

# Self-Efficacy Literature Review: Graduate Students

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## Abstract

**Background:** Literature relating to the relationship between students' perspective of their self-efficacy is gathered to understand the student's perspective of continuing their education. **Method:** Supporting peer-reviewed empirical seminal sources were used to describe prior research including the theoretical framework of Albert Bandura's self-efficacy theory. The organization of this literature review was a collection of resources explained of student self-efficacy in education, self-efficacy in graduate students, social persuasion, vicarious experience, imaginal experience, physical and emotional states, performance experience, and ends with related research from qualitative and quantitative research. **Conclusion:** The literature review described with supporting peer-reviewed empirical seminal sources describes the continued growth in psychology research linked to success demonstrating student self-efficacy.

## Keywords

Student Retention, Student Success, Self-Efficacy, Graduate Students

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## 1. Introduction

Graduate education is a core focus of American higher education. Much remains to understand about graduate students needs to continue their education journey. Explorations into the students' perspective can provide the insight needed to understand what it takes them to continue and succeed in their education journey (Cadenas & Bernstein, 2020; Hardre et al., 2019; McKnight, 2020; Nettles & Millett, 2006; Senters, 2020). A collection of literature relating to the relationship between students' perspective of their self-efficacy and continuing education can describe the need to research, feasibility, but also add to prior research.

Researching students' self-efficacy was gathered from peer-reviewed empirical

seminal sources were retrieved from the university's library database, EBSCOhost database, and Google Scholar. The following keywords were used within these searches were as followed: *self-efficacy, student retention, student attrition, degree completion, persistence, motivation, academic success, graduation, quantitative, qualitative, Bandura's self-efficacy theory, social persuasion, vicarious experience, imaginal experience, physical and emotional states, and performance experience, future research, future suggestions, and the United States*. Exploration by use of the five constructs of Albert Bandura's self-efficacy theory can add to prior research and possibly provide opportunities for educational institutions to help students become efficacious. The five constructs of Albert Bandura's self-efficacy theory are social persuasion, vicarious experiences, imaginal experience, physical and emotional states, and performance experience (Bandura, 1983). Related research is included on qualitative and quantitative research relating to self-efficacy in education. The collection of resources explains explorations of student self-efficacy by use of Albert Bandura's self-efficacy theory.

Challenges facing students in their graduate education can help determine their dropout intentions. A challenge facing graduate students is college students' self-efficacy in their continued learning (Cadenas & Bernstein, 2020). A common challenge for graduate students is dropping out across disciplines or other factors that model perceptions which contribute to dropout intentions (Hardre et al., 2019). Graduate student has challenges in the connection between self-efficacy, mentality towards school, attribution convictions, socioeconomics, and scholastic accomplishment (McKnight, 2020). The collection of literature can provide insight on what is understood about graduate students' self-efficacy to help determine the best way to support them in their education journey.

## 2. Literature Review

### 2.1. Self-Efficacy in Education

Through various hypotheses, interrelationships of non-cognitive attributes are predictors of college student success explained by students' social adjustment, institutional commitment, and college grade point average. Psychological research continues to show that suggested education success in continuing education correlates to non-cognitive skills (Bowman et al., 2019). Bowman et al. researched the direct and indirect interrelationships of several key non-cognitive attributes (i.e., academic self-efficacy, grit, self-discipline, time management) and second-year college retention in hopes of obtaining further explanation of student attrition (Bowman et al., 2019).

Previous researchers have explored student persistence in different student populations. Soland (2019) used an analytic approach to explore whether metadata could provide insight into students' motivation and self-efficacy. Soland's findings demonstrated that the difficult test items correlated to motivation and self-efficacy help students develop social-emotional learning (SEL). McMahan et al. (2019) explored the education persistence of Native American undergraduate

students. Their findings suggested that mentors play a role in developing the program in various ways such as belonging, mastery, and generosity, which can result in a students' ability to continue their education. McMahon et al. used the qualitative method to explore individuals' perspectives on personal experiences in the form of a focus group. The literature review demonstrated results were from the student speed on test items, including those of higher difficulty.

