Dimensions of Success in Graduate Studies: Inputs for Higher Education Policy Reform

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ABSTRACT:

Understanding the factors that contribute to success in graduate studies is essential in strengthening graduate education, improving student completion, and informing policy reforms in higher education institutions. This exploratory sequential mixed-methods study aimed to establish the dimensions of success in graduate studies among students from five State Universities and Colleges in the Davao Region, Philippines. The study began with a qualitative phase involving 10 graduate students who participated through an online Google Forms interview. The qualitative data were analyzed using Colaizzi's phenomenological data analysis framework, which generated 300 significant statements that were reduced into 60 formulated statements. These statements served as the basis for the development of a research instrument, which was subsequently validated and tested for reliability. In the quantitative phase, the validated questionnaire was administered to 300 graduate students. Data were analyzed using Exploratory Factor Analysis through IBM SPSS Statistics 24. Findings revealed six dimensions critical to success in graduate studies: academic readiness, interest in learning, discipline and optimism, involvement in co-curricular programs, faculty support, and social support. These dimensions provide evidence-based inputs for higher education policy reform, particularly in enhancing graduate school support systems, improving completion rates, and reducing student dropout. Future studies may further examine the predictive influence of these dimensions on graduate student success across various higher education contexts.

Keywords: Graduate Studies; Higher Education; Educational Management; Graduate Student Success; Exploratory Factor Analysis; Policy Reform

1. Introduction

Pursuing graduate studies is an emerging trend today. Premuzic (2020) posited that students enroll in graduate studies to increase their salary potential, set careers in motion, and follow their passion. On the other perspective, the Philippine Commission on Higher Education (CHED) Memorandum Order No. 15, Series 2019 highlighted that graduate programs are aimed at the mastery of the specialized field of study, the development of original and critical thinking skills, and the demonstration of problem-solving skills that prepare the degree holder for advanced instruction and leadership positions in research, creative work, and the practice of the profession. Unfortunately, data show that graduation rates in graduate studies could be higher. This is evident in the study of Zulueta et. al (2020), which revealed that the graduation trend of educational management students in graduate school is

significantly low. In the Philippines, CHED (2020) data also disclosed a significantly low completion among doctoral and master's degree students.There has been an alarmingly low completion rate, with 80% of graduate students failing to finish their master's or doctoral programs within the standard timeframes of two and four years, respectively (The Second Congressional Commission on Education, 2025). Different factors may contribute to this scenario.

Success is generally defined as reaching desired goals through hard work, learning, and personal growth over time. In the context of graduate studies, success refers to the ability of students to complete their programs with academic competence, personal resilience, and meaningful engagement in scholarly and co-curricular activities (Weatherton & Schussler, 2022; Jacoba et al., 2025). With the increased demand for higher education and the challenges of graduate school, it is critical to identify the dimensions that facilitate their success. This study examines the factors contributing to success among graduate students in five state universities and colleges in the Davao Region, Philippines.

The necessity of this research lies in its potential to inform policy reforms and institutional interventions aimed at improving graduation rates and reducing dropout rates. As highlighted by Nwosu et al. (2024), understanding key success factors in postgraduate studies is crucial for higher education institutions to support student achievement and institutional performance. Moreover, academic success is influenced by study habits, faculty support, and social networks, which are often overlooked in traditional metrics of performance. In the context of graduate education in the Davao Region, flexible learning has also been found to shape students' academic experiences and success-related behaviors. Junsay and Lagura (2024) revealed that graduate students in State Universities and Colleges experienced high levels of teaching, social, and cognitive presence in flexible learning. Their study further showed that flexible learning provided opportunities for self-directed learning, cost and time savings, digital upskilling, multitasking, and soft-skill development. However, it also presented limitations such as unreliable internet connectivity, power interruptions, financial stress, and the challenge of balancing work and academic responsibilities. These findings suggest that graduate student success is influenced not only by academic capability but also by institutional support, learning flexibility, personal discipline, and social support systems.Therefore, this study is significant to educational administrators, faculty members, and graduate students themselves, as it provides evidence-based insights into the critical constructs, academic readiness, discipline, optimism, co-curricular involvement, faculty support, and social support—that shape graduate student success. First, it may provide a basis for policymakers to develop informed policies and strategic interventions aimed at improving graduate program outcomes, increasing completion rates, and reducing student attrition. Second, identifying success factors is crucial for educators and administrators to design responsive curricula, enhance faculty mentoring, and implement support services that foster academic readiness, discipline, and engagement. Third, identifying success factors will give students greater self-awareness and motivation, enabling them to proactively seek support, participate in co-curricular activities, and cultivate the personal attributes necessary for academic and professional success.

