Tracer Study of Graduates in Entrepreneurship through the Lens of Expectancy Theory

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Abstract

This tracer study aims to determine if there is an alignment between the application of learnings in the Entrepreneurship program and the various pieces of training based on the graduates' present entrepreneurial experience. This paper considers the perspective of Entrepreneurship graduates from 2017-2022. The descriptive correlational method was used. Communication skills are the top competency learned in the program. Specifically, the Spearman partial correlation showed a significant association between the applicability of learning and various training in the program while controlling for the core values and program educational objectives. The study supports the expectancy theory that graduates believed that the learnings and training in the program are essential as entrepreneurs.

Keywords: Tracer study, entrepreneurship, Expectancy theory

INTRODUCTION

A tracer study intends to furnish vital insights into the effectiveness of the BS Entrepreneurship program and prepare students for their chosen careers (Winstead, Adams & Sillah, 2009). The tracer study tracks the career directions of the graduates to determine if the program succeeded in preparing them for entrepreneurship while identifying areas for improvement in curriculum and program educational objectives (Rothman & Sisman, 2016).

A good tracer study can furnish vital information on the program's relevance in the job market (Alekhina, Safonov & Zapalatskaya, 2020). Tracer studies can assist in determining whether graduates can become self-employed or secure jobs in their field of research and be satisfied with their employment (Bridgstock, 2009). Moreover, the tracer study helps to identify areas to improve in instructions and curriculum based on the feedback from graduates. With their response, the graduates assist the program in adjusting to meet the needs of the industry and guarantee that the graduates have the skills to succeed (Royce & Williams, 2022).

The tracer study also strengthens alumni relations, allowing the program to reinforce relationships with alumni. The graduates participating in the tracer study feel more connected with the university and are likely to provide support, such as networking and donations (Dey & Cruzvergara, 2014). The tracer study is vital for the program to evaluate its effectiveness and guarantee that prepared students are ready to take on career challenges after graduation (Sych, 2017).

The conduct of the tracer study depends on the specific goals and context of the program engaging in the study. Mainly, a tracer study evaluates the quality and relevance of the program in preparing graduates for their chosen careers (Brooks, 2005). The study determines how well the program prepared

them. Identifying the strengths and weaknesses of the academic program is another contribution of a tracer study (McCauley, 2007). The information gathered from the survey helps identify better instructional methods, calibrate the curriculum, and provide additional training or resources to prepare students for their careers (Thomas & Zhang, 2005).

Gathering information on the job satisfaction and employment status of graduates helps understand the labor market and the qualifications and skills the industry is searching for or expecting from graduates (Liu, Thomas & Zhang, 2010). With the information gathered, the program can plan actions to improve graduates' career paths and competencies to succeed in the labor market. The information collected helps develop new projects, revise existing programs, and distribute resources more effectively (Jusoh, Simun, & Choy Chong, 2011).

Expectancy theory claims that a person's motivation to achieve the desired outcome depends on their belief about the association between effort, performance, and outcomes (Vroom, 1964). It is a theory used in this tracer study to describe the Entrepreneurship graduate's motivation to pursue a career or further education (Wanous, Keon & Latack, 1983). Three factors influence motivation. Expectancy is the belief of the graduate that effort results in better performance (Brooks & Betz, 1990). In the context of graduates, they are more motivated if they are convinced that their education and training lead to improved job performance.

Instrumentality is the idea that the graduates improve job performance resulting in the desired outcome, such as higher pay or promotions (Fagbohungbe, 2012). Consequently, graduates are more motivated because better job performance leads to career growth. Graduates placed value on the desired career outcome called valence. They experience greater motivation if they value career development more or a desired outcome (Yung Chou & Pearson, 2012).

The expectancy theory becomes the basis for graduates to pursue an entrepreneurial career path. The belief that they possess the appropriate combination and skills allows them to pursue career growth or higher returns, leading to these positive results (Hsu, Shinnar & Powell, 2014). In addition, the expectancy theory explains that graduates consider that their education promotes greater career growth to enhance their performance and increase their chances of attaining their desired career growth (Barba-Sánchez & Atienza-Sahuquillo, 2017). Hence, expectancy theory is the framework used to describe the elements that motivate college graduates in the Entrepreneurship programs to assist in earning a greater understanding of graduates' career growth and outcome (Renko, Kroeck & Bullough, 2012).

The BS Entrepreneurship Tracer study intends to determine the graduates' profiles from 2017 to 2022. Also, the study evaluates the program's effectiveness in finding employment and the graduates' career preparation level. Moreover, this study identifies the strength and weaknesses of the program based on competencies and values learned in the program that assists them in their enterprise. Finally, this study intends to determine the significant association between the applicability of learning and the overall training in the program while controlling for the effects of the core values and program educational objectives.

