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THE INFLUENCE OF SOCIAL NORMS AND ENTREPRENEURSHIP KNOWLEDGE ON ENTREPRENEURSHIP INTENTION: THE MEDIATING ROLE OF PERSONAL ATTITUDE

Khurram S. Rana, National College of Business Administration & Economics
Ghulam Abid, Kinnaird College for Women
Muhammad Nawaz, National College of Business Administration & Economics
Muhammad Ahmad, National College of Business Administration & Economics

ABSTRACT

We examine the influence of social norms and entrepreneurship knowledge on entrepreneurship intention while studying the mediating role of personal attitude in the light of the theory of planned behaviour. The study has a sample of 194 information technology professionals from various companies in Lahore, Pakistan. This paper introduces entrepreneurship knowledge and social norms to study the impact of personal attitude on entrepreneurship intention. SPSS version 24 and Process Macro was used to analyse the responses. The results showed that personal attitude has positive and significant influence on entrepreneurship intention when controlling for social norms while social norms have a positive and significant effect on entrepreneurship intention while controlling for personal attitude. These findings contribute to the knowledge of entrepreneurship intention specially for IT professionals and incorporates the effect of personal attitude to study the relationship.

Keywords: Entrepreneurship Intention, Entrepreneurship Knowledge, Social Norms, Personal Attitude, IT Industry

INTRODUCTION

The number of Pakistani individuals immigrating to other countries has increased by almost 63% over last year, with around 4% belonging to the highly educated and highly skilled category (Bureau of Emigration & Overseas Employment, 2020). In line, it is noted that there has been a 47% growth in freelancers in Pakistan in a period-based comparison by a local notational newspaper based on figures from Payoneer (Payoneer is a popular financial services company that provides freelancers with ability to transfer and receive money online from anywhere globally) (Dhivya & Nandhini, 2020) and currently ranking at the 4th fastest growing freelancers' market (The News International, 2020). So much so that Pakistan is ranked only after USA and India in terms of freelancers that develops the software (Shamsi & Nasir, 2016). Along with the increasing growth of freelancers the entrepreneurial intention has grown by developing creative and innovative ideas in this field. Bearing this in mind it is of utmost importance to understand the driving factors for entrepreneurs in the local talent.

The IT industry represents one of the top five net exporters in Pakistan while being the highest net exporter of services (Wasti, 2019). Industry experts forecast that by 2020 the Pakistan software industry in respect of e-commerce will be generating a revenue of about USD 1 Billion, further adding that the software exports from Pakistan were 8% higher than last year, which is also the reason why major international software companies have presence directly and indirectly in Pakistan which include not only the USA but also UK, Spain, Germany and China (International Trade Administration, 2020). Further there is a multitude of initiatives to encourage the youth towards digitization by fostering and facilitating entrepreneurship in Pakistan like Plan 9, Plan X, TechHub, Herself etc. (Punjab Information Technology Board, 2020), while the government and specially the local provincial governments are taking keen interest in providing viable sponsored platforms to encourage entrepreneurship in the form of freelancing opportunities for the youth (Malik, Nicholson, & Heeks, 2018). Further as per the Pakistan Software Export Board (PSEB) in FY 2018-19 IT and IT services related exports have grown by 8.18% over the last financial year with a 151% increase in export remittances related to IT and IT services over the current 5-year period compared to only 99% growth for the previous 5-year period (State Bank of Pakistan, 2019).

These statistics and numbers show the kind of potential that is open to technology related intra-arterial enterprises and as such to the individuals who can utilize it by becoming entrepreneurs and contribute to the nation's development and the economy. With the world already a global village (McLuhan, Knox, & Meagher, 1968) with the ardent use of internet and mobile applications it is pertinent to review the individual's role to identify effective measures to get the best possible outcomes (Krishnamurthy & Verčič, 2019). As such this research approaches young professionals in the information technology industry to understand the driving variables and commitment of future outlook.

This study is formatted in the following manner, where we begin by reviewing available literature and building a basis for our research in the form of a theoretical framework. Furthermore, we describe and outline our hypotheses including scales used for measurement of the defined factors including the methods and presentation of data. After sharing the results from the data analysis phase, we shall conclude the paper with implications, limitations and future directions.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

We start by reviewing entrepreneurship intention and its precursors and move to entrepreneurship knowledge, personal attitude and social norms. We review the literature available from prior studies and review linkages found for relationships between the variables in order to establish a flow of actions derived from understanding of Theory of Planned Behaviour (TPB) which focused on the attitude towards behaviour, perceived behavioural control and subjective norms of the individual (Ajzen, 1991).