While existing literature extensively explores the factors influencing graduation among high school and undergraduate students, there is a noticeable lack of research focusing on graduate-level education. Most research on graduate programs focuses on the reasons people choose to get advanced degrees instead of what makes them successful in finishing them. This underexplored area presents a valuable opportunity for further investigation. Addressing this gap could yield critical insights for policymakers and academic program developers seeking to enhance support systems and improve graduation outcomes in graduate studies in the Philippines. Considering the prominence of completing graduate studies and the concern on graduation trend, this study

is urgently conducted to explore the dimensions of success in graduate studies and develop a research instrument that measures the dimensions of success in graduate studies. The findings of this study will serve as input for policy reforms or interventions to improve graduation rates and prevent dropout rates of graduate students.

This two-phase, sequential exploratory research study explored the dimensions of success in graduate studies. In this study, success is defined as completion of graduate education upon acquisition of desired program outcomes. The first phase was a qualitative exploration of the dimensions of success in graduate studies by collecting interview data from 10 informants within the Davao Region. Findings from this qualitative phase were used to develop a framework for the dimensions of success in graduate studies. The reason for collecting qualitative data initially is that there needs to be more literature about the constructs of success in graduate studies. This study specifically aims to explore the formulated meaning for the dimensions of success in graduate studies, determine the dimensions of success in graduate studies, and develop a framework of dimensions of success in graduate studies.

2. Methodology

This study employed an exploratory sequential mixed-methods design. This approach integrates qualitative and quantitative methods to generate richer and more comprehensive findings (Creswell & Clark, 2017). In an exploratory sequential design, the qualitative phase is conducted first, followed by the quantitative phase, allowing the initial qualitative findings to guide the development of the research instrument (Fetters et al., 2013). The integration of both phases helps strengthen the consistency and interpretation of the findings (Onwuegbuzie et al., 2009). In this study, the qualitative phase explored the experiences of graduate students in completing their studies, while the formulated meanings from the interviews were used to develop a survey instrument for identifying the dimensions of success in graduate studies.

The study was conducted in five State Universities and Colleges in the Davao Region, Philippines: Davao del Norte State College, Davao del Sur State College, Davao Oriental State University, University of Southeastern Philippines, and Southern Philippines Agri-Business and Marine and Aquatic School of Technology. These institutions were selected because they share similar characteristics and academic culture.

The study involved 310 participants from the five State Universities and Colleges in the Davao Region. Ten informants were purposively selected for the qualitative phase to ensure that the data gathered were relevant and aligned with the objectives of the study (Thorogood, 2018). For the quantitative phase, 300 graduate students were randomly selected to answer the survey questionnaire. This sample size was considered appropriate since 200 to 300 respondents are generally adequate for obtaining reliable results in academic research (Minsel, 2022).

An interview guide was used in the qualitative phase. Since the quality of qualitative data depends on the researcher's skill and the appropriateness of the questions, the interview guide was designed to elicit detailed responses related to the dimensions of success in graduate studies (Roberts, 2020). It was validated by two experts and tried out with two non-participating informants.

For the quantitative phase, a survey questionnaire was developed based on the findings from the qualitative phase. The questionnaire was also validated by two experts and pilot-tested with 30 non-participating respondents to determine its reliability. Pilot testing was conducted to ensure that the instrument was aligned with the objectives of the study before full implementation (Menon et al., 2021; De Guzman et al., 2025).

