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RESEARCH

Factors Influencing Professional Identity Construction in Fourth-Year Pharmacy Students

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Objectives. To explore the key factors that influence professional identity construction in fourth-year pharmacy students enrolled in a Doctor of Pharmacy program.

Methods. A single-site instrumental case study of current fourth-year pharmacy students from the Leslie Dan Faculty of Pharmacy, University of Toronto, was used. Thirteen students participated in semistructured interviews. Poststructural social identity theories were used to analyze the data and identify themes that influence identity construction in pharmacy students.

Results. Data analysis identified five overarching themes that influence pharmacy student professional identity construction: path to pharmacy, curriculum, environment, preceptors, and patient interactions. The Leslie Dan Faculty of Pharmacy curriculum prioritized the health care provider identity, which influenced the students' desire to "become" clinicians. Based on their internalized health care provider identity, they rejected preceptors and practice environments that negatively impacted their ability to embody this identity.

Conclusion. The findings of this study suggest that pharmacy students align themselves strongly with health care provider identities at the cost of other potentially relevant identities. Pharmacy education programs may benefit from curricular reforms that incorporate and legitimize multiple pharmacist identities to ensure a strong pharmacy workforce for the future.

Keywords: professional identity, professional socialization, pharmacy education

INTRODUCTION

Conversations about professional identity in pharmacy education and practice are flourishing in the literature.¹⁻⁷ There is interest among the Academy to establish professional identity formation as a main goal of pharmacy education,² similar to medicine.⁸⁻¹⁶ This is evidenced by recent calls to action to outline key elements of professional identity formation and strategies to support it within pharmacy educational systems.^{3,4} There is a strong desire and sense of urgency to develop formal systems that intentionally guide professional identity formation in pharmacy students, as well as support faculty development needs.² Advocates calling for closer attention to professional identity presume that agreed upon standards can be established, taught, and learned. This suggests there is

one *right* way to be a pharmacist, which is a rather reductionist view of professional identities. Our understanding of professional identity is informed by Foucault and Hall's poststructuralist theories, which conceptualize identity as socially constructed and historically situated.^{17,18} Hall stated, "identities are names we give to the different ways we are positioned by, and position ourselves within, the narratives of the past."¹⁸ Therefore, we conceptualize professional identities as being constructed and reconstructed in relation to our interactions with the social world.^{16,18}

Professional identity formation, the dynamic process of transforming from a lay person into a health care provider, begins during education and training and continues into one's career.^{10,15,16} The development of a strong professional identity is thought to enable confident, self-aware, and ethical practice.¹⁶ Because it is foundational both to the competent practice of individuals and to the sustainability of professional groups, fostering professional identity has become a core focus for health professions educators. While there is little doubt that professional

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identity matters and that conversations are crucial to advancing the dialogue in pharmacy education, there is no urgency to reach a consensus on what it means to be a pharmacist universally. In fact, a slower approach is warranted to reduce the risk of simplifying a complex phenomenon into a rhetorical academic exercise. Professional identity formation is a complex process underpinned by core psychological and social processes¹⁶ that require further exploration in pharmacy education. There is a paucity of data examining the impact of current educational processes on professional identity formation, as well as other factors that may be at play, such as race, ethnicity, and the larger sociohistorical context.¹⁹⁻²³ It is not presently known how pharmacy students in Doctor of Pharmacy (PharmD) programs construct their emerging identities. A scoping review exploring professional identity formation in pharmacy students identified a handful of empirical studies and concluded that more research was needed.²⁴ Gaining a deeper understanding of how current pharmacy students construct their identities is a crucial step in understanding the educational elements that have the most potential to foster professional transformation.

The Academy is at a crucial point in determining how to move the professional identity agenda forward; it can mandate professional identity formation as the goal for pharmacy education and suggest educational reform strategies to achieve this goal based on what is being done in other health professions, or it can become curious and take time to explore how current students are constructing and enacting their professional identities within current pharmacy education structures. The second option will provide information to guide pharmacy-specific approaches to reform that will help socialize students to think, act, and feel like a pharmacist,²⁵ without compromising how they identify with the diversity of roles they must fulfill upon graduation. The objective of this study was to explore the key factors that influence professional identity construction in fourth-year PharmD students.

