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Stereotypical images between physicians and managers in hospitals

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Abstract

Purpose – The purpose of this paper is to apply the image theory to the hospital context in order to add a perspective into the known complex relationship between physicians and hospital managers. This insight can enrich current intervention schemes used in health care to facilitate organisational change.

Design/methodology/approach – In this paper, the image theory of Alexander *et al.* on the known complex intergroup context of physicians and hospital managers is applied. The theory is operationalised in relative status, power, and goal incompatibility.

Findings – The data show the three variables are highly relevant and representative. Hospital managers see physicians as higher in professional status and power, and having different goals. Physicians see hospital managers to have higher power, lower status, and different goals. The study validates the applicability of the image theory in the Dutch hospital context. This results in a questionnaire suitable for performing a quick scan on the strength and direction of intergroup stereotyping within hospital organisations.

Originality/value – Data from the questionnaire give the opportunity to have insight in the way physicians and hospital managers perceive each other. This insight helps to focus attention on bottlenecks and possibilities in enhancing the co-operation between physicians and hospital managers. Research on the relationship between physicians and hospital managers is scarce and mostly of a qualitative nature. This paper is executed in both qualitative and quantitative way, which enables us to empirically and statistically validate the data. The resulting questionnaire is applicable on an organisational intergroup level, while the focus in the extant literature is mostly on the interpersonal or intragroup level.

Keywords Hospitals, Hospital management, Doctors, Prejudice, The Netherlands

Paper type Research paper

Journal of Health, Organization and Management
Vol. 23 No. 2, 2009
pp. 216-224

1477-7266
DOI 10.1108/14777260910960948

1. Introduction

This paper aims to explore the factors influencing the challenging complex relationship between physicians and hospital managers (FitzGerald, 1994; Shortell *et al.*, 1994; Anderson and Pulich, 2002; Dopson *et al.*, 2002; Davies, 2003; Kaissi, 2005; Plochg *et al.*, 2003). Physicians and hospital managers can be seen as two professional groups working within the same organisational setting. Both groups of actors are attached to their reference group (both emotionally and cognitively) and therefore have an own "social identity." Tajfel (1982, p. 255) defines social identity as "knowledge that one belongs to a certain social group (or groups) together with the value and emotional significance attached to that group membership." Raelin (1991, p. 1) describes the difficulties in the co-operation between physicans and hospital managers as: "The inherent conflict between managers and professionals results basically from a clash of cultures: the corporate culture, which captures the commitment of managers, and the professional culture, which socialises professionals." A situation like this can be seen as an intergroup conflict setting which has been studied in many research areas. Alexander *et al.* (2005a, b) studied an interethnic conflict setting with the image theory, this theory seems applicable for research in the hospital setting.

This paper presents the first application of the image theory in a hospital setting. Out of intergroup literature, we know that members of different cultural groups tend to exaggerate the experienced differences and diminish similarities (Tajfel, 1978; Turner *et al.*, 1987). Between different cultural groups there is a tendency to directly attribute characteristics to all individuals belonging to the other group (the outgroup). Therefore, all members of an outgroup are seen as different compared to members of the ingroup. Such generalisations can lead to wrong conclusions about individual members of the outgroup, resulting in an intergroup conflict. The importance of intergroup conflict is stressed in organisational behavioural literature as recent studies show a relationship between efficacy of co-operation between groups and performance (Davies *et al.*, 2003; Berwick, 2004; Mohammed and Angell, 2004; Mycek, 2004; Robyn and Stone, 2004; Hinds and Mortensen, 2005). In literature intergroup conflict commonly has a negative influence on performance. However, Jehn and Mannix (2001) specify the relationship between co-operation and performance as depending on the kind of conflicts. They found task, relationship, and process conflicts have a different impact on the performance in the intergroup setting. Advanced technological innovations and external demands by patients, insurers, and government lead to the necessity of improving quality of care for instance through the translation and implementation of operations management techniques. According to Galinsky (2002, p. 105): "Conflict and stereotyping between groups in an organization can hinder the ability of an organization to maximize its potential."

This study focuses on applying the image theory to the hospital setting in order to enlarge comprehension of the known complex intergroup work relations between physicians and hospital managers. Above this, applicability of the image theory in the hospital setting could also provide new interventions (proven to be appropriate in other research areas) to enhance the co-operation between physicians and hospital managers, and therewith performance. We investigate one of the strongest expressions of intergroup differences: stereotypical images.

