Physicians' intrinsic motivators and their implications on economic control

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Abstract

Giving physicians external rewards for higher quality and output has displayed little evidence of success and the low motivation among physicians is considered a major problem in the health care sector. With these problems arising despite intricate economic control systems some of the attention has shifted toward control systems considering intrinsic motivation. This thesis aims to shed some light on what physicians regard as their primary intrinsic motivators and what underlying needs these satisfy. A distinction is made between being intrinsically motivated by professionalism and being intrinsically motivated by patient care. With a qualitative approach to the collection of data, eight physicians and a CFO of a health care group were interviewed. Using a framework derived from the Self-Determination Theory and the New Light Theory the factors that affect the physicians' intrinsic motivation the most were analysed. The results indicated that professionalism is a more powerful intrinsic motivator than the provision of care. The reason for the result is argued to rest on the assumption that professionalism is connected to the powerful need to feel competent while patient care is linked to the weaker need of social relatedness.

Key Words: Intrinsic motivation, economic control, health care, physician, professionalism

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1 Introduction

Physicians have for as long as they have existed held a special position in society. The knowledge they possess give them the ability to promote and restore human health, it is an admired and sought-after ability. Applications to medical schools are filled to the brim and only top-performing students are admitted. Many outstanding men and women have gone through the multiple years of education in order to become a physician, a profession that to its nature is both physically and mentally demanding and claims high levels of dedication. A high level of dedication in turn calls for a high degree of motivation, recent research points however at a lack of motivation among physicians (Hawkins 2012). Reward systems that focus on monetary rewards are widely spread in the industry and being evaluated on economic grounds is often the basis used (Janus 2010). The sort of control systems that use economic measures are being scrutinized and research shows that there might be a way to get a more optimized combination of output and quality. This optimization is claimed to be achieved through assessing physicians' intrinsic motivation and using the intrinsic factors when designing the systems for economic control (Janus 2010, Yogarabindranath Swarna Nantha 2013). The occurrence of control systems taking intrinsic motivation into account is however limited. Perhaps it is the lack of knowledge stemming from the scant research in the area that makes it seen as inaccessible (Janus 2010). In order to develop such a system, a closer look needs to be taken at the implications of intrinsic motivation within healthcare. The factors that drive motivation need to be determined and evaluated before they can be used to optimize a control system. What this thesis aims to do is to explore the intrinsic motivation among physicians. It focuses on investigating whether physicians are intrinsically motivated primarily by professionalism, patient care, or some other factor.

1.1 Motivation

Motivation is a complex thing and as individual as your fingerprint. Assessing someone's motivation is however a powerful thing, it means that you can steer this person towards something you want to be done. You get what you want and the motivated person finds value in what he or she does. There is no generic key to the highly individual phenomena of motivation, however there are better and worse fits when motivating people.

Systems such as pay for performance has shown to increase the performance in simpler tasks, but when doing complex tasks the systems that address the extrinsic motivation of an employee seem not to matter (Janus 2010). This indicates that the economic control systems that are currently popular in health care might not work as they should. Such a system that is dysfunctional is in that case only a burden for the firm and incurs unnecessary costs.

1.2 Extrinsic motivation

1.2.1 Crowding effect

The idea with motivating employees extrinsically through a control system is that they tend to work harder if they know they will be given an external reward for a higher effort. Putting focus on external motivation makes firms focus their control mechanisms towards measures that are directly tied to financial performance (Janus 2010). There is however a problem with the external view of motivation, research suggests that motivating externally sometimes leads to a crowding-out effect on intrinsic motivation (Deci, Koestner & Ryan 1999), shifting the attention from the task to the reward. This is not a large problem for employees with a work task that is simple and easy to master as the employee does not satisfy his or her intrinsic needs through the task (Janus 2010). In these cases external motivation is even suggested to function better (Janus 2010).
One popular extrinsic control system is pay for performance (henceforth P4P). The purpose of a P4P scheme is to have an extra incentive to perform more.

Even if P4P schemes are constructed to enhance quality, the crowding effect of the system can decrease intrinsic motivation (Deci, Koestner & Ryan 1999) possibly leading to non-improving result compared to before the scheme. These schemes have been shown to enhance performance and quality in simple tasks (Janus 2010), but (Rosenthal, Frank 2006) has found that there is very scarce evidence that these systems are working when it comes to complex and advanced tasks. Some researchers argue that the partial elimination of these crowding effects combined with more intrinsically focused motivation policies can prove to be a recipe for higher output and quality (Janus 2010, Yogarabindranath Swarna Nantha 2013).

1.2.2 Adaptation

Adaptation is another problem with any control system. Motivation and happiness tend to wear off quickly as one gets accustomed to the higher wage, more vacation or similar (Frey, Stutzer 2002). Hence managing through higher wage might decrease the chance of the employee switching employer but it does not increase motivation in the long-term. Adaptation can also occur in P4P systems, the particular problem with this is that performing below standard will be regarded as a negative incentive which possibly will be perceived as very controlling and hence decreases motivation through its crowding effect (Deci, Koestner & Ryan 1999).

1.3 Motivation among physicians

There is always room for improvement when it comes to the motivation of an employee. For physicians there are however large problems with work satisfaction and motivation (Hawkins 2014). The largest problem seems to be related to intrinsic factors related to their autonomy. Almost 70% of the physicians feel that their clinical autonomy is limited and their decisions compromised (Hawkins 2014).
These problems together with the scarce evidence of any success in quality tied to extrinsic reward systems (Rosenthal, Frank 2006) has put the light on the importance of successfully controlling and managing intrinsic motivation (Janus 2010).

1.3.1 Crowding effect in health care

Within the health care sector physicians perform tasks that are often complex. The complexity increases the need for being intrinsically motivated in order to perform the tasks well, as intrinsic motivation enhances the problem-solving abilities and creative thinking (Utman 1997). Even though intrinsic motivation would be preferred, many companies employ and control their physicians through a P4P scheme (Janus 2010). In healthcare these schemes are often tied to quality along with quantity (Janus 2010). The dual focus is needed in order to mitigate the risk of shifting focus from the patient to the reward which can result in patients not getting the attention they need. These external control mechanisms control the behaviour of the physicians and through its controlling effect crowds out some of their intrinsic motivation (Deci, Koestner & Ryan 1999). This can be a problem for health care companies as the lack of intrinsic motivation risks leading to decreasing quality at work as the employees' creative thinking and problem solving abilities are diminished (Utman 1997). In

search of solutions to this crowding-out problems emphasis has been put on looking closer on the intrinsic side of motivation in hope of finding reward systems that do not interfere with the physician's perceived autonomy (Janus 2010, Yogarabindranath Swarna Nantha 2013).

1.3.2 Extrinsic motivation in health care

Even though some external rewards might have a crowding-out effect on intrinsic motivation, they always have to exist to some extent. Some extrinsic rewards are perceived as given and do not have a controlling effect that crowds out intrinsic motivation, examples are vacation and a salary (Deci, Koestner & Ryan 1999). An employee needs to get enough extrinsic rewards to feel satisfied or the intrinsic motivation will not be realised (Rudolph, Kleiner 1989).

Physicians often reach a plateau in their desire for wages after only several years in practice (Yogarabindranath Swarna Nantha 2013) hence other factors seem to be of greater importance at this stage. Although the wages may be of less importance they always have to be seen as fair relative to others, as nothing decreases physician motivation quicker than special treatment or special deals (Tarantino 2008). Since hospitals want a highly motivated workforce to achieve the highest possible quality and performance in their operation, the wage system has to be fair. This is further strengthened by (Adams 1963) who shows that people are more interested in their wage relative to colleagues than in absolute numbers.

Even though there are problems with external reward systems, they are not always bad. It is even proven that these schemes are shown to sometimes improve the total achievement and even quality of care (Yogarabindranath Swarna Nantha 2013) compared to before the implementation of such systems. But evidence for its success is rather weak (Rosenthal, Frank 2006).

1.4 Developing measures and intrinsic policies

With the ever increasing need for efficiency and quality and the problems with physician motivation, researchers are looking through the lens of intrinsic motivation to complement or change the current control systems. In professional health care one such approach would be to look at either a combination of extrinsic rewards and intrinsic policies or a system with

intrinsic measures (Janus 2010, Yogarabindranath Swarna Nantha 2013). Extrinsic rewards are still an option as it has been shown that extrinsic rewards can be designed in a way so that they do not interfere with intrinsic motivation, one such example is unexpected rewards(Deci, Koestner & Ryan 1999).

