



Knowledge Transfer and Entrepreneurial Skills Development Among Students in Higher Education Institutions

Noor Faizzah Binti Dollah, *Lecturer, School of Government, College of Law, Government & International Studies, Universiti Utara Malaysia*

Halimah Abdul Manaf, *School of Government, College of Law, Government & International Studies, Universiti Utara Malaysia, imah@uum.edu.my*

Siti Noor Shamilah Misnan, *School of Government, College of Law, Government & International Studies, Universiti Utara Malaysia*

Muslimin Wallang, *School of Government, College of Law, Government & International Studies, Universiti Utara Malaysia*

Sharmaine Sakthi Ananthan, *Independent Researcher, London, UK*

Abstract. Knowledge transfer practices are crucial for students in higher education institutions to help them understand the knowledge learned and transform their learning skills into entrepreneurial skills. The practices are emphasised on providing opportunities for students to share the skills acquired through learning activities as entrepreneurial skills. Knowledge transfer, especially related to share and transfer best practices enable students to develop appropriate behaviours for their business or entrepreneurial projects. Entrepreneurial skill is one of the essential skills that students require in preparation for job employment after graduation. Building on this framework, the study was conducted to identify knowledge transfer practices and entrepreneurial skills development among students in higher education institutions in the northern region of Peninsular Malaysia. The quantitative research design was carried out by distributing questionnaires among 822 students from Universiti Utara Malaysia, Universiti Malaysia Perlis and Universiti Sains Malaysia. The findings indicated that there is high positive level of awareness regarding the importance of developing entrepreneurial skills among students. It implies that the students readiness to turn their learning activities as opportunity to build entrepreneurship skills.

Keywords: Knowledge transfer, entrepreneurship skills, students, higher education institutions, questionnaire

Received: 07.07.2020

Accepted: 04.08.2020

Published: 05.09.2020

INTRODUCTION

In this age of information enables knowledge transfer practices among students to understand the knowledge learned and transform their learning skills into entrepreneurial skills. It is emphasised to provide opportunities for students to share skills acquired through learning activities as entrepreneurial skills. Knowledge transfer especially related to the best practices enable students to develop appropriate behaviours for their business or entrepreneurial activities.

Additionally, Abu Bakar (2014), Mohamed, Stankosky, and Murray, (2006) claimed that this practice occurs when an individual is interested in helping others create or share new information. It should be practised by students to help others develop knowledge and transform it as entrepreneurial skills. Indirectly, this also assists the students to further expands the entrepreneurial talent among students. Therefore, knowledge transfer needs to be manipulated for all parties to ensure the development of new knowledge.

According to Janus (2015), knowledge transfer is either a two-way or multi-way interaction that involves several parties who want to learn from each other. In addition, it refers to the communication of a certain situation during delivering the information or situation which describes the involvement of behaviour including various things in order to obtain new information. Hence, the transfer of knowledge is best practised to acquire new knowledge to create something innovative and productive. In other words, it needs to be applied to obtain new information over time.

This practice is capable to help develop entrepreneurial skills among students. Consequently, it adds value to students to be applied through entrepreneurial skills development. The development of entrepreneurial skills is fundamental and should be applied to every student who wishes to venture into business. Frequent use of this practice by every student ensures the development of entrepreneurial skills. This shows that knowledge transfer is essential for students to venture into entrepreneurship. In particular, starting from Tenth Malaysia Plan (2011-2105), Malaysia was implemented The Knowledge Transfer for the purpose of encouraging universities and industries collaboration (Rosle et al. 2019). Therefore the present study is aimed to examine knowledge transfer practices and entrepreneurial skills development among students in higher education institutions in the northern region of Peninsular Malaysia.

BACKGROUND OF STUDY

In general, knowledge transfer practices able to help students gained knowledge from various perspectives. It is an important aspect as well as a way to improve the students' abilities through acquired knowledge. Thus, this practice is a transformation that needs to be developed by students to enhance their learning process. Alipour, F., Idris, K. and Karimi (2011) stated that the transfer of knowledge by a person will increase the knowledge of those who learn it, which will further be shared with others as a method of learning. Therefore, the development of this knowledge aids the person to become professional in a certain field. Furthermore, it will also improve performance during any activity or work. Generally, knowledge sharing or development is one of the major impact of knowledge transfer practices.

In this context, knowledge transfer is vital to promote certain people wherever they are. This is acknowledged and reinforced by the transformation made by the Prime Minister of Malaysia in recent years (Carvalho, 2018). This transformation is not only for the betterment of the country but also to produce knowledgeable persons in various fields. The transformation made by the national leaders can be seen by the establishment of the Rural Transformation Centre (RTC) (Shahriar, Siwar, Ghazali, & Chamhuri, 2014). The RTC was formed not just for local development but also to enhance the knowledge of entrepreneurship among citizens (Bakar, Mamat, & Muda, 2019).

Recently, the practice of transferring knowledge has been fundamental in this age of information. This is in line with the National Transformation 2050 which aims to produce citizens with diverse abilities, which can further be used to develop a country. This ability comes from the practice of transferring knowledge to one another. As such, this practice is essential for the development of a country across various aspects intended. Therefore, it will have a huge impact on all people, especially individuals.

The practice of knowledge transfer should be applied by all parties in order to produce knowledgeable and capable individuals. It can be accomplished in a variety of methods and ways. Additionally, all parties need to work together to develop programs and activities to ensure the efficient sharing of the knowledge transferred. The program or activity organised should receive the participation or response of the students as a catalyst for the success of the program. Large participation from the students definitely provides more input for others regarding the knowledge transfer practices. Therefore, this practice is important for students development thus preparing them for entrepreneurship at the higher education institutes.

