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Career Exploration Stage and Employment Outcome of Marketing Management Graduates: An Exploratory Factor Analysis

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ABSTRACT: This study examines the career development and employment outcomes of UM graduates in Marketing Management for the past five years. Using a standardized questionnaire sent through Google Forms, the data were collected from 60 volunteer graduates. The data analysis involved descriptive statistics and Exploratory Factor Analysis (EFA) to determine which factors best explained the trajectories of careers. Findings suggest that although most graduates engage in further studies and professional development, a significant gap is noted between what their training was perceived to be useful for and its actual influence on their careers. The graduates showed excellent adaptability to the changes brought by technology and took considerable initiative in decision-making and teamwork, which supported the Exploration Stage of career development. Recommendations include industry need-based curriculum, improvements to technological training, and better engagement with professional organization participation.

Keywords - Career and Professional Development, Marketing Management Graduates, Technological Adaptation, University Tracer Study

I. INTRODUCTION

The Recent statistics have shown some significant challenges business graduates face in their early career development. Studies show that 40% of new business graduates take more than six months to secure their first relevant position (McMurray et al., 2016), and around 33% of new business graduates initially accept positions below their qualification level (Rynes et al., 2003). The National Association of Colleges and Employers reports that the average starting salary for business graduates in 2023 was $53,901. However, this figure conceals significant variation, as many earn much less in their first jobs (Homework.Study.com, 2015). The skills gap remains a persistent issue, as 65% of employers report that recent graduates lack crucial soft skills, such as leadership and critical thinking, despite their academic qualifications (Employers of Recent Grads Rate Higher Ed, n.d.). Moreover, student loan debt also determines career choices; on average, business graduates secure student loans, forcing them to accept positions outside their preferred career path for financial reasons (Peiró et al., 2002). The increasing use of automation and AI in business processes has also affected entry-level positions, with McKinsey estimating that 30% of traditional entry-level business tasks could be automated by 2030 (Hazan et al., 2024), meaning new graduates have to adapt and develop more specialized skills much faster, while the COVID-19 pandemic has further complicated the landscape by reducing in-person networking opportunities and making it harder for graduates to build professional relationships (Tomlinson et al., 2023) with reporting difficulties in establishing meaningful professional connections during their first year of employment (Smeby, 2007).

Monitoring the first five years post-graduation is critical for understanding the career development (Brooks & Everett, 2009) of Marketing Management graduates. These years, known as the early career stage, are essentially a formative phase when graduates transition from academic environments to professional settings (Hashiguchi et al., 2024). This is when they experiment with career paths, initial work experiences, and professional identity-building. Understanding this phase is essential for several reasons, particularly within the context of the graduates' career development self-concept (Yang & Wong, 2020).

As proposed by Super's Developmental Self-Concept Theory, the concept of career development self-concept emphasizes that career choices and development are linked closely to an individual's evolving self-concept (Super, 2012). This self-concept is shaped by personal experiences, education, and early career experiences (Vondracek & Porfeli, 2011). Monitoring graduates during the first five years can give educators and career counselors insight into whether these educational programs have prepared them for the workplace or if their self-concept is changing in response to challenges and opportunities facing them in the real world (Lau et al., 2021).

The first five years also mark a period that would be critical for discovering mismatches between what graduates were trained to know and what they need to acquire after entering the professional world (Super, 2020). Feedback from graduates in this phase will reveal what areas of the curriculum might need updating or more detail to reflect better on industry requirements (Nasir & Lin, 2013). The constant feedback loop allows the institution to remain sensitive to job market needs and, therefore, continue improving the quality and relevance of its programs (Leong & Serafica, 2005).

Furthermore, early career monitoring also assists in tracking professional development pathways for graduates (Whiston & Brecheisen, 2002). It provides valuable data on employment rates, job satisfaction, career progression, and the relevance of their jobs to their field of study (Hom et al., 2010). This information is essential for career services to offer targeted support and resources to help graduates navigate their career paths more effectively (George, 2024). It also helps identify successful career strategies and common challenges graduates face, which can be addressed through well-tailored career guidance and support programs (Leong & Serafica, 2005).

In brief, monitoring graduates over the first five years following graduation is an indispensable prerequisite to grasp career development by Marketing Management graduates fully. This would reflect not only on the adequacy of education programs (Pasha & Abedi, 2020), alignment between the content of academic preparation (Stone & Lewis,2012) and industrial requirements, and self-concept changes for the graduate over the initial phases of developing their professional identities but also has been essential information for educators, career counselors, and policymakers wanting to improve career preparedness and success among graduates of the future (Marciniak et al., 2022).