To manage intrinsic motivation better, (Janus 2010) suggests that new measures for physicians that address the intrinsic factors should be developed. (Yogarabindranath Swarna Nantha 2013) suggest that intrinsic policies should be combined with extrinsic rewards. They both agree that in order to conduct this further research regarding the assessment of intrinsic motivation of physicians is needed.

1.5 Professionalism versus patient care

A particular field of the intrinsic motivation which needs to be evaluated to implement possible measures is presented by (Janus 2010),

"Are physicians intrinsically motivated by healing and caring for patients and, thus, improving care provision? Or are they rather intrinsically motivated by their professionalism and by securing a certain professional standing?"

This area does not cover all the intrinsic motivational factors, but rather a selection of factors that are deemed central and more specific to the group looked at.

While patient care and professionalism are just two out of a large selection of possible factors to evaluate, they are rather contrasting to each other. Professionalism is tied to goals important to the individual while patient care is more tied to the wellbeing of others.

2 Purpose

The purpose of the thesis is to identify whether physicians' primary intrinsic motivator is professionalism, patient care, or another factor. By identifying them the underlying personal needs can be assessed and analysed. Through the assessment a better understanding of how to design an optimal economic control system for physicians is hoped to be reached.

3 Scope

3.1 Limitations to the purpose

The research is limited to physicians with clinical duties holding a position as specialist or higher. The reason for this limitation is that their tasks involve a high degree of complexity and intrinsic motivation is therefore more central, as described above.

The purpose is to compare what intrinsic factor the physician is more motivated by, not to evaluate whether he or she is very motivated or not. The evaluation will only consist of an evaluation of which factors are the primary motivators for physicians.

To get a better discussion it was deemed fitting to include a third category called "Other factors". This category consists of all other factors concerning intrinsic motivation. This category had to be used as some physicians' primary motivation does not come from either professionalism or patient care.

The purpose to this research is not to evaluate what an intrinsic control system should look like, but to assess the motivation among physicians and lay a ground for further research.

3.2 Empirical scope

The study consists of nine in-depth interviews, this limitation is set due to the large amount of time consumed through conducting interviews and analysing them. The relatively small sample means that the results in this study does not have a very high statistical value to the explanation of whether physicians are motivated through patient care or professionalism.

3.3 Theoretical scope

There is a wide range of theories that try to explain motivation. The limit was set to the theories discussed by (Janus 2010). These theories are the Self Determination Theory (SDT) developed by Deci and Ryan (Deci, Ryan 2000) and New Light Theory by (Lindenberg 2001).

4 Theoretical framework

The data will be analysed through two non-competing frameworks. The frameworks can be illustrated to lie in two layers, one inner and one outer layer. The inner layer lies deeper and discusses the factors that need to be satisfied in order to be intrinsically motivated and also tries to determine what deeper needs these factors satisfy. The outer layer is connected to how intrinsic motivation reveals itself and here Lindenberg's New Light Theory will be used. For the outer layer the SDT (Deci, Ryan 2000) will be used. The two theories' relevance is further emphasized as they are used in (Janus 2010), the article in which the thesis' problem is featured. The framework is illustrated in figure 1.

The data collection is managed through the qualitative extension done by (Rinaldi et al. 2012) based on the PEAQ framework developed by (Waterman et al. 2003).

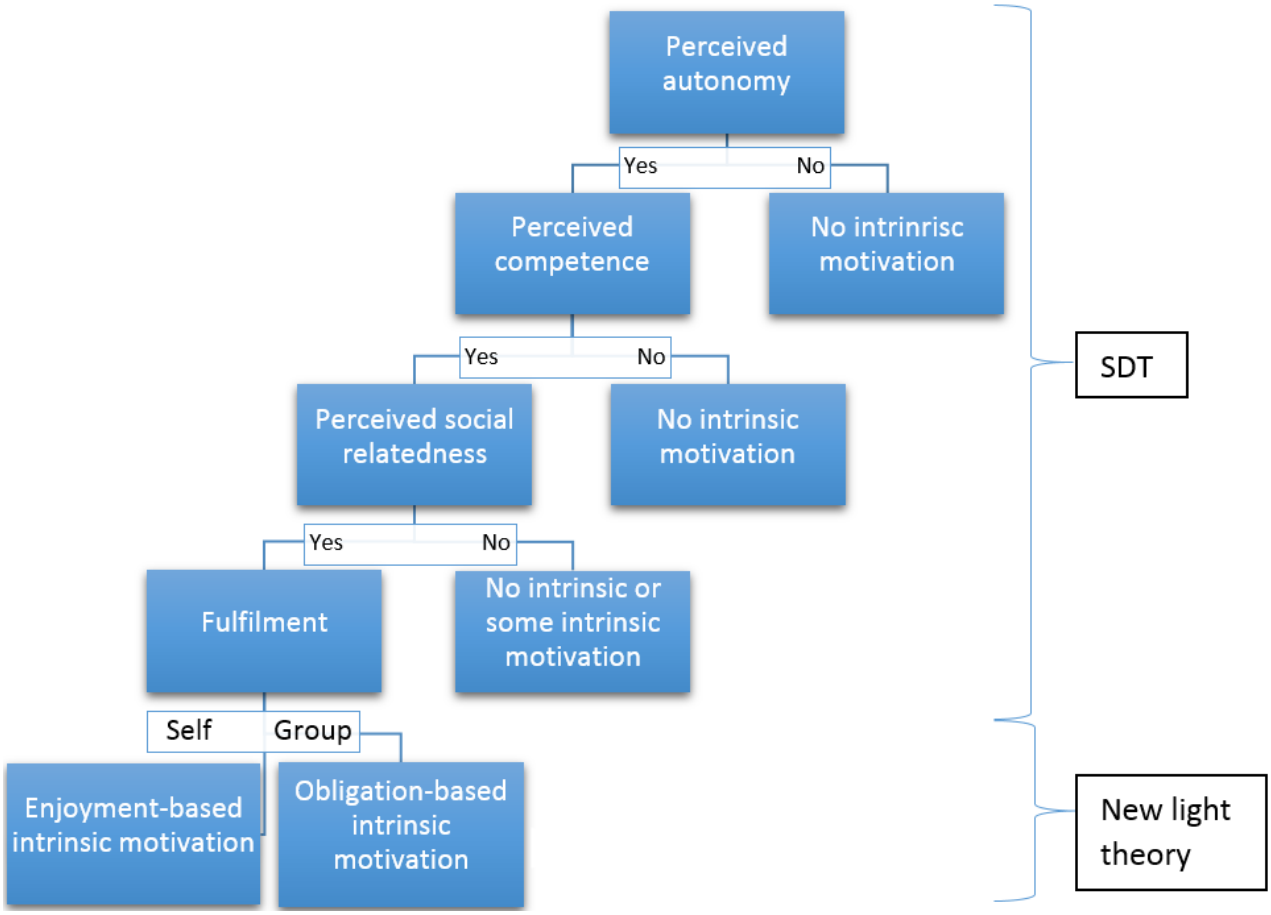
4.1 Prior research

There has been extensive research on the general aspects of motivation of physicians but very little when it comes to the intrinsic motivation (Janus 2010). Typical research in the area such as the one done by (Sicsic, Le Vaillant & Franc 2012) has a more general approach with both extrinsic and intrinsic motivators and is, like most research in the area, quantitative. He suggests and points at the need of further research on intrinsic side of motivation. In the field of purely intrinsic motivation there seems to be very little research (Janus 2010)

4.2 Intrinsic motivation

On the contrary to extrinsic motivation the intrinsic motivation is derived from the individual's inner interests. A definition of intrinsic motivation is "They are activities that people do naturally and spontaneously when they feel free to follow their inner interests."(Deci, Ryan 2000). When these inner interests are satisfied various benefits emerge, such as enhanced problem-solving abilities and creative thinking (Utman 1997).
The theory used in this thesis will be the SDT presented in (Deci, Ryan 2000) and the theory from (Lindenberg 2001) which distinguishes between two forms of intrinsic motivation, enjoyment-based and obligation-based.