METHOD

The descriptive correlation method was used to conduct the tracer study, which requires collecting data from the BS Entrepreneurship graduates using the standardized tracer survey instrument (Iacobucci, Daly, Lindell & Griffin, 2013) of the university as an instrument to gather data. The questionnaire contains items to collect data from graduates about their current employment status, job satisfaction, and how well

the program prepared them for their careers (Thahir, Komariah, Kurniady, Suharto, Kurniatun, Widiawati, & Nurlatifah, 2021). The online survey technique was used since it is more effective to administer and collect a representative sample of graduates (Lent, Morris, Wang, Moturu, Cygrymus, & Yeung, 2022).

The survey method allows for standardized data collection since the respondents are given the same set of questionnaires, which is easier to compare data across respondents. The survey online is generally less expensive because there is no more printing for a hard copy of the instrument (Wright, 2005). Another advantage of the online survey is administering the questionnaire efficiently and faster, allowing for timely data collection. Finally, the technique encourages the respondents to answer more honestly and accurately (Evans & Mathur, 2005).

A tracer study was conducted for the BS Entrepreneurship graduates from 2017 to 2022. Twenty-one graduates accomplished the university standardized questionnaire from March 14 to April 5, 2022. The instrument is available in Google Drive for better accessibility, administration, and retrieval.

The statistical technique used in this study is the measure of central tendency. These are the mean, frequency, and percentage. The survey method effectively captures the required information from graduates using the desired standardized data collection. The Spearman rho was used to determine the significant partial correlation between application and training controlling for the core values and program educational objectives. In determining the effect size in the partial correlation, Fisher's z transformation was used (Glen, S.)

RESULT AND DISCUSSIONS

Twenty-one graduates accomplished the UM standardized questionnaire. Reflected in Table 1 is the profile of the respondents. There were 12 or 67 percent female and nine (9) 43 percent male.

Table 1: Profile of the respondents

Sex	f	Percent
Male	9	43%
Female	12	57%
Total	21	100%
Civil status		
Single	17	81%
Married	4	19%
Total	21	100%
Year Graduated		
2017	4	22%
2018	8	44%
2019	1	6%
2020	1	6%
2021	1	6%
2022	3	17%
Total	18	100%
Present Employment Status		
Regular or Permanent	7	41%

Self-employed	4	24%
Contractual	3	18%
Probationary	3	18%
Total	17	100%
Place of Work		
Local	12	75%
National	2	13%
Abroad	2	13%
Total	16	100%
Industry or sector of employment		
Corporation	7	50%
Government	5	36%
Others	2	14%
Total	14	100%

There were 17 or 81 percent single, four (4) or 19 percent married. In terms of years graduated, four or 22 percent were in 2017; in 2018, there were eight (8) or 44 percent. Seven (7), or 41 percent, are regular, and four (4), or 24 percent, are self-employed as their present employment status. In terms of place of work, 12 or 75 percent were local. For the industry or sector of employment, seven (7) are in the corporation, and five (5) are in the government.

Depicted in Table 2 was the profile of the respondents that relate their BS Entrepreneurship degree with their career growth. Regarding their livelihood, 11 or 61 percent agreed that their program is related to their livelihood. After graduation to secure employment, nine (9), or 47 percent, managed in less than a month, and eight (8), or 42 percent, a guaranteed job for more than a month to less than six months. There 17 or 89 percent confirmed that their overall BS entrepreneurship training at UM is valuable and applicable to their livelihood.

Table 2: Relatedness of BS Entrepreneurship degree with their career growth

Livelihood related to the program (BS Entrepreneurship)	*f*	Percentage
Yes	11	61%
No	7	39%
Total	18	100%
Length of time after graduation to land the first job		
less than a month	9	47%
more than a month to less than six months	8	42%
more than six months to less than a year	2	11%
Total	19	100%
Overall, training in BS Entrepreneurship at UM is useful and applicable		
Yes	17	89%
No	2	11%

Total	19	100%
Usefulness or applicability of learning in BS Entrepreneurship		
Very much useful	10	53%
Much useful	5	26%
A bit useful	4	21%
Total	19	100%
Reason(s) for staying on the job		
Salaries & benefits	15	79%
Family influence	2	11%
Proximity to the residence and career challenges	2	10%
Total	19	100%

Regarding their degree of usefulness, 10 or 53 percent revealed it is very helpful, while five (5) claimed it is much more beneficial. There 15, or 79 percent, of the respondents answered salaries and benefits as the reason for staying in their job, and two (2), or 11 percent, claimed family influence.

