

# Am I An Imposter? Navigating the Research Journey of University Faculty

J. Shellhouse<sup>1</sup>, N. L. P. Stedman<sup>2</sup>, J. C. Bunch<sup>3</sup>

## Abstract

University faculty are charged with advising graduate students through their degree program and equipping them with skills needed to conduct research, but there is limited literature that observes researcher identity development from student to tenured professor. Using self-efficacy as a guide, this phenomenological study examined the research journey of 19 university faculty to better understand the process of researcher identity development. Data were collected from faculty at three annual research conferences regarding four life stages: (1) first contact with research, (2) dissertation, (3) early-career faculty, (4) post-tenure and/or promotion. Findings indicated faculty navigate researcher identity crises following the transition from graduate student to faculty, and researcher identity must be self-identified before accepting external validation as a researcher. Adequate development as a researcher is imperative for graduate students to be effective future members of the academy, which relies on confident, effective faculty advisors to teach them. Our study reports practical suggestions to better prepare graduate students for careers as faculty by setting them up for early research success, as well as strategies to help reduce researcher identity crises experienced by early-career faculty.

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1. Jarred Shellhouse, Strategic Communications Manager, University of Florida, PO Box 110270, Gainesville, FL 32611, [jshellhouse@ufl.edu](mailto:jshellhouse@ufl.edu),  <https://orcid.org/0000-0002-4671-7854>
  2. Nicole L. P. Stedman, Associate Provost and Dean, University of Florida, PO Box 115500, Gainesville, FL 32611, [nstedman@ufl.edu](mailto:nstedman@ufl.edu)  <https://orcid.org/0000-0001-7970-1798>
  3. J. C. Bunch, Associate Professor and Associate Department Chair, University of Florida, PO Box 110540, Gainesville, FL 32611, [bunchj@ufl.edu](mailto:bunchj@ufl.edu),  <https://orcid.org/0000-0001-8729-2349>

## Introduction

A Doctor of Philosophy degree (PhD) is a research preparation degree at its core. Becoming a researcher is an ongoing process requiring doctoral students to continually invest in themselves while seeking help from faculty (Phillips & Pugh, 2010). Students expect doctoral programs to teach them the process to become a researcher (Phillips & Pugh, 2010), but technical skills are separate from actually *feeling* like a researcher and developing a researcher identity. It is imperative for faculty to foster a learning environment which both teaches students technical research skills and equips them with a researcher identity to be successful in their field.

Identity is not an object or quality one can possess; it is a process that continuously develops throughout life (Beijaard et al., 2004). Understanding one's own identity can help deter confusion in values, goals, and desired roles (Erikson, 1968). Faculty's research often corresponds with their own interests and motivations (Åkerlind, 2008), creating greater importance for faculty to fully understand their identity. Further, Evans (2011, p. 425) defined researcher development as "the process whereby people's capacity and willingness to carry out the research components of their work or studies may be considered to be enhanced, with a degree of permanence that exceeds transitoriness." Researcher development describes the process in which a person begins to learn about and conduct their own research, with measurable inputs like grants submitted or doctoral students mentored, as well as outputs such as refereed journal publications (Browning et al., 2017). This process needs further exploration, because "only when we understand how researcher development occurs can we develop effective policy for the improvement of practice" (Evans, 2012, p. 17). The development process of identity is anchored in Bandura's (1977) self-efficacy theory, which served as the framework for this study.

## Theoretical Framework

Bandura (1977) posited perceived self-efficacy is when an individual believes in their ability to perform an order of behaviors to complete a task or achieve a desired outcome. Bandura (1986) identified four sources that influence an individual's self-efficacy: (a) mastery experiences, (b) vicarious experiences, (c) social persuasion, and (d) somatic/emotional states. For this study, mastery experiences, in which an individual has the opportunity to attempt a task and successfully complete the task, could be a faculty member successfully publishing a journal article. Vicarious experiences involve observation of other, similar individuals' successes of other individuals, also known as modeling. For example, a junior faculty member may observe the successes of a senior faculty member and adjust their behavior to mimic them. The third source, social persuasion, is when an individual is told by others they can or will not be successful. Finally, somatic/emotional states involve an individual's reactions to a situation (i.e., coping with stressors).

