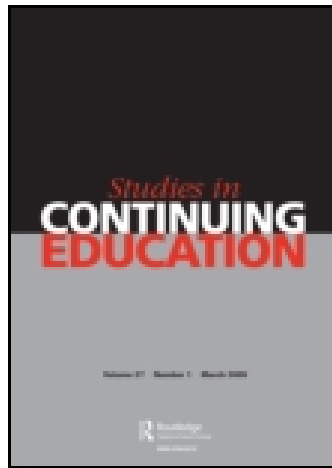


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The role of relationships in the transition from doctoral student to independent scholar

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Little research and practice has focused specifically on Stage 2 of the doctoral student experience – the critical transition from ‘dependence to independence’. In the United States, a student completes coursework, passes candidacy exams, and begins the dissertation proposal process during Stage 2. Given the distinct experiences associated with this stage, it is important for researchers, faculty and administrators to understand each stage fully. Our goal is to shed light on how students begin to enact the academic career during this critical transition by specifically exploring the role of relationships in the identity development process. We rely on a theoretical framework that brings together sociocultural perspectives of learning and developmental networks to reveal a connection between relationships and learning. This study highlights the effects of relationships and interactions on particular strategies and experiences associated with Stage 2 of doctoral education, and therefore students’ identity development and transition to independence.

Keywords: doctoral education; identity development; developmental networks; learning

Introduction

Doctoral education is the first step towards a faculty career and the development of a professional scholarly identity (Austin and McDaniels 2006; Austin and Wulff 2004). Throughout this educational experience, students learn about the nature of the academic career, as well as the language, research, and teaching skills associated within a particular domain or discipline. In the United States, doctoral education is conceptualized as a series of three stages. Stage 1 occurs from admission through the first year of coursework. In Stage 2, the student typically completes coursework, passes candidacy exams, and begins the dissertation proposal process. In Stage 3, the student focuses on completing the dissertation (Tinto 1993). It is important to understand the distinct experiences of each stage fully to provide insights useful to students, faculty, and practitioners interested in successful preparation for academic practice. As McAlpine and colleagues (2009) noted, ‘We need to understand better the experiences of and related challenges faced by doctoral students in the process of coming to understand academic practice and establishing themselves as academics’ (97).

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While prior research has examined Stage 1 (Golde 1998; Baker Sweitzer 2007, 2008, 2009) and Stage 3 (Sternberg 1981), little research and practice has focused specifically on Stage 2, the critical transition from ‘dependence to independence’ as described by Lovitts (2005). During Stage 2, students move away from the structure provided by course schedules and enter into a self-directed, often isolating, period. Students begin to develop their own academic identities, professional voices, and independence as scholars, yet they often struggle with how to effectively manage this stage without the guidance and structure that characterized Stage 1. As they apply the knowledge and insight gained through coursework, students can become lost in their efforts to become independent scholars.

Although researchers consistently suggest that identity development is a crucial dimension of the doctoral student experience, few studies have empirically examined this process. Furthermore, few studies have explored the influence of students’ relationships with others, beyond the academic advisor, on learning and identity development during graduate study (exceptions include Baker and Lattuca forthcoming; Baker Sweitzer 2009; McAlpine, Jazvac-Martek, and Hopwood 2009). Relying on data from our qualitative study of Stage 2 (Baker, Pifer, and Flemion 2009), we examine the role of students’ relationships in the identity development process during this distinct stage of the transition to independent scholar.

Developmental networks and sociocultural perspectives of learning

The notion of identity development in the professions is not novel. For years, researchers have explored the changes that occur as a result of graduate training, particularly in medicine and K–12 education (e.g., Becker and Carper 1956). Very few studies, however, have empirically investigated identity development in the context of doctoral education. For example, Hall (1968) examined the professional identity development of doctoral students during the qualifying or candidacy exam (a necessary step towards achieving candidacy that typically requires students to demonstrate a certain level of content mastery) and found that graduate students were better able to envision themselves as future faculty members after completing the qualifying exam, regardless of whether they passed the exam. Little research has advanced the findings presented in Hall’s work, however, and more research is needed to understand the stages and processes of identity development in doctoral education.