This study pushes towards the United Nations Sustainable Development Goal (UNSDG) 4: Quality Education. The study, therefore, indicates the need for relevant, industry-aligned educational programs by analyzing the career development and outcomes for employment of Marketing Management graduates. The findings reveal a need to improve curriculum design, training practice, and professional development. These are the three essentials for inclusive and equitable quality education. By covering such educational gaps, the study supports improving lifelong learning opportunities and the general quality of education, which contributes to sustainable economic growth and development.

The purpose of this study is to analyze the career development and employment outcomes of graduates from UM in the field of marketing management, as well as their educational background, further studies, professional development, job relevance, satisfaction, and technological adaptation. Examining these factors, the research aims to understand how graduates navigate through their career development in the Exploration Stage, identify key influences on their career trajectories, and provide insights for educational programs and support services to improve the preparation of future graduates better for the changing job market.

II.   RELATED LITERATURE

The Super's Developmental Self-Concept Theory is particularly applicable to explain the career development of Marketing Management graduates. This theory emphasizes that career development is a lifelong process influenced by an individual's self-concept, which evolves through experiences and stages of life (Super, 1969).

Super's Developmental Self-Concept Theory provides a conceptual approach for understanding the trajectory (Vondracek & Porfeli, 2011) in which Marketing Management graduates from 2019 to 2024 progress through their career exploration and establishment phases. During the exploration stage (typically ages 15-24), recent Marketing Management graduates have faced unique challenges in self-concept development (Super, 2020) due to the rapid digitalization of marketing practices (Cham et al., 2022) and the emergence of new specializations like social media marketing, content marketing, and marketing analytics (Maintz & Zaumseil, 2019). With more of these graduates struggling to merge professional identity into an increasingly changing

landscape for marketing, the implementation of self-concept through occupational choice has taken on much complexity (Lee, 2008).

Moving into the establishment stage (25-44 years), the number of graduates who require permanent change and role adaptation due to Super's theory (Hartung, 2013), especially in integrating AI into marketing operations, shifting decisions on data, and greater relevance to the digital customer experience is at its peak (Phillips, 2011). The theory's concept of career maturity has been taken to a new level as these professionals must prove adaptable while maintaining a coherent professional identity, with many graduates cycling through mini cycles of exploration (Richards et al., 2023) and establishment as they navigate between traditional marketing roles and emerging specializations (Patton & McMahon, 2014). Super's focus on the interaction between personal and environmental factors (Bhatt & Pujar, 2020) has been particularly salient as these graduates navigate remote work dynamics, global market uncertainties, and growing demand for cross-functional marketing expertise while trying to develop and maintain a stable professional self-concept in an industry characterized by rapid technological and social change (Vashetina & Vashetina, 2018).

The Exploratory Stage is according to Super's Developmental Self-Concept Theory; the age range is adolescence to early adulthood. Individuals are at this stage searching for various career opportunities and experiences in work with a tentative career choice (Perosa & Perosa,1985). This exploratory stage is where Marketing Management graduates can learn the journey of being an employee at this stage through the dataset.

Further education and training are some of the main features of the exploratory stage. The additional studies or training the graduates undertook after finishing their degree at UM are reflected in the dataset. This signifies the graduates' desire to acquire more skills and knowledge, which is essential at this stage (Patton & Lokan, 2001). They can obtain certifications, diplomas, or advanced degrees to meet career expectations (Giannantonio & Hurley-Hanson, 2006). This pursuit of further education indicates a proactive approach toward career exploration and readiness to adapt to the demands of the job market (Lent, 2013).

The dataset also provides information on whether the graduates' current job is their first job and how long it took them to get it (Vondracek & Porfeli, 2011). These metrics are essential milestones in the exploratory stage of the career, where individuals undergo trial and error to discover the proper career path (Super, 2020). The period between getting the first job and the nature of the first job gives insights into the initial difficulties and opportunities fresh graduates encounter. It is more of a testing of several roles and industries and aids in fine-tuning career preferences and objectives (Lau et al.,2021).

Another critical element of the exploratory stage is involvement in professional organizations and research projects (Weng & McElroy, 2010). The dataset includes variables such as membership in professional organizations and research or consultancy work engagement. These activities indicate graduates' efforts to build professional networks (Dunn, 2019), gain industry insights and enhance their career prospects. Engagement with professional organizations and research work can enable them to learn about relevant activities while offering opportunities to seek mentorship and even more career guidance (Boerlijst, 2013), which will be very important during that stage.

