

Professional Identity Formation in Medical Education: The Convergence of Multiple Domains

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Abstract There has been increasing emphasis on professionalism in medical education over the past several decades, initially focusing on bioethical principles, communication skills, and behaviors of medical students and practitioners. Authors have begun to discuss professional identity formation (PIF), distinguishing it as the foundational process one experiences during the transformation from lay person to physician. This integrative developmental process involves the establishment of core values, moral principles, and self-awareness. The literature has approached PIF from various paradigms—professionalism, psychological ego development, social interactions, and various learning theories. Similarities have been identified between the formation process of clergy and that of physicians. PIF reflects a very complex process, or series of processes, best understood by applying aspects of overlapping domains: professionalism, psychosocial identity development, and formation. In this

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study, the authors review essential elements of these three domains, identify features relevant to medical PIF, and describe strategies reported in the medical education literature that may influence PIF.

Keywords Professional identity formation · Professionalism · Identity construction · Formation · Medical education

There has been increasing emphasis on professionalism in medical education over the past several decades, initially focusing on bioethics, communication skills, and behaviors of medical students and practitioners. More recently, authors have begun to discuss professional identity formation (PIF), distinguishing it as the foundational process one experiences during the transformation from lay person to physician (Inui 2003). This integrative developmental process involves the establishment of core values, moral principles, and self-awareness. The literature has approached PIF from various paradigms, including those of professionalism, psychological ego development, social interactions, and various learning theories. Comparisons have been made between the formation process of clergy and that of physicians (Rabow et al. 2010). Few authors have brought these various perspectives together to help explicate the complexities of PIF in medical education. There is currently no unified theoretical framework for understanding the process of PIF (Cohen et al. 2009).

We posit that PIF reflects a very complex process, or series of processes, best understood by applying aspects of important overlapping domains: professionalism, psychosocial identity development, and formation (Fig. 1). In this paper, we review essential elements of each of these domains and identify features relevant to PIF in medical education.

Professionalism

As described by Cruess and co-authors (2009), the profession of medicine has a long history arising from the healing arts and trade guilds. Medical school courses on bioethical principles have classically focused on patient autonomy, social justice, beneficence, nonmaleficence, confidentiality, the fiduciary relationship, etc. The core elements of medical professionalism have been variably described to include knowledge of these bioethical principles, communication and interpersonal skills, and attributes such as altruism, dutifulness, trustworthiness, compassion, integrity, etc. (Inui 2003). Contemporary medical professionalism describes a social contract between medicine and society, the tacit and explicit expectations society has in exchange for providing the profession with autonomy, prestige, and privilege (ABIM Foundation et al. 2002).

The importance of professionalism lies in the essential foundations of the practice of medicine: the attributes of the professional and the healer (Cruess et al. 2009). Professionalism serves as the foundation of the professional trust and fiduciary relationship between physicians and patients, as well as for the contract

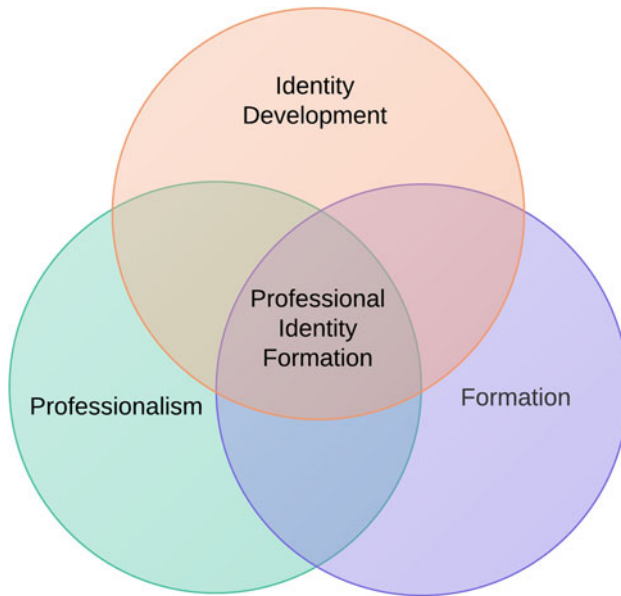


Fig. 1 Domains of professional identity formation

between the medical profession and society. Increasing emphasis on professionalism is evidenced by the *Physician Charter* of the American Board of Internal Medicine, the American College of Physicians, and the European Federation of Internal Medicine; the Accreditation Council for Graduate Medical Education core competencies; the Liaison Committee on Medical Education medical school curricular requirements; and the expanding amount of published literature (ABIM Foundation et al. 2002; Rabow et al. 2010).

