Redefining Professionalism Pedagogy in Physician Assistant Education:

Moving Toward Intersectional Professional Identity Formation

by

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ABSTRACT

The physician assistant (PA) profession is lacking in diversity, both in practicing PAs and the PA student population. PA organizations, including the PA Education Association and the Accreditation Review Commission on Education for the PA, have been advocating for action to address this lack of diversity, and many educational institutions have responded by innovating their recruitment and admissions strategies. Another appropriate response to address the lack of diversity in PA education would be to critically evaluate the curriculum, specifically professionalism curriculum, for inclusiveness. Professional identity formation (PIF) provides a framework for teaching professionalism that focuses on the evolving identities of medical learners (Irby & Hamstra, 2016) as influenced by their individual, relational, and collective identities (Cruess et al., 2015). However, PIF has been critiqued for lacking inclusion of sociocultural contexts (Wyatt et al., 2020).

Through this mixed methods action research study, I utilized community of inquiry (CoI; Garrison et al., 1999) as a theoretical framework for creation and facilitation of a professional development workshop for PA educators aimed at evaluating academic medical journal articles focused on the topics of professionalism in medical education, PIF, and PIF experiences in underrepresented in medicine students. My goal was to increase awareness of PIF as a pedagogical framework which has the potential to alter the learning environment toward one of inclusion and belonging. Additionally, through my CoI, I further aimed to expand upon the PIF conceptual framework to include elements of intersectionality by focusing on how sociocultural factors influence student perspectives on professionalism and their PIF process.

I used Ajzen's (1991) theory of planned behavior to evaluate participants' intention to incorporate PIF into their professionalism curricula and to prioritize sociocultural factors in their professionalism pedagogies. Using pre- and post-intervention surveys, participant interviews, and workshop session exit questions, I determined that my professional development workshop contributed to an increased likelihood of PA educators to integrate PIF and prioritize sociocultural factors into their professionalism curricula, and further, changed perspectives regarding the definition of professionalism in PA education to include an understanding and appreciation for how professionalism is influenced by a student's sociocultural factors.

DEDICATION

To my family, for their steadfast support, constant encouragement, and tough love, when it was needed most.

Brian, through every project I take on, you are always my loudest cheerleader. Somehow, I think you believed in my ability and started supporting my pursuit of a doctorate before I even started to seriously consider it myself. You listened when I was frustrated or overwhelmed, pitched in with extra family responsibilities, kept that "education shelf" stocked, and constantly reminded me of my capabilities. My success would not have been possible without you – thank you for your love and encouragement.

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Lastly, to my parents, Luke and Carol, and my mother-in-law, Joyce, thank you for helping with the kids over the past three years so I could attend class and spend time working on my dissertation. Without all of you pitching in, sometimes with minimal notice, it would not have been possible to meet my academic requirements. Thank you for helping to make it possible to achieve my goal.

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Finally, to the PA students I have had the privilege of coaching over the years, I thank you for influencing me to transform my perspective on what it means to be a PA. I have grown, both professionally and personally, because of my interactions with each one of you, and for that reason I also dedicate this work to you and your patients. I hope we can progress toward a more inclusive profession that will be able to best meet the needs of our communities.

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INTRODUCTION

I belong to the people I love, and they belong to me--they, and the love and loyalty I give them, form my identity far more than any word or group ever could.

— Veronica Roth, Allegiant

I have been a physician assistant (PA) for 19 years. I consider myself a highly competent and compassionate PA who prioritizes a patient-centered approach to care. During patient interactions, I always try to remember the profound asks we have of our patients – to be vulnerable and trusting with near-strangers. I have been privileged with incredibly meaningful patient-practitioner relationships over the course of my career, and I am honored to have played some small part in my patients' wellness and healing. Despite my successes in acquiring medical knowledge, though, I wholeheartedly believe the strength of my relationships with patients has been a result of *who* I am, and not *what* I know or *how* I appear.

A mentor recently asked me about when I felt I had truly *become* a PA. Reflecting on my career, I determined that becoming a mother was the defining moment that helped me fully realize my identity as a PA. I had become comfortable in my own skin and no longer worried about whether I was projecting myself as a PA appropriately; I was simply *being me*, as a PA. Although I had been providing quality, competent care to my patients prior to that point, it was the significant life event of motherhood that changed me as a person and allowed me to connect with patients in a way I never had before. Despite occurring three years into my career, my personal formation as a mother had the effect of transforming my professional identity as a PA.

Thereafter, during the time I transitioned from clinical practice into PA education, I was consistently intrigued by the topic of professionalism, including how we teach and assess it, and the challenges associated with evidence-based practices for remediation of professionalism lapses (Brennan et al., 2020). At times, I have been frustrated that I had to address professionalism *violations* as defined by student policy (e.g., revealing clothing, visible tattoos, interpersonal communication style), when I did not necessarily consider some behaviors to be of significant concern. On several occasions, the students committing these *violations* were students whom I deeply respected and to whom I could envision referring family members for health care in the future. It was difficult for me to reconcile how one student could concurrently embody the ideal attributes of a future PA while displaying supposed unprofessional behaviors, as defined by the PA program's policy. I struggled with the varied interpretations of such behaviors that could be constituted as unprofessional, and I noted, even amongst faculty, there were often different interpretations of how egregious certain behaviors were.

As I further developed professionally as a PA educator, I also started to consider whether professional behaviors mattered at all if our graduating students were making meaningful connections *with* and contributions to *their* patients in *their* contexts. Perhaps, behaviors I perceived as unprofessional could be what others might value in their health care practitioners. For example, I had a former colleague who was always direct and pointed in their discussions with patients with obesity. Some of their patients would disclose to me how much they loved this practitioner's approach to holding them accountable, and other patients would tell me they would never see this practitioner again because of how unprofessional they perceived their communications were. This

transformation in my thoughts surrounding professionalism in medical education made me start to wonder if the behavior-focused emphasis of professionalism curricula should actually shift toward a focus on professional identity formation (PIF). Furthermore, I wondered if facilitating student progression through internal, self-reflective work that supports the development of professional identity would innately lead to the adoption of professional behaviors with individual meaning and value based within individualized contexts. My transformed thinking on this topic was simultaneously being shaped and influenced by increased surrounding academic discourse, within the fields of medicine and medical education, related to the topics of diversity, equity, and inclusion (DEI).

Medicine has a diversity problem, as demonstrated by the fact that 75.9% of certified PAs identify as White, and only 10.6%, 3.7%, 0.3%, and 0.2% identify as Asian, Black/African American, American Indian or Alaskan Native, and Native Hawaiian/Pacific Islander, respectively (National Commission on Certification of Physician Assistants [NCCPA], 2023). Amongst faculty at PA programs, 88.9%, 2.1%, 3.1%, 0.2%, and 0.2% identify as White or European American, Asian, Black or African American, American Indian or Alaskan Native, and Native Hawaiian or other Pacific Islander, respectively (Physician Assistant Education Association [PAEA], 2020-a). Additionally, only 6.8% of certified PAs and 4.4% of PA faculty have indicated they are of Hispanic, Latinx, or Spanish origin (NCCPA, 2023; see also PAEA, 2020-a). Similar racial and ethnic disparities are seen in the physician profession (Association of American Medical Colleges [AAMC], 2019).

These disparities are important because medical practitioners are more likely to practice within and for communities that are representative of their own upbringings.

Black patients, for example, are more likely to seek health care services from Black health care practitioners (Cooper & Powe, 2004; Saha & Shipman, 2007). Similarly, individuals who grow up in rural communities are more likely to return to practice in said communities upon completion of their educations. Inadequate representation in health professions programs from these communities, and others that have been traditionally medically underserved, propagates the problem of inadequate access to medical care for some populations (Sullivan, 2004).

Further contributing to the diversity problem in medicine is the racial discordance seen in student progression through PA programs. For example, despite White students accounting for 70.9% of all PA students in 2019, they accounted for only 54.4% of academic dismissals, 57.1% of nonacademic dismissals, and 63.7% of personal withdrawals (PAEA, 2020-b). In contrast, Black or African American students accounted for only 3.7% of all PA students but 10.5% of academic dismissals, 14.3% of nonacademic dismissals, and 9.6% of personal withdrawals. Researchers have clearly identified that diverse matriculants into health professions programs can struggle with belongingness (Johnson et al., 2021; Roberts, 2020), which I argue may contribute to this racially discordant retention data.

The medical education community is not ambivalent to our diversity problem, though. We own it, and we *aim* to solve it. Accordingly, many nationally recognized PA professional organizations have developed diversity initiatives. For example, the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has enacted educational standards that hold PA program leaders accountable for addressing diversity to achieve and maintain accreditation. Resultantly, in this case and

others (e.g., the PAEA has also developed initiatives related to DEI), PA program leaders have focused on the recruitment of underrepresented in medicine (UiM) students as a method to address diversity. Another path toward addressing this problem has involved PA program leaders focusing on retention efforts, because even when diverse students are accepted into PA programs, their attrition rates are higher than average (PAEA et al., 2020-b), which also impedes progression toward increased diversity in medicine. Accordingly, I maintain that recruitment and retention initiatives alone are insufficient for addressing the complexity of this problem.

Hence, and in sum, I am making the bold accusation that the medical education establishment itself is a contributing factor to our diversity problem, specifically as it relates to discourse around professionalism. The medical education community has been resistant to progressive and innovative interpretations of how we define a medical professional despite the acknowledgment that competence, or mastery (Cruess & Cruess, 2018), in professionalism is difficult to describe and evaluate because it is dependent on the situational application of one's principles and values and it is highly subjective (Kanofsky, 2020). Although the subjectivity around the concept of professionalism competence has been demonstrated in the medical education literature (Ginsburg et al., 2004), professionalism standards are often described as a set of behaviors that have been declared as professional, and a set of behaviors that have been declared as unprofessional; there are then rewards and punitive actions, usually in the form of grades, associated with each type of displayed behavior, respectively.

I contend that these predetermined professional and unprofessional behaviors are influenced by history, tradition, and culture, and have largely been derived from a health

care system lacking in diversity. Further, I question the justification of imposing historical values of professionalism onto modern medical learners without having solicited the contributions of diverse perspectives regarding the definition of professionalism. It is also important to note that medical institutions have not widely accepted the importance of sociocultural backgrounds in the development of professional identity, nor have these concepts been incorporated into the teaching and assessment of professionalism. Continuing to enforce the idea that any individual desiring to enter the field of medicine must conform to a certain identity will undoubtedly impede progress in attracting and retaining diverse applicants and students.

In contrast, I contend that facilitating professionalism competence in an educational environment that embraces PIF as a pedagogical framework has the potential to alter the learning environment toward one of inclusion and belonging, especially if that framework is influenced by intersectionality, or a recognition that the many sociocultural identities of learners influence their educational experiences (Bešić, 2020). Consequently, leaders in medical education, in their quest to diversify programs and the profession, should support learners in their transformational process toward a professional identity that encompasses learners' diverse, lived experiences.

Through my research, correspondingly, I aimed to explore new avenues for supporting and facilitating the development of medical learners into professionals who are honored for not only their knowledge, skills, and behaviors, but also for their individuality that is influenced by their sociocultural identities. To achieve this goal, I introduced and explored the concept of PIF with PA program faculty who are directly involved with teaching and mentoring PA students.

My Action

More expressly, via this action research dissertation I aimed to increase the awareness of PIF as a pedagogical approach to teaching and assessing professionalism in PA education, with the specific intention of expanding upon the PIF conceptual framework (see more forthcoming) to include intersectionality (see more forthcoming). I conducted this action research study by creating a community of inquiry (see more forthcoming), inclusive of PA faculty members, in which members participated in a structured, online journal club aimed at evaluating academic medical journal articles focused on professionalism, PIF, and sociocultural influences on PIF. The journal club spanned a period of 10 weeks with online professional development (PD) sessions being held approximately every two weeks. Prior to each PD session, I asked PA faculty to read a predetermined journal article from the medical literature related to one of the following topics: a) professionalism frameworks in medical education, b) PIF, c) discourses related to PIF, and d) PIF experiences in UiM students. During each PD session, in small groups PA faculty participants engaged in guided discussions surrounding the main points of the articles, during which I included prompts intended to promote self-reflection on participants' existing practices related to teaching and assessing professionalism. More explicitly, I helped participants review the historical approach to teaching professionalism in medical education which included pedagogies focused on cognitive transfer of information and role modeling (Cruess & Cruess, 2006), as contrasted with now more modern views of utilizing PIF as a recommended approach to support students in their progress toward competence in professionalism (Cruess & Cruess, 2018). More details on this action, and the specifics of this action, are included in Appendix A.

LITERATURE REVIEW

Professionalism in Medical and PA Education

Medical education, as it is known today, is largely grounded in the Flexner Report of 1910. Whereas prior to the report by Abraham Flexner—a former school teacher and expert on teaching and pedagogy who was commissioned by the Carnegie Foundation to investigate medical schools and write the report (Bonner, 1998) – medical education was often informal (i.e., based on an apprenticeship model) and unstandardized; post-Flexner, the standard four-year medical curriculum became institutionalized (Flexner, 1910). The primary emphasis of medical training became focused on the acquisition of scientific knowledge, and members of the medical profession were lauded for their research-based advancements which propelled patient care forward in ways that had previously been unimaginable (Flexner, 1910; Duffy, 2011). However, critics of Flexner argued that prioritization of knowledge acquisition came at the expense of patient relationships and connectedness that had traditionally drawn upon the art of medicine. In his perspective of the Flexner report at its centennial mark, for example, Duffy (2011) wrote "the profession appears to be losing its soul at the same time its body is clothed in a luminous garment of scientific knowledge" (p. 274).

Subsequently, and likely in response to concerns that physicians were not appropriately focused on being healers as much as being scientists, in the early 2000s there was an increase in publications in the medical literature related to professionalism in medical education (Cohen, 2006; Cooke et al., 2010; Ludmerer, 1999; Pellegrino, 2002). These publications often included a directive to explicitly teach the concept of professionalism within the medical education curriculum. For example, Pellegrino (2002)

wrote, “if the profession is to be resuscitated as a moral enterprise and not a branch of high-tech industry, [leaders of health professions] schools will need to give significant attention to inculcating the virtues and to evaluating their students and faculty, and their institutional behavior by these standards as well” (p. 383). While serving as president of the AAMC, Cohen (2006), reflected on the diminishing public trust in the medical profession and attributed this phenomenon to the commercialization of medicine leading to more opportunity for the erosion of medical ethics, values, and professionalism. Cohen (2006) also called upon those in academic medicine to take an active role in sustaining professionalism through formal instruction of medical learners. Related, Cooke et al. (2010) referenced the importance of professional formation as a component of medical education because of its role in instilling a sense of commitment and responsibility to patients and communities.

Alongside this call for expanded professionalism teaching, Papadakis et al. (2004) reported on their case-control study of University of California, San Francisco, School of Medicine graduates who received disciplinary action by a state medical board. They found an increased likelihood of disciplinary action in graduates who had professionalism deficiencies noted in their medical school record, which further emphasized the importance of teaching and assessing for competence in professionalism during the tenure of medical education.

In fact, professionalism is identified as one of the core competencies for clinical practice within both medical (i.e., physician) and PA education (American Academy of Physician Associates [AAPA], 2021; Eno et al., 2020.). In medical education, the Accreditation Council for Graduate Medical Education (ACGME) and the American

Board of Medical Specialties (ABM) both define professionalism as one of the six core competencies for a practicing physician (Eno et al., 2020). Similarly, within the AAPA's (2021) Competencies for the PA Profession, professionalism is identified as a core competency for the PA profession through its inclusion in the competency domain entitled professionalism and ethics. This domain is defined as the ability to "demonstrate a commitment to practicing medicine in ethically and legally appropriate ways [while] emphasizing professional maturity and accountability for delivering safe and quality care for patients and populations" (AAPA, 2021). Within this same professionalism and ethics domain, there are 12 areas of competence identified for PAs, each of which are also pertinent to this study and illustrated in Table 1.

Table 1

Professionalism and Ethics Competencies for the PA Profession

1	Adhere to standards of care in the role of the PA in the health care team.
2	Demonstrate compassion, integrity, and respect for others.
3	Demonstrate responsiveness to patient needs that supersedes self-interest.
4	Show accountability to patients, society, and the PA profession.
5	Demonstrate cultural humility and responsiveness to diverse patient populations, including diversity in sex, gender identity, sexual orientation, age, culture, race, ethnicity, socioeconomic status, religion, and abilities.
6	Show commitment to ethical principles pertaining to provision or withholding of care, confidentiality, patient autonomy, informed consent, business practices, and compliance with relevant laws, policies, and regulations.
7	Demonstrate commitment to lifelong learning and education of students and other health care professionals.
8	Demonstrate commitment to personal wellness and self-care that supports the provision of quality patient care.
9	Exercise good judgment and fiscal responsibility when utilizing resources.
10	Demonstrate flexibility and professional civility when adapting to change.
11	Implement leadership practices and principles.
12	Demonstrate effective advocacy for the PA profession in the workplace and in policymaking processes.

The PAEA separately published Core Competencies for New PA Graduates, within which professional and legal aspects of care are also identified as a domain of competence and described as the ability of graduates to "be able to practice medicine in a beneficent manner, recognizing and adhering to standards of care while attuned to advancing social justice" (PAEA, 2018). Their eight competencies included in the professional and legal aspects of health care domain are also of pertinence in this study in that they provide a framework of expected competencies for new graduates that may differ from that expected of an experienced PA. These competencies are illustrated in Table 2.

Table 2

Core Competencies for New PA Graduates

1	Articulate standard of care practice.
2	Admit mistakes and errors.
3	Participate in difficult conversations with patients and colleagues.
4	Recognize one's limits and establish healthy boundaries to support healthy partnerships.
5	Demonstrate respect for the dignity and privacy of patients while maintaining confidentiality in the delivery of team-based care.
6	Demonstrate responsiveness to patient needs that supersedes self-interest.
7	Demonstrate accountability to patients, society, and the profession.
8	Exhibit an understanding of the regulatory environment.

What is important to underscore in these two tables is the wide range of skills and behaviors associated with the competency of professionalism within the PA profession. Also important to underscore is that there are some inherent omissions in the competencies for new PA graduates in contrast to the competencies for the profession as a whole. Some of these omissions are due to the nature of novice PAs not having yet had the opportunities to practice these competencies (e.g., lifelong learning and education of others [#7, Table 1], advocacy for the profession [#12, Table 1], fiscal responsibility [#9,

Table 1). However, the omission of competencies #5 and #8 from the new PA graduate competencies illustrated in Table 2, especially in comparison to the PA profession competencies illustrated in Table 1, is also interesting in that these competencies are related to cultural humility and responsiveness to diverse patient populations, as well as personal wellness and self-care, respectively. Put differently, explicit competencies related to DEI and personal wellness are not delineated in the expected competencies for a new PA graduate. These are topics that I, as a PA educator, would expect to be emphasized in PA curricula. Furthermore, as it relates to this action research study, students' sociocultural backgrounds and lived experiences likely influence how these competencies may be demonstrated in practice; yet, as an authority on PA education, the PAEA has neglected to include these competencies as an expected achievement by new PA graduates.

Also exemplified in Tables 1 and 2 is that even within a profession, perspectives on professionalism may vary depending on the contexts within which the profession is being framed (e.g., experienced vs. novice PAs). Therefore, despite the recognition of the need for supporting the development of professionalism competence in medical learners, the approach to teaching and assessing professionalism is complex and controversial (Cruess et al., 2014; Cruess & Cruess, 2008; Irby & Hamstra, 2016; Lucey & Souba, 2010). Lucey and Souba (2010), for example, described the problems with professionalism in the medical field as complex adaptive problems, in contrast to simple problems that are often fixed with technical solutions.

Professionalism in the medical field is clearly complex because clinical dilemmas that draw upon professionalism competencies have the capacity to challenge personal and

professional values, require judgement in times of stress, and may be influenced by systems, environments, or colleagues (Lucey & Souba, 2010). With that being said, efforts to teach the complex topic of professionalism in medical education have primarily fallen into three primary, albeit overlapping, frameworks, as per Irby and Hamstra (2016): a) virtue-based, b) behavior-based, and c) PIF. Virtue-based professionalism is driven by internal value development as guided by morals, ethical principles, and humanism. Behavior-based professionalism focuses on measurable and observable behaviors, particularly as these behaviors relate to interactions with patients, colleagues, and society. PIF, as briefly touched upon prior, focuses on the evolving identities of medical learners (see also more forthcoming); and it is through the formative and reflective processes of PIF that values driving virtue-based professionalism are developed. Not surprisingly, though, focused assessment of professionalism competence has centered on the aforementioned behavior-based frameworks as it is easier to measure achievement of a set of behaviors than it is to measure internalized values, such as those present in virtue-based professionalism and PIF.

Furthermore, such classic approaches to assessment in medical education, in general, have been based on something called Miller's pyramid, which builds from knowledge ("knows"), to competence ("knows how"), to performance ("shows how") and, finally, to action ("does"), which implies behavior-based assessment (Cruess et al., 2016). However, while easier to measure, behavior-based frameworks perpetually provide a narrow assessment of the broad definitions of professionalism competence, which has led Cruess et al. (2016) to propose an additional assessment level focused on identity ("is") which has, over the past decade, lead to an increased interest and

development of PIF as a pedagogical approach to professionalism curriculum within medical education. As will be described in the next section, PIF, by definition, is inclusive of both the virtue- and behavior-based frameworks for teaching professionalism.

Professional Identity Formation

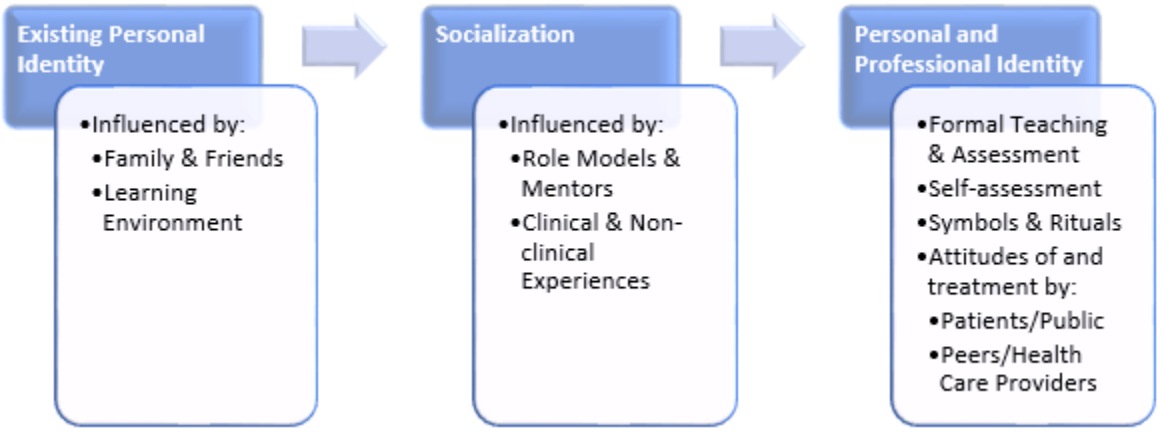
In 2010, after directing the Carnegie Foundation's 100 years post-Flexner study on medical education, Cooke et al. (2010) summarized major concerns promulgating within medical education and recommended four fundamental goals of learning in medical education, one of which is professional formation. Professional formation is defined as encompassing interpersonal relationships and cultural values (Cooke et al., 2010). Work toward professional formation was further advanced when Cruess et al. (2014) called for a shift in medical education from teaching professionalism to the development of professional identity, all while proclaiming that teaching professionalism had actually just been a conduit to the primary objective of "ensur[ing] that students understand the nature of professionalism and its obligations and internalize the value system of the medical profession" (p. 1446). Whereas professionalism was to be focused on the process of *acting* like a medical professional, PIF would focus on *being* a medical professional, with *being* defined as "a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting, and feeling like a [clinician]" (Cruess et al., 2014, p. 1447).

One early outline of a framework for PIF in medical education, for example, encompassed the domains of professionalism, psychosocial development, and formation

(Holden et al., 2012). Here, Holden et al. (2012) described the importance of factors such as moral development, environment, and context as critical in the identity formation process and explained the importance of social learning theory, including observation and role modeling, as a critical strategy for supporting said processes. Soon thereafter, PIF was described by Cruess et al. (2015) as being influenced by the following domains: (a) individual identity, or personal characteristics and beliefs influenced by personal experiences; (b) relational identity, or the role significant individuals play on one's identity; and (c) collective identity, or the role of a social group, including one's status within that group and the group's status in society, on an individual's identity. Cruess et al. (2015), in the same piece, developed a schematic based on the factors influencing these three domains, and described more fully socialization, including interactions with role models and mentors and accumulations of individual experiences as the most powerful factors involved in PIF. Figure 1 summarizes Cruess et al.'s (2015) schematic, including the various factors involved in the process of PIF.

Figure 1

Schematic Representation of PIF



Since socialization was identified as a critical component of PIF, Cruess et al. (2015) posited that the PIF process could be explained through the theoretical framework of communities of practice (CoPs) whereby medical learners, through socialization, progress from legitimate peripheral to full participation. Support for the CoP framework has been further explored and explained as necessary for supporting curricular change toward PIF (Cruess et al., 2019). A similar proclamation was made by Wald (2015) as they emphasized the importance of medical education curriculum being aimed at guiding the development of professional identity through, among other themes, socialization and relationships. Other commentators have expanded upon the importance of relationships in the PIF process by highlighting the role of both intra- and inter-professional relationships in contributing to the development of a distinct professional identity (Sharpless et al., 2015).

Although PIF is frequently regarded as a well-respected approach to professionalism pedagogy in medical education, a critique of PIF has been that, conceptually, it lacks inclusion of sociocultural contexts, namely "student experiences as a result of their social, cultural, historical, political, and racial differences" (Wyatt et al., 2020). Sociocultural contextual backgrounds of medical learners, in other words, have been largely unacknowledged, despite their theoretical influence on all three domains of PIF – individual/personal identity, relational/socialization, and collective/personal and professional identity (Cruess et al., 2015). Beyond PIF, even the more traditional competency of professionalism has been described as being socially constructed and influenced by the cultural values of one's environment (Cruess & Cruess, 2018). Yet, in a scoping review and qualitative metasynthesis of 92 articles on PIF in medical, nursing,

and counseling/psychology students, Volpe et al. (2019) found that authors of only 10 articles examined the sociocultural backgrounds of students. Upon further analysis of these 10 articles, Volpe et al. (2019) uncovered themes related to the extent to which UiM students experienced challenges in developing professional identity and feeling excluded in their educational contexts.

Clearly, there is limited research on PIF in UiM students, but authors of the limited existing studies have consistently emphasized the importance of considering sociocultural factors in PIF in medical education (Chow et al., 2018; Trevino & Poitevien, 2021; Wyatt et al., 2020, 2022). As per Osseo-Asare et al. (2018), medical residents from UiM backgrounds more specifically reported difficulty with developing professional identities while being viewed as an outsider in their workplace and, at best, had their cultural identities ignored. At worst, they were informed that an aspect of their cultural identity was unprofessional (e.g., hair style). This type of messaging led to dissonance between personal and professional identities, and further amplified feelings of exclusion. In research conducted by Wyatt et al. (2021), professional identity in Black/African American medical students, residents, and attending physicians was described according to the following three themes as self-expressed by UiM participants: (a) an alertness or watchfulness for oneself and others borne out of isolation, as primarily felt by Black physicians in a primarily White profession; (b) a sense of responsibility for participating in "racial uplift" (p. 189) by giving back to one's own community; and (c) a sense of value placed on being a leader within one's community. These themes highlight the difficulties UiM medical learners may have with assimilating into communities with shared goals and interests given their feelings of isolation and unique professional goals

related to their own personal communities. Thus, for UiM medical learners, the pedagogical framework for supporting PIF may contrast with earlier frameworks in which theorists identified socialization and CoPs formed while in medical training as defining elements of PIF (Cruess et al., 2015). Interestingly, in additional research conducted by Wyatt et al. (2022), who compared the PIF experiences of UiM PA students and practicing PAs with UiM medical trainees and physicians, they found similar themes in PIF experiences between the two groups with the exception being that both PAs and PA students felt they were "able to bring their entire selves both in the training and practice environments" (p. 458). While there are many reasons that could be explored to better understand this discrepant finding between these two health professions groups, for this study, this difference is important to note as it will help inform the design of my action.

In summary, though, recall the Cruess et al. (2015) schematic of PIF, represented in Figure 1. It depicts a linear progression from personal identity to professional identity through the process of socialization. Personal identity is described as encompassing sex, gender, race, religion, culture, class, education, sexual orientation, and other personal characteristics and experiences (Cruess & Cruess, 2018), all of which are included in the framework of intersectionality (Crenshaw, 1991; Eckstrand et al., 2016). Given recent research findings in which authors have delineated the relevance of sociocultural factors in the PIF experience (Trevino & Poitevien, 2021; Wyatt et al., 2020, 2021, 2022), via my research I will subsequently aim to transform the discourse surrounding PIF to incorporate sociocultural factors into the aforementioned PIF schematic in a more universal manner by emphasizing the importance of intersectionality. That is, rather than

viewing PIF as transforming or modifying personal into professional identities, an intersectionality perspective will help to highlight the importance of embracing sociocultural factors as defining elements of one's professional identity. My hope in conducting this action research study is that PA faculty participants will begin to value the critical role of student personal identities and encourage students to integrate, rather than replace, said identities into their professional identities. While I do not disregard the importance of socialization and CoPs in the PIF process, I think approaching the PIF process from a perspective of intersectionality will help to better legitimize differing student perspectives regarding how a health care professional should think, act, and feel.

THEORETICAL FRAMEWORKS

Recall that the aim of this study is to introduce PA faculty to the concept of PIF as a conceptual framework for teaching professionalism within PA education programs, while emphasizing how PA learners' sociocultural identities influence their individual PIF processes. I will use three theoretical frameworks to inform this study, each of which I will use to support the intents of this study in a different manner. First, I present intersectionality (Crenshaw, 1991) to explain the perspective from which I, as the researcher, am framing the pedagogy of professionalism and PIF in medical education. More explicitly, as the researcher my perspective is that socioculturally-influenced power dynamics may influence student perceptions of inclusion and belonging, which directly relates to the purpose for and content of this intervention. Next, I will use the community of inquiry (CoI) theoretical framework (Garrison et al., 1999) as a pedagogical method that, given the research, has been evidenced as effective for critical inquiry. The CoI framework will serve as the guiding model for the design of this intervention. Lastly, I will include the theory of planned behavior (Ajzen, 1991) as it will provide a framework for measuring the effectiveness of the intervention that I intend to implement in this study. More explicitly, the theory of planned behavior (TPB) will help me measure the effectiveness of the intervention given my intention to modify PA program curriculum to incorporate PIF and intersectionality into the pedagogy used to address the topic of professionalism.

