## Conclusion

This study provides valuable insights into the entrepreneurial intentions of higher-level students in the Koshi province, Nepal, using the Theory of Planned Behavior (TPB) as a framework. The positive and significant relationships identified between personal attitudes, perceived behavioral control, subjective norms, and entrepreneurial intention align with existing literature, emphasizing the importance of these factors in shaping entrepreneurial intention. The findings underscore the influential role of personal attitudes and perceived behavioral control in fostering entrepreneurial intentions among students in the region. Moreover, the study highlights the significant positive impact of subjective norms on entrepreneurial intention, emphasizing the crucial role of social and normative influences.

## References

- Aditya, S. (2020). The Influence of Attitude, Subjective Norms, Perception of Self-Control And Entrepreneurship Education on Entrepreneurial Intentions. *Journal of Business and Behavioural Entrepreneurship*, 4(2), 66–83. <https://doi.org/10.21009/JOBBE.004.2.06>
- Aitken, H. G. J. (Ed.). (1965). Economic Theory and Entrepreneurial History. In *Explorations in Enterprise* (pp. 45–64). Harvard University Press. <https://doi.org/10.4159/harvard.9780674594470.c5>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Alessa, A. A. (2019). Entrepreneurial intention among saudi students: The role of personal attitude, subjective norms and perceived behavior control. *SMART Journal of Business Management Studies*, 15(1), 50. <https://doi.org/10.5958/2321-2012.2019.00006.X>
- Ali, A., Topping, K. J., & Tariq, R. H. (2011). Entrepreneurial attitudes among potential entrepreneurs. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 5(1), 12–46.
- Al-Jubari, I. (2019). College students' entrepreneurial intention: Testing an integrated model of SDT and TPB. *Sage Open*, 9(2), 2158244019853467.
- Al-Mamary, Y. H. S., Abdulrab, M., Alwaheeb, M. A., & Alshammari, N. G. M. (2020). Factors impacting entrepreneurial intentions among university students in Saudi Arabia: Testing an integrated model of TPB and EO. *Education+ Training*, 62(7/8), 779–803.
- Almobaireek, W. N., & Manolova, T. S. (2012). Who wants to be an entrepreneur? Entrepreneurial intentions among Saudi university students. *African Journal of Business Management*, 6(11), 4029–4040.
- Al-Swidi, A., Mohammed Rafiul Huque, S., Haroon Hafeez, M., & Noor Mohd Shariff, M. (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal*, 116(10), 1561–1580.
- Amanamah, R. B., Acheampong, A., & Owusu, E. K. (2018). An exploratory study of entrepreneurial intention among university students in Ghana. *International Journal of Scientific & Technology Research*, 7(1), 140–148.

- Anggadwita, G., & Dhewanto, W. (2016). The influence of personal attitude and social perception on women entrepreneurial intentions in micro and small enterprises in Indonesia. *International Journal of Entrepreneurship and Small Business*, 27(2/3), 131. <https://doi.org/10.1504/IJESB.2016.073974>
- Audretsch, D. B., Keilbach, M. C., & Lehmann, E. E. (2006). *Entrepreneurship and economic growth*. Oxford University Press.
- Autio, E., H. Keeley, R., Klofsten, M., GC Parker, G., & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, 2(2), 145–160.
- Calderon, O. (2013). Direct and indirect measures of learning outcomes in an MSW program: What do we actually measure? *Journal of Social Work Education*, 49(3), 408–419.
- Chen, L. (2013). IT entrepreneurial intention among college students: An empirical study. *Journal of Information Systems Education*, 24(3), 233–244.
- Davidsson, P. (1995). Determinants of entrepreneurial intentions. *RENT XI Workshop*.
- De Clercq, D., Honig, B., & Martin, B. (2013). The roles of learning orientation and passion for work in the formation of entrepreneurial intention. *International Small Business Journal*, 31(6), 652–676.
- Dinc, M. S., & Budic, S. (2016). The impact of personal attitude, subjective norm, and perceived behavioural control on entrepreneurial intentions of women. *Eurasian Journal of Business and Economics*, 9(17), 23–35.
- Fatoki, O. (2014). The entrepreneurial intention of undergraduate students in South Africa: The influences of entrepreneurship education and previous work experience. *Mediterranean Journal of Social Sciences*, 5(7), 294.
- Grundstén, H. (2004). *Entrepreneurial intentions and the entrepreneurial environment: A study of technology-based new venture creation*. Helsinki University of Technology.
- Guo, X., Edghiem, F., Dakhan, S. A., & Khan, M. (2022). Investigating female students' entrepreneurial intention in the UK and Pakistan: An application of TPB. In *Entrepreneurship and Change: Understanding Entrepreneurialism as a Driver of Transformation* (pp. 129–163). Springer.
- Halaby, C. N. (2003). Where Job Values Come from: Family and Schooling Background, Cognitive Ability, and Gender. *American Sociological Review*, 68(2), 251. <https://doi.org/10.2307/1519768>
- Henderson, R., & Robertson, M. (1999). Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career. *Education+ Training*.
- Herdjiono, I., Puspa, Y. H., Maulany, G., & ALDY, E. (2017). *The factors affecting entrepreneurship intention*.
- Heuer, A., & Liñán, F. (2013). Testing alternative measures of subjective norms in entrepreneurial intention models. *International Journal of Entrepreneurship and Small Business*, 19(1), 35–50.
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education+ Training*, 53(5), 353–370.
- Ibrahim, N. A., & Mas'ud, A. (2016). Moderating role of entrepreneurial orientation on the relationship between entrepreneurial skills, environmental factors and entrepreneurial intention: A PLS approach. *Management Science Letters*, 225–236. <https://doi.org/10.5267/j.msl.2016.1.005>