Prior research of self-efficacy in education has resulted in explorations expressing the benefits of further research. Hagqvist et al. (2020) investigated 12 clinical mentors' experiences of their capability in mentoring culturally and linguistically nursing undergraduates during clinical practice. Hagqvist et al. focused on communicating effectively and appropriately with people coming from culturally diverse backgrounds and how effective dimensions of transcultural self-efficacy can change over time as a result of formalized education and other learning experiences. The data collections consisted of semi-structured interviews and deductive-inductive content analysis (Hagqvist et al., 2020). The findings suggested empathy was the motivation to cultivate intercultural communication for the clinical mentors (Hagqvist et al., 2020). Continuing to facilitate intercultural communication presents continuous education and further develops clinical mentors, resulting in efficacious students and benefiting patients and staff (Hagqvist et al., 2020). Future research recommendations can fill a need for more empirical studies that utilize both a questionnaire and semi-structured interviews to provide a comprehensive evaluation of how graduate students describe their self-efficacy toward continuing their education.

## 2.2. Self-Efficacy in Graduate Students

The literature review demonstrated themes of self-efficacy of graduate learning and suggested the research of students' perspectives. Exploration from the participants' perspective to investigate portrayals of self-efficacy can improve and make for effective communications and training (Cadenas & Bernstein, 2020). Exploration into graduate student perspectives on how they identify with self-efficacy in schooling can profit numerous territories and help to decrease dropout rates more readily (Muñoz, 2021). Past researchers have evaluated strategic planning to meet academic goals of graduate students' future success and overall success for society student retention concerns (Ali et al., 2020). The literature review demonstrates self-efficacy in education research and provides insight into experiences that can improve student success related to the behaviors of efficacious students.

Burr and Beck Dallaghan (2019) studied the results of first and second-year medical school participants through The Hope, Pride, Shame, and Anxiety subscales of the Achievement Emotions Questionnaire and the Maslach Burnout Inventory (MBI) during Fall 2017. The authors investigated the phenomenon that medical students can experience burnout due to the challenges of medical curricula based on low self-confidence. The findings suggested that professional self-efficacy is a prominent predictor of the students' academic performance. Burr

and Beck Dallaghan's findings suggested that when medical school students have faced the challenges from medical curricula, the strength of self-efficacy stems from positive emotions, which allows for identifying strategic planning to meet academic goals. Efficacious students continue in their education as they believe it to be possible.

The literature reviewed in self efficacy among graduates included performance improvements. [Ali et al. \(2020\)](#) investigated through a quasi-experimental design two debriefing modalities by Kolb's Experiential Learning Theory (ELT). The authors examined the differences in self-efficacy and code groups, team leader skills, and 28 Acute Care Nursing Practitioner (ACNP) students' knowledge acquisition/retention. Ali et al. suggested the significant differences were in self-efficacy among the two groups between two-time points, demonstrating that team performance improved generally. Ali et al. further suggested both self-efficacy changed, and team performance improved. When trying to meet advanced roles in leadership training, there is a lack of acute care nursing practitioners. The probable remedy is for nurse educators and leaders to consider study results for curriculum development and educational instruction ([Ali et al., 2020](#)). The importance of ACNP educational preparation is to focus success on leadership skill training of simulation-based learning to actual clinical practice to meet their new role requirements and procedure in the current healthcare delivery system ([Ali et al., 2020](#)). An efficacious individual is likely to perform well.

### **2.3. Social Persuasion**

Prior research has explored the level of motivation provided by cognitive tools and network communication for English learning students. [Dong and Liu \(2020\)](#) investigated whether learning a second language was demotivating and challenged the student's complete weekly assignments and overall negative attitude towards online English listening. [Dong and Liu \(2020\)](#) investigated the students' agentic academic engagement related to the low motivation for online English listening. Dong and Liu's qualitative research method relates to the current study as the authors obtained students' perspectives with open-ended questions. Their research question focused on the students' behavioral engagement based on emotional engagement.

