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Original Article

The antecedents and consequences of a strong professional identity among medical specialists

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Abstract This article introduces a conceptual framework for understanding the antecedents of a strong professional identity among medical specialists and its consequences for the quality of healthcare. Three work conditions are proposed under which a professional identity improves the overall work productivity within a specialty, but impedes the efforts of medical specialists to work effectively with others outside their domain because of the experience of identity threat. These conditions are: complex multidisciplinary collaborations, the emergence of new specialties and medical technological developments. The framework has important theoretical and practical implications and calls for future studies on individual characteristics of specialists and on organizational factors that may ensure the benefits and circumvent the threats of a strong professional identity.

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Introduction

Medical specialists increasingly face the challenge of adequately handling healthcare problems that exceed their own domain. This theoretical contribution presents a conceptual framework for understanding when specialists deal with this challenge effectively. Research demonstrates that medical specialists tend to develop a relatively strong professional identity (for example, Pratt *et al*, 2006; Molleman *et al*, 2010a, b), meaning that they derive part of how they personally see themselves from belonging to their particular specialty (Tajfel and Turner, 1979). As a consequence, they value and emphasize key features of their

specialty, such as certain expertise, values, norms, beliefs, attitudes and behaviors (Hogg, 1992; Johnson *et al*, 2006; Hekman *et al*, 2009). Based on this notion, our framework proposes that medical specialists with a strong professional identity are likely to function differently within and outside their own domain.

Our conceptual framework consists of four interrelated parts. The first part draws on social psychological and sociological theories to explain the identity formation process among medical specialists (see 'antecedents of a professional identity' in Figure 1). The second part reviews research demonstrating that there are three key work conditions under which specialists with a strong professional identity tend to respond positively toward their own domain, but relatively negatively toward other domains. These mixed responses are arguably because of the experience of identity threat. The three work conditions represent important developments in their profession, and include the presence of highly complex healthcare problems, the rise of new specialties and technological innovations (see 'identity threatening conditions' in Figure 1). Given the relative frequency in which specialists have to deal with any of these three circumstances

Figure 1: Conceptual framework.

it is proposed that the experience of identity threat can have negative consequences for the quality of healthcare.

The third part of the framework discusses the theoretical implications of identity threats for the quality of healthcare and proposes directions for future research. This part introduces an important trait (that is, a personal characteristic of the individual medical specialist), as well as a key organizational feature that may strengthen the positive (and weaken the negative) consequences of a strong professional identity among specialists (see 'factors that modify the consequences of a strong professional identity' in Figure 1). Finally, the fourth part of the article places the identity dynamics we describe in a broader context. This part explains what roles government agencies, insurance companies and patients may have in the development of a strong professional identity among medical specialists and describes how these important stakeholders are likely to affect the impact of a strong professional identity on the quality of healthcare.

By explaining the role of identity dynamics in collaborations among medical specialists, this theoretical review contributes to prior literature on the execution of complex health-care cases. Knowledge on this process is important for guiding the motivation and the behavior of medical specialists, and, ultimately, for the outcomes of their work (that is, the quality of patient care). Moreover, the conceptual framework will help medical organizations to harness the potential contributions of specialists who are often involved in multidisciplinary collaborations.

Conceptual Framework

Antecedents of a strong social identity

Belonging to social groups serves several basic human needs (Hogg, 1992; Hogg and Terry, 2000). Groups are long believed to fulfill an evolutionary need to ensure the survival of mankind. Groups indeed have functional benefits, as they provide clear norms on how to behave in ambiguous situations and provide help in analyzing complex environments (for example, Tajfel and Wilkes, 1963). Groups also fulfill a social need of belonging as they enable people to relate to other human beings in a meaningful way. And, according to social identity theory, people also derive part of their self-concept and sense of self-esteem from group memberships. This means that their self-view is not determined by personality characteristics or by their interpersonal relationships alone; how people see themselves is also determined by the groups to which they belong (that is, their social identity; Tajfel and Turner, 1979).