In terms of identity development, Kuhlmann and Ardichvili (2015) studied the development of expertise and found that expertise developed quicker when the individual had a natural

interest and intelligence to match the discipline, a strong work ethic, a toleration for ambiguity, and worked for an employer who had complex issues to solve (Kuhlmann & Ardichvili, 2015). These qualities enhanced the motivation for individuals to think critically at work and develop their own desire to enhance technical skills and create solutions to complex problems resulting in increased self-efficacy as an expert (Kuhlmann & Ardichvili, 2015).

Everyone develops researcher identity on a unique timeline, yet some factors can foster progression through the process. Structured interventions to support research faculty and staff allow them to define their future development and support needs to chart a guiding path for future research. The manner in which self-efficacy contributes reciprocally to identity development is evidenced in many ways. With additional constraints around research expectations and researcher identity, it becomes even more important to explore this developmental process.

## Purpose and Objective

The purpose of this study was to understand faculty perceptions of their own research journey as it related to their identity development. Due to the processual nature of identity, we sought to understand the researcher identity development journey from first experiences with research to careers as university faculty. This was achieved through the guidance of the following research questions:

1. How does researcher identity develop in university faculty?
2. What events encourage formation of researcher identity?
3. What events discourage formation of researcher identity?
4. What emotions do faculty navigate as they become more experienced researchers?

## Methods

This study used a qualitative phenomenological approach. This study's target population were university faculty in the United States, which were identified through purposive sampling. Specifically, university faculty were recruited at annual research conferences of three associations predominately focused on education. In total, 19 university faculty representing fourteen different universities across the United States participated in the study (Table 1).

**Table 1***Demographics of Participants*

Participant	Age Range	Gender	Research Appointment	Earned Tenure and Promotion
P <sub>1</sub>	35-39	F	25%	No
P <sub>2</sub>	30-34	F	40%	No
P <sub>3</sub>	25-29	F	50%	No
P <sub>4</sub>	30-34	M	0%	No
P <sub>6</sub>	35-39	M	50%	No
P <sub>11</sub>	25-29	F	30%	No
P <sub>12</sub>	30-34	M	25%	No
P <sub>14</sub> <sup>a</sup>	45-49	F	30%	No
P <sub>15</sub>	35-39	F	50%	No
P <sub>20</sub>	35-39	F	0%	No
P <sub>7</sub>	40-44	F	30%	Yes
P <sub>8</sub>	45-49	F	30%	Yes
P <sub>9</sub>	50-54	M	0%	Yes
P <sub>10</sub>	45-49	M	10%	Yes
P <sub>16</sub>	40-44	F	40%	Yes
P <sub>17</sub>	55-59	F	0%	Yes
P <sub>18</sub>	60-64	M	40%	Yes
P <sub>19</sub>	36-40	F	30%	Yes
P <sub>5</sub>	60-64	F	25%	Not Disclosed

<sup>a</sup>Note: P<sub>13</sub> did not complete the data collection process.

### Data Collection and Analysis

Data were collected through four journey mapping sessions. Journey mapping, as a research tool, is a method to “provide a graphic visualization or a map of a customer or user’s experience” (Howard, 2014, p. 11). Faculty at each of the three research conferences were asked to participate in an hour-long session to collect data on their journey as a researcher.