Entrepreneurship Intention

What is it that motivates a person to become an entrepreneur? We observe in general that most of human behaviour is planned thus we can safely agree that there is a decision, or a set of decisions involved in the process that may very well be classified as a conscious and voluntary in nature (Krueger Jr, Reilly, & Carsrud, 2000; Krueger, 2017). As with every action, its precursor is an intention attempting to explain why an

individual would embark on business venture (Ahmed, Klobas, & Ramayah, 2019). Which in this case would entail intention of the individuals (Abid, Et al., 2015; Abid & Ahmed, 2016; Abid, Zahra, & Ahmed, 2016) to be an entrepreneur or entrepreneurship intention as we will refer to this moving on (Liñán & Chen, 2009). An extent of literature shows that intention is a single best indicator of behaviour (Kolvereid, 1996; Fayolle, Gailly, & Lassas-Clerc, 2006; Wang, Lu, & Millington, 2011; Arranz, et al. 2017; Ahmed, Klobas, & Ramayah, 2019). As with research on career options, entrepreneurship can also be considered a career where decisions about careers show reflection, processing and subsequent development of knowledge based on such human characteristic as intention among others (Lent, Brown, & Hackett, 1994; Krueger Jr, Reilly, & Carsrud, 2000). We also noted that the antecedents of entrepreneurial intention have also been studied such as empathy, moral judgement etc. as well (Hockerts, 2017). Entrepreneurship intention has been treated as an independent or dependent variable in various studies such as (Thompson, 2009; Nabi, et al., 2018).

There are two models that hold up the grounds for understanding the intention when studying entrepreneurship. Our study relies on the TPB (Ajzen, 1991) instead of the entrepreneurship event model (Shapero & Sokol, 1982) since the former is a non-specific model on human behaviour while the latter being specific in nature explaining entrepreneurship intension using perceived desirability and feasibility along with the propensity to act. While the TPB is generic, it does make clear propositions about how such influences like personality and demographics etc. affect the realization of intention (Ahmed, Klobas, & Ramayah, 2019).

Entrepreneurship Knowledge

Entrepreneurship knowledge can be explained as an individual's perceptions of the concepts, skills and mind-set anticipated from an entrepreneur (Tshikovhi & Shambare, 2015) and besides just anticipation the intention to act on the opportunities in the multi-dimensional process of entrepreneurship (Miralles, Giones, & Riverola, 2016). There are two kinds of entrepreneurship knowledge that we find such that one has to do with the individual's ability to discover an opportunity while the second has to do with development and utilization of the said opportunity (Massad & Tucker, 2009). To elaborate on this, the entrepreneur is expected to identify and then formulate a successful strategy and action plan to make best use of the opportunity. The individuals work history irrespective of context does not predict future success or any specific inclination towards an entrepreneurial career (Miralles, Giones, & Riverola, 2016). Further similar in context there is limited effect of just entrepreneurial education agendas on the intention of an individual to start an entrepreneurial venture (Bae, et al., 2014).

Personal Attitude & Social Norms

Personal attitude can be explained as the personal valuation regarding being an entrepreneur for the individual. This is normally measured in terms of a scale or range where personal attitude explains the intention (Liñán & Chen, 2009). We note that the importance or regard for entrepreneurship in the close environment of an individual would have the greatest impact on personal attitude and social norms (Linan, 2008) whereas social norms weigh in very weak at explaining intention when aligning with the TPB specially in the context on entrepreneurship (Krueger Jr, Reilly, & Carsrud, 2000).