Knowledge Management

According to Girard and Girard, (2015), knowledge management is referred to activities of managing information gained through observation, experience and senses scientifically and systematically. Knowledge originates and exist in the mind of an individual, not only stored in documents likewise present in the daily work through innovation, learning and disseminatine of information (Li & Qiushi 2010).

In the age of information and technology calls for effeciieny process of knowledge management by acquire, intimate, analysing and transfer relevant (Mohamed, Stankosky, & Murray, (2006); Drosos, & Skordoulis, Chalikias, & Mandalenaki, (2016). The processs includes to capture and adapt relevant knowledge that will lead to appropriate strategic planning, organising program and decision making. The stages of processing knowledge should be align with the purposes and capabilities to implement knowledge management project (Terzieva, 2014; Manaf, Harvey, Armstrong, & Lawton, 2020).

Knowledge Transfer Practices

Knowledge transfer is a process whereby individuals exchange their knowledge either explicitly or implicitly which leads to the formation of new knowledge (Nonaka, 2007). Previous studies have also stated that knowledge transfer practices are influential to produce innovative ideas (Alexander & Childe, 2012; Jozef, 2020). Moreover, this practice is one of the factors for interactions or affiliations among peoples. However, nowadays the lack of interactions leads to lack of knowledge about entrepreneurship.

In this modern age, a successful business depends on knowledgeable entrepreneurs. Knowledge transfer through formal learning has been identified as the key to an entrepreneur's higher level of creativity and innovation (Rusly et al. 2012). Alipour, Idris, and Karimi, (2011) stated that the main objectives of knowledge transfer management are to achieve specific outcomes such as sharing intelligence, developing performance and creating competitiveness. This practice also contributes to the generation of high-level innovation and other entrepreneurial activities. Wynn, and Jones, (2018) claimed that knowledge transfer is an important practice of organising, storing and sharing information which enables a person to benefit from the knowledge gained.

Development of Entrepreneurial Skills

According to Abuiyada (2018), development is an effort to build a country in cooperation with all parties including the public and private sectors together which take place where new ideas are introduced. Thus, development is arguably a change that is being made to develop the country. In the context of the present, development is a form of a program organised to share knowledge with others. Alternatively stated, development is an entrepreneurial-driven program which will provide the medium for contributing ideas or interactions with one another to share knowledge among students. Consequently, it is focused on programs organised to observe the knowledge transfer practices.

Skills can be defined as the ability to do something under any circumstances. According to Bakar, Mamat, and Muda, (2019), skills are crucial to enable a person to do whatever is needed particularly in the job searching process, in order to excel and succeed in various fields. In this context, skills are referred to as the students' ability to manage knowledge related to knowledge transfer practices in entrepreneurial skills development. Thus, it can also be referred to as a form of student's ability to participate in programs organised at IPTs to share knowledge.

According to Norasmah, Othman and Faridah, (2010), entrepreneurship is defined as an enterprising individual ready to take risks with a variety of new and innovative ideas during the production of a new product. It is about the self-production of their own products marketed to the public either on a small or large scale. Therefore, entrepreneurship is a field that enables one to do business. Ghorbani, Hajinezhad, and Seyyed, (2012) defined entrepreneurship as the operation of new combinations such as new products or services. Zafir (2011) interpreted entrepreneurship as an entrepreneurial trait that enables entrepreneurs to seek opportunities, take risks and have a tendency to turn ideas into reality. It is also associated with attitudes, values, knowledge and skills that enable a person to find, recognise, seize opportunities and transform it into strategies and business ventures for profit (Barjoyai, 2000).

Thus, entrepreneurial skills development is an entrepreneurial-related program organised at IPTs to acquire knowledge. Knowledge transfer practice in the development of entrepreneurship skills is a platform to develop students with entrepreneurial skills. Therefore, this practice is necessary in producing future successful entrepreneurs. Entrepreneurial skills can also be summarised as the interests and ability to explore opportunities and develop risk awareness, creativity and innovation in business and employment-related activities. Entrepreneurial activity is a process of nurturing and developing students with a business culture (Zain, Akram, & Ghani, 2010). This is supported by Lackéus, (2015) that entrepreneurial skills can be nurtured through education. Nowadays, various entrepreneurial programs have been developed at the school and higher education institutes specifically to expose future entrepreneurs to entrepreneurship thus stimulating their interest to engage in this field upon graduation.

Students Awareness Regarding the Importance of Developing Entrepreneurship Skills

In line with the Vision 2020, the government is aspired to create a scientific and progressive Malaysian society with a high degree of innovation and creativity, together with advancement in science and technology (Carvalho, 2018). In order to achieve the vision, innovative and creative, as well as knowledgeable human capital is an essential asset to focus on. Nasharudin, and Harun, (2010) stressed that the first step is to

develop a world-class human model through education. Educational institutions are given the role of nurturing people who can contribute and adopt a positive way of life, apart from achieving higher education and becoming excellent people (Fuller, 2006; Alina, 2020). Among the issues and agendas that are vital in the pursuit of excellence are the application of entrepreneurial values and culture.

Entrepreneurial skills are one of the influential soft skills that either undergraduate or postgraduate students should possess (Norasmah et al, 2003). Entrepreneurship is considered capable of producing human resources that can preserve the country's economic, social and political stability, in addition to be a foundation for human development. The key component to cultivate entrepreneurship is by creating entrepreneurship environment at a young age particularly at higher institution. Exposure to the entrepreneurial culture is in accordance with the ambitions and objectives of the government which is to produce competitive and resilient entrepreneurs. In-depth studies of humanitarian aspects especially in the development of venture enterprises create a small and medium-sized community (Mukhtar, Halilu, & Rosli, 2015). Therefore, students need to be exposed to entrepreneurship knowledge and the application of the values and characteristics of an entrepreneur to raise awareness and interest in this field. The Ministry of Education has taken the initiative by introducing the subjects and electives of entrepreneurship from form one to form three. Generally, students have been taught about entrepreneurship through these subjects theoretically. However, these subjects of entrepreneurship are mostly taught in classroom situations which requires high and stable reasoning and cognition among students. This demands the creativeness of teachers to enhance student acceptance of entrepreneurship lessons (Sohail & Daud, 2009).