In journey mapping, Custer (2018) noted the first step is to create a framework by selecting the chronological boundaries seeking to be investigated, as well as the specific constructs (or dimensions) on which data should be focused. Our study used four chronological boundaries, or *life stages*, in relation to each person’s researcher identity development: (a) first contact or experience with research, (b) dissertation defense, (c) early faculty career, and (d) post-promotion and/or tenure (if applicable). It was not a requirement to have achieved promotion and/or tenure to participate in this study, so some faculty did not participate in the final stage. In addition, we collected data on the subjects’ (a) actions, “*What were you physically doing in this stage in regard to research?*”; (b) thoughts, “*As you were doing those things, what were you thinking?*”; (c) feelings or emotions, “*Draw a picture or an emoji to help show us what you were feeling at this stage?*”; and (d) insights, “*Give us context about your life at this stage?*” for each of the four life stages.

Once data were collected for each dimension in all four life stages, faculty identified two additional peaks in their journey. First, faculty indicated which life stage they felt they took on “researcher” as a piece of their self-identity. Secondly, participants indicated in which life stage they felt their peers and colleagues validated them as a researcher. This was completed by having the faculty place light bulb (*self*) and thumbs-up (*world*) sticky notes on a grid, which acted as a timeline across life stages (Figure 1).

**Figure 1**

*Data collection process*



Following all journey mapping sessions, phenomenological reduction was used to analyze data (Moustakas, 1994). This involved putting the phenomenon on a level plane without assuming the initial hierarchy of reality, and then delimiting the data into meaning units, before finally clustering the meaning units into themes (Moustakas, 1994). Richardson (2010, p. 4) asserted that there is “no single right way to create a customer journey,” but rather, each organization needs to discover what works for their respective situation. Following, the data in all four life stages were examined holistically to understand the essence of the entire experience. To promote triangulation, each researcher developed their meaning units individually, then gained consensus among each other to achieve a more credible product (Tracy, 2010).

## Findings

This section will discuss the essence of each life stage examined to better understand the faculty researcher identity development journey. After each life stage is presented, a holistic presentation of shared meaning is explained. Findings indicated faculty felt somewhat comfortable and confident with research at the peak of their dissertation, but self-efficacy

drastically fell as they entered their early career as faculty. After the tenure and promotion process, faculty often had a strong increase in self-efficacy and researcher identity development.

### First Contact with Research

Participants indicated their first research experience often came late in their undergraduate experience or the beginning of their graduate program. While the actual research work varied from conducting content analyses, creating literature reviews, drafting questionnaires, or studying statistics, this life stage had two major emotions that emerged: curious and overwhelmed. These two feelings seemed to correspond with the level of support the participant felt at that time.

Participants who primarily felt curious during this first research experience discussed engagement in the data collection process. They articulated experiences designing questionnaires and identifying populations and samples to be studied. Some of them also helped with qualitative and quantitative analysis on the data that were collected. P<sub>2</sub> conducted content analyses through their first research experience, noting a broadening understanding of the research process, stating, "Research encompasses much more than I thought. This is kind of fun." P<sub>2</sub>'s first experience with research allowed them to find an interest in continuing to develop their researcher identity. P<sub>12</sub> said, "I thought it [my research] was challenging, in a good way. It sparked my motivation to meet that challenge." P<sub>12</sub> enjoyed the critical thinking the research required of them and began to develop as a researcher because of a first experience that motivated them to do more.

A separate group of the participants felt overwhelmed as they began their research journey. These individuals were reading literature and writing about it, collecting lab samples, and analyzing statistics. P<sub>7</sub> said they felt completely overwhelmed through the whole process, thinking, "I don't know what I am doing!" They went on to say they received "No training and ZERO guidance." P<sub>1</sub> explained they were a first-generation college student and joined a graduate program where they perceived their peers to have much more research experience than they did. "I'm an imposter," P<sub>1</sub> wrote. "I have no idea what I'm doing." Further, P<sub>8</sub> was attempting to read and synthesize literature to write a literature review, but felt they had no guidance. "This is so confusing. I am so unprepared" (P<sub>8</sub>). For this group of now-faculty, the first research experience developed a feeling of anxiety more than interest because they did not feel adequately prepared to tackle tasks at hand.