Intersectionality

Crenshaw (1989, 1991) first coined the term intersectionality in a pair of essays that described the oppression experienced by black women within the legal system. The

theory behind intersectionality has since been advanced, for example, as acknowledged in a published interview of Crenshaw (Columbia Law School, 2017) during which Crenshaw more broadly explained intersectionality as a lens through which to view the impact of power dynamics. Related, Carbado et al. (2013) described how an intersectional lens helps to reveal the "shared experiences of discrimination, marginalization, and privilege" (p. 4) experienced by any societal group impacted by structural power dynamics, including groups defined by gender, sexual orientation, nationality, disability, and race/ethnicity. Perhaps best stated by Carbado et al. (2013), the goal of intersectionality is to:

> …bring the often hidden dynamics forward in order to transform them...a concept animated by the imperative of social change...demonstrat[ing]...the inter-locking ways in which social structures produce and entrench power and marginalization, and by drawing attention to the ways that existing paradigms that produce knowledge and politics often function to normalize these dynamics. (p. 10)

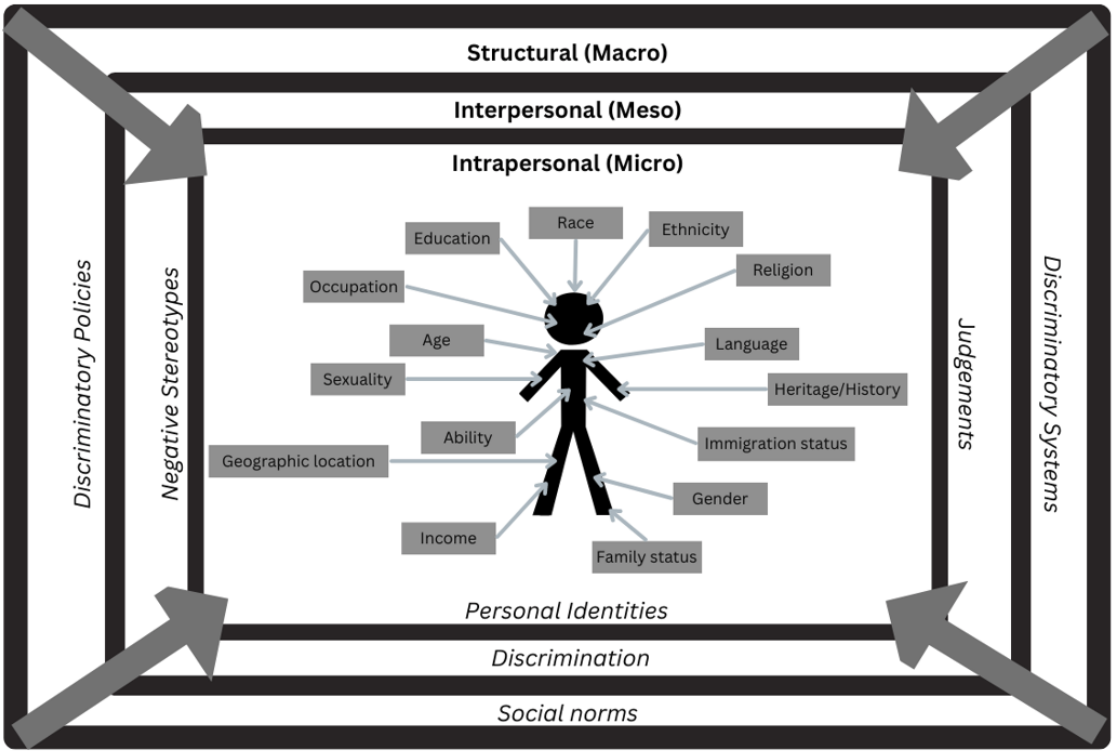
In addition to expanding the subjects studied through an intersectionality lens, Carbado et al. (2013) highlighted the fields in which intersectionality has been applied beyond the original setting of law, namely across the disciplines of sociology, history, psychology, political science, and, of particular interest to this study, education. Indeed, there has been a recent influx of literature examining intersectionality within medical education (Bochatay et al., 2022; Eckstrand et al., 2016; Monrouxe, 2015; Samra & Hankivsky, 2021; Verdonk & Abma, 2013).

Verdonk and Abma (2013), for example, emphasized the importance of examining all social identity categories in analyses of power and discrimination within

medical education and described the importance of embracing diversity and striving for social justice through the creation of inclusive curricula and learning environments. Other authors have summarized the inequities and biases within medical education as they also relate to social identities (Samra & Hankivsky, 2021; Bochatay et al., 2022), all while relaying the importance of institutional leadership promoting cultural humility as a potential means to mitigate existing inequities. Samra and Hankivsky (2021) further described intersectionality as a medical educational method for students and practitioners to become "aware of how their own social positions, values, and experiences shape their professional identities and approaches to care" (p. 858). Eckstrand et al. (2016) added recommendations for advancing intersectionality in academic medicine to support the development of learning environments inclusive of all identities, specifically highlighting the AAMC Diversity 3.0 initiative (Nivet et al., 2016) as an intersectional approach to address diversity in academic medicine by emphasizing the multiple aspects of a person's identity thought to play independent and interactive roles in achieving health equity and inclusion. Figure 2 illustrates the relationship between interpersonal, intrapersonal, and structural factors in the development of an individual's identity, as per Rai et al. (2020) and Harris (2015).

Figure 2

Intersectional Influences on Individual Development



Note. Image adapted from "Intersectionality and health-related stigma: insights from experiences of people living with stigmatized health conditions in Indonesia," by S.S. Rai, R.M.H. Peters, E.V. Syurina, I. Irwanto, D. Naniche, and M.B.M. Zweekhorst, 2020, *International Journal for Equity in Health, 19:206,* p. 6. CC BY 4.0 DEED

Illustrated in Figure 2 is that there are micro, meso, and macro level dynamics influencing an individual's personal and professional development. At the micro level, numerous sociocultural and historical factors (e.g., race, language, income, geographic location, sexuality) intersect in a person's individual development; this concept is demonstrated in the most inward, intrapersonal section of Figure 2. At the meso level, interpersonal relationships are demonstrated as influencing individual development, especially as they relate to negative stereotypes, discrimination, and judgements related to the sociocultural and historical factors encompassing an individual's personal

identities; this concept is demonstrated in the middle section of Figure 2. Lastly, at the macro level, structural factors, such as discriminatory policies and systems, as well as social norms, can influence both interpersonal and intrapersonal factors, each of which can, in turn, influence personal development; this is demonstrated by the inward pointing arrows. Also represented in Figure 2, by the inward facing arrows, is the concept of power differentials that exist between the individual, especially an individual with marginalized personal identities and the forces associated with group dynamics and systems.

As an example of how intersectionality relates to my research, if a PA program has a professionalism policy that disproportionately affects women of color (structural dynamic), students with these two intersecting personal identities may experience an increased number of professional conduct violations compared to other students. In turn, negative stereotypes may develop amongst faculty or student colleagues toward students who are women of color (interpersonal dynamic); this may impede a sense of belonging amongst students who are women of color, which, in turn, may impact how said students develop or express their personal identities (intrapersonal dynamic).

Accordingly, by incorporating the thoughts and recommendations of current thought leaders on the topic of intersectionality in medical education, I will conduct my action research study through this lens of intersectionality, applying this theory to the development of material that I intend to utilize in this intervention. Indeed, the goal of my action (i.e., the proposed online journal club described prior), again, as focused on professionalism and PIF influenced by intersectionality, is to ignite transformation in thought of PA faculty members and social change within medical education institutions.

Furthermore, utilizing the journal club PD workshop sessions, I will highlight how current professionalism pedagogy within medical education (i.e., existing paradigms) may impede diversification of the profession by normalizing power dynamics that prevent PIF informed by sociocultural factors.

Community of Inquiry

The CoI theoretical framework was introduced by Garrison et al. (1999) as a model for best educational practices through the modality of online learning, with emphases on using CoIs to support educational content that engages and emphasizes critical thinking. Cognitive, social, and teaching presence (see definitions forthcoming) are the three interrelated constructs associated with CoI and are identified as influencing the successful delivery of an educational experience within a CoI (Garrison et al., 1999).

In terms of the construct of cognitive presence, Garrison et al. (1999) explained that it was derived from John Dewey's practical inquiry model (Dewey, 1933) that emphasized critical thinking through pre-reflection, reflection, and post-reflection, where reflection guides the thinking process to transition a learner from encountering a problem to a state of resolution. Garrison et al. (1999) expanded upon Dewey's practical inquiry model by explaining that learning occurs through two primary processes: reflection that leads to action and information retrieval that leads to constructed meaning. More specifically, Garrison et al. (1999) described the sequence of learning, or inquiry, as moving through four stages: a) a triggering event, or something generating the need for learning to occur; b) exploration, or the process of acquiring information to explain the triggering event; c) integration, or the construction of ideas from knowledge acquired

during exploration; and d) resolution, or the application of ideas generated during integration.

In the CoI model, the second construct of social presence is important for supporting the construct of cognitive presence in that social presence helps facilitate critical thinking amongst learners (Garrison et al., 1999). The social presence construct is described by Garrison et al. (1999) as the ability of learners to engage in socio-emotional communication, and it is defined by expression of emotion, open communication, and group cohesion or belonging. The construction of social presence is supported by creating shared purpose amongst learners, trust within the learning environment, and interpersonal relationships (Garrison et al., 2010). The importance of social presence in a CoI is to augment the learning to a tone that is "questioning but engaging, expressive but responsive, skeptical but respectful, and challenging but supportive...[resulting in] a high level of cognitive presence leading to fruitful critical inquiry" (Garrison et al., 1999, p. 96).

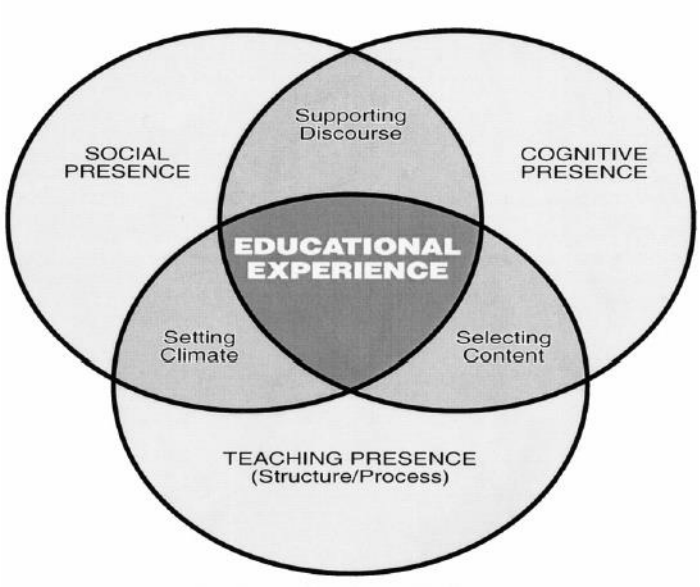
The third construct, teaching presence was described by Garrison et al. (1999) as a connecting factor in the CoI model linking social and cognitive presence through two primary functions: design and facilitation of the educational experience. While not extensively explicated in the original introduction of the CoI framework, in subsequent literature Garrison and Arbaugh, (2007) noted that teaching presence plays a critical role in facilitating learner acquisition of the fourth stage of inquiry, resolution, as described earlier in the cognitive presence section. Stated differently, successfully transitioning through the four stages of learning is difficult without adequate teaching presence. As such, teaching presence is now recognized as an equally important aspect of the CoI

framework, with its definition being expanded to “the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes” (p. 163). More explicitly, there are three elements identified as encompassing the construct of teaching presence: namely, instructional design and organization, facilitation of discourse, and direct instruction (Garrison et al., 1999, 2010; Garrison & Arbaugh, 2007). The expanded definition and understanding of the teaching presence construct in the CoI model explains the role of the teacher as not only designer and facilitator of knowledge, but as the individual emphasizing for learners their metacognitive awareness, or “awareness of the inquiry cycle and reinforced insights and shifts in thinking and understanding” (Garrison & Arbaugh, 2007, p. 165).

Each of the three constructs in the CoI framework have overlapping elements with the other two constructs, and all three elements contribute in totality to the effectiveness of an overall educational experience. The relationships between the three constructs are demonstrated in Figure 3 (see also Garrison et al., 1999, p. 88).

Figure 3

Community of Inquiry Theoretical Model



Note. From "Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education," by D.R. Garrison, T. Anderson, and W. Archer, 1999, *The Internet and Higher Education, 2*(2–3), p. 88 (https://doi.org/10.1016/S1096-7516(00)00016-6). Reprinted with permission.

As illustrated in Figure 3, cognitive presence overlaps with social presence through the factor of supporting discourse and with teaching presence through the factor of content selection. Both factors can be seen as contributing to the learning sequence described above; content selection can serve as a triggering event and supporting discourse can contribute to both the exploration and integration stages of learning. Similarly demonstrated in Figure 3 is that social presence, or the propensity to engage in socio-emotional communication, is influenced by teaching presence in that the instructor determines the setting and climate or stated differently, the design of the educational experience.

The CoI theoretical framework is important for this research study, accordingly, in that CoI is a learning theory shown to be effective for critical inquiry, and the topic guiding this research study, intersectionality and PIF, qualifies as critical inquiry. Additionally, the pedagogy to be employed for deployment of the intervention, an online journal club, by definition, will create a CoI. Thus, as the researcher, I will utilize the CoI theory to guide development of the PD workshop sessions designed for this intervention. It is important to also note that while the CoI framework was originally devised for asynchronous online learning (Garrison et al., 1999), subsequent researchers have studied use of the framework in both synchronous and hybrid learning environments (Aslan, 2021; Rockinson-Szapkiw et al., 2016; Vaughan & Garrison, 2005, 2019). This extrapolation of the framework to other learning environments beyond asynchronous is important in that the model for my study will involve synchronous learning through online videoconferencing software.

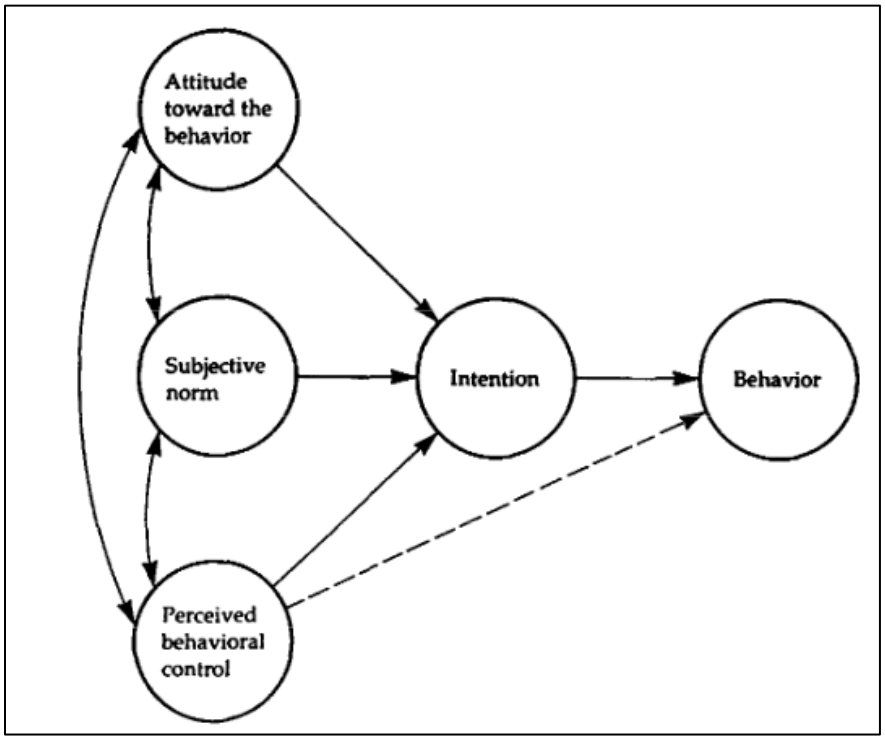
Theory of Planned Behavior

The TPB (Ajzen, 1991) is a psychological theory, born out of the theory of reasoned action (Ajzen & Fishbein, 1980), that is recognized as a model for predicting an individual's behavior based on the factors of attitude, subjective norm, and perceived behavioral control. Attitude toward a behavior is defined as an individual's opinions or feelings about the behavior. Ajzen (1991) added that the more favorable a behavior is viewed, the more intention an individual will have to perform the behavior. Subjective norm is defined as the belief that performance of a behavior will be viewed positively by society; an individual that views societal pressures as being high toward performance of a behavior will have a higher intention to perform said behavior (Ajzen, 1991). Perceived

behavioral control is the major differentiating factor between the theory of reasoned action (Ajzen & Fishbein, 1980) and its successor, the TPB. Ajzen (1991) defined perceived behavioral control as a subject's perception of how easy or difficult it will be to perform a behavior; an individual that anticipates minimal barriers or obstacles to performing a behavior will have both a higher intention and likelihood of performing the behavior. Ajzen (1991) further explained the TPB by correlating the aforementioned constructs with beliefs – attitude with behavioral beliefs, subjective norm with normative beliefs, and perceived behavioral control with control beliefs – as these beliefs are primary determinants of intentions and actions. The relationships between the three constructs in the TPB, attitude, subjective norm, and perceived behavior control, and their influence on intention and behavior are demonstrated in Figure 4 (see also Ajzen, 1991, p. 182).

Figure 4

Theory of Planned Behavior



Note. From "The Theory of Planned Behavior," by I. Ajzen, 1991, *Organizational Behavior and Human Decision Processes*, *50*(2), p. 182 (https://doi.org/10.1016/0749-5978(91)90020-T). Reprinted with permission.

As illustrated in Figure 4, perceived behavioral control influences predicted behavioral actions both independently and through its combined influence, along with attitude and subjective norm, on intention to perform a behavior. The influence of the three constructs on intention to perform a behavior is important because intention is noted by Azjen (1991) to be:

> …a central factor in the theory of planned behavior...[wherein i]ntentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior. As a general rule, the

> stronger the intention to engage in a behavior, the more likely should be its performance. (p. 181)

In summary, the theory of reasoned action has previously been used to show how intention to perform a behavior is a strong predictor of action, with the conditional assumption that the individual has control over their ability to perform the behavior (Ajzen & Fishbein, 1980). The addition of perceived behavior control within the TPB further strengthened the predictive accuracy of the model, as such (Ajzen, 1991).

The TPB is important for this study in that it will guide my measurement of effectiveness of this intervention, as it has been utilized for similar purposes elsewhere in the literature (Archie et al., 2022; Guerin et al., 2019; Townsend et al., 2003). To a lesser extent, the TPB will also help me guide the creation of my intervention in that I will structure the reflective questions I utilize during my PD workshop sessions to address the three constructs influencing intention and behavior as follows: a) I will address attitude by facilitating discussion about PA faculty attitudes toward PIF and intersectionality; b) I will address subjective norm by facilitating discourse within the CoI regarding perspectives on the role of intersectionality on PIF; and, c) I will address perceived behavioral control by guiding participant discussion toward an introspective evaluation of where and how PIF and intersectionality may be introduced into their curricula. In sum, I will utilize the concepts of attitude, subjective norm, and perceived behavioral control to guide development of my PD workshop sessions, and then in the analysis of my research, I will assess intention of PA faculty to incorporate intersectionality and PIF into their PA program curricula by measuring the constructs of attitude, subjective norm, and perceived behavioral control.

METHODS

Research Design

My overarching goal, and the purpose guiding my dissertation, again, was to contribute scholarly work aimed at promoting an environment of inclusion and belonging within medical education. To address this goal, I introduced PIF as a pedagogical strategy for PA faculty to teach and assess professionalism, with the express intention of emphasizing the importance of learners' sociocultural identities on their PIF via a PD workshop. To examine the extent to which this PD workshop impacted my PA participants, I aimed to answer the following, three research questions (RQs): RQ1: How and to what extent did participation in the PD workshop influence PA faculty members' intention to incorporate PIF into their professionalism curriculum? RQ2: How and to what extent did participation in the PD workshop influence PA faculty members' intention to prioritize sociocultural factors in their professionalism pedagogy? RQ3: How did participation in the PD workshop influence PA faculty members' perspectives related to professionalism in medical education?

Given my underlying goal for this study, I used an action research methodology, since action research is transformative in its influence on personal, professional, and political realms (Herr & Anderson, 2005), and it is more explicitly "action oriented, intended to produce research-informed change to address live issues" (Dick, 2014, p. 51). In contrast to traditional research, action research is conducted by practitioners, in the field, who study problems of practice specific to their local contexts (Mertler, 2020). Action researchers address their problems of practice by enacting interventions that are within their spheres of influence.

Likewise, action research is becoming increasingly utilized, especially within the field of education, as it is practical to complete and is associated with more immediate applicability, allowing researchers to both inform and create questions about current problems within their contexts. Mertler (2020) explains that action research is typically accomplished over four stages: planning, acting, developing, and reflecting. The planning stage includes the identification and investigation of a problem prior to implementation of an intervention (Mertler, 2020). During the planning stage, the researcher gathers preliminary information, conducts a literature review, and starts to develop a research plan. The acting stage includes implementation of the research plan with associated data collection and analyses. In the development stage the researcher develops an action plan to help drive change or improvement. Reflection, as a culminating stage of each action research cycle, reinforces another core attribute of action research, which is that action research is iterative; reflection, then, reinforces the iterative nature of action research by leading the researcher to the next cycle of research.

More specifically, I utilized a mixed methods action research (MMAR) methodology which, by design, involves both quantitative and qualitative data collection and analyses. MMAR is an appropriate approach to employ when one is addressing complex problems of a critical nature through social transformation (Ivankova, 2015; Herr & Anderson, 2005). Indeed, through utilization of both quantitative and qualitative methods, researchers can gain more comprehensive views and understandings of their research problems (Ivankova, 2015).

More expressly, I utilized an equal priority, concurrent MMAR design, meaning that I simultaneously (i.e., concurrently) collected and analyzed both quantitative and

qualitative data, and equally emphasized each of these data types when addressing my research questions (Ivankova, 2015). A timeline of my study is available in Appendix B.

Role of the Researcher

As the researcher of this MMAR study, my role involved design and facilitation of all aspects of the intervention (i.e., the PD workshop). I was also responsible for all data collection and analyses as per my research design outlined above. More explicitly, I recruited participants, distributed my pre- and post-intervention survey instruments, conducted participant interviews, and administered PD workshop exit questions. Furthermore, I was responsible for completing the quantitative and qualitative analyses associated with each of these data collection methods.

While, above, I outlined the logistical roles I fulfilled in the completion of this action research study, perhaps my more influential role was that of deciding the theoretical frameworks I used to design this study. For example, my alignment with the theoretical framework of intersectionality likely influenced how my participants acquired knowledge and, possibly, transformed their perspectives on the topic of professionalism in PA education. In more traditional research approaches this may be viewed as introducing bias; however, action research is unique in that researchers, defined as practitioners who are professionals conducting research within their own context (Anderson & Herr, 2009), are expected to focus on "collaboration, reflection, and empowerment…when addressing the need for change in their professional and community settings" (Ivankova, 2015, p. 35). To address this aspect of action research, I was, accordingly, compelled to "take an active role and question every aspect of a situation that [I] may have overlooked, underestimated, or taken for granted" (Ivankova,

2015, p. 34). I accomplished this through my active participation as a both a practitioner and researcher in all aspects of the study.

Lastly, because such a large component of my study is related to my participants' perspectives about the concept of professionalism in PA education, it is important that I am transparent about my own definition of professionalism. I define professionalism as the manner by which professionals integrate their personal values and experiences with their communities as they perform actions associated with their roles. In terms of communities, I include patients and families served by PAs, as well as health care team members with whom PAs collaborate.

Study Participants

Prior to recruiting participants for my dissertation study, I obtained required approval from the Arizona State University (ASU) Institutional Review Board (IRB; see Appendix C). For this study, I recruited PA program faculty members employed at 0.6-1.0 full-time equivalency (FTE) at an ARC-PA accredited PA program to participate in the PD workshop. I recruited participants through the following outlets: a) emails sent to program directors at the five PA programs currently accredited in Arizona, with a request to distribute the email to their faculty; b) social media posts to a private group, *PA Educators*, on the social media platform, Facebook (n.d.); c) posts to my personal profile on the online professional networking site, LinkedIn (n.d.); d) personal email or electronic messaging requests to PA faculty who had previously expressed interest in participating through informal in-person or electronic communications; and e) posts to the *Research, Member Surveys & Research*, and *All PA Faculty* professional learning communities hosted through the PAEA website. In addition to the recruitment efforts

listed above, I also asked PA faculty members to share information about participating in the study within their own networks of colleagues.

In all recruitment communications, I attached the letter of consent, which included a description of the PD workshop, a disclaimer that participation in all five PD workshop sessions was encouraged but not required, and a description of the study with a notation that participation in this study is voluntary. The ASU IRB consent form that I used for these purposes is available in Appendix D. Completion and submission of the consent form served as registration for participation in the PD workshop.

To incentivize participation in all five PD workshop sessions, all participants who attended all five of the sessions and completed the post-intervention survey instrument were eligible for entry into a drawing for one of three $125 gift cards. This incentive amount was based on the most recent PA faculty salary data at the time of this study, which indicated that the mean annual salary for PA program faculty, employed at 0.75 FTE or higher, was $99,771 (standard deviation [SD]=$16,389; PAEA, 2020-a), or an hourly rate of slightly less than $50/hour. I selected an incentive amount of $25/session for five sessions, or $125 total, because it was approximately 50% of the average hourly rate for PA faculty. This amount was intended to provide acknowledgement of the time spent participating in the PD workshop without introducing undue influence to participate.

Important to note, though, is that incentivizing participants is a controversial topic in research; although, researchers have generally found that the use of incentives is usually benign (Grant & Sugarman, 2004). Others, however, have found that the influence of using incentives on motivating potential participants to enroll in research

studies is more variable (Halpern et al., 2021). Grant and Sugarman (2004), for example, in their analysis of the ethics of using incentives in human subjects research, found that the use of incentives for retention and recruitment of research subjects was ethically appropriate as long as the entire research study was ethically sound. They summarized their findings noting that incentives only risk being unethical when one or more of the following criteria are present: the research participant is in a dependent relationship with the researcher, risks associated with participation in the study are high, the research is "degrading," or the potential participant is highly averse to involvement and will only consent with a large incentive (p. 732)

Data Collection

Notwithstanding, and as noted prior, to address my three research questions, I utilized three data collection methods: pre- and post-intervention surveys, participant interviews, and PD workshop exit questions. Each data collection method was aligned with my research questions and theoretical frameworks, as demonstrated in Appendix E.

Surveys

Survey Instruments. I utilized pre- and post-intervention survey instruments to collect data to help support my evaluation of the quantitative components of RQ1 and RQ2, namely to assess the extent to which participation in the PD workshop influenced PA faculty members' intention to incorporate PIF into their professionalism curriculum and prioritize sociocultural factors in their professionalism pedagogy, respectively. I designed the survey instruments according to published guidelines for constructing similar questionnaires based on the TPB (Francis et al., 2004). Additionally, I adapted

several survey items from other TPB-based surveys (Aptyka & Großschedl, 2022; Renaud et al., 2019) into my survey questionnaire.

The four constructs that I wrote into my instrument included intention (INT), attitude (ATT), subjective norm (SN), and perceived behavioral control (PBC). I utilized each of these constructs for both RQ1 and RQ2, essentially creating eight constructs: INT, ATT, SN, and PBC for intention to incorporate PIF into professionalism pedagogy and INT, ATT, SN, and PBC for prioritizing sociocultural factors in professionalism pedagogy. I used a 7-point Likert scale for items measuring the INT, SN, and PBC constructs (i.e., Strongly Agree [7], Agree [6], Somewhat Agree [5], Neutral [4], Somewhat Disagree [3], Disagree [2], Strongly Disagree [1]), and I used a bipolar scale (Kennedy, 2023) to assess belief characteristics for items measuring the ATT construct (e.g. Useful [7] – Useless [1]), using a similar continuum but without defined labels for the five options between the two extremes given bipolar and 7-point Likert scale response formats are most frequently recommended in the literature for questionnaires based on the TPB (Francis et al., 2004). Ultimately, my survey instrument included 44 construct-related items, with 5-7 items per construct, and 10 demographic-related items.

I included the 10 demographic questions to help me better understand the backgrounds of my participants. The demographic items included several sociocultural related items and items related to my participants' employment statuses. I constructed most demographic items as forced-choice response questions; however, I also included some open-ended items (e.g., year of birth, native/primary spoken language, years employed as a faculty member). Since I used intersectionality as a theoretical framework, I felt it was important to also collect this type of information from my participants, as

their own sociocultural backgrounds may influence what conclusions may be drawn from the data. Similarly, employment data, such as number of years as a PA faculty member or FTE status, may influence perspectives on professionalism, just as I explained prior regarding how my own perspectives have changed over time.

I should add that typically TPB-based surveys include both direct and indirect measurements (Francis et al., 2004). An example of a direct measurement is to ask the respondent to indicate their level of agreement with a statement like the following: "I feel under social pressure to perform a given behavior." An example of an indirect measurement would be to ask a respondent to indicate their level of agreement with a similar, paired statement like the following: "My peers perform a given behavior" and "Doing what my peers do is important to me." However, for the purposes of my study I will only be including items defined as direct measurements for each of my eight constructs. Per Francis et al. (2004), utilization of direct measurements only in a TPB-based questionnaire is appropriate when the intent of the questionnaire is to predict intentions or to design or evaluate interventions.

I used this survey instrument on both pre- and post-intervention occasions; hence, both survey instruments included the same items. However, the post-intervention survey instrument included a section for participants to indicate their level of involvement with the intervention, and I added five open-ended items to the post-intervention survey instrument to help elicit feedback from participants in their own words, which would hopefully help me better understand and contextualize their quantitative data.

