

Antecedents and Consequences of Occupational Ideologies: A Comparison of
Multiple Occupational Groups

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Dedication

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Abstract

As occupations become increasingly employed by large organizations, understanding the role of their occupational ideologies especially their antecedents and their consequences becomes critical to managing them and their work. Occupational ideology refers to ideas occupational members maintain about the nature of work and their identities as occupational practitioners. The ideology I examine in this dissertation is professionalism. Professionalism emphasizes the use of expert knowledge, norms of equality, work autonomy, and self-regulation. In contrast to the literature on occupations that construes professionalism to be shared among members of the same occupation, I argue and show using a longitudinal dataset that members of the same occupation maintain heterogeneous degrees of professionalism which are rooted in their organizational context and specifically in the nature of their work. I propose three central antecedents of professionalism that are characteristic of occupational work namely, task uncertainty, task interdependence, and communication frequency. The results support the predictions that task interdependence and communication frequency increase occupational members' sense of professionalism.

Next, I argue and show partial support for the consequences of professionalism on organizational and occupational commitment. While previous work has shown that occupational members can commit to multiple targets and that their commitment to their organization and occupation are positively correlated especially in more "professionally" consistent organizational contexts, I

argue and show that although an organization's professionalism has a positive and significant effect on members' commitment to the organization and occupation, a more nuanced account is also required. Specifically, I argue and show partial support for an interactionist account which suggests that occupational members' commitment to the organization and occupation is a function of the similarity between their own sense of professionalism and their organization's professionalism. The results suggest that occupational members that perceive their organization to be upholding their professionalism will be committed to the organization and less committed to the occupation revealing a substitution in identification undocumented in prior work.

Finally, the dissertation provides a comparative account of the inter-occupational differences in occupational members' ideologies and their organizational and occupational commitment which sheds light on the occupational subcultures that develop in contemporary organizations.

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Antecedents and Consequences of Occupational Ideologies: A Comparison of Multiple Occupational Groups

Introduction

The role of occupations as key institutional agents of change and gatekeepers to major institutions has steadily increased over the last several decades as advanced economies become more knowledge intensive and service oriented (Scott, 2008). According to Muzio, Brock, and Suddaby (2010), professional service firms have contributed over 3 trillion (USD) to the global economy. In addition, the U.S. Bureau of Labor Statistics (2010) projects over the next decade that the number of employed occupational specialty workers will have the highest rate of growth with 5 million jobs between 2008 and 2018. However, as occupations become increasingly employed by large organizations, understanding the role of their occupational ideologies especially their antecedents and their consequences becomes critical to managing them and their work.

Occupational ideology refers to ideas occupational members maintain about the nature of work and their identities as occupational practitioners (Nelson and Trubek, 1992; Bunderson, 2001). One important occupational ideology that I term professionalism emphasizes the use of expert knowledge, norms of equality, work autonomy, and self-regulation. Occupational members develop and maintain accounts of professionalism in order to maintain jurisdiction over their work, to develop their occupational identities, and to respond to novel situations in a coherent and occupationally consistent way. In addition,

members' accounts of professionalism guide them in their interpretation of various situations and their choice and decision-making. Their accounts of professionalism are analogous to world views that constrain but don't determine action.

The early literature on managing employed occupations (Blau and Scott, 1962; Sorensen, 1967) highlights the ideological differences among occupational groups especially among more professionalized groups as they become employed by large bureaucratic organizations. More professionalized groups typically maintain preferences for autonomy, self-regulation, and a client-service orientation which conflicts with administrative control mechanisms found in large bureaucratic organizations. These control mechanisms limit the autonomy and discretion of occupational members and maintain a market-service orientation rather than a client-service orientation to coordinate their work. In addition, more professionalized occupations are construed to be more committed to their occupation than the organization and that commitment to each target is negatively correlated.

The more recent literature (e.g. Wallace, 1993; Wallace, 1995; Briscoe, 2008; Numerato, Salvatore, and Fattore, 2011) has shown that accounts of ideological differences among occupational members and their employing organizations overlook three important issues. First, the early accounts overlook the adaptability of occupational members. As members are trained, socialized and employed in large bureaucratic organizations, they tend to adapt and accommodate to their employment conditions. Second, the early accounts

overlook the differentiation in employment relations between more professionalized occupational members and less professionalized occupational members. Organizations hiring more professionalized members typically maintain more autonomous and independent employment relations that differentiate them from other employees in the organization. Third, the early accounts overlook the ability of occupational members to maintain their commitment to different targets and specifically to the organization and occupation, and that commitment to such targets are actually positively correlated.

The literature however, has paid less attention to ideological differences among members of the same occupation. Members of the same occupation are typically viewed as maintaining very similar ideological positions due to the standardized educational institutions, occupational associations and socialization processes that create a unified ideological position amongst their members (Wilensky, 1964). This view seems to be inconsistent with reality where members of the same occupation typically maintain different occupational ideals and such ideals are as much an artifact of the occupational institutions as they are an artifact of the workplace and the nature of work. Accounts of such heterogeneity in occupational ideals were apparent amongst lawyers in a study by Wallace and Kay (2008) and physicians, nurses and managers in this study. Whereas some occupational members deplore their employment relations others extol those relations. For example, the following statements by four physicians,

two nurses, and a manager in reaction to the acquisition of their medical clinic by a large health system exemplify the heterogeneity in responses:

“Other people are now making the decisions that we used to make – hiring, what type of people to hire, how to structure the clinic. Things get changed and implemented before we even know what’s happening. We are not at all part of the decision-making process. We only find out after the fact. I feel very left out.” [Physician 1]

"The Healthsystem has recently begun to place GREAT emphasis on business - I am in conflict about this because I know we have to function well as a business to survive, but I don't believe the words when they (the upper management) say that quality and patient care is just as important."
[Nurse 1]

"I think the Healthsystem cares too much about the money and not enough about the patients. Before we merged with the Healthsystem, we had great staff-patient relationships. Now, the doctor almost has a quota of the number of patients he or she has to see during the month. I think the Healthsystem needs to be more people oriented and lay back on the money issue." [Physician 2]

"Start listening to physicians and stop being so money and business oriented. Set realistic budgets, start working together. Stop being a top down organization, it doesn't work. You can't care for people and run it like a corporation!" [Physician 3]

“Um... well, you lose some of your autonomy, but some of that autonomy was coming along with a lot of responsibility in terms of managerial responsibilities and it was – it was a welcome thing to have that part of my practice off my back.” [Physician 4]

"I know this is not late 20th century thinking but, I'd like to see a more rigid organizational structure with clear lines of authority. In the clinic where I work, no one knows who is responsible for getting things done." [Nurse 2]

"Management should be more involved with everyday clinic issues, and making sure department leaders are meeting established goals set for them." [Manager 1]

Overall, these examples reveal the difficulty of managing work among occupational members that maintain different ideological positions and feel that their organization is either living or not living up to their expectations. On the one hand, physician 1, 2, 3 and nurse 1 are clearly distressed about the loss of autonomy and discretion in the conduct of their work, and the emphasis on a market (financial)-service orientation rather than a client (patient)-service orientation. They exemplify occupational members with an "oppositional" occupational ideology that sense that the organization is not living up to their expectations by providing the requisite level of work autonomy, discretion and client-service orientation. On the other hand, physician 4 feels content with the organization's ability to shelter her from her administrative responsibilities while nurse 2 and manager 1 would like more formalization and hierarchy in the organization of work. Physician 4 perceives the organization to be providing her

with an opportunity to focus on her medical practice, while nurse 2 and manager 1 would like more bureaucratic control mechanisms to facilitate work. They exemplify occupational members that are willing to accept more bureaucratic control mechanisms in favor of more efficient clinical work.

Understanding the heterogeneity in responses of occupational members to their employing organization and specifically examining the antecedents of their ideological positions which are rooted, in part, in their workplace, is one goal of this dissertation. The other goal is to examine the consequences of violating such ideologies by their employing organizations on their commitment to the organization and occupation. Overall, the broad research question underlying the dissertation is: What are the antecedents and consequences of occupational ideologies or professionalism?

Drawing on an interpretative framework to examine the antecedents of professionalism, I argue that the workplace is an arena in which occupational members develop a conception of their professionalism. Whereas the literature on occupations has mainly conceived of the development of occupational ideals as a function of the educational institutions and occupational associations members are embedded in (e.g. Medical association or Bar association), I adopt Nelson and Trubek's (1992) interpretative framework and propose that the development of occupational ideals also occurs in the workplace. The workplace is an important part of any occupational members' work experience and has implications for their ideological development.

The implications of this interpretive account are twofold. First, the account suggests that members of the same occupation maintain heterogeneous occupational ideals due to their susceptibility to the organizational context and specifically the nature of work. Based on this account, I draw from the intra-organizational coordination literature and argue that the development of occupational ideals is positively associated with the uncertainty of the tasks performed, the interdependence of the tasks performed, and the frequency of interaction required to perform such tasks. Second, the account is consistent with the occupational subculture literature that suggests that occupations maintain different ideological positions, and I argue that more professionalized occupations maintain higher levels of occupational ideals.

Building on the literature on managing professions and occupations (Wallace, 1993; Wallace 1995; Kim and Mueller; 2010), I propose that occupational ideologies have consequences for the organizational and occupational commitment of occupational members. Organizational commitment refers to the degree to which individuals identify with their organizations or alternatively the extent to which individuals are affectively committed to their organization. Occupational commitment refers to the degree to which individuals identify with their occupation or alternatively the extent to which individuals are affectively committed to their occupation.

The current literature on managing occupations suggests that the effective management and integration of occupations, especially more professionalized occupations requires an organizational structure that mirrors the "professional"

organizational structure that has been historically associated with independent professionals. It is characterized by a degree of professionalism based on the use of expert knowledge, norms of equality, autonomy, and self-regulation (Adler, Kwon, and Heckscher, 2008; Waters, 1989). Many studies provide evidence for the development of multiple hierarchies within organizations that mirror the professionalism suggested earlier (e.g. hospitals typically have dual administrative and medical hierarchies). Such organizations have been referred to as heteronomous organizations (Scott, 2008; Scott, 1965) or intermediate collegial organizations (Waters, 1989). Other studies (Wallace, 1995) have also shown how occupational and professional members and in particular lawyers have been able to shelter themselves from the broader bureaucratic hierarchy by creating an alternative professional hierarchy. More importantly, these studies have shown that occupational groups differ in their level of commitment to the organization and occupation. Whereas less professionalized occupations are typically more committed to their organization, more professionalized occupations are more committed to their occupation (Kim and Mueller, 2010). In addition, studies have shown that the extent to which organizations exhibit "professionally" consistent characteristics, occupational members exhibit higher levels of commitment to the organization and occupation, and maintain higher positive correlations between their commitment to each target (Wallace, 1993, 1995).

Building on this work, I assess the inter-occupational differences in organizational and professional commitment, and propose an alternate

perspective to managing occupations and specifically their commitment to multiple targets. In contrast to the earlier work that focuses on the organizational structure and its effect on commitment (e.g. Wallace, 1993, 1995), I suggest that occupational members' representations of their organization's professionalism and their own professionalism influence their organizational and professional commitment. Based on the broader literature on commitment, I argue that identification with an organization is a function of the similarity between individuals' professionalism and their organization's professionalism. More specifically, if an organization's professionalism falls below an individual's professionalism, the individual's organizational commitment will decrease as suggested by the proletarianization thesis (Derber, 1983a; 1983b; Freidson, 1983; 1984) however, the individual's occupational commitment will increase. Alternatively, if an organization's professionalism falls above an individual's professionalism, the individual's organizational commitment will increase as suggested by the *mutation* and *adaptation* theses (Freidson, 1984; Wallace, 1995) however; the individual's occupational commitment will decrease. Hence, by examining the similarity between an occupational members' professionalism and their organization's professionalism, I assess the degree to which the employing organization upholds or breaches occupational members' professionalism.

