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## Impact of psychological hardiness on student's interest in information technology enabled services (ITeS) related entrepreneurship

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### Abstract

Today the Information Technology Enabled Service (ITeS) industry is one of the fastest growing industries in the world, which generates tremendous job opportunities for the people. Some personality factors like Psychological hardiness (Sheard & Golby, 2010) seem to buffer the effect of job stress by promoting effective factors such as commitment, control and challenge. Entrepreneurship plays a vital role in economic and social growth of a society and it becomes the key driver in creating jobs, turning inventions into innovations and improving the standard life of people. Therefore, present study focused on the role of psychological hardiness and its impact on student's interest in ITeS related entrepreneurship. It was hypothesized that psychological hardiness (commitment, control and challenge) would be positively correlated with student's interest in ITeS related entrepreneurship. For this purpose, 65 interested students in ITeS related entrepreneurship age group between 18-25 years were selected using convenience sampling. Findings suggest that psychological hardiness and its components i.e. commitment, control and challenge were significantly and positively associated with student's interest in ITeS related entrepreneurship. Overall findings revealed that the general nature of psychological hardiness and its components helps in predicting entrepreneurial behavior. Thus, the hardiness predicts better performance longitudinally and helps to buffer stress within a pressurized environment.

**Keywords:** Entrepreneurship, psychological hardiness, information technology enabled services (ITeS), behavior

### Introduction

The term hardiness was introduced by Kobasa (1979) [16] to refer to the personality style which keeps the person healthy even after prolonged exposure to stress. According to Sheard & Golby (2010), psychological hardiness is a personality composite of beliefs about self or it is the personality that helps a person cope withstand (Weinberg & Gould, 2011) and actively engage in transformational coping (Quick *et al.*, 2013). This allows the person to reframe the stressful situation and perceive it as an opportunity rather than threat (Nelson & Simmons, 2003). Thus, the psychological hardiness involving the importance of three general characteristics which are commitment, control and challenge (Britt *et al.*, 2001). These three factors follow a sense of control over external events, commitment in daily life, and a challenge perspective if unexpected changes occur (Kobasa, 1979) [16].

The three counterparts of hardiness result in the individual working harder to transform potentially stressful situations into opportunities (Maddi, 2004). Therefore, the person high in hardiness shows better performance under stress in a range of demanding environments and occupations such as the military (Maddi *et al.*, 2012) and sports (Hanton *et al.*, 2013). Hanton *et al.* (2013) examined the hardiness in athletes and observes that the athletes who rated higher in hardiness had lower levels of both cognitive (worry) and somatic (bodily symptoms) anxiety only due to higher levels of self-confidence and better transformational coping (Hanton *et al.*, 2013). Thus, the hardiness predicts better performance longitudinally and helps to buffer stress within a pressurized environment. Study by Maddi *et al.* (2012) on army cadets who trained within a pressurized environment to prepare them for their occupational duties. Three general characteristics of psychological hardiness are commitment, control and challenge (Britt *et al.*, 2001) which reduce unhealthy effects of stress in two ways (Kobasa *et al.*, 1982) [15]. First, it improves health by acting as a buffer to

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stressful life events and second it directly reduces the strain by decreasing the use of unsuccessful coping strategies.

### Commitment

According to Huang & Wagnitd (1995) the word commitment reflected in the ability to feel and actively involved with others and belief in the truth, value and importance of one's self and one's experience. In simple word the hardy people shows their deeper involvement in whatever they do and have a tendency to perceive these activities as worth doing. Therefore, the persons with strong commitment have a strong sense of purpose and do not easily give up under pressure. For them the adverse situations are ultimately seen as meaningful and interesting (Maddi & Kobasa, 1984). Thus, the *Commitment* is defined as a tendency to involve oneself in (rather than experience alienation from) whatever one is doing or encounters.

### Control

According to Kobasa & Puccetti (1983) <sup>[17]</sup> individuals with high psychological hardiness have the tendency to feel and act in an influential manner in the face of varied contingencies of life. They feel both capable and empowered to achieve desired outcomes. They act as they are influential in contingencies of life, events are perceived as a natural outgrowth to the individual's action and not as unexpected experiences.

### Challenge

Maddi & Kobasa (1984) observed that the person with high psychological hardiness tend to perceive changes as a challenge. For them anticipation of changes are interesting incentives to growth rather than threat to security. Challenge reflects the belief that change is not a threat to personal security, but an opportunity for personal development and growth. Thus, the *Challenge* is described as a "belief that change rather than stability is normal in life and that the anticipation of changes are interesting incentives to growth rather than threats to security" (Cole *et al.*, 2004).