I piloted this instrument in spring 2023 with five PA faculty members who were not recruited for participation in my actual study. I asked them to complete the survey

instrument, and thereafter provide me general feedback on the length of the survey and the items themselves, for example, by asking them to identify any items that were confusing, lacked clarity, were jargonistic, etc. Given their feedback, I revised the instrument to develop the final survey instrument by making minor modifications for clarity and to better define the intention of statements used in the INT, SN, and PBC sections. In preparing the pilot study data, I completed one single imputation using mean imputation methods (Mattei et al., 2011) by imputing a score of 6.3 for one participant item response within the sociocultural INT construct items. The imputed score of 6.3 was determined by calculating the mean score of that participant's responses on all other sociocultural INT construct items on the survey.

After imputation, I used the pilot data to test the survey instrument for internal consistency reliability overall and for the items within each of the eight constructs in the survey instrument by calculating Cronbach's (1951) alpha, which is meant for examining whether individual items measuring an overall instrument, as well as items within the constructs, produce similar or internally consistent results (Salkind & Frey, 2020). A Cronbach's alpha measure of 0.7 or higher is generally considered satisfactory for demonstrating internal consistency (Bland & Altman, 1997).

After evaluating Cronbach's alpha calculations, I removed one item from both SN constructs (i.e., items on SN for PIF and SN sociocultural factors), given a low alpha that increased after item removal. I also removed all data collected from both of these items. Illustrated in Table 3 is that these analyses yielded an overall internal consistency reliability alpha of 0.93 for the PIF section of the instrument with alpha coefficients of 0.81, 0.86, 0.90, and 0.87 for the constructs of INT, ATT, SN, and PBC, respectively.

Also demonstrated is an internal consistency reliability of 0.81 for the sociocultural section of the instrument with alpha coefficients of -1.75, 0.81, 0.51, and 0.83 for the constructs of INT, ATT, SN, and PBC, respectively. Despite a negative alpha for the INT construct, I did not make further revisions to the survey instrument given that the overall scale had high reliability (0.81) and because the same INT construct items in the PIF section of the survey had high internal-consistency reliability (0.81).

Table 3

Reliability of Pre- and Post-Intervention Survey Instrument Constructs – Pilot Study

Construct	N of Items	PIF Survey (α)	SC Factors Survey (α)
INT	5	0.81	-1.75
ATT	7	0.86	0.81
SN	4	0.90	0.51
PBC	5	0.87	0.83
All Survey Items	21	0.93	0.81

Note. PIF is professional identity formation; SC is sociocultural; (α) is Cronbach's alpha; INT is intention; ATT is attitude; SN is subjective norm; PBC is perceived behavioral control

This survey instrument, with its incorporated revisions detailed above, is available in Appendix F, also with post-intervention items noted.

After the pilot, and after I used this instrument pre- and post-intervention, I tested it for internal consistency reliability overall and for each of the eight constructs, again, calculating Cronbach’s alpha for both the pre- and post-intervention data. Table 4 demonstrates the alpha calculations from both official pre- and post-intervention survey administrations, by construct and overall.

Table 4

Reliability of Pre- and Post-Intervention Survey Instrument Constructs – Final Version

		Pre-Intervention *n*=28		Post-Intervention *n*=20		Combined Pre-Post-Intervention	
Construct	N of Items	PIF Survey (α)	SC Factors Survey (α)	PIF Survey (α)	SC Factors Survey (α)	PIF Survey (α)	SC Factors Survey (α)
INT	5	0.94	0.94	0.96	0.93	0.99	0.99
ATT	7	0.90	0.94	0.91	0.94	0.91	0.94
SN	4	0.82	0.80	0.79	0.85	0.68	0.85
PBC	5	0.71	0.72	0.52	0.43	0.83	0.87
All Survey Items	21	0.91	0.92	0.92	0.88	0.91	0.87

Note. PIF is professional identity formation; SC is sociocultural; (α) is Cronbach's alpha; INT is intention; ATT is attitude; SN is subjective norm; PBC is perceived behavioral control

Noted here is that my pre-intervention survey yielded satisfactory internal consistency reliability for the overall survey and for the eight individual constructs I measured. My post-intervention survey yielded satisfactory internal consistency for the overall survey, but only for six of the eight constructs I measured. The alpha coefficients for the PBC constructs for both PIF and sociocultural factors were low, at 0.52 and 0.43 respectively. However, when I combined my pre- and post-intervention data, the alpha coefficients for the PBC constructs returned to satisfactory levels.

Survey Administration. I created and administered both my pre- and post-intervention survey instruments utilizing Qualtrics online survey software (Qualtrics, n.d.). I deployed my pre-intervention survey to participants upon receipt of their registration for the PD workshop. I reminded participants to complete the survey instrument through an email message I sent three days prior to the first PD workshop

session and through verbal communication during the first session. I closed the pre-intervention survey at midnight on the day of the first workshop session.

I distributed the post-intervention survey instrument at the culmination of all five PD workshop sessions, which was in June 2023 (see study timeline in Appendix B). I utilized two methods to distribute the post-intervention survey instrument to participants accordingly. First, at the conclusion of the fifth PD workshop session, I shared a link to the survey instrument with all participants in attendance, encouraging them to access and complete the survey instrument at that time, and no less than within two weeks. Second, I sent a link to the survey instrument via email to all PD workshop registrants requesting that they complete the survey instrument within two weeks. Two weeks after initial distribution of the survey instrument link, I sent two reminder emails to PD workshop registrants to encourage their completion of the survey questionnaire. I closed the survey three days after my final email request.

Survey Sample. I invited all participants who registered for and participated in the PD workshop to complete both the pre- and post-intervention survey instruments.

Interviews

Interviews are one of the most common types of qualitative data collection methods in MMAR (Ivankova, 2015). Interviews provide an opportunity for researchers to engage in in-depth explorations of participants' perspectives on and experiences as per most any research topic (Ivankova, 2015). Brinkmann and Kvale (2015) describe the interview as a method to help "understand the world from the subjects' [sic] points of view, to unfold the meaning of their experiences, to uncover their lived world" (p. 3). Through interviews, researchers are accordingly able to produce knowledge and elicit

information and interpret meaning (Brinkmann & Kvale, 2015). Thus, I utilized a post-intervention, semi-structured interview, which included, by definition, predetermined questions with optional follow-up or additional questions (Mertler, 2020). I used said methods to collect data to help me answer the qualitative, or *how*, aspects of RQ1 and RQ2.

Interview Protocol. My interview protocol included 12 open-ended questions that I asked of all interview participants. It also included some additional probing questions to help me expand upon the information elicited, if and as needed (Ivankova, 2015). In addition to my structured questions because, again, I was following a semi-structured interview approach, I asked follow-up or specifying questions to help clarify or expand upon participants' responses (Brinkmann & Kvale, 2015). As I did with my pre- and post-intervention survey instruments, I developed my interview questions to address my same eight constructs: INT, ATT, SN, and PBC for both PIF incorporation and sociocultural factor prioritization (recall Appendix E). Additionally, and as I also did with my survey instruments, I incorporated themes from other TPB-based interview protocols into my protocol (Dai et al., 2021; Kim & Oh, 2015).

I piloted my interview protocol with five PA faculty colleagues who were not recruited for participation in my official study. I essentially asked them to review the interview questions for clarity and to provide their general feedback on the protocol. In cases where there were overlapping themes in the feedback provided, I implemented revisions to the interview protocol. My semi-structured interview protocol that includes a total of 12 structured and 10 semi-structured questions is in Appendix G.

Interview Administration. In my post-intervention survey, I included an item asking survey respondents if they might be interested in participating in an interview after my intervention concludes. From the set of respondents who noted interest, I selected a purposeful sample (i.e., a sample intentionally selected based on the depth of information they may be able to provide on the research topic; Ivankova, 2015; see also more forthcoming) of seven participants with whom I conducted individual interviews via the online modality, Zoom (n.d.). I requested permission from participants to record the interview during the introduction portion of the interview protocol, as also indicated in the letter of consent (Appendix D). I recorded the interview using the Zoom record meeting function for each session, and I utilized a professional transcription service to transcribe the interview data for future data analyses. The length of the interviews ranged from approximately 22-37 minutes per interview.

Interview Sample. I utilized a two-step process when selecting participants for my interview sample. First, and as briefly stated prior, I utilized the post-intervention survey to identify participants willing and interested in being interviewed. Then, from this sample I purposefully selected seven participants to interview. I prioritized selection of participants as follows: 1) the participant attended all five PD workshop sessions; 2) the participant attended at least three of the PD workshop sessions; and 3) the participant contributed to demographic diversity amongst interviewees (e.g., gender, ethnicity, age, number of years working in PA education, PA program and/or geographic region). I prioritized high attendance in the PD workshop sessions for my interview participants because RQ1 and RQ2 were directly related to how the PD workshop influenced

behavior. Demographic diversity in my interview sample was also important given intersectionality was one of the theoretical frameworks that guided my study.

PD Workshop Exit Questions

Exit Questions. To address RQ3, via which I aimed to explore how participation in the PD workshop influenced PA faculty members' perspectives on professionalism in PA education, I utilized PD workshop exit questions at the end of each of the five sessions encompassing the PD workshop. I utilized the same three PD workshop exit questions at the end of each session. These questions were as follows: 1) List the factors you perceive to be most influential in the development of professionalism within PA students, 2) Please provide your current definition of professionalism as it relates to PA education, and 3) Briefly, please summarize your approach to teaching and assessing professionalism in PA education. Important to note is that while RQ3 was aligned with the theoretical framework of intersectionality, theory did not inform how I constructed these exit questions. Rather, theory informed how I analyzed the data and my coding processes (see more forthcoming), which were aligned with intersectionality theory and its associated intrapersonal, interpersonal, structural, and power differential constructs (recall Appendix E). Through these PD workshop exit questions, as such, I aimed to elicit rich qualitative data to help answer RQ3, while also evaluating trends in responses to these exit questions over time.

Exit Questions Administration. I created and administered the PD workshop exit questions utilizing open-ended text response items, also within Qualtrics online survey software (Qualtrics, n.d.). During the last five minutes of each PD workshop session, I provided a link to the three exit questions by way of a Qualtrics survey link,

and I encouraged participants to utilize the remaining five minutes to submit answers to the questions. My intent in administering the exit questions in this manner was to help me yield 100% response rates given I captured audiences at the end of each session.

Exit Questions Sample. I invited all PD workshop participants to complete the same exit questions at the end of each of the five PD workshop sessions.

Data Analyses

As previously mentioned, I followed a concurrent MMAR design for this study, completing quantitative and qualitative data analyses simultaneously, and I compared the results from these analyses to identify whether there were convergent or divergent findings (Ivankova, 2015). More expressly, as per Ivankova (2015), and to address RQ1 and RQ2, I utilized a combined mixed methods data analysis approach to compare quantitative results (i.e., survey instrument data) with qualitative results (i.e., open-ended items on survey instrument and participant interviews). As RQ3 was more of an exploratory question, I primarily utilized qualitative data analyses to evaluate the PD workshop exit question data; however, I also employed a merged mixed methods approach (Ivankova, 2015) by quantifying some of the qualitative data collected from the exit questions (see more forthcoming). The following sections summarize my data analyses for each of the three types of data I collected.

Surveys

After I finished collecting pre- and post-intervention survey data, I reviewed and prepared the data for analyses. On the pre-intervention survey, one participant did not respond to four of the ATT items on the PIF section of the survey and one ATT item on the sociocultural factors section of the survey. Consistent with how I addressed missing

data in the pilot survey, I utilized mean imputation methods by using this participant's responses to other items measuring the same construct to complete single imputations for the missing data (Mattei et al., 2011). The mean of other responses by this participant on these constructs was 7.0; therefore, I imputed scores of 7.0 for all missing data points.

I matched sample responses between the pre- and post-intervention data sets. Recall, I matched samples by having participants enter a unique ID at the beginning of the pre- and post-survey instruments. Thirteen participants were matched by using these unique IDs. Six participants did not have identically matching IDs, but I was able to match them by comparing the demographic data collected on both the pre- and post-intervention survey instruments. I was unable to match one post-intervention survey respondent with their pre-intervention survey data. This left me with n=19 paired samples.

Thereafter, I conducted descriptive statistical analyses of the demographic data and all other data that I collected from my survey instruments. These analyses were intended to help me better understand the sample of participants contributing to my findings and their responses at each point of my survey administrations.

I also calculated inferential statistics, namely by conducting a series of paired samples *t* tests to determine whether there were significant differences between the means of the items measuring these eight constructs before and after participation in the PD workshop (Salkind & Frey, 2020).

Regardless of whether there were statistically significant differences observed (i.e., p value < 0.05), I also computed effect sizes (Salkind & Frey, 2020). Per Salkind and Frey (2020), effect sizes are defined as measurements of the magnitudes of, in this

case of this study, the difference between two groups. This is an important and necessary measurement, because while statistical significance helps to show whether differences are due to, for example, interventions and not chance, effect sizes demonstrate whether said differences are practically meaningful (Salkind & Frey, 2020). Cohen's *d* effect size calculations of 0-0.2, 0.2-0.8, and greater than 0.8 are considered small, medium, and large effect sizes, respectively (Salkind & Frey, 2020). I conducted all statistical analyses using SPSS Statistics Software (IBM, n.d.).

Next, I analyzed the qualitative data gathered from the one, open-ended question that I included on both my pre- and post-intervention survey instruments, as well as the five open-ended questions that I included on only my post-intervention survey instrument (see Appendix F, questions 33-34 and 48-51). However, the responses I collected from questions 49, 50, and 51 on my post-survey instrument did not yield data conducive to deductive coding according to the intersectionality framework discussed above (see also more forthcoming in my results section forthcoming). More specifically, the first of these questions (i.e., 49) unexpectedly yielded nearly universal responses related to time and scheduling challenges; thus, I decided not to use or analyze the data yielded from this question. For question 51, my participants primarily reflected on their enjoyment of participating in the workshop, or they did not have additional comments to add; hence, such comments did not substantively contribute to my ability to answer my research questions, so I decided not to use or analyze these data either. As for question 50, the majority of the responses were not relevant to this framework; however, I unexpectedly identified themes that seemed consistent with the CoI theory I utilized when designing

my workshop. Accordingly, I will also discuss what I did learn from this item in my results section forthcoming.

Otherwise, for questions 33, 34, and 48, I followed a deductive coding method (Mihas, 2023) to complete my analyses of these three questions. This method is defined by Mihas (2023) and Bingham and Witkowsky (2022) as an analytical method whereby researchers are guided by an existing theoretical or conceptual framework based on a directed literature review. Rather than attempting to make new meanings out of researchers', or in this case my qualitative survey data, my goal was to determine how my data aligned with my existing intersectionality theoretical framework that guided my entire study (defined in detail prior). To conduct these analyses, accordingly, I started with a coding framework, as demonstrated in Figure 5 which, again, was informed by intersectionality theory (recall also Figure 2).

Figure 5

Coding Framework Based on Intersectionality

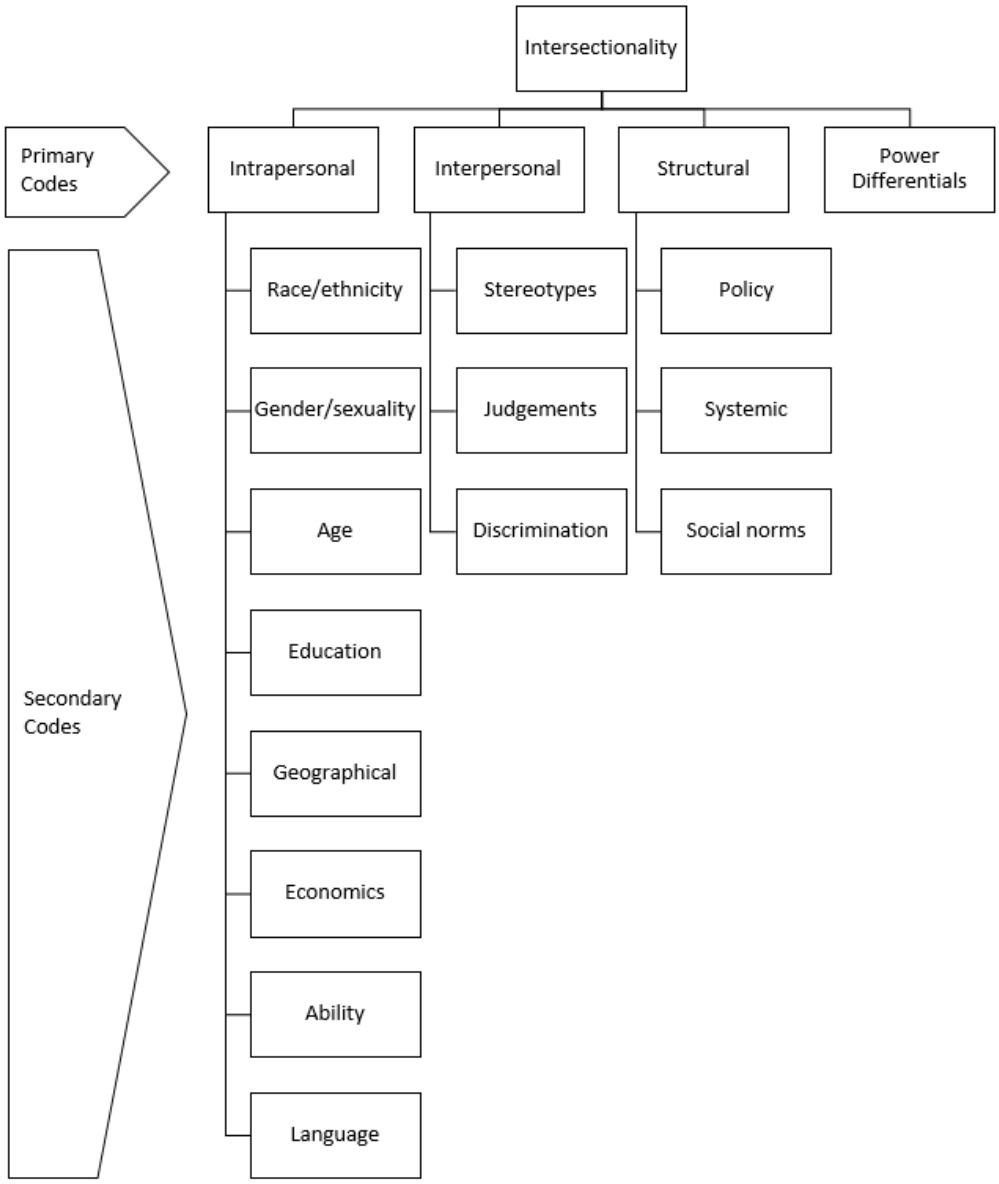


Figure 5 demonstrates the primary and associated secondary codes that I applied to my data through the process of deductive coding. I applied the intrapersonal code to responses that referenced student values or personal factors. I applied the interpersonal code to responses that referenced student interactions with others. I applied the structural

code to responses that referenced policy or professional or educational norms. And I applied the power differentials code to responses that referenced imposed expectations, mandates, adherence, or hierarchy.

I also found that most of my participant responses yielded applications of multiple codes. For example, one participant defined professionalism as "a PA's identity of his/her role as a medical provider including all interactions with colleagues, medical learners, other professionals, patients, and patient families." I coded this response with both the intrapersonal and interpersonal codes because this participant discussed both the personal role identification of a PA (i.e., intrapersonal) and how they interact with others (i.e., interpersonal) as components of this definition.

Another participant response, which I coded as both structural and intrapersonal, was that professionalism was to be defined as "having a shared set of goals and attitudes of the profession without losing one's own personal beliefs and values." I coded this as structural because the concept of shared goals and attitudes aligned with the concept of social norms, which contributed to the structural construct in intersectionality theory. However, I also coded this response with intrapersonal because of the reference to one's own personal beliefs.

Another example of a response I coded in multiple ways was with the power differentials construct whereby one participant's definition of professionalism was "a student's ability to abide by policies and procedures, meet academic standards and accomplish key milestones, and develop a personalized approach to their practice." In particular, the word "abide" in reference to policies, procedures, and standards determined for "a student" led me to determine that this response aligned with the power

differentials construct. Of note, I also applied intrapersonal and structural codes to this response due to the references to a "personalized approach to practice," and because of the reference to policies, procedures, and standards, which aligned with the systemic aspect of the structural construct.

Because my goal here was also to identify the extent to which intersectionality was visible within my participants' responses to my open-ended questions on my pre- and post-intervention survey instruments, I also quantified these qualitative data. I did this by first determining the total number of codes I assigned to each of the qualitative survey question responses. Then, I determined the absolute number of coded responses that corresponded with each of the four primary constructs (i.e., intrapersonal, interpersonal, structural, and power differentials) within my intersectional coding framework (see Figure 5). Lastly, I calculated the percent of total codes applied to each qualitative survey item that represented each of the four intersectionality constructs. As an example, for question 33 on my pre-intervention survey, I applied a total of 63 codes to the data. Thirteen of these 63 codes were coded as intrapersonal, which represented 20.6% of the total codes applied to question 33 (see more results forthcoming).

After I finished the process of coding my qualitative survey data, I also found that my data did not yield the degree of specificity that I had anticipated to be able to code to the secondary code level for all constructs (e.g., secondary levels of race/ethnicity, gender sexuality, under the primary intrapersonal code, see Figure 5). More explicitly, during my deductive coding process, I did not apply any of my secondary codes under intrapersonal to any of my participant responses, and I only applied the secondary code of judgements, under the interpersonal construct, once in all of my qualitative survey data. The structural

construct was the only construct I was able to consistently code to the secondary level of policy, systemic, and social norms. Therefore, as a result, I opted to analyze my qualitative survey data using only the four primary constructs of intrapersonal, interpersonal, structural, and power differentials noted above, again, in Figure 5.

Interviews

As previously mentioned, once my participant interviews were complete, I utilized a professional transcription service to complete verbatim transcription of my interview data. While awaiting receipt of the transcribed interviews, I listened to each of the recorded interviews to increase my familiarity with the data and to start the process of identifying key concepts shared by participants during the interviews. Upon receipt of the transcribed interviews, I listened to each recorded interview again, while I reviewed the transcripts to check for accuracy. I then entered the transcribed interviews into the qualitative analysis software, Dedoose (SocioCultural Research Consultants, 2016) to prepare for initial coding.

In contrast to the deductive coding method that I utilized to analyze my qualitative survey data (Mihas, 2023), for my analyses of my interview data, I followed a grounded theory method as an inductive method for discovering meaning in my qualitative data (Charmaz, 2014). Per Charmaz (2014), more expressly, I used a constant comparative method, which follows the process of first assigning initial codes, then using those initial codes to develop focused codes, and, finally, through further analyses of the data, developing emerging themes. The constant comparative method is an iterative process whereby qualitative data are analyzed segment by segment, with each new segment undergoing analysis being compared to previously analyzed data to continuously

re-evaluate the appropriateness of any assigned codes (Ivankova, 2015). Furthermore, my goal in analyzing my interview data was not to conduct case study analyses, in which I would complete an in-depth study of individual participants (Priya, 2021), but rather to integrate my interview data to conduct thematic analysis, or the identification of patterns (Lester et al., 2020), of my participants' responses in aggregate. Relatedly, this approach to my qualitative data analyses also aligned with my quantitative data analysis, via which I calculated my inferential statistics from the means of my matched samples data, or put differently, I utilized the means of my sample to compare my pre- and post-intervention data.

For my interview data, as such, I utilized the constructs INT (intention), ATT (attitude), SN (subjective norm), and PBC (perceived behavioral control), to facilitate my initial coding. I utilized these constructs because they had originally informed how I developed my interview protocol to address my RQs. As I was analyzing my participant interview data, I found that my codes were overlapping as I analyzed data related to intention to incorporate PIF (RQ1) and intention to prioritize sociocultural factors (RQ2). Thus, I identified several themes and sub-themes correlating with the constructs of INT, ATT, SN, and PBC that applied to both RQ1 and RQ2. Additionally, I found the data supporting the constructs of INT and ATT were overlapping which led me to develop emerging themes via which I was able to combine these data.

In conjunction with my coding procedures, I also used a methodological journal to engage in memo-writing (Charmaz, 2014) throughout the process of performing my qualitative analyses of my participant interview data. Per Charmaz (2014), memo-writing is a process whereby a researcher engages in early data analyses by capturing ideas about

the data in real-time by "conversing with [one]self about your data, codes, ideas, and hunches" (p. 162). I created a new memo after each segment of data that I analyzed. Prior to working on the next segment, I revisited my past memos to understand my prior codes and ideas, as well as any preconceptions or assumptions that I may have had about my data, to also help discover any emerging questions that may have changed how I engaged with my data.

PD Workshop Exit Questions

Recall that through RQ3 my aim was to understand how participation in the PD workshop influenced PA faculty members' perspectives related to professionalism in medical education. I used the theoretical framework of intersectionality to guide this work as well (recall Appendix E). As such, my qualitative data analyses of participant responses to each of the PD workshop exit questions was guided by the constructs associated with intersectionality, namely intrapersonal, interpersonal, and structural factors, as well as power differentials (i.e., the same as discussed and illustrated in Figure 5 above). I also analyzed the degree to which each of the four intersectionality constructs were represented in my participants' exit question responses after each subsequent PD workshop session.

More expressly, I entered the exit question responses from each PD workshop session into Dedoose (SocioCultural Research Consultants, 2016). I utilized the same deductive coding method that I used for my qualitative survey data (Mihas, 2023) described earlier to develop codes of my PD workshop exit question data. To conduct these analyses, accordingly, I started again with the same coding framework illustrated in Figure 5 and engaged in the same processes described prior, but this time within and

across my PD workshop exit questions. As also mentioned earlier, I quantified these data to determine the proportion of the data that represented each of the four intersectionality constructs for each set of the five sets of PD workshop exit question responses. I engaged in memo-writing using a methodological journal as I engaged in these deductive coding processes, as well.

Triangulation

In the final stage of my data analyses, I triangulated my quantitative and qualitative data to identify convergences and divergences in my research findings related to RQ1 and RQ2. Note that I completed triangulation of my data only for RQ1 and RQ2 as these research questions aimed to evaluate both the extent to which (i.e., quantitative) and how (i.e., qualitative) my PD workshop influenced PA faculty members intention to incorporate PIF into their professionalism curriculum (RQ1) and to prioritize sociocultural factors in their professionalism pedagogy (RQ2). As via RQ3 I aimed only to evaluate how (i.e., qualitative) participation in the PD workshop influenced PA faculty members' perspectives related to professionalism in PA education, I did not have quantitative data with which to triangulate for RQ3. To complete triangulation, more specifically, as per Ivankova (2015), I created triangulation matrices (see Appendix H), which helped me organize and align my quantitative and qualitative results with my research questions. This was an important final step in my analyses because, as per Mertler (2020), triangulation of data, particularly when the quantitative and qualitative data converge, helps to support the credibility of findings.

RESULTS

Surveys

Participant Demographic Data

Recall that I conducted descriptive statistical analyses of the demographic data collected from my survey instruments. Table 5 shows the demographic characteristics of my participants who completed the pre-survey instrument, post-survey instrument, and the matched samples data for participants who completed both the pre- and post-intervention surveys.

Table 5

Demographic Characteristics of Pre- and Post-Intervention Participants

Characteristic	Pre-Intervention *N*=28		Post-Intervention *N*=20		Matched Samples *N*=19	
	n	%	*n*	%	*n*	%
Age						
31-35	3	10.7	2	10.0	2	10.5
36-40	8	28.6	4	20.0	4	21.1
41-45	7	25.0	8	40.0	7	36.8
46-50	4	14.3	2	10.0	2	10.5
51-55	4	14.3	3	15.0	3	15.8
56-60	2	7.1	1	5.0	1	5.3
Gender						
Female	22	78.6	16	80.0	15	78.9
Male	6	21.4	4	20.0	4	21.1
Race/Ethnicity						
White or Caucasian	22	78.6	16	80.0	15	78.9
Biracial or Multiracial	3	10.7	3	15.0	3	15.8
Black or African American	1	3.6	0	0.0	0	0.0
Hispanic, Latino/a/x, or Spanish in origin	1	3.6	0	0.0	0	0.0
Other	1	3.6	0	0.0	0	0.0
No Response	0	0.0	1	5.0	1	5.3
Environment						
Large city	14	50.0	6	30.0	6	31.6
Suburban near a large city	9	32.1	9	45.0	8	42.1
Small city or town	4	14.3	4	20.0	4	21.1
Rural area	1	3.6	1	5.0	1	5.3
Native/Primary Language						
English	28	100.0	20	100.0	19	100.0
Disability						
No	27	96.4	19	95.0	18	94.7
Yes	1	3.6	1	5.0	1	5.3
Years of Faculty Experience						
0-1	7	25.0	4	20.0	4	21.1
2-4	3	10.7	3	15.0	3	15.8

Demographic Characteristics of Pre- and Post-Intervention Participants

Characteristic	Pre-Intervention *N*=28		Post-Intervention *N*=20		Matched Samples *N*=19	
	n	%	*n*	%	*n*	%
5-9	10	35.7	6	30.0	6	31.6
10-14	6	21.4	6	30.0	5	26.3
20-24	1	3.6	1	5.0	1	5.3
25-29	1	3.6	0	0.0	0	0.0
FTE						
1.0	27	96.4	19	95.0	18	94.7
0.8	1	3.6	1	5.0	1	5.3
Faculty Rank						
Instructor/Lecturer	1	3.6	0	0.0	0	0.0
Assistant Professor	17	60.7	13	65.0	13	68.4
Associate Professor	7	25.0	6	30.0	5	26.3
Professor	3	10.7	1	5.0	1	5.3
Title						
PA	26	92.9	20	100.0	19	100.0
MD	1	3.6	0	0.0	0	0.0
PhD	1	3.6	0	0.0	0	0.0
Years of Clinical Experience						
2-4	1	3.6	0	0.0	0	0.0
5-9	7	25.0	6	30.0	5	26.3
10-14	4	14.3	3	15.0	3	15.8
15-19	9	32.1	7	35.0	7	36.8
20-24	2	7.1	1	5.0	1	5.3
25-29	1	3.6	0	0.0	0	0.0
No Response	4	14.3	3	15.0	3	15.8

Participants ranged in age from 32-60 years of age, with the largest distribution of participants falling in the 41-45 years of age group. Most participants identified as female (78.9%) and White or Caucasian (78.9%). All participants reported being native English language speakers (100%) and one participant (5.3%) reported having a disability. Most participants identified the environments in which they had spent most of their life to be suburban and near a large city (42.1%); however, participants from a large city, small city

or town, or rural area were also represented in the sample at 31.6%, 21.1%, and 5.3%, respectively. All participants were PAs, nearly all (94.7%) had a 1.0 FTE faculty appointment, and most held the academic ranks of assistant (68.4%) or associate professor (26.3%). Table 6 shows participants' numbers of years of experience as faculty members and clinicians.