The database also captures information on the relevance of the graduates' current jobs to their courses in college and job satisfaction (Yarbrough et al., 2017). These are the variables most important for knowing whether the graduates' first choices of career reflect their background at college and personal interests (Brown & LENT, 2007). High job relevance and satisfaction indicate that graduates have passed through the exploratory stage to find an appropriate career to fit in with their skills and ambitions (Hirschi & Spurk, 2021). Low relevance and satisfaction indicate ongoing exploration and adjustment of the career trajectory (Heise, 2013).

In the changing modern workforce, technological skills and readiness for a modern workplace are becoming more contemporary needs (Kundi et al., 2024). The dataset has different variables related to the use of modern tools and previous knowledge of handling these tools (Vasileva & Kostova, 2020). This aspect has become a significant concern while dealing with the exploratory stage because the ability to adapt to change increases employment and readiness for careers (Bocciardi et al., 2017).

Overall, Marketing Management graduates manage the exploratory stage of their career development. Examining further studies, first job experiences, professional development, job relevance, satisfaction, and technological adaptation helps get insights into the challenges and successes graduates experience during this

formative period. These insights help inform career guidance, educational program improvements, and support services to better prepare future graduates for their career journeys.

III.   METHODOLOGY

Participants

The study involved 60 volunteer graduates of the Marketing Management program from the University of Mindanao. Participants were purposively selected for graduation dates within the last five years to ensure the most recent academic experiences would perturb the study objectives. The voluntary nature of participation ensured that graduates engaging in the study were motivated enough to give authentic and meaningful responses.

Instrument

Data was gathered using a standardized questionnaire developed for the University of Mindanao Tracer Study. The questionnaire included items designed to capture key aspects of the graduates' current employment, entrepreneurial activities, satisfaction with their education, and engagement in professional and multidisciplinary activities. This standardized tool has been validated in previous applications, ensuring reliability and relevance to the research objectives.

Data Collection

The survey was conducted online through Google Forms over the last three months. This online format has allowed easy data collection as each participant is distributed geographically and in terms of schedule. Instructions were clear so that information was collected accurately from respondents, ultimately, and anonymously to encourage honest feedback.

Data Analysis

The data were analyzed using both descriptive statistics and EFA. Descriptive statistics gave a snapshot of the demographic and professional characteristics of the participants. EFA was used to determine the hidden dimensions in the data through the Kaiser-Meyer-Olkin (KMO) measure (Hadi et al., 2016), Bartlett's test of sphericity, and varimax rotation method to improve interpretability (de Almeida et al., 2020). The study computed factor loadings, communalities, and eigenvalues to extract and describe latent factors (Loewen & Gonulal, 2015). Additional fit indices, including RMSEA and SRMR, were used to determine the adequacy of the model (Shi et al., 2020). This mixed-method quantitative approach ensured a detailed understanding of the dataset, and robust identification of latent constructs underlying graduates' experiences and perceptions was achieved.

IV.   RESULT AND DISCUSSIONS

The purpose of this research is to examine the career development and employment outcomes for graduates in Marketing Management at UM over the last five years. The study used a standardized questionnaire, descriptive statistics, and Exploratory Factor Analysis to identify the most critical factors that influence graduates' career trajectories, evaluate the match of educational programs with the needs of industry, and provide actionable insights for improvement in curriculum design and professional development opportunities. The goal is to understand the career readiness and success of present graduates and their readiness to face the changing world of work and realize their professional goals.

Table 1 provides a comprehensive overview of various aspects of career development for Marketing Management graduates. It includes data on licensure exams, further studies, professional organization membership, employment status, job relevance, place of work, and first job experiences. The data reveals that 88.3 percent of the graduates do not have any professional license, while only 11.7 percent passed. Passing a licensure exam is not typical in their careers in marketing management as licensure might not be necessary for their career advancement. Many graduates pursued further education or training after completing their studies at UM; 33.3 percent took short courses, 48.3 percent underwent various training, and 18.3 percent attended graduate school. It conveys a strong leaning toward continuous learning and skill enhancement, which is vital in the exploratory stage of career development.

Membership in Professional Organizations shows that 90 percent of the graduates are not members of any professional organization, while 10 percent are members. In that case, this 10 percent low membership points to an area where the organization can improve because professional organizations also have a lot of network and professional development resources available. Students' employment status depicts a very positive trend, with 90 percent of the graduates having obtained employment and only 10 percent not employed. A

further 65 percent reported regular employment, while others, 20 percent, indicate being on contractual terms; still, 15 percent are self-employed. Such a percentage depicts that employment circumstances are relatively stable, providing a majority with stable employment.