The specific research questions this dissertation seeks to address are: Are there inter and intra-occupational differences in occupational members' professionalism? How does the nature of work influence the development of

occupational ideologies or professionalism? Are there inter-occupational differences in occupational members' organizational and professional commitment? How does the similarity between members' ideologies and their views of their organization's ideology influence their organizational and professional commitment?

I test my hypotheses using a three-year panel dataset of a large vertically integrated health care organization which is part of a longitudinal study that began in 1995 and was led by Professor Andrew H. Van de Ven. The vertically integrated health care organization that was created in 1994 was the result of the merger of 15 hospitals, 50 clinics, and a large health insurance plan covering about one million people. The merger transformed the status of many physicians from being independent proprietors of their clinics in local communities to employees of a large healthcare system. This merger provides a unique context to understand the transition of occupations into large bureaucratic organizations.

This dissertation makes at least four important contributions. First, it examines the organizational antecedents of professional ideologies or professionalism. While the majority of previous work overlooks the heterogeneity in occupational members' ideologies, it builds on Nelson and Trubek's (1992) interpretive framework to suggest that occupational members' ideological position is also rooted in the workplace and the nature of their work. Specifically, it argues that there are within and between occupational differences in occupational members' ideologies. In addition, it argues that the uncertainty of the tasks performed, the interdependence of the tasks performed, and the

frequency of interaction required to perform such tasks have a direct impact on occupational members' ideological position or professionalism. The results suggest significant heterogeneity within occupations in their professional ideologies or professionalism, and minor between occupational differences in their members' ideologies or professionalism. Whereas physicians and managers seem to maintain similar levels of professionalism as clinical and administrative personnel, nurses maintain the highest level of professionalism. These results might suggest that nurses seem to have adapted to their organizational context but still maintain their own distinct ideology.

Second, this dissertation examines the role of professionalism on organizational and professional commitment. Consistent with the previous studies on the role of professionally consistent organizational attributes (Wallace, 1993, 1995), the results suggest that occupational members maintain higher organizational and professional commitment to the extent they perceive their organization to be exhibiting more professionally consistent ideals.

Third, this dissertation provides an alternative to integrating occupational groups within organizations by examining the similarity between the occupational members' professionalism and the organization's professionalism on their commitment to the organization and occupation. This dissertation applies an interactional perspective to suggest that there are significant differences in occupational members' ideals and the degree to which organizations' uphold or breach such ideals will have a significant effect on their commitment to the organization and occupation.

Fourth, this dissertation provides an account of the inter-occupational differences (physicians, nurses, managers, and clinic/administrative personnel) and intra-occupational differences (physicians, nurses, and managers) in professionalism, organizational and occupational commitment following the merger that transformed the status of many occupational members.

The next chapter of the dissertation provides a synopsis of the literature on occupations and professions along with the conceptual framework and hypotheses.

Theory and Hypotheses

My dissertation seeks to understand the antecedents and consequences of professionalism or professional ideologies. As mentioned in the introduction, it seeks to respond to the follow questions: Are there inter and intra-occupational differences in occupational members' professionalism? How does the nature of work influence the development of professionalism? Are there inter-occupational differences in occupational members' organizational and occupational commitment? How does the similarity between members' professionalism and their views of their organization's professionalism influence their organizational and occupational commitment?

In this chapter, I review the background literature on professions and occupations which provides the backdrop for my propositions on the antecedents and consequences of professionalism. From the propositions, I derive the specific hypotheses pertaining to each of the research questions.

Occupations, Professions, and Professionalization

The literature on occupations and professions can be traced to the work of Weber and Durkheim although the most influential work that came to dominate the literature was the work of Carr-Saunders and Wilson (1933) who established the core characteristics of a profession. They claimed that a profession is an organized group of experts that applies esoteric knowledge to particular cases, enforces a code of ethics, and formalizes instruction, training and entry. The work that followed, also known as the trait-based approach, resulted in a set of case studies of various professions which established the core characteristics of professions. Several attempts were made to unify the literature into a general framework in order to characterize a profession however; this trait approach was susceptible to political preferences. Abbott (1988) citing Millerson suggests that social scientists that disliked certain professions were more likely to find characteristics that excluded them from being considered a profession. The most significant attempt to unify this approach and to provide a dynamic perspective was the work of Wilensky (1964) who describes the common sequence of first events that characterize the emergence of a profession among American professions or the professionalization of occupations. The sequence of events consisted of: first training school, first university, first local association, first national association, first state licensing and finally, first code of ethics (Wilensky, 1964). Others have also followed suit and have established their own narratives of the development and emergence of professions or professionalization however, such narratives differed in the sequences of steps,

the function of each step, the motivation of the profession (self-interestedness or other-interestedness) and the use of time (abstract, context-specific).

Early work on professionalization was also functional in orientation. More specifically, the asymmetry of expertise between the client and the professional was presumed to be functionally necessary to perform work and required the client to trust the professional and the professional to respect the client.

However, theorists rejected the functional assumptions and problematized the asymmetric expertise and suggested that it served the economic monopoly and dominance of the professions. Power theorists (Freidson, 1970; Larson 1977; Larson 1980) as they came to be known were more concerned with the functions of the process of professionalization rather than the form. Hence, the sequence of events that characterized the development of professions was construed to be functionally necessary to maintain professional dominance.

The divide among power theorists and functionalists occurred at multiple levels. While power theorists were more concerned with the consequences of professionalization for the status and power of professions, functionalists examined the internal consequences of professionalization on work and more specifically on healing, auditing and other outcomes. For the most part, power theorists focused on the profession at the institutional level while functionalists (e.g. Parsons) emphasized the individual professional-client relation.

Finally, jurisdictional theorists (e.g. Abbott, 1988) viewed the structure of professions as an outcome of jurisdictional conflict among occupations vying for control over various areas of work. They argued that the power of professions is

rooted in their body of knowledge which should be sufficiently abstract to prevent appropriation by other professions but also systematic to legitimate claims made in the workplace.

The literature on professionalization and the broader literature on occupations and professions, however, have also had their share of criticisms. Some authors (Van Maanen and Barley, 1984) suggest that the concept of a profession is problematic and suggest that professional work is not distinct from the work of other occupational groups with the exception that professionals tend to maintain a certain level of autonomy in and control over their work mainly due to the support of various institutions such as the state. Van Maanen and Barley (1984) also take issue with the concept of professionalization and suggest that analogous to unionization it has the same goal i.e. achieving a certain level of autonomy and control for the occupational community. However, they argue that professionalization is less public and typically involves negotiating with the state and other institutions to establish a privileged position.

Another criticism of this literature is its over-emphasis on macro-sociological processes which provide an incomplete depiction of professional work (Bechky, 2003). Bechky (2003) suggests that occupational interaction at the level of work should be examined and shows how such negotiation of work boundaries occurs that the level of work.

Finally, Nelson and Trubek (1992) argue that occupational ideologies have not been adequately addressed in theories of professions. They suggest that the functionalist construe occupational ideology to be rooted in the individuals'

education and socialization into the profession. Power theorists construe occupational ideology as part of the apparatus to control the market.

Jurisdictional theorists neglected the values and beliefs of individuals which are the basis of the occupational ideology.

My conceptualization of an occupation is based on Van Maanen and Barley's (1984) definition of an occupational community. They suggest that an occupational community is a group of individuals performing the same work, deriving their identity from their work, and sharing a common set of values and norms which apply to their work and non-work related activities. Consistent with this definition and other studies (Lee, Carswell, and Allen, 2000; Kim and Wallace, 2010) my use of the term occupation includes a broad array of more or less professionalized occupation i.e. professions (physicians, nurses), semi-professions (managers), non-professions (clerical and administrative personnel). The concept of professionalization builds on Abbott's (1988) work and his theoretical insights. I define professionalization as the process by which occupations strengthen their jurisdictional control over work within the ecology or system of occupations competing for jurisdiction over work. An occupation's jurisdictional control is a function of the occupation's attributes (e.g. gender composition of members, socio-economic status of members), the overall ecology of occupations (other occupations competing for jurisdiction over similar work), the type of work conducted by the occupation, and the type of knowledge used to perform the work. In addition, building on Van Maanen and Barley's (1984) criticisms, I define a profession as an occupation that maintains a higher

degree of jurisdictional control relative to the other occupations within the ecology of occupations. Next, heeding Bechky's (2003) criticism, I focus on the micro-sociological relations among individual members of an occupation within a large healthcare organization.

In the next section, I define professionalism and discuss the conceptual framework and hypotheses guiding the analysis.

Conceptual Framework and Hypotheses

Professionalism

Professionalism or professional ideology is a set of ideas about the nature of work and the identities of the practitioners. Professionalism emphasizes the use of expert knowledge, norms of equality, work autonomy, and self-regulation. It defines the appropriate role that occupational members should maintain in society and in the workplace. The role guides members in conducting their work, maintaining their jurisdictions, and solidifying their identities. To understand the role of professionalism, I trace its use in the literature on professions and occupations and claim that the literature provides only a partial account of its antecedents and consequences. Following this discussion, I argue that Nelson and Trubek's (1992) interpretative account provides an alternative conception of the role of professionalism that integrates earlier conceptions. I unpack this account by deriving its underlying principles and develop the general propositions guiding the hypotheses tested in this dissertation. Finally, I conclude with a more contextualized definition of professionalism and the first set of hypotheses derived from the first proposition.

Starting with the functionalists, they construed occupational institutions as serving their societal functions (e.g. medicine was organized to achieve health) and neglected to account for occupational ideologies except to suggest that the occupational values professed by these institutions corresponded with the values held by the occupational members (Carr-Saunders, 1933; Parsons, 1962). Furthermore, they suggested that the inculcation of occupational values and beliefs was through professional education, occupational associations, and socialization which in turn serve to define the socially accepted role of these occupations in society and in the workplace. These occupational institutions developed the occupational role which determined the occupational members' behavior. However, the functionalists' account viewed members of the same occupation as maintaining very similar ideological positions due to the standardization of occupational institutions which create and maintain a unified ideological position amongst its members.

Power theorists (Freidson, 1970; Larson 1977; Larson 1980) suggested that occupational values did not correspond with their socially accepted role but corresponded with the interests of the members' of the occupations. The occupational institutions and the values they professed served to maintain the occupations' privileged position in society. Occupational ideologies were mechanisms by which occupations asserted their role in society and pursued their collective mobility project. Hence, the antecedents of occupational ideologies were rooted in the occupational elites in every occupation formalizing their collective mobility projects and the consequences were market control.

Although power theorists acknowledge that various occupations maintain multiple occupational ideologies and at times competing ideologies, they neglect the context-specific nature of occupational ideologies which are rooted in the organizations employing these occupational members.

Finally, jurisdictional theorists (Abbott, 1988) suggested that changes in jurisdictional claims always began in the workplace and then moved to the public and legal arenas. However, jurisdictional claims were almost devoid of the internal intentions of occupational actors. According to Nelson and Trubek (1992), the intentions of occupational actors or occupational ideologies provide an explanation for the different strategies that occupational members use to maintain or expand their jurisdictional control.

Overall, the accounts of professionalism proposed by each theory emphasize different antecedents and consequences. The functionalists were more concerned with the role of occupational institutions in educating, socializing and organizing occupational and their work while maintain their “socially” accepted role. The power theorists were more concerned with the role of occupational elites in determining their collective mobility project which were rooted in their ideologies for monopolistic market control. Finally, jurisdictional theorists overlooked the values and beliefs that occupational members maintained which formed the basis for their occupational ideologies.

Drawing upon Nelson and Trubek’s (1992) interpretative account, I propose an alternate account to understanding professionalism. This account integrates the macro - structural and institutional perspectives rooted in the work

of the previously mentioned theorists with a micro – perceptual perspective that highlights the importance of occupational members' perception which is a negotiated order rooted in their organization and work. This interpretive account advances a concept of agency absent in previous accounts. Agents or members of occupations have intentions and disposition that guide their action within a set of constraints set by the institutional and organizational environment they are embedded in.