2. Theory

This paper is based on the image theory (Alexander *et al.*, 2005a, p. 781) because it emphasises the "role of intergroup context and perceived intergroup relations in

shaping the content of social stereotypes." In intergroup situations, perceptions of the outgroup determine the way reality is experienced. Diverse perceptions are derived from different scores on goal incompatibility, relative status, and relative power (Alexander *et al.*, 2005a, p. 783). In health care literature these three variables seem to be applicable to explore the physician-hospital manager relationship. Developments in health care [such as standardization and reports on performance indicators (Davies, 2003)] raise the issue of relative power and status and goal differences between physicians and hospital managers. In health care settings there is a complex division of power between physicians and hospital managers (Ashburner *et al.*, 1996; Addicott and Ferlie, 2007). Hunter (1996, p. 800) states that:

> The cookbook variety (i.e. every aspect of medical care can be described in a protocol or clinical pathway) is seen as threatening both to the status of professionals and to the power and privileges they enjoy, as well as to the non-scientific aspects of professional work based on experience and judgment.

On the other hand, Edwards (2003, p. 21) states that: "In the United Kingdom doctors are still the most trusted of all professions" and "Rather than seeing guidelines and accountability systems as a threat to autonomy there is an argument that they are an essential adjunct to it."

Both groups have the power to influence the primary process, whereas it is obvious that the managers influence is more indirect, for example through financial or staffing conditions. From the above, we can conclude that the three variables power, status, and goal incompatibility are possible key variables to study perceptions of the context physicians and hospital managers are working in (Alexander *et al.*, 2005a):

(1) Relative power is the degree of perceived inequalities in economic and political resources that can affect relevant outcomes for the ingroup.

(2) Relative status is the degree of perceived differences in social and professional position and the perceived importance of the role of the ingroup in the hospital relative to the outgroup.

(3) Goal incompatibility is the degree of perceived dissimilarity in the goals of the ingroup relative to the outgroup.

There is an extensive amount of research on how to overcome potential difficulties in problematic intergroup contexts (Sherif *et al.*, 1954/1961; Galinsky, 2002; Jehn *et al.*, 1999). From these studies it was concluded that contact alone is not enough, a way of co-operation has to be found to reach effective contact. Galinsky (2002) mentions the importance of superordinate goals. Superordinate goals create a state of interdependence between groups and create common problems along. The goal of this study is to add a perspective to the known complex relationship between physicians and hospital managers, with the intention of enriching current intervention schemes which can help to facilitate more effective co-operation between members of both groups.

3. Methods

The questionnaire, we developed is based on the image theory instrument of Alexander *et al.* (2005a, b). We adapted this instrument to the hospital context so that the focus is on perceptions of physicians on hospital managers and vice versa. In order to enhance reliability and validity of the study, we verified the translation of our questionnaire by

back translating it into the original language by an independent translator. The questionnaire, we developed aims to measure the power, status, and goal differences perceived by physicians and hospital managers. Perceptions of relative status and relative power are assessed with two questions comparing physicians and hospital managers (1 = the outgroup scores lower than the ingroup to 7 = the outgroup scores higher than the ingroup). The same is done for measuring perceptions of goal incompatibility (scoring 1 = strongly disagree to 7 = strongly agree) on three questions. To explore the stereotypical images physicians and hospital managers have about each other, 26 statements [based on the statements from the image theory (Alexander *et al.*, 2005a)] are adapted to the hospital context. The statements are assessed with a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree).

In order to ensure the appropriateness of each of the questions and statements to the hospital context, we further investigated and analysed the adapted questionnaire by interviewing nine physicians from surgical, internal, and supportive specialties and six hospital managers, board members, and hospital managers in different hierarchical positions from different hospitals. The respondents were interviewed about their perceptions of the relationship between physicians and hospital managers within their hospital. Furthermore, we asked the respondents to fill out the questionnaire, in our presence. Concludingly, we posed 11 questions about the clarity, redundancy, lay out, relevancy, and other format related aspects of the questionnaire. The interviews were recorded on tape and accordingly laid down in writing. The interviews were semi-structured, and the same questions were posed to all respondents. Every interview lasted approximately 1 h. Based on the comments of respondents, we improved the clarity of the language used in the questionnaire after every interview until there were no further remarks.

For our quantitative study the questionnaire was sent to all physicians and hospital managers of four different Dutch general hospitals ($n = 400$). The hospitals were chosen on their geographical location and size in order to cover differences between urban and rural areas and small, medium, and large general hospitals. This increases the likelihood of generalisability of the conclusions to all Dutch general hospitals.