Social norms may be explained as a sort of guideline perhaps unwritten but understood and shared within particular groups affiliated to feelings of shame or guilt and acting in the overall interest of the group instead of the individual (Emami & Khajeheian, 2019). The same is also found to be true when social norms are validated generally (Ajzen, 1991). These norms play a significant role in determining the shift from intention to behaviour by influencing in a positive or negative manner the individual due to the belief of close relations such as peer groups (Nawaz, et al., 2018), friends, and family (Fayolle, 2005). The influence of the people in one's close circle specially the ones deemed important enough to have an influence on one's decision are of critical value such as older role models, relatives, significant other and even colleagues and peers (Krueger Jr, Reilly, & Carsrud, 2000). Since researchers agree on the premise that entrepreneurship activity is planned and social norms as described have an effect either positive or negative on the potential entrepreneurs (Lortie & Castogiovanni, 2015), decision we will continue to study this in our research context framed with TPB. Alternatively, research also exists on subjective norms where they are shown not to contribute towards entrepreneurial intention (Zulfiqar, et al., 2019). Social Norms also are expected generally to be different across cultures and societies.

As discussed earlier, we note that previous research further strengthens our understanding that an individual's work assignment length and even higher education levels do not predict any higher level of future intention towards an entrepreneurial career (Kourilsky & Walstad, 1998). However, it is interesting to note that in predictable work environments there are such careers where an individual's knowledge, experience and exposure to the inherent and outwardly rewards create a positive impression (Nawaz, et al., 2016), thereby causing an inclination of the person to peruse an entrepreneurial venture of similar nature (Kautonen, Luoto, & Tornikoski, 2010). We also note that the prior statement is found to be more effective when the individual's prior experiences have been positive or preceptor as positive (Fayolle, 2005).

In consequence of the researched literature, we developed and share the *mentioned hypotheses that we will test as shown in the theoretical model (Figure 1).*

H1	*Higher levels of social norms are positively related to higher levels of personal attitude*
H2	*Higher level of personal attitude is positively related to higher level of entrepreneurship intention*
H3	*Higher levels of social norms are not significantly related to higher levels of entrepreneurship intention.*
H4	*Indirect effect of social norms on entrepreneurship intention thru personal attitude is greater than the direct effect of social norms on entrepreneurship intention*
H5	*Higher levels of entrepreneurship knowledge are positively related to higher levels of personal attitude.*
H6	*Higher levels of entrepreneurship knowledge are positively related to higher levels of entrepreneurship intention.*

H7 *Indirect effect of entrepreneurship knowledge on entrepreneurship intention through personal attitude is greater than the direct effect of entrepreneurship knowledge on entrepreneurship intention.*

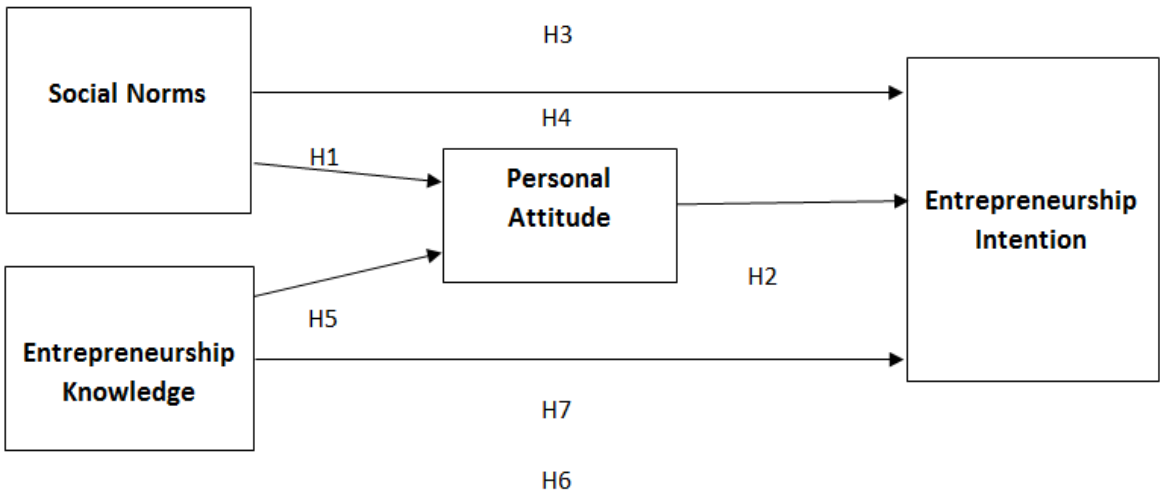

FIGURE 1

THEORETICAL MODEL

METHODS

Sample and Procedure

In this study data was collected *via* an online questionnaire from IT related professionals in Lahore by using non-probability convenience sampling. A university letter of purpose was acquired from the institute to present to various IT related firms in Lahore while the same also supported the premise of our study and its legitimacy when meeting with employees of such companies. We note that individual work history or exposure irrespective of the context does not predict success or inclination towards a career as an entrepreneur. (Miralles, Giones, & Riverola, 2016). The survey was conducted on an individual basis from such respondents and not on a company basis thus company details are not taken from any respondent. We sent out 250 questionnaires to individuals where we focused on basic demographics such as age, marital status, gender, and qualification in number of years and our study variables.