### Information Technology enabled Services (ITeS)

Information technology has been the biggest contributor to today's business world. Business has got a different vision and dimension due to information technology. A new generation of new entrepreneurs has arisen in the field of Indian information technology and Information technology enabled services (ITeS), entrepreneurs who started entrepreneurship from student life even who have no history of family business have created a great impact. The determination of new generation's ambition and new change is definitely being recognized. Thus, today all types of organizations including the entrepreneurs utilizing Information Technology enabled Services (ITeS) around the globe, not only for cutting costs and improving efficiency, but also for providing better customer service. Governments too, around the world, are adopting ITeS to provide better services to their citizens. The adoption of ITeS by organizations requires a business environment encouraging open competition, trust and security.

Information technology relates to data retrieval, information collection, security, change, exchange, study, design etc. functions and computer hardware and software applications required for execution of these tasks. Information technology is the basis of computer-based information

systems. Information technology has become an integral part of commerce and business in present times. As a result of communication revolution, electronic communication is also being considered as a major component of information technology enabled Services. It is an emerging sector as an industry. This new economy is more and more dependent on creative arrangement and distribution of information. Due to this, the importance of information in trade and commerce has increased immensely. That is why this economy has also been called information economy or knowledge economy. Therefore, present study focused on the role of psychological hardiness and its impact on student's interest in ITeS related entrepreneurship.

### Literature Review

Farwizah *et al.* (2018) <sup>[7]</sup> suggest that the conscientiousness is characterized by the extent of responsibility displayed by the entrepreneurs towards the organizational goals. This factor has also been studied in combination with psychological hardiness regarding leader performance and business settings.

According to Raza, *et al.* (2018) <sup>[28]</sup> an entrepreneurship represents the creation of a new firm with innovation under risk and uncertain circumstances, distinct personality traits enhance the behavior to establish the new business like individuals who can tackle risky situations prefer to create their own business. Empirical studies show that personality traits like need for achievement, locus of control, innovativeness, risk taking propensity and hardiness affect entrepreneurial willingness, entry or exit from entrepreneurship, entrepreneurial success and entrepreneurial profitability.

Farwizah *et al.* (2018) <sup>[7]</sup> highlighted that entrepreneurs with the traits of extraversion are the heads or critical agents frequently involved in circulation of ideas and opinions with the investors, employees and the customers. Moreover, they act as better leaders and constantly encourage their employees to take part in decision making. The socially active attitude displayed by the entrepreneurs helps in strong team building and community involvement as well. Further the psychological hardiness i.e. commitment, challenge and control and found strongly and positively related with each other whereas psychological hardiness was negatively related to neuroticism.

Torres & Lechat (2016) <sup>[19]</sup> suggest that the entrepreneurs are the actual source of innovation who as agents leads the way to the growth by contributing through new ventures and job creation. They achieve success on the basis of their entrepreneurial cognitions and actions. Moreover, they bear risk in operating business in the uncertain conditions as well as face issues related with finance, human resources, sales, supplies and administration. Thus, the qualities like self-confidence, competitiveness, commitment and creativity are crucial to enter into new business.

Newman, Schwarz & Borgia (2013) <sup>[23]</sup> discussed that in various literature, psychological capital is the primary determinant of the success of the entrepreneurial process, including in terms of the formation of entrepreneurial competencies. But in the entrepreneurial literature, more empirical evidence is needed to prove the importance of a positive relationship between psychological capital and entrepreneurial competence.

Zampetakis and Kanelakis (2010) <sup>[37]</sup> revealed that individuals with a family background of entrepreneurship

are more likely to develop high entrepreneurial opportunity orientation (i.e. interest, skills and self-efficacy) and start their own business. It was found that having a parent that owns a full-time business was positively related to entrepreneurs' prior knowledge. It can be concluded that having parental role models may influence business start up to a large extent.

Barton *et al.* (2009) [3] observes that the entrepreneur commitment to attain high levels of success. Committed and accountable entrepreneurs can lead the organization in the right direction. Thus, a high sense of life and work commitment is seen in hardy persons. They are more open to change and challenges occurring in the surroundings and have a great feeling of control over what happens to them. Thus, the effective leaders entrepreneurs are the competent and committed in managing the events and outcomes. They are found as conscientious, persistent and good in judgment in the demanding situations.

