

CONSTRUCTING PROFESSIONAL IDENTITY: THE ROLE OF WORK AND IDENTITY LEARNING CYCLES IN THE CUSTOMIZATION OF IDENTITY AMONG MEDICAL RESIDENTS

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Through a six-year qualitative study of medical residents, we build theory about professional identity construction. We found that identity construction was triggered by work-identity integrity violations: an experienced mismatch between what physicians did and who they were. These violations were resolved through identity customization processes (enriching, patching, or splinting), which were part of interrelated identity and work learning cycles. Implications of our findings (e.g., for member identification) for both theory and practice are discussed.

Q: What does it mean to you to be a surgeon?

A: The reason I like surgery, there's the active nature of it . . . I love being in the operating room. I love doing operations. . . . [Surgery] is not a technical discipline . . . you're thinking about these things all the time . . . then you bring in the art aspect of it as well . . . The last time you talked to me, I hadn't done too many operations. Now I'm doing very complicated operations routinely. Like everyday, that's a major difference, so now instead of talking about "well, you know it's really fun to play chopsticks. . . ." Now it's like talking about the nuances of playing Beethoven piano sonatas.

-Interview with a surgical resident

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Despite a growing interest in matters of identity in organizational studies, researchers know relatively little about how identities are formed among those who carry out some highly critical organizational functions: professionals (Ibarra, 1999). Professions, such as medicine, law, and accounting, arise when an organized group possesses esoteric knowledge that has economic value when applied to problems (e.g., sickness) faced by people in a society (Carr-Saunders & Wilson, 1933; MacDonald, 1995). Because of their unique knowledge and skill sets, society grants professionals higher levels of prestige and autonomy than it grants non-professionals (Larson, 1977). Given the historical and potentially increasing importance of professionals in all types of organizations (Wallace, 1995), and given the centrality of identity in how individuals make sense of and "enact" their environments (see Weick, 1995), addressing issues of professional identity construction is timely.

Unfortunately, it is not clear whether current understanding of identity formation among organizational members helps to address this issue. To begin, there is a paucity of literature on the topic. As Ibarra noted: "Despite consensus in the socialization literature that identity changes accompany work role changes, the process by which identity evolves remains under explained" (1999: 765). A similar plea for more dynamic and nuanced models of identity construction was made by Pratt, who suggested that identification sometimes involves

identity change, but that of “all of the central questions of organizational identification, the one that has probably received the least attention by organizational scholars has been, ‘How does organizational identification occur?’” (1998: 192). Sveningsson and Alvesson echoed this sentiment a half decade later, writing: “Despite the espoused interest in the issue of becoming identified, most authors do not go very far in that direction” (2003: 1164).

In addition, even if there were a substantive body of literature on identity construction of organizational *members*, it is not clear whether such insights could be transferred to the identity construction of *professionals* (Van Maanen & Barley, 1984). To illustrate, because of its roots in social identity theory, most research in organizational identification has examined the importance of organizational membership in employee’s self-concepts (e.g., Ashforth & Mael, 1989; Dutton, Dukerich & Harquail, 1994; Pratt, 1998). However, it is not clear whether membership serves a similar role in the self-concepts of professionals (Gouldner, 1957; Wallace, 1995). Organizational membership is an indicator of *where you work* (i.e., an organization). Professionals, by contrast, are often defined by *what they do*. It is not surprising, therefore, that the surgical resident in our opening quote immediately launched into “what he did” when asked to describe what it meant to be a surgeon.

The purpose of this article is to build and enrich theory around how professionals construct their own professional identities. We examined this process in the context of medicine, as it is thought to be a prototypical profession (Hughes, 1956). Specifically, we examined physicians during residency training, which is thought to “contribute to the development of commitment to the occupation as a life career and to a shared identity, a feeling of community or solidarity among all those who have passed through it” (Freidson, 2001: 84). Thus, unlike sociological treatments exploring how professions as an *occupational group* establish legitimacy, status, and boundaries (cf. Abbott, 1988; Larson, 1977), the present treatment focused on *individual* actors.

To accomplish our goal, we performed a six-year, longitudinal, primarily qualitative study that tracked medical residents throughout their entire residency programs. Because our interest was in building and enriching theory, the bulk of our theory lies at the end of the paper. However, to orient the reader toward our eventual findings, we begin

by providing a brief theoretical review of identity construction.¹

IDENTITY CONSTRUCTION: A BRIEF REVIEW

Several theories implicitly or explicitly address the social “fact” that how an individual self-defines him- or herself changes in the context of organizational life. We identified three literatures as especially helpful in understanding the identity construction process, broadly defined: careers and role transitions, socialization, and identity work. Though we ultimately found that each perspective held important pieces of the puzzle of identity construction, none adequately accounted for our findings. This gap was due, in part, to the fact that identity construction is often implied by theories, rather than being their main focus (Ibarra, 1999).

Careers/Role Transitions

Research taking a careers/role transitions perspective suggests that identities may change in organizational settings as individuals’ careers progress. For example, Hall (1968, 1971, 1995) argued that throughout their careers, individuals must move or transition into new roles, and that these transitions facilitate changes in what he referred to as “subidentities.” In particular, he viewed such transitions as involving alignment or fit between a subidentity, defined as “the aspects of identity which are relevant to particular social roles” (Hall, 1968: 447), and role expectations. In developing this perspective, Hall (1971, 1995) argued for the importance of perceived competence in making the transition but did not elucidate how the content of identity changes in this process.

In another treatment, Nicholson and colleagues (Nicholson, 1984; West, Nicholson, & Arnold, 1987) argued that, depending on the job conditions, four outcomes can occur as employees transition into new work roles: absorption, determination, exploration, and replication. These outcomes mark a change in person (absorption), role (determination), both (exploration), or neither (replication). Although this body of work focuses on *when* identities are likely to change (e.g., when individuals

¹ We should note that some of the theory presented here was unknown to the authors before the start of the study. Our initial interest was in how professionals became socialized into multiple identities. However, several astute reviewers of our paper pointed out that our data actually said more about professional identity construction than multiple identity socialization. We thank these reviewers for this insight.

have discretion over their jobs) and *how* they might change (e.g., absorption), it says little about the process that bridges these antecedents and outcomes: identity construction.

Socialization

A second literature that either implicitly or explicitly deals with identity change in organizations is research on socialization. Research on socialization tactics (e.g., Van Maanen & Schein, 1979), conversion (e.g., Kanter, 1972; Lofland & Stark, 1965; Snow & Machalek, 1984; Snow & Phillips, 1980), and “identity transforming organizations” (e.g., Greil & Rudy, 1983) have all examined how groups and organizations actively engage in shaping members’ identity. These literatures describe different levels of identity change—from the moderate change brought on by organizational socialization to the extreme change induced by identity conversion—but they all focus on techniques that organizations use to break down an individual’s existing sense of self (e.g., divestiture or “sensebreaking” tactics) and on techniques that provide meaning (e.g., “sensegiving”) and shape identity in an organization’s image (see Pratt, 2000). And although sensegiving implies what identity content is desired by the organization (i.e., an adoption of organizational values), little is said about how members actively use identity-related information to construct their own identities.

Similar omissions can be found in the extensive literature on medical socialization. Research on medical socialization tactics (e.g., Shulman, Wilkerson, & Goldman, 1992; Weinholtz, 1991), for example, has tended to focus on what organizations do when they train medical professionals, and less on identity construction by the medical professionals themselves. By contrast, some nontheoretical treatments of medical socialization have depicted physicians’ identity change but have not systematically described how such a process unfolds (e.g., Marion, 1989, 1991). There is a notable exception to these trends, however. Central to the work of Hughes and his colleagues (Becker, Geer, Hughes, & Strauss, 1961; Hughes, 1956) is the interplay between learning about one’s identity and learning about the work one needs to accomplish. For example, Hughes argued that during medical school, a student “may be expected to get not merely a better notion of the skills required, of the tasks to be performed, of the roles to be played . . . but also to adjust his conception of his own mental, physical, and personal aptitudes, his tastes and distastes” (1956: 24). Thus, as one learns the work of a doctor, one also constructs new self-conceptions.

The work of Hughes and his colleagues resembles that on careers/role transitions in that both bring the issue of identity change to the fore. However, the former’s focus was more indirect, focusing on students’ understanding of professional culture and values (e.g., “pragmatic idealism”) rather than on professional identity construction, *per se*. Additionally, this work also discusses the importance of identity construction without describing how it occurs. However, one key departure from the careers/roles research is that these scholars balked at viewing identity changes in terms of roles. As Becker and coauthors argued, “Students do not take on a professional role while they are students” (1961: 420).²

Identity Work

An emerging set of studies examines identity construction processes more directly. This literature, which we refer to generally as “identity work,” focuses on individuals’ active construction of identity in social contexts (e.g., Dickie, 2003; Ibarra, 1999; Snow & Anderson, 1987; Sveningsson & Alvesson, 2003; Van Maanen, 1997). In this research, identity construction is viewed as more interactive and more problematic than the relatively straightforward adoption of a role or category. Moreover, although this work focuses on individual agency, it also construes social groups’ influence on identity construction to be significant. For example, some research has discussed how role models provide professional identities that one can “try on” to see if they fit (Ibarra, 1999). Other research has focused on the role of stories and rhet-

² Like Becker and colleagues (1961), we also had difficulty applying a role perspective to our study. To begin with, application of roles was unwieldy, and it was difficult to differentiate professional role from professional identity. Medical residents are initially interns (first-year residents), and then junior and senior residents. Each of these could be considered a “role.” Moreover, residents are also “physicians,” which can also be seen as a role—and as a professional identity—that is related to, but is sometimes distinct from, both their roles as interns and residents and their roles and identities as medical specialists (e.g., as “surgeon”). More importantly, we found taking a role perspective did not fit well with our data. The story that emerged about the interplay of work and identity learning cycles appeared more similar to what Becker and colleagues (1961) labeled “pre-role” activities. Although research on role theories, especially role transitions, provided some important cues to understanding our data (e.g., the role of social validation described by Ashforth [2001]), we nonetheless found the role perspective to be a poor fit with our data.

oric in creating self-identity (e.g., Alvesson, 1994; Sveningsson & Alvesson, 2003). Still others (echoing the work of Hughes and colleagues) have emphasized the role of “working and doing” in the creation of self (e.g., Van Maanen, 1997; Wrzesniewski & Dutton, 2001).

Such identity work, as well as the cited work in other areas, is promising, yet it remains a loosely affiliated body of research that has yet to systematically tackle issues of identity construction. We sought to redress this shortcoming by building theory on how a professional creates a sense of professional identity.

METHODS

Sample and Context

Our aim was to build theory in the area of professional identity construction and to extend existing theory by making it “more dense by filling in what has been left out—that is by extending and refining its existing categories and relationships” (Locke, 2001: 103; see also Lee, Mitchell, & Sablinsky, 1999). Here, we use a grounded theory approach to better understand unexplored dynamics regarding identity construction among professionals.

In order to build and elaborate theory, we searched for a context that could serve as an “extreme case” (Eisenhardt, 1989; Pettigrew, 1990). Extreme cases facilitate theory building because the dynamics being examined tend to be more visible than they might be in other contexts. Applying this criterion, we chose to study medical residents in different specialties at a highly ranked graduate medical education center. We chose the medical profession because its segmentation let us explore professional identity differences among different groups within a general (medical) context (Wyatt, 1978).