One of the separating factors that emerged from the data between the two groups mentioned above was the perception of support from faculty and peers. P<sub>2</sub> acknowledged thinking the research process was kind of fun, but they did not see a future career as a researcher. Toward the end of their master's program, "my advisor told me I was good at research and should consider a PhD." That extra push of validation and support motivated P<sub>2</sub> to continue pursuing graduate school to a doctoral degree. P<sub>12</sub> indicated peer and advisor engagement and support helped them to better enjoy research. "It helped to have a fellow group of grad students going

through a similar experience. I also had a phenomenal mentor as my grad. Advisor who helped me through” (P<sub>12</sub>). On the other hand, a lack of support and community allowed P<sub>3</sub> to develop more apprehension and apathy toward the research process: “I felt isolated in a lab. I didn’t feel confident in research. I was just going through the motions.” The lack of support felt by P<sub>3</sub> inhibited perceived progression in researcher identity development.

### Dissertation

The dissertation life stage was filled with many consistent actions among the participants, who reported they were analyzing data, writing, reading literature, working with their advisor and committee, and preparing for their defense presentations. Participant responses in this life stage emerged in three major attitudinal themes: (a) This was exciting! (b) This is a challenge I can handle. (c) I am not prepared. Out of these three attitudes presented, the data showed most participants were excited about this life stage.

For the group of participants who were excited and confident in their research abilities in this stage, there was a sense of relief and awe that paralleled. P<sub>3</sub> stated, “This [dissertation process] was not as bad as I thought it would be. People seem to value my research. I enjoyed this process.” The dissertation journey can be an arduous one, but P<sub>2</sub> also looked back on the process with a sense of pride, necessitating a need to stop and revel in the moment. They captured these thoughts regarding the end of their dissertation defense: “I can’t believe I just did all of that. I can’t believe I’m done and it went so fast. My committee is saying good things, I need to remember this.” For these participants, the dissertation life stage was a challenge, but curiosity and identity as a researcher continued to develop through the process.

Other faculty looked at this life stage as a challenge but felt equipped with the tools and skills needed to push through it. P<sub>9</sub> noted the following thoughts to themselves, just before they defended their dissertation to their committee: “I hope I have prepared enough. I believe I will finish the process.” P<sub>9</sub> did not look at the dissertation as an easy task to check off a list, but they felt confident in their abilities to successfully complete their product. P<sub>14</sub> articulated similar experiences of reassuring themselves, writing, “I had to tell myself to keep going. ‘You can do this. You are SO close. Don’t stop. Time for you to be the expert!’” Faculty who viewed the dissertation as an accomplishable challenge indicated feelings of confidence and excitement toward research once their committee validated their success by signing off on it.

While the majority of participants had confidence as a researcher in this stage, there were still a few who did not feel adequately prepared. Unlike the previous life stage, feeling supported by advisors and mentors did not seem to have as much influence in changing this feeling. P<sub>1</sub> wrote about publicly defending their dissertation: “I filled up the room. My friends came, administration came, janitors came. I was SUPPORTED but yet I felt that I might not be good enough in terms of my work.” After successfully defending, however, P<sub>1</sub> was able to recognize the research skills at which they excelled and felt more confident in their abilities as a researcher. P<sub>7</sub> wrote about their struggle in the weeks leading up to their defense: “My chair doesn’t have time for me. My chair had more PhD students than he ever had—all three finishing at once. We fought for his time and often I did not “win.”” Because of this lack of time,

P<sub>7</sub> went into their dissertation defense feeling less-than-prepared, but also felt more confident in their research knowledge and skills as it pertained to their study, after they successfully defended.

### Early Career Faculty

Data in this life stage illustrated the largest drop in self-efficacy as a researcher. Some faculty grew more confident as they progressed through their early career years, but only one of the 19 participants indicated complete confidence as a researcher at the beginning of their faculty career. Instead of confidence and excitement toward research, participants indicated feeling overwhelmed and burned out.