The transition to any new professional role, including that of doctoral student, requires the acquisition of new skills and competencies, and the development of new relationships while altering existing ones. Wortham (2006) points out that individuals have identities before entering a new domain or community and that these identities may interfere with learning as it is defined in the new domain. People adapt to new professional roles, Ibarra (1999) suggests, by experimenting with new identities or ‘provisional selves’. The nature of a person’s network of relationships can affect the creation, selection, and retention of these provisional identities. Ashforth (2001) and Goffman’s (1961) assertions that social identities are ascribed to people, rather than created by them, link sociocultural theories of learning with theories of developmental networks. Podolny and Baron (1997) argue that social networks socialize aspiring members, regulate inclusion, and convey expectations about roles. Similarly,

Ibarra and Deshpande (2004) contend that social identities in work settings are co-created by those in the local setting; identities emerge through network processes.

The breadth and interconnectedness of social influences on learning and identity development acknowledged in sociocultural and network theories illuminate a limitation of prior research on doctoral education, which generally accounts for the importance of interpersonal relationships in doctoral student success exclusively by examining the student-advisor dyad (Nettles and Millet 2006; Paglis, Green, and Bauer 2006). Recently, Austin and McDaniels (2006) argued for the development of broader professional networks in socialization to the professoriate. Yet, we must expand our understanding of the role of relationships and interactions even farther beyond this definition, as professional networks are not the only ones at play in doctoral socialization. Tinto (1993) and Weidman, Twale, and Stein (2001) provide evidence that students' networks of relationships within and outside of the academic community are important to persistence and professional success. Additional research has confirmed their findings that a variety of relationships beyond the student-advisor dyad are important for persistence and success in doctoral education, such as relationships with family, friends, and former colleagues (Baker Sweitzer 2007, 2009; Hopwood and Sutherland 2009).

To explore the connections among developmental relationships, learning, and identity development, we relied on the interdisciplinary framework developed by Baker and Lattuca (forthcoming) that brings together developmental network theory and sociocultural perspectives of learning. Our reliance on this interdisciplinary framework allowed us to explore whether and how students' relationships within and outside of the academic community influence the development of their professional identities. In using this framework, we acknowledge and call attention to the social nature of identity development in doctoral education. The application of an integrated approach to the sociocultural influences of identity development during doctoral study allows us to link ontological changes in self-understanding to epistemological changes (alterations in domain knowledge, skills, and views of knowledge). We argue that consideration of interactions and relationships, and the learning that occurs through them, is critical to understanding the identity development process that occurs as students prepare for academic practice.

Methods

Valley University (pseudonym), a top-rated research institution, has nationally ranked undergraduate and graduate colleges of business and education (US News and World Report 2010). Valley's College of Business offers the PhD in five disciplines: accounting, finance, marketing, management and organization, and supply chain and information systems and prepares students for faculty appointments. Valley's higher education doctoral program offers both PhD and DED degrees, and prepares individuals for faculty and administrative appointments. We interviewed a total of 31 doctoral students in business and higher education. This included students who were currently engaged in Stage 2 at the time of the study, as well as those who had recently completed Stage 2.

Of the 31 students, 14 were female (45%). One participant was African American (3%), three were Asian (10%), one was Asian American (3%), two were Indian (6%), and six were international students (19%). The remaining 18 participants were White

(58%). A semi-structured interview protocol was used to guide our interviews. The interview protocol captured information on six areas related to Stage 2:

- (1) key experiences,
- (2) challenges,
- (3) goals for performance/advancement,
- (4) key relationships,
- (5) types of support present/absent, and
- (6) identity (personal and professional).

Each author independently coded interview transcripts using these six themes as a guide. The authors also compiled interview excerpts that illustrated and supported these ideas.