We represent the segmentation of this profession by examining medical residents in three specialties: primary care, surgery, and radiology. The choice of these three physician groups maximized differences along two dimensions thought to be particularly relevant to the work of physicians: generalist versus specialist, and high to low degree of patient contact. The generalists, represented by primary care physicians, are primarily interested in the prevention and treatment of organ-based diseases through the use of medicines and other non-surgical techniques. In contrast, surgeons are specialists who focus on acute problems that can be helped through direct and invasive intervention. Finally, radiologists are primarily diagnosticians who specialize in figuring out what is wrong with

patients through the use of various types of imaging equipment. The amounts of training these three physician types require after medical school reflect these differences in their degree of specialization, with the primary care residents requiring three years of training; radiology residents, four; and surgical residents, from five to six. Regarding patient contact, primary care doctors tend to have the most frequent interactions with conscious patients; surgeons have less contact; and radiologists have the least contact. Given the differences among these types of physicians in focus of training, length of socialization, and kinds of tasks required at work, we felt that examining this combination of physician types would give us three distinct windows through which to view identity construction.

To better examine differences in identity dynamics across these specialties, we chose to study physicians during their residency, because professional identity formation and change are thought to be the most pronounced during that time (Blackwell, Gutmann, & Jewell, 1984). In the United States, residency occurs between the completion of medical school, where a physician obtains an M.D., and the beginning of independent practice. It also serves as an important boundary crossing from student to practitioner, as specialty and subspecialty training and experience both enhance and refine general medical knowledge. Research suggests that all doctors who have completed medical school have some values and beliefs in common as a result of their semistandardized training—and, in essence, have a generalized medical professional identity (e.g., Conrad, 1988; Knight, 1973). Residency represents the initial formation of more permanent, differentiated (i.e., specialty) professional identities. As such, medical residency is a relatively clear context for viewing how professional identities develop (Becker et al., 1961; Hughes, 1956; Marion, 1989, 1991).

Finally, we wanted to study identity dynamics within the same medical education training center. By controlling for organization, we were better able to see differences in identity construction that were attributable to residency type (e.g., surgery versus primary care) as opposed to those caused by differences between medical centers. Further following the logic of choosing extreme cases, we wanted to find a medical center that was known for its intensity in training residents. When initially screening organizations, we saw that the training practices of this organization were well known (Kaufmann & Pratt, 2005). In particular, both members of and recruits to this organization characterized it as demanding, high quality, and somewhat militant. Be-

cause of these characteristics, we labeled the organization “Boot Camp.”³ This excerpt from the current chair of radiology conveys the training philosophy behind Boot Camp:

I am from the old school so I like the Boot Camp “commando” image. . . . This place grew up to take care of patients. Taking care of patients is 24 hours a day, seven days a week. Sickness takes no holiday. Medicine does not lend itself to the modern theories of how you should conduct your personal life and run your family. You say, “Oh I owe my family this” and I’m like, “Great—who’s gonna take care of the patients because they don’t come in 9–5 and they don’t skip weekends and holidays?” That’s not their luxury and they are literally putting their lives in your hands so you’ve got to take care of them. Boot Camp, unlike most of the universities’ practices, grew up taking care of patients so they developed this culture of the Boot Camp “commandos” and they were on [call] every other night at a time when most programs were on every fourth night.

Taken together, this sample and context provided an excellent opportunity to examine the construction of professional identity.

Data

The primary method of data collection involved semistructured interviews with residents ($n = 29$) and medical faculty members (known as “attendings”), administrators, and other physicians, such as chief residents, responsible for the design and implementation of the residency training programs at Boot Camp ($n = 11$). We chose as participants various types of physicians (primary care, surgery, and radiology)⁴ who were each beginning their residency at Boot Camp. Resident interviews occurred at four points in time, the first three during their first year—at 0 months (wave 1), 6–8 months (wave 2), and 12 months (wave 3)—and the last at the end of residency; these exit interviews were in the third year for primary care, the fourth year for radiology, and the fifth or sixth year for surgery.

We concentrated our efforts on interviewing in-

dividuals who were new to Boot Camp because we wanted to focus on members who were simultaneously being exposed to their profession and their organization. Demographically, our resident sample was approximately 38 percent female, with most of the women being in primary care (6 of 11 in primary care, 3 of 8 in radiology, and 2 of 10 in surgery). Although we did not ask about age or race, it appeared that most informants were in their mid to late twenties, and most were white.

Interviews were performed at the hospital and lasted approximately one hour on average. The first and third authors recorded the interviews as well as took notes, and interviews were transcribed verbatim. Although we modified interview protocols during each wave of data collection to take advantage of emerging themes (Spradley, 1979), common to each set of protocols were questions about each member’s perceptions of his or her (1) professional (physician) identity(-ies), (2) organization’s identity, (3) daily activities and training, and (4) relationships (e.g., with attendings and with other residents). This common set of questions allowed us to see changes in members’ responses to questions over time.

These data were supplemented with short surveys, archival analysis, and unobtrusive observations. Surveys investigated how and with whom residents spent their time as well as how residents perceived their specialty vis-à-vis other specialties. For example, we asked each resident about the amount of time he or she spent working, studying, sleeping, and being with his or her partner, and the percentage of time spent with various groups (e.g., patients, nurses, attendings, and his or her cohort). We also followed residents during their visits (“rounds”) with patients and made general observations of how the hospital functioned. These were made to confirm residents’ descriptions of both their work tasks and the general hospital environment. Finally, we gathered archival documents from various sources, including internal department files on resident selection, historical books about the organization, news articles about the organization, and hospital and departmental pamphlets. Taken together, these secondary sources of data provided a richer context for understanding members’ responses and sparked new questions for interview protocols that could be addressed in subsequent interviews with informants.

Data Analysis

In an iterative fashion, we analyzed the qualitative data by traveling back and forth between the data and an emerging structure of theoretical argu-

³ Names of the graduate medical education center, physicians, and other identifying information discussed here have been changed to protect the anonymity of our informants.

⁴ The primary care group also included a few internal medicine residents. Similarly, the surgery group included mostly general surgical residents, but also a few orthopedic surgical residents. We did not find significant differences in identity customization patterns within these subgroups. Therefore, for the sake of parsimony, we refer to these groups as “primary care” and “surgery.”

ments (Locke, 2001; Miles & Huberman, 1994; Strauss & Corbin, 1990). This analysis utilized three major steps.

Step 1: Creating provisional categories and first-order codes. We began by identifying statements regarding our informants' views of the world via open coding (Locke, 2001) and then drew on common statements to form provisional categories and first-order codes. Following the procedures recommended by Miles and Huberman (1994), we used a contact summary form to record the provisional categories revealed in each interview at each point in time. For example, by the second wave of interviews, there were several data fragments that related to the general question raised by the residents, "Why are we doing this work?" After codes were named and categories were constructed, we reviewed the data again to see which, if any, fitted each category. Sometimes the revisited data did not fit well into a category, which led either to abandonment or revision of a category. As noted, we used categories recognized in a wave of data to modify and direct later interviews as data collection continued (Spradley, 1979).⁵

Step 2: Integrating first-order codes and creating theoretical categories. Codes from each wave were consolidated for each group. That is, we summarized the contact forms compiled from all the data collected from surgical, radiology, and primary care residents in the wave 1, 2, 3, and exit interviews into different sets of themes (e.g., surgical residents during wave 1). This stage of analysis allowed us to compare intraspecialty and interspecialty differences within and across waves and to detect developmental changes in our variables of interest (e.g., identity and work). As we consolidated categories, they became more theoretical and more abstract. That is, we moved from open to axial coding (Locke, 2001; Strauss & Corbin, 1998). To illustrate, coding statements about the questions

residents had about the work that they did led us to see that physicians' professional identity beliefs were not being validated. We used the category "violations to identity" to capture these elements.

Step 3: Delimiting theory by aggregating theoretical dimensions. Once theoretical categories had been generated, we looked for dimensions underlying these categories in an attempt to understand how different categories fitted together into a coherent picture. For example, some categories seemed more like process (e.g., "identity customization"), but others were more like states or structures (e.g., "perceived competence"). We brainstormed alternative conceptual frameworks or models that described how these themes related to one another and to available organizational theories. Once we had identified a possible framework, we reexamined the data's fit/misfit with our emergent theoretical understanding (e.g., Becker, 1970; Glaser & Strauss, 1967; Locke, 2001).

Figure 1 summarizes the process that we followed, which shows our first-order categories, theoretical categories, and aggregate theoretical dimensions.⁶ Specifically, the aggregate theoretical dimensions shown were the ones that best explained the identity construction processes for these physicians.

We continue with a brief overview of our findings, followed by a discussion of how the resident groups engaged in a specific type of identity construction: identity customization. We follow this discussion by proposing a more general theoretical model of identity customization among professionals. Our study concludes with a discussion of the implications of our model both for theory related to identity construction and, more practically, for the training and management of health care and other professionals.