Jackson (2007) [14] through his studies emphasized that emerging ICT technology, if used, is most likely to result in a competitive advantage. This competitive advantage is a result of the innovation and flexibility that ICT affords SMEs.

Avey & Norman (2007) explained that psychological capital is an extension of the concept of "economic capital", but differs from human capital or social capital. In other words, psychological capital is the belief that a person has all the mental strength, capacity, and ability to do things for the sake of the progress of oneself and others. Psychological capital is related to "who I am". Psychological capital has four dimensions: self-efficacy, optimism, resilience, and hope.

Paul Matthews (2006) [25] argued that ICT is playing an important role in the growth of enterprises by contributing directly to profitability and by providing foundations for the evolution of operations from a micro to a medium level. They suggest that many young people are reluctant to entrepreneurship due to psychological conditions that do not support. Psychological circumstances are valuable personal resources and capital for someone to succeed.

Segal *et al.* (2005) [29] states that education enhances entrepreneurial efficacy of students through providing experience of mastery, role models, social persuasion and support by involving them in hands-on learning activities, business plan development, and running simulated or real small business. Furthermore, education plays a crucial role in developing students' entrepreneurial efficacy through involving them in various entrepreneurial activities and increasing their desirability to step into venture creation by highlighting the merits, values and advantages of entrepreneurship as well as encouraging and supporting them to start-up their own business.

Shane *et al.* (2003) [30] observed that improving student's entrepreneurial efficacy enables them to put more efforts over a longer time persist the challenges and develop plans and strategies to achieve higher entrepreneurial goals.

Nicol (2003) carried out study and classified ICT into information technologies, telecommunications technologies and networking technologies. This covers all forms of technologies such as computers, Internet, websites as well as fixed-line telephones, mobile phones and other wireless

communications devices, networks, broadband and various specialized devices.

Fulantelli & Allegra (2003) [9] figured out in their studies that information and communication technology (ICT) offer enterprises a wide range of possibilities for improving their competitiveness: they provide mechanisms for getting access to new market opportunities and specialized information services such as distance consulting, continuous training, new advisory modes, etc.

### Research Methodology

The main purpose of this study is to figure out the psychological hardiness and its impact on students interested in ITeS related entrepreneurship. Going through various literature reviews it has been observed that lots of work has been done on entrepreneurship and Information Technology but limited research has focused ITeS related entrepreneurs. So, there is a need to more focus on the psychological hardiness and its impact on ITeS related entrepreneurs, because of the fastest growing field not only for Indian business scenario but also for the global business scenario. Therefore, the main objective of this study is to identify the impact of psychological hardiness on student's interest in ITeS related entrepreneurship.

### Research Hypotheses

**H1:** There is a positive relationship between commitment and student's interest in ITeS related entrepreneurship.

**H2:** There is a positive relationship between control and student's interest in ITeS related entrepreneurship.

**H3:** There is a positive relationship between challenge and student's interest in ITeS related entrepreneurship.

### Data collection procedure

#### Research Sample

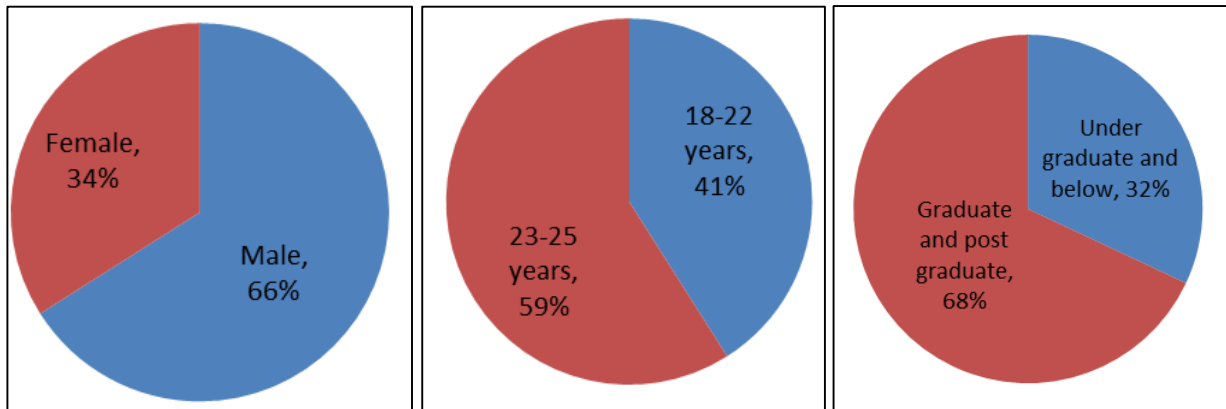
For data collection process the structured questionnaires have been shared by mail and social media platform to the student's age group between 18 to 25 years have interest in ITeS related entrepreneurship. Using convenience sampling method research receives total number 65 completely filled and usable questionnaires for empirical data analysis (Table 1).