P<sub>19</sub> was one of the faculty feeling overwhelmed in this life stage. To them, early career meant defining their own reputation and line of research, except they did not feel confident in either of those components, stating: “What is my research line? What the hell do I have that is publishable? How much ‘research’ am I supposed to do? My God, I will never be tenured.” The internal struggle that P<sub>19</sub> felt was influenced by the expectations of their university to achieve promotion and tenure, weighed against the work they were currently doing which they felt was “publishable” and adequate. More often, however, faculty explained overwhelming feelings sparked by tenure and promotion expectations at their university. P<sub>17</sub> stated, “I was worried about the tenure process, confused by some university policies and procedures, and frustrated by lack of institutional support and consistent changes.” For P<sub>17</sub>, the lack of confidence did not parallel a lack of researcher identity, but a lack of certainty in navigating the tenure process. P<sub>16</sub> and P<sub>15</sub> also articulated problems they ran into while trying to achieve tenure. “How am I supposed to balance grant writing with research and advising and teaching?” (P<sub>16</sub>). The other faculty expectations they had created a burden for achieving research expectations. P<sub>15</sub> noted, “I love what I’m doing but I’m not sure I’m doing enough research. Oh wait. I know I’m not doing enough research. What’s enough?” Subjective expectations and the pressures put on the faculty to achieve tenure inhibited the productivity and confidence they felt as a researcher.

Other faculty felt they began their career with a sense of burnout about their research. P<sub>11</sub> discussed transitioning from a graduate student into a faculty role:

I wasn’t really jazzed or excited about my past line of research. It seemed to be valuable to the stakeholders I worked with (which I appreciated), but was looking to realign my research agenda with something I was more passionate about.

P<sub>11</sub>’s research had been dictated by stakeholders’ interest rather than their own, which caused early career burnout and a need to refocus their research agenda. P<sub>12</sub> recognized that burnout is something that could easily occur and discussed their methods to try and prevent it from happening: “I try to spend my research time only doing things that interest me so I don’t burn out, but teaching is what drives my day to day. Research is what I use to scratch my curiosity itches.” In either case, the early career faculty role marked a decrease in self-efficacy as a researcher while they attempted to balance the additional duties of their job with the tenure and promotion process.

### Post Promotion and/or Tenure

The participants who achieved promotion and/or tenure had two major attitudes toward research identity. The first was confidence and excitement, while the other was still overwhelmed and fearful. In the confident group, P<sub>7</sub> discussed this life stage as one marked with more freedom, stating, “I get to set my own agenda and pursue research in areas I am interested in. I work just as hard, BUT with more confidence and without FEAR. I’m excited to research (not a chore).” The freedom to research what they wanted and break away from the pressures of the tenure process were echoed through P<sub>9</sub>’s sentiments, “Now I can focus on what I really want to study. I can be a mentor. Break the cycle. Support junior faculty.” P<sub>9</sub> saw tenure as an opportunity to help foster research independence and researcher identity in junior faculty in areas they did not feel supported. P<sub>16</sub> also articulated feeling relieved and excited, stating, “I can breathe! I am refocusing my priorities in research, spending more time on meaningful projects. What do I want to be known for?” For P<sub>16</sub>, achieving tenure was a milestone that allowed them to better invest in their own research reputation.