The interpretive account avoids the pitfalls of the previous accounts that reduce the individual agent's intentions and behavior to instantiations of the broader institutional environment and provides occupational members with a reasonable degree of volition and discretion in the development of their professionalism. Furthermore, this account proposes that the organizational context is a critical arena for the development of professionalism.

The organizational context in which occupations practice has undergone dramatic changes over the last couple of decades due to changes in the technology used in the provision of professional services, changes in the types of client problems, and changes in the jurisdiction among occupational groups. These changes which start in the workplace have significant consequences for the way occupations organize their work.

Second, the workplace is a context where competing visions of professionalism emerge that influence the organizational and professional commitment of the occupational members and in turn influence the broader macro-conceptions of professionalism. This bottom-up view of the development

of professionalism rooted in the workplace complements the top-down view proposed by earlier theorists which was rooted in the broader occupational institutions.

Overall, the discussion above leads to the following propositions:

Proposition 1: Members of the same occupation maintain heterogeneous accounts of professionalism.

Proposition 2: Occupational groups maintain heterogeneous accounts of professionalism which are rooted in the workplace and specifically in the nature of work.

Proposition 3: Professionalism influences organizational and occupational commitment.

The professionalism that I examine in the dissertation is rooted in the work on collegial forms of organizing which can be traced back to the work of Weber and Durkheim. Waters (1989) provides a formal definition of collegiality rooted in Parsons' conception of rational-legal authority. According to Waters (1989) a collegial social organization is based on legal norms on the one hand and technical competence on the other.

Occupational members forming a collegial organization, therefore claim authority based on their technical competence and expertise along with their legal position within the organization. Hence, occupational members forming collegial bodies exercise authority first and foremost based on their expertise. Another aspect of collegiality is equality among occupational members. Given that expertise is the basis of authority, occupational members having similar

technical competence are considered to be in the company of equals. Finally, the third aspect of a collegial organization is consensus-based decision making. Members of an occupation forming a collegial organization participate in a consensual decision-making process where each decision reflects the full support of the entire collectivity. More recent work (Lazega, 2001) builds on this work (Waters, 1989) by adding a structural aspect that takes into account the social networks among occupational members that act as conduits for the exchange of resources and instruments for monitoring deviant behavior.

I construe professionalism as a set of ideals that emphasize a collegial form of organizing work analogous to communities (Adler, Kwon, and Heckscher, 2008) and clans (Ouchi, 1980). Broadly, professionalism emphasizes the use of expert knowledge, norms of equality, work autonomy, and self-regulation. In my context, professionalism emphasizes the use and application of occupational knowledge and expertise, the scrutiny of occupational performance through the promotion of high quality occupational work, the promotion of quality initiatives, and the selection and training of competent members.

As mentioned in the introduction, the implications of this interpretive account (Nelson and Trubek, 1992) are twofold. First, the account suggests that members of the same occupation maintain heterogeneous occupational ideals due to the influence of the organizational context. More specifically, this account would suggest that occupational members embedded in different organizational contexts will maintain heterogeneous occupational ideologies due to the heterogeneity in their susceptibility to the idiosyncrasies of the organizational

context and the malleability of their occupational ideals. This discussion leads to the following hypothesis:

Hypothesis 1: Members of the same occupation will maintain heterogeneous accounts of professionalism or occupational ideals.

Second, the account is consistent with the occupational subculture literature that suggests that occupations maintain different ideological positions. The occupational subculture literature (Trice, 1993; Trice and Beyer, 1993; Kim and Mueller, 2010) suggests that organizations with multiple occupations don't maintain a unified organizational culture but rather multiple occupational subcultures that develop their own ideologies, identities and practices. Hence, understanding employee ideologies should take into account the intricacies of the occupational subculture present in organizations and specifically the degree of professionalization of such occupations. More professionalized occupations typically maintain higher levels of professionalism due to the length of their education, their prolonged and concentrated socialization, and their high degree of jurisdictional control over their work which create barriers to entry into the occupation. This discussion leads to the following hypothesis:

Hypothesis 2: More professionalized occupational members (Physicians > Nurses > Managers) will maintain higher levels of professionalism.

In the next section, I discuss the nature of occupational work and the role of professionalism in occupational work.

The Role of Professionalism in Occupational Work

Occupational work and especially the work of more professionalized occupations has been characterized by the sociological and organizational literature (Hwang and Powell, 2009; Hoff, 2003; Hafferty and Light, 1995; Bureau and Suquet, 2009; Briscoe, 2007) as a type of work that cannot be formally controlled using bureaucratic mechanisms. Drawing on this literature, I argue that occupational work and especially the work of more professionalized occupations is inherently uncertain, requires a high degree of interdependence, and requires communication with the client and other occupational members to address client problems. Following this overview, I conclude by arguing that professionalism is ideally suited to coordinate and manage occupational work across multiple occupational groups since it provides occupational members with an instrument to scaffold activities, align work, and create a common perspective among organizational members.

The sociological and organizational literature (Hwang and Powell, 2009; Hoff, 2003; Hafferty and Light, 1995; Bureau and Suquet, 2009; Briscoe, 2007) suggests that the inputs of work cannot be formally controlled due to the distribution of the necessary information to conduct work between occupational members and their clients. Client participation and co-production in the diagnosis, treatment and inference of professional work creates a degree of uncertainty in controlling the requisite information which relies on the clients' willingness to share information with occupational members or the clients' ability to communicate the information to occupational members.

In addition to the uncertainty in controlling the inputs of occupational work, the outputs of occupational work are difficult to measure and control due to their uniqueness and unobservability. Their uniqueness is in part due to the adaptation of occupational work to the clients' conditions which in turn creates problems with the development of a standardized output for comparative assessment and appraisal. Their unobservability is in part due to the intangible nature of their work where the provision of services to clients doesn't reflect the amount of training, knowledge, and judgment required to perform such services.

Finally, the process of transforming the inputs into outputs is probably the most uncertain aspect of occupational work and warrants an extended discussion. The uncertainty is in part an artifact of the problem, the apparatuses used to conduct work, and strategic decisions by the occupations or professions to maintain their jurisdictional claims. Jurisdictional claims link the domain of tasks with the occupational and professional groups. Abbott (1988) argues that the process of occupational work consists of three stages: diagnosis, treatment and inference.

Diagnosis consists of gathering information about the client and classifying the client within the occupational diagnostic system. More specifically, it consists of colligation and classification which can occur in different sequences where colligation can determine classification and vice versa. Colligation refers to gathering information about the client using rules that specify the type of information required and the acceptable degree of ambiguity. Classification refers to placing the colligated picture of the client in the dictionary of

occupational problems or the diagnostic classification system. The classification system is not based on a logical hierarchy but is based on probabilistic assessment of the most common to the most esoteric problems. The constraints on the classificatory system are the abstract foundations of occupational knowledge that are controlled by academic occupational members, and the treatment system that classifies problems by type of treatment and hence influences the diagnostic classification system. Typically, changes in the classificatory system due to changes in the treatment tend to neglect aspects of the problem that cannot be treated. The way disease is labeled consists of the location and the type of problem, leading symptoms, and etiology.

Treatment consists of providing a solution to a problem. The treatment classification system categorizes problems based on their treatment and will suggest the likelihood of success of each treatment. The treatment classification system will differ significantly from the diagnosis classification system. For example, a particular diagnosis can have multiple treatments. In addition, in contrast to the diagnosis where client characteristics are stripped away in order to categorize the problems in the diagnostic classificatory system, treatment requires introducing the client characteristics in order to assess the likelihood of success of the treatment. The temporal structure of diagnosis-treatment is the resort to the purely occupational task of inference.

Inference is conducted when the relationship between diagnosis and treatment is opaque. Inference is conducted either by exclusion or construction. Exclusion consists of ruling out potential problems using special diagnostic

procedure and construction consists of planning potential alternative problems and taking them into account in the initial treatment. Low and high inference complexity can increase occupations' susceptibility to encroachment. More specifically, problems that are characterized by lower degrees of inference complexity are more likely problems that are amenable to routinization and standardized diagnoses and treatments. Occupations either relegate such problems to subordinate occupations or claim that high inference complexity problems are indistinguishable from the low inference complexity problems.

Overall, the nature of occupational work and especially the work of more professionalized occupations is inherently uncertain, and requires a high degree of interdependence and communication with the client and other occupational groups. Professionalism provides a set of ideals that act as instruments that occupational members use to understand their role, rights and obligations in the organization, and to engage in discourse with other members of the organization. Professionalism can improve the coordination of professional work by scaffolding activities, aligning work and creating a common perspective among organizational members. Hence, relying on the selection and training of competent members, the promotion of high quality professional work, and the promotion of quality initiatives, professionalism allows occupational members with increased opportunities for self-regulation and control over the inputs, outputs and processes of work.

In the next section, I develop the hypotheses pertaining to the second proposition and specifically the organizational antecedents of the occupational members' professionalism.

Task Interdependence, Task Uncertainty, Interaction, and Professionalism

As mentioned earlier, the interpretive account has implications for the development of professionalism or occupational ideals. More specifically, the account suggests that the workplace is an arena in which occupational members develop their ideals and more importantly that these ideals are rooted in their work experiences. Drawing on the literature on intra-organizational coordination and the literature on the nature of occupational work, I develop three hypotheses concerning the antecedents of professionalism. More specifically, I propose that professionalism is a function of the perceived task uncertainty associated with work, the perceived task interdependence among members of the organizations, and the frequency of interaction required to perform such tasks. Consistent with an occupational view of organizations (Hoff, 2009) and the interpretive account (Nelson and Trubek, 1994), I assume that occupational members' perception of work is a negotiated order where they socially construct the meanings of their work.

One of the most important aspects of work is the degree of uncertainty associated with the tasks required to perform such work. According to Van de Ven, Delbecq, and Koenig, Jr. (1976), task uncertainty consists of task difficulty and variability where the latter consists of the number of exception encountered (Perrow, 1967) or the sameness of tasks (Hall, 1972) while the former consists of

the analyzability and predictability of work. Early work on the role of task uncertainty (Van de Ven et al. 1976) suggests that as task uncertainty increases, coordinating work using a bureaucratic or impersonal mode becomes difficult due to a greater number of exceptions that arise (March and Simon, 1958; Thompson, 1967) or learning that requires changing roles and schedules especially when tasks are difficult (Perrow, 1967). Hence, increases in task uncertainty decrease the use of bureaucratic or impersonal mode of coordination while increasing the use of more locally adaptive personal and group modes of coordination.

In the context of occupational work, task uncertainty is highlighted in the structure of occupational work beginning with the process of diagnosis followed by treatment and finally inference. Diagnosis with the sequences of colligation and classification, the availability of multiple treatments with varying degrees of efficacy, and the length of chains of inference, highlight the inherent uncertainty of occupational work and the degree of judgment required to perform such work. In such situations, occupational members will expect more locally adaptive organizational routines that are necessary for self-regulation and local control over the inputs, outputs and processes of work. The self-regulation and control creates opportunities to develop locally-adaptive routines that can be used to elicit and gather task-specific information, and develop processes to analyze and apply the information to client problems. Overall, as occupational members perceive higher degrees of task uncertainty, they will maintain higher levels of professionalism to coordinate their work. This discussion leads to the following hypothesis:

Hypothesis 3: As occupational members perceived higher degrees of task uncertainty, they will maintain higher levels of professionalism.