A total of 208 (83.2%) responses were received out of which 194 (93.27%) were complete and valid and used in the study. Among the 194 respondents, 135 (69.6%) were male while 59 (30.4%) were female. The average age of the respondents was 33.02 years (SD 7.07). Further 94 (48.5%) were single, 87 (44.8%) were married, 12 (6.2%) were divorced while only 1 (0.5%) was widowed. It was noted that 132 (68%) respondents had 16 years of education while 32 (16.5%) had 14 years of education followed by 27 (13.9%) who had 18 years of education and only 3 (1.5%) had 20 years of education.

Measures

Entrepreneurship knowledge: We use the entrepreneurship knowledge scale developed by (Linan, 2004) consisting of 4 items measured on a 5 point Likert scale going from 1 (strongly Disagree) to 5 (strongly agree). This was also used by (Miralles, Giones, & Riverola, 2016), however they had used (Liñán & Chen, 2009) where reliability of scale were 0.7238 and 0.943 respectively. Such questions were posed like "Thanks to my experience, I know how to start a viable business" and "Thanks to my professional experience, I know well client's problems". The reliability scale through Cronbach's Alpha was 0.823.

Entrepreneurship intention: We use the entrepreneurship intention scale developed by (Linan, 2008) consisting of 4 items measured on a 5 point Likert scale going from 1 (strongly Disagree) to 5 (strongly agree). This was also used by (Thompson, 2009) where the reliability was reported as 0.70. Such questions were posed like "I am ready to do anything to be an entrepreneur" and "I am determined to create a firm in the future". The reliability scale through Cronbach's Alpha was 0.789.

Social norms: We use the social norms scale developed by (Liñán & Chen, 2009) consisting of 3 items measured on a 5 point Likert scale ranging from 1 (strongly Disagree) to 5 (strongly agree). We used social norms in the prevue of close family, Friends and Colleagues. Questions were posed on perceived support for entrepreneurial initiatives. The reliability scale thru Cronbach's Alpha was 0.748.

Personal attitude: We use the personal attitude scale developed by (Linan, 2005) with 3 items measured on a 5 point Likert scale going from 1 (strongly disagree) to 5 (strongly agree). Such questions were posed like "A career as entrepreneur is attractive for me" and "Being an entrepreneur implies more advantages than disadvantages to me". The reliability scale thru Cronbach's Alpha was 0.786.

Control variables: Demographics such as age, gender, marital status, and education were used as control variables as they may have confused the results. We related from previous research that such demographics as age for instance influence entrepreneurial intention. For instance, the chances of an individual perusing an entrepreneurship venture increases with age up to 35 to 44 years while it is the highest between the ages of 25 and 35 years. (Le´vesque & Minniti, 2006) & (Miralles, Giones, & Riverola, 2016). There are variations across cultures and countries even after adjusting for such factors as socio-economic environments (Bosma & Kelley, 2019), cultural factors clearly make an impact on gender. Due to this we summaries that literature has yet to find clear evidence to show whether gender is an intrinsic or a circumstantial triggering factor for entrepreneurship behavior. We also come across various authors who show the importance of gender for entrepreneurship behavior. Some point out that while factors such as capital equity for both genders may be the same, the type of business or the way that females in general drive the business differs. For instance females may prefer "quality" to "quantity", work part-time etc. (Sexton & Bowman-Upton, 1990) and (Verheul & Thurik, 2001).

Further married individuals are more likely to become entrepreneurs. Individuals with greater qualification are more likely to become entrepreneurs. While there are other factors such as number of children, employment status etc. that have an effect on these

too besides education and marital status(Giannetti & Simonov, 2004). Thus, due to the effect that these demographic variables have on entrepreneurship intention we have kept them as control variables.