### Tools of analysis

To test the research hypotheses, researchers estimate the values of path coefficient ( $\beta$ ), t- statistics and significance level (Hair *et al.*, 2013) using regression tool in SPSS 20 software. Researcher also used the graphical method through MS Excel for analysing the Demographic profile of the respondent.

**Table 1:** Detailed demographic profile

Variable	Level	No. of Respondents	Percentage
Gender	Male	42	66%
	Female	23	34%
Age	18-22 years	27	41%
	23-25 years	38	59%
Education	Under graduate and below	21	32%
	Graduate and post graduate	44	68%



**Data analysis and results**

The resulted output shows that the value of commitment was ( $\beta=0.113$ ,  $t=2.344$ ,  $p=0.019$ ), control has ( $\beta=0.258$ ,  $t=3.137$ ,  $p=0.002$ ) and for challenge the values was ( $\beta=0.105$ ,  $t=2.238$ ,  $p=0.026$ ) shows positive significant influence on student’s interest in ITeS related entrepreneurship. Thus, it has been suggested that the IT enabled Services offers effortless services impacted by psychological hardiness to the student’s interest in entrepreneurship. Therefore, all the hypotheses H1, H2 and H3 were supported the study.

**Table 2:** Hypotheses Testing

Hypotheses	$\beta$ value	t-value	p-value	Decision
H1: COM ->ENT	0.113	2.344	0.019	Supported
H2 :CON -> ENT	0.391	4.620	0.000	Supported
H3 : CHG -> ENT	0.105	2.238	0.026	Supported

Note:  $P < 0.05$

**Discussion and Conclusion**

This study examines the relationship between the variables (commitment, control and challenge) of psychological hardiness on student’s interest in ITeS related entrepreneurship. This study obtains some further innovative aspects of the effectiveness which may lead to figure out and develop younger student to become entrepreneurs. The first component of psychological hardiness is commitment has a positive and significant association with student’s interest in entrepreneurship. This means that young adults who have a strong sense of purpose and are involved rather than being alienated have a tendency to operate the new business in the face of uncertainty. Thus, greater the commitment higher the positive relationship, which indicates that young adults who had a sense of commitment can easily identifies the opportunities and assemble the necessary resources to capitalize on them. Commitment also helps in achievement and motivation that involve people one fully in the situations that are achievement oriented, persistent and attain success in the activities.

The second component of psychological hardiness is the control which is positively and significantly associated with student’s interest in entrepreneurship. This means that young adults perceive themselves as both capable and empowered to achieve desired outcomes. Although the association of control, a component of psychological hardiness was found positively associated with risk-taking attitude, leadership, persuasion and problem-solving but did not achieve the level of significance. Regarding entrepreneurial orientation and attitude towards entrepreneur the association was found positive due to the control on the activities. Thus, the findings indicated that perceived

behavior control influences attitude toward entrepreneurship intentions.

Last, the third component of psychological hardiness, the challenge was positively and significantly associated with student’s interest in entrepreneurship motivate students in risk-taking, achievement and self-concept. This means that young adults who believe to learn from experience are risk takers and risk handlers. Study observes that the people who have positive perceptions towards challenges they have high-risk tolerance. They are achievement oriented and place more importance on tasks that allow them to have power and control. Thus, the people with challenge attribute believe that change is the normative mode of life and perceive them as hard working, single-minded and energetic. Study revealed that the attainment of sufficient challenging tasks experience develops a feeling of psychological success among students that raises their sense of competence which in turn increases their career involvement.

Finally, the study concludes that the psychological hardiness had positive and significant relationship with student’s interest in ITeS related entrepreneurship. Findings lend partial support to the hypothesis and suggest that psychological hardiness factor predisposes to take risks and a strong need for achievement. Overall findings revealed that the general nature of psychological hardiness and its components helps in predicting entrepreneurial behavior. The findings provide valuable indication to university and college educators to initiate effective academic programs to stimulate entrepreneurial behaviors in students. Thus, the hardiness predicts better performance longitudinally and helps to buffer stress within a pressurized environment.

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