Another aspect of work is the degree of task interdependence which consists of the extent to which members of an organization depend on each other to perform their work (Van de Ven et al., 1976). The early work on the determinants of modes of coordination within organizations (Van de Ven et al., 1976) suggests that as task interdependence increases from pooled to sequential to reciprocal (Thompson, 1967), the coordination mechanisms follow suit beginning with standardization followed by planning and scheduling and finally mutual adjustment. Hence, increases in task interdependence slightly increase the use of bureaucratic or impersonal modes of coordination while moderately and significantly increase more locally adaptive modes of coordination such as personal and group modes of coordination.

In the context of occupational work, the importance of task interdependence is highlighted in the earlier section and specifically in the distribution of the necessary information and knowledge to perform work between occupational members and their clients. The co-production process inherent in the diagnosis, treatment and inference of occupational work highlights the role of perceived task interdependence in capturing the intricacies of occupational work. In such situations, occupational members' perception of task interdependence increases the need for local adaptation to solve client problems, and provides opportunities for peer-control which in turn can create a common sense of responsibility and accountability for the consequences of members' work.

Hence, as occupational members perceive higher degrees of task interdependence, they will maintain higher levels of professionalism to coordinate their work. This discussion leads to the following hypothesis:

Hypothesis 4: As occupational members perceived higher degrees of task interdependence, they will maintain higher levels of professionalism.

Finally, extending the work on intra-organizational coordination, I contend that the interaction of occupational members with their clients, with other members of their own occupation, and with members of other occupations, highlights the importance of information sharing and especially the tacit knowledge that develops as members establish client-specific routines to treat their problems. Hence, I contend that as occupational members perceive higher degrees of communication required to perform their work, they will maintain higher levels of professionalism as it provides the basis for an unmediated environment to exchange information among various members. This discussion leads to the following hypothesis:

Hypothesis 5: As occupational members perceived higher degrees of interaction with their clients, peers, and colleagues, they will maintain higher levels of professionalism.

In the next section, I develop the hypotheses pertaining to the third proposition and specifically the consequences of the occupational members' professionalism.

The Role of Professionalism on Organizational and Occupational Commitment

One of the central problems in managing multiple occupational groups with varying degrees of professionalization is the multiple targets of their commitment and specifically the rivalry that is typically associated with being committed to an organization and an occupation. Past research has shown that organizational commitment and occupational commitment don't necessarily compete but they coexist and are positively correlated (Wallace 1993; Kim and Mueller, 2010). More importantly, studies have shown that the extent to which organizations exhibit "professionally" consistent characteristics, occupational members will tend to exhibit higher levels of commitment to their organization and occupation, and a higher positive correlation between their commitments to each target (Wallace, 1993, 1995). Less understood however, is the role of occupational ideologies or professionalism and especially the similarity between occupational members' professionalism and their organization's professionalism on members' commitment to the organization and occupation. To address this issue, I begin this section with an overview of the macro-theories on the status of employed occupations in contemporary society, and connect these theories to micro-studies on the management of occupational groups within organizations. This background provides the backdrop for the first set of hypotheses on the consequences of professionalism and specifically its role on occupational members' organizational and occupational commitment. This background also sets the stage for examining the inter-occupational differences in members' commitment to the organization and occupation. Finally, using an interactionist perspective and the literature on commitment, I propose an alternative view on

the role of professionalism that forms the basis for the last set of hypotheses. These hypotheses suggest that organizational commitment and occupational commitment are also a function of the similarity between individuals' professionalism and their organization's professionalism.

The macro-theories on the status of occupations in society provide competing arguments about the future of employed occupational groups especially more professionalized occupations or professions. The *proletarianization* arguments suggest that professionals are losing autonomy and status. Derber (1983a; 1983b) suggests that selling labor constitutes two types of loss of control. First, technical proletarianization occurs when the worker loses control over the labor process which is now managed by the organization's administration that purchased the labor. The degree of technical proletarianization is a function of the degree of specialization and fragmentation of tasks and sub-tasks. Second, ideological proletarianization occurs when the worker loses control over the uses of the product which is now owned by the organization. More broadly, it is the loss of control over the goals and social purposes to which work is directed and the organizational policies and goals of work. Based on the work of Marglin and others, Derber states that the process of proletarianization follows several stages where ideological proletarianization precedes technical proletarianization. In addition, technical proletarianization follows two stages beginning with the loss of control over work hours and place of work followed by the routinization and standardization of work according to

management's plans. It is the latter process of technical proletarianization which has come to be known as proletarianization.

The *professionalization* thesis (Bell, 1973) suggests that professions will become the dominant modes of organizing superseding corporations. However, this prediction has not materialized and instead the trend over the past 30 years has been the corporatization of work and the emergence of large bureaucratic organizations as dominant modes of organizing work (Freidson, 2001).

Alternatively, the *deprofessionalization* thesis (Haug, 1988; Rothman, 1984) suggests that competition among professional groups and the diffusion of expertise will result in the demise of professions. Again, the demise of professions has not materialized, certain professions (e.g. medical and legal) still maintain jurisdiction over their work albeit to a less extent than earlier in the 20th century (Freidson, 2001).

Finally, the *mutation* and *adaptation* theses suggest that the modes of organizing within professions have become more formalized and rationalized (Freidson, 1984) and that professionals are able to adapt to the bureaucratic organization while maintaining their professional norms (Wallace, 1995)

According to Adler et al. (2008) the most recent trends seem to provide partial credence to all of the above accounts. Professionals seem to be losing their traditional autonomy and are being held accountable for the quality of their services. Professions have also become more formalized, bureaucratic in the coordination and integration of their work. Professions have also adapted to juggling between their commitments to their profession and organization

(Wallace, 1993). These trends are also consistent with studies that provide evidence for the development of multiple hierarchies within organizations. Such organizations have been referred to as heteronomous organizations (Scott, 2008, 1965) or intermediate collegial organizations (Waters, 1989). Other studies (e.g. Wallace, 1995) have also shown how occupational and professional members have been able to shelter themselves from the broader bureaucratic hierarchy by creating an alternative professional hierarchy to coordinate work that might embody some aspects of bureaucratic controls (see Alder, Kwon and Hecksher, 2008 on the emergence of collaborative communities).

Implicitly these studies suggest that the effective management of occupational groups and especially professions requires an organizational structure that mirrors the collegial organizational structure that has been historically associated with independent professionals, and is characterized by a degree of professionalism based on the use of expert knowledge, norms of equality, autonomy, and self-regulation (Adler, Kwon, and Heckscher, 2008; Waters, 1989). In addition, studies have shown that the extent to which organizations exhibit "professionally" consistent characteristics, occupational members exhibit higher levels of commitment to the organization and occupation, and maintain higher positive correlations between their commitment to each target (Wallace, 1993, 1995). More interestingly, these studies suggest that occupational members are more likely to identify and be committed to their organization and profession if they perceive their work to be based on traditional professional ideals such as a greater degree of work autonomy, good work

relationships with their colleagues and perceive their work to be maintaining high quality standards. Wallace (1995) goes even further to suggest but does not empirically test her proposition that such professional values are more important predictors of commitment to the organization and profession (e.g. Hoff, 2000) than structural features of the organization. Hence, this discussion leads to the following hypotheses:

Hypothesis 6: Occupational members perceiving higher levels of professionalism will report higher levels of organizational commitment.

Hypothesis 7: Occupational members perceiving higher levels of professionalism will report higher levels of occupational commitment.

Related to the above studies, the occupational subculture studies (Trice, 1993; Trice and Beyer, 1993; Kim and Mueller, 2010) suggest that occupational groups maintain heterogeneous levels of commitment to their organization and occupation. More professionalized occupations are more committed to their occupation and less committed to their organization while the reverse occurs for less professionalized occupations. More professionalized occupations are assumed to be more committed to the occupation rather than the organization due to the length of their education and the prolonged and concentrated socialization. In addition, their reduced reliance on the organization for their pecuniary and non-pecuniary rewards, and the occupation-specific nature of their skills eases their mobility between organizations and reduces their commitment to their organization. In contrast, less professionalized occupations are assumed to be more committed to their organization since they are more reliant on the

organization for their pecuniary and non-pecuniary rewards. In addition, their skills are typically more organization-specific and less transferable across organizations. This discussion leads to the following hypotheses:

Hypothesis 8: More professionalized occupational members (Physicians > Nurses > Managers) will report lower levels of organizational commitment.

Hypothesis 9: More professionalized occupational members (Physicians > Nurses > Managers) will report higher levels of occupational commitment.

Alternatively and consistent with an interactionist perspective that construes behavior as a function of both the person and the environment (Lewin, 1951), I propose that the effect of professionalism on commitment is a function of the similarity between an individual's professionalism and the organization's professionalism. To understand the role of professionalism on commitment, I briefly discuss the underlying logics used in the literature on commitment. Following this brief overview, I contextualize the most relevant logic to the case of employed occupational groups and the role of professionalism on organizational and occupational commitment.

The literature on commitment can be encapsulated using the underlying logics individuals use to explain their identification with different targets (e.g. organization, occupation). The four main logics used in the literature are: familiarity, similarity, benefits and investments (Vough, 2011).

The familiarity logic is based on the exposure to individuals and work of a certain target. More specifically, individuals maintain a familiarity logic to targets

they know and understand due to their exposure to that target over time (Moreland and Beach 1992, Moreland and Zajonc 1982).

The similarity logic is based on the commonality that individuals perceive with a target. More specifically, individuals maintain a similarity logic to the extent they agree with or they buy into the characteristics of the target. According to Pratt (1998), individuals typically identify with an organization either by emulation (incorporating organizational characteristics in self) or affinity (recognizing similarity between the organization and self). Furthermore, individuals typically identify with an occupation by assessing commonalities with prototypical members or role models in those occupations.

The benefit logic is based on the extent to which individuals perceive the target to be providing some resource whether tangible or intangible. More specifically, individuals maintain a benefit logic when they perceive the target to be providing some benefit for which they exchange their identification and commitment with the target (Kreiner and Ashforth 2004).

Finally, the investment logic is based on the extent to which individuals perceive they have made sacrifices for a target. More specifically, individuals will identify with a target they perceive they have invested more resources which is a form of dissonance reduction (Festinger, 1975).

In the context of employed occupational groups and the role of professionalism on commitment, the similarity logic seems to be the most relevant. The similarity logic would suggest that the commonality that is perceived between an individual and his or her organization is the basis for

identification. This similarity can either be due to a process of emulation where the occupational members attempt to incorporate aspects of the organization's professionalism in their self concept. Alternatively, similarity could be due to a process of affinity where occupational members attempt to find aspects of the organization's professionalism that are in-common with their self-concept. Both processes underlying the similarity logic increase the degree to which occupational members identify with the organization.

Based on this logic, I propose that identification with an organization is a function of the similarity between the individual's professionalism and the organization's professionalism. More specifically, if an organization's professionalism falls below an individual's expectations of the organization's professionalism, the individual's commitment will decrease as suggested by the proletarianization thesis (Derber, 1983a; 1983b; Freidson, 1983; 1984). This erosion could also be conceived as a breach of the professional members' expectations by the employing organization (Bunderson, 2001). Alternatively, if an organization's professionalism falls above an individual's expectations of the organization's professionalism, the individual's commitment to the organization will increase as suggested by the *mutation* and *adaptation* theses (Freidson, 1984; Wallace, 1995). Thus, the discussion leads to the following hypotheses:

Hypothesis 10: Occupational members perceiving lower than expected professionalism will report lower organizational commitment.

Hypothesis 11: Occupational members perceiving higher than expected professionalism will report higher organizational commitment.

Next, I contend that identification with a profession is inversely related to the similarity between an individual's expectations of the organization's professionalism and the organization's professionalism. More specifically, if an organization's professionalism falls below an individual's expectations of the organization's professionalism, the individual's commitment to the occupation will increase as it becomes a substitute for the organization in upholding and maintaining the individual's professionalism. Alternatively, if an organization's professionalism falls above an individual's expectations of the organization's professionalism, the individual's commitment to the occupation will decrease since the organization becomes a substitute for the organization in upholding and maintain the individual's professionalism. Thus, the discussion leads to the following hypotheses:

Hypothesis 12: Occupational members perceiving lower than expected professionalism will report higher occupational commitment.