- Introduction. (2020). In E. Douglas, *Entrepreneurial Intention* (pp. 1–17). Edward Elgar Publishing.  
<https://doi.org/10.4337/9781788975230.00009>
- Kalyoncuoğlu, S., Aydın, B., & Göksel, A. (2017). The effect of entrepreneurship education on entrepreneurial intention: An experimental study on undergraduate business students. *Journal of Management Research*, 9(3), 72–91.
- Karimi, S., Chizari, M., Biemans, H. J., & Mulder, M. (2010). Entrepreneurship education in Iranian higher education: The current state and challenges. *European Journal of Scientific Research*, 48(1), 35–50.
- Khanka, S. S. (2006). *Entrepreneurial development*. S. Chand Publishing.
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), 866–885.
- Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432.
- Kuckertz, A., & Wagner, M. (2010). The influence of sustainability orientation on entrepreneurial intentions—Investigating the role of business experience. *Journal of Business Venturing*, 25(5), 524–539.
- Lorz, M. (2011). *The impact of entrepreneurship education on entrepreneurial intention*.
- Maes, J., Leroy, H., & Sels, L. (2014). Gender differences in entrepreneurial intentions: A TPB multi-group analysis at factor and indicator level. *European Management Journal*, 32(5), 784–794.
- Mahmoud, M. A., Garba, A. S., Abdullah, Y. A., & Ali, A. I. (2020). Assessment of entrepreneurship education on the relationship between attitude, subjective norms, perceived behavioural control and entrepreneurial intention. *International Journal of Business and Technopreneurship*, 10(2), 197–210.
- Majeed, A., Ghumman, A. R., Abbas, Q., & Ahmad, Z. (2021). Role of entrepreneurial passion between entrepreneurial attitude, subjective norms, perceived behavioral control, and entrepreneurial intention: Measuring the entrepreneurial behavior of Pakistani students. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 15(3), 636–662.
- Marques, C. S., Santos, G., Galvão, A., Mascarenhas, C., & Justino, E. (2018). Entrepreneurship education, gender and family background as antecedents on the entrepreneurial orientation of university students. *International Journal of Innovation Science*.
- Mohammed, B. S., Fethi, A., & Djaoued, O. B. (2017). The influence of attitude, subjective norms and perceived behavior control on entrepreneurial intentions: Case of Algerian students. *American Journal of Economics*, 7(6), 274–282.
- Mok, K. H. (2005). Fostering entrepreneurship: Changing role of government and higher education governance in Hong Kong. *Research Policy*, 34(4), 537–554. <https://doi.org/10.1016/j.respol.2005.03.003>
- Muliadi, A., & Mirawati, B. (2020). The Effect of Personal Attitude and Subjective Norm on Entrepreneurial Interest of Biology Education Students. *Jurnal Penelitian Dan Pengkajian Ilmu Pendidikan: E-Saintika*, 4(3), 342–351.