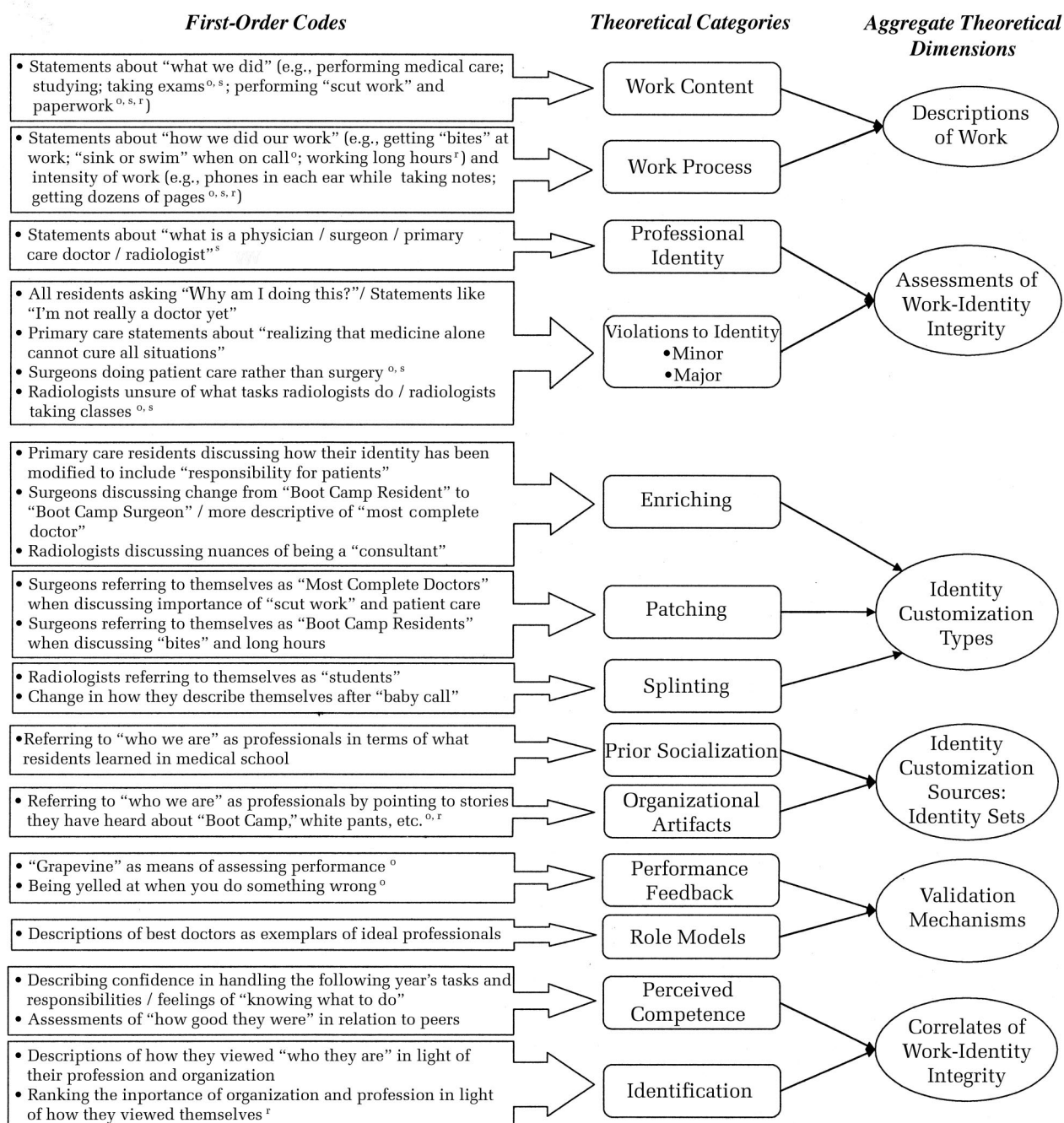
FINDINGS

As we looked at the data from each group of residents over time, two main findings became apparent. First, systematic changes occurred in the respondents' professional identities. As can be seen in Table 1, which summarizes the respondents' accounts of their work and gives exemplary quotations about both work and professional identity, some of these identity changes were rather slight, involving a deepening understanding of a professional identity, and others were more dramatic,

⁵ Each coder began by reading all transcripts. A specific discipline was assigned to a specific coder and contact summary sheets were generated. For the sake of consistency and integration, the lead coder coordinated coding across disciplines to identify any potential sources of conceptual overlap. Once contact summary sheets were complete, the coders met numerous times to create theoretical categories. As theoretical categories were created, coders went back and recoded data to see if the codes fitted the emerging abstractions. Where they did not, coders reviewed the "discrepant data" and revised categories accordingly. This process was continued until all coders agreed. A similar process was used to delimit theory. This process continued over the six years of data collection.

⁶ We would like to thank our colleagues Kevin Corley and Denny Gioia for providing the template for this figure.

FIGURE 1
Overview of Data Structure^a



^aAll data were derived from semistructured interviews; “o” indicates “supplemented with observations”; “s” indicates “supplemented with survey data”; and “r” indicates “supplemented with archival data.”

involving changes in professional identity. Second, we see in Table 1 that the *work* itself changed throughout residency. As we further analyzed the data, it became clearer that changes in identity were intertwined with changes in work. Specifically, we found that professional identity changes occurred when the residents’ ideas about “who

they were” as professionals (i.e., their *professional identity*) did not match the work that they did. We refer to these comparisons as *work-identity integrity assessments*. We use the term “integrity” not only because it implies consistency between who one is and what one does, but also because it implies sound structure, such as when one speaks of

TABLE 1
Work and Identity during the Course of Medical Residency

Program	Beginning to Midpoint of First Year—Waves 1 and 2	End of First Year— Wave 3	Exit Interview
Primary care (two–three years) Work	<p><i>Specific tasks:</i> Writing orders, getting consults, admits (new patients), discharges, rounds, physical exams, histories.</p> <p><i>Time breakdown:</i> Time working, 64.9% Time sleeping, 17.1% Time with non-work others, 17.1%.</p> <p>“[During the day I do] histories, physicals, and just talk to them [the patients] about what is going on. That also means like ordering their tests and following up on their tests and doing all the things I was telling you about, about them and taking care of them.” (wave 2, interview)</p>	<p><i>Specific tasks:</i> Same as wave 2.</p> <p><i>Time breakdown:</i> Time working, 59.9% Time sleeping, 22.9%</p> <p>“You write all the orders and the nurses can’t do anything. You can’t give a diet tray or a meal tray without an order. . . . You write all the orders, you do all the grunt work. You’re there overnight taking care of problems that come up.”</p>	<p><i>Specific tasks:</i> Same as waves 2 and 3 but with increased supervision of junior residents and medical students.</p> <p><i>Time breakdown:</i> Time working, 51.2% Time sleeping, 25.7%</p> <p>“The [medical] students present the patients and it’s helpful if you’ve gone over the presentation or at least the patient with the student before they present it because you kind of feel like the parent out in the audience when your kid’s up to do the spelling bee.”</p>
Professional identity	<p>“[A primary care physician] has an overall picture of that patient and can kind of coordinate care everywhere. When that patient gets admitted to the hospital . . . you can come in and see them and they’ll see that familiar face and even if they’re having GI people and cardiologists work on them they’ll know that someone knows them—and hopefully [the primary care physician] has been taking care of them 5 to 10 years and can kind of coordinate everything and steer them in the right direction and make sure they’re seeing the right specialist and that they’re appropriately being taken care of.” (wave 1 interview)</p>	<p>“For my patients, I try and make sure they get everything in a very timely fashion. I try and fight for my patients for what they need. In a way I feel like I’m not just their doctor but their advocate too.”</p> <p>“In some ways, having patients is like having children. You kind of worry about them and wonder if you should nag them or they’ve got to figure out that their diabetes is their problem it’s not mine. I think it’s kind of the same thing. You have to worry about the whole patient and I worry about my patients.”</p>	<p>“A primary care physician is somebody who really cares about these people, worries about these people, and it is kind of woven into the fabric of their life where 24 hours a day, they are available to them as if they are their children.”</p>

the integrity of a bridge. As noted in Figure 1, some violations of this work-identity integrity were relatively major and lead to a devaluation of the identity. Others were relatively minor. Furthermore, we found that differences in these work-identity integrity assessments resulted in different *identity customization* processes. We use the term “identity customization” to denote that identity is tailored to fit the work at hand, and not vice versa.

In describing this process, we begin with a discussion of the work that these residents did, which helps inform how they made work-identity integrity assessments—and, ultimately, how they customized their professional identities. We continue by addressing how these customized identities were socially validated and how identity construction correlated with perceived work competence and different patterns of identification with the

TABLE 1
Continued

Program	Beginning to Midpoint of First Year—Waves 1 and 2	End of First Year— Wave 3	Exit Interview
Surgery (five–six years) Work	<p><i>Specific tasks:</i> Rounds, conferences, writing orders, getting consults, physical exams, histories, discharges.</p> <p><i>Time breakdown:</i> Time working, 65.5% Time sleeping, 16.9% Time with non-work others, 12.6%</p> <p>“An intern [first-year medical resident] is something like a <i>secretary</i> and a <i>social worker</i> and a <i>physical therapist</i> and an <i>errand boy</i>. You just take care of business as an intern. . . . That means you know—that means writing down hundreds of pages a day of text into different places—patients’ charts and forms. It is just an unbelievable pile of paperwork that somebody has to do. . . . The interns get left to do all that sort of crap.” (wave 2 interview)</p>	<p><i>Specific tasks:</i> Same as wave 2.</p> <p><i>Time breakdown:</i> Time working, 70.8% Time sleeping, 17.0%</p> <p>“So much time is spent doing menial labor . . . very little time is left to read.”</p>	<p><i>Specific tasks:</i> Supervision of residents, surgery.</p> <p><i>Time breakdown:</i> Time working, 51.2% Time sleeping, 25.7%</p> <p>“This year I had more responsibility. You really have to know what’s going on. You have a lot more teaching responsibilities. At the same time, a lot of the scut work falls on other people, so it was nice.”</p> <p>“We do a lot less ICU [intensive care unit] work, less sort of floor work and more consultative work. And then the bulk of what you do—surgery.”</p>
Professional identity	<p>“They [surgeons] don’t like to sit and think too much. They are great actors instead of thinkers. They get up earlier. They get things done quicker. They do things with their hands.” (wave 1 interview)</p>	<p>[We are] the most complete doctors in the hospital in terms of being able to address whatever ailment comes into the ER [emergency room].”</p> <p>“The Boot Camp way is trying to always look your best and everything like that and try not to let yourself show that you’re 30 hours behind sleep for the week. Always look clean and pressed. You should try to be pleasant and try to carry yourself around in that manner.”</p>	<p>“I think the main thing that surgeons have over most disciplines is that they have a therapeutic armory. If you are a medical doctor . . . their only arsenal is medicine . . . radiologists don’t even treat patients. Anesthesiologists don’t even treat patients. They treat them while the surgeon does what they need to do.”</p> <p>“Well, being a Boot Camp surgeon is a little different than being a general surgeon. We tend to identify with each other and with the particular experience of being here more, I think, than we identify with the greater community of general surgeons.”</p>

TABLE 1
Continued

Program	Beginning to Midpoint of First Year—Waves 1 and 2	End of First Year— Wave 3	Exit Interview
Radiology (four years) Work	<p><i>Specific tasks:</i> Teaching conferences, studying, shadowing senior residents</p> <p><i>Time breakdown:</i> Time working, 45.4% Time sleeping, 25.5% Time with non-work others, 37.7%</p> <p>“They usually get [you] out of here sometime between 5:00–6:00. Then I usually go home, cook dinner and maybe watch TV while I’m eating and then generally I read for a couple of hours a night.” (wave 2 interview)</p> <p>“Someone got mad at me for saying it, but I really think we’re spoon- fed.” (wave 2 interview)</p>	<p><i>Specific tasks:</i> Same as wave 2 but with “baby call”</p> <p><i>Time breakdown:</i> Time working, 55.0% Time sleeping, 24.9%</p> <p>“Actually as we’ve started taking call more, you interact more with the physicians in other specialties.”</p> <p>“Then when you do you take it [call] until 11:00 at night and it’s pretty fun because now you’re back in the hospital and you’re in charge kind of.”</p>	<p><i>Specific tasks:</i> Radiology consults, supervision of junior residents, intensive studying for specialty boards</p> <p><i>Time breakdown:</i> Time working, 39.1% Time sleeping, 27.2%</p> <p>“We have two pretty big board exams during the fourth year, so you spend some time preparing for those early in the year and late in the year.”</p> <p>“It [studying for boards] was stressful, it was a lot of work, it was a lot of long afternoons, we spent a lot of time after work as a class going over cases with a different attending everyday for like three or four months, so it was a lot more time, it was a lot more effort.”</p>
Professional identity	<p>“Uh, to be a radiologist . . . uh . . . this . . . this is difficult. Cause I haven’t been, it’s easier for me to say what. . . its like to be a doctor. . . Uh, to be a radiologist, you know, it will be, this will be good to change—my attitude in six months will be different. Um, to be a radiologist, you have to be. . . or the essence of being a radiologist is that basically you need to make the most important diagnosis [laugh]. That’s, that’s a given.” (wave 1 interview)</p>	<p>“You just don’t know enough to contribute a lot and when you start taking call, you get a lot more experience with just seeing a lot more films but you also feel like you are part of the program. You’re involved.”</p> <p>“I feel like a consultant.”</p>	<p>“No matter how much the referring doctors think they know about radiology, you know more than them. You try to be helpful in seeing their point of view and realize how or what you say is going to affect that doctor and his/her patient. If you are able to put all that together and keep it all in mind, you will be a good radiologist. A radiologist is not just someone who can read films, but be a valuable consultant to the referring physicians.”</p>

profession and the organization. We wrap up this section by proposing a theoretical model that integrates the findings of this paper and builds new theory in the area of identity construction.