The increasing emphasis on professionalism in medical training is in part a response to the recognition of unprofessional behaviors by physicians noted by state licensing boards, news media, lawmakers, and the public. Lapses in physician professional behavior have been correlated with unprofessional student behaviors identified during medical school, most notably in students with “severe irresponsibility” or “severely diminished capacity for self-improvement” (Papadakis et al. 2005). Perhaps these examples of unprofessional behavior are observable manifestations of poor PIF.

Much of the recent literature has focused on the educational processes that impact an understanding of professionalism and contribute to PIF. Important aspects have been highlighted including providing a strong foundation for the expectations of the profession, providing exposure to patient challenges (both simulated and real), personal reflection through writing, and facilitated debriefing of experiences (Branch 2010; Ginsburg and Lingard 2011; Monrouxe et al. 2011). Stern and Papadakis (2006) emphasize that advances in teaching professionalism require providing experiences with adequate feedback, reflection, and role modeling. A common theme across the literature is the need for learners to internalize bioethical principles and the lessons learned through experience.

Simply providing medical trainees with curricula in professionalism is inadequate. Cohen (2007) reminds the medical community of the importance of fostering humanism (“a way of being”) and not just looking at professionalism (“a way of acting”) as observable behaviors. Lucey and Souba (2010) emphasize that enhancing professionalism is important to all communities of practice and encourages a paradigm shift beyond rules, role models, and right behaviors. Medical education must move beyond instruction in science, ethics, and elements of professionalism to focus on the complexities of professional formation in students and physicians (Rabow et al. 2010).

Identity Development and Social Learning

The construction of professional identity is a part of overall identity formation. Consideration of the implications of psychosocial development is necessary for understanding the complexities of PIF. The developmental stages of identity and moral development, along with a sense of self-efficacy and the availability of role models and unique experiences of each individual, combine with stressors inherent in the process of medical education to shape the formation of professional identity. The process and outcome are unique to each individual.

For most medical students the transition from lay person to physician begins during late adolescence. According to Erikson (1963), development of identity is the primary psychological work of adolescence, resolving the psychological struggle that may lead to a strong ego identity or, if poorly resolved, to *role confusion*. In this developmental model, adolescents explore various options and eventually construct a psychological identity, although it may remain stable or undergo further change over time (Klimstra et al. 2010). Marcia’s (1966) study on identity status elaborated on Erikson’s developmental theory, providing descriptions of various states of identity formation. In this paradigm, status describes the balance between exploration of developmental alternatives and commitment to adopted options. Marcia described four statuses of identity development: diffusion, moratorium, foreclosure, and achievement. These statuses may be applied to all facets of identity, e.g., professional, religious, ideological (Klimstra et al. 2010). These statuses are not sequential stages and an individual may move among them in any order and revisit the same status at multiple points in the developmental process. The statuses vary along two dimensions: exploration and commitment. Identity diffusion is a state during which the individual engages in little exploration of identity options and displays little commitment to any identity, while those in the state of identity achievement have significant commitment after appropriate exploration. Those in foreclosure demonstrate strong commitment without preceding exploration and those in moratorium show significant exploration without commitment. Subsequent study expanded the exploration categories adding in-depth exploration and reflection on current commitments and reconsideration of established commitments against alternative possibilities, as well as differentiating approaches to exploration with varying results on identity formation (Meeus et al. 2010; Grotevant 1987). Some approaches to exploration lead to affirmation of prior conceptions of identity

while other experiences and approaches may result in changes to the identity in formation.