Many studies at the school level show that students have an interest in entrepreneurship however lacking on the knowledge of how businesses operates. Din (2002) reported that the potential impact of entrepreneurship during the learning process affected entrepreneurial aspirations and self-employment. Therefore, this study found that high school students with high potentials and traits need to be nurtured to create awareness and preparation for entrepreneurship as a career alternative. This is in agreement with Fauziah, Rohaizat and Haslinah (2004) which also found that students' characters and attitudes changed after engaging in the Small Business Program. Numerous researchers concluded that the requirement of entrepreneurship components on the students is undeniable (Alina, (2020); Ede, Panigrahi, & Calcich, (1998); Fuller, (2006). For instance, Lackeus, (2015) suggested that entrepreneurial training exposure on young students are necessary.

Ying, (2012), claimed that the readiness of an individual's ability to prepare at the beginning of a teaching and learning activity, which can be divided into cognitive, affective and psychomotor readiness. However, it is also influenced by several factors such as maturity, interest, basic skills, knowledge, experience and motivation. These factors are helpful in creating more active, easy, fun and effective teaching and learning activities. Readiness creates a sense of enjoyment in learning for both students and teachers. On the contrary, without readiness, students and teachers will feel burden by the teaching and learning process.

A study conducted by Nasharudin, and Harun, (2010) stated that passion in a particular subject or activity is a motivator factor to further explore and develop their interest. Typically, a student's passion for a certain activity is proportional to their effort of looking for ways and means to further their interests. On the other hand, when they are not interested in something, the ability to access information is weakened and their effort diminished. Meanwhile, Kuratko and Hodgetts, (2004) suggested that skills and knowledge are gained through reading, visions, seminars, observations and studies. The crucial factor is one's desire and curiosity to acquire the knowledge. Opportunities to increase passion in this field are essential among Bumiputera students. At a young age, they are able to increase their awareness and self-development. Further Norasmah, Othman and Faridah, (2010) illustrated that the need to improvise their entrepreneurial skills and develop their passion for entrepreneurship is to have the ability to sustain in the long run, especially when dealing with competitors and the challenges. Entrepreneurial skills are also gained through business experience which cannot be taught. The knowledge of the business world is excessive and broad. There are numerous courses or seminars organised by the government and certain parties to provide the best input for entrepreneurs. Through courses and seminars, they are able to share experiences and problems faced in the business world.

Study by Yusof and Sapiah (2010) showed that the Bumiputera students were not ready to venture into entrepreneurship due to lack of willingness to venture into this field as well as a lack of parental support. The study indicated that there is a need for adequate guidance, exposure and skills to make entrepreneurship as their preferred career. This is in line with the expectations of the national leaders for current students to become entrepreneurs to continue the efforts to make Malaysia an industrialised nation. Sohail, and Daud,

(2009) suggested that it is wise to train or prepare students for entrepreneurship because when they graduate, the desire to start a business will rise thus this would be in accordance to fulfilling the government vision of making Bumiputera students more confident in this field.

Level of Knowledge Transfer Practices Among Students

According to Wynn, and Jones, (2018), knowledge transfer involves declarative knowledge, procedural knowledge or a combination of both. Declarative knowledge relates to "what" such as facts, theories and events, while procedural knowledge is "how to do things" such as psychomotor skills, cognitive skills and cognitive strategies (Terzieva, 2014). The transfer can occur from declarative knowledge to procedural knowledge or vice versa. Different situations also lead to different knowledge transferred (Schofield, 2013)). In this case, the transfer can be carried out in any situation with any existing knowledge. What matters is how the transfer can be made by someone. There are several types of transfers, namely positive and negative transfers, vertical and lateral transfers, near and far transfer, and specific and general transfers. Positive transfer is when the lessons learned can help in future learning. As an example of meaningful learning, lessons learned are used to understand and remember new ideas. Negative transfers are the lessons learned but cannot be used in a new situation.

Knowledge Transfer and Development of Entrepreneurial Skills Among Students

Entrepreneurial skills are a part of soft skills (Norasmah, Othman & Faridah, 2010). The government aims to produce entrepreneurs of noble and excellent character. Studies show that entrepreneurship is able to build the self-esteem of individuals. According Din (2002), co-curriculum plays an important role in developing soft skills, particularly in the aspects of individual leadership. They claimed that co-curricular activities cultivate, nurture and provide early training in terms of leadership, personality and community among students. Entrepreneurship skills to be introduced in the soft skills consists of four stages as follows:

1. Able to explore business prospect
2. Able to create business plan.
3. Able to find smart partnership
4. Able to market own brand.

Previous studies indicated that to turn relevant knowledge to develop entrepreneurship skills are required strategic plan and appropriate platform in organisations (Wynn, and Jones, (2018). For example, study by Zain, Akram, and Ghani, (2010) indicated that well planned program of knowledge management will lead to the development of entrepreneurial skills among employees in organisation. In a separate study by Sulisworo, (2012) suggested that there is a significant relationship between knowledge management and negotiation skills, who suggested that employees able to improve themselves in term of negotiation skills or career part by acquire and apply relevant knowledge. Further, it should cultivate organisation culture and build trust among employees to share their best practice and learning by doing (Wong and Chin, 2007). Business culture in organisation allows transfer of knowledge on risk, innovation, marketing, sales, turn threats into opportunities and benchmark with excellence model at national or international level (Ashmore, 1989). However, knowledge management programs has to be monitored and evaluated frequently to ensure that it able to develop entrepreneurship skills successfully (Ghorbani, Hajinezhad, & Seyyed, 2012). If organisation able to create entrepreneurship culture in organisation it will encourage creativity and innovative ideas among employees (Alexander, & Childe, 2013).