The response of the graduates demonstrates instrumentality as a critical component of expectancy theory which show how graduates decide based on their relationship between effort, performance, and outcomes (Barba-Sánchez & Atienza-Sahuquillo, 2017). They expect improved performance results to desired outcomes such as the period to get their first job, the usefulness of their training in job performance, and staying in their job (Shweiki, Martin, Beekley, Jenoff, Koenig, Kaulback& Cohen, 2015).

Shown in Table 3 are the competencies learned in the BS Entrepreneurship most helpful in their current livelihood. Communication skills were chosen 17 or 16 percent of the time, critical thinking was chosen 15 times or 14 percent, problem-solving was selected 12 times or 11 percent, and leadership was selected 13 or 12 percent.

Table 3: Competencies graduates learned in college are most useful in their first job

Competencies learned in college most useful in the first job	f	Percent
Communication skills	17	16%
Critical thinking	15	14%
Public relations	14	13%
Leadership	13	12%
Problem-solving	12	11%
Human relations	10	9%
Instruction	10	9%
Multi-tasking	9	8%
Technological	5	5%
Technology	2	2%

Total	107	100%

The topmost essential skill BS Entrepreneurship identified is communication skills, considered vital for success in their career. They are convinced that effective communication skills assist them in building solid relationships, advancing their profession, and resolving conflict (Tripathy, 2020). They appreciate the communication skills learned in their program, such as verbal communication. It is the ability to convey thoughts and ideas effectively and clearly. They manage to enhance their verbal communication skills through various class discussions and participating in public speaking and presentations (Alshare, Lane, & Miller, 2011).

The respondents appreciate the skills learned in written communication which is vital for successfully expressing a concise and clear message. They understand the writing assignment and feedback from peers and teachers and adopt various styles and formats (Kelley & Bridges, 2005). Further listening skills are also considered a critical element of effective communication. They enhance their listening skills through participation in class discussions. Nonverbal communication, such as tone of voice, facial expression, and body language, is essential to convey messages and their effect on communication (Iksan, Zakaria, Meerah, Osman, Lian, Mahmud, & Krish, 2012).

Interpersonal skills learned in the program are vital to transmitting ideas and building relationships. They admitted that they develop interpersonal skills through membership in the academic organization, extracurricular activities, and involvement in group projects (Ginger Levin & PMP, 2010). By developing communication skills in their college, they acquire the skills that contribute to competencies essential for professional success and build connections with others.

In addition, graduates of BS entrepreneurship identified problem-solving skills as another competency learned in the program. The skill is vital in overcoming obstacles, achieving goals, and discovering innovative solutions. Critical thinking is among the essential problem-solving skills graduates develop in the program (Lai, 2011). They acknowledge their ability to analyze information and evaluate arguments to make logical or rational decisions. The opportunity to enhance their critical thinking was using interpreting case studies and debates.

Further creativity is another vital element to contribute to their problem-solving skills through brainstorming sessions, art projects, and creative writing (Tracy, 2014). While in the program, they recognize decision-making as another skill that allows them to evaluate the advantages and disadvantages of different alternatives and choose the best course of action. Also, adaptability, which taught them to adjust to shifting situations and seek solutions to unexpected challenges, contributed to their problem-solving skills.

The respondents recognize that developing problem-solving skills can contribute to career success and personal relationships. These skills are essential for both professional success and help find fulfillment in personal engagement and directing the difficulties of daily life.

Graduates of the program demonstrate expectancy that their effort to acquire the competencies in the program will lead to better performance in their job. They are more likely motivated since they believe their training and education contributed to better performance.

Depicted in Table 4 are the personal values BS Entrepreneurship graduates developed that are most useful in achieving entrepreneurial success. The essential personal values most useful are strong work ethics, self-motivation, responsibility, reliability, dependability, and motivation to grow.

Table 4: Personal values learned in the program are useful in achieving entrepreneurial success

Personal values learned/ developed in college are most useful in achieving entrepreneurial success	f	Percent
Honesty	2	7%
Integrity	2	7%
Morality	2	7%
Motivated to grow	3	10%
Dependability	3	10%
Reliability	3	10%
Responsibility	3	10%
Professionalism	1	3%
Self-confidence	1	3%
Adaptability	2	7%
Flexibility	2	7%
Self-motivated	3	10%
Strong work ethics	3	10%
Total	30	100%

These are essential personal values to pursue career success. For instance, graduates identified strong work ethics as one of the top values learned in the program is the belief in hard work and commitment to push to attain their goal (Lyon & Kirby, 2000). They developed work ethics to dedicate to their work. Similarly, self-motivation is the value of finding inner drive and motivation to achieve objectives in the absence of external factors. They understand self-motivation to become highly productive and committed to their work. Likewise, responsibility is their ability to own their decisions and actions and assume the consequences of their choices. These are their values to become highly reliable and trustworthy.