Moral development may be viewed as a key component of PIF (Podd 1972; Forsythe 2005). Moral development has been described as occurring in four stages, not necessarily in a linear sequence (Bebeau and Monson 2008). These include moral sensitivity, an awareness of how actions affect others; moral reasoning and judgment, an integration of moral principles in decision making about which course of action is most just; moral identity and motivation, an identification with moral values over other types of values (pragmatic or psychological); and moral implementation, an ability to enact moral values in the face of impediments. Moral development is an essential part of the development of professional identity. Understanding and upholding the social contract professionals have with society require considerable moral maturation, sometimes referred to as self-authorship (Hamilton 2008; Forsythe 2005).

The manner in which students develop professional identity and learn to face moral dilemmas is strongly influenced by environmental and contextual factors (van der Zwet et al. 2010). Medical education imposes inherent stressors on students, e.g., expectations of self and others, time and content challenges, separation from family, and support networks (Cohen et al. 2009). The quality and availability of role models have a demonstrable impact on identity formation, as does the timing of clinical experiences and the relationships with other professionals and patients. The aspects of identity which are supported and which contribute to a sense of competence will strengthen during medical school; those aspects which are ignored or criticized will wither or become distorted. Such support, or lack thereof, comes from fellow students, faculty, staff, and patients and may be subtle or blatant. Thus, professional identity is constructed from a multitude of experiences processed through the unique filter of each individual. Each experience and the individual's assessment of the experience may be seen as a tiny contribution which shapes the whole.

Many of the experiences comprising physician education occur in groups and in the medical workplace, where social development and learning theories may help elucidate the process of work identity formation. One task of medical students as they develop a professional identity is to reconcile their idealized concept of physician with the realities of modern medicine (Nieme et al. 2003). The workplace provides essential exposure to the reality to which the individual can compare expectations and ideals (Cohen et al. 2009). It also provides critical role models, including peers, faculty, and the training institutions themselves (Kenny et al. 2003). Early clinical experiences may be a key strategy for fostering PIF (Littlewood et al. 2005). Bandura's (1969) social learning theory describes learning through observation of others, such as the behaviors of peers and role models and may be applicable in efforts to optimize the learning that occurs during such experiences. As medical students become residents, professional identity shifts to become more specific to the graduate medical training they undertake and the environment in which they work (Pratt et al. 2006).

Vygotsky suggested that learning and cognitive development occur in social settings through use of language and interaction with more knowledgeable others

(Swanwick 2010). Vygotsky's "zone of proximal development" has also been applied to characterize learning contexts that foster development (van der Zwet et al. 2010). A study by Lave and Wenger (1991) emphasizes that learning is situated within the context and cultural setting of the learner and the activity and involves social interaction, as within a "community of practice." Socially situated learning is prevalent in medical education, which includes classrooms, problem- and team-based learning, hospital rounds, and morning report (Apker and Eggly 2004). One of the requisites for development of a mature professional is a sense of competency or self-efficacy. As individuals experience themselves as accepted and competent in the "community of practice," they are able to embody the role of physician without feeling like an imposter (van der Zwet et al. 2010; Stets and Burke 2000; Rabow et al. 2010; Pratt et al. 2006). Application of these important psychosocial frameworks is critical in understanding the development of professional identity and provides a potential area for future research.

Formation in Clergy

Formation is a classical concept previously described in other professions, especially in the education of clergy, where the term variably refers to priestly formation, spiritual formation, or human formation (Foster et al. 2006). Religious formation involves the cohesive development within students of core knowledge, skills, behaviors, and commitments that shape their beliefs and practices. While there are variations in formation training across religious disciplines, a detailed discussion of the elements of Jesuit formation serves as an illustrative example based on its 475-year history, profound educational influence, and global impact.

In the Jesuit tradition, the formation process involves an intricate rhythm of sophisticated, psychologically astute self-examination, dedicated mentorship in the form of spiritual direction, service to the suffering, poor, and disenfranchised, and extensive reflection undertaken every day. This formation process is designed to cultivate a sense of awe in the creation, as well as the divine presence within every facet of the creation. Jesuit poet Gerard Manley Hopkins registers this sense in his exquisite image from the sonnet "God's Grandeur," where he testifies that God's presence flashes everywhere, like a glorious scattering of light from a shaken sheet of metal foil. "The world is charged with the grandeur of God," he writes; "It will flame out, like shining from shook foil" (Hopkins 2011). This foundational aspect of Jesuit formation—an expectation of finding God in all things and all people—proved crucial, historically, to the order's credibility and world-wide appeal, for rather than insisting on their own understanding of God and their approaches to truth, love, and happiness, Jesuits looked for and expected to find the active presence of God variously expressed in cultures very different than their own (Modras 1995). In reflecting on the potential applicability of this mindset to medical education—wherein one might seek a common ground of regarding the human as asymptotic to a divine ideal—one may discern a means of cultivating notions of cultural diversity in ways quite different than the ways we do now. If, by virtue of ongoing reflection, one looks carefully for and expects to find a divine-human in the