The role of relationships: purposes and outcomes

In this paper, we highlight three themes related to the role of relationships in the identity development process and preparation for academic practice. The three themes are:

- (1) general support and advice,
- (2) identity development as student (e.g., scholar in training), and
- (3) identity development for academic practice (scholar).

In the following section, we discuss these themes as they relate to the key characteristics of Stage 2 of doctoral education.

General support and advice

Given that Stage 2 is unlike any other professional or educational experience that doctoral students have faced, many students relied on relationships to help them navigate the basic challenges associated with this stage.

Lack of structure

Stage 1 is characterized by coursework, due dates, syllabi, and consistent interactions with faculty, peers, and administrators. Having recently completed this stage, participants struggled with the lack of structure that characterizes Stage 2. Relationships with academic advisors (or supervisors) and advanced students played a crucial role in helping students overcome this lack of structure. For example, many academic advisors/supervisors helped their students develop a writing schedule to help keep them on task. Advanced students shared their own strategies, such as daily or weekly writing goals, successful writing habits, and writing support groups. The anecdotal evidence and advice that these individuals offered to students dealing with the uncertainty of this stage was immeasurable in providing some understanding of how to avoid succumbing to what some participants called ‘the lost year’.

In the absence of such relationships, some students struggled to have even a basic understanding of what to expect during this stage and how to deal with the dramatic

change in structure during the transition to Stage 2. For example, several students confided in us that their advisors/supervisors were essentially non-existent, which resulted in no guidance, no sounding board with whom to share ideas or concerns, and no mentoring or advice. The students who did not have this key source of support struggled with the basic tasks of how to structure their daily schedules, and the larger goal of persisting through Stage 2.

Isolation

Because students were no longer in the classroom in Stage 2, their interactions with community members were greatly reduced or even non-existent. Students spoke of the drastic change from being in the classroom and office one day and working independent of those environments the next. Relationships both in and out of the academic community became paramount for helping students deal with the isolation associated with Stage 2. All of the students in our study spoke of the isolation they felt during this transition period, and found that relationships 'helped keep [them] sane,' 'helped keep [them] on task,' and 'were vital to feeling like a normal person'.

Relationships within the academic community, primarily one's academic program or department, serve as conduits to the academic community and help keep students informed of events and professional development opportunities. Professional relationships also have the potential to serve as sources of friendship and personal support as students engage in the sometimes challenging parallel process of forming their identities as students and scholars. Personal relationships – those outside of students' professional lives – were emphasized by participants as equally important sources of support during Stage 2. Family and friends who have known students well before their engagement in doctoral studies provided perspective and support that help students remain focused on their work, as well as their motivations for success, their prior accomplishments, their identities and roles outside of their profession, and other sources of encouragement.

Unfortunately, not all students had positive relationships to rely on during this time. In fact, a few students felt they had no sources of support, which made the transition even more difficult. One student, for example, was far from her family and personal support network. She expressed sadness and disappointment over not having close friendships, and wished she had such relationships to help her manage the negative emotions and challenges associated with Stage 2. When asked how she would like to improve her experience as a doctoral student, she replied simply, 'I would like more friends. . . . I really hope I can establish friendships with other students.'

Key experiences

Because students in Stage 2 were no longer in the classroom, other experiences were crucial for helping them feel part of the academic community and engaged in the ongoing identity development process. This included experiences such as research assistantships, teaching assistantships, brown bag lunches, and student organization meetings. The transition to independent scholar includes understanding and engaging in the activities and experiences associated with the academic career. Opportunities for these experiences presented students with a realistic job preview of

life as an academic and the interactions needed for embracing and enacting that role. Such opportunities also communicated a sense of being valued within the academic community. One student said, ‘I have an assistantship that folks want. [Because of] the people that I get to rub elbows with, people want that job. That tells me I’m valued in the community, at least by faculty.’ Faculty members, including academic advisors and research supervisors, were critical for helping students become aware of the importance of opportunities for continued learning and professional development, and the need to identify or create such opportunities. Advanced students were also important, as they shed light on the experiences (and related successes and failures) that they found to be most helpful in preparing for the later stages of the program.