RESULTS (DATA ANALYSIS AND HYPOTHESES TESTING)

We started by calculating the mean, standard deviation (SD), reliability (Cronbach's Alpha) and correlations using SPSS 24. Next, we used PROCESS macros (Hayes & Preacher, 2013) to test our hypotheses (Model 4 was used). Two mediation models were processed as we have two independent variables (Social norms and entrepreneurship knowledge) as shown in the theoretical model (Figure 1.0). We tested the hypotheses (H1-H4) in the first simple mediation model while further testing hypotheses (H5-H7) in the second simple mediation model.

Table 1
DESCRIPTIVE STATISTICS, CORRELATION, AND RELIABILITIES OF STUDY VARIABLES.
*** SYMBOLIZES (0.05) SIGNIFICANCE LEVEL; ** SYMBOLIZE (0.01) SIGNIFICANCE LEVEL**

		M	SD	1	2	3	4	5	6	7	8
1	Age	33.02	7.07	-							
2	Gender	1.3	0.46	-0.267**	-						
3	Marital Status	1.59	0.63	0.586**	-0.350**	-					
4	Qualification	4.01	0.61	0.115	0.365**	0.046	-				
5	Entrepreneurship Knowledge	3.64	0.8	0.388**	-0.102	0.279**	0.074	0.823			
6	Social Norms	3.9	0.68	-0.068	0.116	-0.163*	0.048	0.018	0.748		
7	Personal Attitude	3.98	0.67	0.098	0.147*	0.193**	0.068	0.168*	0.315**	0.786	
8	Entrepreneurship Intention	3.61	0.72	0.126	0.05	0.075	0.249**	0.149*	-0.004	0.425**	0.789

*N= 194. Reliabilities are on the diagonal in parentheses

Table 1 displays the Mean (M), Standard Deviation (SD), and bivariate correlations of the variables under study, *i.e.* Entrepreneurship Knowledge, entrepreneurship Intention, social norms and personal attitude along with the control variables. The reliability of scales ranged from 0.748 to 0.823 which are all valid (Sekaran & Bougie, 2016).

Along the lines with our hypotheses the results show that entrepreneurship knowledge is positively and significantly related to personal attitude ($r=0.168$, $p<0.05$) and entrepreneurship intention ($r=0.149$, $p<0.05$). Social norms are positively and significantly related to personal attitude ($r=0.315$, $p<0.01$). Further the results also show that social norms are negatively and not significantly related to entrepreneurship intention ($r=-0.004$). This correlation analysis gives us a confident direction for our hypothesized relationships.

We tested our hypotheses using Hayes PROCESS Macro model 4 (Hayes & Preacher, 2013). The results of the tests are shown in Tables 2 and 3. The results obtained showed that social norms significantly impact personal attitude ($\beta=0.314$,

t=4.599, p<0.001), thus H1 is supported. Personal attitude has a positive and significant influence on entrepreneurship intention (β=0.508, t=6.946, p<0.05) when controlling for social norms. Social norms have a positive and significant effect on entrepreneurship intention (β=-0.164, t=-2.251, p<0.001) while controlling for personal attitude, these outcomes were favoured H2 and H4.

Our findings further indicated that the total effect of social norms on entrepreneurship intention was negative (β=-0.005, t=-0.059, p>0.05), thus H3 was also supported.

Results of simple mediation model suggested that social norms have an indirect effect on entrepreneurship intention *via* personal attitude. This indirect effect was positive (β=0.16) and formal two-tailed significance of normal distribution (Sobel test) indicated that indirect effect was significant (Sobel z=3.807, p<0.001). The bootstrapping results consistent with Sobel test, as 90% CI (0.10, 0.24) around indirect effect (ab) have a non-zero point. Therefore, H4 was supported.