culturally different other, the resulting relational engagements are likely to be very different than the sort founded on grudging tolerance or on conventions of political correctness. In addition, such a mindset directs attention to and is grateful for the wisdom and good character of colleagues and superiors, and is deeply appreciative of the wisdom of professional tradition, even as certain dimensions of that tradition may need to be challenged and changed. A cultivated sense of awe—so appealingly demonstrated by physician writers like Thomas (1979), Groopman (2004), and Ofri (2010)—nourishes curiosity and inquisitiveness, and promotes vitality of exploration.

Another aspect of Jesuit and other religious formations is the sustained reflection on suffering, evil, and sin. Consideration of the latter two phenomena may seem to be matters of strictly theological concern, but they call for considerations—taken substantially, over time—over why even the best of intentions lead to bad ends, to the suffering of others and the self, issues confronted repeatedly by physicians. In addition, such reflection includes consideration of the impact of egotism and excessive pride on relationships—even professional relationships. The formation process encourages those in training to develop capacities of looking honestly at these phenomena as they play out, concretely, in life, and to seek ways to realize better, happier ways of life. It is essential in this pursuit to develop the genuine humility of accepting that one cannot escape nor rid the world of limitations, suffering, and ambiguities. Then the question becomes, “How do we live with the burden of such things?” The formation process is indeed concerned with exploring this.

For Jesuits, the general answer to this question is divine grace, whose influence may be grasped, to some degree, through prayer. A secular common ground for the concept of grace may be the noble endurance of humanity and human dignity in the face of great suffering. Physicians’ writings about their patients can demonstrate the sort of reflective writing and contemplation on these matters that might serve to translate components of religious formation into the secular context of medicine (Groopman 2004; Ofri 2010; Coles 1989; Sacks 1985).

Reflection is an important dimension of religious formation that is worth considering as a component of PIF to be enhanced along analogous lines. The *Spiritual Exercises* are the foundation of Jesuit formation, spirituality, and service (Puhl 1951; McGovern 1988; Haight 1987; O’Malley 1976). They involve a remarkably sophisticated psychological process of imagining life choices, behaviors, and modes of relating and exploring alternatives to identify those that bring consolation—a deep peace with self—and those that lead in the direction of desolation—anxiety or emptiness. The aim of the process is to reach a level of personal psychological freedom whereby, deeply cognizant of his or her limitations and flaws, an individual can choose a way of life that best leads to a flourishing of the self and the flourishing of others engaged with the person. Applied in the context of medical professional formation, such examination may take the form of reflecting carefully on other professionals who embody the values and qualities that a particular student or physician wishes to embody him- or herself. Considering the prospect of living life, professionally, as that other does, the person asks herself, “Do I experience consolation? Does the prospect feel deeply right and lead to a

profound sense of peace with myself?” Professional “success” may be regarded by certain groups of physicians as entrepreneurially and commercially effective (Castellani and Hafferty 2006). “Does subscribing to that notion bring me real consolation? If not, what might I do? What choices do I make that lead to consolation?”

Twice each day, a Jesuit is supposed to undertake the Examen, wherein he addresses three questions: What have I done for Christ? What am I doing for Christ? What could I be doing for Christ? A secular version of this might substitute the word “healing” or the phrase “human flourishing” for “Christ”: What have I done today and earlier to bring healing to the world? What am I doing to bring healing—here and now, with this particular patient or colleague? What might I do to bring healing to this person? An ongoing practice of asking such questions engages the imagination in such a way that leads to profound self-understanding and relational enrichment.