METHODS

This study used a single-site, instrumental case study approach to explore factors that influence professional identity construction in pharmacy students. This approach was selected as it allowed for in-depth exploration of the complex phenomenon of professional identity in pharmacy students in its real-life context (ie, a PharmD program).²⁶ Fourth-year students were chosen as the case, as they were nearing the end of their pharmacy training and, hence, had been exposed to formal and informal curricula and pharmacy practice in various settings. Including only fourth-year students from a single pharmacy program

increased the specificity of the sample, thus increasing the information power.²⁷ This study was carried out at the Leslie Dan Faculty of Pharmacy, University of Toronto. The study received ethics approval from the University of Toronto Research Ethics Board.

In-depth semistructured interviews were carried out with fourth-year students. Interviews were chosen as we were interested in gaining insight into individual students' lived experiences with professional identity construction, which is deeply personal.²⁸ In addition, interviews are well suited to encourage open dialogue and deep, reflective responses.²⁸ The interview guide was designed by the principal investigator and revised by the research team. The guide was trialed by the research associate prior to using with participants to ensure questions were open-ended and easy to follow. The questions were designed to encourage students to reflect on their experiences throughout their pharmacy education and how these experiences impacted their developing professional identities and future career goals. Participant responses to the initial questions guided the use of follow-up probes that allowed the research associate to gather data that extended beyond the specific experience described and allowed for flexibility to explore emerging ideas.²⁸

Eligible participants included all students enrolled in year four of the PharmD program at the Leslie Dan Faculty of Pharmacy. An initial email outlining the study and an invitation to participate was sent to all fourth-year students. Any students who volunteered were interviewed. A convenience sampling technique was used to identify participants, as the goal was to capture a range of experiences, including variety in gender, prior years of university completion, previous pharmacy experience, and experiential rotation types, to better understand the different factors that impact identity construction. All interviews were hosted on Zoom (Zoom Video Communications Inc) and were conducted by the research associate. A snowballing strategy was then employed, whereby participants were asked whether they knew of any classmates who may be approached to take part. All participants provided written consent. Interviews were conducted during the period of June to November 2021. The interviews were approximately 60 minutes in duration. All interviews were audio recorded and transcribed verbatim by a professional transcriptionist. A total of 188 pages of interview text were analyzed.

Data analysis was iterative, occurring alongside data collection.²⁸ A constructivist, interpretive lens was applied. Initial line-by-line open coding was conducted by the principal investigator after each interview to establish initial understanding of the data and to inform adaptations to the interview guide. Upon completion of the individual

case coding, the principal investigator and the last author combined codes into broader categories. The coding process drew upon socialization theories of professional identity, specifically poststructural theories.^{18,29,30} It built on our previous work in which we identified multiple identities at play in pharmacy education¹ that impact pharmacists' abilities to construct professional identities in practice.³¹ Based on this, we conceptualized professional identity to be a social process in which constructed educational and workplace experiences, as well as socialization processes, guide learners to adopt professional roles for themselves as pharmacists that are aligned with their expectations of what constitutes valuable pharmacist work. We used this conceptualization as a starting point for this study so that we could garner a better understanding of how fourth-year students experience transitions to the workforce. Our theorizing follows the tradition of other scholars who view professional identity as a dynamic process versus a stable trait.^{11,16,29}

Research team discussions were used to review categories and identify overarching themes. The first and last author of this study are both pharmacists and pharmacy educators at the Leslie Dan Faculty of Pharmacy, hence they were professional insiders. Throughout data collection and analysis, both authors engaged reflexively with the data, noting their assumptions and values at larger team meetings with the other nonpharmacist researchers. The diversity of the team enriched the perspectives and precision brought to the analysis. To further enhance qualitative rigor, a member-checking procedure was performed, where results were given back to participants for further comment.³² In accordance with case study analysis, we did not aim to establish consensus between interviews, but rather we attempted to develop a deeper understanding of how professional identity construction occurred in training by studying a range of student experiences.