The study used in-depth interviews and survey questionnaires. Data collection was conducted online through Google Forms, Google Meet, and Zoom. In the qualitative phase, the informants selected their preferred online platform for the interview. With their permission, the interviews

were recorded and transcribed for analysis. In the quantitative phase, the survey questionnaire was administered through Google Forms, and the links were distributed to the selected respondents.

The qualitative data were analyzed using Colaizzi's phenomenological data analysis method. This method is useful in identifying significant statements, formulating meanings, clustering themes, and developing a comprehensive description of the phenomenon (Wirihana et al., 2018). Following Colaizzi's procedure, the interview transcripts were carefully reviewed, significant statements were extracted, meanings were formulated, and themes were organized to develop a conceptual understanding of success in graduate studies (Praveena & Sasikumar, 2021).

For the quantitative phase, Exploratory Factor Analysis was used to identify the underlying dimensions of success in graduate studies. EFA is appropriate in the early stages of instrument development because it determines the dimensionality of constructs and identifies items that may be removed to improve the instrument (Netemeyer, Bearden, & Sharma, 2003; Wetzel, 2011). Before conducting EFA, descriptive statistics, skewness, and kurtosis were examined. The analysis was conducted using SPSS version 24. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity were used to determine whether the data were suitable for factor analysis. Items with weak loadings, wrong factor placements, or cross-loadings were reviewed until a clear factor structure was achieved.

Ethical considerations were observed throughout the study. The safety, privacy, and well-being of participants were prioritized to protect them from harm or unnecessary stress (Cacciattolo, 2015; Concepion et al., 2026). Before data collection, the participants were oriented about the purpose of the study and the extent of their involvement. Informed consent and voluntary participation were secured. The identities of the respondents and informants were kept confidential through the use of code names. The interview questions and wording were carefully reviewed to ensure respect for the participants. The Data Protection Act 2012 was also observed to protect the privacy and personal data of the participants.

3. Results

3.1 Profile of the Respondents

The quantitative phase of the study involved 300 graduate students from five state universities and colleges in the Davao Region. The respondents represented different age groups, sex, institutions, and graduate programs, providing a varied respondent base for examining the dimensions of success in graduate studies. In terms of age, the largest group of respondents belonged to the 26 to 35 age bracket, with 96 respondents or 32% of the total sample. This was followed by respondents aged 36 to 45 years old, with 64 respondents or 21.33%. Respondents aged 25 years old or below accounted for 61 or 20.33%, while those aged 46 to 55 years old comprised 45 or 15%. The smallest age group was composed of respondents aged 56 years old and above, with 34 respondents or 11.33%. This distribution shows that most of the respondents were early-career and mid-career professionals pursuing graduate education. In terms of sex, most of the respondents were male, comprising 192 or 64% of the sample. Female respondents accounted for 108 or 36%. This indicates that the respondent group was predominantly male. The respondents came from five state universities and colleges in the Davao Region. The largest proportion came from Davao del Norte State College, with 126 respondents or 42%. This was followed by the University of Southeastern Philippines, with 83 respondents or 27.67%. Southern Philippines Agri-Business and Marine and Aquatic School of Technology contributed 38 respondents or 12.67%, while Davao Oriental State University had 27 respondents or 9%. Davao del Sur State College had the smallest share, with 26 respondents or 8.67%. In terms of academic program, the largest group came from the Master of Arts in Educational Management program, with 65 respondents or 21.67%. This was followed by Doctor of Philosophy in

Educational Management, with 42 respondents or 14%. Both Master of Arts in Science Teaching and Master in Public Administration had 36 respondents each, representing 12% per program. Other programs included Master of Arts in Education, Master of Arts in Education major fields, mathematics education, agriculture, biology, organizational studies, development research and administration, fisheries management, and other graduate disciplines. The distribution shows that the study included respondents from different graduate programs, although the strongest representation came from education-related programs.