Table 2
RESULTS OF FIRST SIMPLE MEDIATION MODEL

Paths	**B**	**SE**	**T**	**P**
Social Norms → Personal Attitude	0.314	0.068	4.599	0
Social Norms → Entrepreneurial Intention	-0.164	0.073	-2.251	0.026
Personal Attitude → Entrepreneurial Intention	0.508	0.073	6.946	0

Indirect effect and significance using the normal distribution						
	Value	SE	LL90%CI	UL90%CI	z	P
Sobel	0.16	0.042	0.1	0.24	3.807	0

Bootstrap results for indirect effect			
	PA	SE	LL90%CI
Effect	0.16	0.044	0.1

* β=Unstandardized Regression Coefficient; Bootstrap Sample Size is 2000

Further, results suggested that entrepreneurship knowledge positively impacts personal attitude (β=0.14, t=2.37, p<0.05). Hence, H5 is supported. Personal attitude positively impacts entrepreneurship intention (β=0.44, t=6.22, p<0.001) when controlling for entrepreneurship knowledge. Entrepreneurship knowledge has a positive and insignificant effect on entrepreneurship intention (β=0.07, t=1.20, p<0.05) while controlling for personal attitude. In agreement with H6, outcome showed that the total effect of entrepreneurship knowledge on entrepreneurship intention was positive and significant (β=0.14, t=2.09, p<0.05).

Finally, favouring our H7, results showed that indirect relationship between entrepreneurship knowledge and entrepreneurship intention was positive (β=0.063) and

significant (Sobel z=2.19, p<0.05). The bootstrapped results confirmed Sobel test because 90% CI (0.02, 0.12) around indirect effect did not contain zero. So, H7 was supported.

Table 3
RESULTS OF SECOND SIMPLE MEDIATION MODEL

Paths	B	SE	T	P
Entrepreneurial Knowledge → Personal Attitude	0.14	0.06	2.37	0.02
Entrepreneurial Knowledge → Entrepreneurial Intention	0.07	0.06	1.2	0.23
Personal Attitude → Entrepreneurial Intention	0.44	0.07	6.22	0

Indirect effect and significance using the normal distribution						
	Value	SE	LL90%CI	UL90%CI	z	p
Sobel	0.063	0.03	0.02	0.12	2.19	0.03

Bootstrap results for indirect effect				
	PA	SE	LL90%CI	UL90%CI
Effect	0.063	0.03	0.02	0.12

DISCUSSION AND IMPLICATIONS

The purpose of this study is to add to the knowledge base for potential entrepreneurs specially IT graduates and professionals who may have an intention to pursue entrepreneurship as a career option. The study of entrepreneurship intention using the theory of planned behaviour has been rewarding in the recent past (Liñán & Fayolle, 2015). Keeping this in mind the paper studied the influence of social norms and entrepreneurship knowledge on entrepreneurship intention with the mediating role of personal attitude.

It was found that personal attitude performs a vital function in the relationship between entrepreneurship knowledge with entrepreneurship intention and social norms with entrepreneurship intention. The results of this study indicate that social norms have an indirect effect on entrepreneurship intention *via* personal attitude where this effect is significant and positive, we can surely come to a conclusion that personal attitude of an individual developed due to the influence of close friends, family and colleagues is a strong indicator of likelihood of intention towards an entrepreneurial activity. Similarly, we note from the results that entrepreneurship knowledge has an indirect effect on entrepreneurship intention *via* personal attitude.

This clearly demonstrates that personal attitude of the individual is a significant factor in determining the intention towards venturing forward with an entrepreneurial opportunity. In the context of the IT professionals in the recent times there is an increase in immigrations and the number of freelancers which is a form of entrepreneurial activity while many are either engaged in jobs and entrepreneurial activity or both simultaneously. Future policy makers in organizations specially for retention of such talent or even considering engaging in accepting services from such entrepreneurs to

contribute to the economy of the nation while also supporting such talented initiatives can be an option that should be seriously considered. Of course, employment is not the only way to get work done.

CONCLUSION

In light of the theory of planned behaviour, we further investigated the relationship between its perceptual variable social norms and entrepreneurship intention and entrepreneurship knowledge and entrepreneurship intention and the mediating effect of the theory of planned behaviour perceptual variable personal attitude. Companies or governments may also consider outsourcing to these entrepreneurs in order to support them. While we already have outsourced in terms of geographical disperse places, we can also look at the same locally saving the companies overhead costs while the right person can add value while still being an entrepreneur and not an employee per say. This can be a guided and planned initiative deriving from the cultural perspective in order to influence the personal attitudes of the individuals to foster a positive approach to entrepreneurship. Future researchers may want to look into the effects of personal attitude and educational background as opposed to only entrepreneurial knowledge to better understand the impact that the combination may have on personal attitude.

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