When students do not have connections with people who can serve as bridges, to use a networks term, in their ‘development networks’, they often miss out on opportunities for key experiences and question their sense of belonging. Bridges serve to connect students to valuable experiences directly, or to connect them to others who can provide such experiences. Bridges can also link students to other resources, such as personal support, knowledge, and effective behavioral strategies for mastering the parallel process of identity development in Stage 2. Students who do not have such relationships, or whose relationships do not provide this bridging function, subsequently do not have the key experiences and access to resources that their better-connected peers may receive.

Identity development as student

The role of student, or scholar-in-training, is one of the most central roles enacted during graduate education. Organizational newcomers must understand what others expect of them and must have the ability to achieve those expectations in order to perform a role adequately. This process is called role learning (Brim 1966). Researchers suggest that role learning is paramount to effective role entry (Ashforth 2001). Role learning not only focuses on acquiring the technical skills associated with a given role but also mastering the social, normative, organizational, and political information associated with the role and organization (Morrison 1995). As Walker and colleagues (2008) noted:

Subject mastery is necessary but is not in itself sufficient to the formation of scholars. Learning to present oneself as a member of a discipline, to communicate with colleagues, and to apply ethical standards of conduct is part and parcel of formation (62).

Critical to role learning is social support from and interaction with peers, mentors, family members, and friends.

Awareness of transition

Participants in our study were aware that they were transitioning from students to scholars, but struggled with self-doubt as they attempted to balance multiple roles simultaneously. The abrupt shift from the familiarity of the classroom and regular interactions with community members to isolation and self-doubt can be a challenge

for doctoral students during Stage 2. Students felt confident in the abilities and knowledge they had gained during Stage 1; however, they relied on advanced members of the community to provide support and advice as they engaged in parallel identity development as both student and scholar. Interacting with faculty and advanced students who modeled behavior allowed students to feel more comfortable asking questions. One student told us, 'I don't know what I don't know, so it's not always easy to ask the "right" questions. Having a few close people you can trust and rely on is so important.' Students' peers, those also working through the transition to independent scholars, also served as important sources of support. As one student commented, 'It's nice to have folks that are in the trenches with you, to share stories and frustrations.' Relationships outside of the academic community also helped students maintain balance and perspective on the experience as a whole. Many students described family members and close friends as 'cheerleaders' or their 'biggest fans'. Such relationships helped students talk through the challenges they were facing in a non-threatening, low-stakes environment, allowing them to rely on comfortable, long-standing relationships for support.

Alternatively, a lack of close relationships to rely on during this time can cause fear and undue stress for students who are engaged in an already stressful process. When students do not have individuals to rely on, they can become unclear of the expectations associated with this stage, which can make the process of identity development as a student and scholar-in-training difficult to manage. As one student asked, 'If [the faculty] aren't going to invest in me, who will?' Furthermore, when students see others getting support and guidance that they do not think they have received, resentment can often occur. Students' feelings that they were not getting the same level or kinds of support as their peers were often a major source of tension for participants.

Impression management

Once students complete course work and pass comprehensive or qualifying exams, they often experience a sense of accomplishment. As one student noted, 'I feel one step closer to achieving my goal, and I do feel I have learned a lot these past two years.' While students noticed the increased knowledge and ability to 'have real conversations with faculty', issues of impression management also arose. Participants talked about not wanting to embarrass themselves in front of faculty, avoiding meetings with their advisors until they had clear ideas about their research, for example. Advanced students in the program helped participants manage faculty members' impressions of their progress and abilities, providing advice about who to go to for particular issues, how to approach faculty, and who to avoid in some instances. The students who had relationships with advanced students relied on them for this type of advice, and were subsequently more comfortable interacting with faculty and presenting themselves as members of the academic community.