More than three decades of research offers strong support for these propositions (Haslam *et al.*, 2010; Turner and Reynolds, 2010). For example, there is

abundant evidence for the notion that group memberships can enhance one's self-view. This is particularly likely when members share a number of important characteristics with each other (for example, interests, skills). Perceptions of commonality offer social validation and allow group members to make favorable comparisons of themselves (Ashforth *et al*, 2008). Accordingly, groups help to make the world look safe, meaningful, predictable and positive, particular when other group members are similar to the self (Stevens and Fiske, 1995; Hogg and Terry, 2000). People, therefore, value group memberships.

The professional identity of medical specialists.

In addition to serving these basic needs, there are a number of reasons why medical specialists are particularly likely to identify strongly with their specialty (from here on referred to as their *professional identity*, see Pratt *et al*, 2006; Hewett *et al*, 2009; Burford, 2012). First, medical specialists receive exceptional extensive knowledge and skills training to execute their profession. Research has demonstrated that people are inclined to identify highly with a group when they have made significant investments in time, money and cognitive ability for that particular group (Johnson *et al*, 2006; Pratt *et al*, 2006; Von Nordenflycht, 2010; Weaver *et al*, 2011).

Second, during training, medical specialists go through an intense socialization period where they are taught to adopt the norms, values, thoughts and behaviors common to their specialty (Bauer *et al*, 1998; Haslam, 2001; Pratt *et al*, 2006). In other words, specialists from one and the same specialty are deliberately trained to develop a shared frame of reference and a common way of thinking (Becker *et al*, 1961; Hogg, 1992).

Third, the mere fact that medical specialists conduct highly professional work tends to strengthen their professional identity (for example, Hall, 1968; Wallace, 1993; Blau, 1999; Swailes, 2003; Pratt *et al*, 2006; Chreim *et al*, 2007; Molleman and Broekhuis, 2012). A high degree of professionalization allows medical specialists to self-regulate their work (Swailes, 2003), which, in turn, reinforces the efforts that they make for their specialty (for example, Friedson, 1970; Swailes, 2003; Pratt *et al*, 2006; Hekman *et al*, 2009; Von Nordenflycht, 2010). For example, medical specialists often determine their own work processes, develop their own entry criteria and training programs, and are often primarily accountable to colleagues from their own specialty (instead of to more distant higher management bodies like most regular employees; Hekman *et al*, 2009). As Fournier (1999, p. 285) has put it: 'professionals are both the governor and the governed'.

Taken together, medical specialists are not only prone to develop a strong professional identity because this identity will serve some of their basic human needs; additional reasons exist why they are likely to attach great value to their specialty.

Consequences of a strong professional identity

A strong professional identity among an occupational group of medical specialists tends to have positive consequences for the work behavior of these specialists and may thus contribute to the quality of health care. When specialists within the same domain all have a strong professional identity, they work from a shared frame of reference, endorse similar work norms and have the same interests in mind. Research has demonstrated that such commonalities facilitate communication patterns with members of the same group as they make interactions more predictable and efficient (Haslam *et al*, 2003). Moreover, medical specialists with a strong professional identity are generally motivated to make an effort for their work and strive for high quality patient care because good performance outcomes underline their specialty in a positive sense (Molleman *et al*, 2010a).

Exactly because a strong professional identity motivates specialists to demonstrate the value of their domain to others, it often also stimulates specialists to perform optimally in multidisciplinary teams. Multidisciplinary work gives specialists a podium to demonstrate the importance of their own specialty for high quality patient care (Janz *et al*, 1997; Molleman *et al*, 2010a). Indeed, the whole purpose of multidisciplinary collaborations is that specialists pool their knowledge in order to solve complex health-care cases that involve multiple domains. In this way, multidisciplinary collaborations are like puzzles that need to be solved, each specialist has unique input that is required to complete it. Being able to contribute to such complex cases with their unique expertise often makes medical specialists even more proud to belong to their own specialty (Wackerhausen, 2009; Molleman *et al*, 2010a; Mitchell *et al*, 2011).