Table 6

Descriptive Statistics of Participant Faculty and Clinical Years of Experience (N=19)

	n	Min	Max	*M*	*SD*
Years of Faculty Experience	19	0	20	6.53	5.22
Years of Clinical Experience	16*	6	20	12.69	4.80

Note. *Three respondents did not answer this demographic item on the survey.

The participants' number of years of experience as faculty members were adequately distributed between 0-1 (21.1%), 2-4 (15.8%), 5-9 (31.6%), 10-14 (26.3%), and 20-24 years (5.3%), with the mean number of years of experience being 6.53 years (SD=5.22, *n*=19). Participants' number of years of clinical experience was also adequately well distributed between 5-9 (26.3%), 10-14 (15.8%), 15-19 (36.8%) and 20-24 years (5.3%), with the mean number of years of experience being 12.69 years (SD=4.80, *n*=16).

Quantitative Survey Responses

In Table 7, I present the descriptive statistical data for each of the constructs that I measured on my pre- and post-intervention surveys. More specifically, I included the means (*M*) and standard deviations (*SD*) for each of the constructs I measured with my survey items pre- and post-intervention, and the difference between the means (*M* Diff). Additionally, in Table 7, I demonstrate the *t*-test results with the corresponding degrees

of freedom (df) and statistical significance (*p*-value), and effect size coefficients (Cohen's *d*) for the differences in mean scores pre- and post-intervention for the constructs of INT, ATT, SN, and PBC as they relate to both incorporation of PIF into professionalism curriculum and prioritizing sociocultural factors within the professionalism pedagogy of participants' institutions.

Table 7

Statistical Data of Pre- and Post-Intervention Survey Responses (N=19)

	Pre-Intervention		Post-Intervention							
	M	*SD*	*M*	*SD*	*M* Diff	*SD*	*t*	df	*p*-value	Cohen's *d*
PIF-INT	5.86	0.90	6.18	0.98	0.32	1.42	0.97	18	0.17	0.22
PIF-ATT	5.95	0.77	6.14	0.69	0.19	1.14	0.72	18	0.24	0.17
PIF-SN	4.12	0.98	4.21	1.07	0.09	1.20	0.33	18	0.37	0.08
PIF-PBC	4.93	0.82	5.29	0.76	0.37	0.99	1.62	18	0.06**	0.37
SC-INT	5.81	1.03	6.00	0.67	0.19	0.70	1.18	18	0.13	0.27
SC-ATT	5.86	0.88	6.19	0.79	0.33	1.10	1.31	18	0.10**	0.30
SC-SN	5.11	0.95	4.76	1.11	-0.34	1.13	-1.31	18	0.10**	-0.30
SC-PBC	4.99	0.98	5.43	0.61	0.44	0.88	2.19	18	0.02*	0.50

Note. PIF is professional identity formation; INT is intention; ATT is attitude; SN is subjective norm; PBC is perceived behavioral control; SC is sociocultural
* $p \leq 0.05$
** $p \leq 0.10$

Illustrated in Table 7 is that the mean scores for seven of the eight constructs increased post-intervention compared to the pre-intervention means. The only construct mean score that decreased from pre- to post-intervention was the SC-SN construct. Recall that I constructed the SC-SN construct to measure participants' views of others (e.g., colleagues, students) regarding prioritizing sociocultural factors in the professionalism pedagogy of their institution. The decrease in the SC-SN construct may have, accordingly, indicated that the PD workshop highlighted for participants that SC factors

were not prioritized to the degree that participants thought prior to the intervention. I will explore this though more in my discussion (forthcoming), also given the results from when I triangulate my quantitative and qualitative data.

Otherwise, the only construct that yielded statistical significance between pre- and post-intervention scores was the SC-PBC construct (t_{18}=2.19, p<0.05); although, the PIF-PBC construct approached significance (p=0.06). I selected a statistical significance threshold of p<0.05 because this is a widely accepted threshold that indicates, in this case, my intervention may have been the reason for the observed change rather than chance (Dahiru, 2008). However, also as per Dahiru (2008), my small sample (N=19) may have impacted my ability to show statistical significance because small sample sizes frequently yield higher p-values. Related, some researchers have utilized higher p-values as a threshold for significance in small-N studies (Anderson et al., 2000; Thiese et al., 2016). If I used $p\leq0.10$, accordingly, three of my construct means, PIF-PBC, SC-ATT, and SC-PBC, would have been observed to have significantly increased, and the construct mean SC-SN would have still decreased, but at $p\leq0.10$, at a statistically significant level.

With that being said, to further understand the practical impact of my intervention I also calculated effect sizes. An effect size is utilized to determine whether observed changes in means are substantive. Put differently, effect sizes provide information about the actual or practical magnitude of the differences observed pre- and post-intervention, often regardless of but also in conjunction with statistical significance (Sullivan & Feinn, 2012; Salkind & Frey, 2020). Using the effect size categorizations that I previously outlined in my data analyses section, (i.e., Cohen's d effect size calculations of 0-0.2, 0.2-

0.8 and greater than 0.8 are considered small, medium, and large effect sizes, respectively; Salkind & Frey, 2020), I found that all measured constructs, except for the PIF-ATT and PIF-SN constructs, yielded medium effect sizes. Using the same categorizations, I determined the PIF-ATT and PIF-SN constructs yielded small effect sizes. I interpreted these effect sizes to suggest that the magnitude of changes in construct means when comparing post-intervention to pre-intervention data were meaningful, to varying degrees, for all of my measured constructs.

Given these findings, again, as derived via my quantitative data, I concluded overall that after participation in my PD workshop, participants' perspectives on their PBC for incorporating PIF into the professionalism curriculum significantly increased to a moderate degree. Additionally, and also as related to the PIF curriculum, my participants' perspectives related to INT moderately increased. To a smaller degree, participants' perspectives on ATT and SN increased. Additionally, in respect to prioritizing sociocultural factors, participants' perspectives on PBC and ATT significantly increased to a moderate degree, participants' perspectives on SN significantly decreased to a moderate degree, and participants' perspectives on INT moderately increased. Therefore, I was able to state with a decent-to-good level of confidence that my PD workshop contributed to my participants' changed (and predominantly enhanced) perspectives about their intentions to incorporate PIF into their professionalism curriculum as well as prioritize sociocultural factors in their professionalism pedagogy.

Qualitative Survey Responses

Recall that I utilized a deductive coding method guided by my intersectionality coding framework to analyze the qualitative data gathered from three of the six open-ended questions included on my pre- and post-intervention survey instruments, after which I then quantified my qualitative survey data. Also recall that for question 33 on my pre-intervention survey (i.e., about my participants' definition of professionalism), that the intrapersonal construct accounted for 20.6% percent of the total codes applied to responses to that survey item.

Indeed, the most frequently applied code in the pre-intervention survey, question 33, was structural (22/63 codes, 34.9%), followed by interpersonal (21/63 codes, 33.3%), intrapersonal, and finally power differentials (7/63 codes, 11.1%). This means that, pre-intervention, my participants most frequently defined professionalism with structural- and interpersonal-related factors, followed by intrapersonal factors. One example of a professionalism definition provided by one of my participants that I coded into the structural construct was that professionalism is a "set of behaviors, habits, routines, and attributes necessary for, and expected for, a physician assistant in their professional setting." I coded this statement into the structural construct because of the implied reference to social norms, but I also coded it into the power differentials construct because of the term "expected" within the statement. An example of a participant response that I coded into the interpersonal construct, because of its reference to interactions with others, but also into the structural construct, because of its reference to social norms and inferred rules, and into the intrapersonal construct, because of the reference to values and attitude, was that professionalism "refers to a broad set of

behaviors, values, and attitudes that students, and ultimately practitioners, are expected to exhibit in their interactions with patients, colleagues, and the wider healthcare community." Least frequently in my pre-intervention data did my participants incorporate power differential concepts into their definitions of professionalism.

This same item (i.e., question 33) in my post-intervention survey yielded an equal distribution of applied codes from the intrapersonal, interpersonal, and structural constructs (13/43 responses [30.2%] for each code), and the power differentials construct was the code that I applied least, again, to the data from this post-survey item (4/43 responses, 9.3%). This suggests that, post-intervention, my participants more frequently considered intrapersonal factors in their definition of professionalism as compared to in their pre-intervention data, and they equally considered intrapersonal, interpersonal, and structural factors in their definition of professionalism. An example of a participant response that I coded into both the intrapersonal and interpersonal constructs was that "professionalism is a set of attitudes, beliefs, and cultural norms that one aligns with in a personal setting and brings to a group setting." I coded this statement as intrapersonal because of the reference to personal factors, but I also coded it as interpersonal because it referenced how those personal factors are integrated with others in the same settings. An example of a participant statement that I coded into the structural construct, because of the implication that there are professional norms, was that professionalism "relates to PA education because *we* [emphasis added] are educating our students to be part of *our* [emphasis added] profession, which requires a high level of professional ideals and behavior." However, I also coded this statement into the power differentials construct

because of the hierarchical tone I interpreted in the statement which suggested a uniformly predetermined set of values and behaviors for the profession.

Recall that I only asked questions 34 (i.e., about how my participants' definitions of professionalism may have changed) and 48 (i.e., about changes my participants intended to make regarding teaching and assessing professionalism) on the post-intervention survey. My quantification of my qualitative data for question 34 demonstrated that I most frequently coded my data to the intrapersonal construct (8/10 responses, 80%) followed by interpersonal and structural constructs (1/10 responses [10%] for each code). Again, I did not apply the power differentials code to any of my data from question 34. Regardless, this means that the overwhelming majority of my participants referenced intrapersonal factors when describing how they perceived their definitions of professionalism changed after participation in the PD workshop. Here is one example of how a participant's response to question 34 fit the intrapersonal construct:

> I now see that it is more than just the interaction with patients and other providers, I realize now that this identity really begins from the onset of PA school and is greatly impacted by personal values and beliefs as well as sociocultural influences.

Exemplified in this statement, more specifically, is how this participant perceived that the PD workshop helped to transform their definition of professionalism to now include personal factors.

As for question 48, akin to question 34, I most frequently assigned the intrapersonal code to my participant responses to this survey item (10/20 responses,

50%). The next most frequent code I assigned was structural (5/20 responses, 25%), followed by power differentials (3/20 responses, 15%) and lastly, interpersonal (2/20 responses, 10%) codes. Taken in context with the rest of the data, these codes, or rather their frequencies suggested that most of my participants intended to make changes related to how intrapersonal factors might be included in the pedagogy of professionalism within their institutions. One such example of my participants' intentions to make curricular changes related to intrapersonal factors was most clearly demonstrated in one participant's response, that they "would like to take a more individualized approach to professionalism and how [they] might mentor or coach a student when they are struggling with faculty expectations of professionalism."

An example of a participant response that I coded as structural was my participant's intention for "enhancement of the definition of professionalism within [their] handbook [and] increased in-classroom learning and development of professional identity and professional behaviors." I coded this statement as structural because it suggests that changes to professionalism teaching and assessment would include changes in policy, but I also coded it as intrapersonal because of the reference to including professional identity development to how professionalism is taught and assessed, which in and of itself is a personal formation process.

Interestingly, although I applied three power differentials codes to these same data from question 48, one of the codes actually had a negative connotation associated with the construct of power differentials, with the participant indicating they would have "more dialogue with colleagues around what is professionalism, what biases we bring to this, and gathering more stakeholder feedback." I coded this response to power

differentials because the participant was reflecting on how biases are related to teaching and assessing professionalism; however, given the intent of my participant's statement, it is clear they were not endorsing concepts related to power differentials. Thus, the 15% of codes, for question 48, that I assigned to the power differentials code may have been falsely elevated.

In sum, from my participant responses to my open-ended survey items, I concluded that after, and perhaps because of, participation in my PD workshop, my participants more frequently considered intrapersonal factors in their definitions of professionalism, and changes they intended to make regarding how they teach and assess professionalism were most frequently related to how intrapersonal factors are incorporated into the professionalism pedagogy.

As also mentioned previously (i.e., in my data analyses section), I did not analyze my data from Question 50, regarding the strengths of the PD workshop, in the same manner as my other data collected from my qualitative survey items. However, I found three additional findings, related to those above, important to add here. First, I found that many of my participants appreciated the ability to connect, engage, and collaborate with peers over the course of the PD workshop, with feedback indicating that they enjoyed hearing others' perspectives throughout their engagement in this study. Second, regarding structure, my participants indicated the way in which educational material was revealed within and between PD workshop sessions was helpful as was the style of my facilitation, and the mediums via which I deployed the sessions (i.e., Zoom sessions with break out rooms for small group discussion). Finally, regarding content, my participants indicated the articles that I selected for the PD workshop, as well as the topics discussed during

each PD workshop session were relevant, thought provoking, and enjoyable. These additional findings all related to my use of CoIs (i.e., communities of inquiry), as per my CoI theory described in detail (i.e., in my Theoretical Frameworks section), that I utilized to design my PD workshop around social, cognitive, and teaching presence (Garrison et al., 1999; see also Figure 3). Accordingly, I concluded here that utilizing CoIs as to frame my study, as well as the actions within my study were, indeed, effective strategies for effecting changed perspectives on the goals and objectives behind and driving my research questions.

Interviews

Recall that I utilized a constant comparative coding method as I analyzed my interview transcripts to develop initial codes, focused codes, and emerging themes from my participants' interview data. I ultimately derived five primary themes via my interview data categorized as follows: 1) intention and attitude, 2) perceived behavioral control, 3) subjective norm, 4) PIF definition and perspectives on professionalism, and 5) impact of workshop. Table 8 demonstrates the emerging themes I identified in my interview data, organized by the aforementioned categories and correlating RQs.

Table 8

Emerging Themes Identified in Interview Data

Category and RQs	Theme and Sub-Themes (if applicable)
Intention and Attitude (RQ1, RQ2)	1. Inclusive learning environments that promote diversity and belonging a. Potential to contribute toward cultural uplift by addressing exclusionary elements in medicine. b. Reiteration of the role sociocultural factors have on professionalism 2. Declared intention to add PIF and prioritize sociocultural factors in curricula 3. Vehicle for individualized professionalism mentorship, growth, and transformation 4. Enhanced interpersonal relationships
Perceived Behavioral Control (RQ1, RQ2)	1. Modification of existing curriculum 2. Challenges related to new curricular innovation and development a. Competing time and work demands 3. Concern for lack of support and buy-in 4. Acknowledgement of supportive entities
Subjective Norm (RQ1, RQ2)	1. Immediate network of peers value and prioritize PIF and sociocultural factors 2. Generational and historical approaches to professionalism have not included PIF nor prioritized sociocultural factors 3. Rigid perspectives on professionalism are still pervasive in PA education
PIF Definition and Perspectives on Professionalism (RQ3)	1. Baseline professionalism standards should exist 2. PIF is how one thinks, acts, and presents oneself as a PA 3. PIF is influenced by environment and individual backgrounds and experiences 4. PIF is a continuous process
Impact of Workshop (RQ1, RQ2, RQ3)	1. Inspired a modified perspective on professionalism pedagogy 2. Contributed to new or transformed knowledge related to PIF 3. Inspired critical inquiry regarding PIF and professionalism 4. Led to appreciation of the pedagogy underlying PIF

Intention and Attitude

First, as illustrated in Table 8, within the category of INT and ATT, I identified four primary themes that helped me define participants' perspectives on the incorporation of PIF curriculum and participants' prioritization of sociocultural factors in their professionalism pedagogy (RQ1, RQ2) as follows (with more forthcoming): 1) inclusive learning environments that promote diversity and belonging, with sub-themes 1a) the potential of inclusive learning environments to contribute toward cultural uplift by addressing exclusionary elements in medicine and 1b) regarding the reiteration of the roles that sociocultural factors may have on professionalism; 2) participants' declared intentions to add PIF and prioritize sociocultural factors in their future professionalism curriculum (hereafter, unless stated otherwise, "curriculum" includes teaching and assessment); 3) participants viewing PIF curriculum and prioritization of sociocultural factors as a vehicle for individualized professionalism mentorship, growth, and transformation; and 4) participants extrapolating that incorporating PIF curriculum and prioritizing sociocultural factors in professionalism curriculum will lead to enhanced interpersonal relationships. Each of these themes and subthemes are described in more detail, with evidence, next.

Inclusive Learning Environments that Promote Diversity and Belonging. The first theme, inclusive learning environments that promote diversity and belonging, I defined as learning environments in which all students, from diverse backgrounds, feel included and have a sense of belonging within their programs and institutions. This definition is, perhaps, best demonstrated through one participant's reflection about how historical approaches to professionalism curricula, defined as being focused on

behavioral aspects and role-modeling, “may not be the best method. May have intentionally or unintentionally been focused on certain groups and may not be effective for all, all people.” This participant seems to have perceived an exclusionary element to the historical implementation of professionalism curricula within medical or PA education and saw a need for more inclusive educational approaches.

Another participant, when expanding upon why they would want to integrate PIF into their curriculum, stated “I think students might feel more included and less apt to hide certain aspects of their personality.” This participant further explained “I would hope that by highlighting more professional identity, but also personal identity, and trying to successfully merge [professional and personal identities] without suppressing some components of that [their personal identity] would help people feel more included in the class, maybe less imposter syndrome.” Clear here is that this participant reportedly believed some PA students feel excluded and do not have a strong sense of belonging in their program. Concurrently, my participant viewed integration of PIF into their curriculum as a potential solution to this problem.

A third participant added that it was important to incorporate PIF into the curriculum because “to be able to hear somebody else's story…may help me be more understanding to somebody else's professional formation identity [sic] and how they perceive themselves.” Here, this participant seems to have underscored how incorporating PIF into the curriculum may help them (and others) be more inclusive in how they approach students’ professional development.

Another participant stated that incorporating PIF into the curriculum “would allow the students to be able to develop their professional identity…with more

awareness… reconcil[ing] [their professional identity] with their own personal background and thoughts and ideas about [how] their professional identity [was] going to impact also [sic] their personal identity." Here, again, this participant described that the incorporation of PIF curriculum may better allow them (and others) an increased sense of belonging because students could more freely integrate their personal and professional identities.

Lastly, another participant reflected on how PIF curricular efforts may have impacts beyond educational settings stating that "diversity can look a lot of different ways, but I feel like everyone having their own professional identity formation process, and *different* [emphasis added] identities, only diversifies the workforce once they get beyond the program." I interpreted this to mean that having a more inclusive approach to professionalism curricula with the incorporation of the concept of PIF could lead to increased diversification of the profession.

In sum, these responses suggest that my participants had a positive attitude regarding incorporating PIF into their professionalism curricula, and they especially perceived there to be much value related to potential improved inclusion and sense of belonging for PA students if such incorporations of PIF curricula were to occur within and across the entirety of the PA education process.

One of the sub-themes I identified under this major theme was about the potential for inclusive learning environments to contribute toward students' abilities to engage in cultural uplift, which I extrapolated from the concept of racial uplift (Wyatt et al., 2020) and defined as the sense of responsibility one feels to give back to their own community and to support members of their own community in achieving similar professional goals

as one's own achievements. I interpreted my data to suggest that prioritization of sociocultural factors within professionalism curricula would support cultural uplift by such prioritization helping to address historical exclusionary elements in medicine (e.g., dress codes that are not inclusive of diverse cultural backgrounds or attendance expectations not reflecting diverse family backgrounds and obligations). Evidence supporting the extent to which a professionalism curriculum via which people prioritize sociocultural factors may lead to UiM (i.e., underrepresented in medicine) students encouraging members of their communities to pursue PA education was demonstrated in the following quote:

> …one of the things that happens in professional identity is the individual has to meld their previous support system with their new medical support system. And the whole goal of our program is we try to recruit underrepresented minorities and economically disadvantaged individuals who then go back and practice in their communities. And if these individuals, our graduates, go back and tell their community members about their experiences, I think it's only going to help encourage other members of that community to want to come to a program where they feel as supported.

What seems clear here is that this participant believes that the concomitant incorporation of PIF curricula and the prioritization of sociocultural factors may better create inclusive environments for students of diverse backgrounds, and subsequently encourage those same students to encourage members of their own communities to also want to pursue educational endeavors in similar environments.

A similar sentiment was expressed by another participant in the following statement as they reflected on the relationship between their program's goals and prioritizing sociocultural factors in their professionalism curriculum:

> …those two things would be very closely aligned because…some of our main goals are to be diverse and inclusive of people from multiple backgrounds. And we have a mission to have first generation college students and people from backgrounds that maybe traditionally aren't or don't have as much access to education and advancing into the healthcare field…We don't want to take them out of their background and put them somewhere else…We want them to bring that with them into the profession in order to reach a more diverse group of people.

This response suggests that this participant believed that an inclusive educational environment allows for PA students, and accordingly future PAs, to more effectively engage in more cultural uplift.

Another participant reflected on applicants to the program who come from medically underserved areas and how they often express "that's where they want to go back and practice when they graduate…they want to give back to their community…show that an underrepresented minority in medicine can become a PA or work in medicine," underscoring the need for PA educators to facilitate a learning environment that will allow PA students to engage in the cultural uplift they indicate they value even prior to the time of their acceptance into a PA program.

In sum, all of this suggests that prioritizing sociocultural factors in the context of a professionalism curriculum that incorporates PIF will better support students in their

endeavors to give back to their communities and potentially inspire other members of their communities to believe in their ability to pursue the PA or medical profession.

The other sub-theme, about the reiteration of the role sociocultural factors have on students' developing their professionalism or, more specifically how their personal background and factors might contribute to their behaviors and values related to professionalism, was supported through the following statement offered by another participant:

> I think that [sociocultural factors are] something that [need] to be considered when you're instituting teaching about professionalism because I think that different cultural, ethnic, or socioeconomic backgrounds definitely influence how people view professionalism and what that might mean for them. And so I think when you institute teaching or training about what professionalism is, you have to consider a person's background to know if they're one, even going to understand what you're trying to teach in the sense that they may not see what you're saying is either professional or unprofessional. As it may be the opposite to them based on the background that they grew up with. So I think it's something that you have to consider and be cognizant about when you are going to institute any type of teaching about it.

Here, this participant is explaining that different cultural backgrounds may influence how individuals perceive their own professionalism, which directly impacts how they interpret professionalism curricula and program and institutional expectations as related to students' professionalism in PA education.

Similarly, another participant discussed their intention to incorporate sociocultural factors into their PIF pedagogy, explaining the importance for students of "self-exploration in the beginning to understand their own values, their own beliefs…to identify things that may be different from what they're used to…to identify things that may be difficult for them in terms of professional identity." This participant seems to have recognized that to effectively develop a professional identity, students need to be able to integrate their personal identities, including any relevant sociocultural factors, into their developing professional identities early in their educational programs of study.

Another participant explained that sociocultural factors also play an important role in teaching and assessing professionalism because "everybody's going to come with a different potential socioeconomic cultural background that is going to shape how they learn or how they perceive information." Here, this participant explicated how students' sociocultural backgrounds may influence their educational experiences because these personal factors contribute to how professionalism curricula is perceived.

Lastly, another participant expressed gaining awareness as to how much learners' sociocultural backgrounds "offer and how much they can bring their stories and where they're coming from for us to better understand all the different patient populations that we're going to be serving; not only our students as future providers, but various different patient populations." This participant seemed to have been reflecting on the importance of sociocultural factors being prioritized in the curricula because of the net benefit that such prioritization could have on future professional interactions with patients of diverse backgrounds.

In sum, my interview data helped me to address RQ1 and RQ2 as findings that I constructed from these data (and other data not included above) indicate that my participants perceived that adding PIF and prioritizing sociocultural factors in their professionalism curricula at their respective institutions would contribute to more inclusive learning environments that better promote diversity and belonging, especially among students of diverse backgrounds (e.g. UiM). Participants' perceptions also indicated an overall positive attitude toward how incorporating PIF curriculum and prioritizing sociocultural factors facilitated the development of inclusive learning environments. Likewise, since attitude is correlated with intention (Ajzen, 1991), I can presume my participants are likely to incorporate these concepts into their curricula.

Further, these interview data provided insights into why participants may have had a positive attitude about incorporating PIF curriculum and prioritizing sociocultural factors in the sense that such actions help to contribute to cultural uplift and emphasize the correlation between sociocultural factors and how professionalism is perceived and enacted. The next theme I present helps to further explore my participants' reported intentions to add PIF into their professionalism curriculum and prioritize sociocultural factors within their professionalism pedagogy.

Declared Intention to Add PIF and Prioritize Sociocultural Factors in Curricula. The second theme that emerged under my INT and ATT category was that my participants expressed a declared intention to add PIF and prioritize sociocultural factors within their professionalism curricula. I determined this to be a theme because my interview data overwhelmingly included statements from my participants declaring their intention to both incorporate PIF into their professionalism curricula and prioritize

sociocultural factors within their teaching and assessing of professionalism. One example of such a statement was offered by a participant who stated, “I think that we find it important to try to help students understand different backgrounds…and how it's going to factor into how they may be perceived…and I think we do plan to incorporate [prioritization of sociocultural factors] into our program.” Here, this participant was expressing that their program’s prioritization of student appreciation and understanding of diversity would be a reason for intending to prioritize sociocultural factors within their professionalism curricula.

Another participant indicated their intention to add sociocultural factors into their curricula stating:

> I think that is something that can affect so many people…that could be almost like the level playing field or that commonality amongst the students that would, I think, help to kind of bring them together also, and also learn about each other's struggles, work with each other, and see how their peers handle certain things or interact with certain people because of those experiences. So yeah, I think that's really important for everyone.

Additionally, this same participant, regarding PIF stated “I think I'd like to tell them about professional identity formation and how we feel that's important.” This participant further explained, “I myself as a faculty want to take a different role in how I address professionalism issues.” Evident from this participant’s statements is that they viewed the prioritization of sociocultural factors as a mechanism for unifying their students, and that they would like to incorporate the concept of PIF into how they address lapses of professionalism that arise within their program.

For transparency, I also want to highlight that there was one participant who expressed acknowledging the importance of prioritizing sociocultural factors in their professionalism curriculum, but they also indicated they had other higher priorities, stating “it's on the list of important things. I don't know if it's at the top of the list of important things. So, will it be number one? Probably not, it's probably farther down the list after learning all the other didactic curriculum material that [students] need.” This suggests that although this participant viewed the topic as important, they did not intend to prioritize it over other curricular endeavors.

In sum, despite one participant expressing an alternate perspective, my interview data within this theme clearly indicated participants’ intentions to incorporate PIF and prioritize sociocultural factors within their curricula. Again, given intention is a construct closely aligned with predicting behavior (Ajzen, 1991), this indicates there is high likelihood that my participants might actually act on their intentions to make these changes to their professionalism curriculum.

Vehicle for Individualized Professionalism Mentorship, Growth, and Transformation. The third emerging theme I identified within my INT and ATT category was that my participants identified the incorporation of PIF into their professionalism curricula as a vehicle for supporting individualized professionalism mentorship, growth, and transformation of their students. Several participants expressed that the concept of PIF could allow for individualization of professionalism feedback for students, exemplified by one participant’s statement who said, “I really want to make [professionalism] more individualized… try to understand if there's something about how [students’] acting or behaving or interacting with somebody that may be a part of their

culture, their past experiences…I want to get *their* [emphasis added] perspective." This participant further explained,

> Then I want to try to help either coach or mentor [my students as to] why or why not [their actions or behaviors] might be something to continue to do or not to as a way to help mold and form that [professionalism] rather than just me barking at them and telling them that's not appropriate; that's not professional. I think that will help them to take a little bit more ownership in how they act as a PA or as a professional and as a provider.

These statements suggest that this participant viewed integration of PIF into their approach for teaching and assessing professionalism as a mechanism that would allow for their own improved understanding of their students' perspectives on professionalism. Accordingly, they further indicated that improved understanding of their students' perspectives would allow for more meaningful mentorship of their students as related to professionalism development.

Another participant expressed the importance of "letting students know that [PIF is] not just for them, that it's for all of us and that it's something that [students are] going to continue to experience as they grow as professionals." This participant indicated that they viewed their own PIF process as a vehicle for demonstrating to students that professional growth is an ongoing endeavor. This same participant added "there's certain things that are like, yes, this is professional and that is not professional, but there's so much of that gray space in between and [PIF provides] that room for personal[ized] growth." Clear here is that this participant viewed PIF as a mechanism for individualized mentoring of students regarding their professional growth, and they determined it would

be a particularly useful method for teaching and assessing professionalism when encountering situations in which there may be discrepant views on what defines professionalism.

A third participant stated that the PIF process "allows you to take a look at how that [professionalism] is occurring…what potentially positive impacts and what negative impacts are happening as a result [of the professionalism curricula]…I feel like you can then make changes based on what you've seen in order to hopefully make it a more beneficial process." Evident in this statement is that this participant valued consciously acknowledging the PIF process as an important element of the professional transformation process that occurs in students during PA school.

In sum, my interview data for this theme, and the theme I introduce next, provided further explanation as to why participants expressed positive attitudes regarding the concept of adding PIF and prioritizing sociocultural factors into their professionalism curricula. As demonstrated, my participants placed high value on individualized approaches for mentoring students through their growth and transformations into professionals. As will also be discussed below, my participants also identified incorporating PIF and prioritizing sociocultural factors as being important contributors to PA students' enhanced interpersonal relationships.

Enhanced Interpersonal Relationships. The final theme I identified within the INT and ATT category was that incorporating the concept of PIF and prioritizing sociocultural factors within the professionalism curricula of PA programs could have the potential to lead to enhanced relationships between and among the individuals with whom students currently and, in the future, will interact in their role as a PA. Many

participants extrapolated that focusing on incorporation of PIF curricula and prioritization of sociocultural factors could be a means to improved relationships with classmates, teammates, future patients, and interprofessional colleagues. This theme was demonstrated through several statements. One participant stated PIF "includes not just the way that you practice medicine and treat your patients, in addition to being competent and being able to deliver compassionate care, it's the way that you treat everybody else around you." In this statement, this participant explained that they perceived a defining characteristic of PIF as being related to how professionals treat others in their interactions. Other participants explained that PIF is "what helps you grow as a professional and learn to treat and care for your patients" and what "helps [PAs] to interact with their patients, their colleagues, [and] their peers." Clear here is that PIF was viewed by study participants as a tool for supporting high quality relationships with patients and professional teammates.