We observed two negative outcomes related to a lack of relationships or ineffective relationships in terms of dealing with impression management issues. First, when students lacked colleagues to approach regarding how to interact with faculty, they rarely interacted with faculty to share ideas or create opportunities for intellectual discourse. Rather, students worked alone, often heightening their feelings of isolation, loneliness, and self doubt. Second, when relationships provided bad

advice in terms of managing impressions, students' reputations were damaged and their self-confidence and willingness to engage were negatively affected. One student in particular received misguided advice about priorities between the classroom and research. The advisor she spoke with encouraged the student to focus on research, while faculty members who taught seminars urged her to spend more time on her coursework. She followed the advice of her advisor, and she failed to gain the support of other departmental faculty as a result. She was later counseled out of the program.

Networking and collaboration

During Stage 2, students began to understand the importance of networking and building collaborations, mostly within their academic programs or departments, but also within the broader disciplinary community as well. Many of the students in our study were preparing to present their work at professional conferences and relied on their peers for advice about this important yet often intimidating experience. Participants said that these relationships, and the advice gleaned from them, further highlighted just how critical these relationships were and would continue to be. The students who were able to forge those connections with faculty, advanced students, and peers reaped the benefits. Students began working on new projects that resulted in co-authorship opportunities, important for developing one's curriculum vitae. These opportunities, such as seeing a project through from inception to publication, also provided first-hand knowledge about the faculty career. The ability to network and be an effective collaborator is a skill that is necessary for academics in any field and institution type. When students are afforded the opportunity to begin honing these skills as part of the identity development process while enrolled in graduate study, they are likely to have increased confidence and success during their early career stages.

The students in our study who did not realize the importance of networking and collaboration, or lacked the confidence to engage in these activities, suffered as a result, and had a more difficult time making that transition from student to scholar. They seemed to be waiting for someone else to assign them to a project or otherwise direct their efforts and progress. Efficacy and initiative are critical to making the transition from student to scholar, and engaging in collaborations with individuals in the community are key for making this transition effectively.

Identity development as scholar

The topic of identity development and preparation for academic practice during doctoral study is an important one that is gaining attention from researchers and practitioners. For example, sessions at the most recent annual meeting of the Association for the Study of Higher Education highlighted the issue as one that is paramount to understanding preparation for the professoriate. While students engaged in Stage 2 were aware of the transition and their own efforts to manage it successfully, it was the students who had recently completed Stage 2 who were able to reflect on their experiences and provide important insight into their preparation as scholars. Their ability to clearly articulate their own identity development in these ways revealed valuable insights into the process of becoming a scholar that occurs in Stage 2.

Long-term vs. short-term planning

As students described their experiences in Stage 1, they often focused on short-term goals. They scheduled their life based on assignment due dates and exam dates, the beginning and end of semesters, and the timing and completion of program milestones. Once students entered Stage 2, however, the remaining program milestones were the dissertation proposal and dissertation, which have no due dates (candidacy exams were completed during Stage 1 for the programs we explored). In the process of working on these milestones, students began shifting from a short-term focus to thinking long-term (e.g., graduation and academic employment). Students began to develop the requisite skills as they transitioned from student to scholar during Stage 2 and prepared for the realities of the academic career. They noticed this shift in thinking within themselves, as well as the role of relationships in facilitating this shift. Faculty, for example, helped students develop and hone dissertation ideas that would establish clear research agendas. Collaborations with faculty, advanced students, and peers led to publications and working papers that were crucial to participants' marketability and future success in their pursuit of tenure. Relationships outside of the community, particularly those including family responsibilities, were also key to influencing this shift in thinking. Many participants in our study expressed feeling pressure to think beyond their doctoral studies and seriously plan for life after graduation.