Hypothesis 13: Occupational members perceiving higher than expected professionalism will report lower occupational commitment.

In the next section, I discuss the sample, the organizational context and the measures used in the dissertation.

Methods

Sample and Data

I test the hypotheses using a three-year panel dataset study of organizational integration of a large vertically integrated health care organization which is part of a longitudinal study that began in 1995 and was led by Andrew

Van de Ven. The integration occurred in 1994 through the merger of 15 hospitals, 50 clinics, and a large health insurance plan covering about one million people. The merger transformed the status of many physicians from being independent proprietors of their clinics in local communities to being employees of a large healthcare system. The data were collected using a survey instrument that was developed in 1995 and 1996. The final version of the survey was administered to all the employees of the organization in 1997, 1998, and 1999. The sample consists of 1299 respondents in 1997, 1160 respondents in 1998, and 1066 respondents in 1999. In 1997, there were 176 managers, 209 physicians, 62 nurses, and 852 clinical and administrative personnel. In 1998, there were 178 managers, 223 physicians, 60 nurses, and 699 clinical and administrative personnel. In 1999, there were 144 managers, 181 physicians, 48 nurses, and 693 clinical and administrative personnel. Missing data in this study is assumed to be missing completely at random (MCAR) and listwise deletion was used in the statistical models. This assumption regarding the missing data will be addressed again in the last chapter's limitations section.

Measures

Dependent Variables

Professionalism was measured using Bunderson, Lofstrom, and Van de Ven's (2000) measure of professional model of organizing work. The professional model construes the organization as a promoter of quality work and hence activities are geared towards providing the highest quality of professional care to patients. In order to capture respondents' ideals about the professional

model, the specific items of the measure reflect the extent to which respondents perceived that the organization **should** foster clinical excellence, stress high quality healthcare, and competent medical staff. The use of **should** in the items captures the ideals that respondents maintain about the professionalism of their organization. Responses were recorded on a 5-point Likert scale. (Cronbach alpha = 0.86, see table 1 for factor loadings)

Organizational Professionalism was measured using the same measure as professionalism except that the specific items of the measure reflect the extent to which respondents agree that the organization **is** fostering clinical excellence, stressing high quality healthcare, and competent medical staff. Responses were recorded on a 5-point Likert scale. (Cronbach alpha = 0.79, see table 1 for factor loadings)

Organizational Commitment was measured using three items adapted from the instrument developed by Porter et al. (1974). These items assess the extent to which the respondent is proud to be a part of the organization, feels he/she belongs to the organization, and finds personal meaning in the organization. Responses were recorded on a 5-point Likert scale. (Cronbach alpha = 0.79, see table 2 for factor loadings)

Occupational Commitment was measured using three items adapted from the instrument developed by Wallace (1995). These items assess the extent to which the respondent feels obligated to making and keeping people healthy, is proud to be in the occupation, and that the occupation is important for

his/her self-image. Responses were recorded on a 5-point Likert scale.
(Cronbach alpha = 0.76, see table 2 for factor loadings)

Independent Variables

Task Uncertainty consists of task difficulty and variability. More specifically, it captures the difficulty, the cognitive demand, and the routineness of the job using four items. These items were adapted from Van de Ven and Ferry's (1980) Organizational Assessment Instrument (OAI) and they assess the extent to which the respondent perceived difficulties with no apparent solutions, was unsure of work outcomes, had unpredictable work outcomes, and had difficulty in analyzing work. Responses were recorded on a 5-point Likert scale.
(Cronbach alpha = 0.66)

Task Interdependence captures the degree to which the respondent relied on others to perform work and the degree to which others depended on the respondent to perform their work. These items were adapted from Van de Ven and Ferry's (1980) Organizational Assessment Instrument (OAI) and assess the extent to which respondents depended on their own clinic members to perform their work and the extent to which the clinic members depended on them to perform their work. Responses were recorded on a 5-point Likert scale.
(Cronbach alpha = 0.73)

Frequency of communication refers to the extent to which the respondent communicated with patients, other clinicians and managers. Responses were recorded on a 5-point Likert scale. (Cronbach alpha = 0.6)

Physician is a binary variable taking a value of 1 if the respondent is a physician and 0 if the respondent is not a physician.

Manager is a binary variable taking a value of 1 if the respondent is a manager and 0 if the respondent is not a manager.

Nurse is a binary variable taking a value of 1 if the respondent is a nurse and 0 if the respondent is not a nurse.

Above Expected Professionalism captures the extent to which respondents perceive the organization's professionalism to be higher than the individual's professionalism. It was measured as the absolute value of the positive residuals ($|\text{residual}| > 0$) from regressing organizational professionalism on professionalism. Otherwise, the measure had a value of 0.

Below Expected Professionalism captures the extent to which respondents perceive the organization's professionalism to be lower than the individual's professionalism. It was measured as the absolute value of the negative residuals ($|\text{residual}| < 0$) from regressing organizational professionalism on professionalism. Otherwise, the measure had a value of 0.

Control Variables

Individual level Control Variables

Since perceptions of professionalism, organizational and professional commitment might be influenced by individual level attributes, I control for gender and tenure. I also control for the degree to which individuals perceive their leadership to be supportive, their organization to be effective, and their job satisfaction.

Tenure was measured as the number of years a respondent spent as an employee of the organization.

Leadership Supportiveness was measured was measured using an adaptation of a similar measure using on the Organizational Assessment Instrument (Van de Ven and Ferry, 1980). Respondents were asked to report the extent to which their leader or supervisor provides constructive feedback, emphasizes work accomplishment, emphasize maintaining inter-personal relationships), encourages you to do your best, makes it more difficult to do best work (reversed), *allows experiments and mistakes, and responsive to your concerns*. Responses were recorded on a 5-point Likert scale. (Cronbach alpha = 0.79).

Male is a binary variable taking a value of 1 if the respondent is male and 0 if the respondent is female.

Job Satisfaction was measured using an adaptation of the facet-based measure of job satisfaction developed by Taylor and Bowers (1972).

Respondents were asked to report the extent of their satisfaction with their job, co-workers, supervisors, and professional career progress. Responses were recorded on a 5-point Likert scale. (Cronbach alpha = 0.76).

Perceived Organizational Effectiveness was measured using an adaptation of a similar measure using on the Organizational Assessment Instrument (Van de Ven and Ferry, 1980). Respondents were asked to report the quality of services provided, the quantity or amount work produced, cost efficiency of services provided, patient or customer responsiveness, financial

profitability, improving patient health, and improving health of the community. Responses were recorded on a 5-point Likert scale. (Cronbach alpha = 0.83).

Clinic level Control Variables

Since respondents were embedded in clinics within the larger health system, I control for time invariant clinic level factors such as the type of clinic (specialized versus broad), location, patient mix, climate and culture using clinic fixed effects. Using clinic fixed effects or equivalently dummy variable for each clinic, I control for any unobserved time invariant clinic characteristics that might have an effect the dependent variable and are correlated with the independent variables.

Results

Descriptive Statistics and Correlations

Descriptive statistics and correlations between the variables are listed in table 3. Consistent with the literature on commitment (Wallace, 1993; Vough, 2011) there is a significant positive albeit modest correlation between organizational and professional commitment ($r=0.07$; $p<0.05$) which suggests that individuals perceive their identification with their organization and occupation to be complements and not substitutes. From an occupational standpoint, physicians ($r=0.07$; $p<0.05$) and nurses ($r=0.04$; $p<0.05$) maintain a modestly higher level of professionalism than managers, and other clinical and administrative personnel. Consistent with the occupational sub-culture literature, physicians seems to be more committed to their occupation ($r=0.25$; $p<0.05$) while less committed to their organization ($r=-0.12$; $p<0.05$). In contrast,

managers seems to be more committed to their organization ($r=0.24$; $p<0.05$) while less committed to their occupation ($r=-0.17$; $p<0.05$). Nurses however, seem to be modestly committed only to their occupation ($r=0.10$; $p<0.05$).

Longitudinal Panel Data Plots and Variance Decomposition

To address the first proposition on intra-occupational or within-occupation heterogeneity in professionalism, I use two analytical tools. First, I plot longitudinal panel data plots for each occupational group (physicians, managers, and nurses) and show the heterogeneity within each groups' professionalism across the three years of the study. The longitudinal panel plots consist of superimposed individual trajectories of professionalism and a loess curve or a locally weighted regression smoother for each occupational group. Second, I decompose the variance in professionalism for each occupational group and statistically show the heterogeneity within each groups' professionalism. Put differently, the variance decomposition provides a way to decompose the variance in a measure in terms of its within-occupational or cross-sectional variation and its within-individual or longitudinal variation over time.

Figure 1-3 are the longitudinal plots for physicians, managers, and nurses, respectively. Figure 1 consists of physicians' superimposed individual trajectories and loess of professionalism. The superimposed individual trajectories indicate a considerable degree of variability in the intercepts and slopes of physicians' trajectories of professionalism. Some physicians start with high levels of professionalism, and decrease over time. Other physicians exhibit the opposite trend, and begin with low levels of professionalism that increase

over time. In addition, several physicians maintain U-shaped trajectories where they start with high levels of professionalism, decrease in the next time period, and increase in the final time period. Finally, some physicians exhibit the opposite trend or inverted U-shaped trajectories where they start low, increase in the next time period, and finally decrease again in the final time period. Overall, the heterogeneity in the physicians' trajectories and specifically the trajectories' intercepts provides support for the first hypothesis suggesting that physicians begin with different levels of professionalism. In addition, the heterogeneity in the slopes of their trajectories (increasing, decreasing, U-shaped, and inverted U-shaped) also provides support for the first hypothesis and indicates considerable variability in physicians' level of professionalism over the time. Finally, the loess curve shows the aggregate trajectory in physicians' professionalism is stable over time.

Figure 2 consists of managers' superimposed individual trajectories and loess of professionalism. With slightly more variability than the physicians' figure, the superimposed individual trajectories indicate a considerable degree of variability in the intercepts and slopes of managers' trajectories of professionalism. Again, the heterogeneity in the managers' trajectories and specifically the trajectories' intercepts and slopes provide support for the first hypothesis suggesting that managers begin with varying levels of professionalism that vary over time. Finally, the loess curve shows the aggregate trajectory in managers' professionalism is stable over time.

Figure 3 consists of nurses' superimposed individual trajectories and loess of professionalism. The superimposed individual trajectories indicate a considerable degree of variability in the slopes and to a less degree in the intercepts of nurses' trajectories of professionalism. The heterogeneity in the nurses' trajectories and specifically the trajectories' intercepts and slopes provide support for the first hypothesis suggesting that nurses begin with varying levels of professionalism that vary over time. Finally, unlike physicians and managers, the loess curve shows the aggregate trajectory in nurses' professionalism is slightly increasing over time.

Overall, the figures support hypothesis 1 regarding the heterogeneity in professionalism or occupational ideologies across occupational groups. This heterogeneity is also consistent over time. Whereas socialization would suggest a decrease in occupational members' heterogeneity in professionalism over time, the opposite trend seems to occur providing a counter-institutive picture of the occupational subcultures that exist within the organization and its clinics.

Table 4 summarizes the results of the variance decomposition of professionalism for physicians, managers, and nurses. Providing support for hypothesis 1, physicians, managers, and nurses exhibit significant within occupational variance ($\sigma_{\text{Physicians}} = 0.03$, $p < 0.05$; $\sigma_{\text{Managers}} = 0.13$, $p < 0.05$; $\sigma_{\text{Nurses}} = 0.1$, $p < 0.05$). The intra-class correlations provide additional evidence for hypothesis 1 indicating heterogeneity within occupational groups that are due to differences between members of the same occupation ($ICC(1)_{\text{Physicians}} = 38\%$; $ICC(1)_{\text{Managers}} = 72\%$; $ICC(1)_{\text{Nurses}} = 67\%$). The results reveal considerable

variability among managers and nurses in their level of professionalism while much lower levels of variability among physicians.