The study by Haron and Idris (2010) which aimed to identify the students' perceptions of the application of generic skills in co-curricular activities. The study focused on four aspects namely communication skills, cooperative skills, entrepreneurial skills as well as professional ethics and morals. The study population involved the students from the Faculty of Education, UTM. The results showed that the application of entrepreneurial skills in co-curricular activities conducted at the university is moderate and also revealed that the students' inability to master the skills.

Knowledge Transfer And Entrepreneurial Skills In Higher Education Institutions (Ipts)

Both Public Higher Education Institutions (IPTAs) and Private Higher Education Institutions (IPTS) are essential in transforming Malaysia through the development of human capital. This is in line with the Second Core of the National Mission 2006-2020 which outlined several fundamentals to enhance knowledge, creativity and innovation as well as fostering the first-class mentality among Malaysians (Rosle et. al, 2019).

This is because the future success of Malaysia depends on the quality of the human capital which is not only guided by intellectual capital, but also by the personality of the citizens (Manaf, Harvey, Armstrong & Lawton, 2020). Therefore, IPTs are regarded as capable of producing highly educated, skilled, creative, innovative, progressive and critical-thinking graduates (Nasharudin, and Harun, 2010).

IPTs are a knowledge centre that cultivates knowledge sharing initiatives especially among lecturers (Sulisworo 2012) whether through discussions, conferences and publications (Cheng Ho, & Lau, 2008). Such initiatives enable knowledge to be used as a source of reference in learning, teaching and research (Schofield, 2013). Thus, a consistent knowledge management process can enrich and develop the economy of an organisation. However, the success of this process depends on the efficient use of knowledge by an organisation (Jain & Sandhu 2007). Therefore, knowledge can shape the values, competitiveness, and resources of the organisation. The success and development of a country and community depend on the ability to utilise the intellectual resources of the citizens (Abuiyada, 2018)).

Implementation of knowledge-sharing activities in educational institutions is appropriate as it is not only functions as a means to deliver knowledge to students but also a knowledge gathering place (Sohail and Daud, 2009). Study by Mitchell (2005) showed that knowledge sharing activities among students and educational institutions are not just for storing information, however also to develop knowledge through the process of exchanging and sharing knowledge within the organisation towards the future development and growth of the organisation. This activity is important because it leads to the availability of new knowledge, able to achieve better results and improve performance, especially in teamwork. Thus, it will facilitate students to access knowledge resources and graduate with ease. Yang (2007) showed that the implementation of knowledge-sharing activities helped organisations improve efficiency and gain knowledge, as well as more innovative and competitive insights.

Academic scholars are responsible to help and expose students or graduates in entrepreneurship systematically and effectively. This is supported by Bird (1995) which claimed that it is vital for the scholars to expose their students to entrepreneurship and to increase the students self-innovation to be creative, critical, motivated and capable in entrepreneurship. In addition, teaching staffs or academic scholars can diversify their teaching method by conducting a variety of indoor and outdoor activities to further develop the students' competency. The IPTs excellence is measured by the quality and involvement of lecturers in academics such as learning and teaching, supervision, collaboration and research. Thus, lecturers need the knowledge as a source of reference as preparation to become a responsible academic scholar (Jain, Sandhu, & Sidhu, 2007) hence helping to achieve organisational goals and performance. Apart from that, the competitive advantage and excellence of IPTs depend on the knowledge of the lecturers both theoretically and practically (Schofield, 2013). Therefore, lecturers should take responsibility and play a role in practising the knowledge sharing culture at IPTs.

The development of the entrepreneurial sector is one of the current important agendas of the country. This is evidenced by various initiatives to assist and enhance entrepreneurial activity among the community (Zain, Akram, & Ghani, 2010). One of the initiatives through the Ministry of Higher Education (MoHE) is to promote the development of the entrepreneurial curriculum at higher education institutions in Malaysia (Nasharudin, and Harun, 2010). It aims to provide exposure, awareness, skills and knowledge as well as to cultivate entrepreneurship among the students, thus producing graduates who would choose entrepreneurship as a career (Ministry of Education Malaysia 2006). This is vital to prepare for the increasingly challenging human capital competition after graduation.

Various entrepreneurial activities in the curriculum throughout the course of studies in the university have provided a great opportunity to expose students to the real business world and entrepreneurship (Reynaldo, Maria, & Asuncion, 2007). This view is supported by Norasmah, Othman and Faridah, (2010) where involvement in entrepreneurship activities can enhance their entrepreneurial competence, attitude, self-control, self-esteem and innovation. The approach taken by the university can foster the entrepreneurship culture among students indirectly and change their mentality towards self-employment (Ede, Panigrahi, & Calcich, 1998; Din, 2002). It also provides the students to learn techniques in preparation to become successful entrepreneurs in the future. Indirectly, this connects students and entrepreneurship. Universities also play an important role to develop entrepreneurship programs hence creating entrepreneurial personality within students. This view is supported by Fuller (2006) which stated that the university plays a significant role in the development of ongoing entrepreneurial activities.

Therefore, entrepreneurial skills must be implemented so that students in higher education institutions (IPTs) can open their own businesses upon graduation. Students are expected to shape the

country in the future. They have a wealth of expertise in knowledge learned at the highest level which is useful if it is channelled in the right direction and useable by other generations. Students should be encouraged and exposed to entrepreneurship as they have the potential to be a successful entrepreneur. Their attitudes, passions and perceptions on entrepreneurship should be corrected for it to be selected as one of their job opportunities after graduation (Nasharudin and Harun, 2010).