Related to the prioritization of sociocultural factors in the teaching and assessing of professionalism, one of my participants expressed that "I think it opens up the door to…understanding the uniqueness of everyone that we're involved with: different facilities, different patients, different colleagues, all of that." This suggests that prioritizing sociocultural factors within the professionalism curricula could facilitate improved understanding of the institutions and individuals that students will interact with now and in the future. Another participant stated that "we feel that having a diverse class or a diverse workforce that's part of this whole formation process…can only benefit patients." This suggests that prioritization of sociocultural factors will contribute to diversity in the PA workforce, which will subsequently improve the patient experience.

To summarize, my interview data supported the theme of enhanced interpersonal relationships in that my participants perceived PIF and sociocultural factors being integrated into the professionalism curricula as a means to positively influence PA student relationships with all people with whom they will interact in their role as a PA. Again, a positive attitude corresponds with increased intention to perform a behavior, helping to address RQ1 and RQ2.

Perceived Behavioral Control

Within the category of PBC, as illustrated above in Table 8, I identified four primary themes that defined participants' perspectives on their perceived control over incorporating PIF curriculum and prioritizing sociocultural factors within their professionalism curricula (RQ1, RQ2). These themes are as follows: 1) modification of existing curriculum as an approach to incorporate PIF and prioritize sociocultural factors; 2) identification of challenges related to the development of new or innovative curriculum, with one sub-theme 2a) competing time and work demands; 3) a concern for lack of support and buy-in regarding the incorporation of PIF into the curriculum and the prioritization of sociocultural factors related to teaching and assessing professionalism; and 4) acknowledgement that there are entities that would be supportive of curricular changes that incorporate PIF and prioritize sociocultural factors in professionalism curricula. Each of these themes and subthemes are described in more detail, with evidence, next.

Modification of Existing Curriculum. My first theme that I constructed under the category of PBC was related to the ease with which my participants felt they would be able to incorporate and prioritize PIF and sociocultural factors into their curricula.

Regarding their sense of ease, my participants had varying responses. Participants who recognized that modifying already existing curricula as an approach to include PIF and prioritize sociocultural factors in their professionalism curricula seemed more optimistic about their PBC. As an example, one participant indicated "we could incorporate [PIF] into…that [which] we already do based on our medical simulations. And so it wouldn't take a lot to incorporate [PIF] or add [PIF] to what we're already doing. It would take minimal effort." This same participant also indicated that students "do participate in some lectures and some activities [related to sociocultural factors] that we already have incorporated. And so it wouldn't be a stretch to mold that, or change it, or expand it to the extent that we needed." Another participant similarly acknowledged, "the easiest low-hanging fruit would be to see if we couldn't modify what we're already doing." In all the above statements, it is clear participants determined the easiest way to include the concept of PIF and address sociocultural factors in professionalism curricula would be to modify curricula that already exists.

In sum, some of my interview data, as exemplified above, suggested that my participants had a high level of PBC for adding PIF and prioritizing sociocultural factors into their curricula, meaning that they determined they had control over their ability to make these changes and, further, the changes seemed feasible to make. PBC is related to intention to perform a behavior (Ajzen, 1991); thus, the above data help to answer RQ1 and RQ2 as to participants' intention to make these curricular changes. However, in contrast to the above data, and as discussed below, some participants had lower levels of PBC as they identified challenges related to making such curricular changes.

Challenges Related to New Curricular Innovation and Development. The second theme that emerged within the PBC category was related to the challenges participants felt they may encounter when trying to incorporate PIF curricula or prioritize sociocultural factors within their professionalism curricula. While several potential challenges were identified, the primary challenge, and thus a sub-theme that emerged, was related to competing time and work demands. One participant stated, "I think that it's really just the time and figuring out where to start and how to get there…[These] are the two biggest things." This participant further expressed "it's the time to sit down and focus on what we've been doing, what we want to do, and then figure out how to get there. Just like everything in PA education, I think there's just not enough hours in the day." Evident here is that a challenge to developing new or innovative curriculum related to PIF and sociocultural factors is that faculty may not have enough time to, first, actually develop the curricula, and second, determine how to implement the curriculum. Another participant stated:

> My biggest challenge…in my particular role…[is that] every day looks a little different...so, many times there are things that get pushed aside because of something that's going on in the clinical realm that needs to be handled... So, I can see that also as being a barrier or challenge as I've set aside this time to work on this project or to…look at resources or tools or planning, and it just needs to be put to the back burner because there's other more urgent things that needs to be addressed that day.

This participant seemed concerned that the specific job responsibilities associated with their unique position in the PA program would make it difficult to find time to implement new curriculum, even if they were to set aside time to undertake such a project.

In addition to time demands, other data supporting the main theme included some participants' statements in which they expressed challenges related to not having the knowledge to effectively implement such changes within their program. One participant explained "there's probably a sense of not knowing where to start or knowing that there needs to be change, but not really knowing or having the bandwidth to address that change right now." This participant also posed the question: "How do you develop or…incorporate that into a curriculum over a longer period of time? I don't know." Clear here is that this participant, while in support of making curricular changes related to PIF and sociocultural factors, did not have confidence in their ability to effect those curricular changes.

Another participant stated that "to expand upon [PIF], I think as faculty members we need to understand what that means and what our goals are and what our expectations are going to be for that moving forward." This participant seemed to be indicating that more faculty development would be necessary to effectively make curricular changes related to PIF and sociocultural factors in professionalism curricula.

Similarly, another participant stated the biggest challenge was "probably just a personal challenge of not feeling confident and feeling like I want to make sure that I am appropriate in what I'm saying and appropriate in what I'm doing and that I'm meeting everyone's needs." This suggests that this participant lacked confidence in their ability to fully integrate the topics of PIF and sociocultural factors into their curriculum.

Finally, another participant stated "one of the biggest challenges is even if you want to [make curricular changes], how are you going to do it? And how are you going to do it in a way that is actually inclusive of those things [e.g., sociocultural factors] and not just based on *your* [emphasis added] perception or historical idea of what that [professionalism] is?" This participant added:

> …even until recently my perception of [professionalism], whether conscious or subconscious, was that it really is the same for everybody. And that that's [sic] how you teach it. It's like, this is how you be professional and regardless of your background, this is how everybody should be when they leave school or start their profession. So, I feel like…the most challenging [part] in general, [is] just to be able to sort of acknowledge that [preconceived perspectives on professionalism exist], and then get beyond that to try to get a better understanding of how actually to include [sociocultural factors] in teaching about professionalism.

Through these particular statements, it was evident this participant was concerned about prioritizing sociocultural factors in the teaching and assessing of professionalism in an inclusive manner, while they were also acknowledging how implicit biases may influence how PIF and sociocultural factors could be implemented and prioritized within professionalism curricula. Another challenge that participants discussed related to concerns that there would not be support or buy-in to make curricular changes, but this challenge was predominant enough in the data that it emerged as its own theme, which I discuss in more depth next.

Concern for Lack of Support and Buy-In. Another theme I identified in my PBC category was that my participants were concerned about there being a lack of

support and buy-in from various entities for their incorporation of PIF and prioritization of sociocultural factors in their professionalism curricula. One participant stated a challenge to implementing such curricular changes was:

> …students not wanting to participate. That's a hard thing sometimes, getting them to see the importance of, in the midst of a fast-paced curriculum, they're like, 'This? You're going to make me do a reflection? You're going to make me participate in this discussion? I need to be learning my clin[ical] med[icine] topics. That's what's actually going to get me to pass my boards.'

This participant was clearly concerned that there might be a lack of student buy-in, effectively creating a challenging environment for implementing curricular changes related to PIF and sociocultural factors. Concern about student buy-in was reiterated by another participant who stated some students are "really interested in the science and the medicine and they'll think of [PIF curricula] as maybe it's just a soft exercise or assignment or it's not as important…that's probably one of the biggest things I would see as a potential struggle."

Another participant stated:

> The commonly held or historically held idea of what professionalism is and then changing or altering the view of that, I think would be really challenging. And so I think that some people would...I think it would be really challenging to change some people's perception of that. So depending on if you had to do that with someone who is very staunchly in disagreement with those types of changes, I think would be one of the biggest challenges.

In this statement, this participant was expressing concern over the ease with which a new perspective on professionalism would be adopted by other members of the faculty.

Illustrated in this and the previous section, as such, is that most of my participants, in addition to the high PBC they expressed as it related to modifications of existing curriculum, also indicated low levels of PBC for incorporating PIF and prioritizing sociocultural factors in that they identified competing time and work demands that could interfere with implementation, and they expressed concern about support and buy-in by key constituents. Low PBC can negatively influence intention to complete a behavior (Ajzen, 1991); however, via my last theme in my PBC category, discussed next, I identify additional factors that contribute to higher levels of PBC related to incorporating PIF and prioritizing sociocultural factors.

Acknowledgement of Supportive Entities. In this section, I present interview data that, interestingly, supported another emerging theme within the PBC category, that participants expressed they would have support in their endeavors to develop or innovate professionalism curricula to incorporate PIF and prioritize sociocultural factors. This theme competed with my previously discussed theme about my participants' concerns that there would be lack of support for such endeavors. Conversely, my participants identified several different entities that would support the development of PIF curriculum and prioritization of sociocultural factors, ranging from colleagues, to program leaders, to university leadership. One participant stated, "I think that at least the other faculty in our PA program for the most part, I think would be very open to considering changes that would include professional identity formation in our curriculum." Clear here is that this

participant seemed to think their direct peer group would be supportive of curricular changes related to the concept of PIF being incorporated into the curricula.

Another participant stated, “I definitely think our program director supports what we want to do individually and collectively within our courses.” This suggests that creative freedom in teaching would provide the needed support to make curricular changes in reference to PIF and sociocultural factors.

Another participant stated, “I also think, probably, our university Office of Diversity, Equity, and Inclusion would also be kind of a champion” of this, suggesting they would be supported from entities outside of their program.

Other interview data also pointed toward support coming from entities outside of participants’ own institutions. As an example, one participant stated that “it's not necessarily advocates, but resources…using our colleagues nationally…with strategies if we're running into barriers, or if there's something that we need, because it's amazing how much is out there that we don't have to reinvent.” Another participant referenced support coming from other participants who attended the PD workshop, stating “it was nice to interact with other faculty from other programs…they would be good advocates.” Lastly, another participant stated that “I think one advocate would be if you have a diverse population of students, the students are advocates, right? They can advocate for themselves to their classmates and open up those conversations.” This suggests that students were also viewed by participants as supportive entities for enacting curricular changes related to PIF and sociocultural factors.

In sum, my participants’ perceptions of their PBC for incorporating PIF and prioritizing sociocultural factors in their professionalism curricula was mixed with some

factors contributing toward high levels of PBC, namely the ease of modifying existing curriculum and recognition of having a support network for accomplishing these tasks. Contrariwise, most of my participants also identified factors that contributed toward low levels of PBC, including challenges related to competing time and workload demands, the process of developing new curriculum, and concerns regarding lack of support and buy-in for making such curricular changes.

Subjective Norm

Within the category of SN, as also indicated in Table 8, I identified three primary themes that helped me explain participants' perspectives on how they thought their peers view incorporating the concept of PIF into the professionalism curricula and prioritizing sociocultural factors in the teaching and assessing of professionalism (RQ1, RQ2). These themes are as follows: 1) participants indicated their immediate network of peers value and prioritize the concept of PIF and the prioritization of sociocultural factors; 2) participants acknowledged that generational and historical approaches to teaching and assessing professionalism have not included PIF nor prioritized sociocultural factors; and 3) rigid perspectives on professionalism are still pervasive in PA education. Each of these themes are described in more detail, with evidence, next.

Immediate Network of Peers Value and Prioritize PIF and Sociocultural Factors. The first theme that emerged under my SN category was that most of my participants reportedly believed that their immediate networks of peers in their respective PA programs valued and prioritized the concept of incorporating PIF and prioritizing sociocultural factors in their professionalism curricula. The propensity of interview data collected reflected this concept. One participant stated, "I feel like our faculty is very

interested, excited, and willing to incorporate this into the curriculum," while another stated "we do have kind of a diversity focus in our program; there's probably an awareness that we need to address [regarding] how we educate and how we instill professional identity." Evident here was that there is not only passion for making the purported curricular changes, but also that such changes are considered necessary to address program goals.

Another participant stated that "the team I'm a part of, I feel like a lot of us are on a similar wavelength [regarding] the importance of the professional identity formation," suggesting there may be uniformity of thought amongst participants' program personnel related to their perspectives on the importance of the concept of PIF being incorporated into the curricula.

In contrast, another participant acknowledged that some other perspectives are also present on their team, stating "there are people [who] are far more lenient than I am…so I think we run the spectrum. I'm pretty much in the middle, which I guess is a good thing."

Lastly, another participant stated, "I think that I have sort of deliberately sought out groups that are a little bit more open to this other view of [PIF], making this [professionalism] a broader and more inclusive process and idea." This participant indicated that although they viewed their immediate team as sharing a perspective of PIF curriculum being important, they were aware that they may have intentionally sought out a team with similar values. This may be extrapolated to further suggest that this participant did not necessarily consider their positive view of incorporating PIF into professionalism curricula to be a view shared profession wide.

In sum, my data here illustrated that my participants perceived their immediate network of colleagues to prioritize PIF and sociocultural factors in their professionalism curricula. From this, I can infer that my participants would expect their immediate peer groups to view their own adoption of these two concepts favorably (i.e., a subjective norm). Recalling that SN corresponds with intention (Ajzen, 1991), this positive view of SN as it relates to incorporating PIF and prioritizing sociocultural factors, helps to answer RQ1 and RQ2 in that it supports the likelihood that my participants do intend to make these changes to their professionalism curricula.

Generational and Historical Approaches to Professionalism Have Not Included PIF nor Prioritized Sociocultural Factors. The second theme that emerged in the SN category was that my participants expressed their perspectives that PIF curriculum and prioritization of sociocultural factors have not historically been a component of professionalism curricula in PA education. Furthermore, they indicated there may be generational differences amongst PA educators as related to their acceptance or implementation of PIF curriculum and prioritization of sociocultural factors. For example, one participant stated, “I feel like there [is] definitely more of a trend in those new[er] educators to want to help and see their students grow.” Another participant stated, “I feel like there's been a shift in the last 10 years because it's almost like we've just grown to accept that this is definitely a different generation we're teaching, or the world has changed.” Through both statements, it is evident participants reflected on how varying levels of experience as an educator may influence how professionalism is approached. Additionally, there was an acknowledgement that perspectives amongst educators on the topic of professionalism had changed over the years.

Another participant reflected on historical perspectives, as related to sociocultural factors in medical education, stating:

> I think as a profession…we probably haven't put enough emphasis on sociocultural factors. I think medical education as a whole has continually tried to fit, you fit square pegs in a round hole because the round hole is what we want and that's how it is…And I think for a long time it was this is how it's going to be done, and that's just the way it is. And there's kind of a, I think medical providers are kind of put on a pedestal to some extent. And there's a belief that…if you're lucky enough to be here [in PA school], you have to do things the way we want it done because you get to be a PA at the end of this. And I don't think that that's necessarily intentional or mean-spirited, but I think for a long time we've just thought this is the way it has to be, and this is the way it's done, and the student has to figure out how to get there. And so I think medical education and PA education in general have probably not done a good job of looking at the whole picture.

This suggests that medical education has forced students to comply with historical standards as related to professionalism, and there has not been any consideration of students' backgrounds, and more specifically their sociocultural factors, in how the teaching and assessing of professionalism has been or is still enacted.

Other participants reflected on their own experiences as students and used those experiences as indicators for how much PIF and sociocultural factors are emphasized in PA education. As an example, one shared that "a handful or two of faculty felt like [sociocultural factors were] important and promoted [them] and emphasized [them] in the

ways they could throughout their course of whatever they were teaching, but I feel like [sociocultural factors were] not overly emphasized." Evident in this participant's reflection on their own PA school experience is that they found any prioritization of sociocultural factors by their own PA faculty to be occurring in isolation, rather than as program wide.

My synopsis of the above interview data is, as such, that despite my participants' perceptions that their current, immediate network of peers positively views PIF and prioritization of sociocultural factors in professionalism curricula, they also understand that, historically, PA educators as a whole, have not similarly included nor prioritized these concepts. Since my participants' perspectives frequently indicated there is not widespread acceptance of PIF curriculum and prioritization of sociocultural factors in the teaching and assessing of professionalism, it would also seemingly follow that there would be low SN related to PIF and sociocultural factors, meaning that my participants' may perceive that enacting these curricular changes would be perceived negatively by peers. However, the tone of my participants' interview data seemed to suggest that they had a negative perception of others in PA education who have not enacted these curricular concepts. This negative perception offered by my participants is further demonstrated in my next theme related to the pervasiveness of rigid perspectives on professionalism in PA education.

Rigid Perspectives on Professionalism are Still Pervasive in PA Education. The aforementioned theme, regarding generational and historical approaches to professionalism, complemented my final theme within the SN category, that rigid perspectives related to professionalism in PA education are still pervasive. This theme

may be best reflected in the following statement, in which one of my participants shared their perspective that many educators believe that:

> …it shouldn't matter what your background is, or where you're from, or what your belief system is. Like, what is or isn't professional is the same for everybody. And I think that that's a pretty widely held perception of [professionalism], especially within the healthcare profession. And it may be changing, but I think that definitely that's pretty well ingrained in both the education of healthcare providers and in the profession itself.

This same participant added:

> …when I was a PA student…it was more my perception, especially with some of the professionalism guidelines and discussions and stuff that we had, that there was a very narrow view of appropriate ways to behave and act and present yourself in this profession, both for colleagues and also for patients. And that if you sort of stepped outside of that well-defined paradigm of what professional behavior is that your work would suffer; your patients would not feel comfortable trusting you. And so it would sort of impact both your interactions with colleagues, but then also sort of patient outcomes because you would make them uncomfortable or they would feel like you're not trustworthy because you don't fit into what we define as a professional healthcare provider. And so I do feel like some PA educators still really hold on to that historical, very narrowly defined idea of what professionalism and professional identity is in the healthcare setting.

Evident here was that this participant reportedly believed many PA educators have one uniform definition for professionalism which does not account for students' sociocultural

backgrounds; further, my participant conjectured that this uniform perspective on professionalism may exist because of a widely held view of how patient interactions and outcomes may be dependent on health care practitioners exhibiting predetermined characteristics that define professionalism in health care.

Similarly, another participant reflected, “we bring our own biases and we bring our own experiences [to PIF]... I'm definitely one who is like, ‘Well, back when I was in school,’ or, ‘This is how I would’ ... that type of thing...because again, different ages, different cultures.” Clear here is that this participant was acknowledging how faculty biases and experiences may influence how PIF is incorporated into the professionalism curricula.

In sum, my data here yielded mixed results regarding SN, with my participants’ immediate networks being identified as viewing such actions related to incorporating PIF and prioritizing sociocultural factors favorably, but with my participants also perceiving that the more widely held view in PA education, at least historically, is that enacting these concepts in the curriculum is not a priority. However, again, my interview data also suggested that my participants had a negative perspective regarding their views that there had not been widespread adoption of the concept of PIF and the prioritization of sociocultural factors within the professionalism curricula of PA educational institutions. Important to note here, also, is that my PD workshop, in and of itself, may have contributed to this negative perception of the larger educational system as some of the articles participants were assigned to read for the PD workshop highlighted these issues in medical education (Frost & Regehr, 2013; Wyatt et al., 2020; Wyatt et al. 2022).

Finally, to conclude, since SN is one of the factors that contributes to intention to perform a behavior (Ajzen, 1991), the above interview data related to the themes I identified in the SN category helped me (and should help others) also better understand my participants' intentions to incorporate PIF and prioritize sociocultural factors in their professionalism curricula.

PIF Definition and Perspectives on Professionalism

Next, as also illustrated above in Table 8, I identified four emerging themes that helped me address RQ3 related to participants' perspectives on professionalism in medical education as follows: 1) there are a set of baseline professionalism standards PA students are expected to meet; 2) PIF is defined as how one thinks, acts, and presents oneself as a PA; 3) PIF is influenced by one's environment and one's individual background and experiences; and 4) PIF is a continuous process throughout one's education and career.

Baseline Professionalism Standards Should Exist. The first theme that I constructed from my data was that there should be a baseline set of standards related to professionalism. One my participants' statements that exemplified this notion was "I think at the end of the day, we want people to achieve the same level of professionalism as a baseline…there's a minimum standard that we want them all to achieve regardless…." Another participant summarized their thoughts on this topic as follows:

> I kept saying throughout the whole workshop, I think there are some things that are immutable. For instance, being on time, finishing what you say you're going to finish, meeting deadlines, to me those things are, they're a component of professionalism, but I don't care what background you come from [sic]. There's

> no excuse for not being where you're supposed to be on time or getting your work done because it's going to ultimately end up like you're not completing your charts, you're not, whatever, your patients get delayed because you didn't show up to clinic on time. We get emergencies, but this chronic pattern is an issue. So, there are things that in my mind have to happen, but other things I'm less rigid on [sic].

Evident in both of the above statements is that my participants expressed expectations that PA students should meet a set of minimum standards as related to professionalism. In the latter statement, my participant seemed to be focused, primarily, on a minimum set of behavioral expectations, as opposed to other aspects of professionalism (e.g., attitudes, values).

Another participant added, "to encompass professionalism and professional identity, you still have to have some of those black and white things." This suggests that, even with the implementation of PIF as a pedagogical strategy for teaching and assessing curriculum, there would still have to be a minimum set of professionalism standards enforced. This sentiment was reiterated by yet another participant who stated, despite their intended approach to make professionalism more individualized with mentorship, "you still have to go over some professionalism type rules, policies…procedures." Which, again, indicated that while some aspects of how faculty approach professionalism could be modified with the adoption of PIF in their professionalism pedagogy, a minimum set of expectations would still have to be outlined for students.

In sum, all of the data pertinent to this finding suggested that my participants supported having a minimum set of professionalism standards in their professionalism

curricula. Further, even with the adoption of a more individualized approach to professionalism, through incorporation of the concept of PIF, uniform standards should still be expected for all students.

PIF is How One Thinks, Acts, and Presents Oneself as a PA. The second theme that emerged in this category, PIF definition and perspectives on professionalism, was related to how my participants defined PIF. Frequently their definitions encompassed the concept that PIF is how one thinks, acts, and presents oneself as a PA. One of my participants stated that PIF is "thinking and acting not only as a PA, but as a PA that would represent the profession the way we would want it to be represented." This suggests that in addition to defining PIF as how one thinks and acts as a PA, this participant also considered PIF to include the mindset that a PA should consider themselves as a representative for the entire profession. Another participant stated that PIF is "how our attitudes and behaviors change," suggesting they were focused on the evolving nature of professional identity. Another participant stated PIF is PA students' and PAs' "thinking, their behavior, their dress, everything that amounts to how they interact with a patient or a colleague," indicating that this participant was focused on how PIF impacts interpersonal dynamics with patients and colleagues. Lastly, another participant focused largely on the formation component of PIF stating PIF is "taking the knowledge you learn with the upbringing you've had and molding you into and morphing you, I guess, into how you want to be perceived and how you want others to perceive you as a professional."

While, as demonstrated above, several participants defined PIF as how one thinks, acts, and presents oneself as a PA, which was likely influenced by several of the assigned

articles used during my PD workshop (see Appendix A) that similarly defined PIF, I should note that one participant did define PIF using a more traditional definition of professionalism stating:

> PIF starts in the classroom before [students] end up in the clinic. So, things like showing up to class on time, being prepared, knowing what we're going to talk about, having read the literature or whatever they're responsible to know before they show up. Having on clean clothes or scrubs, combing your hair. Simple things like that…."

This same participant, despite focusing on behavioral aspects of professionalism, as exemplified in the above quote, also elaborated that "your professional identity is linked first to professionalism. And so I guess how I define that is more like how you conduct yourself mostly with responsibility, integrity, accountability, and most of all excellence." This indicates that there is also an element of professional values that encompasses this participant's definition of PIF.

In sum, my participants, with one exception as noted, largely defined PIF in a manner similar to the literature, which suggests that PIF is thinking, acting, and feeling like a PA (Cruess et al., 2014). This definition of PIF may seem narrow in that it focuses primarily on collective identity, and not individual or relational identities (Cruess et al., 2015) nor does it specifically reference the role of sociocultural contexts in developing professional identity (Wyatt et al., 2020). However, as I will discuss next, my participants also further expanded upon their definitions of PIF by discussing how environment and individual factors influence PIF.

PIF is Influenced by Environment and Individual Backgrounds and Experiences. The third theme that emerged in this category, again related to participants' definitions of PIF, is that PIF is influenced by an individual's environment as well as their background and personal experiences. One participant summarized that PIF is "a reflection of who you are as a person before you become a medical professional," indicating that one's personal identity is largely manifested in their emergent professional identity. Another participant explained PIF as an "amalgamation of somebody's experiences throughout not only their childhood and adulthood, but both in and outside of education and through their professional training…and it's unique, I feel like to them." This suggests that PIF is formed by, not only, one's personal experiences and background, but also by their educational and professional experiences, and further, how all of these experiences uniquely combine together for each individual.

Another participant explained that PIF is "that adaptability and flexibility based upon the environment that you're in," meaning they were more focused on how the environment influences PIF. This same participant also reflected that PIF may vary based on geographical environments, stating "the different areas, the different cultures regionally, all sorts of different things…constitutes professional identity formation." They added that PIF may be influenced by "the expectations…of facilities and patients and different patient populations," indicating they considered the clinical environment to have influence over the process of PIF.

Lastly, another participant indicated PIF is influenced by one's own profession and society, stating there is fluidity to PIF "personally as you become more familiar with sort of [the] commonly held beliefs and structure of your profession" and "over time with

society's perception of the way people are perceived in those professions." Clear here is that this participant perceived PIF to be influenced by the values and social norms of the PA profession and by how society views the PA profession.

These data ultimately suggested that my participants perceived many different factors to have potential influence over the process of PIF. These factors included personal factors, identified as individual backgrounds and experiences; professional factors, identified as educational and clinical experiences; and other external factors, including cultural factors related to geography or region and patient or other societal interactions.

PIF is a Continuous Process. The last theme I identified in this set of data, related to the definition of PIF and perspectives on professionalism, was that PIF is a continuous process. Most participants referenced the ongoing nature of PIF with statements such as "it's not…a one-time thing. It's like a lifelong pursuit," "you have to develop that over time," "it can definitely change with changing perceptions," and "[it] occurs not just in their [students] professional education time in the program, but over the course of their entire career probably." One participant further summarized this theme stating:

> [PIF is] not something that's static. It's going to change as you grow as a professional, as the profession changes, as your life experiences change, and as the world changes around us, too. Some of [PIF is also influenced by] other factors that we don't have control of [sic]. And so I think taking all that into [account] is how you develop your professional identity.

In the statements above, it is evident that my participants viewed PIF as an ongoing process that starts during one's education, but continues over the course of one's entire career.

To summarize, my four emerging themes related to PIF definition and perspectives on professionalism helped me to answer RQ3 by identifying participants' perspectives on professionalism. My participants acknowledged that there are baseline standards for professionalism, but they also discussed professionalism in conjunction with PIF, and further defined PIF as being a continuous process of how one thinks, acts, and presents oneself as a PA, all while emphasizing that PIF is influenced by environment and individual backgrounds and experiences.

Impact of Workshop

Lastly, as also illustrated above in Table 8, I identified four themes from my data that helped me to address how the PD workshop influenced participants' intention to incorporate PIF into the curricula (RQ1), intention to prioritize sociocultural factors in professionalism pedagogy (RQ2), and perspectives on professionalism in medical education (RQ3). These four themes are as follows, the PD workshop: 1) inspired a modified perspective on how professionalism is taught and assessed in PA education; 2) contributed to new or transformed knowledge related to PIF; 3) inspired critical inquiry regarding PIF and professionalism; and 4) led to appreciation of the educational theory (i.e., pedagogy) underlying PIF. Each of these themes are described in more detail, with evidence, next.

Inspired a Modified Perspective on Professionalism Pedagogy. About half of my participants expressed that the PD workshop helped change their perspectives

regarding how professionalism is taught and assessed in PA education. One participant discussed how they would "[talk] to [their] students about…develop[ing]…professional identity, rather than just relying on the professionalism policy...[being] more proactive about it rather than reactive and punitive." Clearly this participant was indicating they intended to be more thoughtful about how they addressed professionalism with students by utilizing PIF as a proactive approach to addressing professionalism rather than waiting for lapses in professionalism to be addressed in a more reactive manner. Another participant stated "we kind of talk about…professionalism, but not necessarily the identity formation and the fact that you…have to shift your thinking from being an undergraduate student to a graduate student to a PA." This suggests that this participant realized, through the course of the PD workshop, that there are differences between focusing on addressing professionalism with students and focusing on guiding students through the educational process whereby students transform from students to PAs.

Another participant indicated "I think that we all are embracing [PIF] and are looking for ways to incorporate it into each course." This participant seemed to be indicating that PA educators, in general, are now focused on modifying their approaches to teaching professionalism.

Lastly another participant shared that what "really kind of became more apparent to me with these sessions was that [PIF] is actually a process that occurs." Similar statements to this were also indicated by several other participants, which I interpreted to suggest that there was a new understanding of professionalism acquired by participants.

Similar to this first theme, about modified perspectives on professionalism that were gained after participating in the PD workshop, was another similar theme I

identified, and discuss next, that my participants gained or transformed their knowledge specific to the concept of PIF.

Contributed to New or Transformed Knowledge Related to PIF. My next theme under this category, impact of the workshop, was that my PD workshop contributed to new or transformed knowledge related to the concept of PIF. Some participants had not previously heard of PIF, but even those who were aware of the concept of PIF prior to the PD workshop experienced a transformed understanding, as best captured by one participant who stated, "I had heard [PIF] discussed, but I don't know that I really understood the concept." Another stated, "having gone through the workshop, I think my idea of [PIF] has actually changed." Another participant stated, "I just am really appreciative of participating in [the PD workshop] because it's stuff that I never thought about [sic]."

Evident in these statements is that my participants had a newfound understanding of PIF after the PD workshop or that it challenged them to think about a new concept to them, PIF. One participant stated, "I love the aha moments…[and this workshop] was definitely an aha moment where I was sharing things with our faculty and our program director…I just found it interesting and fascinating and something that I can take away and continue to build upon [sic]." This participant seemed to be expressing that they had gained new insight from the PD workshop, and that they were sharing that insight with others.