Nevertheless, a strong professional identity can also have negative consequences for the quality of healthcare. There are circumstances where multidisciplinary medical collaborations may be seen as posing a threat to medical specialists. This is the case when specialists feel that their own specialty is evaluated negatively. Those with a strong professional identity are particularly likely to experience negative emotions and respond negatively in the face of criticism (see Walton and Cohen, 2007). Research in the medical domain suggests that this experience of identity threat is often triggered by developments imposed upon a specialty. In the next section, three such developments are discussed: (i) the growing complexity of health-care cases handled by multidisciplinary collaborations, (ii) the entry of new specialties into the domains of existing specialties, and (iii) the introduction of new technologies that shift boundaries between specialties.

Identity threatening conditions

Complexity of multidisciplinary healthcare cases

Multidisciplinary collaborations are increasingly confronted with cases that are not easily solvable by simply pooling knowledge from different domains. There

are complex cases where 'pieces of the puzzle' do not fit together or cases where 'pieces of the puzzle' are missing. In the first case, treatments of different specialties for different parts of the problem may interfere with one another. For example, obstetric and pediatric specialists may seriously advocate different treatment plans if a pregnant woman, as well as her fetus, have health problems (Brown *et al.*, 2012). In this complex health-care case differences between specialties can become salient in a negative way because these differences represent competing opinions and values among the representative medical specialists. Research has demonstrated that this threatening experience is unlikely to impair the specialist's feeling of being connected to his own specialty rather, such an experience in fact often *strengthens* his professional identity (Tajfel, 1970; Molleman *et al.*, 2010a). Accordingly, in complex cases where medical specialists in a multidisciplinary team have competing opinions on a treatment plan, they are likely to respond negatively toward the specialists outside their domain, and, as a consequence, are inclined to devalue the multidisciplinary collaboration at hand (Ferlie *et al.*, 2005; Molleman *et al.*, 2010a).

In the second case, where 'pieces of the puzzle' are simply missing, it is ambiguous how a problem can be solved (Kvarnström, 2008; Molleman *et al.*, 2010a). For instance, consider a patient with palliative treatment for cancer who suffers from such severe side-effects that his or her quality of life is substantially lowered. When this patient at the same time has serious geriatric problems it becomes impossible for specialists to discern his or her personal needs and make unequivocal decisions. In such ambiguous cases, research has consistently shown that decision makers are inclined to rely on knowledge most familiar to them (Stasser and Titus, 1985; Wittenbaum *et al.*, 2004). That is, such ambiguous health-care cases can again, paradoxically, strengthen the tendency of medical specialists with a strong professional identity to rely upon their own well-known expertise (Rink and Ellemers, 2010).

To conclude, although medical specialists are brought together in multidisciplinary medical teams to solve unclear and unstructured health-care problems, it is exactly this complexity and ambiguity that may cause those with a strong professional identity to attach even greater value to their own specialty. In this way, multidisciplinary teamwork does not always bring what it could or should bring.

Rise of new specialties

Another important development is the growing number of new specialties in medical sciences. For example, our aging population requires new expertise about functional decline and cognitive impairment and has led to the rise of geriatrics as a new specialty. This specialty does, however, overlap with certain domains in neurology, internal medicine and psychiatry. Although, this overlap

can lead to fruitful collaborations there is also empirical evidence on changes in inter-group relations suggesting that the rise of new specialties can cause multidisciplinary tensions (Ferlie *et al*, 2005; Van der Vegt and Bunderson, 2005). Indeed, given that new specialties are still developing their own professional identity, they feel pressure to legitimize their own unique expertise toward others during this process (Molleman *et al*, 2008). Existing specialties, on the other hand, often experience identity threat when confronted with a new specialty because they may have to reposition their own domain as a result of this development. As explained earlier, this threat is particularly experienced by specialists with a strong professional identity, leading to implicit or explicit identity struggles between specialties and suboptimal collaborations (Molleman *et al*, 2008).