The literature review demonstrated the investigation on mitigating problems to the many challenges teachers encounter when teaching by fostering self-efficacy in pre-service teachers (PST). [Bjorklund et al. \(2020\)](#) investigated preservice teachers to explore their perceptions of belonging, social networks, and self-efficacy. Preservice teachers' self-efficacy can alleviate stressful challenges, and teacher education programs are an essential resource. Understanding the foundations of self-efficacy is valuable to researchers and educators ([Bjorklund et al., 2020](#)). More exploration of the perspectives of individuals to explore social network theory and the relationship to a sense of belonging and network centrality as well as how social network theory fosters self-efficacy is valuable to understanding student success.

Bond et al. (2020) and Muñoz (2021) explored nursing graduate students' effort to allow them to persevere through challenges within their learning journey. Muñoz's research included 23 qualitative empirical articles considered original and not one of other research explaining prior research. The research included insight from the nursing graduate students related to their feelings and thoughts during challenging moments and non-challenging times. The antecedents within the research involved the abilities perceived by influences and self-efficacy as the nursing graduate students-built confidence and competencies (Muñoz, 2021). Muñoz's research resulted in an explanation of how mechanisms gained self-efficacy. Professors' feedback and encouragement as well as mentorship relationships were ways in which professors supported the graduate students. The personal concept was the uniqueness each individual experienced (Muñoz, 2021). The relationship between self-efficacy and motivation is the push for a person to act, and self-efficacy is the belief in one's ability.

#### 2.4. Vicarious Experience

Prior researchers sought to explore the effectiveness of the programs designed to encourage participation and overall graduation rates. Vicarious experience is defined as identifying with others who have completed tasks and believing one can achieve the same results (Ahern-Dodson et al., 2020, Bandura, 1971). The literature review explores students' perspective regarding how they identify with others' success in their self-efficacy to mimic similar results.

The reviewed literature further supports how qualitative analysis can provide an exploration of why a program within academics can benefit from exploring students' perspectives related to self-efficacy. Ahern-Dodson et al. (2020) demonstrated themes of how valuable community support and sense of belonging were for students' success in the fields of science, technology, engineering, and mathematics (STEM), but primarily among underrepresented minorities (URMs). Qualitative analysis allows for exploring the mechanisms within a program as well as success achievements. A qualitative study allows for exploring perceptions through participant narrative reactions, which builds confidence in the quality of the outcomes (Ahern-Dodson et al., 2020). Future studies should explore how a subjective examination by qualitative analysis can explain why a program inside scholastics can profit by investigating the understudy's viewpoint related to self-efficacy (Ahern-Dodson et al., 2020). Vicarious experience is demonstrated in the literature review as the researcher shows that community support provides a sense of belonging and its value on students' success (Ahern-Dodson et al., 2020).

Like Bond's research, Muñoz explored student attrition through the concept of graduate students' self-efficacy by adjacency pairs, such as questions and answers and compliment responses and previous article reviews. The researcher explored various points of a nursing graduate student, namely enrollment, retention, and graduation (Muñoz, 2021). There may be the potential for students to experience significant differences in self-efficacy based on how they build re-

relationships with professors and advisors (Muñoz, 2021). Future research is recommended relating to self-efficacy to examine the subgroups of master's students.

## 2.5. Imaginal Experience

Researchers have investigated how imagery can influence self-efficacy, which can affect performance. Bandura (1986) suggested imaginal experience is when an individual embraces practices from imagined encounters for future achievement. Future success can be encouraged when individuals adopt behaviors from visualized experiences of future success (Bandura, 1986). The literature review explores how participants' perspectives of their imaginal experience can provide a guide to success.

The reviewed literature on imaginal experience through qualitative studies. Uddin (2020) conducted a qualitative study consisting of face-to-face interviews, phone interviews, and an online survey. The results analyzed were of 32 completed surveys, which made for a 21% rate. The advisors were from a public university that consisted of 7000 to 35,000 students. Of the advisors, there were 27 females and five males (Uddin, 2020). They averaged 8 years in the role of an academic advisor. Most participants had a bachelor's degree, and 25% obtained their master's degree (Uddin, 2020). The advisors averaged 280 students within the academic year. Uddin's research consisted of open-ended questions in three different sections. The first section of the questionnaire survey consisted of a collaboration of academic advisors and an extensive literature review (Uddin, 2020). The second question focused on background information of the advisors' training and education (Uddin, 2020). The second discovered the advisor's duties and responsibilities to determine the type of students and the number of students assigned.