Overall, the variance decomposition indicates support for hypothesis 1 which suggests heterogeneity in professionalism or occupational ideologies across occupational groups. These statistical results corroborate the graphical results in figure 1-3.

Random Effects Models

To address the second and third propositions on the antecedents and consequences of professionalism, I use one analytical tool. I model professionalism, organizational commitment, and professional commitment using a general linear estimator that accounts for the correlation between professionalism, organizational commitment, and professional commitment for each individual across the three time periods. Specifically, I estimate the models using a random-effects estimator to account for the intra-individual correlation over time and add clinic level fixed-effects to account for any time invariant clinic-level characteristics that might be correlated with the individual level attributes. The equation for the random-effect estimator is:

$$y_{ijt} = \alpha + \beta_1 * x_{ijt} + \beta_2 * x_i + \beta_3 * x_j + v_i + \epsilon_{ijt}$$

Where y_{ijt} represents professionalism, organizational commitment or professional commitment for individual i in clinic j during year t , x_{ijt} represents a vector of individual-year-specific regressors, x_i represents a vector of individual-specific regressors, and x_j represents a vector of clinic-level fixed effects. The residual v_i

is a time invariant individual-specific error term that is assumed to be normally distributed, and is uncorrelated with the regressors. The residual ε_{ijt} is a random error that is individual-year-specific.

I begin by estimating the effects of the control variables and then include the independent variables in the final model to test the hypotheses using the fully-specified models. The results for the antecedents of professionalism are presented in table 5. Model 1 or the base line model that includes the control variables suggests that job satisfaction and perceived organizational effectiveness are significant and positively associated with professionalism ($\beta_{\text{job satisfaction}} = 0.05, p < 0.01$; $\beta_{\text{organizational effectiveness}} = 0.04, p < 0.01$; model 1). Individuals who are more satisfied with their jobs and maintain more favorable views of the organization's effectiveness are more likely to expect higher levels of professionalism. In contrast, leadership supportiveness is negatively associated with professionalism ($\beta_{\text{leadership supportiveness}} = -0.02, p < 0.1$; model 1) which suggests that individuals perceiving a more supportive leadership are less likely to expect higher levels of professionalism.

Model 2 or the full model with the independent variables testing hypothesis 2, 3, 4, and 5 shows partial support for hypothesis 2 and complete support for hypothesis 4 and 5. In contrast to the prediction in hypothesis 2, physicians, managers and other clinical and administrative personnel maintain similar levels of professionals while nurses seem to be the only occupational group that maintains a higher degree of professionalism providing only partial support hypothesis 2 ($\beta_{\text{nurses}} = 0.12, p < 0.01$; model 2). Next, task

interdependence and frequency of communication are significant and positively associated with professionalism providing support for hypothesis 4 and 5 ($\beta_{\text{task interdependence}} = 0.04, p < 0.01$; $\beta_{\text{frequency of communication}} = 0.04, p < 0.05$; model 2) while task uncertainty is not significantly associated with professionalism providing no support for hypothesis 3. Individuals perceiving higher task interdependence and higher frequency of communication to accomplish their tasks are also expecting higher levels professionalism.

The results for the consequences of professionalism are presented in table 6. Starting with organizational commitment, model 1 or the base line model suggests that leadership supportiveness, job satisfaction, and organizational effectiveness are significant and positively associated with organizational commitment ($\beta_{\text{leadership supportiveness}} = 0.24, p < 0.01$; $\beta_{\text{job satisfaction}} = 0.4, p < 0.01$, $\beta_{\text{organizational effectiveness}} = 0.12, p < 0.01$; model 1). Individuals who perceive their leadership to be more supportive, perceive higher satisfaction with their jobs, and maintain more favorable views of the organization's effectiveness are more likely to be committed to their organization.

Model 3 or the full model with the independent variables testing hypothesis 6, 8, 10 and 11, shows no support for hypothesis 10 while showing support for hypothesis 6 and 11, and partial support for hypothesis 8. In contrast to the prediction in hypothesis 10, occupational members that perceive lower than expected levels of organizational professionalism are not differentially committed to the organization. Occupational members that perceive higher levels of organizational professionalism and perceive higher than expected

organizational professionalism are more committed to the organization providing support for hypothesis 6 and 11 ($\beta_{\text{professionalism}} = 0.21$, $p < 0.01$; $\beta_{\text{above exp. prof}} = 0.15$, $p < 0.1$; model 3). While physicians and managers maintain the lowest and highest levels of commitment to the organization ($\beta_{\text{physicians}} = -0.17$, $p < 0.01$; $\beta_{\text{managers}} = 0.28$ $p < 0.01$; model 3), nurses and other clinical and administrative personnel maintain similar levels of organizational commitment providing partial support for hypothesis 8. In contrast to the literature on organizational commitment, tenure is significant and negatively associated with organizational commitment suggesting that individuals that spend more time in the organization are also the least committed to the organizations ($\beta_{\text{tenure}} = -0.01$, $p < 0.01$; model 3).

With respect to occupational commitment, model 2 or the base line model suggests that job satisfaction and being male are positive and significantly associated with occupational commitment ($\beta_{\text{male}} = -0.03$, $p < 0.01$; $\beta_{\text{job satisfaction}} = 0.17$, $p < 0.01$; model 2) while leadership supportiveness is negative and significantly associated with occupational commitment ($\beta_{\text{leadership supportiveness}} = -0.07$, $p < 0.01$; model 2). Men and individuals who perceive higher satisfaction with their jobs are more likely to be committed to their occupation. In contrast, individuals who perceive higher leadership supportiveness are less committed to their occupation.

Model 4 or the full model with the independent variables testing hypothesis 7, 9, 12, and 13, shows no support for hypothesis 12 while showing support for hypothesis 7 and 13, and partial support for hypothesis 9. In contrast

to the prediction in hypothesis 12, occupational members that perceive lower than expected levels of professionalism are not more committed to the occupation. However, occupational members perceiving higher organizational professionalism are more committed to the occupation while members perceiving higher than expected organizational professionalism are less committed to the occupation providing support for hypothesis 7 and 13 ($\beta_{\text{organizational prof}} = 0.35$, $p < 0.01$; $\beta_{\text{above exp. prof}} = -0.27$, $p < 0.01$; model 4). While nurses, physicians and managers maintain the highest to lowest levels of commitment to the occupation ($\beta_{\text{nurses}} = 0.38$, $p < 0.01$; $\beta_{\text{physicians}} = 0.35$, $p < 0.01$; $\beta_{\text{managers}} = -0.1$ $p < 0.1$; model 4), other clinical and administrative personnel seem to maintain an intermediate level of commitment lying between physicians and managers providing partial support for hypothesis 9.

Discussion and Conclusion

The dissertation focused on three interrelated propositions: 1) members of the same occupations maintain different ideologies or degrees of professionalism, 2) Occupational groups maintain different ideologies or degrees of professionalism which are rooted in the workplace and work, 3) occupational members' ideologies influence their organizational and occupational commitment. The hypotheses derived from the first proposition were supported however; the hypotheses derived from the remaining propositions were only partially supported. Finally, an additional set of hypotheses were developed to test the inter-occupational differences in organizational and occupational commitment.

The results for those hypotheses were partially supported (Table 7 contains a summary of the results).

The first proposition and its related hypothesis received complete support (H1 in Table 7). The implications of the interpretive account (Nelson and Trubek, 1992) that formed the basis of this proposition contended that members of the same occupation maintain different degrees of professionalism since such ideologies are not solely rooted in the standardized educational and training institutions but also in the organizational context and specifically in the nature of work. The results of the longitudinal panel plots and the variance decomposition reveal significant variability in physicians', managers', and nurses' views of professionalism providing support for a critical underlying principle of the interpretive account.

The second proposition and its related hypotheses received partial support (H2-H5 in Table 7). An implication of the interpretive account which is also consistent with the broader theory on occupational subculture suggests that occupational groups with different degrees of professionalization will, on average, maintain heterogeneous degrees of professionalism. More specifically, the more professionalized occupations will maintain higher degrees of professionalism. Unfortunately, the results did not support this hypothesis, however, an interesting finding emerged. Nurses were the only occupational group that maintained a higher degree of professionalism while physicians, managers and the remaining clinical and administrative staff maintained similar levels of professionalism. This finding seems to be consistent with accounts that certain occupational groups

have adapted (Wallace, 1995; Kim and Mueller, 2010) to working with each other in various organizational contexts especially in the case of physicians, managers and the remaining clinical and administrative personnel. Maintaining similar accounts of professionalism, as I suggested earlier, has a functional aspect in terms of facilitating coordination through scaffolding activities, aligning work, and creating a common understanding. Future research could explore these effects on work-related outcomes.

The other implication of the interpretive account is that the antecedents of professionalism are rooted in the organizational context and specifically in the nature of work. The three antecedents tested are task uncertainty, interdependence and communication which were predicted to have a positive effect on occupational members' professionalism. The results provide partial support for the hypotheses (H3-H5 in Table 7). While interdependence and communication have a positive effect on professionalism, task uncertainty had no effect. While this might be striking since earlier work (e.g. Van de Ven et al., 1976) has shown the role of task uncertainty in determining the mode of organizing, I suspect that in this context the level of task uncertainty is considerably low given that it may be socially unacceptable to admit to uncertainty especially in medical diagnosis and prescription (to avoid medical malpractice), and since best practice guidelines and evidence-based medicine typically reduce this uncertainty.

The third proposition and its related hypotheses also received partial support (H6-H13 in Table 7). Understanding the consequences of

professionalism and especially as it sheds light on the central problem of managing multiple occupational groups with varying degrees of professionalization, and their commitment to multiple targets was the basis of these hypotheses. More specifically, two hypotheses proposed that higher degrees of professionalism were positively related to occupational and occupational commitment (H6 and H7 in Table 7). Both hypotheses were supported which provides credence to the earlier work by Wallace (1995) and Hoff (2000) who suggested that the more an organization exhibits "professionally" consistent characteristics and especially in its ideals, occupational members will maintain higher degrees of organizational and occupational commitment.

Next, using an interactionist perspective and the literature on commitment, an alternative view on the role of professionalism is developed. Four hypotheses are proposed suggesting that the identification with an organization and occupation are a function of the similarity between the individual's professionalism and the organization's professionalism (H10-H13 in Table 7). With respect to organizational commitment, if an organization's professionalism upholds the member's professionalism, the member's commitment to the organization increases while a reverse effect will occur when an organization's professionalism falls short of the member's professionalism (H10 and H11 in Table 7). While the latter effect was not supported regarding the shortfall in professionalism, the former was partially supported. This result suggests that occupational members maintain heterogeneous preferences for professionalism

and while an organization's professionalism is important for their commitment to it, meeting the members' preferences is also important.

Concerning occupational commitment, if an organization's professionalism upholds the member's professionalism, the member's commitment to the occupation decreases while a reverse effect will occur when an organization's professionalism falls short of the member's professionalism (H12 and H13 in Table 7). As occupational members sense that the organization is upholding their professionalism, their commitment to the occupation decreases since the organization provides a substitute for the occupation in upholding their professionalism. Conversely, as occupational members sense that the organization is falling short, their commitment to the occupation increases since the occupation continues to uphold their professionalism. The results support both hypotheses. At the surface, this result seems to be counter-intuitive since we know from studies that suggest organizations exhibiting "professionally" consistent characteristics increase commitment to both the organization and occupation (Wallace, 1995, Hoff, 2000); however, previous models of members' commitment might be misspecified since their accounts neglected the heterogeneity in members' preferences for professionalism. While the previous findings focused on the degree or level of organizational professionalism which clearly has a positive effect on occupational commitment, the interactionist perspective of satisfying members' professionalism provides a distinct account suggesting that once members' preference for professionalism is met by an organization then their commitment to the occupation erodes.