Another participant explained that they were "so used to hearing or working on professional*ism* [emphasis added] with students, but not necessarily that it was an individual formation that occurred." This participant further explained how their

awareness of the concept of PIF changed through participation in the PD workshop, stating that prior to the workshop "I may have read it or come across it I feel like probably at some point. But I don't know that it really stuck or [that I] knew what it was or [that] I contemplated what it was until this particular set of sessions." Clearly, this participant experienced a transformed understanding of PIF after their participation in the PD workshop, as well.

All the above interview data demonstrated how participants either gained new knowledge about PIF or experienced a transformed understanding of PIF. In my next theme, I explore one specific way in which my participants' experienced transformative thinking related to PIF.

Inspired Critical Inquiry Regarding PIF and Professionalism. My third theme, also related to the impact of the PD workshop, was that the workshop seemingly inspired my participants to think critically regarding PIF and professionalism, which I define as inspiring self-reflection on the topic, especially when considering how others, of diverse backgrounds, may perceive the topics. One participant, in their conceptualization of PIF after participation in the PD workshop expressed that they found themselves "trying to understand *who* [emphasis added] set those expectations for [how PAs students or PAs] need to act or behave." Additionally, this participant reflected on their own implicit biases and how those biases might impact professional expectations by rhetorically questioning "how [do expectations] change based on what we're experiencing with different generations of learners and what bias I bring." They further explained "since going through the workshop, what I started to really notice was I was questioning where [professional expectations] came from [sic], questioning a little bit more of who

created these ideas [and] what biases do I bring to that?" While only one participant made statements indicating the PD workshop, specifically, contributed to their critical reflection on PIF and professionalism, similar sentiments were expressed by other participants in their responses to other interview questions. Although they did not specifically note that their critical inquiry was related to participation in the PD workshop, I inferred their perspectives were associated with participation in the workshop and both determined and constructed this to be another theme.

Led to Appreciation of the Pedagogy Underlying PIF. My final theme was that my participants gained an appreciation for the pedagogy underlying PIF, that is, how PIF is actually taught and assessed within professionalism curricula in PA education. Some participants indicated they had a newfound appreciation for the underlying educational efforts that are the foundation of students' PIF. One participant effectively summarized this sentiment in their statement, noting "I think for a long time, I think [sic] it was just something that happened…I didn't realize that it was actually orchestrated." Clear here is that this participant gained a new appreciation for the educational basis that supports the development of students' PIF. Likewise, another participant expressed that "before [the PD workshop], I…saw [PIF] as just something that sort of happened on a subconscious basis [and] that no one really directly attempted to impact in any specific manner. And I definitely have a different perception of that now." They further explained their understanding of how PIF can be utilized appropriately (or inappropriately) in an educational setting, stating:

> I think it's important to at least be aware of [the PIF] process and that it is an *actual process* [emphasis added] that occurs and may be different for different

> people. And that it can be influenced both in a positive and a negative way depending on whether you're actually participating in it or just allowing it to happen without acknowledging it.

Evident here is that this participant's perspective on PIF shifted from, prior to the PD workshop, thinking PIF was something that occurred organically, to after the PD workshop, recognizing the educational influences, positive and negative, that can contribute to a student's PIF process.

Similar to my previous theme, related to the PD workshop inspiring critical inquiry regarding PIF and professionalism, the number of participants who directly discussed this current theme, appreciation of the pedagogy of PIF, was minimal (two total); however, and again, the data that I gathered were high quality, and I determined that other interview data alluded to this concept even if not explicitly stated.

In sum, RQ1, RQ2, and RQ3, were addressed by the themes I constructed as related to the impact of the PD workshop that was central to this action research project. My participants attributed their new or transformed knowledge on the concept of PIF to be related to the PD workshop series, and their participation also inspired them to think about PIF from new perspectives, with a more critical lens and more appreciation for pedagogical principles underlying said concept. Additionally, participation in the PD workshop apparently contributed to the modification of my participants' perspectives on how they teach and assess professionalism.

PD Workshop Exit Questions

Finally, I also utilized a deductive coding method to analyze my PD workshop exit question data in the same manner and following the same coding framework I

described above in reference to my analyses of my qualitative survey responses; I quantified my exit question data in the same manner that I quantified my qualitative survey data. See also examples of how I applied codes to my qualitative data in my qualitative survey responses section above. In this section I present the results yielded for each of the three exit question data after quantifying my qualitative data.

Recall that via my PD workshop Exit Question 1 that I asked my participants to list the factors they perceived to be most influential in the development of professionalism within PA students. For Session 1 of the PD workshop, the most frequently applied code was structural (22/42 codes, 52.4%), followed by intrapersonal (10/42 codes, 23.8%), interpersonal (7/42 codes, 16.7%), and finally power differentials (3/42 codes, 7.1%). For Session 2, the most frequently applied code was structural (12/22 codes, 54.5%), followed by intrapersonal (7/22 codes, 31.8%), and interpersonal (3/22 codes, 13.6%). For Session 2, I did not apply the power differentials code to any of my data. For Session 3, the most frequently applied code was again structural (12/25 codes, 48.0%), followed by intrapersonal (7/25 codes, 28.0%), and both interpersonal and power differentials (3/25 responses [12.0%] for each code). For Session 4, the most frequently applied code was yet again structural (5/13 codes, 38.5%), followed by intrapersonal (4/13 codes, 30.8%), and both interpersonal and power differentials (2/13 responses [15.4%] for each code). Finally, for Session 5, the most frequently applied code was intrapersonal (4/9 codes, 44.4%), followed by structural (3/9 codes, 33.3%), and both interpersonal and power differentials (1/9 responses [11.1%] for each code).

From the above, I concluded that as the PD workshop progressed, my participants more frequently associated intrapersonal factors to be amongst the most influential

factors in the development of professionalism within PA students having increased from 23.8% of codes in the first PD workshop session to 44.4% of codes in the final session. I also noted here that there was a small decrease in the percent of codes assigned to the interpersonal construct, decreasing from 16.7% in Session 1 to 11.1% in Session 5. Related to the structural construct, my data demonstrated a large decrease in the percent of codes assigned to the structural construct, decreasing from 52.4% in Session 1 to 33.3% in Session 5. The percent of codes assigned to the power differentials construct fluctuated throughout the PD workshop.

Taken together, these changes in my Exit Question 1 data over time suggest that my PD workshop may have contributed to changes in my participants' perceptions regarding the most influential factors in the development of professionalism within PA students. More specifically, by the conclusion of my PD workshop, my participants seemed to place a higher value on students' sociocultural and historical factors, as represented by the intrapersonal construct, than they had placed on these factors prior to participation in the workshop. Conversely, my participants placed less value on policy and social or professional norms, as represented by the structural construct, after participation in my PD workshop than they had placed on these factors prior to participation in the workshop. However, recall that my participants were not required to attend each PD workshop session, which means that the sample of participants I utilized to evaluate my exit question data varied from session to session. Therefore, the results I found from my analysis of Exit Question 1 data, and also the subsequent exit question data, must be interpreted cautiously.

I used my PD workshop Exit Question 2 to ask my participants to provide their definition of professionalism as related to PA education. For Session 1 of the workshop, the most frequently applied code was structural (17/49 codes, 34.7%), followed by interpersonal (14/49 codes, 28.6%), intrapersonal (12/49 codes, 24.5%), and finally power differentials (6/49 codes, 12.2%). For Session 2 of the workshop, the most frequently applied code was interpersonal (8/19 codes, 42.1%), followed by intrapersonal (6/19 codes, 31.6%), and structural (5/19 codes, 26.3%). For Session 2, I did not apply the power differentials code to any of my data. For Session 3 of the workshop, the most frequently applied code was intrapersonal (9/24 codes, 37.5%), followed by structural (7/24 codes, 29.2%), interpersonal (6/24 codes, 25.0%), and power differentials (2/24 codes, 8.3%). For Session 4 of the workshop, the most frequently applied code was interpersonal (6/16 codes, 37.5%), followed by structural (5/16 codes, 31.3%), intrapersonal (4/16 codes, 25.0%), and power differentials (1/16 codes, 6.3%). For Session 5 of the workshop, the most frequently applied codes were equally distributed across intrapersonal and structural (4/9 responses [44.4%] for each code), followed by interpersonal (1/9 codes, 11.1%). For Session 5, I did not apply the power differentials codes to any of my data.

From the data yielded from Exit Question 2, I concluded that as the PD workshop progressed, my participants more frequently included references to intrapersonal factors in their definitions of professionalism as related to PA education with intrapersonal factors accounting for 24.5% of codes assigned in Session 1 and 44.4% of codes that were assigned in Session 5. Another conclusion I drew from my Exit Question 2 data was that there was a moderate decrease in the percent of codes assigned to the interpersonal

construct, decreasing from 28.6% in Session one to 11.1% in Session 5. Finally, I noticed a moderate decrease in the percent of codes assigned to the power differentials construct, decreasing from 12.2% in Session 1 to 0% in Session 5. With respect to the structural construct, the percent of codes I assigned to this construct fluctuated throughout the PD workshop, but ultimately increased from 34.7% in Session one to 44.4% in Session five.

Generally, the above changes in my Exit Question 2 data over time suggested that my PD workshop may have contributed to changes in my participants' definitions of professionalism as related to PA education. More specifically, by the conclusion of my PD workshop, my participants seemed to more frequently reference students' intrapersonal factors in their definition of professionalism whilst less frequently referencing interpersonal factors in their definitions.

Through my PD workshop Exit Question 3, I asked participants to summarize their approach to teaching and assessing professionalism in PA education. For Session 1 of the workshop, the most frequently applied code was structural (21/50 codes, 42.0%), followed by interpersonal (17/50 codes, 34.0%), intrapersonal (9/50 codes, 18.0%), and finally power differentials (3/50 codes, 6.0%). For Session 2 of the workshop, the most frequently applied codes were equally distributed across interpersonal and structural (9/28 responses [32.1%] for each code), followed by power differentials (6/28 codes, 21.4%), and intrapersonal (4/28 codes, 14.3%). For Session 3 of the workshop, the most frequently applied codes were again equally distributed across interpersonal and structural (10/28 responses [35.7%] for each code), followed by intrapersonal (5/28 codes, 17.9%), and power differentials (3/28 codes, 10.7%). For Session 4 of the workshop, the most frequently applied codes were once again equally distributed across

interpersonal and structural (6/16 responses [37.5%] for each code) followed by both intrapersonal and power differentials (2/16 responses [12.5% for each code). For Session 5 of the workshop, the most frequently applied code was interpersonal (4/11 codes, 36.4%), followed by both intrapersonal and structural (3/11 responses [27.3% for each code). For Session 5, I did not apply the power differentials codes to any of my data.

Accordingly, I concluded from my Exit Question 3 data that as the PD workshop progressed, my participants more frequently included references to intrapersonal factors in their summaries of their approaches to teaching and assessing professionalism in PA education with intrapersonal factors accounting for 18.0% of codes assigned in Session 1 and 27.3% of codes that were assigned in Session 5. Another trend I noticed was that there was a moderate decrease in the percent of codes assigned to the structural construct with structural factors accounting for 42.0% of codes assigned in Session 1 and 27.3% of codes assigned in Session 5.

In sum, the above changes suggested that my PD workshop also apparently contributed to changes in my participants' perceptions about teaching and assessing professionalism in PA education. More specifically, by the conclusion of my PD workshop, my participants seemed to indicate that sociocultural and historical factors, again as represented by the intrapersonal construct, would be more likely to be factored into my participants' professionalism pedagogy after having participated in my PD workshop. In contrast, policy and social or professional norms are less likely to contribute to my participants' professionalism pedagogy after having participated in my PD workshop.

To reiterate, the findings from all three of my PD workshop exit questions, taken together, suggested that after participation in my workshop, participants perceived historical and sociocultural factors to be of increased importance as related to the factors most influential in the development of professionalism in PA students, participants' definitions of professionalism, and their approaches to teaching and assessing professionalism. Similarly, participants placed less importance on structural factors in how they perceived factors most influential to the development of professionalism in PA students and their approaches to teaching and assessing professionalism. These findings are in line with the content offered via my PD workshop, during which I introduced participants to the concept of PIF, particularly from the lens of intersectionality (see My Action section, above), and through the journal articles I assigned for each PD workshop session.

Triangulation

As previously mentioned, I created triangulation matrices (see Appendix H) to assist with my comparisons of my quantitative and qualitative data results, again, as they related to RQ1 and RQ2. Recall as well that I did not triangulate data for RQ3 because I only collected qualitative data to address RQ3. Notwithstanding, next I discuss how my quantitative data converged with or diverged from my qualitative data for RQs 1 and 2.

First, as related to RQ1, I evaluated four constructs (i.e., INT, ATT, SN, and PBC) to help me better understand my participants' intentions to incorporate PIF into their professionalism curricula. As related to INT and ATT, I observed practically, although not statistically significant increases in my participants' intentions to incorporate PIF into their professionalism curricula, as well as a practically, but not

statistically significant increases in my participants' attitudes related to their incorporation of PIF into their professionalism curricula. My qualitative data demonstrated convergence with these findings in that my participants overwhelmingly expressed positive intentions and attitudes regarding incorporating PIF into their professionalism curricula. Although, my quantitative data was not significantly related to INT and ATT in the statistically significant sense, the convergence of my quantitative and qualitative data helped me to determine these findings are true and credible.

Regarding my SN construct, my quantitative data yielded practically, but not statistically significant increases in my participants' perceptions regarding SN; yet, my corresponding qualitative data presented mixed results. As related to my participants' immediate peer networks, my qualitative data demonstrated high perceptions of SN; thus, in this respect, my qualitative data converged with my quantitative data. As related to participants' PA educational networks, as a whole, my qualitative data diverged from my quantitative data in that my participants' demonstrated lower perceptions of SN. Taking my qualitative data into consideration with my quantitative data, I accordingly concluded that my participants placed a higher value on how they were perceived by their immediate networks of peers than they placed on how they believed they were perceived by their broader network of PA educators, in general. Recalling that via RQ1 I aimed to evaluate my participants' intention to incorporate PIF into their professionalism curricula, I can presume that my participants' immediate network of peers would be most influential in and influenced by such curricular changes, as such, and thus further supporting the qualitative findings that converged with my quantitative findings as being true and credible.

Lastly, regarding my PBC construct, my quantitative data yielded a statistically significant ($p<0.10$) and practically significant increase in my participants' perceptions regarding their PBC for incorporating PIF into their professionalism curricula; however, similar to my SN data, the qualitative data, here, were also mixed. My participants identified both confidence in their ability to make such curricular changes, through which these findings converged with my quantitative data, and challenges to making such changes, through which these findings diverged from my quantitative data. Put differently, my quantitative data here suggested that after having participated in my PD workshop, my participants' perceived there to be less barriers or obstacles to incorporate PIF into their professionalism curricula than they had perceived pre-intervention. However, my qualitative data was mixed in that some of my qualitative data also suggested my participants perceived incorporating PIF into their professionalism curricula to be easy while other qualitative data, in contrast to my quantitative data, suggested it would be difficult.

It is also important to note that my interview protocol may have contributed to these themes in my interview data being related to both lower and higher levels of PBC in that I specifically asked participants to identify both positive and negative components related to PBC (see Appendix G). Given that my interview protocol may have led participants to provide responses that led to competing themes, and given that my quantitative PBC data were the only quantitative data related to RQ1 that showed statistical significance, I determined that my triangulated data for this construct, overall, suggested convergence of findings. Put differently, I determined that my participants, overall, perceived that it would be relatively easy to incorporate PIF into their

professionalism curricula with minimal barriers, namely in terms of their abilities to modify existing curriculum and their identification of institutional entities via which organizational support would be provided for their curricular change initiatives. Further, the factors that my participants discussed that allowed for their increased senses of ease regarding incorporating PIF into their professionalism curricula I determined to address, and outweigh, the challenges my participants identified as barriers to making such curricular changes.

Finally, for RQ1 I considered my findings as also situated within the TPB (i.e., theory of planned behavior). Recall Ajzen (1991), via the TPB, indicated that both INT and PBC were directly related to likelihood to perform a behavior, whereas ATT and SN were only indirectly related to perform a behavior through their direct relationships with INT (see also Figure 4). Accordingly, I concluded here that the data I collected to study RQ1 and the resultant findings suggested a high likelihood that my participants would incorporate PIF into their professionalism curricula after participation in the PD workshop. To reiterate, I made this conclusion because during my triangulation of my quantitative and qualitative data for all four factors that contribute to likelihood to perform a behavior, INT, ATT, PBC, and SN (Ajzen, 1991), I discovered converging findings that my participants perceived these factors positively as related to their intentions to incorporate PIF into their professionalism curricula.

Next, as related to RQ2, recall that I evaluated the same four constructs (i.e., INT, ATT, SN, and PBC) to help me better understand my participants' intentions to prioritize sociocultural factors in their professionalism pedagogy. As related to INT and ATT, I observed practically, although not statistically, significant increases in my participants'

intentions to prioritize sociocultural factors in their professionalism pedagogy, as well as practically and statistically significant (p<0.10) increases in my participants' attitudes related to prioritizing sociocultural factors in their professionalism pedagogy. My qualitative data demonstrated convergence with these findings in that my participants overwhelmingly expressed positive intentions and attitudes regarding prioritizing sociocultural factors in their professionalism pedagogy, as well. Taken together, the convergence of my quantitative and qualitative data related to INT and ATT helped me determine these findings to be true and credible.

Regarding my SN construct, my quantitative data yielded practically and statistically significant (p<0.10) decreases in my participants' perceptions regarding SN; however, my corresponding qualitative data were mixed. Akin to my findings above related to incorporating PIF into participants' professionalism curricula, as related to participants' immediate peer networks, my qualitative data demonstrated high perceptions of SN for prioritizing sociocultural factors, thus, in this respect, diverging with my quantitative data. That is to say, my quantitative data suggested that my participants perceived less pressure by peers to prioritize sociocultural factors in their professionalism pedagogy after having participating in my PD workshop than they perceived pre-intervention. However, in contrast to my quantitative findings, my qualitative data suggested that when my participants considered their immediate peer group (i.e., PA faculty within their own departments), they perceived that their prioritization of sociocultural factors was important to their peers. Per the concept of SN (Ajzen, 1991), this perception could exalt a perceived pressure by my participants to make such prioritizations in their own professionalism pedagogies.

In contrast, when considering my participants' indirect peer group (i.e., PA faculty as a whole), my qualitative data converged with my quantitative data in that my participants described lower perceptions of SN within the entirety of PA education, similar to the lower SN mean calculated from my post-intervention quantitative survey data. Important to consider, then, especially as related to the moderate decreases that I observed in my pre-to-post-intervention means for my SC-SN construct demonstrated in my quantitative data, is that my PD workshop may have highlighted for participants the lack of prioritization of sociocultural factors in medical or PA education, as a whole. To clarify, prior to my intervention my participants may have considered the perspectives of PA faculty within their own departments to be reflective of PA faculty as a whole, and more specifically, they may have regarded their immediate colleagues' views on prioritization of sociocultural factors to be reflective of the larger PA faculty network. Accordingly, it is plausible that the mean I calculated for my pre-intervention SC-SN construct was higher because my participants responded with consideration of their perceptions of their immediate professional network. Then, after being exposed to knowledge that such prioritizations were not necessarily shared profession-wide, it was further plausible that the mean I calculated for my post-intervention SC-SN construct may have been, correspondingly, lower.

My qualitative data, still regarding my SN construct, which both converged and diverged from my quantitative data were all substantive, high quality data. Thus, triangulation did not allow me to further support the credibility of my quantitative data results that indicated a statistically and practically significant decrease in SN after participation in my PD workshop. This should not necessarily be interpreted to suggest

that SN does not influence intention to prioritize sociocultural factors in professionalism pedagogy, recalling that the mean SN score on my post-intervention survey was slightly positive at 4.76 on a 7-point Likert scale (i.e., 4.0 is neutral). However, what can be interpreted from the triangulation of my data is that SN was negatively influenced by my PD workshop, perhaps because my workshop highlighted the historical lack of prioritization of sociocultural factors in medical education. Thus, the practically and statistically significant decreases observed in my post-intervention SN quantitative survey data may have actually been a more accurate representation of participant changes on this construct.

Lastly, regarding my PBC construct, my quantitative data yielded statistically ($p<0.05$) and practically significant increases in my participants' perceptions regarding their PBC for prioritizing sociocultural factors in their professionalism pedagogy; however, similar to my SN data, the qualitative data, here, were also mixed for the same reasons identified in my discussion above regarding PBC and triangulation of data for RQ1. Again, because of the questions I included in my interview protocol, and because my quantitative PBC data related to RQ2 was both statistically and practically significant, I determined that my triangulated data for this construct, overall, suggested convergence of findings whereby my participants perceived that prioritizing sociocultural factors in their professionalism curriculum would be met with minimal barriers, and thus, relatively easy to implement.

In sum, after triangulating my quantitative and qualitative data for RQ2, and again, with consideration for the TPB (Ajzen, 1991), I concluded that, overall, the data from my INT, ATT, and PBC constructs all suggested a high likelihood that my

participants would prioritize sociocultural factors in their professionalism pedagogy after participation in my PD workshop. In contrast, my quantitative data related to the SN construct seemingly demonstrated a decrease in perceptions related to SN after participation in my PD workshop. However, through analysis of my qualitative data, I was able to determine that my participants' perceptions of SN for their immediate network of peers was high whereas their perceptions of SN for PA educators, more broadly, was low. In fact, my participants largely expressed negative feelings, toward the larger medical education community, primarily for not having already prioritized sociocultural factors in the pedagogy of professionalism. I interpreted these negative feelings to suggest that my participants did not want to reflect the attitudes and behaviors of their wider professional network as related to their prioritizations of sociocultural factors in their professionalism pedagogy. Therefore, regarding SN I concluded that although my SN quantitative data yielded a practically and statistically significant decrease, my participants' still qualitatively reported increased likelihoods to prioritize sociocultural factors in their professionalism pedagogy, and this construct was not, similarly or negatively impacted via my intervention.

Finally, and once again, I evaluated all of my triangulated findings in the context of the TPB. Per Ajzen (1991), ATT, SN, and PBC all together contribute to a subject's INT to perform a behavior; further, ATT, SN, and PBC all influence each other (see also Figure 4). Thus, given that my findings for both ATT and PBC demonstrated, with credibility, that my participants would be likely to prioritize sociocultural factors in their professionalism pedagogy, I can infer that ATT and PBC may positively influence SN. Further, the most direct influences on behavior, per Ajzen (1991) are INT and PBC; thus,

the strength of my findings related to INT and PBC suggests my participants would be likely to prioritize sociocultural factors in their professionalism pedagogy. Put differently, I am positing that the strength of my INT and PBC findings supersedes any perceived weakness in my SN data that may be interpreted from really any of my divergent findings.

DISCUSSION

Again, through my MMAR study I facilitated an online PD workshop with the intention of increasing the awareness of PIF as a pedagogical approach to teach and assess professionalism in PA education. I further aimed to expand upon my PIF conceptual framework to include elements of intersectionality (discussed in depth in my Theoretical Frameworks section, prior). More expressly, my overarching inspiration for conducting this research was to effectively take action to help address the lack of diversity within the PA profession and contribute to transformation in PA faculty perspectives about and approaches to addressing professionalism in PA education to honor and be responsive to the increasingly diverse sociocultural backgrounds of PA learners. My assertion was that, in achieving such transformation, PA faculty may increasingly contribute to more inclusive learning environments, thus contributing to more diverse student populations and future populations of PAs.

Recall that the RQs I utilized to guide my MMAR study were as follows: RQ1) How and to what extent did participation in the PD workshop influence PA faculty members' intention to incorporate PIF into their professionalism curriculum?; RQ2) How and to what extent did participation in the PD workshop influence PA faculty members' intention to prioritize sociocultural factors in their professionalism pedagogy?; and RQ3) How did participation in the PD workshop influence PA faculty members' perspectives related to professionalism in medical education? Next, I discuss my findings for each of these three RQs and the implications of my findings per RQ as per my overarching study goals. Following this discussion I address the limitations of this study, followed by my conclusions with implications for future research.

Research Question 1

The purpose of RQ1 was to evaluate the impact of participation in a CoI on PA faculty members' intentions to incorporate PIF into their professionalism curricula. To effectively answer RQ1 I ensured that my intervention provided participants with foundational information regarding PIF and professionalism curricula. Thus, via my first PD workshop session I focused on professionalism frameworks in medical education, including PIF and virtue- and behavior-based frameworks (Irby & Hamstra, 2016). Via my second PD workshop session I provided a more in-depth inspection of PIF also in terms of how study participants might reframe medical education to support PIF (Cruess et al., 2014). The focuses of my final three PD workshop sessions are forthcoming, in my discussion about RQ2.

After completion of the entire PD workshop, I utilized the TPB theoretical framework (Ajzen, 1991) to evaluate my participants' intention to incorporate PIF into their professionalism curricula by using quantitative and qualitative tools to assess INT, directly, and assess the factors that Ajzen (1991) outlined as contributing to intention, namely ATT, SN, and PBC. My quantitative data yielded means for all four of my constructs (i.e., INT, ATT, SN, and PBC), that suggested participants' agreement (i.e., on a 7-point Likert scale, with means of 6.18, 6.14, 4.21, and 5.29, respectively) with statements that they intended to incorporate PIF, believed PIF was associated with positive attributes, perceived the views of others to be positive regarding PIF, and perceived a high level of control over incorporating PIF at their institutions. Further, when comparing my pre- and post-intervention survey results, I found a statistically significant increase in means for my PBC construct, and practically significant, small to

medium, increases in means for all four constructs. This meant that, per my quantitative results, after participating in my PD workshop my participants were, as also noted prior, more likely to act on incorporating PIF into their professionalism curricula, also given, again, that per Ajzen (1991), INT, ATT, SN, and PBC together predict such behaviors.

Through my qualitative data, in the form of participant interviews, I evaluated the same four constructs (i.e., INT, ATT, SN, and PBC). The majority of my participants expressed that they intended to incorporate PIF into their professionalism curricula and had increasingly positive attitudes towards PIF. Specifically, they saw value in utilizing PIF as a tool for providing individualized professionalism mentorship models for their students and determined their utilization of PIF would lead to improved interpersonal relationships. Additionally, participants perceived the incorporation of PIF into their professionalism curricula as a strategy that could better promote diversity and belonging within and across PA education. Although my qualitative data regarding my SN and PBC constructs yielded mixed results, after further analyses, I determined that, overall, participants perceived SN and PBC positively. To expand, my participants perceived that incorporation of PIF into their professionalism curricula would be seen as important and encouraged by their immediate network of faculty colleagues, or those colleagues who would be most likely to be impacted by such curricular changes. Regarding PBC, although my participants identified some challenges to incorporating PIF into their professionalism curricula, they also identified solutions for those challenges and shared that they could easily make the changes intended.

To comprehensively address RQ1, I also needed to understand my participants' definitions of PIF, and how my PD workshop influenced those definitions. Almost

universally, my participants defined PIF in a manner consistent with the literature (Cruess et al., 2014) in that they described PIF as a continually evolving process regarding how one thinks, acts, and presents oneself as a PA. From these descriptions, I concluded that my participants had foundational knowledge regarding the concepts supporting PIF. Regarding how my PD workshop influenced definition, through my qualitative data analyses it became evident that participant engagement in my PD workshop contributed to my participants' newfound or transformed knowledge about the concepts supporting PIF. Additionally, my participants also defined PIF as being influenced by environmental and individual factors and attributed my PD workshop as contributing to such critical reflection about PIF. Through the further definition of PIF provided by participants, I concluded that the intersectionality (Crenshaw 1989, 1991) lens with which I had developed my PD workshop material likely influenced my participants in that they were referencing intrapersonal, or historical and sociocultural factors, in their very definitions. My discussion of the implications of my findings for RQ1 are forthcoming, after my discussion of RQ2.

Research Question 2

The purpose of RQ2 was to evaluate the impact of participation in a CoI on PA faculty members' intentions to prioritize sociocultural factors in their professionalism pedagogies. Similar to RQ1, to effectively address RQ2 via my intervention I needed to provide participants with content relevant to RQ2. Thus, via my third PD workshop session I focused on discussions about how standardization and diversity approaches in medical education might impact PIF in medical learners (Frost & Regehr, 2013). For my fourth PD workshop session, participants examined a research study on PIF in a

Black/African American physician population (Wyatt et al., 2021), and via my fifth PD workshop session I continued the discussion from Session 4, during which my participants evaluated another research study in which researchers compared Black/African American physicians' professional identity experiences with similar experiences of a group of minoritized PAs (Wyatt, et al., 2022).

To evaluate RQ2, also again, I utilized the TPB theoretical framework (Ajzen, 1991) to evaluate my participants' intentions to prioritize sociocultural factors in their professionalism pedagogies by using quantitative and qualitative tools in the same manner I used these tools to address RQ1. My quantitative data, here, also yielded means for all four of my constructs (i.e., INT, ATT, SN, and PBC), that leaned toward or demonstrated agreement (i.e., on a 7-point Likert scale, with means of 6.00, 6.19, 4.76, and 5.43, respectively) with statements, again, suggesting that they intended to prioritize sociocultural factors, believed prioritizing sociocultural factors was associated with positive attributes, perceived the views of others to be positive regarding prioritizing sociocultural factors, and perceived a high level of control over prioritizing sociocultural factors at their institutions. Further, when comparing my pre- and post-intervention survey results, I found a statistically significant increase and a medium practical increase in means for my ATT and PBC constructs, and a medium practical increase in my INT construct. Regarding my SN construct, I found a statistically significant decrease and a medium practical decrease in means. This meant that per my quantitative results, after participating in my PD workshop my participants were more likely to act on prioritizing sociocultural factors in their professionalism pedagogy, given that, also again as per Ajzen (1991), both of the direct predictors (i.e., INT and PBC) and one of the indirect

predictors (ATT) of behavior change indicated my participants would increasingly prioritize sociocultural factors. Only SN had contrasting findings; however, as I discuss next regarding my qualitative findings for RQ2 I determined my decrease in SN meant that my quantitative findings did not correspond with my participants' reported intentions that I found in my interview data.