Figure 1: framework model



Note: *This model is constructed by the authors.*

4.3 Self-Determination Theory

(Deci, Ryan 2000) argues that there are different preconditions to intrinsic motivation. For a person to engage in an activity willingly certain criteria have to be met. These consist of perceived: autonomy, feeling of competence and social relatedness. The better these factors are satisfied the higher degree of fulfilment can be achieved.

4.3.1 Autonomy

Autonomy is argued to be the most important of these preconditions (Janus 2010). Sanctions can function as an interference to the perceived autonomy. They generate a shift in the subject's attention from the activity to the sanction, which makes the importance of the original activity decrease. Such a sanction can be an extrinsic tangible reward as these often

have a controlling effect on behaviour (Deci, Koestner & Ryan 1999). The shift in perceived autonomy is argued by the SDT to crowd out some of the intrinsic motivation, the motivation can however not be eliminated if it does not exist in the first place (Janus 2010). Factors that have been shown by (Deci, Ryan 2000) to be negatively correlated with motivation through its compromising effect on perceived autonomy are threats, deadlines, evaluation and surveillance. Further these factors have shown to decrease cognitive flexibility and creativity(Deci, Ryan 2000). Even if the definition of autonomy is about being self-dependent in one's own choices, it is not the same thing as being independent of others. The core is about the feeling of being in control over the own choices in life.

4.3.2 Feelings of competence

Feelings of competence is the second central factor in the intrinsic motivation of an employee (White 1959) has described competence as "Seek to control the outcome and experience mastery". Feelings of competence cannot be generated if the individual has no perceived autonomy as he does not feel responsible for the outcome as defined by (White 1959) .While autonomy is a requirement for intrinsic motivation, perceived competence is a requirement for any type of motivation (Deci, Ryan 2000). One way of touching the feelings of competence is via feedback. It has been shown that positive feedback enhances the feelings of competence relative to no feedback, and bad feedback decreases the feelings of competence relative to no feedback (Deci, Ryan 2000). Such feedback that generates feelings of competence is however shown to not generate intrinsic motivation if it is perceived as controlling (Deci, Koestner & Ryan 1999). Feelings of competence is generated in more ways than through feedback and external sources, examples being successfully completing a difficult surgery, reaching a certain position and other self-empowering accomplishments. To reach such accomplishments the individual has to become better, in that sense goals related to becoming better is closely related to feelings of competence. This inner satisfaction from getting better is closely related to the feelings of self-fulfilment derived from mastering your profession, further discussed under 5.4.1 Professionalism.

4.3.3 Social relatedness

Social relatedness is the third precondition, this factor is about the need to interact, connect, experience and care for others. The factor is argued to be weaker than the other two and not always necessary to be intrinsically motivated (Deci, Ryan 2000). Examples that highlight

this kind of self-driven motivation is when individuals perform activities on their own. The example Deci uses is explorers, and adventurers pushing the boundaries on their own. Within healthcare this can take the form of researchers who do their work mostly in solitude.

(Janus 2010) identifies several especially important factors regarding social relatedness.

4.3.3.1 Fairness

The more fair people feel they are being treated the more they will identify with the group. This relationship is so strong that empirical evidence suggest that employees are more interested in what they earn in relation to those around them than what they earn in absolute terms (Adams 1963). It is not however what is objectively fair that has to be satisfied but rather what is perceived as fair(Janus 2010).

4.3.3.2 Personal communication

Personal communication has shown to raise the intrinsic motivation when it comes to cooperation. Cooperation can take the form of team-based structures, which create relations between individuals. Personal relations are another condition that creates motivational loyalty, also known as "team spirit" (Janus 2010).

4.3.3.3 Socially Appropriate Behaviour

Further Janus exemplifies that people want to feel connected to the group or different groups. This can take the forms of following what a legitimate authority tells them. This carries a strong link to obligation-based behaviour.

4.4 Lindenberg's obligation versus enjoyment

When the preconditions from the SDT are satisfied, and intrinsic motivation can be achieved, it can take two different forms. (Lindenberg 2001) distinguishes between two different types of intrinsic motivators.

4.4.1 Enjoyment-based intrinsic motivation

In this form motivation is derived from the activity itself and not the compensation for the activity. Lindenberg argues that this can be conceptualized as "an emotion directly tied to

one's condition (especially direct improvement)". Support for this can be found through observing the length of time a person can engage in an activity without any form of tangible reward. Such activities could be said to be communication or intellectually challenging activities. At the core Lindenberg explains that the enjoyment of an activity can be explained by different factors where the activity is perceived to be: (i) Stimulating (ii) providing comfort (iii) behavioural confirmation by self (iv) providing behavioural confirmation by others (v) providing status.

4.4.2 Obligation-based intrinsic motivation

Obligation-based motivation is closely tied to social relatedness. Activities are done voluntarily but might not be to the enjoyment of the individual. Instead these activities enhance something that is of benefit to a group or a community, in this case such a group could be a team within a hospital. This behaviour is called "Extra-role behaviour". According to research in "organizational citizenship behaviour" discussed by (Janus 2010) employees follow rules voluntarily and even "exert proactive behaviour on behalf of the organization". This means providing inputs far beyond the duties defined in employment contracts.

4.5 Personally Expressive Activities Questionnaire

In the article (Waterman et al. 2003) it is discussed that intrinsic motivation and life goals can be predicted through a framework. This framework consists of three different categories of predictors for preconditions to intrinsic motivation, (i) Self-determination, (ii) Balance of challenges and skills, and (iii) Self-realization values. Some standard questions intended for predicting these factors are discussed in the article.

The framework is intended for quantitative research and puts a large emphasis on predicting scores. The qualitative framework used in this thesis is PEAQ-QE (Personally Expressive Activities Questionnaire - Qualitative Extension) developed by (Rinaldi et al. 2012). This framework explains how you extend the questions used in a PEAQ in a manner so that qualitative data can be gathered.

5 Method

5.1 Choice of method

In order to collect data a range of methods were evaluated and some quickly discarded. With the purpose to explain the role of the motivating factors better, quantitative data gathering seemed to be the wrong way to go as it was deemed better when testing a hypothesis. Experiments was also discarded as it would give less insight to the issue than qualitative would do, at the same time as the authors' knowledge in conducting experiments in order to identify subjective matters was limited.
Given the subjective nature and complexity of the topic a qualitative approach was suggested by (SBU 2014). It was estimated that a deeper understanding of motivation could be achieved through a qualitative research, leading questions could largely be avoided, and hence better view of their motivation is found. With a qualitative research the background to choices could be studied and understood (e.g. if a physician became a leader by actively searching for it or simply because the career path randomly led him or her there). A downside with the chosen method is that the reliability of the research is decreased, as is its external validity (Bryman 2013).

5.2 Studied subjects

Given the purpose of the research to compare whether physicians are driven through professionalism or patient care, a choice had to be made between looking at a broad selection of physicians or a narrow selection. A broader view was deemed better for two reasons. Firstly, finding eight physicians with the same speciality was judged difficult. Secondly and more importantly, firms generally use the same economic control system for similar employees (e.g. a heart surgeon a knee surgeon probably work under the same system). Therefore it was believed better to look at a broad section that covered the motivational structure among physicians in general rather than a sub-group.

Interviewing eight specialised physicians from five different hospitals in two different cities operating in both the public and private sector was considered a good sample which gave a fitting width.

5.2.1 The selection of interview subjects

To understand the issue of physicians' motivation better and to get a more business related perspective of its implications, a CFO of a large Swedish health care group was contacted. This connection gave access to several physician interviewees, the majority were however found through personal connections.

Table 1: Interview list

Date of interview	Title
2015-03-09	CFO - Private health care concern
2015-04-10	Specialist - Odontologist
2015-04-12	Specialist - Urologist
2015-04-13	Medical chief - Orthopaedic
2015-04-14	Specialist - Vascular Surgery
2015-04-15	Specialist - Heart surgery
2015-04-15	Specialist - Heart surgery
2015-04-23	Specialist - Internal medicine
2015-04-23	Specialist - Heart analysis

***Note**: the interview with the medical chief was mostly concerning his period as a surgeon, a career which ended one year prior to the interview.*

The interviewees were all men. This was not an active choice but as some of the interviewees were recommended and some were personal connections it rather turned out that way. It is possible that having interviewees from different sexes would give the empirics a broader and better empirical base.