3.2 Suitability of the Data for Exploratory Factor Analysis

Before conducting exploratory factor analysis, the suitability of the dataset was examined using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity. These tests were used to determine whether the 60 items were appropriate for factor analysis. The Kaiser-Meyer-Olkin value was 0.917. This result indicates that the sample was highly adequate for exploratory factor analysis. Since the value exceeded the minimum acceptable threshold of 0.60, the data demonstrated sufficient common variance among the items. This means that the responses were appropriate for identifying underlying dimensions of success in graduate studies. Bartlett's Test of Sphericity also supported the suitability of the data for factor analysis. The test produced a chi-square value of 15,758.119 with 1,770 degrees of freedom and a significance value of less than .001. Since the result was statistically significant, the null hypothesis was rejected. This indicates that the correlation matrix was not an identity matrix and that meaningful relationships existed among the variables. Therefore, the dataset was considered suitable for exploratory factor analysis.

3.3 Extraction of Factors

The exploratory factor analysis generated six factors from the 60 items. These six factors represented the major dimensions of success in graduate studies. The extracted dimensions collectively explained 92.3% of the total variance, indicating that the factor structure strongly represented the data. The first factor accounted for 17.5% of the variance. The second factor increased the cumulative explained variance to 37.1%. The third factor raised the cumulative variance to 54.2%, while the fourth factor increased it to 71.0%. The fifth factor raised the cumulative variance to 82.2%, and the sixth factor brought the total explained variance to 92.3%. These results indicate that the six extracted factors captured a substantial portion of the variability among the responses. The high cumulative variance suggests that the identified dimensions provide a strong empirical structure for understanding success in graduate studies.

3.4 Rotated Factor Structure

The rotated factor solution produced a clear six-factor structure. Varimax rotation was used to improve the interpretability of the factor loadings. The 60 items loaded under six dimensions based on their strongest associations with each factor. The factor loadings showed that the items were meaningfully grouped according to common characteristics. The extracted dimensions were labeled based on the content and conceptual similarity of the items within each factor. The six dimensions were identified as academic readiness, interest in learning, discipline and optimism, involvement in co-curricular programs, faculty support, and social support. The rotated factor structure confirmed that success in graduate studies is multidimensional. It is not defined by a single academic indicator alone but by a combination of academic, personal, institutional, and social factors that support students in completing graduate education.

3.5 Dimensions of Success in Graduate Studies

The first dimension was academic readiness. This dimension consisted of 11 items with factor loadings ranging from 0.511 to 0.788. The highest loading was associated with embracing self-directed learning as a means of personal and academic development. Other highly loaded items included remaining open to learning and adapting to new concepts, seeking advice from individuals who had completed thesis or