METHOD

This study is quantitative-based using a questionnaire in data collection and data analysis using statistical analysis.

The population of this study involves all students in all Public Institutions of Higher Learning (IPTA) in northern zone involving IPTA in the state of Penang (Universiti Sains Malaysia-USM), Kedah (Universiti Utara Malaysia-UUM) and Perlis (Universiti Malaysia Perlis-Unimap). Researchers select all programs at the undergraduate level, as this group is indeed exposed to courses involving entrepreneurship. For instance, students at UUM will take 'Marketing Introduction' and 'Management Introduction' courses at the beginning of their studies. This technique gives space to all programs to have a representative in the selected sample.

For the research instrument, the researcher has distributed questionnaires to the respondents who have been identified as students who have been and are taking courses related to entrepreneurship. Questionnaires were developed based on research instruments that have been used in the field of entrepreneurial development. The questionnaire contains 46 items in six (6) categories. Part A was designed to obtain the demographic information of the respondents while part B related to the practice of knowledge transfer in the study program of the respondents of 15 items. Part C of (9 items) is used to measure the form of learning, Part D (9 items) is used to measure the development of entrepreneurial skills, Part E, form of entrepreneurial skills (21 items) and 2 items for additional questions related to entrepreneurial skills. Likert scale 1-5 was used to enable respondents to express their degree of agreement by marking their chosen number based on the instructions and scale description stated at the beginning of the questionnaire set.

Data collected from the questionnaire were analysed using IBM SPSS software. Data analysis involves two types, namely descriptive statistics and inferential statistics. Descriptive statistics were used to show the mean marks and percentages used to explain the background of the respondents. Next, the inference statistics are used to test the relationship between the variables.

Profile of Respondents

Table 1: Demographic Profile of Respondents

Demographics Of Respondents	Frequency (students)	Percentage (%)
Gender		
- Male	244	29.7
- Female	578	70.3
Races		
- Malay	762	92.7
- Chinese	33	4.0
- Indian	9	1.1
- Others	18	2.2
Religion		
- Islam	773	94.0
- Buddhist	33	4.0
- Hindu	7	0.9
- Others	9	1.1
Age		
- 18-22	589	71.7
- 23-27	220	26.7
- 28-32	7	0.9
- 33-37	3	0.4
- 38-42	2	0.2

- 43-47	1	0.1
Highest Education		
- Diploma	378	46.0
- STPM	145	17.6
- Matriculation/ Foundation	55	6.7
- Others	244	29.7
Education Program		
- Science & Mathematics	265	32.2
- Arts	557	67.8
Current year of study		
- First	83	10.1
- Second	355	43.2
- Third	365	44.4
- Fourth	19	2.3
Cumulative Grade Point Average (CGPA)		
- 3.51-4.00	181	22.0
- 2.51-3.50	591	71.9
- 2.41-2.50	28	3.5
- 2.31-2.40	11	1.3
- 2.30- below	11	1.3
State of Birth		
- Johor	42	5.1
- Kedah	243	29.6
- Kelantan	100	12.2
- Terengganu	30	3.6
- Perak	111	13.5
- Selangor	72	8.8
- Negeri Sembilan	13	1.6
- Melaka	17	2.1
- Pahang	30	3.6
- Sabah	15	1.8
- Sarawak	12	1.5
- Penang	57	6.8
- Perlis	41	5.0
- W. Persekutuan	35	4.3
- Abroad	4	0.5
Do you run a business		
- Yes	107	13.0
- No	715	87.0
Business income per month		
- 0	715	87.0
- 1-100	47	5.7
- 101-200	27	2.9
- 201-300	7	0.9
- 301- above	29	3.5

N=822

This study successfully obtained information from 822 respondents which consists of students from across three universities. The majority of respondents who answered the questionnaire are women with 70.3 percent, or 578 people, while male respondents are 244. In addition, a total of 762 respondents were Malays, followed by 33 respondents who were Chinese, 9 respondents are Indian while the other races consists of 18 people.

Muslim respondents were the highest respondents to answer the questionnaire which was 94 percent or 773 people and followed by Buddhist, Hindu and others respondents with 4.0 percent, 0.9 percent and 1.1 percent respectively. In addition, the majority of respondents are aged between 18 to 22 years which is 589 people and followed by respondents aged between 23 to 27 years which is 220 people, while the least number of respondents are aged between 43-47 which is only one.

Respondents who have a diploma as the highest education is 46 percent and followed by others that is as much as 29.7 percent or 244 people. In addition, 67.8 percent or 557 respondents are in the arts study program and the rest in science and mathematics study program which is 265 respondents or 32.2 percent. Respondents in the third year of study were the highest at 44.4 percent and closely followed by respondents in the second year of study at 43.2 percent, while respondents in the fourth year of study were the lowest at 2.3 percent or 19 people only.

In addition, respondents with a Cumulative Grade Point Average (CGPA) in the range of 2.51 to 3.50 are the highest at 71.9 percent or 519 people and the lowest are respondents with a CGPA in the range of 2.31 to 2.40 and also 2.30 and below at 1.3 percent or 11 people. Respondents born in the state of Kedah are the highest at 29.6 percent or 243 people and followed by the state of Perak at 13.5 percent or 111 people, while the lowest are respondents born abroad at four people.

As many as 87 percent or 715 respondents do not do business while studying while 107 respondents do business while studying. Among the 107 respondents who do business, a total of 47 respondents earn business income per month between RM1 to RM100 and followed by business income per month from RM301 and above a total of 29 respondents. A total of 27 respondents who earn a monthly income between RM101 to RM200, while the income of RM201 to RM300 is 7 people.

RESULTS AND DISCUSSION

Student Awareness Levels on the Importance of Developing Entrepreneurial Skills Among Students.