A critical note is that the interviewees were to a large extent in the same stage in their career. All of them are successful and have reached a high position in their various organizations. It

can be argued that it is obvious that a high degree of professionalism would be found among them and that the findings would be different if there was a greater spread in the interviewees' careers. However, the interviewees have been working as physicians for a long period of time and it can be argued that it is through working for a long time with the same thing that the underlying motivation is truly shown.

5.3 The data collection

The goals of the data collection were to get (i) an assessment of what factor was the primary source of motivation and (ii) understand the underlying factors of motivation.

To firstly be able to get a reliable identification of the subjects' primary motivators a qualitative extension of PEAQ was used. The PEAQ-QE from (Rinaldi et al. 2012) was complemented with a more classical approach of in-depth interviewing. The more standard in-depth interview was conducted to get a better understanding of the interviewees' motivational structure.

5.3.1 Measurement scale

To achieve comparability of motivation between professionals, each subject's motivation from the three factors "Professionalism", "Patient care" and "Other" was ranked on a scale from 1-3 (1 being primary motivator, 2 being secondary etc.). The category "Other" consists of factors other than professionalism and patient care that the subject considered intrinsically motivating. "Other" was used to get a better discussion about the motivational factors. The scale was implemented to get a better comparability between the subjects and to be able to quantify the results to some extent. The scale will be used even though qualitative research is not intended for measurement (SBU 2014).

The scale used is exclusive for each grade, all physicians were ranked with a primary, secondary and least important motivator. It is however important to note that even if a physician ranked:

Professionalism as primary motivator
Other as secondary motivator
Patient care as least important motivator,

patient care could still be a very important factor of motivation for the physician. What it means is that there is at least one factor of many in the category "Other" that is of greater importance than "Patient care".
The reason for using this system is that it would be difficult to get a reliable reading of someone's actual motivation if every individual was ranked based upon the subjective experience of the authors. This system is simpler but also more reliable and easy to test.

5.3.2 Questionnaire

When assessing the intrinsic motivation of his subjects, Waterman uses his Personally Expressive Activities Questionnaire (PEAQ) (Waterman et al. 2003) during the data collection. PEAQ is however a questionnaire with closed-end questions and designed primarily for quantitative research. With the qualitative nature of the thesis it would be more useful with a questionnaire that uses the traditional PEAQ but with open-ended questions. This sort of extension to the questionnaire, PEAQ-QE (Qualitative Extension) has been designed by (Rinaldi et al. 2012). The questionnaire used in the data collection was taken from the appendix of (Rinaldi et al. 2012) and slightly modified in the sense that instead of identifying life goals, work related goals were identified. These goals were then broken down into activities and ranked in order of importance.

In addition to the PEAQ-QE a semi structured questionnaire was developed. The semi structured questionnaire was developed as a greater understanding of the motivational factors was sought. It was also good to have a different set of questions, if the interviewee said anything that contradicted or backed up what was said in the PEAQ-QE they were asked to elaborate. As different topics were to be covered semi structured interviews were suggested by (Bryman 2013). The questions were designed in a way that enabled additional focus on questions that proved central to the interviewee.

5.3.3 Implementation of the interviews

The nine interviews lasted about 45-65 minutes each, and were mostly conducted at the interviewees' workplaces, when there was no opportunity to be at their workplace it was due to logistical problems. The aspiration was always to be at their "home turf" as it can be argued that it gives a sense of calmness that would in turn give the most sincere and thought-through

answers. Instead of using classical transcription, the six-stage method of data analysis developed by (Halcomb, Davidson 2006) was used. The steps in short:

Step 1: Audiotaping of interview and concurrent note taking
Step 2: Reflective journalizing immediately after an interview
Step 3: Listening to the audiotape and amending/revising field notes and observations
Step 4: Preliminary content analysis
Step 5: Secondary content analysis
Step 6: Thematic review

Recording the interviews gave a better flow as the interviewer could focus on the interviewee rather than keeping notes and risk missing something essential. As there were two interviewers one could focus on the flow of the conversation while the other kept notes.

Before the interview an introduction to the background of the thesis was given to the interviewee. The interviewee was also given a brief summary of what kind of questions were to be posed and the time the interview would take in accordance with what (Kvale 1996) mention to be beneficial.

After a question was answered a pause was given in order not to interrupt any following thoughts from the interviewee (C. Boyce 2006). Every interview followed a similar course with general questions initially about work tasks and earlier career to get the interviewees comfortable. This was followed by questions that related to the PEAQ-QE to get an assessment of their motivation. After the PEAQ-QE thematic questions from the semi structured questionnaire were covered. The questions posed were neutral and rather open, signals and statements that pointed somewhere were followed by further questions that could reinforce or discard previous statement.

5.3.4 Identifying primary motivators

When asking a physician to state what he is truly motivated by consideration for the somewhat ethically sensitive subject needed to be taken. The event that a physician states that he or she is more motivated by mastering something rather than caring for patients could be

seen as an ethical issue as it sort of contradicts the general mission of doctors; that they act for the wellbeing of others. In that sense it was good to have another questionnaire so that the answers given in the PEAQ-QE could be elaborated upon in the case of contradictory statements.

As the PEAQ-QE was broken down into activities we could see which one of these activities that was seen as most motivational and hence get a better understanding of their goals. For example, if a doctor says that his or her primary goal is to heal patients, this could then be broken down into e.g. the activities socialising and helping. If the socialising part is more important to the doctor, then the primary motivator is derived from social factors rather than from patient care. The definitions of the factors are described in the next section.

5.4 Definitions

To conduct a research, the terms “Professionalism” and “Patient care” had to be defined. The idea was to use the goals from PEAQ-QE, and see which of them that point toward professionalism, patient care, and other.

5.4.1 Professionalism

Professionalism in this meaning is basically the idea that an individual is motivated through the aim of achieving a certain standard. This standard can be an informal position such as being an “excellent surgeon”. A person gains self-fulfilment from becoming better and excelling at what he or she does and in the end becoming a master of the profession. Professionalism is closely related to feelings of competence as that is what can be gained through a certain status or skill.

In search of professionalism the PEAQ-QE was used, goals that indicate professionalism are many and include becoming better at your work, becoming better than someone (organisation or individual), and reaching a certain informal position.

Other important factors to evaluate were off-work contributions to the hospital as well as reasons and implications for the chosen career path. What was searched for was behaviour that was made to get personal non-monetary gains, such as informal status.

In search of what is more intrinsically motivating, the different career paths will also be analysed. Even though motivation to reach a certain formal position can be considered to be extrinsic, there is still a side to it that relates to the intrinsic motivation, like the drive to become the best.

5.4.2 Patient care

Physicians motivated through patient care are motivated by helping other individuals, hence the satisfaction is derived from helping others. A complex line that had to be drawn is the one between helping and socialising. Even if it is shown that good communication with the patient contributes to achieving better patient outcomes (Yogarabindranath Swarna Nantha 2013), the line was drawn so that the social side of the doctor-patient relation is separated from the purely healing and caring side.

In search of patient care the PEAQ-QE was used. Goals that indicate patient care are related to the patient and can include better care or higher quality for the patient. To separate the social side from the healing side these goals were then broken down into activities and the interviewee was then asked to rank the activities after their importance.

As in professionalism, factors to evaluate were off-work patient contact, reasons and implications for the chosen career path, and interest in the patient.

5.4.3 Other factors

This concerns other factors that generate motivation for the work, they might not be related to the work itself. Examples of this would be social environment such as friendship while performing surgery or intellectual stimulation.

Autonomy is perceived to be perhaps the greatest precondition to intrinsic motivation for the physicians (Janus 2010), we do however not include this factor in “other factors” as it is not the autonomy that motivates, rather the lack of autonomy and controlling behaviour that demotivates (Deci, Ryan 2000).