Technological developments

Finally, one other development that may shift relational boundaries between specialists and threaten medical specialists with a strong professional identity is the course of new scientific and technological knowledge. Medical imaging techniques, for instance, currently change the positions of certain specialties in multidisciplinary collaborations substantially. Through these techniques, some specialties become more involved in patient treatment plans (for example, interventional radiology), while other specialties can improve their traditional interventions (for example, cardiologists). In both cases, technological developments contribute to the professional identity of one specific specialty (Burri, 2008). Yet such technological developments may pose a threat to other specialties because these developments can impede the necessity of some of their interventions (for example, cardiovascular surgery). In this case, technological developments can fundamentally change a specialty's status and reputation relatively to other specialties and may even have financial consequences (Burri, 2008). Medical specialists with a strong professional identity respond negatively toward such status losses because these specialists largely base their own self-esteem and self-worth on their specialty's reputation (Burri, 2008).

To conclude, the current identity framework helps explain why medical specialists are likely to develop a strong professional identity and illustrates how this professional identity may benefit collaboration processes *within* their own domain. However, the identity framework presented here also points out that medical specialists, who increasingly face new developments in their field and continuously have to deal with multidisciplinary health-care problems, can experience difficulties collaborating with others *outside* their own domain. These mixed effects of a strong professional identity may seriously affect the quality of health care. The third part of our framework therefore discusses the theoretical implications of these effects and introduces two key directions for future research. It is proposed that one key personality characteristic of the individual

specialist (that is, openness to experience), as well as a key factor in the health-care context (that is, a strong overarching organizational identity) can reduce the experience of identity threat and may thus mitigate the negative consequences of a strong professional identity.

Theoretical Implications and Future Research Directions

The identity framework has two important implications for theory development on the consequences of a strong professional identity among medical specialists in the health-care sector. First, the framework highlights that a strong professional identity can have differential effects on the functioning of specialists within and outside their domain, particularly in conditions where specialties are challenged with relational developments. Our analysis indicates that the negative consequences of a strong professional identity may be severe and could, at some point, outweigh its positive consequences.

Second, the framework makes clear that the professional identities of different specialties already start to diverge in the formation process, early in the careers of medical specialists, and that medical specialists with a strong professional identity tend to see multidisciplinary collaborations as an opportunity to demonstrate their own expertise to others (Gaertner and Dovidio, 2009). These processes imply that specialists are taught to think in terms of their uniqueness, tend to value this uniqueness and may not see any harm in it, particularly when this uniqueness places them in a positive light compared with other domains. However, as we have argued, it is crucial that medical specialists come to realize that their value and contribution as a doctor also depends on the extent to which they are able to look beyond their own field and call upon the experiences of others in order to improve patient care.

The foregoing indicates that it is important to examine factors that can mitigate the negative outcomes of a professional identity and harvest its positive ones. One possible avenue for such future research is to examine whether dominant personality traits can influence the extent to which a strong professional identity influences the attitudes and behaviors of medical specialists toward other specialists outside their domain. Research has demonstrated that young medical students are inclined to select a specialty which they believe will match their own personality (Borges and Gibson, 2005; Hartung *et al*, 2005). In this sense, personality traits play an important role in reinforcing the image and culture of a certain specialty. Relatedly, it has been found that personality traits of specialists can influence whether or not they react positively to others outside their domain (Molleman and Broekhuis, 2012). In the current framework, one personality trait, 'openness to experience', will be discussed that strongly affects

people's responses to relational tensions and to changing circumstances (Van der Zee *et al.*, 2004; Homan *et al.*, 2008; Molleman and Broekhuis, 2012).