Table 1: Mean Distribution of Entrepreneurial Skills

Entrepreneurial skills	Mean	Standard deviation (sd)	Level
Creativity	4.14	0.72	High
Innovative	4.14	0.69	High
Management	4.16	0.71	High
Analytical	4.20	0.72	High
Marketing	4.21	0.74	High
Communication	4.07	0.68	High
Career	4.03	0.67	High
Overall mean	4.14		High

Source: Research data

Table 1 shows that the awareness level of the importance of developing entrepreneurial skills among students is positive with a high overall mean value of 4.14. Marketing skills earned the highest mean of 4.21 while career skills gained the lowest mean of 4.03, although it is still high. In summary, students' awareness of the importance of developing entrepreneurial skills is high. The finding implies that student at higher education aware that they should develop these entrepreneurship skills, in particular knowledge on marketing and career path. Probably, exposure in the class during presentation and case study discussion give some idea to students on creativity on marketing services, product, strategic plan will attract people to higher than as consultant. Meanwhile, the current trend on downsizing manpower and job employment demands either in private or public sector require students to plan for career path. The lower mean score for career path skills compare to other entrepreneurship skills probably due to foresating made by students to completed their study and start venture in business as option gain income.

Level of Knowledge Transfer Practices Among Students

Table 2: Mean Distribution of Knowledge Transfer Practices

Knowledge Transfer Practices	Mean	Standard deviation (sd)	Level
B1 (I use different knowledge sharing methods between students)	4.24	0.64	High
B2 (My partner and I conveyed information related to course content)	4.96	0.55	High
B3(I share a lot of knowledge through: Group discussion method, Mentor system, University-sponsored programs (example: excellent student programs, brainstorming, Public speaking, Student exchange between institutions (mobility)	4.24	0.80	High
B4 (Knowledge of the content of my study program increased by 50% through knowledge sharing.)	4.76	0.62	High
B5 (Sharing information with other students can help spread knowledge)	4.87	0.63	High
B6 (The learning I follow helps produce creative idea writing)	4.85	0.61	High
B7 (Learning methods require me to demonstrate my self-efficacy (such as arguing and making decisions)	4.90	0.64	High
B8 (The study program I attended made me a consultant)	4.09	0.70	High
B9 (I am able to communicate with all parties)	4.05	0.62	High
B10 (The main value of knowledge sharing is to disseminate information to relevant parties)	4.89	0.60	High
Overall mean	4.59		High

Table 2 shows the high overall mean value of 4.59. The question B7 *learning methods require me to demonstrate my self-efficacy (such as arguing and making decisions)* gained the highest mean of 4.90. It indicates that the level of knowledge transfer practices among students at excellent standard. The students are acquire arguing and managerial decision skills in doing their teaching and learning assessment. These skills are important for individual in particular those in business to deal and make decision on price, marketing, tender and other strategic planning for business.

Meanwhile question B9 *I am able to communicate with all parties* earned the lowest mean of 4.05. It means that personality of students also plays an important part to determine they able to communicate with all parties. This skill is not crucial because in the business although businessman need to acquire the characteristics of friendliness and easy going personality, however most of the time they no need to deal with all level of society.

Overall, for knowledge sharing practices skill indicates that students in higher education institute possess positive and at high level.

Relationship between Knowledge Transfer Practices and Entrepreneurship Skills Development Among Students.

Pearson correlation coefficient is used as a guide to identifying the relationships and strengths among variables. The range of correlation coefficient values is between -1 to 1 (Hinkle, Wiersma & Jurs, 2003). It

explains the strength of the relationship, while the indicators (+ and -) indicate the direction of the relationship between the two variables (see Table 3).

Table 3: General Interpretation of the Correlation

Correlation interpretation value	Strength of the relationship
0.91 to 1.00 (-0.91 to -1.00)	Very highly positive correlated (negative)
0.71 to 0.90 (-0.71 to -0.90)	Highly correlated (negative)
0.41 to 0.70 (-0.41 to -0.70)	Moderately correlated (negative)
0.20 to 0.40 (-0.20 to -0.40)	Weakly positive correlated (negative)
< 0.20	Very weakly correlated

Source: Hinkle, Wiersma and Jurs (2003)

Table 4: Pearson Correlation Between Knowledge Transfer Practices and Entrepreneurial Skills Development

		Knowledge Transfer Practices	Entrepreneurial Skills Development
Knowledge Transfer Practices	Pearson Correlation	1	.459
	Sig (1-tailed)		.000
	N	822	822
Entrepreneurial Skills Development	Pearson Correlation	.459	1
	Sig (1-tailed)	.000	
	N	822	822

Table 4 shows that values ($r = .459$, $p < .05$) indicated a moderately positive correlation between knowledge transfer practices and entrepreneurial skills development. The results of this study show that there is a significant positive relationship between knowledge transfer practices and entrepreneurial skills development. It indicates that from students view in higher education institution if knowledge transfer practices were deliver well then it will encourage them to develop their entrepreneurial skills. Transfer knowledge on teaching and learning activities including from teaching delivery, assessments, sharing information has lead to the development of strategic planning, risk taking assessment and other enterprenership skills. All these skills are preparing students in searching for the job after completing study.