Descriptions of Work: Work Content and Process

Each group of residents was assigned work by senior members of the hospital (e.g., attendings). As shown in Figure 1, residents further distinguished their work along two dimensions: what they did (work content) and how they did it (work process). Regarding *work content*, primary care and surgical residents performed very similar tasks (see Table 1); both types of residents spent most of their time caring for patients (e.g., treating fevers), doing paper work, and completing a wide range of menial tasks (what they called “scut work”). Neither primary care nor surgical residents experienced many changes in their work during the first year. Surgical residents’ work, however, changed dramatically later in their residency.

The initial work content of the radiology residents was quite different from that of the other residents. This difference stemmed from the lack of medical school training in radiology, which limited the ability of these residents to initially act as radiologists. As the chair of the Radiology Department explained:

Medical schools are fundamentally designed to produce people to go into internal medicine, pediatrics, and surgery. . . . They don’t train people to go into radiology. Our residents . . . when they come to radiology, they don’t know any of the skills required in radiology.

As Table 1 shows, the radiology program required its residents to attend multiple teaching conferences each day, to learn assigned readings, and to take formal written examinations. Work rotations consisted of sitting side-by-side with a faculty radiologist going over images. Unlike their peers, each radiologist had a relatively large change in work content during the midpoint and end of the first year, with the introduction of “baby call”: a truncated call schedule in which they assisted senior residents during some evening and weekend hours. It was here that these residents started to perform the duties associated with being radiologists.

With regard to *work process*, both primary care and surgical residents began with an almost immediate immersion into the work of a resident. For example, after a one-day orientation explaining how Boot Camp worked, surgical residents began working on the first of ten rotations (e.g., cardiothoracic, surgical intensive care) to which they

were assigned over the first year. Both primary care and surgical residents felt their lives were consumed by their jobs and reported spending between 100 and 140 hours a week in the hospital. One primary care resident noted during the midpoint of the first year, “By the time I finish work next Friday, it will be my 26th day of work in a row without any days off.” Radiology residents, by contrast, found their first year to be considerably less intense. They also reported spending significantly more time sleeping and less time working, logging about 50 hours a week in the hospital.⁷ As noted above, however, the intensity of work increased in radiology at the midpoint of their first year, as residents began to be on call and actually perform the work of radiologists.

Work-Identity Integrity Assessments

By the midpoint of the first year, each group of residents struggled to reconcile their professional self-conceptualizations with the work that they did. For primary care residents, who saw themselves as “coordinators of care” for patients over the patients’ lives (see Table 1), the integrity violation was relatively minor. While many reported struggling with the breadth of their work tasks, they did not find that it undermined their professional identities. To illustrate:

I need to not only take care of their medical needs but also take care of any sort of social needs in order for them to achieve the health care that they need. Right now I am still struggling with that. (primary care resident, wave 2)

Integrity violations for surgical and radiology residents were much more severe. As noted in Table 1, surgical residents saw themselves as highly action-oriented and as professionals who effected “dramatic change in disease.” Doing paperwork and other “scut work”—such as lowering a patient’s toilet seat or deciding whether a patient could have a different flavor of vitamin shake—was at odds with this view of themselves as professionals. As a result, surgical residents felt that what they were

⁷ To illustrate, in both the wave 2 and 3 data, *t*-tests showed that radiology residents, when compared with surgical residents, reported spending significantly more time studying ($p < .001$, both waves), sleeping ($p < .05$, both waves), and doing nonwork activities ($p < .07$, wave 2; $p < .05$, wave 1). They also spent significantly less time working ($p < .001$, both waves). Comparing radiology with primary care residents showed a similar pattern.

doing was removed from their identities as surgeons. As one surgical resident noted:

Mostly your workload is working on the floor—working with patients, doing paperwork—basically a social worker for the year. . . . All the patient care and all the paperwork is put on you basically. You get removed from thinking that you are here for surgery, you just have to try and block it out. (surgical resident, wave 2)

The end result of this identity violation was that surgical residents did not feel like surgeons. As one resident put it during the midpoint of the first year, “I am not really a surgeon yet.” Another even came to devalue his/her role as a physician: “I’m an intern [first-year resident] barely and I don’t know anything. I know very little. I understand the human body and can make some good guesses. It doesn’t mean much to be an MD anymore—not to me.”

Radiology residents reported a similar sense of identity violation. However, the identity quote for radiology in the first column of Table 1 shows less certainty than the identity claims made by the surgical and primary care residents. The quotation in the table—which resonates with the identity descriptions made by his/her peers—is peppered with qualifiers (e.g., “I think,” “I guess,” “supposedly”); these qualifiers suggest that the resident was not very sure what a radiologist did. However, even this vague understanding of who a radiologist was (e.g., a diagnostician) did not match what they did on a daily basis (e.g., studying, attending lectures). Consequently, they felt useless, stupid, and devalued at work:

It kind of makes you feel pretty shitty in the middle of the year—you really don’t feel very useful a lot of times and you know, here I am 28—I have been studying for however many years in a row and everyone looks at you like you’re just a first year. (radiology resident, wave 2)

As one radiology resident reported, “I’m a resident—I’m not even a radiologist.”

Identity Customization

Residents handled these minor and major violations of work-identity integrity by customizing their identities. As noted, identity customization by these professionals denotes changes in identity made to fit work demands. We further delineate three different *customization types*—enriching, patching, and splinting—and describe the *identity sets*, or “raw materials” used to customize these identities. Some of these “materials” involve internalized beliefs from prior socialization experiences, while others are more external and involve

elements adopted from the organizational context. We discuss customization separately for each residency group.

Primary care: Customization type. As noted above, primary care residents experienced relatively minor violations to their work-identity integrity. Those that did arise came from a growing recognition regarding the scope of responsibility toward patients. This recognition occurred as they were increasingly faced with life and death decisions, as they were contacted by patients at all hours of the day and night, and as they realized how much they had to think about, fight for, and otherwise care for their patients. The result was that primary care residents deepened their understanding of their professional identity. We refer to this identity customization process as *identity enriching*. The basic tenets of the professional identity remained the same, but the understandings of this identity became deeper and more nuanced. Note the fine distinction the following resident makes between medical care and medical treatment when describing (in a wave 3 interview) what it means to be a physician:

I really think you need to be concerned about people, someone who cares for the sick, not just treats them but cares about them. I guess this year I have been more focused on learning how to care for people better, than [on] learning medicine.

Similar changes are also noted in the exit interviews of the primary care residents (see Table 1). This sense of a primary care physician as someone who treats more than medical needs is fully embraced as they leave their residencies. As such, primary care residents take on a more holistic view as doctors who take responsibility for “caring” for patients:

I think you play an incredibly important role in a patient’s life if you’re a good primary care physician. The ideal of what it means to be a primary care physician, it means to be all these to a patient—a friend, ally, advocate, and in some ways a parent figure that guides them through the options. (exit interview)

Primary care: Identity set. It appeared that the main identity beliefs that primary care residents drew upon in making sense of their work were the ones gained during medical school (Knight, 1973). These residents found that the work that they were doing was largely what they expected to be doing—and what they had done during medical school. In a wave 3 interview, one informant said:

Through med school, you’re working with physicians quite a bit so you actually have a few years of

being in the hospital and working with patients. The expectations that you have I think are pretty well ingrained by the time you get to your residency just because you've been exposed to it for so many years.

By contrast, although primary care residents were aware of Boot Camp's prestige and intense reputation, they did not see the organization as being an important source of identity meaning when resolving work-identity integrity violations. An exemplary exit interview comment regarding the role of Boot Camp in helping them become physicians is, "I think I was a physician and on my way to all that other stuff before I came to Boot Camp."

Surgery: Customization types. The mismatch between identity and work caused the surgical residents to use alternative identities to help make sense of what they were doing. Two types of identities were created: one in reaction to the type of work that they did, and the other in reaction to the intensity of their training. With regard to the content of their work, most of which involved various aspects of patient care, residents came to attach their surgery identities to their preexisting notions of what it meant to be a generalist doctor. This patching created a new, composite identity as residents referred to themselves as the "most complete doctors." Being "most complete" meant that they could do what a generalist (i.e., primary care) doctor could do—clinical treatment—in addition to performing surgery:

[We are] the most complete doctors in the hospital in terms of being able to address whatever ailment comes into the ER. (wave 3 interview)

We refer to this process as *identity patching* because surgical residents drew upon one identity (medical generalist) to permanently patch up "holes," or deficiencies in their understandings of who they were as surgeons, understandings stemming from the tasks they performed at work. Over the course of their residencies, however, they were able to build from this conceptualization of themselves as the "most complete doctors" to create a deeper, more nuanced understanding of this identity. Thus, by the end of their tenures, surgery residents had moved from an identity-patching to an *identity-enriching* process. To illustrate, note how the description of the "most complete doctor" in the last column of Table 1 came to include sophisticated new metaphors (e.g., armory and arsenals) and how it communicates a growing sense of how incomplete other physicians are compared with surgeons.

A similar type of identity patching occurred in reaction to the intense work process at Boot Camp. Surgical residents felt that they were working

harder than other residents in the hospital, and harder than surgical residents at other medical centers:

I think that most people that train in medicine are overworked during their training. I think surgery is particularly bad. I think Boot Camp is probably particularly bad for surgery. . . . I think Boot Camp is pretty bad. For example my fiancé is a surgical intern at Prestigious Hospital and he works many fewer hours than I do.

To make sense of this situation, surgical residents changed their conceptualizations of who they were to fit *how* they did their jobs—that is, the "Boot Camp way." As noted in Table 1, the "Boot Camp way is trying to always look your best and everything like that and try not to let yourself show that you're 30 hours behind sleep for the week." In incorporating these notions, residents combined their surgeon identities with the Boot Camp identity to become Boot Camp interns (first-year residents). As one resident noted at the end of the first year, "I'd say within the first three months, you pretty much get to be a Boot Camp intern."

Like the most complete doctor identity, the identity of the Boot Camp *intern* grew richer over time, developing into the "Boot Camp *surgeon*." As noted in Table 1, Boot Camp surgeons saw themselves as distinct from other surgeons; moreover, they tended to identify with this group more than with "the greater community of general surgeons."

Although we treat these two examples of patching as relatively distinct responses to work type and work process intensity, it is interesting that descriptions of the "most complete doctor" in exit interviews included war imagery (e.g., "arsenal"; Table 1). This suggests that there may have been some overlap between the two identity construction processes.