Still another aspect of Jesuit or religious formation worthy of consideration in the context of medical education is that of the spiritual director—a mentor of character development. Reflection upon the role of such a person in religious formation may prompt worthwhile considerations of enriching the role of mentorship in PIF, possibly through the incorporation of people trained in the medical humanities and counseling as part of a mentoring team.

Further aspects of religious formation that deserve some attention as applicable in medical education include experiences of ritual, meaningful participation in community life—within the professional community—and service to broader communities *in conjunction with* both private reflection and conversational reflection with a mentor. Each of these aspects might, in the medical context, be enriched through thoughtful consideration of the way they are incorporated in religious formation.

Professional Identity Formation in Medicine

What does the literature reveal about PIF in medical trainees? How can we apply what we know about professionalism, psychosocial development, and formation in other professions to PIF in medical students? Several factors reported in the literature related to PIF in medical students emphasize relationships, reflection, storytelling, ethical dilemmas, role modeling and work-life cycles.

In his 2003 report, “A Flag in the Wind: Educating for Professionalism in Medicine,” Inui (2003) notes that although the elements of professionalism have been frequently described, there remains a gap between the commonly accepted attributes of a virtuous person and observed real-world actions. He emphasizes that medical education is an opportunity for personal and professional formation through experience, reflection, service, and incremental self-awareness and understanding.

In the context of medical education, Monrouxe (2010) reports that personal and professional identity, influenced and constructed through language, experiences, symbolic events (such as the White Coat Ceremony), and interactions are dynamic and often include multiple identities, such as gender, ethnicity, and occupational

group. These findings are consistent with the characterization of professional identity as an ongoing reinterpretation of experiences and as the balance of multiple “sub-identities” (Beijaard et al. 2004).

Studies of preclinical medical students have demonstrated the importance of self-reflection and patient interaction and communication skills in medical student identity development (Niemi 1997; Vågan 2009). Utilizing “life-circle diagramming” and narrative storytelling, Haidet and co-authors (2008) identified the significance of multiple interpersonal relationships during the education of medical students and the construction of their professional identities. Ginsburg and Lingard (2011) recognized differences between preclinical and clinical medical students’ approaches to standardized professional dilemmas, suggesting differences in their underlying stages of PIF. These differences may also relate to the various stages of moral development discussed previously. Knight and Mattick (2006) proposed that medical students’ epistemological thinking and beliefs also develop and change during their education along with or as part of their PIF.

Pratt and co-authors (2006) developed a theory about PIF from a longitudinal qualitative study of residents from different medical disciplines. They described work and identity learning cycles in which residents compared the consistency of their self-identities with their actual work activities. When inconsistent, the trainees experienced various types of *identity customization*. “*Identity enriching*” experiences reaffirmed their self-conceptualization and enhanced their identities. Some incongruous experiences resulted in “*identity patching*,” in which part of one identity “patches” a deficit in another incomplete identity. Over time, however, the patched identity also moves towards identity enrichment. When there is significant disparity between self-identity and work, the residents may employ “*identity splinting*,” in which a previously developed identity supports a weak, emerging identity. The residents received social validation of developing professional identities via feedback and interactions with role models. The authors also noted that as residents experienced identity enrichment, they expressed improved levels of perceived competence. This theoretical description of PIF is consistent with Erikson’s and Marcia’s models for psychological development and with social learning theory. Pratt and co-authors also posit that providing residents with professionally relevant work activities earlier in their training might accelerate the process of PIF. Their recommendation is consistent with the trend toward early clinical experiences in the education of medical students.

Thus the work to date examining PIF in medical students reflects themes from the multiple domains of professionalism, identity development and formation. Guided reflection, internalization, relationship building, the need for role models, the need for early experiences, and the processes of exploration and commitment are themes that appear throughout these interrelated domains. Yet each perspective brings an important and unique lens to the multifaceted phenomenon of identity construction. More detailed explication of the process of PIF in medical education should involve application of the principles and frameworks from these varied disciplines. The construction of professional identity in medical students is a complex, iterative process. Approaching PIF in medical trainees from a single discipline or perspective

would be insufficient and incomplete. Significant work is yet to be done to better define and assess the complex processes of PIF in medicine.