Openness to experience is defined in terms of being curious, imaginative, open-minded and eager to learn (Barry and Stewart, 1997). It refers to a person's motivation to explore novel ideas and consider unfamiliar situations (McCrae and Costa, 1989). People who score high on openness to experience do not mind uncertainty and prefer innovative work settings that undergo frequent developments. These individuals also respond relatively positive toward others with a deviating opinion because they are curious and willing to broaden their horizons (Molleman *et al.*, 2004; Van der Zee *et al.*, 2004; Homan *et al.*, 2008). People who score low on this trait, on the other hand, prefer predictability, and therefore tend to choose more routine work settings that do not frequently change in content or structure. These individuals are also more hesitant toward others with a deviating opinion. Accordingly, it is proposed that the trait openness to experience can modify the negative consequences of a professional identity when medical specialists have to exceed their own domain and engage in multidisciplinary work (see also Molleman and Broekhuis, 2012). Research on diversity in organizations has indeed demonstrated that people experience differences within their work team differently when they score high on openness to experience. Rather than being threatened by these differences, these individuals are challenged by them (Homan *et al.*, 2008). As such, specialists with a strong professional identity should experience less identity threat when changes in their specialty occur (either through overlapping specialties or new technology), or when confronted with competing views on how to treat a patient, when they are highly open to new experiences. They then should perceive these new work conditions as opportunities to learn and explore new ideas. These arguments make it meaningful to investigate to what extent this personality trait moderates the relationship between professional identity and its consequences in a positive way such that identity-related problems will be inhibited and the benefits of a strong professional identity can be harvested.

The arguments presented above suggest that it would be preferable for medical educators to select medical students or residents who score high on openness to experience in particular for specialties that are confronted with multidisciplinary collaboration on a daily basis. To confirm this idea, future research could assess the personality profiles of current apprentices and follow them longitudinally for several years. When specialists who scored high on openness to experience indeed develop a more inclusive professional identity and indeed experience less identity threat during interdisciplinary settings throughout their career, this would suggest that it may be worthwhile to include certain validated personality tests in these selection procedures (for example, Antony, 1998; Leong *et al.*, 2005).

Given that in practice, not all medical specialists will have personalities that suit multidisciplinary work well and that personality traits cannot be taught, we acknowledge that it may also be important to study the effectiveness of interventions that train interpersonal skills. Working in a multidisciplinary team implies receiving feedback from colleagues from other specialties or other disciplines. As medical specialists with a strong professional identity tend to experience identity threat when others ask them to justify their actions (Molleman *et al*, 2010b), one could explore whether specific training programs on feedback giving and feedback receiving can mitigate this experience and, hence, increase the effectiveness of multidisciplinary collaborations. Relatedly, leadership theory suggests that leaders play a crucial role in shaping the values and norms among employees (Mayer *et al*, 2012). From this, we infer that leaders should be able to influence the relationships between specialists who struggle with the fact that they have different identities. It may thus also be important to examine whether specific courses on group dynamics and conflict management skills can help leaders of multidisciplinary medical teams to recognize and reduce the level of identity threat experienced among the specialists.

Finally, it may be worthwhile to investigate the role of an important organizational factor in modifying the negative consequences of a strong professional identity for the quality of health care: the hospital context in which specialists operate. Although a high degree of professionalization enhances a strong identity among medical specialists within the same specialty, it also often lowers their identification with the overarching organization where they are working (for example, Johnson *et al*, 2006; Hekman *et al*, 2009). This may be particularly so when the distribution of resources among the different specialties within the organization (for example, technical equipment or assisting personnel) is constrained (Taylor-Robinson *et al*, 2012). Yet there may be organizational contexts in which medical specialists identify with the organization as a whole as well, despite there's being scarce resources (for example, Wallace, 1993; Lee *et al*, 2000). Future research could, for example, examine the effectiveness of creating overarching organizational goals by training team leaders to shift the inward focus of many specialists to an outward focus on the organizational goal to be innovative and multidisciplinary (Haslam, 2001). Or, studies could test the effectiveness of temporary project groups of medical specialists specifically designed to deal with hospital issues such as the purchase of new medical equipment, real estate investments, patient safety and logistic problems. These interventions may require medical specialists to balance their professional identity with their orientations toward the organization (Han *et al*, 2010), and may ensure that medical specialists develop a broad system of professional norms, that transcend the norms of their own domain (for example, Burford, 2012).

When it is sufficiently clear to medical specialists that the overarching organization can help them forward (for example, by personally experiencing that hospital management invests in common goods of *all* medical specialties), they should be able to develop a sense of attachment to the organization as a whole, making their identification with their specialty less leading (Van Dick *et al*, 2004). Ideally, the aforementioned interventions may even stimulate medical specialists to identify with their specialty, with the multi-disciplinary teams in which they operate *and* with the overarching organization simultaneously. Literature suggests that the development of such inclusive identities, also referred to as social identity complexity (Roccas and Brewer, 2002; Ashforth *et al*, 2008), enhances communication between different professional groups greatly (Monrouxe, 2010).