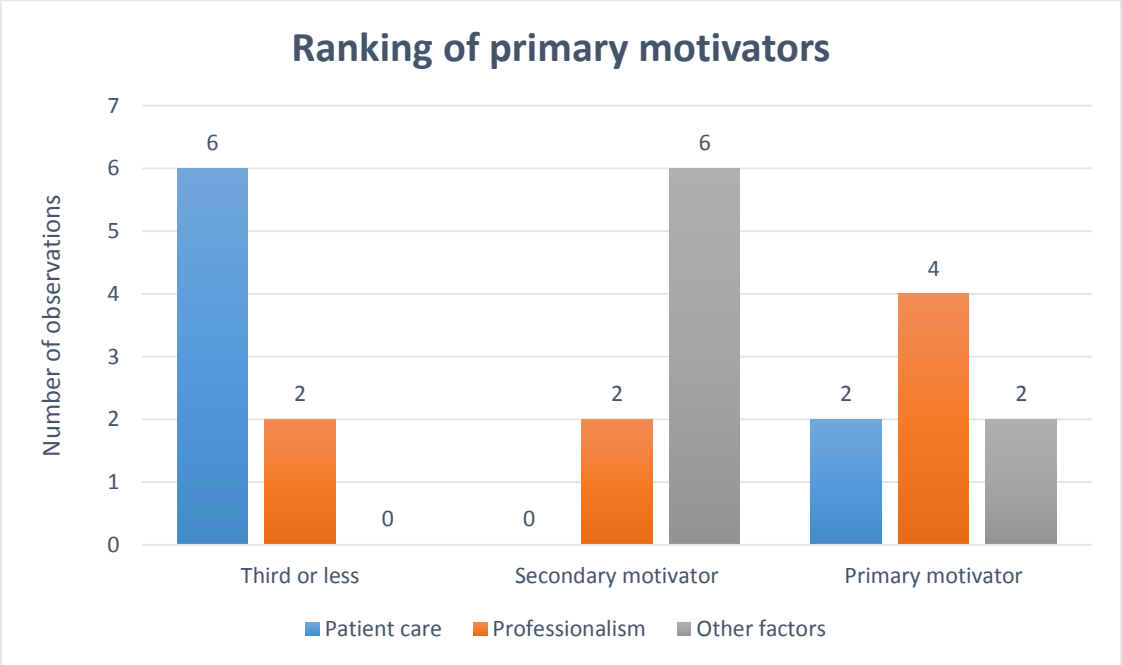
5.5 Critique to the method

Assessing deep psychological traits as motivation is something challenging, especially for two students without any education in psychology or extensive knowledge in extracting subconscious thoughts. The tools that were found in order to do this were however considered so straightforward and useful that even laymen can draw understanding from its results.

6 Empirical result

The result from the PEAQ analysis shows that the majority of the sample is motivated by professionalism. Other factors was seen as more important than patient care in most of the interviews. Figure 1 shows the distribution of motivators among the subjects.

Figure 1



6.1 Professionalism

Professionalism was the type of motivation that had the highest frequency of primary motivation (four out of eight). Most subjects responded that their primary goal and source of motivation was to become better. The subjects that were primarily motivated by professionalism mentioned career paths and competence as important factors to their

motivation. Even if professional goals are described as stronger, patient care also seems to play a significant role to their motivation discussed further down.

6.1.1 Different career paths

Central to professionalism is the drive to achieve a certain standard or status. Many of the physicians that were interviewed mention that the obvious career path has been altered. 30 years ago, when most of the interviewed physicians were educated, the most reputable career path was the academic, one should do research and eventually become a professor. With this formal degree it was described that you were almost automatically given a higher responsibility and a title like unit chief or hospital chief. According to an interviewee another path at this time was the path of "//...// becoming an excellent clinician". This was an attractive job in monetary terms as he mentions "//...// physicians were directly paid through consumers during this time". He further explains that //...// "people for that reason still think that being a physician is a very lucrative job, although the relative pay has decreased the past decades.".

What has changed the past 30 years is that there are now additional paths. The academic path is still considered the most attractive as professors are sometimes compared to being the rock stars in the business. "//...//Some of them travel around in limousines and believe they are gods" was a quote given. One of the subjects described it as "//...// enjoyable" to hold a seminar for 2000 other physicians and researchers.
Nowadays the administrative path is however described as the primary path to become the head of a unit or hospital. This path is now not only occupied by professors and researchers but people who actively search for a leading role. The surge in private actors on the market has also opened up for the path of the entrepreneur, opening a private clinic is much easier and enables a relatively high stature from the start.

6.1.2 Preferred career paths

When it comes to which career path to aim for the results indicate that the path to become a leader is not a very popular one, both the CFO and many of the physicians mention that it is difficult to find someone "//...// who wants to step up and become a leader". It was explained that one reason for this was that "//...// a leadership position means having to decide over others.". This was described as something which the physicians disliked and that by entering a

leading position you imply that "//...// I know better than you". The majority stated that the most preferred path was to become an excellent clinician. The CFO described it as "//...// For some reason they still want to remain as clinicians, they like to cut in people.".

6.1.3 Professional obligations

The observations indicate that the professional standing strived for is largely individual and is influenced by factors such as the culture at the workplace and surroundings. An example is a subject who started his own private clinic. Prior to the start he was in several research committees and other institutions were professors and careerists were over-represented. Once he had started his own private clinic he spoke of how he was removed from these institutions and occasionally even undermined by previous colleagues. The undermining of colleagues was explained to be a result of the large public, more advanced, hospitals wanting all the advanced healthcare for themselves. The behaviour with strong norms of what is deemed right and wrong was described to exist in both of the largest hospitals in both of the cities where the interviews were conducted. These norms in the large hospitals were perceived as tough, most of the interviewees despised them and even called them "//...//frightening"

6.1.4 Undermining of competence

Other ways the physician's motivation could be damaged was through the patient. Some of the interviewees mention how they could be annoyed by patients seeking care and diagnosing themselves. Having someone with less knowledge on the subject than yourself telling you what is right or wrong was described as"//...// frustrating". Several examples were discussed where the patient has been correct in his or her own diagnosis but the doctor, wanting his pride and feeling of superior competence intact, dismissed the patient and set his own, faulty, diagnosis. The physician who then makes the right diagnosis could then experience a more intense satisfaction by getting a boost from feeling more competent than another physician.

6.2 Patient care

Asking a physician what he or she is motivated by is a somewhat ethically sensitive subject. The answer was therefore surprising when the interviewees were asked to estimate the occurrence of physicians drawn to the profession from altruistic reasons, like having a "call" to become a doctor. The interviewees' estimation of the people with the "call" was that they

are actually very few. What further backs this statement is that all interviewees except one became physicians more from coincidence than actively choosing it.
The belief that most physicians "have a call to become a doctor" was something that was described as "//...//a typical myth that exists outside the health care business".

6.2.1 Motivation from the patient

Two different types of motivations that comes from the patient were identified. One type is the actual helping, the work task. The second type is the social relation that emerges between the physician and the patient. The social relation was mostly seen as an activity full of enjoyment. However, sometimes the opposite occurs when the patient is hard to connect to. Such individuals that were described as "//...// crazy" or "//...// lunatics" were mentioned to be one of the worst parts of the work. While the one of the best parts of work was described as when successfully curing a patient. The event at work that was considered most demotivating was when something went wrong with the treatment, as this caused both the patient and the physician suffering.

6.2.2 Observations from individuals driven by patient care

Within the sample, only two had patient care as a primary source of motivation. Observations indicated that these individuals had a tendency to seek certain positions. One subject chose a career path within an area where you really could cure people, and the other subject showed his drive for patient care as he started to work part time in public hospitals after some time at a private clinic. He described it as "//...// people who visit private clinics believe they are severely ill while on public hospitals they are severely ill. While people occasionally are severely ill on private clinics it's not as frequent as within public hospitals.".
In both public and private hospitals the amount of contact that should be held with the patient outside the hospital was chosen freely by the doctor. In the sample there were large variations in the amount of contact. The physicians who were driven more by patient care stated that they believed that they had a larger amount of contact with the patients outside working hours relative to their colleagues. Out of the individuals driven through professionalism about half stated they had more contact with patients than colleagues.

Many of the interviewees mention how a bond is created between the physician and the patient when you have the responsibility for the patient and their well-being. Another remark

was when successfully helping a patient who had been treated wrongly for a long time, it created a more powerful feeling of enjoyment and aliveness than “normal” helping. The extra boost coming from helping a formerly ill-treated patient is also present for reasons related to professionalism. While the happiness from professionalism is derived through being better than someone and through doing a good job, the extra motivation through patient care came from the boost given by the connection and happiness from the patient who had been mistreated.

Such enjoyment seems to persist only if it feels meaningful, examples of when this motivation did not pertain in the same way was when there was an excess amount of patients, often observed in public hospitals. Many interviewees reported that in that case patients risk being seen more as a burden than an asset. One of the physicians stated “//...// the worst periods are when there is an endless flow of patients and there is no time to stop and develop oneself.”