Further, Table 1 indicates that 63.3 percent of the graduates work in jobs related to their college program, while 36.7 percent are in unrelated fields. This high relevance rate suggests that the Marketing Management program at UM effectively prepares students for careers in their field of study. Most graduates (78.3 percent) work locally, 11.7 percent work at the national level, and 10 percent are employed abroad. Most graduates find local employment, while only a few find jobs from other parts of the country or outside. The data conveys that 76.7 percent of the graduates are not in their first job, compared to 23.3 percent working in their first job. This shows that many graduates have moved from their first job to another one, which signifies that the early career stage is exploratory since individuals are looking for the best fit for their skills and interests.

Table 1. Career Development and Employment Outcomes of Marketing Management Graduates from UM

Licensure Exam Passed/ Date taken (N/A if not applicable)	*f*	Percent
Without	53	88.3
With	7	11.7
Total	60	100
Further studies or training pursued after graduating from UM		
Short courses	20	33.3
Training	29	48.3
Graduate School	11	18.3
Total	60	100
Member of any professional organization		
Not a member	54	90
A member	6	10
Total	60	100
Presently employed		
Not employed	6	10
Employed	54	90
Total	60	100
Employment status		
Contractual	12	20
Regular	39	65
Self-employed	9	15
Total	60	100
Business related to the program		
Note related	22	36.7
Related	38	63.3
Total	60	100
Place of Work		
Local	47	78.3
National	7	11.7
Abroad	6	10
Total	60	100
First job after college		
Not first job	46	76.7
First job	14	23.3
Total	60	100

Table 2 gives a breakdown of employment and career development for Marketing Management graduates. This includes the time spent in the first job, the relevance of the job to the program, time to get to the first job, supervisory positions, monthly salary, and tenure in the current job. Among graduates whose current job is not their first, a large percentage (56.7 percent) remained in their first job for over two years, which reflects a high rate of stability and commitment toward their first employment. A less significant number stayed for only shorter periods: 16.7 percent for 1.1 to 2 years, 13.3 percent for 7 months to 1 year, 11.7 percent for 1-6 months, and only 1.7 percent for less than a month. This distribution indicates that although most graduates moved on immediately after their first job, many found their first position suitable for a long time.

It was presented that 80 percent of the graduates were employed in jobs related to the Marketing Management program, and the remaining 20 percent were working in non-related fields. This high rate indicates relevance, which means that students are adequately prepared for work in their field of study and well aligned with their educational background and career aspirations. The majority of graduates, 88.3 percent, obtained their first job within 0-6 months of graduation, which indicates a strong demand for their skills and a relatively smooth transition into the workforce. Smaller percentages took longer: 5 percent took 7 months to a year, 1.7 percent took 1.1 to 2 years, and another 5 percent took more than 2 years. This quick employment rate is a positive indicator of the graduates' employability and the effectiveness of their training. Forty (40) percent of the graduates do not supervise anyone, while 28.3 percent supervise fewer than five people. The percentages of those supervising larger teams are smaller: 11.7 percent supervise 5 to 10 people, 1.7 percent supervise 11 to 20, and 18.3 percent supervise more than 20. This distribution indicates that while many graduates are in non-supervisory roles, a large percentage have progressed to positions with significant managerial responsibilities.

The monthly salary distribution reveals that 31.7 percent of the graduates earn ₱20,000, 21.7 percent earn ₱30,000, and 15 percent earn ₱87,000. Other salary brackets include ₱10,000 (15 percent), ₱40,000 (6.7 percent), ₱50,000 (3.3 percent), and ₱60,000 (6.7 percent). This range indicates a diversified earning potential among graduates, with a significant portion attaining higher salary brackets, indicating career advancement and success. As for the tenure in their current job, graduates who have been in it for 1 to 3 years are 41.7 percent, less than 1 year is 30 percent, more than 5 years is 20 percent, and 3.1 to 5 years is 8.3 percent. A distribution like this indicates a distribution of relatively new employees mixed with those with tenures longer than 1 year, thus showing newly hired and experienced professionals in the workforce.

Table 2. Employment and Career Progression of Marketing Management Graduates

Current job is NOT the first job; length of time in first job	*f*	Percentage
less than a month	1	1.7
1-6 months	7	11.7
7 months -1 year	8	13.3
1.1 to 2 years	10	16.7
More than 2 years	34	56.7
Total	60	100
Current job related to the program		
Not related	12	20
Related	48	80
Total	60	100
Length of time to get first job		
0-6 months	53	88.3
7 months to a year	3	5
1.1 to 2 years	1	1.7
more than 2 years	3	5
Total	60	100
Number of individuals under supervision		
None	24	40
Less than 5	17	28.3