Prior studies explored self-efficacy and performance measures. Moritz et al. (2000) investigated self-efficacy measures in sports performance in 45 studies with 102 correlations. The researchers also measured moderators of the nature of the task and the assessment duration. The authors found indications of value to match self-efficacy and performance. Future research on imaginal experience may be beneficial for other researchers and education fields to gain from their prosperity.

In another study, Haight et al. (2020) studied college baseball players and the imaginal experience effects on their performance and self-efficacy. The authors demonstrated that each player provided one imagery condition before, during, and after practice (Haight et al., 2020). Data were collected through ANOVA by the imagery assigned to the player and their interactions for self-efficacy. Haight et al. found the imagery group interaction of self-efficacy was tenaciously more present in psychological effect than physical effect. Moritz et al. (2000) demonstrated imagery results caused a performance decline when using imagery. Further, the use of time differently resulted in self-efficacy, and when used during or after, there was an increase in self-efficacy compared to the use before practice.

The study by Haight et al. may be used as a resource for different specialists and training fields to pick up from their successful results. Both studies demonstrated an increase of self-efficacy relating to imaginal experience.

## 2.6. Physical and Emotional States

Researchers have investigated self-efficacy in the domains of physical and emotional states to better explore students' engagement and well-being. Bandura (1986) explained physical and emotional states as when individuals embrace practices for a fact perceptible to the senses and enthusiastic states to make changes on the cynicism of self-judgment for future achievement. Learning institution advisers, staff, and administrators interact the most with students, and increasing student retention and student success is their expected job responsibility (Hempel et al., 2020). Building positive outcomes like achievements can build student confidence.

The literature review demonstrated the themes found in the literature review were of students' sense of community, their support networks, balancing study with life, confidence, and their learning approaches. Andretta and McKay (2020) investigated the three self-efficacy domains (i.e., academic, social, and emotional) to examine person-centered analysis in a comparative study researching self-efficacy and well-being among 3485 adolescents in their final year of high school. Andretta and McKay found that analysis of emotional self-efficacy is a crucial variable of adolescent well-being by Bivariate Pearson's Correlations. Through a qualitative study, Farrell and Brunton (2020) investigated 24 online undergraduate students' engagement experiences. Participant-generated learning portfolios and semi-structured interviews were used in a data-led thematic approach. The researchers found that psychosocial factors influenced online students (Farrell & Brunton, 2020). These findings were present when the students had engaging online teachers, confidence, and structural factors such as life load and course design (Farrell & Brunton, 2020). Andretta and McKay (2020) and Farrell and Brunton (2020) surveyed the students for responses in academic self-efficacy and emotional self-efficacy.

Seeking to explore retention influences is a goal of the current study. Farrell and Brunton (2020) recommended exploring socio-cultural influences, structural results, psychosocial effects, student engagement, and engagement-disengagement outcomes. The current study focused only on students' perspectives. Still, the researcher explored physical and emotional states relating to Bandura's self-efficacy theory.

## 2.7. Performance Experience

The researcher reviewed literature on performance experience explorations of participants' relationships and how they enhanced their success. Bandura (1986) explained performance experience as when an individual is intentionally encouraged to adopt behaviors they have experienced in life or their environment for future achievement. The researcher suggested further exploration of how these

partnership relationships formed as this may lead to enhanced efforts of partnerships and encourage community partnerships to expand resources and cultural competency (McIntosh & Curry, 2020; Murcia et al., 2020). Prior researchers suggested investigating an approach that gave insight from the participants' perspective to explore how to help gain practical approaches to provide student support and guidance (Harn et al., 2019; McIntosh & Curry, 2020; Murcia et al., 2020). Students of graduate studies can achieve behaviors that lead to their academic success when they have exposure to their previous lived experiences or environment.