References

- ABIM Foundation, American Board of Internal Medicine, ACP-ASIM Foundation, American College of Physicians-American Society of Internal Medicine, & European Federation of Internal Medicine. (2002). Medical professionalism in the new millenium: A physician charter. *Annals of Internal Medicine*, 136(3), 243–246.
- Apker, J., & Eggly, S. (2004). Communicating professional identity in medical socialization: Considering the ideological discourse of morning report. *Qualitative Health Research*, 14(3), 411–429.
- Bandura, A. (1969). Social learning theory of identificatory processes. In D. A. Goslin (Ed.), *Handbook of socialization theory and research*. Chicago: Rand McNally and Co.
- Bebeau, M. J., & Monson, V. E. (2008). Guided by theory, grounded in evidence: A way forward for professional ethics education. In L. P. Nucci & D. Narvaez (Eds.), *Handbook of moral and character education*. New York, NY: Routledge.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research in teachers' professional identity. *Teaching and Teacher Education*, 20, 107–128.
- Branch, W. T. (2010). The road to professionalism: Reflective practice and reflective learning. *Patient Education and Counseling*, 80(3), 327–332.
- Castellani, B., & Hafferty, F. W. (2006). The complexities of medical professionalism: A preliminary investigation. In D. Wear & J. M. Aultman (Eds.), *Professionalism in medicine: Critical perspectives* (pp. 3–23). New York, NY: Springer Science & Business Media, LLC.
- Cohen, J. J. (2007). Linking professionalism to humanism: What it means, why it matters. *Academic Medicine*, 82(11), 1029–1031.
- Cohen, M., Kay, A., Youakim, J. M., & Balaicuis, J. M. (2009). Identity transformation in medical students. *American Journal of Psychoanalysis*, 69, 43–52.
- Coles, R. (1989). *The call of stories: Teaching and the moral imagination*. Boston, MA: Houghton Mifflin Harcourt.
- Cruess, R. L., Cruess, S. R., & Steinert, Y. (2009). *Teaching medical professionalism*. Cambridge, England: Cambridge University Press.
- Erikson, E. H. (1963). Eight ages of man. In E. H. Erikson (Ed.), *Childhood and society* (pp. 261–263). New York, NY: WW Norton.
- Forsythe, G. B. (2005). Identity development in professional education. *Academic Medicine*, 80(10), s112–s117.
- Foster, C. R., Dahill, L. E., Golemon, L. A., Tolentino, B. W., Sullivan, W. M., & Shulman, L. S. (2006). *Educating clergy: Teaching practices and pastoral imagination*. San Francisco, CA: Jossey-Bass.
- Ginsburg, S., & Lingard, L. (2011). "Is that normal?" Pre-clerkship students' approaches to professional dilemmas. *Medical Education*, 45, 362–371.
- Groopman, J. (2004). *The anatomy of hope*. New York: Random House.
- Grotevant, H. D. (1987). Toward a process model of identity formation. *Journal of Adolescent Research*, 2(3), 203–222.
- Haidet, P., Hatem, D. S., Fecile, M. L., Stein, H. F., Haley, H. -L. A., Kimmel, B., et al. (2008). The role of relationships in the professional formation of physicians: Case report and illustration of an elicitation technique. *Patient Education and Counseling*, 72(3), 382–387.
- Haight, R. (1987). Foundational issues in Jesuit spirituality. *Studies in the spirituality of Jesuits*, 19 (4).
- Hamilton, N. W. (2008). Assessing professionalism: Measuring progress in the formation of an ethical professional identity. *University of St. Thomas Law Journal*, 5(Legal Studies Research Paper No. 08–10), 101–143.
- Hopkins, G. M. (2011). *God's grandeur*. Poetry foundation: www.poetryfoundation.org/poem/173660. Retrieved 23 Jan 2012.
- Inui, T. S. (2003). *Flag in the wind: Educating for professionalism in medicine*. Washington, DC: Association of American Medical Colleges.