Surgery: Identity set. Surgical residents drew upon a variety of sources when customizing their professional identities. Although their use and acceptance of the term "most complete doctor" appeared to grow during their tenure at Boot Camp, residents were first exposed to the concept in medical school. Moreover, the generalist part of this identity appeared to be internalized in medical school:

Being a physician to me means putting the patient first which means my job is to help you if you are sick. To do what I have to do to make you better. That means I have to use the knowledge that I received in medical school and my training as a resident to put your priorities first regardless of my ego, regardless of what others suggest, regardless of what the HMO tells me to do, my job is to take care of you

and that's what I promised to do when I graduated from medical school. That's what being a physician means. (wave 1 interview)

By contrast, to build the Boot Camp intern and surgeon identities, surgical residents drew upon organizational stories and artifacts. First, stories played a role in these surgical residents' understanding of what it meant to be in this organization and what it meant to be working so intensely. Even before they entered Boot Camp, residents reported stories revolving around the intensity of training and unique pressures faced by Boot Camp surgeons:

I heard that there was a 100 percent divorce rate—that no marriage has ever survived this program. I heard that you were not allowed to drink Coke in the hallways because it was unprofessional. I heard just that it was brutal. It used to be every other night on-call for five years with no vacations. (wave 1 interview)

General surgery is just malignant and there are some services where not only are you working hours and hours and never getting any sleep [but] you're treated like crap. (wave 1 interview)

Second, physical artifacts—especially white uniform pants—were important for distinguishing first-year surgical residents from all other interns and in constructing their professional identity. As James (1890) noted more than a century ago, one's clothes and other possessions are often an integral part of identity. Dress is an especially potent component of identity among physicians and other medical professionals (Becker et al., 1961; Pratt & Rafaeli, 1997). It used to be common for all medical residents to wear white pants and a white lab coat during the first year of residency. Although many graduate medical education centers have retained the lab coats, the bottom half of the “white suit” has been largely abandoned. The Boot Camp surgery department retains this tradition, however, and reminds residents how Boot Camp is different:

Not only do I not mind dressing up in this white suit but I take it as a big source of pride . . . I know very well who has worn this uniform over time. . . . This is a great tradition and so I mean these giants were not too good for this you know and I am sure not. So, part of it is that I am a bit of a traditionalist in that I tend to think of our move toward being overly casual is being somewhat of an excessive move in that direction. In mean, in thinking and in personal discipline and all these kinds of things. (wave 1 interview)

Wearing the white pants further strengthened the “commando” image of Boot Camp, which helped

contribute to the respondents' Boot Camp intern identities:

The Boot Camp “commando” attitude . . . yes it's still that way . . . I have to put my whites back on to come outside the OR [operating room] for 10 minutes and go back . . . (wave 1 interview)

Radiology: Customization types. To deal with the lack of integrity between the content of the work (e.g., studying; see Table 1) and professional identity, the radiology resident went through a two-stage identity customization process. At the beginning of the program, work-identity integrity was lacking because radiology residents were not actually practicing radiology. Although radiologists were supposed to read films and other images for real patients, these first-year residents spent their time reading, studying, and attending daily teaching conferences. Unable to align their work with what it meant to be radiologists, residents adopted a prior identity: that of student. These quotations from two radiology residents' midpoint interviews are exemplary: “You really feel like you're in medical school all over again” and “This year in training it's almost like being a student again.”

The prior student identity bolstered the weakly defined radiologist identity by providing residents with a temporary identity to use until the radiologist identity developed and became stronger. We refer to this identity customization process as *identity splinting*. Like a weakened bone, radiology residents' sense of self at the start of the year failed to support them; it lacked sufficient explanatory power to make sense of the work they were doing. As a result, the residents temporarily used the prior student identity as a splint, protecting the fragile radiology identity that they retained alongside the student identity. Further, as the radiologist identity became stronger, the student identity—like a real splint—was cast aside.

The radiologist identity was strengthened as the residents' work changed and as their knowledge bases grew. Strengthening began during their eighth month of training, when the residents started to be assigned to baby call (when, as previously noted, the residents began to assist senior residents during evenings and weekends):

You just don't know enough to contribute a lot and when you start taking call, you get a lot more experience with just seeing a lot more films but you also feel like you are part of the program. You're involved. (wave 3)

As these residents began to carry out the tasks of their specialty, they started to flesh out their views of what it meant to be radiologists. That is, they

moved beyond understanding the job as involving “thinking and a small degree of patient contact.” They began to more fully understand their identity as a “doctor’s doctor” or a doctor’s consultant, marking a shift away from identity splinting. By wave 3, we saw these physicians adopting a professional identity centered on this idea of being a consultant instead of a professional identity centered on being a student. Unlike the responses from wave 1, the wave 3 responses have few or no qualifiers. One wave 3 radiological resident simply said, “I feel like a consultant.” Another explained:

I think we are consultants to every other specialty and that’s what it means to me to be a radiologist—the fact that we get to consult with neurosurgery, with general surgery, with medicine and family practice. . . . To be a radiologist, I think that we are diagnosticians number 1—we don’t treat patients per se for the most part—and [we are] able to add a diagnosis or two.

This conceptualization of radiologist as consultant deepens over time. Thus, during their exit interviews, radiology residents were exhibiting *identity enrichment*. Note how easily the following quotation distinguishes radiologists from doctors who “make people feel better”:

For me, the benefit of being a physician as a radiologist is that is what we do all day long—we are not actually making anyone feel better. We are actually trying to figure out what is wrong with them, and then other people actually do the work to make them feel better.

Still another resident discussed in the exit interview how a radiologist must be able to take others’ perspectives and measure them against his/her own knowledge.

No matter how much the referring doctors think they know about radiology, you know more than them. You try to be helpful in seeing their point of view and realize how or what you say is going to affect that doctor and his/her patient. If you are able to put all that together and keep it all in mind, you will be a good radiologist. A radiologist is not just someone who can read films, but be a valuable consultant to the referring physicians.

It is also interesting to note that radiologists do not revive their student identities during their last year of residency, even though this year is marked by intensive study for radiology boards (the professional certification examination; see Table 1). Thus, it is clear that by this point the radiology identity is strong enough that residents no longer need the splint provided by this student identity.

Radiology: Identity set. As noted, radiology residents explicitly referred to medical school and their identities as students during their initial attempts to create an identity splint to protect their fragile and underdeveloped radiologist identities. This student identity was reinforced by the language used by the chair of the department (who referred to them as students during their orientation), and it was reinforced by the work assigned: reading, attending lectures, taking written examinations. In a similar way, the consultant identity label was also learned in medical school, but reinforced in how radiology residents referred to each other on the unit. As the chair of radiology told them on their first day, “One of the things about this program that may be different from some other programs . . . is that this is a very clinically oriented program and we work a lot with the clinicians. . . . We like to see ourselves as part of the team.”

What is perhaps as interesting as the identity set for radiology residents is the fact that they rejected many of the identity sources used by other physicians. For example, unlike the primary care and surgical residents, the radiologists did not see the general medical identity learned in medical school as relevant for explaining the type of work they did or for defining professional identity. As one radiology resident explained during his first year:

The whole approach to things seems different in a sense that you go into radiology and take a step back—you are not directly involved with patient care and I knew that going into it but it feels different to finally get there and sort of give up that whole aspect that most of medical school gears you towards. (wave 2)

Another resident, in the exit interview, was more pointed about the disconnect between being a medical doctor and being a radiologist: “I realize how much they mislead you into thinking that radiology is—that it is a lot of medicine.”

It also appeared that Boot Camp had relatively little impact on radiology residents’ identity customization. Before entering, radiology residents (like primary care and surgical residents) saw Boot Camp as very tough and demanding. As one radiology resident said, “This is a very competitive place, they work their residents to death.” This identity, however, was not in agreement with how these residents viewed their workload. That is, unlike the surgical residents, the radiological residents did not need Boot Camp to explain the intensity of work. Statements such as “I am actually working less than I thought I would be,” and “I

really think we're spoon-fed" were common (see Table 1).

To this point, we have discussed how each of the three resident groups constructed their identities. However, common to most theories of identity is the notion that identities are socially validated (see Ashforth [2001] for a review). In the next section, we go past the initial construction processes and discuss how identities were validated through both work feedback and role models.

Validating Professional Identities

In our examination of identity customization among residents, we found that social validation took one of two forms. The first form was largely initiated by senior physicians and peers and involved validating how well a particular resident was performing as a resident. The second form of validation appeared to be initiated by the residents and involved identifying specific role models. Unlike identity customization processes, the validation processes were highly similar across the three groups of residents.

Validating via work feedback. At Boot Camp, the overriding sentiment was, "No news is good news." In general, all residents noted that they received relatively little instruction in how to perform their work. Specifically, they noted that they were given a large number of tasks to perform during their rotations and were told to figure out how to get them done. Residents described this aspect of their training with comments such as:

I think Boot Camp does this more than some other places but you are sort of put in a position and if you're going to [do] well, you have to figure it out for yourself because they don't tell you exactly what to do. (primary care resident, wave 3)

You learn by just simply being immersed in it. (surgical resident, wave 3)

Nobody trains you. They tell you what they want. They tell you what their expectations are but they don't really guide you. (radiology resident, wave 3)

When feedback was given, it often took one of two forms. First, all the residents reported getting yelled at when they made mistakes. One surgical resident referred to this as "a bite."

They say you get a bite so that if something goes wrong, you did it wrong or they would have done it another way, they tell you about it and then you don't do it that way again. (wave 3)

Bites were common for both surgery and primary care residents. In a wave 2 interview, a primary

care resident recalled a colleague's run-in with a senior physician:

Dr. Glenn sat down next to the intern and put his arm around him and said, "You know Mrs. X's [hemato-] crit dropped three points and I hope you noticed that today and what are you going to do about it? I just wanted to let you know that if her crit drops or if she bleeds out and you don't catch it, I'll fire you. I want you to tell your [senior] resident that if that happens, I'll fire her too." He didn't laugh.

Residents were also able to assess their performance compared to their colleagues' through an active grapevine. Residents often found this informal discussion of performance by residents and attendings more useful than formal evaluations. Not only was the grapevine fast and ubiquitous, but also, it was often seen as more relevant than their performance "write-ups."⁸ As one surgical resident noted in the exit interview:

The grapevine is pretty thick. Yeah, everything spreads like wildfire. You know who is being reprimanded and who is sort of in trouble very quickly. I've never really seen such a rapid flow of news. Everyone just loves to talk about things. I think a lot of it is we're put in a situation where it may be a little stressful at times and maybe this is how people deal with it.

This information was spread primarily through stories. As one primary care resident said at wave 3, "You hear stories, stories about attendings yelling at interns and interns screwing things up." Another resident (in radiology, at a wave 3 interview) noted the importance of the grapevine in disseminating information about class rankings: "The people in the bottom third of the class, everyone knows who that is because the walls speak around here. . . . These people are talked about behind their backs all the time whether it's by me or not. You hear it."