Finally, the set of hypotheses concerning the inter-occupational differences in organizational and occupational commitment were partially supported (H8 and H9 in Table 7). More professionalized occupations are assumed to be more committed to the occupation than the organization while less professionalized occupations are more committed to their organization than the occupation. Consistent with the hypothesis on organizational commitment, physicians and managers maintained the lowest and highest levels of commitment to the organization, respectively. Contrary to the hypothesis, nurses and other clinical and administrative personnel maintained similar levels of organizational commitment. Partially consistent with the hypotheses, nurses and physicians maintained similar and high levels of commitment to their occupations followed by clinical and administrative personnel, and managers maintained the lowest levels of commitment to their occupation. Overall, the results concerning managers' and physicians' organizational commitment are consistent with previous findings (Kim and Mueller, 2010) however, the findings regarding nurses' commitment seem to be depict a previously undocumented picture of an occupational group that maintains a commitment to the organization similar to that of other personnel but also maintains the highest level of commitment to the occupation.

Theoretical Contributions

This dissertation makes at least four important contributions. First, it examines the organizational antecedents of professional ideologies or professionalism. While the majority of previous work has mainly assumed that

members of the same occupation maintain similar ideologies (e.g. Wilensky, 1964), this dissertation suggests and shows that previous work overlooks the heterogeneity in occupational members' ideologies. The literature overlooks this heterogeneity due to its emphasis on the standardized educational institutions, professional associations and socialization processes whose function is to homogenize views of professionalism and create a unified ideological position. Building on Nelson and Trubek's (1992) interpretive framework this dissertation suggests that occupational members' ideological position is also rooted in the workplace and the nature of their work. Specifically, it argues that there are within and between occupational differences in occupational members' ideologies. In addition, it argues that the uncertainty of the tasks performed, the interdependence of the tasks performed, and the frequency of interaction required to perform such tasks have a direct impact on occupational members' ideological position or professionalism. Using longitudinal panel plots and variance decomposition techniques, the results suggest significant heterogeneity within occupations in their professional ideologies or professionalism. In addition, using random effects models to account for the dependency in the longitudinal data, the results suggest only minor between occupational differences in the members' ideologies or professionalism. Whereas physicians and managers seem to maintain similar levels of professionalism as clinical and administrative personnel, nurses maintain the highest level of professionalism. The results seem to provide partial credence to the adaptation and mutation theses (Freidson, 1984; Wallace, 1995) that professions and specifically

physicians have adapted to their employment relations and maintain similar ideologies as their managerial counterparts. Nurses however, seem to maintain higher levels of occupational ideals which might be an artifact of having always been an employed occupational group and having "strategically" adapted to the organizational context but still maintaining their own distinct occupational ideology.

Second, this dissertation examines the role of professionalism on organizational and professional commitment. While earlier studies have focused on the role of the organizational structure on organizational commitment and professional commitment (e.g. Wallace, 1995; Kim and Mueller, 2010), this dissertation supplements the evidence in the legal industry (Wallace and Kay, 2008) and focuses on individuals' perceived organizational professionalism. Consistent with the previous studies on the role of professionally consistent organizational attributes (Wallace, 1993, 1995), the results suggest that occupational members maintain higher organizational and professional commitment to the extent they perceive their organization to be exhibiting more professionally consistent ideals.

Third, this dissertation provides an alternative to integrating occupational groups within organizations by examining the similarity between the occupational members' professionalism and the organization's professionalism on their commitment to the organization and occupation. Whereas the literature has focused solely on the degree to which an organization exhibits professionally consistent attributes (Wallace, 1993, 1995; Wallace and Kay; 2008; Kim and

Mueller, 2010), this dissertation applies an interactionist perspective to suggest that there are significant differences in occupational members' ideals and the degree to which organizations' uphold or breach those ideals will have a significant effect on their commitment to the organization and occupation.

Fourth, this dissertation provides an account of the inter-occupational and intra-occupational differences in professionalism, organizational commitment, and professional commitment. While earlier studies have either focused on one occupation (e.g. physicians in the case of Hoff, 2000, or lawyers in the case of Wallace and Kay, 2008) or multiple occupations (Kim and Mueller, 2010), this dissertation provides a longitudinal account of the difference between and within occupations on professionalism, and an account of the difference between occupations on organizational and professional commitment following the merger that transformed the status of many occupational members.

Limitations

This dissertation has three main limitations. First, the dissertation examines one occupational ideology which provides only a weak test of the role of occupational ideologies. Future studies could examine a broader set of ideals and examine their antecedents and consequences across more and less "professionally' consistent contexts.

Second, missing data was assumed to be missing completely at random (MCAR). This assumption is difficult to satisfy and creates endogeneity problems that bias the estimates. For example, understanding the consequences of occupational ideologies on organizational commitment needs to take into account

the turnover that occurs when individuals uncommitted to the organizations leave the organization. Otherwise, the estimates could be biased upwards or downwards depending on our assumptions about the professionalism of individuals who leave the organization. Similar arguments could be raised regarding the non-respondents who are still employed by the organization.

Third, the measurement of occupational ideology lacks the breadth of occupational ideals that might be part of an occupational members' ideology. In addition, the items used in the measure provide very little variability since respondents consistently rate favorably the need for competent medical staff, clinical excellence, and high quality healthcare. Alternative items could have captured whether medical care should be physician centered versus patient centered or whether medical staff should be accountable to clinical or financial benchmarks etc.

Conclusion

As occupations become increasingly employed by large organizations, this dissertation argued that understanding the role of occupational ideologies especially their antecedents and their consequences becomes critical to managing them and their work. The results of the dissertation show that unlike previous work that construed occupational ideologies to be homogenous among members of the same occupation, they are in fact heterogeneous and have organizational antecedents. Similarly, results build on earlier work and show that occupational ideologies have an effect on occupational members' organizational and occupational commitment and a more nuanced interactionist account is

suggested that complements earlier accounts. Finally, the dissertation provides a comparative account of the inter-occupational and intra-occupational differences in occupational members' ideologies and their organizational and professional commitment.

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Appendix 1: Tables

Table 1
Factor Loadings of Principle Component Analysis Using Varimax Rotation for Professionalism and Organizational Professionalism 1997-1999

Items	Professionalism (Should)	Organizational Professionalism (Is)
1 competent medical staff (should)	0.88	0.09
2 fosters clinical excellence (should)	0.87	0.10
3 stresses high quality healthcare (should)	0.90	0.08
4 competent medical staff (is)	0.21	0.72
5 fosters clinical excellence (is)	0.05	0.88
6 stresses high quality healthcare (is)	0.08	0.89

Table 2
Factor Loadings of Principle Component Analysis Using Varimax Rotation for Organizational and Occupational Commitment 1997-1999

Items	Organizational Commitment	Professional Commitment
1 Proud to be a part of the Health System	0.88	0.01
2 Do not feel "belonging" to their Health System (R)	0.78	0.01
3 What the Health System stands for has meaning for me	0.85	0.07
4 Making and keeping people healthy is life's work	-0.08	0.83
5 Proud to be in my respective occupation	0.08	0.85
6 The occupation is important for my self-image	0.08	0.80

Table 3
Descriptive Statistics and Correlations 1997-1999

Variable	Mean	S.D.	1	2	3	4	5	6	7	8
1 Professionalism	4.82	0.43								
2 Organizational Commitment	3.16	0.99	0.03 (0.08)							
3 Occupational Commitment	4.06	0.82	0.19 (0.00)	0.07 (0.00)						
4 Organizational Professionalism	3.83	0.72	0.22 (0.00)	0.47 (0.00)	0.13 (0.00)					
5 Below Expected Professionalism	0.13	0.33	0.05 (0.01)	-0.39 (0.00)	-0.05 (0.00)	-0.82 (0.00)				
6 Above Expected Professionalism	0.00	0.70	0.05 (1.00)	0.38 (0.00)	0.08 (0.00)	0.79 (0.00)	-0.18 (0.00)			
7 Physician	0.09	0.29	0.07 (0.00)	-0.12 (0.00)	0.25 (0.00)	-0.07 (0.00)	0.20 (0.00)	-0.08 (0.00)		
8 Manager	0.08	0.27	0.02 (0.21)	0.24 (0.00)	-0.17 (0.00)	0.06 (0.00)	0.05 (0.00)	0.16 (0.00)	-0.09 (0.00)	
9 Nurse	0.03	0.16	0.04 (0.03)	-0.02 (0.18)	0.10 (0.00)	-0.00 (0.79)	0.08 (0.00)	0.07 (0.44)	-0.05 (0.00)	0.04 (0.00)
10 Year	4.00	0.82	-0.00 (0.95)	-0.01 (0.67)	-0.01 (0.44)	0.01 (0.59)	-0.03 (0.03)	-0.02 (0.49)	-0.02 (0.15)	-0.02 (0.07)
11 Task Uncertainty	2.73	0.60	0.02 (0.39)	-0.10 (0.00)	0.03 (0.13)	-0.18 (0.00)	0.16 (0.00)	-0.12 (0.00)	0.11 (0.00)	0.33 (0.00)
12 Task Interdependence	3.90	0.94	0.13 (0.00)	0.09 (0.00)	0.13 (0.00)	0.14 (0.00)	-0.08 (0.00)	0.11 (0.00)	0.23 (0.00)	0.20 (0.00)

13	Frequency of Communication	4.13	0.68	0.09 (0.00)	0.09 (0.00)	0.10 (0.00)	0.09 (0.00)	-0.05 (0.00)	0.06 (0.00)	0.14 (0.00)	0.21 (0.00)
14	Tenure	6.66	6.78	0.02 (0.37)	-0.04 (0.05)	0.02 (0.17)	0.02 (0.24)	-0.02 (0.25)	0.01 (0.33)	0.05 (0.01)	0.17 (0.00)
15	Leadership Supportiveness	3.03	0.80	0.01 (0.56)	0.48 (0.00)	-0.01 (0.62)	0.37 (0.00)	-0.32 (0.00)	0.28 (0.00)	-0.17 (0.00)	0.19 (0.00)
16	Male	0.23	0.42	0.05 (0.01)	0.01 (0.77)	0.12 (0.00)	-0.02 (0.26)	0.03 (0.05)	-0.01 (0.15)	0.58 (0.00)	0.07 (0.00)
17	Job Satisfaction	3.61	0.83	0.07 (0.00)	0.50 (0.00)	0.19 (0.00)	0.40 (0.00)	-0.33 (0.00)	0.30 (0.00)	0.01 (0.55)	0.04 (0.03)
18	Perceived Organizational Effectiveness	3.63	0.66	0.12 (0.00)	0.30 (0.00)	0.19 (0.00)	0.48 (0.00)	-0.38 (0.00)	0.38 (0.00)	0.04 (0.02)	0.01 (0.63)

() p-values

Table 3 (continued)
Descriptive Statistics and Correlations 1997-1999

Variable	9	10	11	12	13	14	15	16	17
9 Nurse									
10 Year	-0.02 (0.18)								
11 Task Uncertainty	0.02 (0.16)	-0.01 (0.64)							
12 Task Interdependence	0.01 (0.58)	-0.02 (0.34)	0.16 (0.00)						
13 Frequency of Communication	0.03 (0.08)	0.02 (0.28)	0.22 (0.00)	0.43 (0.00)					
14 Tenure	-0.00 (0.92)	0.04 (0.02)	0.09 (0.00)	0.11 (0.00)	0.07 (0.00)				
15 Leadership Supportiveness	0.02 (0.19)	-0.01 (0.76)	-0.09 (0.00)	0.13 (0.00)	0.14 (0.00)	-0.04 (0.02)			
16 Male	-0.13 (0.00)	0.02 (0.24)	0.18 (0.00)	0.22 (0.00)	0.17 (0.00)	0.08 (0.00)	-0.06 (0.00)		
17 Job Satisfaction	0.00 (0.90)	-0.02 (0.16)	-0.26 (0.00)	0.13 (0.00)	0.10 (0.00)	-0.06 (0.00)	0.54 (0.00)	0.02 (0.27)	
18 Perceived Organizational Effectiveness	-0.02 (0.38)	-0.03 (0.13)	-0.12 (0.00)	0.16 (0.00)	0.17 (0.00)	0.01 (0.53)	0.30 (0.00)	0.03 (0.14)	0.39 (0.00)