Reliability is also identified as an essential value learned in the program. It is the ability to meet responsibilities and commitment. They developed reliability, becoming dependable and consistent in their work (Hoekstra, 2011). Reliability is dependability which is the ability to support their colleague. They are respected and valued by their peers. Motivation to grow is the willingness to seek new opportunities, take on new challenges and learn new skills for career development. They know the motivation to evolve, adapt, and innovate in their studies. The respondents appreciate that these values help them achieve career success to become trustworthy, productive, and committed and open new opportunities for career growth.

A Spearman partial correlation determines the presence of a significant association between applicability and training while controlling for core values and program educational objectives. There was a strong partial correlation between applicability and training while controlling for core values $rho = 0.623$, $n = 21$, $p < 0.01$. Fisher's z indicates a significant strong partial correlation when controlling for core values ($z = 0.6173$). The core values had little influence in controlling the association between applicability and training. Using the program educational objectives as a controlling variable, a strong partial exist $rho = 0.620$, $n = 21$, $p < 0.01$. Fisher's z indicates a significant strong partial correlation when controlling for the program's educational objectives ($z = 0.6088$). The program's educational objectives had little influence in controlling the association between applicability and training.

Table 5: Significance of partial association between applicability and training controlling for the core values and program educational objectives of BS Entrepreneurship

	Spearman rho	p-value	Effect size (Fisher's z)	z' to r
Applicability and training	0.624	0.003	-	-
Applicability and training controlling for core values	0.623	0.003	0.731	0.6173
Applicability and training controlling for program objectives	0.620	0.004	0.724	0.6088
Applicability and training controlling for core values and program objectives	0.622	0.005	0.728	0.6137

Combining core values and the program educational objectives as controlling variables, a strong partial association exists with rho = 0.622, n = 21, p <0.01. Fisher's z indicates a significant strong partial correlation when controlling for core values and the program's educational objectives (z = 0.6137). The core values and program educational objectives had little influence in controlling the association between applicability and training.

BS Entrepreneurship graduates claimed that their training and education result in better performance, attaining their desired career growth. For instance, they deem their education valuable in their current livelihood, and the skills learned are very useful in their present occupation. Instrumentality is essential in expectancy theory, motivating them to exert more effort. Based on instrumentality, graduates believe their degree leads to enhanced performance, resulting in better career outcomes.

Based on the response of the graduates, they demonstrate valence, a concept in expectancy theory that explains the relationship between their program and outcomes. They focus on the specific outcome, a critical factor in career growth. Graduates place importance on attaining typical career growth demonstrate valence. They value career advancement the values learned in the program lead to achieving entrepreneurial success.

CONCLUSION AND RECOMMENDATIONS

The result of the tracer study aligned with the expectancy theory that college graduates pursue their career growth based on their belief that their competencies and values learned from the program are related to their effort, performance, and career outcome. The expectancy theory is the framework used to understand the graduate career outcome better. In addition, the instrumentality, as a vital element in expectancy theory, describes how the graduates considered the program as the cause for better performance, such as easier to get their first job, very useful in their current position, and staying in their career. Valence explains how graduates understand values as a factor that improve their performance and behind the improved outcomes.

The graduates identified technology skills as the least competency learned in the program. Today's business graduates need strong skills in technology for career growth which increase efficiency and reduce error, especially for repetitive business tasks. Moreover, the program must introduce technology skills to students to easily collect, store, and analyze data. They can make data-driven decisions using statistical analysis software and machine learning algorithms. Introducing the Enterprise Resource Process allows graduates flexibility that can help them adapt to changing market conditions.

Self-confidence is the least of the values graduates learn in the program. However, students must develop self-confidence to be more successful, assertive, and resilient. The program can start encouraging a growth mindset through perseverance and hard work to promote self-confidence. Faculty praise student effort and persistence and instruct students that their mistakes and failures are good opportunities to learn and grow. Providing students with a chance at success is likely to encourage self-confidence. Faculty can furnish opportunities for success by setting attainable objectives, providing students with a task that matches their abilities, and allowing faculty to provide positive feedback.

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