dissertation work, maintaining belief in completing graduate education, and sustaining mental and emotional stability throughout the academic journey. These results indicate that academic readiness involves self-directed learning, adaptability, confidence, emotional preparedness, intellectual engagement, and the ability to apply knowledge in academic and practical contexts. The second dimension was interest in learning. This dimension consisted of 12 items with factor loadings ranging from 0.402 to 0.492. The items under this dimension included studying lessons for formative and summative tests, using institutional manuals and school documents, adapting appropriate programs and interventions, integrating knowledge and experiences for academic growth, appreciating faculty teaching strategies, extracting insights from curricular content, reading scholarly materials, attending classes regularly, and seeking supplementary learning resources. These results show that interest in learning is reflected in students' active engagement with academic content, learning materials, institutional requirements, and classroom participation. The third dimension was discipline and optimism. This dimension consisted of 11 items with factor loadings ranging from 0.434 to 0.675. The strongest loading was found in demonstrating persistence, consistency, and commitment. Other items included managing time between work and studies, completing requirements during nights, weekends, and holidays, preparing comprehensive to-do lists, accepting responsibilities, maintaining a positive mindset, sustaining productivity, recognizing the value of research publication, showing diligence, and prioritizing graduate education. These results indicate that discipline and optimism are important personal qualities that help graduate students manage academic pressure, remain productive, and sustain commitment toward program completion. The fourth dimension was involvement in co-curricular programs. This dimension consisted of 11 items with factor loadings ranging from 0.458 to 0.642. The items included offering assistance and guidance to peers, participating in academic and extracurricular activities, attending seminars and professional development opportunities, conducting research for courses and thesis or dissertation work, implementing intervention activities, conducting discipline-based training, sharing acquired knowledge with colleagues, contributing to institutional policies and programs, providing research coaching, developing research modules, and initiating research proposals in the workplace. These results suggest that graduate success also involves participation in academic, professional, leadership, and research-related activities beyond regular coursework. The fifth dimension was faculty support. This dimension consisted of 8 items with factor loadings ranging from 0.455 to 0.862. The highest loading among all items was found in seeking guidance from approachable professors who were available beyond regular office hours for technical assistance. Other items included benefiting from faculty coaching and mentorship, engaging with expert faculty members, accepting constructive feedback, seeking adviser support during thesis or dissertation work, drawing motivation from inspirational professors, seeking expert consultation, and participating in program chairperson-created consultation channels. These results show that faculty support is a strong dimension of graduate student success, particularly through mentoring, consultation, feedback, technical assistance, and academic encouragement. The sixth dimension was social support. This dimension consisted of 7 items with factor loadings ranging from 0.441 to 0.665. The strongest loading was associated with having support systems that motivate students to comply with academic requirements. Other items included collaborating with individuals with similar academic interests, communicating with peers and members of the academic community, surrounding oneself with supportive individuals, receiving support from family, friends, colleagues, and superiors, building a network of learning colleagues, and collaborating with peers to seek help and exchange ideas. These results indicate that social support contributes to graduate success by providing motivation, collaboration, emotional reinforcement, and academic assistance.

4. Discussion

The findings revealed six dimensions of success in graduate studies: academic readiness, interest in learning, discipline and optimism, involvement in co-curricular programs, faculty support, and social support. These dimensions indicate that graduate student success is not limited to academic performance alone but is shaped by personal, academic, institutional, and social factors. This supports Weatherton and Schussler (2022), who emphasized that graduate students define success through academic achievement, personal growth, research development, and meaningful engagement.

Academic readiness emerged as an important dimension of success in graduate studies. This result suggests that students who demonstrate self-directed learning, openness to new concepts, emotional stability, and the ability to apply knowledge are more prepared to meet the demands of graduate education. This finding agrees with Visser and van Zyl (2016), who noted that insufficient academic readiness can affect student success and retention. It also supports Pangket et al. (2023), who emphasized the need for interventions that strengthen graduate students' readiness, particularly in research writing. Interest in learning was also found to be a key dimension of graduate student success. This result shows that students who actively study, read scholarly materials, attend classes, seek additional resources, and apply theories to real-life contexts are more engaged in their academic journey. This supports Tugrul and Tasan Deniz (2013), who described passion for learning as a strong motivator for curiosity, participation, and personal development. It is also consistent with Duckworth et al. (2007), who linked passion and persistence with long-term achievement.

Discipline and optimism also appeared as essential personal attributes of successful graduate students. The result implies that persistence, time management, accountability, productivity, and a positive mindset help students manage academic demands despite work, family, and professional responsibilities. This supports Duckworth and Seligman (2005), who found that self-discipline predicts academic performance. It also agrees with Hagger and Hamilton (2018), who associated grit and self-discipline with academic effort and attainment. Similarly, Usán et al. (2022) and Hayat et al. (2022) emphasized that optimism, hope, and self-efficacy contribute to positive academic outcomes.

Involvement in co-curricular programs was identified as another dimension of success. This finding suggests that graduate students benefit from participating in seminars, training, research activities, academic events, peer assistance, and professional development opportunities. Such involvement helps students develop leadership, collaboration, research competence, and professional confidence. This supports Fredricks et al. (2004), who emphasized the role of student engagement in academic motivation and achievement. It is also aligned with Deng et al. (2020), who found that leadership involvement may enhance learning autonomy and academic performance.