Strategic relationship choices

While all students discussed the importance of networking and engaging in collaborations, the students who had recently completed Stage 2 spoke of a particular need to be strategic in terms of relationship choices. This strategic focus connected to the shift from short-term to long-term thinking as students dealt with job placement and publication concerns. In order to develop solid research agendas, students discussed the need to network with leaders in their respective fields and forge collaborations with scholars who conducted research in their areas of interest. Similarly, a few students also told us that collaborating with assistant professors was a good strategy in that they were '[more] motivated to get published than senior faculty' given the pressures for promotion and tenure. Many students also discussed strategic approaches to selecting dissertation committee members. One student selected a committee member not because of her reputation for being supportive or developmental with students (in fact, she had the opposite reputation), but because symbolically her lack of involvement (e.g., membership on the committee) could be a negative signal as the student entered the job market.

Realistic previews of faculty career

'Besides the pay, I am doing exactly what I will be expected to do once I become a faculty member.' This quote expresses a statement we heard from several students who had recently completed Stage 2. Reflecting upon that stage, participants emphasized their identities as scholars. Faculty relationships were particularly important at this stage in terms of providing honest assessments of the academic career. As one student noted, 'My advisor told me the good, the bad, and the ugly

about this profession. . .and despite that, I still think I am interested in becoming a faculty member.' Students were able to observe junior faculty on the tenure clock and could see the similarities to life as a graduate student and the associated expectations. Senior faculty members offered perspective and shared 'war stories' of the trials and tribulations they faced while working through promotion and tenure. Personal relationships were also important in terms of ensuring balance; in some cases, such relationships forced balance and a recommitment to life beyond the academy. For example, one participant described how her relationships with both her advisor and her husband influenced her goals in Stage 2. She said:

Professionally, as well as personally, [my advisor] knew that my husband and I would like to leave sooner rather than later if possible, you know, for him as well. And so she was really responsive to paying attention to me wanting to leave earlier.

Discussion

We embarked on this line of research to better understand the key relationships and their influence on the identity development process during Stage 2. Learning, which we define as knowledge acquisition and identity development (Baker and Lattuca forthcoming), is critical to this transitional stage in doctoral education. We investigated the interplay of developmental networks, learning, and identity change that are necessary to successfully transition from student to independent scholar. We argue that students are undergoing a parallel identity development process that requires them to master the student role and corresponding identity, while simultaneously beginning to accept and enact the identity of scholar and academic. This research highlights the importance of relationships during this stage, including the potential positive and negative effects they can have in doctoral students' transitions into independent scholars.

We explored the role of relationships as critical to the doctoral student experience and professional preparation, while illuminating the key challenges and issues students face during Stage 2. Given that Stage 2 is unlike any other prior academic or professional experience, students' relationships are critical sources of support and behavioral modeling during this time. These relationships inform learning and role enactment, contribute to self-efficacy and motivation, and affect the subsequent identity changes and development that occur. Students engage in various relational strategies and rely on many different relationships for guidance, opportunities, and support during Stage 2 of their doctoral programs.

We argue that understanding relationships as part and parcel of doctoral education can help all involved with doctoral education acknowledge the necessity of attending to this critical component of the doctoral student experience. While components such as program structure and climate are important, our research shows that relationships are an equally legitimate component of doctoral education, socialization, and preparation for the professoriate and academic career. We emphasize relationships and interactions as key resources that help make the transition to independent scholar as smooth as possible. Significant relationships include not just long-term regular interactions, such as participation on research projects, but also incidental and infrequent interactions, such as informal conversations with peers. Key relationships within academic programs are not limited to

persons with formal authority such as supervisors and advisors, but also peers, senior students, and other scholars. Key relationships at this stage also extend beyond the academic community to include family members, friends, and role models.