5 to 10	7	11.7
11 to 20	1	1.7
More than 20	11	18.3
Total	60	100
Monthly salary ('000)		
10	9	15
20	19	31.7
30	13	21.7
40	4	6.7
50	2	3.3
60	4	6.7
87	9	15
Total	60	100
Number of years in current work		
Less than a year	18	30
1 to 3 years	25	41.7
3.1 to 5 years	5	8.3
more than 5 years	12	20
Total	60	100

Table 3 shows the perceived usefulness of training received at UM, the influence of this training on current careers, and how graduates adapt to modern technology in their workplaces. It reveals that an overwhelming number of graduates (95 percent) feel their training while studying at UM is relevant to their current job; on the contrary, 5 percent thought it was useless. This is an area that has a great connection between the kind of training and practical requirements of their jobs at present.

An overwhelming 86.7 percent rate the training/skill set/knowledge received at UM as highly influential to their current position and career. Only 1.7% found it not influential, and 11.7% rated it unimportant, indicating that while the training is directly applicable, the overall educational experience and skills acquired significantly impact their career development and professional growth.

Utilization of Modern Equipment reflects the following figures: 65 percent use new, state-of-the-art equipment, machines, or processes that might not exist anywhere else similar, whereas 35 percent do not use them. Again, the result portrays the high incorporation of technologies within the workplace, showing that many already operate in sophisticated and highly innovative workspaces, providing students with state-of-the-art technological skills to prepare them and enhance their employability anywhere in the modern workplace. Regarding prior knowledge to maneuver or operate modern equipment, 58.3 percent of graduates reported having such knowledge. In comparison, 41.7 percent did not suggest that most graduates felt adequately prepared to handle modern technological demands. A significant portion still faced challenges highlighting the need for continuous improvement in the curriculum to ensure all students are well-prepared for technological advancements in their careers.

Table 3. Perceived Usefulness of Training and Technological Adaptation Among Marketing Management Graduates from UM

Overall, training as a UM student is valuable and applicable to the present job	*f*	Percentage
Training not useful	3	5
Training useful	57	95
Total	60	100
Training/skill set/knowledge received in UM as a student to current position and career		

Not influential	1	1.7
Not so influential	7	11.7
Extremely influential	52	86.7
Total	60	100
Utilize modern equipment, machines, and/or processes that are not common in similar workplaces		
No	21	35
Yes	39	65
Total	60	100
Prior knowledge to maneuver or operate such modern equipment and/or have previous knowledge to adapt to modernization		
No	25	41.7
Yes	35	58.3
Total	60	100

Table 4 provides career development indicators with means and standard deviations for marketing management graduates. The performance indicators include professional activities carried out by the graduates and their decision-making roles, participation in projects they are involved in, and how entrepreneurial they are, among which a scale measurement against meeting educational objectives and outcomes measures its impact.

The mean score for being consulted for inputs for the betterment of their current organization is 4.22, with a standard deviation of 0.91. This high mean score reflects that graduates are frequently sought for their opinions and input, and thus, they are in influential positions in their organizations. The relatively low standard deviation implies consistency in this experience among the graduates.

This indicator has a mean of 4.42 and a standard deviation of 0.74, indicating graduates frequently participate in critical problem-solving decisions at work. High involvement in decision-making implies that they have played considerable roles and responsibilities within their organizations, hence their capability and trustworthiness when entrusted with essential tasks. The mean score for participation in teams or multidisciplinary projects stands at 4.32, with a standard deviation of 0.88, indicating that the graduates are actively involved in collaborative efforts and interdisciplinary activities, contributing to teamwork, innovation, and diverse perspectives in the workplace.

Engagement in research projects as part of their present work is 3.02, with a higher standard deviation of 1.36, presenting a moderate level of involvement in research activities, with significant variability among graduates. Some graduates may be heavily involved in research, while others may not engage in such activities, reflecting diverse career paths and interests. The mean score is 3.45 for involvement in entrepreneurial ventures, with a standard deviation of 1.36. The moderate score suggests that many graduates are involved in entrepreneurial activities, although there is considerable variation. This entrepreneurship engagement indicates proactive career development and the willingness to explore opportunities in new businesses.

The mean score in achieving program educational objectives is 4.08, with a standard deviation of 0.74. This high score shows that graduates feel they have achieved their programs' set educational objectives. The relatively low standard deviation indicates the graduates' consistent perception of attaining these objectives, showing a mean score of 4.15 with a standard deviation of 0.77. Thus, such a high result indicates that these graduates were satisfied that they had met the goals of student outcomes in terms of academic results and outputs during their programs. This high stability result is revealed through the minimal variability provided through this low standard deviation.