We argue that feedback, through "bites" and

⁸ None of the surgical residents reported reading their formal evaluations, and some did not even know that they had access to them. And, although residents in primary care were required to read these formal evaluations during semiannual meetings with the program director, they reported discounting them because (1) they spent very little time working directly with the evaluator or (2) because they were unable to interpret the numerical evaluations in a meaningful manner, given that they did not know the numbers given to others. Finally, radiology residents found the evaluations to be somewhat useless as they were provided after a rotation and were therefore of little use in addressing any performance deficiencies they may have occurred in that rotation.

through the grapevine, helped shape physicians' identities by shaping their behavior. By learning what they, and others, were doing wrong and consequently how the work should be performed, they changed how they viewed themselves as physicians. As one surgical resident summarized in a wave 3 interview:

This place is really a machine that takes you in, chews you up, spins you around and either spits you out or you come out top notch and I think that is true in everything. . . . That's just the Boot Camp way and I think that's what has maintained its reputation.

Validating via role models. We also found that residents received validation for their professional identities through role models. Residents clearly felt that a large portion of the medical staff at Boot Camp was highly competent; when asked about whom they personally saw as role models, they chose those physicians whose characteristics matched the perceptions of their professional identities. For example, the professional identity of a primary care physician involved taking care of both medical and nonmedical aspects of care. And a commonly mentioned role model was described as having both these characteristics:

[Dr.] Kline is very in tune with treating the patient as a person and not just as a commodity or a case and that's really important when you realize that these patients are [not] just any sort of disease process but they are a person as a whole. Again, that also goes into the fact that being a primary care physician, you're treating them as just the whole person and not just certain organs or diseases separately (wave 3 interview).

Surgical residents came to view themselves as the most complete doctors and as Boot Camp surgeons. Not surprisingly, these characteristics were common in the role models they chose. In this wave 3 quotation, Drs. Ian and Ivan were viewed as being both surgeons *and* excellent providers of patient care:

They [Dr. Ian and Dr. Ivan] are excellent surgeons and they are so attentive to their patients. They talk and they communicate with their patients all the time. They always give them the plan and they explain everything. They see them at least once a day, no matter what time in the night.

Similarly, some role models were chosen because they seemed to reflect the Boot Camp way of doing things. One popular role model is described below in another wave 3 interview as both highly competent and also epitomizing the commando attitude of the organization:

He is a little bit outspoken, little arrogant, very friendly. I've never worked with him in the OR [operating room] but I hear he's just a total asshole. I hear that you just shake. You screw up. . . . You cut wrong or nothing that's going to hurt the patient but just little technique things. I hear that he's just a total asshole. It's like Jekyll and Hyde—because every time I have interacted with him, he's incredible. He's just been a great teacher, very friendly and he's also a team player and protects his residents.

And some role models appeared to be both “complete” and “Boot Camp” doctors:

He is an intern/resident/chief resident/fellow and attending wrapped into one. He comes in in the morning and rounds with us and basically his actions . . . he doesn't say this but his actions are saying . . . “I don't need any of you, I can do it all myself. I can take care of my own patients myself. I don't need [you] to pre-op my patients. I don't need you to post-op my patients. I don't need you to do any of the scut work. You're more than welcome to come along with me and I will teach you everything I know but I don't need you.” (wave 3 interview)

Finally, radiology residents viewed themselves as consultants, as “doctors' doctors” who provide information to physicians, unlike other physicians, who only provide information to patients. These characteristics were also central in the role models they chose. A quotation from an exit interview illustrates:

Dr. Smith, is somebody who I believe does a good job, you know, kind of, first being a radiologist and second knowing how to communicate well with other physicians and technologists.

Correlates of Identity Customization and Validation

We end our description of identity customization by assessing the impact of identity changes on other outcomes. Although our research design was not well suited for assessing causality, we were interested in understanding what other changes in physicians covaried with their identity customization and validation. Our data suggest at least two additional changes in resident attitudes: (1) they communicated a higher degree of perceived competence and (2) they exhibited varying patterns of identification with their profession and their organization.

Perceived competence. We noticed that just as work and identity changed over time, so also did members' perceptions of their own competence. Table 2 presents data illustrating changes in perceived competence at two different points in the course of residency. For each group, the second

TABLE 2
Changes in Perceived Competence

Program	Early Perceptions	Later Perceptions
Primary care	"That's one of the things as a physician that you need to be aware of or how people are going to take care of themselves not just when you give out their drugs or fix their knee. In a way it's certain anticipation and it's a certain awareness that you need of the whole dynamics of their family—of their background, of their education—and that is something I think that in the internship year it is hard to do sometimes . . . I think the internship year is tough when it comes to that." (wave 2 interview)	"[I] kind of know what to do without actually having to think about it. I know what to do in most situations. I know how to take care of sick people." (wave 3 interview)
Surgery	"As much as we learned in medical school, we really don't know anything." (wave 2 interview)	"Well you go from knowing nothing hopefully to having confidence in approaching mastery in certain areas." (exit interview)
Radiology	"It's obviously a little bit unnerving because you will be acting more independently [in the future], . . . I think that is the main problem. We really have no application yet for our knowledge." (wave 3 interview)	"You are using your knowledge to sort of bridge a gap between an internist, a surgeon, an obstetrician, and the patient, so you are sort of being the problem solver in many cases." (exit interview)

comparison point was determined by when they first discussed feeling competent as primary care, surgery, and radiology residents.

Interestingly, the timing of competence assessments demonstrated in Table 2 overlaps with the onset of identity enrichment strategies. This parallel suggests feelings of competence occur when one's identity beliefs are relatively stable and are undergoing nuanced changes. Our data further suggest that perceived competence is also related to the learning of work. This quote from a surgery resident's exit interview illustrates:

You learn the most about surgery by doing surgery, there's no replacement for it. You can watch. Once you have achieved a certain level of confidence and you are approaching mastery, seeing stuff becomes more useful. . . . You know exactly what you're seeing, you can visualize that as being a deviation from what you might usually do. You've already got your way, now you're seeing somebody else's way that you might want to incorporate.

As we discuss below, we believe that learning about work and identity are interrelated.

Patterns of identification. At their exit interviews, we asked residents to rank-order items in terms of how important they were to their identities, with 1 being the most important and higher numbers denoting less importance. These items included being a "physician," being a "primary care physician/surgeon/radiologist," being a "Boot Camp graduate," being a "Boot Camp physician,"

and being "a Boot Camp primary care physician/surgeon/radiologist." Both the primary care and radiology residents saw being a physician/radiologist as being most important to their identities; the average rank given was 1.2 for primary care residents and 1.8 for radiology residents. Boot Camp was seen as relatively unimportant. Two statements illustrate:

I enjoy my time at Boot Camp and I'm glad I came here. If I carry anything with me I'd say that I'm a [medical school] grad. I'm not really faithful to Boot Camp per se. (primary care resident, exit interview)

It definitely means something . . . there are obviously people that trained at Boot Camp, that are Boot Camp-trained physicians. . . . I wouldn't necessarily be glad to group myself in with them. (radiology resident, exit interview)

Surgical residents, however, ranked being a Boot Camp surgeon the highest of all the work identities, assigning it an average rank of 1.5. We suggest that this difference between this group and the other two resident groups stemmed directly from the surgeons' identity customization process. Being a member of Boot Camp helped surgical residents make sense of how work was done, and thus the organization become incorporated into professional identity (see Table 1). As noted earlier, the primary care and radiology residents did not need such explanations to make sense of their work.

TOWARD A MODEL OF IDENTITY CUSTOMIZATION: THE INTERPLAY OF WORK AND IDENTITY LEARNING CYCLES

To help make sense of the various concepts and their relationships in our data, we constructed Figure 2, which both summarizes and generalizes our main findings. This figure illustrates our view that work results in work-identity integrity assessments but that such assessments actually result in two related learning cycles.

The first cycle, indicated by the white arrows in the figure, involves learning about the work itself. Here, individuals work, experience work-identity integrity violation, and receive social validation for their performance. We have argued that informal feedback—especially in the form of grapevine assessments and bites—works to remind students about their work performance. When one receives (mostly negative) feedback, one is expected to improve performance. As illustrated in Figure 2, learning about work serves as the inner core of the identity learning cycle.

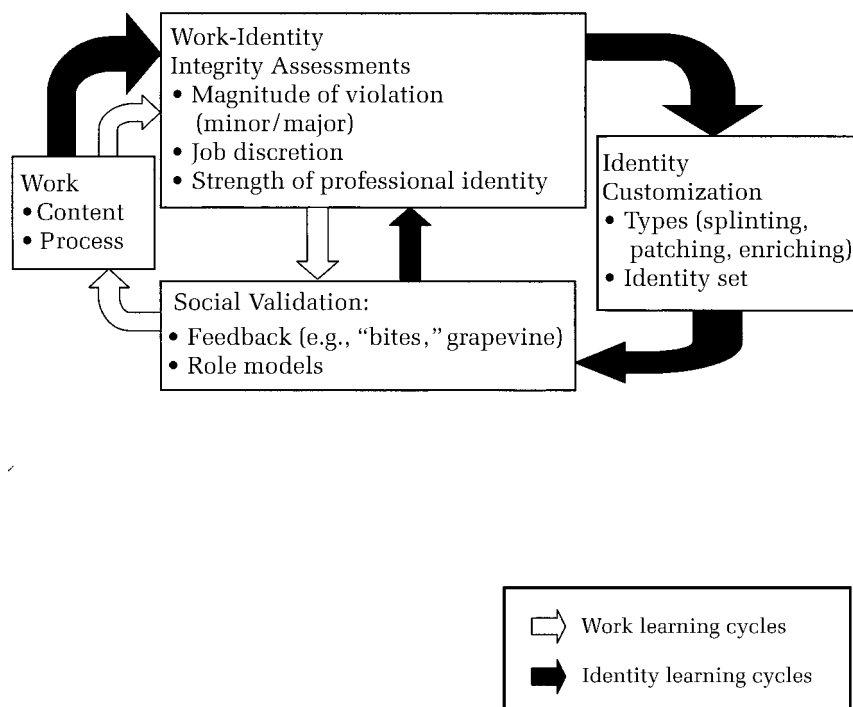
Also shown in Figure 2, work and resulting work-identity integrity violations can also lead to a second cycle, indicated by the black arrows, that involves learning about one's professional identity. When who you are does not match what you do, another possible outcome is change in your sense

of who you are. We have called this process identity customization.

The two cycles are inextricably linked. Both cycles begin with *work* and *assessments of work-identity integrity*. When who you are does not match what you do, you can improve your performance and/or how you view yourself. For example, challenges to become better at patient care are wrapped up in becoming “a more complete doctor.” Similarly, Hall (1968, 1971, 1995) suggested that acquiring a sense of self-esteem and agency (i.e., work competency) is critical to stepping into new identities throughout people's careers. In our data, the time required to gain competence appeared to be related to the severity of the work-identity integrity violation. To illustrate: the primary care residents, who experienced the fewest work-identity integrity violations, reported feelings of mastery and competence at the end of their first year. But the surgical and radiology residents, who experienced much more profound integrity violations, did not make statements about perceived competence until the end of their residencies (see Table 2).

Although the two cycles are linked, as integrity violations lead to identity changes, the two cycles begin to diverge. Specifically, our data suggest that job discretion plays a major role in *how* work-iden-

FIGURE 2
Interplay of Work and Identity Learning Cycles in Professional Identity Customization



tity integrity violations are resolved and that the magnitude of the violation and strength of identity play a major role in predicting *what* type of identity customization will take place.