Our data support the notion that learning and identity development are interconnected social processes, occurring simultaneously and informing each other. Building on our prior research of Stage 2, we found an important theme: the importance of relationships in the parallel process of mastering both the student role and the scholar role. One participant revealed these parallel processes when she spoke of her experiences in Stage 2. She recalled, 'I was adopting so fully the role of graduate student in a prestigious program that required all this work.' Yet, she later described this time by saying, 'I was trying to really be a colleague in the profession, not just a student. So in some ways my identity shifted from just being a student to trying to be a real legitimate, professional person who's a part of that community.'

The interdisciplinary framework developed by Baker and Lattuca (forthcoming) helps us understand that learning and identity development are mediated through students' relationships. Merging the sociocultural perspective of learning with the notion of developmental networks helps us isolate the role of relationships and their influence on learning and the educational experience. The relationships and interactions that create the sociocultural context and developmental networks in which doctoral student learning is situated provide meaning, efficacy, and identity development. The interactions, and subsequent sense-making, that students engage in, help students determine if and how they can successfully make the transition through Stage 2 and into their roles as independent scholars.

As we close, we recommend additional research that further explores the connection among developmental networks (e.g., relationships), identity development, and learning in successfully navigating the critical transition points in doctoral education. One area in particular is the intergenerational (cross-cohort) effects of relationships on the behavioral modeling and sociocultural learning on doctoral student development and preparation for an academic career. Many students in our study benefitted from the support, advice, and guidance provided by advanced students throughout their experiences. In turn, they offered support to students in the earlier years of their programs as well. We refer to this as the 'family tree effect', whereby knowledge extends beyond the most immediate dyadic relationship or exchange. Although not explored in this research, we encourage future research that considers the interaction of individual student characteristics and structural, or program, characteristics and the effects of those interactions on doctoral student development. Similarly, research is needed that explores the diversity of student experiences, including similarities and differences among students' relationships, learning, and identity development based on characteristics such as (but not limited to) race, gender, age, career goals, and family status.

More research is also needed to explore the role of negative relationships on identity development during the transition to independence. For example, does bad mentoring have a more negative effect on student identity development and success than no mentoring? Furthermore, if students fail to get the support needed to make this transition, how does that affect their future academic careers? In other words, are academic programs failing to help students develop the skills needed to be successful beyond life in graduate school? Such research might include an exploration of the behavioral strategies students employ in response to negative or

nonexistent relationships. Finally, examining disciplinary differences might provide some interesting insights given we chose not to do so for the purposes of this exploratory study.

As we continue to engage in efforts to improve our collective understanding of doctoral education and preparation for the professoriate, we emphasize the importance of theory and research that provide all stakeholders invested in preparation for academic practice with the knowledge of how to better understand and support the next generation of scholars, both in the classroom and outside of the classroom. We advocate for strategies that acknowledge students' varying needs and concerns as they transition through the stages of doctoral education and identity development and emerge as independent scholars.