Table 4 emphasizes the positive impact of the Marketing Management program on graduates' careers. Graduates are actively involved in decision-making, teamwork, and entrepreneurial activities, and they feel that their education has effectively prepared them for their professional roles. The data suggests that the program's educational objectives and student outcomes are well-aligned with the demands of the job market, contributing to the graduates' career success and satisfaction.

Table 4. Program Preparation for the Marketing Management Career

Indicators	Mean	S.D.	D.E.
Consulted for inputs for the betterment of the current organization	4.22	0.91	Very High
Making decisions that are crucial to solving problems at work	4.42	0.74	Very High
Participate in teams or any multidisciplinary projects or activities	4.32	0.88	Very High
Research projects as part of present work	3.02	1.36	Moderate
Engaged in entrepreneurial ventures	3.45	1.36	High
Attained the Program Educational Objectives (PEO)	4.08	0.74	High
Attained the Student Outcomes (SO)	4.15	0.77	High

The Kaiser-Meyer-Olkin (KMO) Test in Table 5 determines if the sampling is appropriate for factor analysis. The global MSA is 0.646, which is mediocre but acceptable for factor analysis. The individual MSAs fall between 0.426 and 0.793. Some of the low values occur for *Consulted for inputs for the betterment of current organization*" and "*Making decisions crucial to solving problems at work*, with the highest MSAs, signifying that these items contribute enormously to the factor solution. On the other hand, variables like *overall training as a UM student that is useful and applicable in the present job and years worked for the present employer* have lower MSAs. They may not be as suitable for the analysis.

Table 5. Exploratory Factor Analysis on Career Development of Marketing Management Graduates

Kaiser-Meyer-Olkin Test		
	MSA	
Overall MSA	0.646	
Involved or engaged in research projects as part of present work or as a consultant	0.723	
Engaged in entrepreneurial ventures	0.710	
Prior knowledge to maneuver or operate modern equipment and/or have prior knowledge to adapt to modernization	0.511	
Overall training as a UM student useful and applicable in present job	0.426	
Years worked for present employer	0.464	
Monthly salary	0.683	
Number individuals supervised	0.517	
Further studies or trainings pursued after graduating from UM	0.726	
Satisfaction in current job	0.497	
Attained the program educational objectives	0.711	
Participate in teams, or any multidisciplinary projects or activities	0.670	
Consulted for inputs for the betterment of current organization	0.793	
Making decisions that are crucial to solving problems at work	0.786	
Job utilized modern equipment, machine, and/or process that are not common in similar workplaces	0.543	

Displayed in Table 6 is the Bartlett's test had a chi-square value of 196.027 (df = 91, p <.001), indicating the correlation matrix is not an identity matrix and factor analysis is applicable. The significant p-value establishes correlations between variables appropriate for the extraction of factors.

Table 6. Bartlett's Test			
X²	df	p	
196.027	91.000	< .001	

The Mardia's Test of Multivariate Normality in Table 7 checks for skewness and kurtosis. The statistical skewness is highly significant, at p <.001, implying that the data is not normal. Still, kurtosis is not significant at p = 0.471, suggesting that the tails of this distribution do not significantly deviate from the normal distribution. Skewness by a small sample confirms it as not normal.

Table 7. Mardia's Test of Multivariate Normality					
	Value	Statistic	df	p	
Skewness	66.799	656.860	560	0.003	
Small Sample Skewness	66.799	694.892	560	< .001	
Kurtosis	220.031	-0.720		0.471	
Note. The statistic for skewness is assumed to be Chi^2 distributed and the statistic for kurtosis standard normal.					

The model chi-squared test in Table 8 is 39.915 with (df = 52, p = 0.890). The good fit between the observed and the model-implied covariance matrices results from the test. Also, with a high p-value of no significant difference, the factor solution is adequate. The result after doing the varimax rotation is that three factors are extracted.

Table 8. Chi-squared Test				
	Value	df	p	
Model	39.915	52	0.890	

Variables in Table 9 with high loadings on Factor 1 with involvement in research projects (0.798) and entrepreneurial ventures (0.746) indicate an emphasis on professional engagement and innovation. Factor 2 points to the use of modern equipment and associated skills (0.980), such as the item: Job utilizes modern equipment, machines, (0.725) and/or processes that are uncommon in similar workplaces. Factor 3 is satisfaction and organizational contribution, reflected in items such as overall training as a UM student useful and applicable in present job (0.961).