Before presenting the themes generated from our analysis, we describe the social context. The Leslie Dan Faculty of Pharmacy PharmD program is a four-year professional degree program. It consists of course-based and experiential-based training. The first three years of the program consist of in-class coursework. Early practice experience (EPE) courses lasting four weeks occur after years one and two. Advanced pharmacy practice experience (APPE) courses totaling 35 weeks occur after year three. The program is designed to meet the Association of Faculties of Pharmacy of Canada (AFPC) Educational Outcomes for first professional degree programs in pharmacy in Canada, as well as the Accreditation Standards set by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP).^{33,34} The AFPC and CCAPP Outcomes and Standards are well aligned to the Center for the

Advancement of Pharmacy Education (CAPE) Educational Outcomes and the Accreditation Council for Pharmacy Education (ACPE) Standards in the United States.

RESULTS

The data yielded deep insights into factors influencing professional identity construction in pharmacy students. In total, 13 fourth-year students from the Leslie Dan Faculty of Pharmacy took part. After the 13th interview, data collection was stopped as no new information was obtained. Demographic details about the participants are provided in Table 1. The proportion of male (46%) to female (54%) participants in the study was consistent with the proportion of male (42%) to female (58%) students in the full class, as was the breakdown of years of study prior to entering pharmacy school.

Our thematic analysis revealed five overarching themes associated with pharmacy students' professional identity construction: path to pharmacy, curriculum, environment, preceptors, and patient interactions. The themes are described in detail below in no particular order. Illustrative quotations for each theme are presented in Appendix 1.

Theme 1, path to pharmacy, refers to the personal and educational experiences that impacted participants' decisions to enter pharmacy school. They entered via one of two paths: the plan A path, in which they considered pharmacy early in their university studies, or the plan B path,

Table 1. Demographic Information for Fourth-Year Pharmacy Students Who Participated in a Study of Factors Influencing Professional Identity Construction

Demographic variable	No. (%)
Gender	
Female	6 (46)
Male	7 (54)
Years of university prior to entering pharmacy school	
2	0 (0)
3	6 (46)
4 or more	7 (54)
Area of study prior to entering pharmacy school	
Biochemistry/pharmaceutical chemistry	3 (23)
Microbiology	1 (8)
Biology, physiology, biomedical science	8 (61)
Pharmacology	1 (8)
Previous pharmacy experience prior to entering pharmacy school	
Yes	4 (31)
No	9 (69)

in which they wanted to practice in health care, most often medicine, but they “fell” into pharmacy for reasons such as not getting into medical school or the desire to do something in the medical field. Regardless of the path, most participants entered with a limited understanding of what it meant to be a pharmacist. The participants described their initial view of the pharmacist’s role as that of a dispenser of medications. They were unaware of the variety of roles pharmacists play in the health care system until they were immersed in the program. This is an essential element to consider in professional identity construction, as before a student can engage in the process of “becoming” a pharmacist, they must have a sense of what it is they are aiming to become. Since the students did not enter pharmacy with a clear idea of what it means to be a pharmacist, they had to renegotiate previously held views of what a pharmacist “is” as they integrated into the program and were faced with the realities of the profession being presented to them.

Theme 2, curriculum, includes both the formal curriculum and the hidden curriculum (tacit socializing influences that teach learners what is important and valued in the contexts that they study/work).^{32,35} Students described the value of the didactic curriculum in preparing them effectively for clinical practice. They consistently described feeling like they had the knowledge required to be medication experts. They also discussed the limitations of the curriculum, specifically that the didactic curriculum did not prepare them for the “real” world of pharmacy practice, which they experienced during their EPE and APPE courses. Overwhelmingly, the students felt strongly that it was within experiential experiences where they learned how to apply their knowledge and how to act and think like pharmacists.

The participants did not directly name the hidden curriculum as impacting their identity development, but they described situations that educators would associate with the hidden curriculum, such as “unwritten rules” of conduct in community pharmacies in which efficiency trumps empathy during patient encounters and ethical dilemmas such as quotas and metric-driven outcomes. Most participants discussed the pressure they felt trying to navigate the business aspects of pharmacy with their desire to prioritize the clinical aspects. They placed significant value on being health care providers, hence they felt conflicted when their ability to embody this identity was not supported during their community rotations. When left to their own devices, the students’ solution to the conflict was to choose to not work in corporate settings after graduation, as the work was not aligned with their internalized identity.

Theme 3, environment, refers to the influence of the practice environment on students’ professional identities.