() p-values

Table 4
Variance Decomposition of Professionalism Across Occupational Groups 1997-1999

	Professionalism Physicians	Professionalism Managers	Professionalism Nurses
Within-Occupational Variance	0.03**	0.13**	0.1**
Within-Individual Variance	0.05	0.05	0.05
IIC (1)	38%	72%	67%
Observations	582	487	158
Number of Individuals	327	307	114

** p<0.05

Table 5
Results of Random Effects Regression for Professionalism 1997-1999

Variable	Model 1 Professionalism Base Line Model	Model 2 Professionalism Full Model
Physician		0.03 (0.034)
Manager		0.00 (0.034)
Nurse		0.12*** (0.042)
Task Uncertainty		0.01 (0.018)
Task Interdependence		0.04*** (0.011)
Frequency of Communication		0.04** (0.015)
Tenure	0.00 (0.001)	0.00 (0.001)
Leadership Supportiveness	-0.02* (0.014)	-0.03** (0.014)
Male	0.03 (0.024)	-0.01 (0.030)
Job Satisfaction	0.05*** (0.014)	0.04*** (0.014)
Perceived Organizational Effectiveness	0.04*** (0.015)	0.03** (0.015)
Constant	4.63*** (0.146)	4.37*** (0.170)
Clinic-Fixed Effects	Yes	Yes
Observations	2,193	2,113
Number of groups	1,344	1,300
Inter-Individual Variance	0.0684	0.0617
Intra-Individual Variance	0.0977	0.0931
ll_(null)	-1114	-1003
ll_(model)	-1053	-946.5

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 6
Results of Random Effects Regression for Organizational and Occupational Commitment 1997-1999

Variable	Model 1 Organizational Commitment Base Line Model	Model 2 Occupational Commitment Base Line Model	Model 3 Organizational Commitment Full Model	Model 4 Occupational Commitment Full Model
Organizational Professionalism			0.21*** (0.075)	0.35*** (0.065)
Below Expected Professionalism			-0.07 (0.368)	0.32*** (0.069)
Above Expected Professionalism			0.15* (0.086)	-0.27*** (0.077)
Physician			-0.17*** (0.062)	0.35*** (0.061)
Manager			0.28*** (0.059)	-0.10* (0.056)
Nurse			-0.05 (0.077)	0.38*** (0.072)
Tenure	-0.00 (0.003)	0.00 (0.002)	-0.01*** (0.003)	0.00* (0.002)
Leadership Supportiveness	0.24*** (0.025)	-0.07*** (0.022)	0.17*** (0.025)	-0.06** (0.022)
Male	-0.03 (0.047)	0.23*** (0.046)	0.07 (0.056)	0.06 (0.056)
Job Satisfaction	0.40*** (0.025)	0.17*** (0.022)	0.38*** (0.025)	0.15*** (0.023)
Perceived Organizational Effectiveness	0.12*** (0.027)	0.09*** (0.024)	0.00 (0.029)	0.08*** (0.026)
Constant	1.16*** (0.264)	3.62*** (0.258)	1.53*** (0.485)	1.84*** (0.447)
Clinic-Fixed Effects	Yes	Yes	Yes	Yes
Observations	2,322	2,321	2,172	2,172
Number of groups	1,407	1,407	1,333	1,333
Inter-Individual Variance	0.313	0.384	0.256	0.339
Intra-Individual Variance	0.287	0.176	0.282	0.174
ll_(null)	-2699	-2575	-2406	-2319
ll_(model)	-2540	-2303	-2288	-2092

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 7
Summary of Results

Hypothesis	Independent Variable	Dependent Variable	Prediction	Support
H1	Occupations	Professionalism	Within Occupational Heterogeneity	Yes
H2	Occupations	Professionalism	Between Occupational Heterogeneity (Physicians>Nurses>Managers)	Partial
H3	Task Uncertainty	Professionalism	Positive	No
H4	Task Interdependence	Professionalism	Positive	Yes
H5	Frequency of Communication	Professionalism	Positive	Yes
H6	Organizational Professionalism	Organizational Commitment	Positive	Yes
H7	Organizational Professionalism	Professional Commitment	Positive	Yes
H8	Occupations	Organizational Commitment	Positive (Physicians>Nurses>Managers)	Partial
H9	Occupations	Occupational Commitment	Positive (Physicians>Nurses>Managers)	Partial
H10	Below Expected Professionalism	Organizational Commitment	Negative	No
H11	Above Expected Professionalism	Organizational Commitment	Positive	Yes
H12	Below Expected Professionalism	Occupational Commitment	Positive	Yes
H13	Above Expected Professionalism	Occupational Commitment	Negative	Yes

Appendix 2: Figures

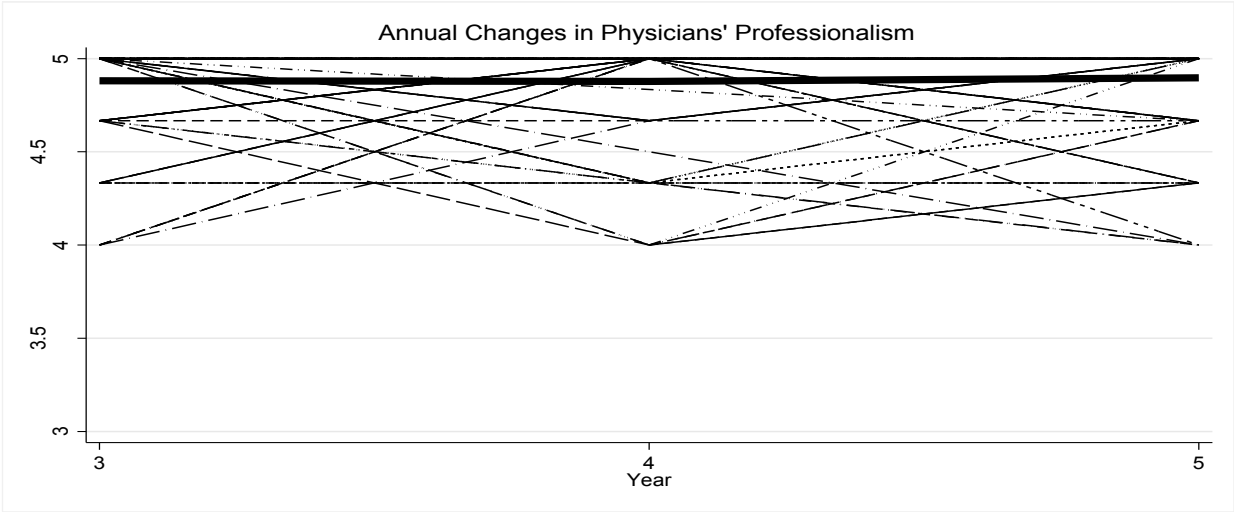


Figure 1: Physicians' Longitudinal Panel Data Plot 1997-1999

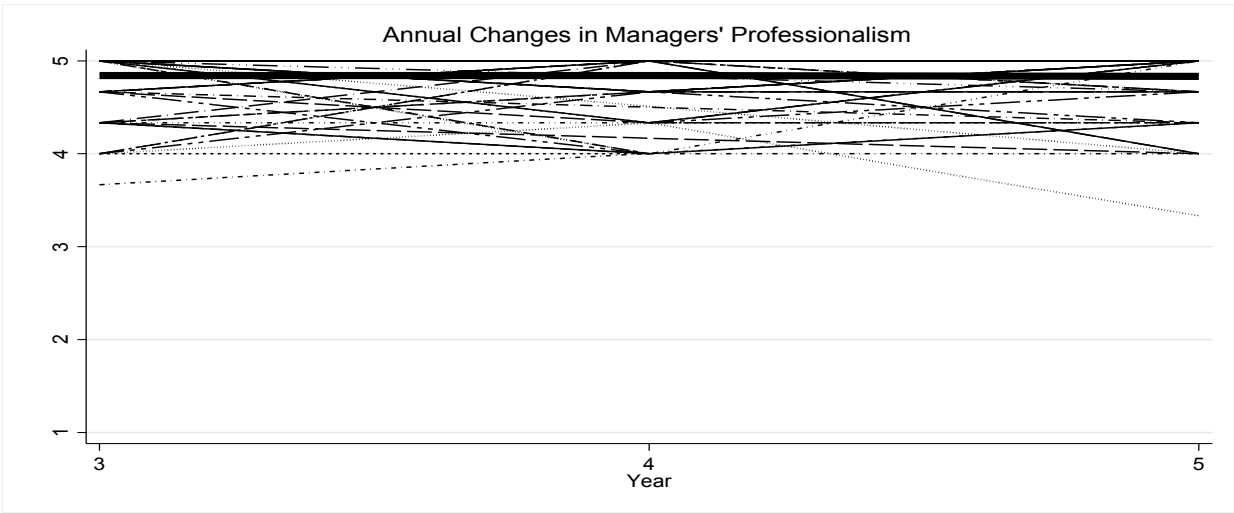


Figure 2: Managers's Longitudinal Panel Data Plot 1997-1999

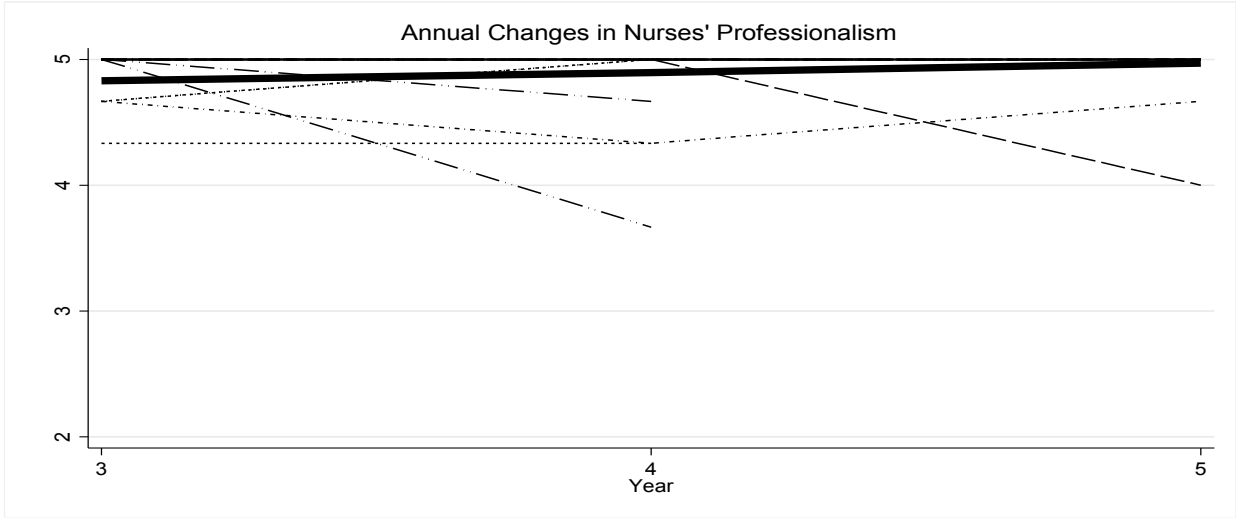


Figure 3: Nurses' Longitudinal Panel Data 1997-1999