6.2.3 Parallels between patient care and other factors

The relationship with the patient and the process of healing them is explained to have parallels in different areas of work. One of the subjects that was previously a practising clinician but had moved towards having only administrative and leadership duties explained that “//...// now the co-workers are my patients”. Another interviewee who had moved towards a more research-oriented position said “//...// Now my motivation and happiness is derived from helping others reach their goal instead of helping patients.”. Working as a physician has the benefit that you easily feel needed, many subjects describe it as satisfying that you in a concrete and direct way notice the results and contribution originated from your work.

6.3 Other factors

The factors that was reported to be the most motivational and important was (i) stimulating activities (ii) creational activities (iii) socialising activities.

6.3.1 Stimulating activities

Stimulating activities was by every respondent listed as an important factor at work, one respondent held it as highest. The work has to be challenging, otherwise the activity was seen as boring. Health check-ups was an example of an unstimulating activity, it is practically

never considered a challenge and it merely follows a standard procedure. When it came to which environment was more stimulating there were different opinions, many said private clinics were more stimulating while others said public emergency work was more stimulating. The indication was that the work which was preferred was the one where larger autonomy was present.

6.3.2 Creational activities

Both surgeons that were involved in surgery that concerned a great deal of "//..// craftsmanship" (the knee surgeon and the odontologist), experienced a lot of motivation from the fact that they created something. The knee surgeon compared this to carpentry and described it as "//...//there are some slight differences in the consequences from mistakes and the time pressure".

6.3.3 Socialising activities

Socialising activities is something that was an important factor to many of the subjects, one respondent ranked it as his most important. It was the feeling of team-work and solving stimulating tasks together that appealed. One surgeon described how he enjoyed the ambience during surgery, there "//...// was a good and joyful atmosphere while performing surgery where you made jokes with your colleagues while the patient was asleep". Some of the subjects to a larger extent work with non-practical activities, like give basic examinations or merely talk to the patients. These subjects who meet with the patients and primarily made decisions on their own expressed how they missed the atmosphere where teamwork was a larger part of work. In these cases it was also described how the patient played a more important role as meeting and talking to them was the major activity of the day.

6.4 Additional findings

One indirect factor that seemed of great importance to motivation was the size of the hospital. Many interviewees mentioned that an optimal size for a hospital is one that does not generate too many hierarchical levels. Too many levels was portrayed as bureaucratic and interfered with motivation. According to both the physician and the CFO the size of a department should be no greater than 60-70 employees where of seven to eight of them should be specialists.

7 Analysis

7.1 The result

The result indicated that most of the subjects were driven by professionalism. It can be argued that the sample consisted of successful physicians where almost everyone had a prominent position, hence it is possible that these individuals might to a higher extent be driven by professionalism. What seems to be at the core for these individuals is the urge to feel competent. Many of the interviewees spent a good share of off-work time reading articles and research to excel in their work. In doing so they did not receive a notable higher wage or position, which can be seen as an indication that intrinsic motivation is of great importance.

The result that the respondents are to a higher degree motivated by professionalism than of patient care, indicates that goals that are closely related to personal gains seem to be of greater importance to the physician than helping your patients. This can be argued to indicate that possible measures and intrinsic control systems should lean more toward individual goals. But too much self-promotional activities might have other consequences discussed below.

7.2 Feelings of competence and professionalism versus social relatedness and patient care

Why certain people are motivated by professionalism and others by patient care can be explained through the nature of human being. As everyone is different, everyone have different ways of fulfilling their needs. People motivated by professionalism get their fulfilment mainly through achieving their self-defined goals while those motivated by patient care reach fulfilment by helping others.

Within the SDT professionalism can be linked toward feelings of competence in the aspect that professionalism as defined is related to activities that enhance the feelings of competence. Patient care on the other hand leans more toward social relatedness in the sense that through caring for others you easily create a connection to the patient and feel appreciated. In the context of SDT social relatedness is said to be less important of a motivator (Deci, Ryan 2000) which the result is in line with.

It is important to remember that patient care still plays a large part in the motivation, just because a physician finds larger satisfaction in becoming better does not mean that he only cares about himself or does a bad job as physician. Physicians driven by professionalism have high standards and take their work very seriously in order to achieve their goals.

The results do not indicate how much stronger any of these motivators are, only that professionalism is to be considered as stronger than patient care. In most cases professionalism and patient care will not intervene with each other but might instead have a symbiotic relationship as both boost overall motivation. The risk for problems however heightens when professionalism starts to take over.

7.3 Professionalism

The core of motivation through professionalism seems to be derived from always aiming for the next goal, always looking to take another step, always becoming a little better. In this process the perceived competence increases and hence the feeling of fulfilment. These individuals seem to find great enjoyment in the process of becoming better. The drive to always strive to become better can be related to adaptation (Frey, Stutzer 2002). A physician might find joy in the process of becoming better, but as they eventually adapt to their new skill, they have to continuously improve in order to be satisfied.

7.3.1 Competence and arrogance

The continuous search for improvement might sometimes go so far as it can jeopardize the wellbeing of the patient. One example that highlights this is the patients who have been given the wrong treatment for a long time. In normal cases physicians are said to have a dialogue with colleagues about their patients, cases and their diagnoses. In cases when a doctor discovers the true diagnosis of a patient who has been mistreated for a long time he or she often contacts the physician that has given the previous, faulty, diagnosis. It is however not seldom that the faulting physician refuses to reply or give an excuse, even though he or she is sent copies of the new, correct, diagnosis. In such cases the physician's competence is of such great importance to him, that he does not want to acknowledge when a mistake has been made. In cases like this it seems that the perceived competence is of significantly greater value to him than patient care, which in the end often leads to the suffering of patients.

A related problem is when a physician feels frustration and annoyance when patients tell them their own diagnosis. The physician values his own professional pride and wants to have his feeling of competence intact so much that he risks not giving the patient the optimal treatment. A shocking example was a patient experiencing problems with her heart and was forwarded to a psychologist instead of a heart specialist as the physician did not believe or take the patient's symptoms seriously.
The somewhat arrogant behaviour can be argued to be more present in the latter state of a career, when a professional has, or to a large extent, reached his goals and his self-perceived competence is greater. When these professional goals have been achieved there can be an overestimation of one's competence which sometime leads to arrogance and faulting diagnoses. As arrogance and perceived competence are closely linked together (Bauerschmidt 2008), it might not be in the best interest of a hospital to give the physician too many possible ladders to climb as this risks making his perceived competence too large. An intrinsic control system can in this aspect be difficult to balance with an economic control system as these are to a large extent built around incentives like advancing in position and pay.

7.3.2 What physicians strive for

In order to understand what kind of incentives a physician motivated by professionalism responds to it is crucial to understand why they want to become better and secure a certain professional standing. If a physician remains in the duty as a clinician there are rather few hierarchical levels to climb and consequently small opportunities for higher pay and formal status. In the context that there are few extrinsic rewards to strive for, intrinsic rewards seem to matter to a higher extent to physicians. An example of this was captured by the CFO in his function as outside observer, he said "//...// it's almost like they are competing in how many surgeries they can conduct in one day." As the physicians working in this organisation don't receive monetary compensation for this efficiency the drive rather comes from taking pride in doing things in the most time-efficient manner.

As physicians is a group that perform advanced tasks, they might have a very high perceived competence. With a high perceived competence and norms that say a doctor shall not interfere with other doctors' perceived competence it is not surprising that "//...// it is hard to find somebody to step up." There might also be a larger respect and fear to step up as a leader position in healthcare, for starters you would lose a large part of the work as a practising

clinician. As many physicians feel that their competence lies within this area means they possibly would feel less competent as a leader. Another problem that is related to this is that physicians are described to only voluntarily follow a leader that is a legitimate authority to them (Janus 2010). Non clinicians (i.e. "managers") are generally not a legitimate authority for physicians whereof large problems are often described to emerge when the leader is a non-clinician if he is not "//...// extremely competent". Hence, when looking for a fitting leader in healthcare one should look for someone with a background as a physician in order to avoid problems.