Once again, I also utilized qualitative data to evaluate the constructs (i.e., INT, ATT, SN, and PBC) to address RQ2. My participants expressed that they intended to prioritize sociocultural factors in their professionalism pedagogy and had increasingly positive attitudes regarding such prioritizations. This sentiment was best represented by one participant's response regarding whether they intended to prioritize sociocultural factors – "I do. I think once your eyes have been opened, you can't close them again…So for me personally…I absolutely will make sure that I'm being more holistic and more sensitive about [sociocultural factors]." Similar to participants' perspectives on incorporating PIF into their professionalism curricula, participants also viewed prioritization of sociocultural factors as a means for the creation of more inclusive learning environments, also to support learners in the cultural uplift of their communities. My qualitative data regarding my SN and PBC constructs were also mixed, here, and again, after which I determined that, overall, my participants perceived SN and PBC positively. To expand, my participants perceived that prioritization of sociocultural factors in their professionalism pedagogies would be commended by their immediate peer networks, and they further indicated that they would like the prioritization of sociocultural factors to be more of a profession-wide sentiment. Regarding PBC, although my participants identified some challenges to prioritizing sociocultural factors

into their professionalism pedagogies, they also identified solutions for those challenges and indicated they could make said changes, regardless of the challenges.

Implications of RQs 1 and 2

The implications of RQs 1 and 2 are overlapping so, as briefly mentioned, I discuss them together. Results suggested that a CoI was an effective framework for introducing new curricular concepts to PA faculty, and inspiring changed perspectives on foundational pedagogical concepts in PA education. Using the CoI framework, I was able to successfully guide my participants through the four stages of inquiry, as per Garrison (1999; see also Theoretical Frameworks section, prior): 1) a triggering event, or discovery that there were new concepts to learn regarding professionalism (i.e., through the recruitment process); 2) exploration, or process of acquiring new information (i.e., through journal articles participants were assigned to read); 3) integration, or construction of new ideas (i.e., through discourse with other participants during the PD workshop sessions); and 4) resolution, or application of new ideas (i.e., through participants' qualitative responses via survey and interview data by which participants considered if and how they could apply these concepts to their curricula). Additionally, by utilizing a CoI that I developed using the lens of intersectionality, my participants' perspectives on professionalism and PIF evolved to become more inclusive of sociocultural factors. Likewise, by their own testaments they predicted future integration of PIF and prioritization of sociocultural factors into their professionalism curricula, via which they were also more likely to help diversify the PA student population, and by extension, profession. As these predictions were in line with my ultimate goals and inspiration for my action research study, I am confident that my PD inspired positive changes in the

approach by which PA faculty participants might more effectively teach and assess professionalism in PA education, specifically to better incorporate PIF into their curricula, all while increasingly prioritize sociocultural factors into their professionalism pedagogies.

Research Question 3

The purpose of RQ3 was to help me evaluate the impact of participant involvement in a CoI on their perspectives related to professionalism in medical education. Accordingly, I collected only qualitative data to investigate this RQ. Participants' qualitative survey responses and responses to my PD workshop exit questions provided me with rich insight into their changing perspectives on professionalism over time during my intervention. Via both participant qualitative survey and PD workshop exit question responses, I discovered that participant definitions of professionalism more frequently included intrapersonal factors after participation in the PD workshop (i.e., 20.6% of pre-intervention and 30.2% of post-intervention codes on Question 33 of survey; 24.5% of Session 1 and 44.4% of Session 5 codes on PD Workshop Question 2). My PD workshop exit questions further identified large shifts in the factors that my participants identified as being most influential in the development of professionalism within PA students. Specifically, they identified intrapersonal factors much more frequently (i.e., 23.8% of Session 1 codes and 44.4% of Session 5 codes on PD Workshop Question 1), and structural factors much less frequently (52.4% of Session 1 codes and 33.3% of Session 5 codes on PD Workshop Question 1). This means that my participants were exceedingly appreciating the micro level factors (e.g., age, race, gender)

and depreciating the macro level factors (e.g., policy, social norms) that influence individual development (Rai et al., 2020).

I was able to derive further elaboration on my participants' changed perspectives through additional qualitative survey data via which I asked my participants to describe how their definitions of professionalism had changed after participation in the PD workshop (i.e., Question 34 of post-intervention survey) to which 80% of the coded data aligned with the intrapersonal construct. I considered these findings in context with some of my emerging themes from my interview data. In particular, I reflected on the following relevant interview findings: 1) participant positive attitudes regarding the role sociocultural factors have on professionalism; 2) recognition of a role for PIF to promote inclusive learning environments; 3) negative perceptions regarding the lack of prioritization of sociocultural factors within larger field of PA education; and 4) critical inquiry regarding PIF and professionalism through which there was an acknowledgment of how bias and power differentials may influence professionalism pedagogy. Ultimately, after considering the totality of findings from my study, I interpreted my participants' changed definitions of professionalism to be related to the extent to which they learned or were more exposed to how intrapersonal factors shape individual's PIF processes. Relatedly, particularly when again considering how my participants' changed definitions related to interview findings, I also found that my participants seemed to be recognizing, per intersectionality theory (Crenshaw 1989, 1991), the oppressive role that meso level (i.e., interpersonal relationships that can include judgements and stereotypes) and macro level (i.e., structural or systemic policies and social norms that can be discriminatory) factors can have on individual personal development.

Implications of RQ3

Here, I confidently concluded that participant engagement with their CoI, as influenced by my intersectionality theory, contributed to PA faculty member participants defining professionalism with an understanding and appreciation for how professionalism is influenced by students' sociocultural factors. Given the importance of professionalism standards in PA education (see Literature Review, prior), as well as recent reports highlighting the isolation, exclusion and discrimination experienced by persons who are UiM as related to professionalism and professional identity (Wyatt et al, 2021; Volpe et al., 2019; Osseo-Asare et al., 2018), it is critically important for PA educators to better identify ways to merge their approaches to professionalism alongside or given the diverse set of sociocultural backgrounds represented by the learners with whom they interact. My findings accordingly suggest that utilizing PIF as a pedagogical strategy for addressing professionalism in PA education may provide just such a mechanism for accomplishing that task.

Next, I review the limitations of my study and the threats to validity that I believe most applied to my study or, rather, the validity of the inferences of my findings above.

Study Limitations

It is important that these findings, and all inferences I make about how my intervention may have influenced my findings, are considered in the context of my study limitations. As with any research design, my study was subject to both internal and external threats to validity. Internal validity is defined as the degree to which an independent variable (i.e., an intervention) can be confidently deemed to have caused any changes measured in the topic being studied (i.e., dependent variable; see, for example,

Smith & Glass, 1987). Threats to internal validity include history, maturation, testing, instrumentation, nonequivalence, regression, selection, and mortality (Smith & Glass, 1987; see also Olsen, 2008; Lavrakas, 2008). External validity is defined as the degree to which the findings from one study can be extrapolated (i.e., or generalized), more broadly, to other contexts, including other environments, different participants, or different researchers (Smith & Glass, 1987). Smith & Glass (1987) identified several possible threats to external validity as follows: (1) population, meaning aspects related to the sample studied that may influence how findings can (or cannot) be generalized to a population; (2) ecological, meaning aspects related to the physical or social contexts of a study; and (3) operations, meaning the specific technical aspects of how a study is conducted by a researcher. In the next sections I will further define and discuss the internal and external threats to validity that I deemed relevant to the overall validity of the inferences I drew throughout my study.

Internal Threats to Validity

First, I will discuss internal threats to validity, or in the case of my study specifically, the factors that may have limited my ability to conclude that my results were directly related to my subjects' participation in my PD workshop. The internal threats to validity that I determined relevant to my research design were history, testing, attrition, and selection, each of which I explain next.

History effects refer to external events that participants are concurrently exposed to during their time as participants in a research study (Smith & Glass, 1987; see also Reichardt, 2015). As related to my study and my participants, it is important to note, as I also alluded to in my introduction, that DEI (diversity, equity, and inclusion) topics are

amongst some of the most prevalent topics discussed within and amongst PA educator professional networks nowadays. Further, as outlined in my literature review, the accreditation standards related to DEI recently enacted by the ARC-PA (i.e., Accreditation Review Commission on Education for the Physician Assistant) have furthered DEI initiatives within PA education; thus, it is common to encounter articles, conference sessions, workshops, and the like, aimed at various PA faculty audiences that are focused on approaches to address DEI in PA education.

Recall that through my intervention, I aimed to provide PA faculty with a pedagogical intervention that would honor the diversity of PA students by prioritizing their sociocultural factors within professionalism curricula. Due to the related nature of my PD workshop intervention with the broader, profession-wide initiatives surrounding DEI, it is subsequently possible that any changes I observed in my participants could have been influenced by such external factors. While it would not have been feasible for me to completely remove this particular internal threat, history, I was able to mitigate it to a certain degree in that via two of my qualitative post-survey items I specifically asked participants to explore their changed perceptions after participation in the PD workshop, and via one of my interview items I asked participants to discuss their awareness of the concept of PIF prior to participation in the PD workshop. The associated qualitative data I collected from my post-survey and my participant interviews accordingly helped me affirm that my findings were unlikely to have been substantively influenced by such external factors, again, due to history.

The next internal threat to validity, testing, is described as the effect that participation in a pre-intervention assessment has on a research study participant

(Reichardt, 2015). To further explicate, in the case of my study, this means that a participant could demonstrate differences in their pre- and post- intervention survey responses, even without having participated in the PD workshop, because their interaction with the pre-test may have increased their knowledge or familiarity with the concepts being tested (Smith & Glass, 1987). In other words, testing is a threat to internal validity because the test itself may influence participants' awareness of and perceptions about the concept being assessed.

This threat is relevant to my study because my pre-intervention survey included a definition for PIF which could have been the source of my participants' gained knowledge about this concept, and over time their perceptions related to PIF could have changed even without participation in the PD workshop. Similarly, in my pre-intervention survey I asked about the constructs of INT, ATT, PBC, and SN as related to incorporating PIF and prioritizing sociocultural factors within professionalism curricula, which may have also contributed to my participants' perceptions about these constructs as participants progressed in the study. By deploying a pre-intervention survey, in other words, my participants may have been particularly attuned to their attitudes on PIF and sociocultural factors, they may have been considering the ease with which they could make such changes (i.e., PBC), and they may have increasingly been reflecting on their peers' perceptions about PIF and prioritization of sociocultural factors (i.e., SN). I attempted to mitigate this threat in the same manner as described above with the history threat, in that, through my qualitative data collection, I specifically asked my participants to reflect on their perceptions and knowledge about the studied concepts after their participation in the PD workshop. Thus, through the process of my qualitative data

analyses I could assess whether participants seemed to attribute any of their changed perceptions (in)directly to their PD workshop participation. Additionally, the effect of time, meaning the time between pre- and post-intervention assessments, helped me mitigate this testing threat in that I deployed my post-intervention survey instrument approximately three months after my pre-intervention survey instrument; the more time that passes between two instrument administrations, the less likely it becomes that measured changes are due to exposure to the pre-test or, in this case, pre-survey instrument (Smith & Glass, 1987).

The next threat to internal validity relevant to my study was attrition, or the loss of participants during the intervention so that the pre- and post-intervention assessment data represented different groups (Reichardt, 2015). Attrition is a threat to internal validity because it is associated with differences in characteristics of pre- and post-intervention groups. In particular, participants who complete the entirety of any study may have differing characteristics or motivating factors than participants are lost to attrition (Smith & Glass, 1987).

For my study, I mitigated the attrition risk in that I only analyzed matched samples so that my pre- and post-intervention quantitative and qualitative survey data encompassed the same participants. However, because I did not require attendance at all five of my PD workshop sessions, there was definitely variation amongst even my matched samples with regard to the degree to which they interfaced with my intervention. Specifically, of my 19 participants, 18 attended Session 1, 13 attended Session 2, nine attended Session 3, seven attended Session 4, and five attended Session 5. I tried to mitigate the threat created by varied attendance at my PD workshop sessions by

incentivizing 100% participation with a gift card; however, I still only had one participant with 100% attendance.

This threat also applied to my qualitative interview and exit question data collection. With respect to interviews, my participants had varying levels of attendance at my PD workshop sessions. Specifically, of my interview participants, two attended 60% of sessions (i.e., three sessions), four attended 80% of sessions (i.e., four sessions), and one attended all sessions. I attempted to mitigate the attrition threat related to my interview participants by prioritizing percent attendance at the PD workshop sessions as a primary factor for whom I selected to interview amongst those participants who indicated willingness. On the flipside, and also of note, regarding the varied attendance at my PD workshop sessions is that I did have participants over the course of the intervention privately inform me that although they may not have been able to attend a given session, they were still reading the articles and reflecting on the discussion questions I sent out to all participants after the conclusion of each session. Regardless, with respect to my PD workshop exit question data, these data (i.e., my participants' exit question responses) must also be considered with caution because the trends I noticed over time did not necessarily reflect the same participants from session to session, either.

I also identified self-selection bias as an internal threat to validity, as well. Self-selection bias refers to the bias that occurs when a participant is the sole individual deciding whether to participate in a research study (Olson, 2008). This is a threat to validity that is difficult to avoid in research studies in which participants are not randomized into treatment and control groups. In my study, my participants self-selected into my study after receiving recruitment communications from me, to which my letter of

consent was attached, which included information about the study purpose and the topics for each of the PD workshop sessions. Therefore, it is possible, if not likely, that my participants had an underlying interest in the topics of professionalism, PIF, and sociocultural factors that may have influenced their interest in participating in this study and, thus, impacted the extent to which they related to the material presented in the PD workshop, the extent to which they indicated agreement with the statements I presented to them in my quantitative data collection, and the extent to which they demonstrated interest in the topics of my RQs (i.e., incorporation of PIF and prioritization of sociocultural factors) through the qualitative data I also collected.

External Threats to Validity

Next, I discuss external threats to validity, or again, the threats related to my ability to conclude that the results from my research study are generalizable, or able to be extrapolated to any larger population (Slack & Draugalis, 2001; Bannerjee & Chaudhury, 2010). The external threats that I determined were relevant to my research were noncomparability, the Hawthorne effect, and experimenter effects (Smith & Glass, 1987), each of which I further explain next.

Noncomparability refers to differences between the sample population and the larger target population that jeopardize the ability to generalize findings from the study to the broader population (Smith & Glass, 1987). The threat of noncomparability can be mitigated by using sampling methods, such as random sampling, that facilitate the formation of a representative sample that matches the characteristics of the target population (Kalaian & Kasim, 2008). I did attempt to mitigate this threat by recruiting my participants from professional learning communities inclusive of PA faculty across the

country; however, my study was ultimately subject to noncomparability as an external threat due to my small sample size (n=19), which cannot possibly represent the overall PA faculty population. While I could not entirely mitigate this threat, it is important to remember that, in action research, comparability of sample populations for the purposes of generalizability of findings is not a priority (see more forthcoming).

My next external threat to validity was the Hawthorne effect, which refers to participants' altered behavior because of their perceptions about the intended purpose of the study (Smith & Glass, 1987; Kalaian & Kasim, 2008). The Hawthorne effect could have led my participants to consciously or subconsciously provide data that either supported or refuted my research depending on their attitudes toward the subject matter. Further, my recruitment of participants from professional learning communities that often include PA faculty who demonstrate support for other PA faculty pursuing their doctoral degrees may have contributed to the Hawthorne effect in my study. In other words, professional solidarity may have caused participants to be compelled to support a professional colleague by (consciously or subconsciously) providing data that would support or, rather, sway their perceptions in favor of my expected outcomes. I attempted to mitigate this threat by ensuring my survey and interview questions were presented objectively and that I did not disclose to my participants any of my hypotheses regarding how my PD workshop may have influenced their intentions to incorporate PIF and prioritize sociocultural factors in their professionalism curricula.

My final external threat to validity was the experimenter effect, or any effects of the researcher. This effect refers to the effects that I personally may have had on my participants because of my interactions and relationship with them throughout the study

(Smith & Glass, 1987). Since most of my participants were professional colleagues with whom I either currently work or have worked with in the past, there may have been a conscious or subconscious effort on the part of my participants to provide me with data that would show a positive effect of my intervention. Additionally, many of my participants were aware of my own perspective on the topic of professionalism because of their familiarity with me as a professional colleague. Thus, it is likely that my known perspective on this topic may have contributed to my participants having preconceptions about the outcomes I expected from my research, which again, may have influenced how they responded to my surveys, exit questions, and interview prompts. This aspect of the experimenter effect is also related to social desirability bias, which could be considered another external threat to validity. Social desirability bias is defined as a phenomenon in which participants answer questions in a way that will allow them to look better to others or to feel good about themselves (Larson, 2019). I could have mitigated the experimenter effect by utilizing a research assistant, or other entity, to conduct participant interviews. However, the benefits of conducting the interviews myself were that I had established trust with my participants, and, because of my familiarity with the purpose of the study, I was able to ask effective probing questions to gain greater depth of understanding of my participants' responses.

Lastly, due to the nature of action research, I created and facilitated the PD workshop sessions myself, each of which included my summary of the assigned journal article, discussion questions about the articles that I created, and reflection questions for participants to consider after the conclusion of each session. It is likely that my own perceptions about professionalism, PIF, and sociocultural factors were communicated to

my participants by the very nature of how I designed these sessions. I attempted to mitigate the researcher effect, accordingly, by trying to be objective in my summaries of the journal articles I presented at the beginning of each PD workshop session, by not participating in the small group breakout discussions during the workshop sessions, and by not providing my own answers to the reflective questions I presented during each workshop session. Nonetheless, I think it is possible that my perspectives may have introduced bias in how I presented information in the PD workshop sessions, which could contribute to this external threat to the validity of my study in that a different researcher conducting this study could have different findings.

Nevertheless, despite the above described threats to external validity, it important to remember that action research is not intended to be generalizable (Ivankova, 2015), as per the first external threat described prior, but rather transferable, which is defined as the ability of the consumer of the research to fully understand the contexts related to the research study to determine for themselves if the study and its related findings apply to the research consumer's own context (Mertler, 2020).

Further, as described by Stake & Trumbull (1982), educational research is intended to help practitioners achieve naturalistic generalizations, which Stake and Trumbull define as providing readers with rich, full descriptions of research interventions and observations to allow for the acquisition of experiential knowledge that can be applied to one's own context for the purpose of improved practice. Correspondingly, I contend that I have allowed for the possibility of my action research findings being transferable by providing explicit details about my role as the researcher (see Role of the Researcher section prior), the characteristics of my participants (see Participant

Demographic Data section prior), the details of my action and my research design (see My Action and Methods sections prior, and Appendix A), and how I analyzed and interpreted my findings (see Methods and Results sections prior).

CONCLUSION

In sum, I want to acknowledge, and commend, my profession for having already recognized the need to diversify our students, our faculty, and ultimately our clinicians. There is a steadfast recognition within medical and PA education that a homogenous clinical workforce is not relatable to a diverse patient population and the resultant effect is a patient population whose members feels estranged from their health care practitioners. Diversification of our student body, then, is a critical step toward improving the health of populations of people who have had inadequate access to healthcare for various reasons, including distrust and systemic inequities.

The most prevalent approaches to promote increased diversity of medical learners, that I have witnessed, have come in the form of pathway (i.e., pipeline) programs and holistic admissions procedures. Pathway programs focus on targeted outreach to individuals who are UiM to introduce and recruit them to the PA profession (Cuenca et al, 2022; Vallejo et al., 2020; VanderMeulen et al., 2022). Holistic admissions procedures involve balancing applicants' experiences, backgrounds, personal attributes, and their academic records in selection processes, while also taking into consideration the contributions applicants might make to their learning environments and the profession (Coplan et al, 2021; Cuenca et al, 2022; VanderMeulen et al., 2022). Both pathway programs and holistic admissions procedures are important; however, I think it is also time to look inward at our educational institutions with a critical eye. Are we creating inclusive environments that support our most diverse learners? Are we willing to stray from centuries of traditional approaches to medical education? *Are we willing to transform?*

When I took my first steps on this action research journey, I had lofty goals of transforming the landscape of PA education in a way that would address the diversity (or lack thereof) problem in medicine. In particular, I contended that aspects of the medical education community itself, particularly the manner in which professionalism is taught and assessed, may contribute to the promulgation of an exclusive learning environment. Accordingly, I sought to inspire the community to look inward at its own curriculum and associated strategies for delivering that curriculum as a means to create more inclusive learning environments that, in my mind, could lead to improved diversity.

My hope for this study, accordingly, was that involvement in it would introduce and, perhaps, even compel PA educators to approach the topic of professionalism more innovatively within their programs. At minimum, by adopting a pedagogical strategy that incorporates PIF, rather than a pedagogy that is behaviorally focused, I believed we could start to honor the individuals joining our profession. Even better, if PA educators respected and celebrated the sociocultural factors that contribute to our learners' identity formation, I hoped that we would be one small step closer to increased diversity within PA education. While I realize I cannot transform the entirety of PA education with one action research study, I do hope that what I did at least inspired some PA faculty to engage in their own critical inquiry regarding how they approach professionalism and PIF. As my study demonstrated, through such critical inquiry, we can advance perspectives and effect change that will allow us to create learning environments in which PA students of all backgrounds will feel a sense of belonging.

Implications for Future Research

As such, I see several potential avenues for future research related to my study and its findings. First, related to professionalism pedagogy, my current study focused on PA faculty intentions to incorporate PIF into their professionalism curricula and prioritize sociocultural factors in their professionalism pedagogy. Overwhelmingly, study participants indicated that they intended to make these changes. However, there was also some acknowledgment of uncertainty regarding their levels of knowledge or confidence to help them effectively make these changes. Thus, it stands to reason that it would be beneficial for PA faculty to have future action research or other projects help them focus on the development, deployment, and outcomes related to specific curricular innovation(s). Related, to determine how and when to most effectively innovate professionalism curriculum, it would be helpful to better understand PIF in PA students, especially as most of the literature around PIF has focused on medical students. Therefore, additional research might focus on developing and validating PIF scales for PA students. Furthermore, longitudinal studies focused on better understandings of the PIF process in PA students would have utility in developing a more comprehensive professionalism curriculum.

Next, because again, my assertion in this study was that transformation in PA faculty approaches to professionalism and PIF could lead to more inclusive learning environments, I think it is important to better understand the program and institutional factors that contribute to PA students' sense of belonging, as a measure of inclusion. Thus, I think there would be value in conducting research that evaluates the curricular and other program or institutional factors (e.g., student and faculty demographics,

program mission, institutional support services) that affect students' sense of belonging. Information from this type of research could then inform interventions that would yield additional research, thus contributing to the cyclical nature of action research (Mertler, 2020).

Implications for Future Action

Next, I reflect on the implications of this study on my future actions remembering that, again, action research is intended to be transformative and to produce change (Herr & Anderson, 2005; Dick, 2014). One of the insights I gained from conducting this study is that PIF, while well-established within medical educational programs, is not a well-known concept amongst PA educators. Through my action research study, I helped to address this gap in knowledge. Likewise, by conducting this research, I effectively provided myself an opportunity to be a leader and advocate for transformation in professionalism pedagogy within PA education.

Moving forward, my actions will focus on advancing the concept of utilizing PIF with prioritization of sociocultural factors as a professionalism pedagogy in PA education. In my local context, most of my colleagues are already aware of the concept of PIF, but as the Director of Didactic Education, my sphere of influence affords me the opportunity to charge our team with identifying specific curricular innovations we can make to integrate PIF into our own professionalism curriculum. I learned from my study participants and their confidence in their abilities to make such changes that we can all easily make small modifications in our quest to adopt this pedagogy. Additionally, within my local context I would like to explore our adopted professionalism standards and policies within our program and institution and evaluate them with an intersectional lens,

perhaps in the form of content analyses. Such actions would help to ensure that any efforts we make to incorporate PIF into our professionalism curriculum are not thwarted by unintended exclusionary policies or practices. Rather, they might advance.

Within the larger context of PA education, in general, I would like to continue to facilitate PD workshops on the topic of PIF and professionalism that are designed with a CoI framework by either repeating the same PD workshop with new participants or by creating new, similar workshops. My most immediate action might be to facilitate an abbreviated version of my PD workshop at the annual education forum for PA educators that is hosted by the PAEA (i.e., the Physician Assistant Education Association). I could launch the first session, live, at this forum to garner excitement and interest, and then continue the remaining sessions in the same manner as my current study. Another related action could be to further explore the CoI model for asynchronous delivery of educational content. Many of my participants identified competing time demands as a challenge for participating in all five sessions; therefore, modifying my PD workshop to an asynchronous format may allow for more widespread dissemination. Lastly, to also promote more widespread dissemination, my future actions may include encouragement of other PA faculty to similarly facilitate workshops on similar topics within their own local contexts through which I could also provide them with access to workshop curricular material and mentorship for workshop facilitation.

Final Thoughts

As a pragmatist, to succinctly conclude my thoughts on a multi-year scholarly journey, I think the most practical approach is to return to the beginning and reflect on the motivating factors that started me on this journey. Ultimately, I am a PA educator

because I want to inspire my students to approach their future clinical practice with the mindset of patient-centeredness. To effectively deliver patient-centered care, we need PAs in the field who bring with them a diverse set of lived experiences allowing them to relate with and be relatable to patients of diverse backgrounds. Knowing that medical and PA education have, thus far, failed in achieving such diversity-related goals, it is time that we critically reflect on the educational environments we are asking individuals of diverse backgrounds to join. It is time for curricular change. As my study demonstrated, a transformed approach to professionalism pedagogy may be the needed change to support the development of more inclusive learning environments.

Hence, I conclude my study by also returning to the quote from *Allegiant* (Roth 2013) with which I started this dissertation, "I belong to the people I love, and they belong to me--they, and the love and loyalty I give them, form my identity far more than any word or group ever could." I encourage my PA faculty colleagues to consider that we are not, ultimately, attempting to have our students fit into our "group" of PAs, but rather, we are providing students the knowledge and skills requisite to competently practice medicine as their own person and for their own community, however that may be defined.

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APPENDIX A

MY ACTION

Note: The structure of the action aligns with the community of inquiry theoretical framework, the reflective questions guiding the PD workshop sessions align with the theory of planned behavior, and the exit questions, align with intersectionality theory.

Format for Professional Development Sessions

Each session will be planned for 60 minutes, with the time allotted as follows:

- 5 minutes: Welcome and agenda setting
- 5 minutes: Summary presentation of key points from article
- 10 minutes: Small-group discussion in breakout rooms - first reflective prompt
- 10 minutes: Small-group discussion in breakout rooms - second reflective prompt
- 10 minutes: Small-group discussion in breakout rooms - third reflective prompt
- 12 minutes: Large-group reconvenes to share key ideas discussed in small groups
- 3 minutes: Wrap up
- 5 minutes: Deploy link to exit questions
  Note: same exit questions used during each session

    1. List the factors you perceive to be most influential in the development of professionalism within PA students,
    2. Please provide your current definition of professionalism as it relates to PA education, and
    3. Briefly, please summarize your approach to teaching and assessing professionalism in PA education.

Professional Development Session Details

Session 1 – Professionalism frameworks in medical education

Journal reference:

> Irby, D. M., & Hamstra, S. J. (2016). Parting the clouds: Three professionalism frameworks in medical education. *Academic Medicine*, *91*(12), 1606–1611. https://doi.org/10.1097/ACM.0000000000001190

Reflective questions guiding journal club session:

1. Three professionalism constructs were described in this article: virtue-based, behavior-based, and PIF. Discuss how your personal definition of professionalism does or does not align with these constructs.

2. Which of the three construct(s) guide how professionalism is taught and assessed at the PA program at which you teach?
    a. Is this congruent with your personal definition of professionalism? Why or why not?

3. Discuss any insights you had, as a result of reading this article, related to teaching professionalism?
    a. Will you implement any new teaching strategies for the topic of professionalism?
    b. Discuss any anticipated barriers or challenges to changing the approach to teaching professionalism.

Session 2 – PIF

Journal reference:

> Cruess, R. L., Cruess, S. R., Boudreau, J. D., Snell, L., & Steinert, Y. (2014). Reframing medical education to support professional identity formation: *Academic Medicine, 89*(11), 1446–1451. https://doi.org/10.1097/ACM.0000000000000427

Reflective questions guiding journal club session:

1. Discuss how this article influenced your understanding of PIF. Consider:
    a. Were you familiar with the concept of PIF prior to participating in this journal club?
    b. If you were familiar with PIF, did your understanding of PIF align with the material presented in the article?
    c. What new insights about PIF did you gain from this article?

2. Cruess et al. seem to imply that the more traditional focus on teaching cognitive and behavioral aspects of professionalism will automatically be encompassed in medical learners that participate in a medical education experience guided by the pedagogy of PIF. Do you agree with this assumption? Why or why not?
    a. Would you consider reframing the explicit teaching of cognitive and behavioral components of professionalism to the facilitation of PIF?

3. How would you see incorporating PIF into the PA program at which you teach? How would you envision ensuring professionalism competence using a PIF framework?

Session 3 – Discourses related to PIF

Journal reference:

> Frost, H. D., & Regehr, G. (2013). "I AM a doctor": Negotiating the discourses of standardization and diversity in professional identity construction. *Academic Medicine, 88*(10), 1570–1577. https://doi.org/10.1097/ACM.0b013e3182a34b05

Reflective questions guiding journal club session:

1. Do you relate with the perspective summarized in the article related to faculty frustration with student professional identities being incongruent with faculty and/or profession expectations?

2. The article describes the conflict between standardization and diversity as it relates to professionalism, and discusses how some students choose to embrace standardization, others embrace diversity, and still others construct hybrid identities. What expectations do you have for students in your program with regard to how they approach this conflict in professionalism?
    a. How is this expectation relayed to students (e.g., implicitly vs. explicitly, case-by-case mentoring, etc.)?
    b. What are the benefits and risks of students' embracing a standardized, diverse, and/or a hybrid identity?

3. Frost and Regehr state educators should promote students "construct[ing] an identity that intersects with and builds on who they are and that, hopefully, allows them to experience identity integration and alignment." How realistic do you think it would be to implement this perspective amongst PA educators?
    a. What challenges would you have in adopting a model of professionalism that truly accepts diversity, especially as it relates to sociocultural aspects of identity?
    b. How could you start to implement incremental change toward a diversity discourse as it relates to professionalism?

Session 4 – PIF experiences in UiM students, Part 1

Journal reference:

> Wyatt, T. R., Rockich-Winston, N., White, D., & Taylor, T. R. (2021). "Changing the narrative": A study on professional identity formation among Black/African American physicians in the U.S. *Advances in Health Sciences Education, 26*(1), 183–198. https://doi.org/10.1007/s10459-020-09978-7

Reflective questions guiding journal club session:

1. Dominant PIF literature emphasizes the socialization of medical learners into the norms of a profession. Reflect on the impact of that approach on medical learners of diverse backgrounds.

2. Discuss your views on adapting the pedagogy of PIF to include sociohistorical factors of individual medical learners. What are the associated benefits and challenges?