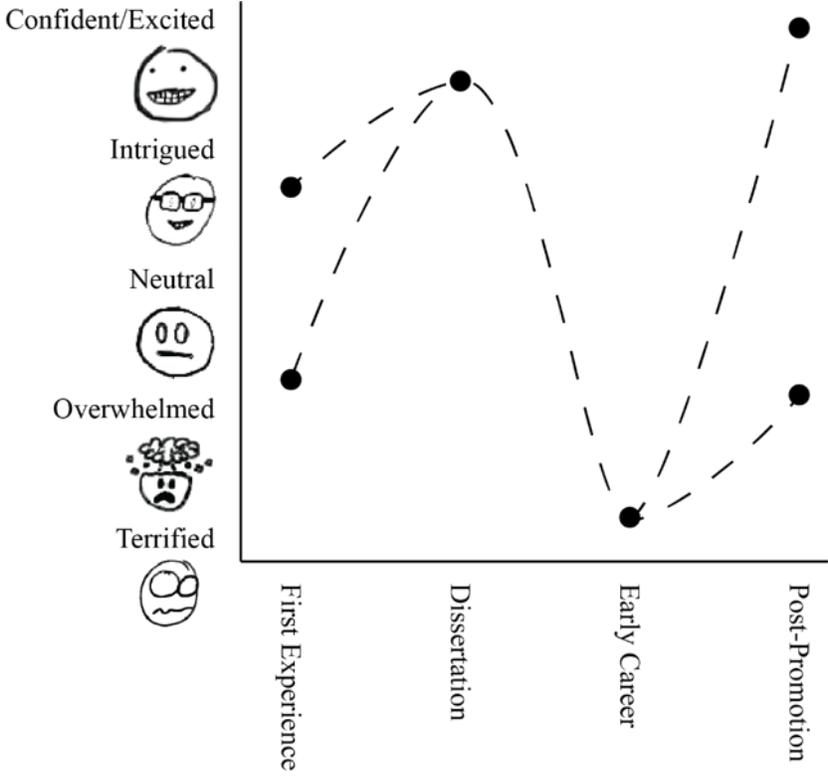
Not every tenured faculty echoed the same confidence in their researcher identity. P<sub>18</sub> discussed their thoughts on navigating the next level of the promotion process: “The promotion process is more difficult; the bar keeps moving. This process is more subjective than pre-tenure. There is less support from profs. I need to stay focused on the goal.” Because of the ambiguous expectations for promotion, P<sub>18</sub> did not feel confident in their abilities to navigate the research expectations. P<sub>19</sub> said, “I am scared and unsure. I feel like an imposter and I worry people are about to really find out how not good I am.” They believed that tenure marked a time of external validation, but did not believe they actually had the knowledge, skills, and reputation needed to achieve that milestone.

### Overall

The overall emotional journey of the faculty participants’ researcher identity is represented in Figure 2. However, we also asked each participant to acknowledge the life stage in which they felt they developed their researcher identity, and when they felt the world gave them external validation as a researcher (Table 2).

**Figure 2**

*Emotional research journey of university faculty*



**Table 2***Self-identity and external validation of participants' researcher identity*

Participant	First research experience	Dissertation defense	Early career	Post tenure and promotion
P <sub>1</sub>		S W		N/A
P <sub>2</sub>	S	W		N/A
P <sub>3</sub>		S W		N/A
P <sub>4</sub>		S	W	N/A
P <sub>5</sub>	S		W	
P <sub>6</sub>		S	W	N/A
P <sub>7</sub> <sup>a</sup>				
P <sub>8</sub>		S	W	
P <sub>9</sub>			W	S
P <sub>10</sub>			W	S
P <sub>11</sub> <sup>b</sup>		W		N/A
P <sub>12</sub>	S	W		N/A
P <sub>14</sub> <sup>c</sup>		S	W	N/A
P <sub>15</sub>	S	W		N/A
P <sub>16</sub>		S	W	
P <sub>17</sub>		S		W
P <sub>18</sub>			S	W
P <sub>19</sub> <sup>d</sup>		S		
P <sub>20</sub>		S	W	N/A
<b>Self Total</b>	<b>4</b>	<b>10</b>	<b>1</b>	<b>2</b>
<b>World Total</b>	<b>0</b>	<b>6</b>	<b>9</b>	<b>2</b>

*Note.* Green “S” cells note instances in which the faculty possessed self-identity as a researcher. Blue “W” cells note instances when the faculty felt external validation by the world as a researcher. <sup>a</sup> Participant 7 did not answer the questions regarding self-identity nor external validation. <sup>b</sup> Participant 13 did not complete the data collection process. <sup>c</sup> Participant 11 does not yet identify as a researcher. <sup>d</sup> Participant 19 does not yet feel the world has validated them as a researcher.