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References

- Ashforth, B.E. 2001. *Role transitions in organizational life: An identity-based perspective*. New Jersey: Lawrence Erlbaum Associates.
- Austin, A.E., and M. McDaniels. 2006. Preparing the professoriate of the future: Graduate student socialization for faculty roles. In *Higher Education: Handbook of Theory and Research*, ed. J.C. Smart, 397–456. Bronx, NY: Agathon Press.
- Austin, A.E., and D.H. Wulff. 2004. The challenge to prepare the next generation of faculty. In *Paths to the professoriate: Strategies for enriching the preparation of future faculty*, ed. D. Wulff and A. Austin, 3–16. San Francisco: Jossey-Bass.
- Baker, V. L., and L.R. Lattuca. Forthcoming. Developmental networks and learning: Toward an interdisciplinary perspective on identity development during doctoral study. *Studies in Higher Education*.
- Baker V.L., M.J. Pifer, and B. Flemion. 2009. 'The lost year': Exploring Stage 2 of the doctoral student experience. Research paper presented at the annual meeting of the Association for the Study of Higher Education, November 4–7, in Vancouver, British Columbia.
- Baker Sweitzer, V. 2007. Professional identity development among business doctoral students: A social networks perspective. Doctoral dissertation, Pennsylvania State University 2007. Proquest Dissertation & Theses – AAT 3266209.
- Baker Sweitzer, V. 2008. Networking to develop a professional identity: A look at the first-semester experience of doctoral students in business. In *Educating Integrated Professionals: Theory and Practice on Preparation of the Professoriate*, ed. C. Colbeck, K. O'Meara, and A. Austin, 43–56. San Francisco: Jossey-Bass.
- Baker Sweitzer, V. 2009. Towards a theory of doctoral student professional identity development: A developmental networks approach. *Journal of Higher Education* 80, no. 1: 1–33.
- Becker, H.S., and J. Carper. 1956. The elements of identification with an occupation. *American Sociological Review* 21: 341–7.
- Brim, O.G. 1966. Socialization through the life cycle. In *Socialization After Childhood*, ed. O.G. Brim and S. Wheeler. New York: Wiley.
- Goffman, E. 1961. *Encounters: Two studies in the sociology of interaction*. 3–49, Indianapolis, IN: Bobbs-Merrill.
- Golde, C.M. 1998. Beginning graduate school: Explaining first-year doctoral attrition. In *New Directions for Higher Education*, ed. M.S. Anderson, 55–64. Walden, MA: Wiley.
- Hall, D.T. 1968. Identity changes during the transition from student to professor. *School Review* 76: 445–69.

- Hopwood, N. and K. Sutherland. 2009. *Relationships and agency in doctoral and early career academic experience*. In *Research and Development in Higher Education*, vol. 32: *The student experience*, ed. H. Wozniak and S. Bartoluzzi, 210–8. Higher Education Research and Development Society of Australia.
- Ibarra, H. 1999. Provisional selves: Experimenting with image and identity in professional adaptation. *Administrative Science Quarterly* 44, no. 4: 764–91.
- Ibarra, H., and P. Deshpande. 2004. Networks and identities: Reciprocal influences on career processes and outcomes. Working Paper Series – INSEAD (2004/85/OB).
- Lovitts, B.E. 2005. Being a good course-taker is not enough: A theoretical perspective on the transition to independent researcher. *Studies in Higher Education* 30, no. 2: 137–54.
- McAlpine, L., M. Jazvac-Martek, and N. Hopwood. 2009. Doctoral student experience: Activities and difficulties influencing identity development. *International Journal for Researcher Development* 1, no. 1: 97–112.
- Morrison, E.W. 1995. Information usefulness and acquisition during organizational encounter. *Management Communication Quarterly* 9: 131–55.
- Nettles, M.T., and C.M. Millett. 2006. *Three magic letters: Getting to PhD*. Baltimore: The Johns Hopkins University Press.
- Paglis, L.L., S.G. Green, and T.N. Bauer. 2006. Does advisor mentoring add value? A longitudinal study of mentoring and doctoral student outcomes. *Research in Higher Education* 47, no. 4: 451–76.
- Podolny, J.M., and J.N. Baron. 1997. Relationships and resources: Social networks and mobility in the workplace. *American Sociological Review* 16: 18–21.
- Sternberg, D. 1981. *How to complete and survive a doctoral dissertation*. New York: Macmillan Publishers.
- Tinto, V. 1993. *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- US News and World Report*. 2010. www.usnews.com. (May 1, 2010).
- Walker, G.E., C.M. Golde, L. Jones, A.C. Bueschel, and P. Hutchings. 2008. *The formation of scholars: Rethinking doctoral education for the twenty-first century*. San Francisco: Jossey-Bass.
- Weidman, J.C., D.J. Twale, and E.L. Stein. 2001. *Socialization of graduate and professional students in higher education: A perilous passage*. ASHE-ERIC Higher Education Report 28, no. 3, Washington, DC: Association for the Study of Higher Education.
- Wortham, S. 2006. *Learning and identity: The joint emergence of social identification and academic learning*. Cambridge: Cambridge University Press.