7.3.3 Obligations and competence

Other norms that were discussed in the result was the indication that the large public hospitals were described as "//...// wanting to have a monopoly on advanced healthcare". It supports that strong obligation-based behaviour sometimes exist within these organisations. Employees at these organisations were described to exert an extra-role behaviour (Janus 2010) when they act in what they believe to be their organisation's best. The employees that exert proactive behaviour on behalf of the organization goes far beyond what their work contract state as their tasks. Why they exert this behaviour is an interesting discussion. As these hospitals are state owned they have no economic incentives to exert such a behaviour. As mentioned in the empirics many of the interviewees who have previously worked in public healthcare state that there is a strong perceived identity at state owned hospitals. This identity is then defended to practically all costs. A linkage to feelings of competence can also be made. People strive to keep their perceived competence, a way of doing this can be through working somewhere that is recognized as competent. A hospital offering advanced healthcare would fit that description very well and can give the employees a feeling of competence. Losing the monopoly of advanced health care in this case lowers the feeling of competence, which can explain the defence mechanisms triggered when private clinics start to "compete" with the public hospitals. The normative obligations that emerge within hospitals can be a good way of controlling physicians, as these norms emerge from the individuals themselves, and will therefore not be regarded as controlling. The issue lies in controlling the norms. The norms in the public hospitals were described to be "//...// stuck in the walls". A problem that can arise is that if organisational norms are successfully created, it can be difficult to remove them in the case of a reorganisation or if the norms are outdated.

7.4 Patient care

In the sample there were only two subjects driven mainly by patient care. One probable reason is their prominent positions discussed above. Another reason is that the social part of the patient relation was categorized into “Other factors” which can explain why the number of subjects motivated by patient care was smaller.

7.4.1 Satisfaction from the patient

The SDT argues that the need for social relatedness is weaker than the other preconditions needed to be motivated. It can explain the result that the physicians in the sample are to a less extent motivated by helping. The actual urge for helping the patient appears in most cases to be satisfied from only a couple of days work with patients. Those who had more administrative roles still retained some days every month for clinical work and felt that was enough. At public hospitals there was a description of hopelessness from the never ending flow of patients. If physicians were primarily motivated by patient care it could be argued that this should be seen as an opportunity rather than something hopeless. This could show that physicians might not be driven to the same extent through patient care as typically believed outside hospitals. This is further strengthened by the indication that almost none of the interviewed had searched for the job of physician and that very few were said to become physicians for selfless reasons.

7.4.2 Urge to feel needed

What seem to be at the core to patient care is social relatedness. When helping patients a bond is formed between patient and doctor which satisfies the need for social connection
The results however indicate that patient care is not a unique form of motivator within healthcare. What seems to be more true for healthcare than other areas of work is that it is easy to see a clear relation between input and output and hence feel useful for others.

The activity of helping is something that generates a lot of enjoyment through its ability to gain both approval from the patient and self-approval from knowing that you do something good. By helping the physician can then be argued to gain a connection with the patient from which the need for social relatedness is satisfied.

The connections can however be seen in most areas of work and who the physician creates this bond to seems to mostly depend on the context in which he or she operates. An example that highlights this is when a physician describes how the patients start to play a more important role when he shifted from emergency service to scheduled basic examination, the former implying a large dose of team-work, the latter almost none.

As patient care is a part of every clinician's job it can be suggested that the motivational foundation for social relatedness should easily be fulfilled in every physician's work life. If this was of a large importance physicians could be argued to supposedly be very happy with their career choice. However a recent study suggests that 60% of American physicians would not recommend their children a career as a physician, and over one third would not become a physician if he or she would re-educate (Hawkins 2012). This study shows that there is something missing. In the 2014 report by the Physician Foundation 69% feel that their clinical autonomy is compromised (Hawkins 2014). It gives a strong indication that the perceived autonomy within healthcare is the problem rather than social relatedness. Most clinics that were visited in preparation for this thesis were smaller and claimed to not have any particular issues related to autonomy.

7.5 Hospital size and autonomy

The autonomy problems at larger hospitals might be related to their size. Research seems to indicate that there is a problem with organisational bureaucracy which interferes with perceived autonomy (Engel 1969). Problematic however is that research indicate that the optimal size of the hospital is around 275 beds (Kristensen 2008) which is significantly larger compared to that described as optimal by the physicians. A possible solution to this might be to create larger hospitals to generate economies of scale and at the same time retain intrinsic motivation might be to have autonomous units in the same building.

7.6 Implications

The use of intrinsic motivation as a tool for economic control might be hard to implement. The research indicates that individuals tend to be motivated by their own needs before others. Motivational theory seems to mostly state that the ideal work for motivation is relatively unregulated (Deci, Koestner & Ryan 1999). It means that employees have to be genuinely interested for the control systems to function, as the reward will consist of the work itself.

Another problem with intrinsic control is that it requires all the SDT-preconditions to be satisfied to work properly. These preconditions can easily be offset which makes these systems sensitive to changes.

The problem arises if this intrinsic unregulated system is in place but the physician doesn't find intrinsic motivation in his or her task, without any extrinsic rewards to strive for overall motivation might decrease. While an economic control system might be able to target and satisfy the deeper needs as defined in the SDT, control systems are built upon incentives of tangible resources that the physician can never get enough of. If physicians are to be controlled through intrinsic rewards there must equally be an intangible resource that never can be fully satisfied.

As large hospitals seem to be lacking the autonomy needed to achieve high intrinsic motivation, a system that is based on intrinsic rewards would not work properly when one of the preconditions will continuously be interfered with, due to its organisational size (Engel 1969).

In this sense it can be argued that the ideal motivational state is a utopia as negative or positive controlling incentives will always exist, for example losing your job or getting a promotion from working hard. The ideal system is possibly a combination of extrinsic and intrinsic reward systems were the crowding-out effect is minimized.

8 Conclusion

Motivation is a nested road with a multitude of factors and influences offsetting and enhancing the other. There is no universal key to motivation but there are better and worse fits. Problems with motivation within the healthcare sector have made researchers look for control systems that retain motivation better. In the search the spotlight has been put on intrinsic motivation for the development of new economic control systems. This thesis has focused on the assessment of intrinsic motivation among physicians within healthcare. What can be seen is that neither professionalism nor patient care is an almighty motivator. Physicians rather seem to be motivated by a large amount of different motivators. Professionalism and patient care seem to belong, along with socialising and stimulus, to the more important motivators. The results indicate that professionalism is the strongest intrinsic

motivator of these. Patient care even seems to be a factor that in some cases holds a lower priority in relation to other factors like intellectual stimulus.
Professionalism can be split up in two parts, an individual part with self-defined goals, and a group part with the goals defined through the group. Self-defined goals might be hard to change, but the group-defined goals, such as certain standards at a hospital, is a result of a group defining their own norms. Such norms would be a very powerful tool of economic control if they could be controlled, as it would not interfere with autonomy in the way that most normal economic control system do. Extra-role behaviour within health care is something that can give a hospital or clinic a very strong comparative advantage if it lies in line with the company's aspirations.

Competence seems to be the core driver for the physician. The SDT argues however that it is a factor that does not matter if the feeling of autonomy is not fulfilled. The physician's competence will then be perceived as useless as in the physician's viewpoint someone else is taking the decision. While the need for social relatedness does appear to be of importance, this is easier satisfied and thus not as important. The feeling of competence seems to arise from becoming better, personal development and by informal status. On the other hand social relatedness coming from caring for patients can be achieved through other factors like helping and socialising activities, it can also be obtained by adapting to the work-context. What can be said is that the benefit of being a physician is that patient care is a concrete driver for motivation in the sense that you help patients met in person and their recovery is tangible. This direct helping makes it possible for the physician to see a concrete relationship between the input and output of his or her work.

8.1 The future

In the pursuit of the optimal control system several steps have to be taken. The traditional system that risks compromising the autonomy must be partially removed. As autonomy is the most important precondition to be intrinsically motivated a system that jeopardizes this is risky to use.

The ideal motivational state might not be possible to reach in a context of a workplace, but the ideal control system for physicians would probably consist of a mix of extrinsic and intrinsic

rewards. The crucial point is that the extrinsic rewards in the system must be designed in a way that they do not interfere with the physicians' perceived autonomy.