The Broader Context

In this article we focused on the development of a strong professional identity among medical specialists and how this directs their functioning particularly in relation to other specialties. These relations can lead to the experience of identity threat, and hence affect the quality of health care. We highlighted three developments under which relational issues are likely to occur: when specialists with a strong professional identity have to work on highly complex multi-disciplinary cases, when they are confronted with new disciplines and when they are confronted with certain technological innovations (see Figure 1).

We acknowledge, however, that the broader, societal context in which specialists with a strong professional identity operate may also have a role in whether or not they experience identity threats. For example, because of an aging population, the volume of health-care demands have increased substantially (Dall *et al*, 2013). This development, combined with continuously growing treatment opportunities, has raised fierce public debates about the costs of most western health-care systems. Different countries respond to this issue in various ways; in some countries, the state has a leading role in managing the system, while in other countries insurance companies or hospital managers have a more prominent role (Kuhlmann and Allsop, 2008; Kuhlmann *et al*, 2009; Van Essen, 2009). Nonetheless, there seems to be a common understanding among all countries and stakeholders involved that higher levels of efficiency and control are needed to make the current health-care systems sustainable over time.

The external pressure to reduce costs can be seen as a serious threat to the professional identity of medical specialists in general. As indicated in an earlier section, self-regulation is an important mechanism through which specialists develop a strong professional identity. The urge for cost control has resulted in extensive administrative, employment, remuneration and

performance management systems that impair this self-regulating mechanism. Such management systems require specialists to justify their work outcomes to institutions outside their own profession and organization (for example, government agencies and insurance companies). Moreover, these management systems can impose regulations upon medical specialists that they consider to be suboptimal from their professional point of view. Some scholars therefore argue that this broader contextual development (referred to as ‘bureaucratic accountability’; Harrison and Dowswell, 2002; Timmermans, 2005) can lead to a ‘proletarianization of the medical profession’, which implies that medical specialists lose control over their own profession and are pushed into a position of regular hospital employees (for example, Britten, 2001; Harrison and Dowswell, 2002; Muzio and Kirkpatrick, 2011; Reich, 2012).

Another broader, societal development that may threaten specialists with a strong professional identity in a general sense is the increase in ‘consumerism’ among patients (Timmermans and Oh, 2010). That is, a growing number of patients have become well-informed highly demanding consumers of health care because new medical knowledge is now so widely spread and easily accessible on the internet (Weiss and Fitzpatrick, 1997). Scholars have argued that this development has lowered the status of medical specialists, leading to what is called a ‘demystification’ and ‘deprofessionalization’ of their work (Weiss and Fitzpatrick, 1997; Britten, 2001; Reich, 2012).

To conclude, in addition to relational threats from other medical domains, there may be several broader contextual or societal developments that threaten specialists with a strong professional identity as well. Interestingly though, while these contextual developments are likely to threaten the overarching profession of medical specialists as a whole, they can at the same time also *align* the interests of specialists from different domains. After all, when medical specialists from different domains realize that they need each other in handling these external societal developments so that they can protect their joint status as medical specialists (for example, their average income), they may no longer experience relational tensions among them (Haslam, 2001). We therefore think that considering these developments in future research will add to a more comprehensive understanding of how a strong professional identity will exactly affect the relations that specialists build within and outside their own domain and the quality of health care accordingly.

Conclusion

The current identity framework clarifies why medical specialists tend to develop a strong professional identity and proposes that this identity can negatively

influence the ways in which specialists approach other domains when they feel threatened by developments, such as the growing complexity of multidisciplinary health-care cases, the rise of new specialties and new technological developments. It is important to be aware that because of identity dynamics, these developments may unintentionally have a negative instead of a positive influence on the performance of medical specialists and impair the quality of health care. On the basis of this framework, one can develop new lines of research examining which factors could potentially reduce the negative and stimulate the positive consequences of a strong professional identity.

About the Authors

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