Further literature reviewed on performance experience included African American students' perceptions and how the partnership of Black church and school partners can influence educational achievements through support. McIntosh and Curry (2020) utilized a qualitative case study to explore student success influenced by a partnership with Black Church and School Partnership on student Success by critical race theory (CRT) and social learning theory (SLT). The study included observations, interviews, artifacts, and document analysis from a 40 years' partnership between a Black church and a high school. SLT explains African American students' perceptions and how the partnership of Black church and school partners can influence educational achievements through support (McIntosh & Curry, 2020). CRT provides an opportunity to examine critical perspectives within society (McIntosh & Curry, 2020). The 30 interviews conducted included 15 participants. Of the 18-year-old students, there were seven on track to graduate. McIntosh and Curry explored the students' perspectives regarding how they felt supported and guided to adopt behavior they have experienced to help them gain effective skills, which led to graduation. The current study explored the students' perspective on performance experiences.

Further literature regarding performance experience included students' perspectives. Murcia et al. (2020) investigated the significance of STEM through social cognitive career theory (SCCT) and how it influenced 15 lower secondary school students' career choices. Murcia et al. discovered how the students described the learning environment resulting in STEM career interest and self-efficacy, parental influence, and career counseling. Murcia et al. found students appreciated the support from career counselors, STEM guest presenters, online, STEM career information, and parents by confirming this through the students' skills and continued development of self-efficacy. Murcia et al. suggested that highly efficacious students set an adaptive learning environment and goals and actively engage in career conversations with their parents and career counselors. Efficacious students demonstrate behaviors that lead to continuing their education.

The reviewed literature also utilized semi-structured interviews conducted with open-ended questions to gain students' perspectives. Harn et al. (2019), for example, investigated seven college students with autism spectrum disorder (ASD) through self-determination theory to explain how they understood their experiences through a qualitative interpretive phenomenological study. Harn et al.



suggested gathering data from the students' perspective development of programming to support students with ASD. The authors' research caused perspective-shifting, which brought discoveries of handling new challenges and discovering expressions of empathy. The challenges motivated the students, as the students did not want to be constrained by ASD stereotypes. The research brought awareness to the participants of the need to socialize to gain self-efficacy.

## 2.8. Related Research Qualitative Research and Quantitative Research

The literature reviewed on qualitative research studies further supports the selection for a qualitative method for this current study. Hagqvist et al. (2020) explored 12 clinical mentors' experiences of their capability in mentoring, culturally and linguistically, nursing understudies during clinical practice. The data collection of this qualitative study design consisted of semi-structured interviews (Hagqvist et al., 2020). The findings suggested empathy was the motivation to cultivate intercultural communication for the clinical mentors (Hagqvist et al., 2020). Recommendations to explore studies of the collected data through a questionnaire and semi-structured interviews explored how students described their self-efficacy and how it results in their ability to continue their education can be valuable for future studies.

Similar to Mishra (2020), the current study explored the relationship of self-efficacy. The purpose of this qualitative descriptive study explored how graduate students described their self-efficacy toward continuing their education in the Southwestern United States. For the purpose of this current study, self-efficacy was defined by the five constructs of Albert Bandura's self-efficacy theory (i.e., social persuasion, vicarious experiences, imaginal experience, physical and emotional states, and performance experience).

Through the students' perspective, prior research explored the students' experiences by concepts of Bandura's self-efficacy theory. Bromms (2020) conducted a qualitative study to explore 65 Black males' collegiate experiences at three different white institutions and how they define their interactions and relationships with faculty in their pursuit of efficacious students. Bromms' (2020) research included semi-structured interviews as the data collection method to explore how students defined their educational experiences from aspirations from college, academic and social experience, classroom environment experience, relationship with faculty and the perceptions of faculty relationships, and campus engagement.

Qualitative studies allow a researcher to explore students' perspectives through questionnaires and semi-structured interviews, as is the plan for the current study. Exploration of students' support perspective based on the relationship between non-cognitive attributes can aid in student retention (Bowman et al., 2019). The researched literature suggested a predisposition of various overviews that may be viewed as intensity of various events for potential nonresponse on a

questionnaire.