According to Nicholson and colleagues (Nicholson, 1984; West et al., 1987), one key predictor of how integrity violations will be resolved is *job discretion*. As physicians-in-training, the residents in our study had relatively little discretion over how their work was done. As the chair of the radiology program noted, "We'll try it our way for four years. . . . You'll find a few things you don't like you can change after you're gone. While you're here, it's our way." As a result, identity is more likely to change to fit the work than vice versa.

We argue that the *magnitude* of the violation largely predicts the *type* of identity change that occurs when integrity is violated. In sensemaking terms, the lack of integrity induces "unfreezing" of an individual's current sense of self (Lewin, 1958; Schein, 1987), and a "seeking" of identity-related meaning (Lofland & Stark, 1965; Pratt, 2000). When the violations to work-identity integrity are minor, sensemaking results in identity enrichment, or a more nuanced understanding of identity. By the end of residency, all our residents experienced identity enrichment. This uniformity suggests that identity enrichment is a customization strategy common to most professional identity construction processes.

However, when violations are more major, two results are possible: identity patching and identity splinting. What appeared to account for which type of customization occurred had to do with the current *strength* of the professional identity. As noted in Table 1, surgical residents had a fairly clear (even if inaccurate) sense of what a surgeon was. As a result, they were able to use this identity as a lens for interpreting their work (Weick, 1995). Starting with this strong foundation, the surgical residents were able to add to, or patch, their existing identity. Specifically, to explain the broader range of tasks, surgical residents essentially annexed the physician identity to create the most complete doctor identity. To explain how the work was done (e.g., long hours, presence of bites), surgical residents annexed identity-related beliefs about Boot Camp.

Radiology residents, however, were initially much less sure of their identities. In Hall's (1968) terms, their sense of professional identity was somewhat crude, or "embryonic," compared with those of their surgery and primary care peers. Hall described embryonic identities as "rudimentary and ineffective, analogous to the small clublike arms and legs of a young fetus" (1968: 465). Because of the weakness in the identity, radiology

residents adopted a previously learned identity to serve as a splint to protect the growing professional identity. Taken together, these observations suggest that professionals with well-developed identities who face identity-incongruent work are likely to "patch." By contrast, professionals with less-developed identities are, under the same conditions, more likely to "splint."

The differences among these resident groups suggest that the identity customization types that we have offered may be temporally ordered. Professionals who are unsure of their tasks and their identities, such as radiology residents, may begin customization through splinting. We propose that splinting therefore might occur either at the beginning of professional development, or when professionals encounter a major "boundary crossing" (Van Maanen & Schein, 1979) in their careers. This suggests that professional identity may not begin as a tabula rasa, but rather might from the beginning involve importing previous identities that serve as a temporary means of making sense of work. As professional identities begin to mature, major misalignments with work may be resolved via patching. Finally, as we saw here, enrichment may occur later in professional identity development than either splinting or patching. Thus, future research could look for a splinting-patching-enriching pattern among professionals.⁹

In addition to differing in customization types, residents also differed in their *identity sets*. In our data, the surgical residents drew upon the widest set of identity beliefs. Some were internal and were associated with prior socialization (Nicholson, 1984). Others were external and appeared to be associated with the organization's Boot Camp identity; these were central, enduring, and distinctive beliefs about the organization (Albert & Whetten, 1985). It appeared that the misalignment of the content of work and professional identity for all residents caused them to look back at prior socialization (e.g., medical school). However, when there

⁹ This sequencing begs the question of why we did not find patching for our radiology residents. Patching occurs when professional identity is strong but tasks are new. We have argued that radiology residents did not have strong professional identities until after their first year. Extrapolating from our data, patching would have therefore been the most likely to occur during the radiology residents' second year, when they transitioned away from student activities to shift work and were taking full call. During this time, tasks were changing, but professional identity was fairly strong. However, as noted in our methodology, this year was not a focus of our data collection.

was a violation in how the work was done, or *work process*, the scope of sensemaking expanded. Thus, surgical residents complemented their prior socialization with notions of the Boot Camp commando.

Finally, we found that the work and identity learning cycles intertwined in the area of social validation. Feedback about work progress from “bites” and from the informal grapevine was common to learning about work and professional identity among the residents. In the same vein, like Ibarra (1999), we found that role models played a critical role in identity learning. However, unlike Ibarra, we did not find that junior physicians tried on and experimented with various “possible selves” based on multiple role models. Rather, it appeared that role model choice was based more on a justification or validation of an existing or emerging identity. Furthermore, in addition to low job discretion, the life-and-death nature of their work may have left these physicians less willing or able to play with their identities. In this situation, the residents may have been more satisfied with somewhat haphazard attempts (e.g., identity patching) that worked in the short run but would likely be modified in the future.

DISCUSSION

We began our article by discussing how construction of identities among professionals is often implied but rarely explicated. Our research contributes to our understanding of identity construction by describing the importance of the relationship between “doing” and “being” among professionals. When faced with a violation between their work and professional identities, physicians rectified this violation by customizing who they were to match what they did. We further identified some conditions that favor these specific identity changes; these include work discretion, violation strength, and strength of identity. In doing so, we not only build new theory, but also connect disparate pieces of the identity construction puzzle that other theories have offered and in turn offer new insights for practitioners.

Theoretical Implications

An overview of three sets of theories that touch upon the notion of identity construction introduced this article. We return to those three sets here and discuss how our study builds or extends theory in these areas as they related to identity construction.

Identity work. Our work extends and bridges various studies that comprise the literature on

identity work. To our knowledge, although others have begun to outline the factors important to identity work, we are the first to detail how this process occurs among professionals. That is, we are the first to discuss specific types of customization (e.g., identity enriching, patching, and splinting); sources of customization (identity sets); and sources of validation of these identities (e.g., grapevine feedback and role models). Nevertheless, there are important similarities between this study and other treatments of identity work. For example, we see “stories” as important to identity construction, as they are the raw materials of a wide “identity set” that individuals can draw upon to construct identity (e.g., Alvesson, 1994; Sveningsson & Alvesson, 2003). Similarly, we see role models (Ibarra, 1999) as critical to the social validation of newly constructed identities (Ashforth, 2001).

More generally, we add to this work by turning scholars’ attention toward the motivation for identity customization (see also Baumeister, 1998; Deaux, 1991; Epstein, 2002; Erez & Earley, 1993). In doing so, we take lessons from research on “meaningful work,” according to which work is meaningful to an individual to the extent that it reflects who the individual is (Gardner, Csikszentmihalyi, & Damon, 2001; Gini, 2000; Pratt & Ashforth, 2003). And as Kahn (1990) noted, work becomes meaningful when one’s “preferred self” can be expressed through one’s work and through one’s membership in an organization. Building on this research, we argue that achieving alignment between identity and work is a fundamental motivator in identity construction.

Careers/role transitions. Our research builds and extends research in the area of careers and role transitions in two ways. First, in discussing the correlates of the identity customization process, we complement the work of Hall (1968, 1971, 1995) by showing that work learning cycles are embedded in identity learning cycles. This is perhaps not surprising given that, during transitions in people’s professional careers, learning about work is intimately associated with learning about identity. This interplay may explain the confusion that often surrounds the concept of role (Ashforth, 2001; Biddle, 1986). In his review of role theory, Biddle argued that roles may refer to behaviors, parts that people act out (social positions), or behavioral scripts (role expectations). However, by treating work behaviors and professional identities separately—rather than confounding them as roles—we could see that these various conceptualizations of role were related in the identity construction process. Our model suggests that what one does (work behaviors) is often compared with expectations

about who one is (identity assessments) to motivate the construction process. Newly constructed identities are in turn validated by others with similar social positions. Perhaps different conceptualizations of roles stem from focusing on different “parts” of this identity construction process.

Second, we build upon this research by describing the job characteristics that might influence whether individuals change themselves or change their work. Nicholson and colleagues (Nicholson, 1984; West et al, 1987) argued that job discretion and job novelty are two critical factors. In our study, we also found that a lack of job discretion favored identity change over changes in work. We further expect that when work becomes more discretionary, as occurs when someone gains autonomy through experience or expertise, the relative emphases on work and identity learning cycles will change, and work customization, or “job crafting,” will occur (Wrzesniewski & Dutton, 2001). Further research that tracks individuals for even longer spans in their work careers, however, is needed to validate this prediction.

We found the novelty of work tasks to be a less helpful predictor. To illustrate, both our surgery and primary care residents had similar work to do, and they had relatively similar training in medical school. Thus, the work that they did should have been comparable in terms of novelty. However, identity change was greater for the surgical residents. Our data suggest that it was work-identity integrity violations, rather than novelty, that motivated identity customization. Novel situations may evoke such violations, but even familiar work may lead to identity change if it does not fit an individual’s conceptualization of who he/she is. This possibility suggests a need to look not just at the characteristics of work, but also at the characteristics of the worker, when predicting identity change.

We also extend research in this area by going beyond predicting when identity change might occur, to predicting *how* it might occur. Thus, we predicted that individuals with low job discretion and well-developed identities—who experience minor integrity violations—are likely to experience identity enrichment. Alternatively, individuals with low job discretion and major violations will either patch or splint their identities, depending on how well developed their identities are. As far as we know, no other research has been able to match individual (e.g., identity development) and job characteristics (e.g., job discretion) with specific change outcomes (e.g., identity enrichment). And certainly, more research is needed to explore other possibilities (e.g., high discretion/weak identity/minor violation). In sum, we believe that research

on predictors of job versus identity change in careers needs to focus on a wider set of factors.

Socialization. Finally, our research adds to the often overlooked relationship between socialization and identity change (Ibarra, 1999). In some ways, the question of whether individuals change to fit their jobs or change their jobs to fit themselves is also evidenced in the literature on socialization tactics (Ashforth & Saks, 1996; Van Maanen & Schein, 1979), which has asked what predicts when an individual will adopt a role (become a role custodian) or change it (become a role innovator). Thus, as noted above, our research sheds new light on this issue by going beyond what an organization does (socializes people in groups) to address what individuals bring to the organization (e.g., prior socialization; see also Nicholson [1984]) and working conditions (e.g., lack of job discretion).

At a more general level, compared with those studies that have focused primarily on how organizations convert or transform the identity of members, the present study offers a much more subtle and nuanced perspective on identity change. Work on psychological (e.g., brainwashing [Schein, 1962]) and sociological conversion (Greil & Rudy, 1983; Lofland & Stark, 1965), for example, suggests that individuals adopt whole identities and discard old ones. We argue that identity change can be more incremental. Instead of adopting a whole new identity, an individual can enrich an existing identity, patch together two (or more) identities, or use another identity as a temporary splint.

Though we detail less extreme forms of identity change, we resonate with the socialization focus of looking at how organizations influence the identity construction process. Although clearly “people are not just milquetoasts who passively sit back as targets of others’ treatment and absorb any identity-relevant information they encounter” (Polzer, Milton, & Swann, 2002: 299), our research reveals a fair amount of intragroup conformity within the three different residency groups regarding how identities were constructed. Thus, there was some consensus around what it meant to be a primary care physician, radiologist, or surgeon in all waves of data (see Table 1). How was such consensus achieved? We believe that this consensus came about because the organization both created the need for sense-making and limited members’ identity sets.