New measures and policies could target their professionalism in a way that it uses non-monetary intrinsic rewards instead of extrinsic rewards as a motivator. The system could be supported by obligation-based norms if they can be successfully established. The question is if such norms should be perceived as controlling or not, research would have to done in order to evaluate whether implementing such a system is even possible. Another problem is that if the feelings of competence become bloated from too much intrinsic rewards arrogance might emerge. With the many issues in need of undertaking more research has to be made on intrinsic rewards. Questions that need answers is how they should be designed and what effects they will have on physicians.

The question of what the primary intrinsic motivational factors of physicians are still remains. Conducting a quantitative study in this subject would provide a higher statistical value and could help employers to design their economic control systems in a way that benefits both the organisation and the employee.

Finally, the degree to which a physician can be stimulated through intrinsic goals related to e.g. competence has to be evaluated. Another factor that needs further evaluation is the obligation-based behaviour, are there possible ways of changing what's perceived to be right and wrong? If such additional research shows good results, there might very well be a bright future for changing the economic control systems within healthcare.

9 References

Adams, J.S. 1963, "Towards an understanding of inequity", *The Journal of Abnormal and Social Psychology*, vol. 67, no. 5, pp. 422-436.

Bauerschmidt, M. 2008, "Physician leader, be careful not to let arrogance stand in for competence", *Physician Executive*, vol. 34, no. 4, pp. 34-35.

Bryman, A.B. 2013, *Företagsekonomiska forskningsmetoder*, 2nd edn, Liber Ab, Stockholm.

C. Boyce, P.N., 2006, 2011-12-25-last update, *A guide for designing and conducting in-depth interviews for evaluation input* [Homepage of Pathfinder International Watertown], [Online]. Available: http://www.cpc.unc.edu/measure/training/materials/data-quality-portuguese/m_e_tool_series_indepth_interviews.pdf [2015, 2015-02-25].

Deci, E.L., Koestner, R. & Ryan, R.M. 1999, "A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation", *Psychological bulletin*, vol. 125, no. 6, pp. 627-668.

Deci, E.L. & Ryan, R.M. 2000, "The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior", *Psychological Inquiry*, vol. 11, no. 4, pp. 227.

Engel, G.V. 1969, "The Effect of Bureaucracy on the Professional Autonomy of the Physician", *Journal of health and social behavior*, vol. 10, no. 1, pp. 30-41.

Frey, B.S. & Stutzer, A. 2002, "What can economists learn from happiness research?", *Journal of Economic Literature*, vol. 40, no. 2, pp. 402-435.

Halcomb, E.J. & Davidson, P.M. 2006, "Is verbatim transcription of interview data always necessary?", *Applied Nursing Research : ANR*, vol. 19, no. 1, pp. 38-42.

Hawkins, M. 2014, 2014-09-15-last update, *Practice Patterns & Perspectives An Examination of the Professional Morale, Practice Patterns, Career Plans, and Perspectives of Today's Physicians Based on Over 20,000 Survey Responses* [Homepage of Physician foundation], [Online]. Available: http://www.physiciansfoundation.org/uploads/default/2014_Physicians_Foundation_Biennial_Physician_Survey_Report.pdf [2015, 2015-04-20].

Hawkins, M. 2012, 2012-09-12-last update, *A SURVEY OF AMERICA'S PHYSICIANS: PRACTICE PATTERNS AND PERSPECTIVES* [Homepage of The Physician foundation], [Online]. Available: http://www.physiciansfoundation.org/uploads/default/Physicians_Foundation_2012_Biennial_Survey.pdf [2015, 2015-04-20].

Janus, K. 2010, "Managing motivation among health care professionals" in Emerald Group Publishing Limited, , pp. 47-77.

Kristensen, T. 2008, 2008-12-08-last update, *Economies of scale and optimal size of hospitals: Empirical results for Danish public hospitals* [Homepage of Institute of Public Health, Department of health Economics, Faculty of Social Sciences University of Southern Denmark], [Online]. Available: http://static.sdu.dk/mediafiles//Files/Om_SDU/Centre/c_ist_sundoke/Forskningsdokumenter/publications/Working%20papers/200813_001.pdf [2015, 2014-04-30].

Kvale, S. 1996, *Interviews :an introduction to qualitative research interviewing*, Sage Publications, Thousand Oaks, Calif.

Lindenberg, S. 2001, "Intrinsic motivation in a new light", *Kyklos*, vol. 54, no. 2/3, pp. 317-342.

Rinaldi, R.L., Meca, A., Eichas, K., Kurtines, W.M., Albrecht, R.E. & Goodletty, S. 2012, "The development of a qualitative extension for the Personally Expressive Activities Questionnaire (PEAQ-QE): A construct validation study", *Identity: An International Journal of Theory and Research*, vol. 12, no. 4, pp. 320-344.

Rosenthal, M.B. & Frank, R.G. 2006, "What is the empirical basis for paying for quality in health care?", *Medical care research and review : MCRR*, vol. 63, no. 2, pp. 135-157.

Rudolph, P.A. & Kleiner, B.H. 1989, "The Art of Motivating Employees", *Journal of Managerial Psychology*, vol. 4, no. 5, pp. i.

SBU 2014, "Utvärdering av metoder i hälso- och sjukvården: En handbok", *Stockholm: Statens beredning för medicinsk utvärdering (SBU)*, , no. 2, pp. 85-85-121.

Sicsic, J., Le Vaillant, M. & Franc, C. 2012, "Intrinsic and extrinsic motivations in primary care: An explanatory study among French general practitioners", *Health Policy,* vol. 108, no. 2, pp. 140-148.

Tarantino, D.P. 2008, "If You Want to Motivate Physicians, You Have to Understand and Fulfill What Drives Human Behavior", *Physician Executive,* vol. 34, no. 5, pp. 84-86.

Utman, C.H. 1997, "Performance effects of motivational state: a meta-analysis", *Personality and social psychology review : an official journal of the Society for Personality and Social Psychology, Inc,* vol. 1, no. 2, pp. 170-182.

Waterman, A.S., Schwartz, S.J., Goldbacher, E., Green, H., Miller, C. & Philip, S. 2003, "Predicting the subjective experience of intrinsic motivation: the roles of self-determination, the balance of challenges and skills, and self-realization values", *Personality & social psychology bulletin,* vol. 29, no. 11, pp. 1447-1458.

White, R.W. 1959, "Motivation reconsidered: The concept of competence", *Psychological review,* vol. 66, no. 5, pp. 297-333.

Yogarabindranath Swarna Nantha 2013, "Intrinsic motivation: how can it play a pivotal role in changing clinician behaviour?", *Journal of Health Organization and Management,* vol. 27, no. 2, pp. 266-72.

10 Appendix

Questionnaire

Note that this is translated from Swedish, which the original questionnaire is in.

PEAQ-QE - health care theme

- What are the three most important goals with your work
- Which is the MOST important - describe it
- What it means to you?
- How important it is to you?
- Why it is important to you?
- In what activities can this goal be broken down into?
- Has the perception of which goal is most important changed?

Topic

General

- Name
- Education
- Describe your work tasks
- For how long have you been working in this area?
- How long have you been working at this workplace?
- Previous workplaces?

General work related questions

- Why did you become a physician (*-do you come from a family of physicians?)*
- Why did you end up in this [area of healthcare]?
- do you want more or less clinical tasks? -why?
- If private (public) have you been working within public (private) healthcare before?
- If so did you experience a difference of that department compared to your current? (- which was more motivating)
- (if physician did quit) why did you quit in private/public? (Is there something you miss?)
- Could you start working within private (public) healthcare again?

Motivational factors

- What motivates you within your work?
- What is most important with a working environment?
- What is most important to be able to develop - do you have the possibility to?

- What is most important to you to be satisfied with your work?

(What could make it even better?)

- Which part of the work do you feel most involved with? (After which days do you feel most satisfied?)

Driven through Patient care/professionalism

-What do you experience as most rewarding with your work -why?

- Which parts of your work would you like to do more of (less)?

- Do you have contact with patients after working hours? - do you have more contact with patients than colleagues?

- Describe the relationship with the patient

- How common is altruism within healthcare? - How many - how important?

- Do you experience your work your tasks more motivating when you are good at them? - why/why not?

- In what way would you make an excellent career as a physician?

- What adds to the status of a physician?

- Are you doing more work than required of you? – Why/why not?

- Do you experience different hierarchy or status levels within your group of professionals? Which has more status, which less?

Other

-If position gave the same salary, what would you do then?

-Is there anything you would do different if looking back at your career?