Participants described environmental factors such as practice setting, volume of work, and physical location as having an impact. There was consensus that busy community pharmacies made it difficult to fully embody the health care provider identity. The volume of work made it challenging to spend enough time with patients to provide assessments. The students reported tension with these environments as they struggled to enact their clinician identities, which were strongly internalized. The physical location of the pharmacy also played a role. The further the pharmacy was from other health care members, the harder it was to integrate the health care provider identity. Community pharmacies again were discussed, as most do not have access to patient charts or information that is helpful to guide clinical assessments. Hospital environments were reported as being more conducive to clinical work, as information was readily available and pharmacists were noted to be more integrated within the interprofessional teams.

Theme 4, preceptors, refers to the finding that preceptors were also found to impact students’ developing professional identities. The students discussed both positive and negative experiences with pharmacist preceptors and how these experiences impacted their emerging identities. The positive experiences highlighted preceptors who prioritized clinically oriented patient care activities. The students discussed being inspired by preceptors who developed relationships with patients. They also described being impressed by pharmacists who confidently made recommendations to physicians and proactively sought to optimize medication regimens. These positive experiences reinforced the students’ health care provider identity and motivated them to want to practice in a similar fashion. Another key component of the positive preceptor experiences was the autonomy afforded to students. The students valued preceptors who gave them room to develop independently and to try diverse ways of “being” a pharmacist. They felt the independence helped them build confidence and internalize what it means to be a health care provider.

On the flip side, the negative experiences shared by students revolved around preceptors who prioritized dispensing and business functions. The students expressed frustration when their preceptors did not work to their full scope of practice and when they were focused on prescription counts and meeting service quotas. Most negative experiences shared by students occurred in corporate pharmacy locations. These negative experiences created a sense of professional identity dissonance for students, as they could not see themselves as dispensers or businesspeople. The students reconciled this dissonance by stating they did not want to practice in corporate environments, as they were not deemed compatible with their developing

health care provider identities. Overall, the dialogue regarding pharmacist preceptors uncovered the important roles that preceptors play in students' understanding of what it means to be a pharmacist. In our sample, the students overwhelmingly viewed the negative experiences as reinforcements of the importance of finding a future job that would not compromise their ability to embody the health care provider identity.

Theme 5, patient interactions, refers to the influence of patients on shaping professional identity construction. It includes the perceived value of developing ongoing patient relationships, observing pharmacists go beyond their perceived roles to provide compassionate care, and the impact of public perception. Students talked frequently about the tension they experience when the public sees them as pill pushers, but they see themselves as health care providers.

DISCUSSION

This qualitative study explored factors that influence how fourth-year pharmacy students come to identify with certain components of pharmaceutical work as more central to their professional identity. Various curricular content and experiences contribute to constructions of emerging professional identities. We found that students' path to pharmacy, curriculum, preceptors, practice environment, and patient interactions all play a role. Several of the themes identified are supported by previous research in medical and pharmacy students.^{5,14,24,36-41} Wong and colleagues found five themes associated with professional identity formation in medical students: prior experiences, role models, patient encounters, curriculum, and societal expectations.³⁶ Previous studies in pharmacy students have illustrated the impact of experiential and part-time work experiences and the impact of social recognition or public perception as well as pedagogy and curriculum.^{24,38,41-43}

Our path to pharmacy theme identified that most students entered pharmacy with limited knowledge of the roles of the pharmacist beyond dispensing medications. These data are aligned with a study conducted in first-year pharmacy students that found students entered pharmacy often as a second choice, simply wanting to do "something" medically oriented.⁴⁴ This suggests that students come with preconceived views about the dispensing identity of pharmacists, but they rely heavily on curricular experiences to socialize them to other ways of "being" pharmacists.