4. Findings

From the 400 questionnaires sent, the response rate was 41.5 percent, consisting of 107 physicians and 59 managers. The sampling distribution is maintained: 64.5 percent of the respondents are physicians and 35.5 percent are hospital managers. In order to obtain the Cronbach's α the data were split in two groups: physicians and hospital managers. For both groups the Cronbach's α is high. Physicians score a 0.938 and hospital managers score a 0.840, hence the questionnaire seems to measure a uni-dimensional construct. This conclusion is supported by the results of a factor analysis.

The standard deviations on questions about perceptions of professional status, power, and goal incompatibility show there is a high intragroup cohesiveness within the group of physicians and within the group of hospital managers (Table I).

5. Conclusion and discussion

Results of both the pilot and quantitative study confirm the applicability of the image theory to the hospital organisational context. The three variables (power, status, and goal incompatibility) distinguish between the groups of physicians and hospital managers.

Power, status, and goal incompatibility give a good insight in the direction and strength of the stereotypical image of the outgroup, while it took a limited amount of data to be gathered. The 26 statements illustrate the content of the stereotypical images both groups have about each other are described below.

Hospital managers are seen by physicians as:

- Not to be good leaders with the best intentions for the hospital.
- Pushing the limit, they try to go as far as possible.
- Enjoying to get it their way, even if this will spoil things for others.
- Not deserving an equal influence on the organisation.
- Threatening physicians in their status and power.
- Not aware of what is important for physicians.

Physicians are seen by hospital managers as:

- Lacking insight in the long term.
- Stubborn, they would rather have a conflicting discussion than talk sense when solving a point of disagreement.
- Not to be good leaders with the best intentions for the hospital.
- Ruthless and try to stay in power as long as they are the biggest and the strongest.
- Pushing the limit, they try to go as far as possible.
- Trying to avoid control.
- Arrogant and convinced they are superior to other groups.
- Not trying to avoid any conflict with hospital managers.
- Enjoying to get it their way, even if this will spoil things for others.
- Not working hard for a good relationship with management.
- Not aware of which added value hospital managers can offer.

The scores on professional status clearly show both groups agree on the higher professional status of physicians. The scores on power show both groups disagree on

Table I. Descriptive statistics of medical doctors ($n = 107$) and hospital managers ($n = 59$) about status, power, and goal incompatibility

	N	Min.	Max.	Mean	SD
Medical doctors' perceptions about hospital managers					
Professional status	103	1	6	3.07	1.031
Power	103	1	7	4.69	1.475
Overall goal: delivery of care	104	1	7	5.09	1.981
Subgoals	102	1	7	5.14	1.724
Scope	103	1	7	4.93	1.745
Hospital managers' perceptions about medical doctors					
Professional status	59	2	7	5.24	1.104
Power	59	2	7	5.29	0.966
Overall goal: delivery of care	59	1	7	5.08	1.932
Subgoals	59	2	7	5.20	1.362
Scope	59	3	7	5.95	0.936

who is higher in power. Physicians see hospital managers as being higher in power and hospital managers see physicians as being higher in power. This means both groups feel relatively "powerless" in the same organisation. Both groups perceive a goal incompatibility with the outgroup. This result points at a possible level of friction between both groups.

According to Alexander *et al.* (2005a, b), stereotypical images of physicians lead to a behavioural orientation of defensive protection towards the outgroup (the hospital managers). This means physicians will a priori probably tend not to accept suggested organisational improvements by hospital managers. Above this, in addition possible organisational improvements, leading to changes in daily medical practices are not likely to be proposed by physicians to hospital managers.

In analogy, stereotypical images of hospital managers could lead to feelings of resistance toward the outgroup (Alexander *et al.*, 2005a, b). This can resolve in negative interpretations by hospital managers concerning acts performed by physicians, possibly leading to an emplification of existing stereotypical images. These mechanisms may hamper the establishment of more effective co-operation between the two professional groups.

These results are supported by the interviews with both physicians and hospital managers. Both groups stated that an "understanding of each other" would be very important to have a healthy relationship and "this was often not the case." A hospital manager stated that "if they should know what I could offer them, and know what kind of things they could all use me for, our relationship and co-operation would not be such a problem." There are misunderstandings on the professional and personal level ("Why would I need a hospital manager?" "Why don't physicians see what I mean?" and "They are just stubborn and do not want to listen to what I have to say and add," both physicians and hospital managers stated this). Hospital managers think physicians do not understand why hospital managers are there and physicians think hospital managers do not understand the essential needs for physicians. Important for the aim of our study is to find areas where these differences can be overcome.