- Mwiya, B., Wang, Y., Shikaputo, C., Kaulung'ombe, B., & Kayekesi, M. (2017). Predicting the entrepreneurial intentions of university students: Applying the theory of planned behaviour in Zambia, Africa. *Africa (August 18, 2017)*.
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education*, 43(3), 452–467.
- Narayanasamy, K., Rasiah, D., & Jacobs, C. J. (2011). An empirical study of factors influencing gender differences in entrepreneurship. *International Business & Economics Research Journal (IBER)*, 10(10), 17–30.
- Ng'andwe, E. (2022). *The effect of entrepreneurship education in employment creation: A case study of Evelyn Hone College*. The University of Zambia.
- Pejic Bach, M., Aleksic, A., & Merkač-Skok, M. (2018). Examining determinants of entrepreneurial intentions in Slovenia: Applying the theory of planned behaviour and an innovative cognitive style. *Economic Research-Ekonomska Istraživanja*, 31(1), 1453–1471.
- Peng, Z., Lu, G., & Kang, H. (2013). Entrepreneurial intentions and its influencing factors: A survey of the university students in Xi'an China. *Creative Education*, 3(08), 95.
- Popescu, C. C., Bostan, I., Robu, I.-B., Maxim, A., & Diaconu, L. (2016). An analysis of the determinants of entrepreneurial intentions among students: A Romanian case study. *Sustainability*, 8(8), 771.
- Quan, X. (2012). Prior experience, social network, and levels of entrepreneurial intentions. *Management Research Review*, 35(10), 945–957.
- Robledo, J. L. R., Arán, M. V., Sanchez, V. M., & Molina, M. Á. R. (2015). The moderating role of gender on entrepreneurial intentions: A TPB perspective. *Intangible Capital*, 11(1), 92–117.
- Rueda, S., Moriano, J. A., & Liñán, F. (2015). Validating a theory of planned behavior questionnaire to measure entrepreneurial intentions. *Developing, Shaping and Growing Entrepreneurship*, 68–78.
- Saeed, S., Yousafzai, S. Y., Yani-De-Soriano, M., & Muffatto, M. (2015). The role of perceived university support in the formation of students' entrepreneurial intention. *Journal of Small Business Management*, 53(4), 1127–1145.
- Samaranayake, G. (2016). Expansion of university education, graduate unemployment and the knowledge hub in Sri Lanka. *Social Affairs: A Journal for the Social Sciences*, 1(4), 15–32.
- Santoso, S. (2021). Relationship between Social Media, Organizational Support, Subjective Norms and Perceived Behavioral Control to Form Entrepreneurial Intention. *Expert Journal of Business and Management*, 9(1).
- Schwarz, E. J., Wdowiak, M. A., Almer-Jarz, D. A., & Breitenecker, R. J. (2009). The effects of attitudes and perceived environment conditions on students' entrepreneurial intent: An Austrian perspective. *Education + Training*, 51(4), 272–291. <https://doi.org/10.1108/00400910910964566>
- Shinnar, R. S., Giacomini, O., & Janssen, F. (2012). Entrepreneurial perceptions and intentions: The role of gender and culture. *Entrepreneurship Theory and Practice*, 36(3), 465–493.

- Shiri, N., Mohammadi, D., & Hosseini, S. M. (2012). Entrepreneurial intention of agricultural students: Effects of role model, social support, social norms and perceived desirability. *Archives of Applied Science Research*, 4(2), 892–897.
- Siu, W., & Lo, E. S. (2013). Cultural contingency in the cognitive model of entrepreneurial intention. *Entrepreneurship Theory and Practice*, 37(2), 147–173.
- Tshikovhi, N., & Shambare, R. (2015). Entrepreneurial knowledge, personal attitudes, and entrepreneurship intentions among South African Enactus students. *Problems and Perspectives in Management*, 13, Iss. 1 (contin.), 152–158.
- Vamvaka, V., Stoforos, C., Palaskas, T., & Botsaris, C. (2020). Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: Dimensionality, structural relationships, and gender differences. *Journal of Innovation and Entrepreneurship*, 9(1), 1–26.
- Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E., & Van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538–559.
- Villanueva-Flores, M., Hernández-Roque, D., Díaz-Fernández, M., & Bornay-Barrachina, M. (2023). Exploring the mediation role of perceived behavioural control and subjective norms in the relationship between psychological capital and entrepreneurial intention of university students. *The International Journal of Management Education*, 21(3), 100865.
- Ward, A., Hernández-Sánchez, B. R., & Sánchez-García, J. C. (2019). Entrepreneurial potential and gender effects: The role of personality traits in university students' entrepreneurial intentions. *Frontiers in Psychology*, 10, 2700.
- World Bank. (2021). *Entrepreneurship* [Text/HTML]. World Bank. <https://www.worldbank.org/en/programs/entrepreneurship>
- Xiu, S., Oh, K. Y., Kim, H. J., & Min, T. (2020). A Study on the Effect of Chinese University Students' Entrepreneurial Intention: Focused on the Mediating Effect of Entrepreneurial Attitude and Perceived Behavioral Control. *Asia-Pacific Journal of Business Venturing and Entrepreneurship*, 15(3), 175–189.
- Zacharakis, A., Reynolds, P. D., & Bygrave, W. D. (1999). Global entrepreneurship monitor. *National Entrepreneurship Assessment*.
- Zhang, Y., Duysters, G., & Cloudt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, 10, 623–641.
- Zulfiqar, S., Sarwar, B., Aziz, S., Ejaz Chandia, K., & Khan, M. K. (2019). An analysis of influence of business simulation games on business school students' attitude and intention toward entrepreneurial activities. *Journal of Educational Computing Research*, 57(1), 106–130.