Our data also illustrate that curriculum has a significant impact on identity construction. The students discussed the role of the didactic curriculum in providing them with the knowledge required to be medication

experts, while the experiential rotations provided them opportunities to be involved in "real-world practice." The participants articulated that they felt the curriculum provided them with a solid foundation to perform as a health care provider in practice. They voiced strong commitments to patient care and improving patient outcomes through collaborative medication management and advocacy for patients on the interprofessional team. In addition, the participants asserted strong rejections of non-health care provider identities when faced with them in experiential rotations, such as dispenser or businessperson identities. The students felt that these identities were not in line with their training; hence, these alternatives were less acceptable to them. These findings suggest that there are strong socialization processes at work within the formal curriculum reinforcing the value of clinical knowledge and clinical roles and devaluing other common pharmacist roles. This is supported by earlier work by Kellar and colleagues, which found a strong curricular emphasis on the clinician discourse in pharmacy education in North America.¹ This has the potential to impact the profession significantly, as students are likely to be less willing to take jobs that compromise their ability to enact the health care provider identity in practice.

Our data also reveal the presence of a hidden curriculum, particularly as it relates to corporate pharmacy practice. Although the hidden curriculum can be positive, our data illustrate learner experiences that expose negative hidden curriculum effects. During experiential rotations and part-time work experiences, students are being exposed to corporate pharmacy models that value quantity over quality of services. Students observe pharmacists in these environments prioritizing dispensing and business activities over patient care activities, and students feel stigmatized when they spend too much time assessing patients. This hidden curriculum is contributing to villainizing the role of the merchant and dispenser identities.¹ Thus, educational practices may be unintentionally reinforcing an "assumptive professional typology of 'a good pharmacist'" that can only be attained through the health care provider identity.²⁹ This limits the potential impact of pharmacists in health care systems, as it makes other ways of practicing less legitimate.^{1,31} This has the potential to negatively impact the community pharmacy workforce in the future, as students may preferentially seek alternative practice sites. Formal opportunities for students to reflect on experiential rotations that challenge their emerging identities with faculty members are important areas to consider in curriculum reform initiatives.

Preceptor role modeling, both positive and negative, emerged as a powerful theme in the interviews. Our findings suggest that faculty members need to be more aware

of the important influence that role modeling plays on students' professional identity formation.^{24,36,37,40} Professional development for preceptors to ensure alignment between their behavior and the values of the profession could help to close the gap between formal teaching on professional identity and experiences in the clinical setting.²⁴ If students have the opportunity to discuss their clinical experiences with faculty members, this could also help to address hidden curriculum issues as they arise.^{15,24,38,40}

Our study provides insights into factors that influence how students construct their professional identities during pharmacy school. The findings suggest that students studying at the Leslie Dan Faculty of Pharmacy have strong internalized health care provider identities, at the exclusion of other potentially relevant pharmacist identities. This finding is not surprising considering that the current PharmD curricular model, AFPC Educational Outcomes, and CCAPP Accreditation Standards prioritize pharmaceutical care and clinically oriented content and skills. The formal course-based curriculum comprises predominantly pharmacotherapy and medication therapy management courses. The AFPC Educational Outcomes are designed with the care provider role as the principal component of the pharmacist's function, and all other roles and enabling competencies are patient centered. The AFPC Outcomes state that "Pharmacy graduates must be grounded in a professional identity when being a Care Provider who approaches practice through the integration and application of Communicator, Collaborator, Leader-Manager, Health Advocate and Scholar roles."³³ This suggests that pharmacy education in Canada is designed to socialize students to a single, standardized health care provider role rather than fostering the construction of many potentially important roles. This is problematic, as our previous work illustrates that pharmacists play diverse roles in the health care system, and many struggle to enact the health care provider identity in certain practice environments.³¹ This results in pharmacy trainees and pharmacists feeling conflicted when navigating the tension between the health care provider identity discourse and the dispenser and merchant discourses.^{31,45} This has potential implications for the profession, as the identity dissonance experienced may lead to job dissatisfaction, attrition from the profession, and a sense of complacency in practice. The Canadian Standards are well aligned with the CAPE Educational Outcomes and the ACPE Standards, hence these findings have potential applicability to PharmD programs across the United States as well as in other countries that have modeled their pharmacy education around North American programs.

Our work adds important information on how pharmacy students are constructing their identities during their

pharmacy education. It opens the door for pharmacy educators to think about the benefit of exposing students to multiple identities during pharmacy school and how faculty members can assist students in constructing their professional identities so they are not left to reconcile competing identity discourses on their own.¹¹ Our work also makes significant methodological contributions, as it explores identity from a sociocultural perspective and employs robust qualitative methods that are crucial when studying a complex phenomenon such as professional identity.