Table 9. Factor Loadings								
	Factor 1		Factor 2		Factor 3		Uniqueness	
Involved or engaged in research projects as part of present work or as a consultant	0.798						0.338	
Engaged in entrepreneurial ventures	0.746						0.414	
Job utilized modern equipment, machine, and/or process that are not common in similar workplaces			0.980				0.005	
Prior knowledge to maneuver or operate such modern equipment and/or have prior knowledge to adapt to modernization			0.725				0.465	
Overall training as a UM student useful and applicable in present job					0.961		0.005	
Years worked for present employer							0.933	
Monthly salary							0.734	
Number of individuals supervised							0.908	
Further studies or trainings pursued after graduating							0.775	
Satisfaction in current job							0.867	
Attained the program educational objectives (PEO)							0.764	
Participate in teams, or any multidisciplinary projects or activities							0.776	
Consulted for inputs for the betterment of current organization							0.806	
Making decisions that are crucial to solving problems at work							0.735	
Note. Applied rotation method is varimax.								

Variables with high uniqueness (Years worked for the present employer) may not fit well into the factor structure, suggesting other unexplored dimensions influence them. The unrotated solution in Table 10 had three factors with eigenvalues greater than 1, explaining 39.1% of the total variance. After rotation, Factor 1 explains 18.9%, Factor 2 explains 11.2%, and Factor 3 explains 9.0%, cumulatively capturing 39.1% of the variance. Rotation improves interpretability by redistributing variance across factors.

Table 10. Factor Characteristics								
		Unrotated solution				Rotated solution		
	Eigenvalues	SumSq. Loadings	Proportion var.	Cumulative		SumSq. Loadings	Proportion var.	Cumulative
Factor 1 (Professional engagement)	3.342		2.780	0.199	0.199		2.644	0.189	0.189
Factor 2 (Technical Proficiency)	1.782		1.481	0.106	0.304		1.572	0.112	0.301
Factor 3 (Job Satisfaction)	1.520		1.215	0.087	0.391		1.259	0.090	0.391

Table 11 is the Tucker-Lewis Index and Comparative Fit Index measure of more than 1 further indicates that the applied model is well fitting. And the Bayesian Information Criterion's value is -172.991, which supports its parsimony. Generally, EFA results indicate a good factor structure. The data has three meaningful factors: Professional engagement, technical proficiency, and job satisfaction. Although some variables' commonalities are relatively lower, and MSAs are also lower, this analysis offers essential knowledge that can be useful in further research or practice applications.

Table 11. Additional fit indices					
RMSEA	RMSEA 90% confidence	SRMR	TLI	CFI	BIC
0.000	0 - 0.04	0.061	1.216	1.000	-172.991

The Root Mean Square Error of Approximation, RMSEA, is 0.000, with a 90% confidence interval range from 0 to 0.04, indicating a good fit for the model. The standardized root means square residual measures 0.061, which again falls within acceptable criteria limits.

Figure 1 depicts a scree plot comparing eigenvalues across 14 factors between actual data (solid line with circles) and simulated data from parallel analysis (dashed line with triangles). The actual data line starts at a noticeably high eigenvalue around 3 for Factor 1 and drops sharply to Factor 2, after which both lines follow a similar gradual declining pattern. A horizontal reference line at eigenvalue 1 suggests that factors above this threshold might be significant; Factors 1-6 meet this criterion in the actual data. The parallel analysis line generally shows slightly higher eigenvalues than the actual data after Factor 6, which suggests these later factors are likely just random noise in the data structure.
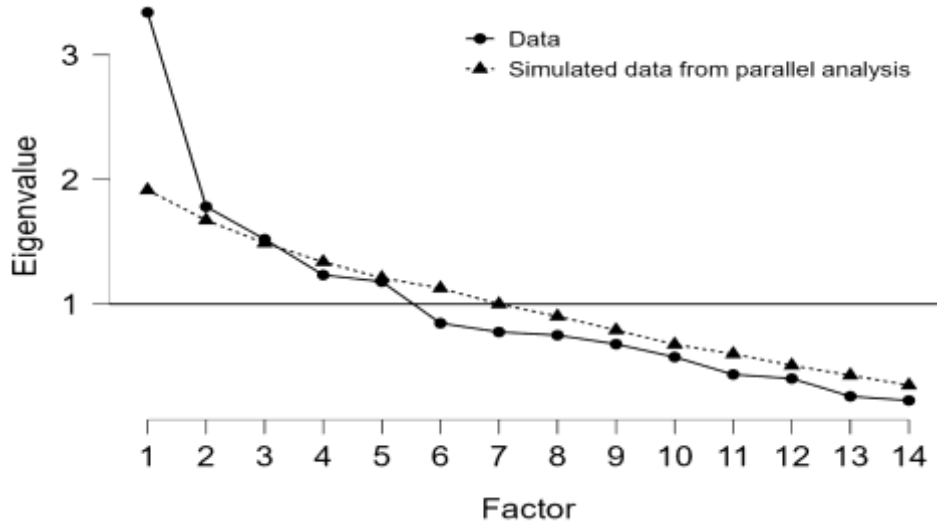
Figure 1. Scree Plot