The image theory gives insight in the direction and strength of stereotypical images based on differences in power and status and goal incompatibility. This insight could be input for possible interventions to diminish stereotypes. Jehn (1997), Jehn and Mannix (2001), and Jehn *et al.* (1999) performed several studies on group conflict and related performance, describing relationship – task – and process conflicts. Relationship and process conflict are negatively related to group performance and satisfaction of the group members. On the other hand, a moderate level of task conflict has a positive effect on performance on complex cognitive tasks. Our results mainly point towards a relationship – and process conflict between physicians and hospital managers, and not so much a task conflict. A possible way of intervening in the intergroup conflict between physicians and hospital managers is by defining superordinate goals (and deducted complex cognitive problems, Galinsky, 2002) and therewith create a state of interdependence. This could lead to enhanced co-operation between both groups and will facilitate the process of diminishing the relation – and process conflict (Jehn and Mannix, 2001). Practically this means when physicians and hospital managers are co-operating in a project, focus of the project manager should be at defining superordinate goals on which both groups agree and for which both groups need each other to achieve the defined goals. For example, our research showed both groups highly value a more effective co-operation among each other

and share a focus on patient related problems. When defining project goals, the perspective from the patient's point of view could be helpful to overcome the goal incompatibility between physicians and hospital managers we found in our study.

Task conflict could be benificial in the co-operation and forthcoming performance (Jehn and Mannix, 2001). Defining complex themes around a superordinate goal, in which differences of viewpoints and opinions have to be discussed, might enhance project outcomes. An example of this could be the introduction of market elements and its translation in the hospital organization. This creates a possible external threat and therewith a superordinate goal of for example preservation of patientvolumes. Project methods should aim at discussing how to safeguard patientflows on a rational level. The probable different viewpoints physicians and managers have on solutions for the problem can be seen as a task conflct (physicians will probably focus on extra capacity, while managers search for more efficiency). If a project manager handels this well, the focus will be on task conflicts in stead of relationship – or process conflicts:

> The mututal collaboration necessary for successful completion of an interdependent task, promotes a desire for accurate knowledge of one's partner in order to anticipate their actions and thus individuating information is utilized over stereotypes (Galinsky, 2002, p. 95).

Purposeful defining superordinate goals and using the positive effects of task conflict could be the input for reducing relationship conflict. Future research should be aimed at exploring these conclusions.

The study is performed in Dutch general hospitals, therefore, the applicability of the questionnaire is only confirmed in this setting. Based on literature review and the results of this study, we expect the questionnaire to be suitable for other health care settings, such as academic, non-Dutch, profit, and categorical hospitals. However, before applying the image theory in other settings, validation is required. The need for effective co-operation between members of professional groups within hospitals is not restricted to physicians and hospital managers. The applicability of the questionnaire should be validated for other groups (nurses, physiotherapists, psychologists, etc.) in their intergroup relation in the hospital setting.

Based on the relevance of the three variables, mean scores, and the standard deviations presented in Table I we come to a concise questionnaire. With this questionnaire it is possible to perform a quick scan suitable for measuring stereotypical images between physicians and hospital managers (Table II). We chose to use a ten point Likert scale because this scale is very well known within the Dutch system, every number has a known value. A ten point scale also gives the opportunity for a high variation in answering for respondents.

Table II.
Quick scan measuring stereotypical images between physicians and hospital managers

	Quick scan
1.	What is the level of power physicians have on hospital policy?
2.	What is the level of power hospital managers have on hospital policy?
3.	What is the level of professional status of physicians?
4.	What is the level of professional status of hospital managers?
5.	To what extent align professional goals of physicians and hospital managers?

This research validates the applicability of the image theory in the hospital setting and gives insight in the strength and direction of the stereotypical images between physicians and hospital managers. A balance has to be found between physicians seeing organisational improvements as limiting the professional freedom and possibilities and hospital managers seeing physicians as being stubborn and not seeing the greater picture. Insight in the strength and direction of status and power differences and goal incompatibility between physicians and hospital managers can be the input for defining the difficulties both groups are faced with when co-operating. When phsycians and hospital managers diminish relationship – and process conflict and focus on task conflicts, the effectiveness of co-operation is likely to rise. A startingpoint for improving the balance and co-operation could be the area we found common understanding between physicians and hospital managers: patient related problems. Based on knowledge from the image theory, we recommend to start improving the hospital organisation on the micro level. Focusing on improving patient processes on an operational level can align medical and organisational goals, because this is an area where medical professional and organisational improvements can go hand in hand. This could lead to a better co-operation between physicians and hospital managers so that improvements on organisational level will be possible to execute.

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