While the internal identity sometimes developed in the same life stage as the external validation, the data showed external validation rarely comes before self-identity formed. For 13 faculty, self-identity developed before external validation. For two, external validation and self-identity developed simultaneously. Another two faculty indicated their self-identity developed after external validation. Finally, one faculty did not feel they had developed their self-identity yet, and another did not yet feel they had received external validation.

## Conclusions, Discussion, and Recommendations

Our study illustrated a journey of faculty members' research highs and lows, aligning largely with Bandura's (1986) four main influences on a person's self-efficacy. Participants who felt successful in their first research experience articulated perceived support, often learning closely from their advisor, aligning with Bandura's (1986) sources of social persuasion and vicarious experiences. Participants who did not perceive high levels of research self-efficacy in the first stage discussed low support from others and not knowing enough about the process to be successful. This low level of support conversely echoes the social persuasion source because a perceived lack of support lowered self-efficacy.

Participants experienced a collective spike in perceived self-efficacy in the 'dissertation' life stage. Successfully completing and defending a dissertation served as both a mastery and vicarious experience, by learning from and being validated by advisors and committees. Validation by peers helped the participants stabilize their own professional identity (Archer, 2008). Perceived support, or social persuasion, from other graduate peer communities aided in self-efficacy and confidence as a researcher as the participants overcame life and university obstacles to achieve this milestone (Gardner, 2008; Roska et al., 2018). The dissertation stage brought focus to the participants' family life, making somatic/emotional experiences more important in this new life stage (Bandura, 1986).

As participants began a faculty role, a large perceived self-efficacy decline ensued. We conclude this is related to increased expectations and pressures faculty face, such as securing grants, advising students, and creating curricula (Boyd & Smith, 2016), while facing the dominant concern of career progression and tenure processes (Austin, 2010). Knowledge about the research process, relationship support, and personal engagement must exist to develop as a researcher (Albertyn et al., 2018), but we conclude successful faculty also need clear guidelines to navigate the promotion process and meet all departmental expectations. Additionally, many faculty members leave their institution of graduate study to begin their career, often losing social support from a pre-established peer network. With new colleagues, new faculty may also struggle to model those they deem successful. These losses and additional emotional stressors are indications of low self-efficacy (Bandura, 1986).

Following tenure, participants indicated signs of growing self-efficacy. The successful achievement of tenure and/or promotion serves as both a mastery experience and social persuasion, as faculty's peers validate their success. Developing expertise takes about ten years (Ericsson & Charness, 1994), so this confidence as a researcher and validation experienced through tenure and promotion aligns with this timeline. Participants who had reached full professorship indicated higher efficacy levels than those who had only achieved the associate level. Finally, data showed external validation rarely developed before self-identity as a researcher. We contend it is imperative for faculty to foster enough research support to graduate students, so they develop their researcher self-identity. External validation is not as crucial for the student until they perceive their own researcher self-identity.

Inexpert researchers need support to develop researcher identity. Our study adds to previous literature regarding self-efficacy and researcher identity development by pinpointing various stressors and triumphs that inhibit or aid development. Faculty who want to better prepare graduate students for this sometimes-arduous journey should not only focus on giving students mastery experiences, but also develop coursework for graduate students to understand strategies to balance all the faculty expectations they will have. Additionally, helping new faculty cultivate internal and external support groups can give them both social persuasion and vicarious experiences to better develop identity as a researcher. This study should be replicated, and we recommend a similar study be conducted longitudinally to get richer data that are not influenced by recall bias. Our study also grouped the associate- and full-level professors, but differences could be uncovered through future scholarship.

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