According to Super's Developmental Self-Concept Theory, the Exploration Stage marks an essential time in career development. One discovers several career possibilities, starts gaining initial work experience, and makes tentative career decisions. It usually falls from adolescence to early adulthood and features major self-discovery and professional growth. Data and discussions presented contribute much to understanding the navigation of this stage by Marketing Management graduates from UM, supporting the theoretical framework used.

The information gathered from the data indicated that most graduates continued studying or received additional training after graduation. Of those, 33.3 percent took short courses, 48.3 percent received various trainings, and 18.3 percent attended graduate school. Pursuing additional qualifications is well-aligned with the exploration stage, wherein people aim to improve their skills and knowledge to align with their careers. This proactive approach to continuous learning supports the idea that the Exploration Stage is characterized by significant educational and professional development.

The dataset reveals that 76.7% of graduates are not in their first job, indicating that many have transitioned from their initial employment to other positions. This high turnover rate in the early career stages is typical of the Exploration Stage, where people try on different roles and industries to find the right fit for their skills and interests. Moreover, most graduates (88.3%) found their first job within 0-6 months after graduation, which is a testimony to the demand for the skills they bring and their smooth transition into the labor market. These results indicate that the Exploration Stage is not devoid of experimentation since they learn by making mistakes to clarify their desired career.

While the 10% membership in professional associations is very low, evidence exists that most respondents are doing something related to professional development. Many participate in research (3.02, moderate level), while some actively engage in entrepreneurship (3.45, high level). Conversely, this signifies early career stages that entail exploring professional networks, gaining insight into an industry, and new business prospects. This engagement in professional development helps support the notion that the Exploration Stage is indeed an exploratory growth stage.

The statistics reveal that 80% of the graduates' work in a job directly related to their Marketing Management program, and an overwhelming majority of 86.7% rated the training/skill set/knowledge received at UM as highly influential to their current position and career. Such high relevance and satisfaction rates indicate that the graduates have successfully negotiated the Exploration Stage and found careers aligned with their educational background and personal interests. This aligns with the exploration stage, where an individual must find an appropriate career for which one's skills and ambitions are required.

The dataset shows that 65% of graduates employ modern equipment, machines, or processes that are not widely used in similar workplaces, and 58.3% said they already knew how to operate them. Most graduates are already well-primed to face the needs of modern workplaces, reflecting the flexibility and preparedness of

graduates in facing changing requirements in the job market, giving credence to the concept that the Exploration Stage entails learning and applying new skills to keep up with changing requirements in the job market.

Graduates were highly involved in decision-making at a mean score of 4.42 and participated in teams or multidisciplinary projects at a mean score of 4.32. This indicates that graduates begin to take on significant responsibility and contribute meaningfully to their organizations even at an early stage, supporting the theory about the Exploration Stage, in which one gains practical experience and develops professional competencies.

The result of the study supports the idea of the Exploration Stage in career development. Graduates actively pursue further education, transition between jobs, engage in professional development, find relevant and satisfying careers, adapt to technological advancements, and take on significant responsibilities. These activities reflect the exploratory nature of early career stages, characterized by self-discovery, skill enhancement, and professional growth. Although things need improvement, including increasing membership in professional organizations, in general, the findings are consistent with the theoretical framework of the Exploration Stage.

V.   CONCLUSION

The career development of Marketing Management graduates from UM are pursuing further education and training. Job transitions intend to achieve suitable career paths, research, and entrepreneurship for professional development. They present a highly perceived usefulness of the training by graduates, who rate the skills and knowledge acquired at UM as highly influential in their careers. They adapt well to technological advancements and take on significant responsibilities in their roles. Overall, the findings support the Exploration Stage of career development, characterized by self-discovery, skill enhancement, and professional growth, while highlighting areas for improvement in aligning educational programs with industry demands.

The program should enhance the career development of graduates in Marketing Management at UM by tailoring the curriculum to suit the industry's demands better, incorporating more practical and hands-on training and modern technological skills. Engagement with professional organizations can enhance networking and professional growth opportunities. Support for entrepreneurial ventures and research projects can further encourage innovation and professional development. Regular feedback from graduates continuously improves the relevance and applicability of the training programs so that graduates are prepared for the changing job markets.

ACKNOWLEDGEMENTS

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