- Kenny, N. P., Mann, K. V., & MacLeod, M. A. (2003). Role modeling in physicians' professional formation: Reconsidering an essential but untapped educational strategy. *Academic Medicine*, 78(12), 1203–1210.
- Klimstra, T. A., Luyckx, K., Hale, W. A., I. I. I., Frijns, T., & van Lier, P. A. (2010). Short-term fluctuations in identity: Introducing a micro-level approach to identity formation. *Journal of Personality and Social Psychology*, 99(1), 191–202.
- Knight, L. V., & Mattick, K. (2006). When I first came here, I thought medicine was black and white: Making sense of medical students' ways of knowing. *Social Science and Medicine*, 63, 1084–1096.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.
- Littlewood, S., Ypinazar, V., Margolis, S. A., Scherpbier, A., Spencer, J., & Dornan, T. (2005). Early practical experience and the social responsiveness of clinical education: Systematic review. *BMJ*, 33, 387–391.
- Lucey, C., & Souba, W. (2010). Perspective: The problem with the problem of professionalism. *Academic Medicine*, 85(6), 1018–1024.
- Marcia, J. E. (1966). Development and validation of ego identity status. *Journal of Personality and Social Psychology*, 3, 551–558.
- McGovern, A. F. (1988). Jesuit education and Jesuit spirituality. *Studies in the Spirituality of Jesuits*, 20 (4).
- Meeus, W., van de Schoot, R., Keijsers, L., Schwartz, S. J., & Branje, S. (2010). On the progression and stability of adolescent identity formation: A five-wave longitudinal study in early-to-middle and middle-to-late adolescence. *Child Development*, 81(5), 1565–1581.
- Modras, R. (1995, February 4). The spiritual humanism of the Jesuits. *America*, pp. 10–16;29–30.
- Monrouxe, L. (2010). Identity, identification and medical education: Why should we care? *Medical Education*, 44, 40–49.
- Monrouxe, L., Rees, C., & Hu, W. (2011). Differences in medical students' explicit discourses of professionalism: Acting, representing, becoming. *Medical Education*, 45, 585–602.
- Nieme, P. M., Vainiomaki, P. T., & Murto-Kangas, M. (2003). My future as a physician: Professional representations and their background among first-day medical students. *Teaching and Learning in Medicine*, 15(1), 31–39.
- Niemi, P. M. (1997). Medical students' professional identity: Self-reflection during the preclinical years. *Medical Education*, 31, 408–415.
- Ofri, D. (2010). *Medicine in translation: Journeys with my patients*. Boston, MA: Beacon Press.
- O'Malley, W. J. (1976). *The fifth week*. Chicago: Loyola Press.
- Papadakis, M. A., Teherani, A., Banach, M. A., Knettler, T. R., Rattner, S. L., Stern, D. T., et al. (2005). Disciplinary action by medical boards and prior behavior in medical school. *New England Journal of Medicine*, 353(25), 2673–2682.
- Podd, M. H. (1972). Ego identity status and morality: The relationship between two developmental constructs. *Developmental Psychology*, 6(3), 497–507.
- Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing professional identity: The role of work identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal*, 49(2), 235–262.
- Puhl, L. J. (1951). *The spiritual exercises of St. Ignatius*. Chicago: Loyola University Press.
- Rabow, M. W., Remen, R. N., Parmelee, D. X., & Inui, T. S. (2010). Professional formation: Extending medicine's lineage of service into the next century. *Academic Medicine*, 85(2), 310–317.
- Sacks, O. (1985). *The man who mistook his wife for a hat*. New York: Summit.
- Stern, D. T., & Papadakis, M. (2006). The developing physician: Becoming a professional. *New England Journal of Medicine*, 355(17), 1794–1799.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63(3), 224–237.
- Swanwick, T. (Ed.). (2010). *Understanding medical education: Evidence, theory, and practice*. Chichester, West Sussex, UK: Wiley-Blackwell.
- Thomas, L. (1979). *The medusa and the snail*. New York: Viking.
- Vågan, A. (2009). Medical students' perceptions of identity in communication skills training: A qualitative study. *Medical Education*, 43(3), 254–259.
- van der Zwet, J., Zwietering, P. J., Teunissen, P. W., van der Bleuten, C., & Scherpbier, A. J. (2010, December 28). Workplace learning from a socio-cultural perspective: creating developmental space during the general practice clerkship. *Advances in Health Science Education*, doi:10.1007/s10459-010-9268-x.

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