CONCLUSION

Knowledge transfer practices must be implemented to facilitate the development of entrepreneurial skills among students. This is one of the steps to face the current era of globalisation. Knowledge transfer is best suited to develop students in the business field parallel to the goal of the Ministry of Higher Education which is to encourage students to venture into this field since jobs opportunities have become challenging lately. In addition, funding for business licenses to students was also provided by Majlis Amanah Rakyat through the PUTRA program to produce small entrepreneurs (Portal Rasmi Majlis Amanah Rakyat, 2017). The advancement of entrepreneurial skills development is imperative provided that the knowledge transfer is practised by every student. This shows that knowledge transfer practice is fundamental for students to venture into entrepreneurship. The study will contribute in theoretical and practical dimension. Theoretically, the study will add new knowledge in field of education. In particular, providing new model on the linkages of knowledge transfer, teaching and learning, enterprenurship and young population. The study has explained that knowledge transfer practices as a platform to build enterpenurship skills among students. Furthermore, students as young generation are committed and aware that knowledge transfer practices during teaching and learning helps them to acquire enterprenurship skills. In practical perspective, the study will help university to provide specific guidelines on knowledge transfer practices in teaching and learning to academic affairs department, teaching and learning center, lecturers, students and relevant department. This guidelines will be a references for those interested to practice knowledge transfer for their course successfully. For the future study, it recommend on a study of effective knowledge transfer mechanism from perspectives of lecturer and students in the age of digital learning.

REFERENCES

- Abu Bakar, R. A. S. M. (2014). Budaya Berkongsi Pengetahuan Dalam Kalangan Pelajar Pekak: Satu Kajian Penerokaan. *Proceeding of the 1st International Conference on Management and Muamalah 2014 (1st ICoMM)* (p. 2). Selangor : Fakulti Pengurusan dan Muamalah (FPM).
- Abuiyada, R. (2018). Traditional Development Theories have failed to Address the Needs of the majority of People at Grassroots Levels with Reference to GAD. *International Journal of Business and Social Science*, 9(9), 115-119.
- Alina, A. M., (2020). *Entrepreneurial Knowledge And Digital Competencies – Keys For A Success Of Students Entrepreneurship*. Studia Universitatis Economics Series. 30 (2) . 57-69.
- Alipour, F., Idris, K. and Karimi, R. (2011). Knowledge Creation and Transfer: Role of Learning Organization. *International Journal of Business Administration*, 2(3), 61-67.
- Ashmore, C.M. (1989). *The power of entrepreneurship: a process perspective*. Canada: Thompson South Western.
- Alexander, A. & Childe, S.. (2012). Innovation: A knowledge transfer perspective. *Production Planning & Control - PRODUCTION PLANNING CONTROL*. 24. 1-18. 10.1080/09537287.2011.647875.
- Bakar, N. A., Mamat, I., and Muda, W. M. W. (2019). A Critical Analysis of Terengganu Rural Transformation Centre. *International Journal of Academic Research in Business and Social Sciences*, 9(11), 930-941.
- Barjoi, B. (2000). *Keusahawanan dan Perniagaan Kuala Lumpur*: Dewan Bahasa dan Pustaka. Kuala Lumpur.
- Bird, B. (1995). Toward a theory of entrepreneurial competency. *Advances in Entrepreneurship, Firm Emergence, and Growth*, 2, 51-72.
- Carvalho, M. (2018). PM: Govt's transformation programme continues to deliver, *TheStar*, 23 Feb, access from <https://www.thestar.com.my/news/nation/2018/02/23/pm-govts-transformation-programme-continues-to-deliver/>
- Cheng, M., Ho, J. S., & Lau, P. M. (2008). Knowledge Sharing in Academic Institutions : a Study of Multimedia University Malaysia. *Journal of Knowledge Management*, 7(3), 313-324.
- Din, M. S. (2002). The Development of Entrepreneurship and Enterprise in Higher Education in Malaysia. Tesis PhD. University of Durham.
- Drosos, D., & Skordoulis, M., Chalikias, M. & Mandalenaki, M. (2016). *The Role of Information Technology and Knowledge Management in Higher Education*. 2nd International Conference on Lifelong Education and Leadership for All (ICLEL), At Liepaja, Latvia
- Ede, F. O., Panigrahi, B. & Calcich, S. E. (1998). African American Students' Attitude Toward Entrepreneurship Education. *Journal of Education for Business*, 73(5), 291-296.
- Fauziah, Rohaizat & Siti Haslinah (2004). Interest In Entrepreneurship: An Exploratory Study On Engineering And Technical Students In Entrepreneurship Education And Choosing Entrepreneurship As A Career. RMC project: Vot 71790. Faculty of Management and Human Resource Development Universiti Teknologi Malaysia.
- Fuller, S. (2006). What makes universities unique? Updating the ideal for an entrepreneurial age. *Higher Education Management and Policy*, 19(3), 27-50
- Girard J., and Girard, J. (2015). Defining Knowledge Management: Toward An Applied Compendium, *Online Journal of Applied Knowledge Management*, 3(1), 1-20.
- Ghorbani, M., A. Hajinezhad, V. Seyyed, Z. (2012). *The Relationship between Knowledge Management and Development in Individual Entrepreneurship at Industrial*. *World Applied Science Journal*. 18 (6) 745-753.
- Haron, Z. & Idris, A. A. (2010). *Persepsi Pelajar Terhadap Penerapan Kemahiran Generik Pendidikan, Universiti Teknologi Malaysia, Skudai*. Fakulti Pendidikan, Universiti Teknologi Malaysia.
- Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2003). *Applies statistics for the behavioural science*. Boston: Mass: Houghton Mifflin.
- Li, N. and Qiushi, L. (2010). Knowledge management modes and strategies for university libraries. In *2010 International Conference on Future Information Technology and Management Engineering*, 2, 288-290.
- Janus. S.S. (2015). *Becoming a Knowledge Sharing Organization. The Art of Knowledge Exchange: World Bank Group*.