Faculty support was also found to be a strong dimension of success in graduate studies. The findings show that students value guidance from approachable professors, coaching, mentorship, expert consultation, constructive feedback, and adviser support during thesis or dissertation work. This supports Baker and Griffin (2010), who explained that faculty interaction strengthens scholarly development, self-confidence, and academic integration. It is also consistent with Schrubbe (2004), who emphasized mentoring as important for professional growth and academic success, and Mathur et al. (2023), who highlighted the role of faculty support in doctoral students' academic and professional development.

Social support was likewise identified as a dimension of success. This result indicates that support from family, friends, peers, colleagues, superiors, and members of the academic community helps graduate students sustain motivation and manage academic pressure. This supports Chen et al. (2023), who found that social support is associated with academic engagement. This finding is consistent with the earlier study of

Junsay and Lagura (2024), which found that graduate students engaged in flexible learning relied on effective time management, positive outlook, consultation, reading, and support from family, peers, classmates, colleagues, friends, and institutions to cope with academic demands. This supports the present study's finding that discipline, optimism, faculty support, and social support are important dimensions of success in graduate studies.It also agrees with Roksa and Kinsley (2018), who emphasized that family support contributes to students' psychological well-being and academic involvement.

The findings show that success in graduate studies is multidimensional. Academic readiness prepares students for advanced academic work; interest in learning sustains engagement; discipline and optimism support persistence; co-curricular involvement promotes professional growth; faculty support provides academic direction; and social support strengthens motivation and emotional resilience. These dimensions may serve as bases for policy reforms and institutional interventions intended to improve graduate program completion and reduce dropout rates.

5. Conclusion

The study concluded that success in graduate studies is multidimensional. Based on the exploratory sequential mixed-methods design, six dimensions were identified: academic readiness, interest in learning, discipline and optimism, involvement in co-curricular programs, faculty support, and social support. These dimensions show that graduate student success is influenced not only by academic ability but also by motivation, persistence, institutional support, faculty guidance, and social relationships. The quantitative findings confirmed that the data were suitable for factor analysis, as shown by the high Kaiser-Meyer-Olkin value and the significant Bartlett's Test of Sphericity. The exploratory factor analysis extracted six valid factors that explained a large portion of the variance, indicating that the identified dimensions strongly represent the indicators of success in graduate studies.The findings suggest that graduate students are more likely to succeed when they are academically prepared, interested in learning, disciplined, optimistic, actively involved in academic and professional activities, supported by faculty, and surrounded by strong social support systems. These dimensions may serve as bases for institutional policies and interventions aimed at improving graduate program completion and reducing dropout rates.

Graduate schools may develop academic readiness programs for incoming and continuing graduate students. These may include orientation programs, research writing workshops, academic reading support, statistics training, and thesis or dissertation preparation seminars to strengthen students' capacity to meet graduate-level requirements. Faculty mentoring and advising systems may also be strengthened. Institutions may establish clear guidelines for consultation, thesis and dissertation advising, feedback timelines, and faculty mentoring responsibilities. This will help ensure that graduate students receive consistent academic guidance and support throughout their program. Graduate programs may promote student engagement by encouraging participation in seminars, research conferences, training, professional development activities, and co-curricular programs. These activities can help students develop leadership, research competence, collaboration, and professional confidence. Support systems for graduate students may be institutionalized. Peer mentoring groups, research circles, learning communities, counseling services, and wellness programs may be developed to help students manage academic pressure and sustain motivation. Graduate schools may also conduct regular monitoring of student progress to identify those at risk of delay or dropout. Early intervention may be provided through academic advising, mentoring, counseling, or research support. Future researchers may use the six identified dimensions as variables in studying predictors of graduate student success. Further studies may also test the developed framework in other regions, private higher education institutions, or specific graduate programs to determine its wider applicability.

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8. Author Declaration

The author confirms that this manuscript is original, has not been published before, and is not under review by any other journal. The author accepts full responsibility for its content and declares no conflict of interest.