To begin, we note that, by having high discretion over the content and process of work, the medical center’s administrators were able to trigger work-identity violations. Medical directors explicitly told us that over the course of residency, residents would feel “stupid” and “frustrated by doing ‘scut work.’” Thus, they propagated the conditions that

motivated identity construction. Administrators also controlled what raw materials the physicians would use to construct their professional identities. As noted in Table 1, first-year residents spent anywhere from 45 to 70 percent of their waking hours at the hospital and spent most of their time with hospital personnel. This picture suggests that residents were well encapsulated, cut off from people other than hospital personnel (Greil & Rudy, 1984). Pratt (2000) suggested that organizations that encapsulate members have a high degree of control over member sensemaking. In the language of our study, by limiting contact with non-hospital members, the medical organization limited the potential identity set, the raw materials that members drew upon to make sense of their work. Given the residents' lack of significant outside contact, it is perhaps not surprising that they used medical school experiences as one of their first sources for making sense of their role as residents. However, when these experiences did not suffice, as was the case for surgical residents, the residents turned to organizational sources for meaning (e.g., organizational stories and organizational dress codes).

This is not to say that there was no variation in how identity was constructed. Some surgical residents, for example, gravitated more toward the "most complete doctor" identity than to the "Boot Camp surgeon" identity. Similarly, at the end of their first year, some primary care residents viewed themselves as "quarterbacks," or coordinators for entire medical teams working with patients, while others saw themselves more actively, as "advocates" or even "parents" (see Table 1). Therefore, the customization process described herein appears more akin to *mass customization*, a process whereby goods are produced on an assembly line but tailored to an individual's needs. Here, members can be said to have been able to pick and choose from various identity elements—as if choosing from an identity "menu"—to make sense of their work, but these choices were highly constrained by the organizational context.

Practical Implications: Health Care and Residency Training

We believe that our study has practical implications for the professional training of medical residents. For example, the number of hours that residents spend at work, long assumed to be natural and inherent to excellent training, has come under harsh criticism by those who argue that it improves neither patient care nor the ability of residents to learn (e.g., McCall, 1988). In response to such criticism, the Accreditation Council of Graduate Med-

ical Education has established strict guidelines mandating that residents spend no more than 80 hours per week in their hospitals. Programs that violate these rules can face a variety of sanctions, up to and including loss of accreditation. In our study (which preceded these legal changes), many physicians worked more than 80 hours a week. To the extent that such physical encapsulation aids an organization's ability to control how physicians' construct their identities, one may wonder whether and how fewer hours might influence identity customization and perceived competence. We suggest that medical organizations concerned about these potential outcomes should look to alternative ways of encapsulating their members (Greil & Rudy, 1983), such as establishing strong interpersonal bonds (social encapsulation) and fostering belief systems that discourage members from seeking advice from nonmembers (ideological encapsulation).

Perhaps more importantly, our research sheds light on how the training of physicians might influence the performance of those in whose care we place our lives when sick or otherwise disabled. It was clear in this context that physicians, who at the time had significant (although not sole) responsibility as care providers, felt somewhat incompetent as they attempted to figure out who they were in light of the work they were assigned. As we have noted, program administrators expect such feelings. We did not directly measure levels of stress, but it was clear that violations to professional identity were distressing to residents. Although the training tactics of this organization were ultimately successful—for example, in the case of surgical residents, the identity customization process did work to create "most complete doctors" and "Boot Camp surgeons"—one wonders if both the *length of training* and *integrity violations* are essential for producing good doctors.

Can the work and identity learning cycles be completed more quickly, so that feelings of integrity come more rapidly than we observed them to in Boot Camp? Do surgeons really need two years of "scut work" to achieve these ends? Our data, while not conclusive, hint that giving physicians more professionally relevant tasks earlier in their residency might speed up this process. What is less clear, however, is whether there is any proxy for work-identity integrity violations. Might another motivator for identity construction be found? Given that professional identity is so bound up in what residents do, these violations may be necessary to spark work and identity learning cycles. However, if such stresses are inherent to becoming a professional, perhaps health care organizations should

discourage using tactics that exacerbate an already stressful identity transition—for instance, they might discourage validating professional identity via biting criticism.

Practical Implications: Professional Training and Management

We believe that our findings hold not only for socializing physicians, but also for training most other (if not all) professionals. With regard to managing the identity construction process of professionals during their training, we argue that decision makers see this management as a *system of choices* that continue from selection through socialization. Given the importance of prior socialization for how members construct identities, more emphasis should be given to understanding employees' prior socialization experiences and not just their prior memberships. As Louis (1980) noted, to understand what individuals are "changing into" at work, it is critical to know what they are "changing from."¹⁰ In addition, organizational leaders need to remember their role in three interrelated steps of the identification construction process: (1) creating the need for construction, (2) providing the raw materials for such construction, and (3) providing opportunities for validating newly constructed identities.

First, with regard to motivation, we feel that most professional programs, such as academic graduate programs, create work-identity integrity violations in the course of training (e.g., is being a doctoral student all about copying papers from the library?). As noted, given that these violations are likely to be stressful, those managing professional training programs may seek to minimize stress in other parts of the system (e.g., helping students validate identities). Second, regarding the provision of raw materials, program leaders need to be cognizant of the values and beliefs that they may be unintentionally communicating to students. As research has shown, even small changes in the dress codes of established professionals can have large implications for how they construe their professional identities (Pratt & Rafaeli, 1997). Moreover, being aware of both the values and beliefs that a profession holds, and *how they are transmitted*, will help professional educators adjust to environmental jolts,

such as legal challenges to how socialization is done. Third, professional educators need to be cognizant of the power of role models, even role models who are not mentors. *All* members of a training faculty are potential sources of professional identity validation (Ibarra, 1999). This observation suggests that professional educators periodically assess faculty not only for their skills, but also for their fit with professional values and beliefs. Finally, our research suggests that informal feedback and grapevines are especially powerful. This observation implies that educators should be aware not only of what is being taught in their curricula, but also of what is being taught informally in the "hidden curricula" (e.g., Margolis & Romero, 1998).

More generally, our study sheds some new light on the relationship between professional and organizational attachment by noting the relationship between identity construction and patterns of identification. Goulter (1957), for example, viewed differences in degrees of loyalty to an organization and a profession as critical in delineating "locals" and "cosmopolitans." These distinctions, in turn, had ramifications for organizational rule following, organizational influence and participation, and the like. This line of inquiry regarding attachment to organization versus profession remains a vital line of inquiry. In fact, Wallace (1995) argued that how these affiliation questions play out are increasingly important to organizations, as professionals become a greater part of nonprofessional organizations. Of the three groups we examined, only surgeons appeared to incorporate their organizational affiliations into their self-conceptualizations.

Research suggests that identities are the lenses through which people make sense of the world (Weick, 1995) and that identification with a social group may be motivated by the need to reduce uncertainty about one's place in that group (Hogg & Abrams, 1993; Hogg & Mullin, 1999; Pratt, 2000). We take these arguments a step further by emphasizing that such sensemaking is *pragmatic*. Residents engaged in certain types of identity customization because it helped them to better understand their work. For example, surgical residents adopted the Boot Camp surgeon identity to make sense of work intensity. This observation suggests that traditional drivers of organizational identification, such as prestige and distinctiveness (Ashforth & Mael, 1989; Dutton et al., 1994; Pratt, 1998) may not be sufficient for professionals, who may fulfill such needs via their professional affiliation. Rather, adopting an organizationally relevant identity must have some pragmatic value.

¹⁰ This need to understand existing identities before one can understand identity change is echoed in Erikson's (1983) classic work on stages of identity development and in Cote and Levine's (2002) notion of "identity capital," or investment in existing identities.

Limitations and Future Research

As with all attempts to build and elaborate theory from a limited sample, one must be careful when generalizing these findings to other organizations. For example, our focus has been on professional identity as it undergoes change. Changes in other work-related identities, or even nonwork identities, may be qualitatively different. However, although as a qualitative study our research lacks statistical generalizability, we do feel that it can be used for “naturalistic generalization,” whereby one recognizes similarities based on experiences with similar “cases” without any statistical inference (Stake, 1995). For example, as a prototypical profession (Hughes, 1956), medicine offers fairly easy-to-see parallels with other professions. Doctoral students, for example, undergo cycles of identity and work learning resembling the cycles these physicians experienced (see Hall, 1968). Similarly, treatments of law students have often focused on their encapsulation during the first year of training (e.g., Turow, 1977). In addition, we see our study as having “analytical generalizability” in that its purpose is to “expand and generalize theories . . . not to enumerate frequencies” (Yin, 2003: 10).

We must also be careful about the unique nature of the setting. As noted in the introduction, our work focuses on professionals. Because professions are delineated by their unique sets of work knowledge and skills, work-identity integrity is highly likely to be a motivator for professionals, as people who derive a large part of their self-meaning from the work that they do. By contrast, work-identity violations may be minimally motivating to those who find meaning in the culture of their workplaces (see Pratt and Ashforth's [2003] distinction between meaningfulness “in” and “at” work), and such violations may be minimally motivating to those who find meaning primarily outside of the work arena. In future work, researchers may wish to more explicitly compare identity construction dynamics among professionals and nonprofessionals, and among those who look at work as a primary source of meaning in their lives and those who do not.

In addition, our emphasis on identity construction as opposed to job crafting or role innovation largely stems from the fact that we were examining professionals-in-training. As noted, we believe that emphasis might shift to job crafting or role innovation as people gain experience in their work. This idea suggests the need to view the identity customization of people at various stages in their career processes.

Conclusion

Despite increasing interest in identity, and the importance of professionals in organizations, there is little research on how professionals construct professional identities. The goal of the current research was to build and enrich theory in this area. We believe we contribute to theory in several important ways.

First, our research shows how each of several existing bodies of knowledge (including socialization, career/role transitions, and identity work) illuminates separate aspects of identity construction. Specifically, our findings advance theory in each of these areas as they pertain to how professionals build identity over time. In doing so, we provide new insights into extant conclusions (e.g., why perceived competence accompanies identity construction), refine current ways of thinking (e.g., the importance of the magnitude of integrity violations rather than task newness as a trigger for identity change), and show how findings from these separate literatures are linked in the identity construction process.

Additionally, in our findings and in our construction of a theoretical model, we make several advances in understanding professional identity construction. First, our research points to the importance of looking at work-identity *integrity* as motivating identity construction. Thus, we argue for the need to examine how work and identity reinforce each other rather than concentrating on work-identity fit, which can be conceptualized in a myriad of ways (Kristof, 1996). Second, our model focuses attention on different types of identity customization, and our findings suggest not only the conditions that might lead to each type of customization, but also how and why these customization types may change over time. Third, we discuss some correlates of identity construction: perceived competence and different patterns of identification. The last is especially useful to draw on when predicting when professionals might also identify with their organizations—a key concern in the study of professionals (e.g., Gouldner, 1957; Wallace, 1995). Finally, we reiterate the importance of understanding “what they do” in order to gain a richer appreciation of “who they are” in the identity construction of professionals. As such, we show how organizational practices, such as giving feedback and providing role models, serve a dual role in improving the understanding of both work and professional identity. In making these advances, we hope that this research might serve as a foundation for further research on identity construction in organizations.

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