The reviewed qualitative research studies describe methodology selected. [Zainuddin et al. \(2020\)](#) conducted a quantitative systematic literature review on e-learning and the relationship between culture and learning techniques. The data were collected from literature that mentions the culture and learning techniques from 46 published (2016-2019) empirical research papers by Web of Science database on gamification within the educational space of learning and guidance. [Zainuddin et al. \(2020\)](#) utilized combined general trends of the research field data methodological approach. The authors included content mixed-methods into themes based on learning outcomes of textual data coded in themes and categories. The findings resulted in gamification studies that have revealed upgrades in understudies' inspiration and commitment, but additionally in their learning ([Zainuddin et al., 2020](#)). Zainuddin's study was about students' success and self-efficacy related to enhancing a learners' experience and educational success. Zainuddin et al. suggested a qualitative study could build upon this study and search for themes on learning outcomes from the students' perspective regarding defining their self-efficacy as well as the inspiration and commitment in becoming an efficacious student.

A qualitative methodology allowed for obtaining students' perspectives for many researchers. [Bond et al. \(2020\)](#) directed a quantitative systematic literature review on 243 published studies from 2007-2016 based on advanced innovation affecting all parts of the student experience. The findings demonstrated that the most identified dimension was behavioral engagement, followed by affective and cognitive engagement ([Bond et al., 2020](#)). Prior research followed the suggestion put forth by [Bond et al. \(2020\)](#) for further research of alignment of a theory and methodological design to obtain an adequate analysis of a phenomenon under investigation. [Nicholes and Reimer \(2020\)](#) investigated, by use of logistic regression (LR) completed by SPSS Statistics version 25, 8916 centers on intersections of 14,000 FYC of Fall 2011-Fall 2018 cohort college-students ([Nicholes & Reimer, 2020](#)). In this quantitative study, the authors studied students from Composition 1 and 2 to graduation and proposed hypothetical and viable ramifications for early-alert and student-support strategies. [Nicholes and Reimer \(2020\)](#), can be a resource for learning institutions to strategize and plan student support to help reduce ramifications leading to attrition. [Fischer et al. \(2020\)](#) investigated performance and enrollment patterns and the effects of course modality of 23,610 students in 433 different courses at a public research university. The connection of prior research is the research investigated student characteristics and how they influence their performance. The common goal of both studies is to research the students' experience as well as how these impact student behaviors.

### 3. Summary

The peer-reviewed sources explored graduate students' self-efficacy towards continuing their education. Research gathered was to add to prior research and pos-

sibly provide opportunities for educational institutions to help students become efficacious. Future recommendations collected were from prior research of students' perspective of their self-efficacy in continuing their education. This literature collection was intended to describe the need to research the relationship between students' perspective of their self-efficacy and continuing education. This literature collection can help describe the need for researching the relationship between students' perspective of their self-efficacy and continuing education.

Both students' self-efficacy research and student attrition research from the students' perspective can provide insight on student retention. Supporting articles suggests further explorations of students with efficient interactions obtained by gaining the students' perspectives and exploring how they describe their self-efficacy (Brown, 2019; Cadenas & Bernstein, 2020; Hardre et al., 2019; Haslett, 2019; Muñoz, 2021; McKnight, 2020; Nettles & Millett, 2006; Senters, 2020). The literature reviewed of self-efficacy in graduate learning indicated the area of research which continues to be explored. Effective communication and strategic training designs can improve when exploring portrayals of self-efficacy (Cadenas & Bernstein, 2020). Dropout rates at graduate level learning should be further explored (Muñoz, 2021). The literature reviewed explored the continued growth in psychology research linked to success demonstrating student self-efficacy.

Based on the literature reviewed suggestions can be made to for learning institutions to provide an environment when students can build confidence. By better understanding the needs of the student learning institutions can be strategic in planning resources that can motivate students. Measures should be taken where faculty ensure students receive individualized and caring direction that keep them zeroed in, actively listening to their interests and objections, and sincerely have confidence in their students.

### **Limitations and Future Recommendations**

Limitations within this literature review include a distinction between type of program students. Future recommendation is to explore those of a traditional program, online study, or other types of programs. Another limitation includes focusing on a different region in the United States. Future recommendation is to explore other regions in the United States such as, southeastern, northwestern, northeastern, other sections of the United States. Understanding influences of self-efficacy can provide more insight that can help understand student's self-efficacy is a future recommendation. A final recommendation for future research can be to explore factors that influence self-efficacy such as, but not limited to, family background and how it influences a student's self-efficacy.

### **Conflicts of Interest**

The author declares no conflicts of interest regarding the publication of this paper.

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