Future work is needed to determine how findings from a single pharmacy program resonate on a national and international scale. It is likely that many of the factors identified are broadly applicable to entry-level PharmD programs across Canada and the United States as well as other countries that have designed curriculum around the pharmaceutical care model, but the sociocultural contexts in different countries may impact how the factors play out in students. In addition, research exploring the impact of professional identity construction on career trajectories and workplace performance would be of value. Finally, research exploring the impact of race and ethnicity on professional identity is of utmost importance as the diversity of the student population continues to increase.^{19,22}

This study has limitations worth noting. It was conducted in a single institution, so the findings may not transfer to PharmD programs that are significantly different than the program at University of Toronto. However, the case study was conducted at the largest pharmacy school in Canada, and the 60-minute interviews with a cross section of learners generated rich data that led to recurrent themes being generated, suggesting the information power of the sample was adequate for identifying general trends in socialization experiences that are broadly applicable. Also, the study was conducted in Canada, which has a universal, publicly funded health care system; this may impact students' experiential encounters differently than in countries with different health care models. Also of note, we did not triangulate our interview data to other sources such as admissions data, curriculum maps, or other researchers results, which may have increased the rigor of the findings.

CONCLUSION

Our study of fourth-year pharmacy students provides a window into the dynamic, discursive, and iterative nature of professional identity construction. Students co-construct their identities through encounters with the curriculum, patients, preceptors, and different pharmacy environments. Our study provides insights into the ways in which the

Leslie Dan Faculty of Pharmacy curriculum legitimizes the health care provider identity, creating a structure that disempowers any other way of “being” a pharmacist. This impacts students’ identity construction, as they prioritize opportunities that will facilitate their “becoming” clinicians. The profession could benefit from curricular reform efforts that encourage diversity in pharmacists’ roles to ensure the profession can meet the medication-related needs of society presently and in future.

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Appendix 1. Representative Quotes Provided During Interviews With Fourth-Year Pharmacy

Students Who Participated in a Study of Factors Influencing Professional Identity Construction

Theme 1: Path to Pharmacy

“I didn't really know what a pharmacist did. I thought they just count pills.” (Participant 2)

Theme 2: Curriculum

“I think at the core we're medication experts ... the program developed us into doing that, they prepared us for clinical roles and being experts in medications.” (Participant 7)

“...I was disillusioned...I felt pressure from management to accomplish certain goals...I wouldn't have felt that pressure in other healthcare professions...it feels like I am a cog in the machine. I'm a replaceable piece...if I'm unable to meet quota numbers then my boss can find someone to replace me...it makes me feel underappreciated and undervalued.” (Participant 11)

Theme 3: Environment

“Let's say there is an economic pressure where dispensing gives more reimbursement than clinical services, then definitely my identity shifts away from being a clinician to more of a drug dispenser. Even though that is something I don't want, and something we didn't learn in school of

what an ideal pharmacist is...it indicates identity is strongly influenced by the environment.” (Participant 1)

“The pharmacy was very busy, it's like 300 to 500 scripts a day. I was busy, and you don't get a lot of time to counsel a patient, it's more like, do you have any questions? No? Okay, bye.” (Participant 9)

Theme 4: Preceptors

“You're a professional and your number one responsibility is to act in the interest of the patient. The most impactful way I saw this is when pharmacists did it in real life...it is a powerful moment when you see a pharmacist go, okay there is nothing backing me on this, but in my professional judgement, I can do this...this is in the best interest of the patient...it is very inspiring.” (Participant 3)

“He let me have an important role on the team, and it wasn't hand holding. He let me have my own practice, and that's where I really learned a lot...I felt empowered.” (Participant 4)

Theme 5: Patient Interactions

“...the relationship with my patients, it's important to me. I want my patients to think of me as their pharmacist, the way they'll say my doctor wrote a refill. I wish they would

think of me as their pharmacist rather than the pharmacist or a pharmacist.” (Participant 5)

“They [the public] don’t really see the value, and pharmacists don’t communicate that value ... pharmacists do the

work behind the scenes ... but the patients don’t see that. They just think, oh, the doctor is always right ... the pharmacist is just making me wait ... we’re not recognized for our role.” (Participant 8)