3. Wyatt et al. identified the themes of alertness to exclusion, racial uplift, and leadership as critical elements of professional identity formation of Black physicians. How can PA educators support sociocultural/sociohistorical aspects of PIF in medical learners?
    a. Is this the role of faculty? Why or why not?

Session 5 – PIF experiences in UiM students, Part 2

Journal reference:

> Wyatt, T. R., Rockich-Winston, N., Crandall, S., Wooten, R., & Gillette, C. (2022). A comparison of professional identity experiences among minoritized medical professionals. *Journal of the National Medical Association*, *114*(4), 456–464. https://doi.org/10.1016/j.jnma.2022.05.013

Reflective questions guiding journal club session:

1. Participants in the Wyatt et al. study believe that racial identity is important to clinical care. How might this concept be extrapolated to other aspects of student diversity?
    a. How important is it for students to conform to the norms of the profession if, as a result, their sociocultural personal identity is transformed?
    b. What effect might this have on the long-term diversification of the PA profession?

2. Wyatt et al. found that minoritized PAs and PA students were able to "bring their entire selves both in the training and the practice environments" whereas Black/African American physicians felt "splintered" in their professional identity.
    a. Do you feel like this is consistent amongst PA students in your program?
    b. Wyatt et al. speculate about different possibilities for the difference – what ideas do you have as to why there may be a difference?

3. Discuss any transformation in thought you may have experienced, as a result of participating in this journal club, regarding how you and/or your program teach and assess professionalism.
    a. What information was most useful or surprising from the journal articles that were analyzed?

APPENDIX B

STUDY TIMELINE

Anticipated Time	Actions	Procedures
January – February 2023	Pilot Study of Survey Instrument and Interview Protocol	Conduct a pilot study of the survey instrument and implement any necessary revisions. Solicit feedback on participant interview protocol questions.
February – March 2023	Study approval from ASU IRB, Dissertation Committee	Complete dissertation proposal and obtain necessary approvals to proceed with study
March 2023	Participant Recruitment	Recruit participants via email, professional social network sites, online professional learning communities, and word-of-mouth.
March – April 2023	Pre-Intervention Survey	Administer pre-intervention survey to PD workshop registrants.
April – June 2023	Intervention and Exit Questions	Facilitate five PD workshop sessions, held approximately every two weeks during timeframe. Administer PD workshop exit questions at the completion of each workshop session.
June 2023	Post-Intervention Survey	Administer post-intervention survey to participants.
July – August 2023	Conduct Interviews	A purposeful sample of 6-8 participants from the intervention will be created and interviews will be conducted via online modality such as Zoom.
September – November 2023	Data preparation and analysis	Prepare data and conduct quantitative and qualitative analysis. Triangulate quantitative and qualitative data according to a convergent MMAR design.
December 2023 - January 2024	Compose findings	Compose the results and findings sections of the study report.
February 2024	Present and defend findings	Present findings to dissertation committee and disseminate to others as appropriate.
March 2024 and onward	Reflect and plan for future cycles of action research	Reflect on study results and plan future cycles based on results, committee feedback, and peer feedback.

APPENDIX C

INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL

Figure C1

Arizona State University IRB Approval

EXEMPTION GRANTED

Audrey Beardsley
MLFTC: Educational Leadership and Innovation, Division of
-
audrey.beardsley@asu.edu

Dear Audrey Beardsley:

On 3/7/2023 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Redefining Professionalism Pedagogy in Physician Assistant Education: Moving Toward Intersectional Professional Identity Formation
Investigator:	Audrey Beardsley
IRB ID:	STUDY00017684
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• IRB Protocol_Feirstein dissertation_revised.docx, Category: IRB Protocol; • letter of consent_feirstein dissertation_revised.pdf, Category: Consent Form; • recruitment_methods_03-05-2023_revised.pdf, Category: Recruitment Materials; • supporting documents, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2)(ii) Tests, surveys, interviews, or observation (low risk) on 3/7/2023.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Jennifer Feirstein
Jennifer Feirstein

APPENDIX D

LETTER OF CONSENT

Redefining Professionalism Pedagogy in Physician Assistant Education: Moving Toward Intersectional Professional Identity Formation

Researcher

Jennifer Feirstein, doctoral student at Arizona State University, has invited your participation in a research study. This study is under the direction of Audrey Beardsley, professor in the Mary Lou Fulton Teachers College.

Study Purpose

The purpose of the study is to evaluate sociocultural factors, professionalism, and professional identity formation (PIF) in physician assistant (PA) education. More specifically, the study will assess PA faculty knowledge and attitudes regarding PIF, PA faculty intention to incorporate PIF into professionalism curriculum, PA faculty members' perspectives on relationships between intersectional identities and PIF, and PA faculty members' discourse related to professionalism.

Participant Inclusion Criteria

- Faculty member at an ARC-PA accredited PA program
- Employed at 0.6 – 1.0 full-time equivalency

Description of Research Study

If you decide to participate, then you will join a study involving research of a professional development intervention.

If you say YES, your participation will involve the following components:

1. **Attend synchronous, online journal club sessions.**

   The researcher will host and facilitate five synchronous, online journal club sessions, each lasting 60 minutes in duration, over a ten week period. The schedule and topics for the sessions are as follows:

Session	Topic	Date	Time (for all sessions)
1	Professionalism frameworks in medical education	April 20, 2023	12:00 – 1:00 pm, AZ 1:00 – 2:00 pm, MST 2:00 – 3:00 pm, CST 3:00 – 4:00 pm, EST
2	Professional identity formation (PIF)	May 4, 2023	
3	Discourses related to PIF	May 18, 2023	
4	PIF in underrepresented in medicine (UiM) students, part 1	June 1, 2023	
5	PIF in UiM students, part 2	June 15, 2023	

The large group discussion portions of each session will be recorded to aid in the researcher's data analysis; however, small group discussions will not be recorded. Recordings will be deleted from the original recording device upon transfer to a password-protected computer.

Participants are encouraged, but not required, to attend as many sessions as possible because the content from each session is designed to build from material covered in prior sessions.

The researcher will distribute a journal article to participants in advance of each session with the request to read the article prior to attending the session. Journal articles will range in length from 5-15 pages.

Time commitments for journal club sessions:

- Reading journal articles prior to session: 5-30 minutes/article; up to 80 minutes total for all 5 articles
- Attending sessions: 60 minutes/session; up to 5 hours total for all 5 sessions

2. **Complete a pre- and post-intervention survey.**

The surveys will include items related to the following topics: intention to incorporate PIF into professionalism curricula, intention to prioritize sociocultural factors in professionalism pedagogy in PA education, and demographic questions. The pre-intervention survey will be distributed to participants upon registration for the workshop. The post-intervention survey will be distributed to participants

after culmination of the PD workshop series. Participants are not required to complete the surveys and may exit the surveys at any time, without penalty.

Time commitment: The pre-intervention survey is expected to take about 10-15 minutes to complete, and the post-intervention survey is expected to take 15-20 minutes to complete.

3. **Complete exit questions at the conclusion of each journal club session.**

   The last five minutes of each session will be allotted for completion of three free response questions related to professionalism in PA education.

   Time commitment: The exit questions are expected to take about 5 minutes to complete and the time will be built into each journal club session.

4. **Participate in an interview with Jennifer Feirstein (selected participants).**

   Survey respondents will be polled regarding their interest in participating in a one-to-one interview with the researcher regarding the following topics: intention to incorporate PIF into professionalism curricula and intention to prioritize sociocultural factors in professionalism pedagogy in PA education. The researcher will interview up to eight participants with selection criteria for interviewees being prioritized as follows:

   1) Participant attended all five learning sessions;
   2) Participant engaged with at least three of the learning sessions;
   3) Participant contributes to demographic diversity amongst interviewees (e.g., gender, ethnicity, age, number of years working in PA education, PA program and/or geographic region)

   The researcher would like to video record the interview but will not do so without your permission. Video recordings will be deleted from the original recording device upon transfer to a password-protected computer. Please let the researcher know, at any time (even after the interview starts), if you do not want the interview recorded.

   Time commitment: It is expected the interview will last 45-60 minutes.

Risks

There are no foreseeable risks for taking part in this study.

Benefits

There is no direct benefit for your participation. Possible benefits may include: expanded knowledge and understanding regarding the concept of PIF; professional networking opportunities with faculty external to your PA program; the opportunity to reflect on the pedagogy of professionalism in PA education.

Confidentiality

All information obtained in this study is strictly confidential. The results of this research study may be used in reports, presentations, and publications, but the researcher will not identify individuals. Pseudonyms will be used to identify each participant. In the survey, to protect your confidentiality, I will ask you to create a unique identifier known only to you. To create this unique code, use the first three letter of your mother's first name and the last four digits of your phone number. Thus, for example, if your mother's name was Sarah and your phone number was (602) 543-6789, your code would be Sar6789. The unique identifier will allow us to match your pre- and post-intervention survey responses during data analysis. In order to maintain confidentiality of your records, survey results will be password protected, and other documents containing data will be stored on a password-protected computer to which only Jennifer Feirstein has access. No one besides Jennifer Feirstein will be able to link any responses to individual study participants. All files will be destroyed three years after the end of the project.

Withdrawal Privilege

Participation in this study is completely voluntary. You may withdraw from the study at any time without penalty.

Costs and Payments

Participants that attend all five of the synchronous sessions and complete the study survey will be eligible to be entered into a drawing for one of three $125 gift cards. There is no other compensation for participating in this study.

Voluntary Consent
For any questions you have concerning the research study or your participation in the study, before or after your consent, please contact the research team: Jennifer Feirstein, Co-Investigator at jmmarqu9@asu.edu or Audrey Beardsley, Principal Investigator at audrey.beardsley@asu.edu.

If you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review
Board through the ASU Office of Research Integrity and Assurance at 480-965-6788.

Completion of the registration form indicates that you consent to participate in the above study, be video recorded during the online journal club sessions, and, if pertinent, be video recorded during an interview session with the researcher.

By signing below, you are agreeing to:

- participate in video recorded online journal club sessions, and
- if selected, participate in a video recorded interview.

Signature: _____

Please enter today's date: _____

APPENDIX E

RESEARCH QUESTION AND THEORETICAL FRAMEWORK ALIGNMENT

	Research Question	Theoretical Framework Alignment	Constructs Measured	Data Collection Method
1	How and to what extent does participation in the PD workshop influence PA faculty members' intention to incorporate PIF into their professionalism curriculum?	Theory of Planned Behavior (TPB)	Intention • Attitude • Subjective norm • Perceived behavioral control	Quantitative: Pre- and Post-Intervention Surveys Qualitative: Participant interviews
2	How and to what extent does participation in the PD workshop influence PA faculty members' intention to prioritize sociocultural factors in their professionalism pedagogy?	TPB	Intention • Attitude • Subjective norm • Perceived behavioral control	Quantitative: Pre- and Post-Intervention Surveys Qualitative: Participant interviews
3	How does participation in the PD workshop influence PA faculty members' perspectives related to professionalism in PA education?	Intersectionality	Intrapersonal (micro) Interpersonal (meso) Structural (macro) Power differentials	Qualitative: Deductive coding of PD workshop exit questions

Note: As a reminder, I implemented community of inquiry (CoI) theory in the development of my intervention; however, I will not be measuring the constructs associated with CoI as a component of this study.

APPENDIX F

PRE- AND POST-INTERVENTION SURVEY

Instructions

My name is Jennifer Feirstein, and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU). I am working under the supervision of Dr. Audrey Beardsley, a faculty member in MLFTC. My research focuses on professional identity formation (PIF) and sociocultural factors as they are related to professionalism pedagogy in Physician Assistant (PA) education.

Via this doctoral research study, I am seeking to examine the extent to which participation in an online, professional development (PD) journal club (hereafter referred to as PD workshop) focused on the above research topic influences intention to incorporate PIF and to prioritize sociocultural factors in professionalism curricula and pedagogy.

This survey instrument starts with a section to indicate your level of participation in the PD workshop sessions, then has eight sections of Likert-scale questions, and concludes with a section on demographic questions.

Participating in this survey should take you about 15-20 minutes to complete.

The full letter of consent can be accessed here.

To participate in this study you must be:

- A faculty member at an ARC-PA accredited PA program
- Employed at a minimum of a 0.6 full-time equivalency (FTE)

Submission of this survey indicates your consent to participate.

To protect your confidentiality, please create a unique identifier known only to you. To create this unique code, use the first three letters of your mother's first name and the last four digits of your phone number. For example, if your mother's name was Sarah and your phone number was (602) 543-6789, your code would be Sar6789. The unique identifier will allow us to match your pre- and post-intervention survey responses during data analysis.

Unique Identifier:

[Free response]

Section 1: PD Workshop Participation
This section included in post-intervention survey only.

Please indicate whether you attended each of the following PD workshop sessions:

	Yes	No
Session 1 (4/20/2023) - Professionalism frameworks in medical education	☐	☐
Session 2 (5/4/2023)- Professional identity formation (PIF)	☐	☐
Session 3 (5/18/2023) - Discourses related to PIF	☐	☐
Session 4 (6/1/2023)- PIF in underrepresented in medicine (UiM) students, part 1	☐	☐
Session 5 (6/15/2023) - PIF in UiM students, part 2	☐	☐

Section 2: Intention – Professional Identity Formation (PIF)

For this study, again, PIF is defined as the process whereby a PA student becomes, rather than acting like, a PA by embodying the characteristics, values, and norms of the profession.

The following items ask about your **intentions to incorporate PIF** into the professionalism curricula at your institution. Please use the following scale to indicate your level of agreement with the following statements related to your **intentions to incorporate PIF.**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
7	6	5	4	3	2	1

1. I expect to incorporate PIF into the professionalism curricula at my institution.
2. I want to incorporate PIF into the professionalism curricula at my institution.
3. I intend to incorporate PIF into the professionalism curricula at my institution.
4. It is essential to me to incorporate PIF into the professionalism curricula at my institution.*
5. I am enthusiastic about incorporating PIF into the professionalism curricula at my institution.*

Section 3: Attitude – Professional Identity Formation (PIF)

The following item asks you to share your beliefs about **incorporating PIF into the professionalism curricula** at your institution by indicating where your beliefs fall on the following scale. Please indicate where on the continuum your beliefs fall as they relate to **incorporating PIF into the professionalism curricula** at your institution.

6. Incorporating PIF into professionalism curricula is:

a.	Beneficial	7	6	5	4	3	2	1	Harmful
b.	Good	7	6	5	4	3	2	1	Bad
c.	Pleasant (for me)	7	6	5	4	3	2	1	Unpleasant (for me)
d.	Useful	7	6	5	4	3	2	1	Useless*
e.	Desirable	7	6	5	4	3	2	1	Undesirable*
f.	Effective	7	6	5	4	3	2	1	Ineffective*
g.	Helpful	7	6	5	4	3	2	1	Worthless*

Section 4: Subjective Norm – Professional Identity Formation (PIF)

The following items ask about how you perceive the **views of others related to incorporating PIF into the professionalism curricula** at your institution. Please use the following scale to indicate your level of agreement with the following statements about subjective norms.

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
7	6	5	4	3	2	1

7. Most people who are important to me think that I should incorporate PIF into the professionalism curricula at my institution.
8. It is expected of me that I incorporate PIF into the professionalism curricula at my institution.
9. I feel under social pressure to incorporate PIF into the professionalism curricula at my institution.
10. My peers think I will benefit by incorporating PIF into the professionalism curricula at my institution.#
11. Students think it is important that I incorporate PIF into the professionalism curricula at my institution.#

Section 5: Perceived Behavioral Control – Professional Identity Formation (PIF)

The following items ask about the level of control you feel over **incorporating PIF into the professionalism curricula** at your institution. Please use the following scale to indicate your level of agreement with the following statements about perceived behavioral control.

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
7	6	5	4	3	2	1

12. For me, to incorporate PIF into the professionalism curricula at my institution is easy.
13. I am confident that I could incorporate PIF into the professionalism curricula at my institution if I wanted to.
14. Whether I incorporate PIF into the professionalism curricula at my institution or not is entirely up to me.
15. I do understand what PIF means.[#]
16. I would have no difficulty explaining why incorporating PIF into the professionalism curricula at my institution is beneficial.[#]

Section 6: Intention – Sociocultural Factors

The following items ask about your **intentions to prioritize sociocultural factors** in the professionalism pedagogy at your institution. Please use the following scale to indicate your level of agreement with the following statements related to your **intentions to prioritize sociocultural factors.**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
7	6	5	4	3	2	1

17. I expect to prioritize sociocultural factors in the professionalism pedagogy at my institution.
18. I want to prioritize sociocultural factors in the professionalism pedagogy at my institution.
19. I intend to prioritize sociocultural factors in the professionalism pedagogy at my institution.
20. It is essential to me to prioritize sociocultural factors in the professionalism pedagogy at my institution.[*]
21. I am enthusiastic about prioritizing sociocultural factors in the professionalism pedagogy at my institution.[*]

Section 7: Attitude – Sociocultural Factors

The following item asks you to share your beliefs about **prioritizing sociocultural factors** in the professionalism pedagogy at your institution by indicating where your beliefs fall on the following scale. Please indicate where on the continuum your beliefs fall as they relate to **prioritizing sociocultural factors** in the professionalism pedagogy at your institution.

22. Prioritizing sociocultural factors in the professionalism pedagogy is:

a.	Beneficial	7	6	5	4	3	2	1	Harmful
b.	Good	7	6	5	4	3	2	1	Bad
c.	Pleasant (for me)	7	6	5	4	3	2	1	Unpleasant (for me)
d.	Useful	7	6	5	4	3	2	1	Useless*
e.	Desirable	7	6	5	4	3	2	1	Undesirable*
f.	Effective	7	6	5	4	3	2	1	Ineffective*
g.	Helpful	7	6	5	4	3	2	1	Worthless*

Section 8: Subjective Norm – Sociocultural Factors

The following items ask about how you perceive the **views of others related to prioritizing sociocultural factors in the professionalism pedagogy** at your institution. Please use the following scale to indicate your level of agreement with the following statements about subjective norms.

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
7	6	5	4	3	2	1

23. Most people who are important to me think that I should prioritize sociocultural factors in the professionalism pedagogy at my institution.
24. It is expected of me that I prioritize sociocultural factors in the professionalism pedagogy at my institution.
25. I feel under social pressure to prioritize sociocultural factors in the professionalism pedagogy at my institution.
26. My peers think I will benefit by prioritizing sociocultural factors in the professionalism pedagogy at my institution.*
27. Students think it is important that I prioritize sociocultural factors in the professionalism pedagogy at my institution.*

Section 9: Perceived Behavioral Control – Sociocultural Factors

The following items ask about the level of control you feel over **prioritizing sociocultural factors in the professionalism pedagogy** at your institution. Please use the following scale to indicate your level of agreement with the following statements about perceived behavioral control.

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
7	6	5	4	3	2	1

28. For me, to prioritize sociocultural factors in the professionalism pedagogy at my institution is easy.
29. I am confident that I could prioritize sociocultural factors in the professionalism pedagogy at my institution if I wanted to.
30. Whether I prioritize sociocultural factors in the professionalism pedagogy at my institution or not is entirely up to me.
31. I do understand how sociocultural factors influence professionalism.*
32. I would have no difficulty explaining why prioritization of sociocultural factors in the professionalism pedagogy at my institution is beneficial.*

Section 10: Definition of Professionalism

33. Please provide your current definition of professionalism as it relates to PA education.
    [Free response]

34. How has your definition changed after participation in the PD workshop series (if it has not changed, enter N/A)? *This item included in post-intervention survey only.*

    [Free response]

Section 11: Demographic Questions

35. In what year were you born?
    [Free response]

36. What is your gender?
    Female
    Male
    Gender identity: [Free response]
    Prefer not to answer

37. What is your race/ethnicity?
    American Indian or Alaskan Native
    Asian
    Black or African American
    Hispanic, Latino/a/x, or Spanish in origin
    Native Hawaiian or Pacific Islander
    White or Caucasian
    Biracial or Multiracial
    A race/ethnicity not listed here
    Prefer not to answer

38. How would you describe the environment in which you have spent the majority of your life?
    Large city
    Suburban near a large city
    Small city or town
    Rural area

39. What is your native/primary spoken language?
    [Free response]

40. Do you have a disability? (Disability is defined as a physical or mental impairment or medical condition that substantially limits a major life activity, or a history or record of such an impairment or medical condition.)
    Yes
    No
    Prefer not to answer

41. How many total years have you been employed as a faculty member in a PA program (please round to nearest whole number, enter 0 if less than 6 months)?
    [Free response]

42. What is your current faculty appointment full-time equivalency (FTE)? (Note: ≥ 0.6 FTE required to participate in study)
    0.6
    0.7
    0.8
    0.9
    1.0

43. What is your faculty rank?
    Instructor/Lecturer
    Assistant Professor
    Associate Professor
    Professor

Other:

44. Please indicate your professional title:
    Physician Assistant/Associate (PA)
    Medical Doctor (MD)
    Doctor of Osteopathy (DO)
    Nurse Practitioner (NP)
    Other: [Free response]

    Skip Logic → If Other is selected, skip to next section
    → If PA, MD, DO, NP selected, skip to question #44

45. How many total years of clinical experience do you have (please round to nearest whole number; enter 0 if less than 6 months; enter N/A if you have never worked clinically)?
    [Free response]

46. Please indicate your current or most recent clinical practice discipline.
    Family Medicine
    Internal Medicine
    Pediatrics
    Emergency Medicine
    Psychiatry/Behavioral Health
    Obstetrics/Gynecology
    Gynecology without obstetrics
    General Surgery
    Urgent Care
    Geriatrics
    Orthopedics
    Cardiology
    Neurology
    Dermatology
    Critical Care
    Surgical Specialty
    Oncology
    Pediatric sub-specialty
    Physician Assistant Education
    Other:
    Not applicable (i.e., no clinical practice experience):

47. Please indicate any additional clinical practice disciplines in which you have accumulated at least six months of experience (select all that apply).
    Family Medicine
    Internal Medicine
    Pediatrics

Emergency Medicine
Psychiatry/Behavioral Health
Obstetrics/Gynecology
Gynecology without obstetrics
General Surgery
Urgent Care
Geriatrics
Orthopedics
Cardiology
Neurology
Dermatology
Critical Care
Surgical Specialty
Oncology
Pediatric sub-specialty
Physician Assistant Education
Other(s):
Not applicable (i.e., no additional clinical practice experience):

Section 12: Additional Questions for Post-Intervention Survey
This section included in post-intervention survey only.

Please think about your experience participating in the PD workshop.

48. Please explain any changes you intend to make with regard to how professionalism is taught and assessed at your institution.
    [Free response]

49. What were the challenges you encountered in your participation in the PD workshop?
    [Free response]

50. What were the strengths of the PD workshop?
    [Free response]

51. Is there any additional information or feedback you would like to add?
    [Free response]

Are you willing to participate in an interview with the researcher, Jennifer Feirstein, about the topics discussed during the PD workshop, professional identity formation and sociocultural factors in professionalism curriculum and pedagogy?
This section included in post-intervention survey only.

Yes

Skip Logic → Please enter your name and email address below. You will be contacted by Jennifer Feirstein regarding scheduling an interview. Your personal information will be disaggregated from your survey responses.
Name:
Email address:

No

If you attended all five live, synchronous PD workshop sessions and would like to be entered into the drawing for one of three $125 gift cards, please select *yes* below and you will be taken to a separate screen to enter your contact information.
This section included in post-intervention survey only.

Yes, please enter me into the drawing.
Skip Logic → Please enter your name and email address below. You will be contacted by Jennifer Feirstein regarding scheduling an interview. Your personal information will be disaggregated from your survey responses.
Name:
Email address:

No, I do not qualify and/or I do not want to be entered into the drawing.

Thank you for your participation in this survey!

This section is for internal purposes only:

Except as indicated below, all survey items in sections 2-9 were adapted from Francis et al. (2004). Otherwise:

- Survey items designated with an asterisk (*) were adapted from Aptyka & Großschedl (2022).
- Survey items designated with a hashtag (#) were adapted from Renaud et al. (2019).

Instruction section:
In the pre-intervention survey, the instruction section will not include the reference to the survey having a section about indicating level of participation in the PD workshop sessions.

Survey items are aligned as follows, by survey instrument section:

	Construct			
RQ	Intention	Attitude	Subjective Norm	Perceived Behavioral Control
1	Section 1	Section 2	Section 3	Section 4
2	Section 5	Section 6	Section 7	Section 8

APPENDIX G

INTERVIEW PROTOCOL

1. **Introduction**
    a. Welcome and thank participant for agreeing to participate in the interview.
    b. Remind participant of purpose of study and the PD workshop series
        i. You recently completed a professional development (PD) workshop series, which consisted of five online journal club discussions. The aim of the PD workshop was to discuss professional identity formation (PIF) and sociocultural factors in relation to professionalism pedagogy in PA education.
        ii. As a reminder, I am a doctoral student in the Mary Lou Fulton Teachers College at Arizona State University (ASU). I am working under the direction of Dr. Audrey Beardsley, a faculty member in the Teacher's College.
    c. Ask for verbal authorization to record meeting and agreement to participate.

2. **Semi-Structured interview guiding questions and prompts**
    a. This first set of questions will focus on professional identity formation
        i. How would you describe the concept of PIF?
        ii. Were you aware of the concept of PIF prior to participation in the PD workshop?
            1. If yes: Can you please compare and contrast your understanding of the concept of PIF before and after your participation the PD workshop?
        iii. Would it be worthwhile for you to incorporate the concept of PIF into the professionalism curriculum of your institution? (RQ1 – attitude)
            1. Why or why not?
        iv. Please describe the student outcomes you would expect if you were to incorporate the concept of PIF into the professionalism curriculum of your institution. (RQ1 – attitude)
        v. Thinking about other PA educators, how do you perceive their views on the concept of PIF? (RQ1 – subjective norm)
        vi. Do you intend to incorporate PIF into the professionalism curriculum at your institution? (RQ1 – intention)
            1. Why or why not?
            2. If participant indicates they already do this: Why did you initially incorporate PIF into your professionalism curriculum?
        vii. If you wanted to incorporate PIF into the professionalism curriculum at your institution, how would you go about that and what resources would you need? (RQ1 – perceived behavioral control)
            1. Potential probe: What challenges would you anticipate?
            2. Potential probe: Would there be any advocates to help you accomplish this?

b. Now I am going to ask questions related to sociocultural factors and professionalism pedagogy.
    i. What role should learners' sociocultural backgrounds have on teaching and assessing professionalism? (RQ2 – attitude)
    ii. How might prioritizing sociocultural backgrounds in the professionalism pedagogy of your program be relevant to your overall program goals? (RQ2 – attitude)
    iii. Thinking about other PA educators, how much priority do you think they place on sociocultural factors with regard to teaching and assessing professionalism? (RQ2 – subjective norm)
    iv. How easy or difficult would it be for you to prioritize sociocultural factors into your teaching and assessment of professionalism, and what resources would you need? (RQ2 – perceived behavioral control)
        1. Potential probe: What challenges would you anticipate?
        2. Potential probe: Would there be any advocates to help you accomplish this?
    v. Do you intend to prioritize sociocultural factors in your professionalism curriculum? (RQ2 – intention)
        1. Why or why not?
        2. If participant indicates they already do this: Why did you initially start this practice of prioritizing sociocultural factors?

3. Thank you and end of interview

APPENDIX H

TRIANGULATION MATRICES

Table G1

Triangulation Matrix for RQ1

Research Question	How and to what extent did participation in the PD workshop influence PA faculty members' intention to incorporate PIF into their professionalism curriculum?
Quantitative Result	I observed: (1) practical, but not significant, increase in participants' INT (intention) to incorporate PIF into their professionalism curriculum; (2) practical, but not significant, increase in my participants' ATT (attitude) related to incorporating PIF into their professionalism curriculum; (3) practical, but not significant, increase in my participants' perception of SN (subjective norm) related to incorporating PIF into their professionalism curriculum; and (4) statistical ($p<0.10$) and practical increase in participants' PBC (perceived behavioral control) related to intention to incorporate PIF into their professionalism curriculum between my pre- and post-intervention quantitative survey data.
Qualitative Result	Interviewees, overall expressed: (1) a positive INT to incorporate PIF into their professionalism curricula; (2) a positive ATT about incorporating PIF into their professionalism curricula; (3) mixed perceptions related to SN for incorporating PIF into their professionalism curricula; and (4) mixed perceptions related to PBC to incorporate PIF into their professionalism curricula.
Convergence & Divergence	The quantitative and qualitative data primarily converge as it relates to INT and ATT regarding incorporating PIF into participants' professionalism curricula. Related to SN and PBC, there is both convergence and divergence of findings as the quantitative data demonstrates an increase, but the qualitative data for both SN and PBC is mixed.

Table G2

Triangulation Matrix for RQ2

Research Question	How and to what extent did participation in the PD workshop influence PA faculty members' intention to prioritize sociocultural factors in their professionalism pedagogy?
Quantitative Result	I observed: (1) practical, but not significant, increase in participants' INT (intention) to prioritize sociocultural factors in their professionalism pedagogy; (2) statistical (p<0.10) and practical increase in my participants' ATT (attitudes) related to prioritizing sociocultural factors in their professionalism pedagogy; (3) statistical (p<0.10) and practical decrease in my participants' perceptions of SN (subjective norm) related to prioritizing sociocultural factors in their professionalism pedagogy; and (4) statistical (p<0.05) and practical increase in participants' PBC (perceived behavioral control) related to prioritizing sociocultural factors in their professionalism pedagogy between my pre- and post-intervention quantitative survey data.
Qualitative Result	Interviewees, overall expressed: (1) a positive INT to prioritize sociocultural factors in their professionalism pedagogy; (2) a positive ATT about prioritizing sociocultural factors in their professionalism pedagogy; (3) mixed perceptions related to SN for prioritizing sociocultural factors in their professionalism pedagogy; and (4) mixed perceptions related to PBC to prioritize sociocultural factors in their professionalism pedagogy.
Convergence & Divergence	The quantitative and qualitative data primarily converge as it relates to INT and ATT regarding prioritizing sociocultural factors in their professionalism pedagogy. Related to SN and PBC, there is both convergence and divergence of findings as the quantitative data demonstrates a decrease for SN and an increase for PBC, but the qualitative data for both SN and PBC is mixed.

APPENDIX I

PERMISSION TO USE COMMUNITY OF INQUIRY FIGURE

Figure I1

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APPENDIX J

PERMISSION TO USE THEORY OF PLANNED BEHAVIOR FIGURE

Figure J1

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