- Jain, K. K., J., Sandhu, M. S., & Sidhu, G.K. (2007). Knowledge Sharing Among Academic Staff : A Case Study of Business Schools in Klang. *Journal for the Advancement of Science and Arts*, 2, 23–29.
- Jozef, R. (2020). Making Ideas Work for Society: University Cooperation in Knowledge Transfer. 10.1007/978-3-030-25525-1_6.
- Kumar, N., & Rose, R. C. (2012). The impact of knowledge sharing and Islamic work ethic on innovation capability. *Cross Cultural Management: An International Journal*, 19(2), 142–165.
- Kuratko, D.F., & Hodgetts, R.M. (2004). *Entrepreneurship: Theory, Process & Practice*, Mason, OH; South-Western Publishers.
- Lackéus, M (2015). *Entrepreneurship in Education, What, Why, When, How*. Entrepreneurship 360 Background Paper. OECD
- Manaf, H. A., Harvey, W. S., Armstrong, S. J., & Lawton, A. (2020). Differences in personality and the sharing of managerial tacit knowledge: an empirical analysis of public sector managers in Malaysia. *Journal of Knowledge Management*, 24(5)1177-1199.
- Ministry of Education Malaysia. (2006). *Modul Pembangunan Kemahiran Insaniah (Soft Skills) untuk Institusi Pengajian Tinggi Malaysia*. Serdang: Penerbit Universiti Putra Malaysia.
- Mitchell, H. (2005). Knowledge Sharing The Value of Storytelling. *International Journal of Organizational Behavior*. 9(5), 632-641.
- Mohamed, M., Stankosky, M., & Murray, A. (2006). Knowledge management and information technology: Can they work in perfect harmony?. *Journal of Knowledge Management*. 10(3), 103-116.
- Mukhtar, S.A, Halilu, B. R. & Rosli Mahmood (2015). *Knowledge Management, Entrepreneurial Orientation and Firm Performance: The Role of Organizational Culture*. *Asian Social Science*; 11 (23) 140-152
- Sohail, M. S. & Daud, S. (2009). Knowledge sharing in higher education institutions perspectives from Malaysia. *Journal of Information Knowledge Management System*, 39: 125-142.
- Nasharudin, N. dan Harun, H., (2010). *Aspirasi Kerjaya Keusahawanan dalam Kalangan Pelajar Institusi Pengajian Tinggi Awam*. *Jurnal Pendidikan Malaysia* 35(1),11-17.
- Nonaka, I. (2007). The Knowledge-Creating Company, *Harvard Business Review*, 85(7/8), 162-171.
- Norasmah, Othman & Faridah, K (2010). *Entrepreneurship Behaviour amongst Malaysian University Students*. *Pertanika Journal of Social Sciences & Humanities*.18 (1), 23-32.
- Portal Rasmi Majlis Amanah Rakyat*. (2017). Retrieved from Keusahawanan: <http://www.mara.gov.my/program-putra>.
- Reynaldo S. B., Maria J. P. B., & Asuncion G. N. (2007). The Personal Entrepreneurial Competencies of BS Entrepreneurship Students of the Cordillera Administrative Region and Practicing Entrepreneurs in the Cities of Baguio, Dagupan, and San Fernando, La Union: A Comparison. *Paper presented at the 10th National Convention on Statistics (NCS)*, EDSA Shangri-La Hotel, Phillipines
- Rusly, F.H., Corner, J.L. & Sun, P. (2012). *Positioning change readiness in knowledge management research*. *Journal of Knowledge Management*. 16 (2) 329-355.
- Rosle, Roslinah, Lim Thien, Roselina, Zatul, Durrishah & Ahmad Shaharudin (2019). Determinant Factors Effecting The Success of Knowledge Transfer Programe (KPT) in Malaysia. *International Journal of Business and Management Studies*. 08 (01) 259–272.
- Schofield, T. (2013). Critical Success Factors for Knowledge Transfer Collaborations between University and Industry, *The Journal of Research Administration*, (44)2, 38-56.
- Shahriar, S.M., Siwar, C., Ghazali, R., and Chamhuri, N. (2014). Prospects of Rural Transformation Centre (RTC) of Malaysia from the Perspective of Inclusive Rural Development. *Current World Environment*, 9, 639-645.
- Sohail, M. S., & Daud, S. (2009). Knowledge sharing in higher education institutions: Perspectives from Malaysia. *The journal of information and knowledge management systems*, 39(2), 125–142.
- Sulisworo, D. (2012). Enabling ICT and Knowledge Management to Enhance Competitiveness of Higher Education Institutions. *International Journal of Education*, 4(1), 112–121.
- Terzieva, M. (2014). Project knowledge management: how organizations learn from experience. *Procedia Technology*, 16, 1086-1095.
- Yang, J. (2007). The Impact of Knowledge Sharing on Organizational Learning and Effectiveness. *Journal of Knowledge Management*, 11(2), 83-90.
- Wong, S. Y & Chin, K. S., (2007). *Organizational innovation management: An organization-wide perspective*. *Industrial Management & Data Systems*. 107 (9), 1290-1315.

- Wynn, M. and Jones, P. (2018). Context and entrepreneurship in Knowledge Transfer Partnerships with small business enterprises. *The International Journal of Entrepreneurship and Innovation*, Special Issue, 8-20
- Yang, J. (2007). The Impact of Knowledge Sharing on Organizational Learning and Effectiveness. *Journal of Knowledge Management*, 11(2), 83-90.
- Ying, Z. (2012). *Improve Knowledge Management in IT Company in China: A case study of Taobao*. Degree Project. Retrieved from <http://urn.kb.se/resolve?>
- Yusof, B. B. and Sapiah, B. B. (2010). Kesediaan Untuk Menceburi Bidang Keusahawanan Di Kalangan Pelajar-Pelajar Bumiputera Tingkatan Empat Di Tiga Buah Sekolah Sekitar Skudai,
- Zafir, M. M. (2011). Entrepreneurial Success: An Exploratory Study among Entrepreneurs. *International Journal of Business and Management*. 6 (1), 116-125
- Zain, Z. M, Akram, A. M. & Ghani, E. K. (2010). Entrepreneurship Intention Among Malaysian Business Students. *Canadian Social Science*. Vol. 6, No. 3, 2010, pp. 34-44.