

# MASTER THESIS IN EUROPEAN STUDIES

# Perceptions of Healthcare and Trust

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## **Abstract**

This thesis is about the perception of healthcare with a focus on the role of trust. One of the purposes is to bring a better understanding on how some factors influence the way people in Europe perceive their healthcare

The data used was from European Social Survey (ESS), with statistics from all parts of Europe. Selection was made by using previous research which divided the countries into different healthcare types. The statistical method used was linear regression. Results showed that there are differences between healthcare systems and that socioeconomics factors do play a role, even if the impact of them varies between the healthcare types. Individual characteristics used in the study were gender, age and social class. The result showed that the significance of age, class and gender for the perception of healthcare varied between the healthcare types.

Trust had an influence on perception of healthcare across all healthcare types. The discussion pointed out that there is still, a need for more research on the perception of healthcare.

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#### 1 Introduction

The European Union (EU) adopted a new strategy regarding health for the years 2008-2013. In their White Paper about health, the EU laid out the need for new policies regarding health issues. Health is not only important for the individual, but for society as a whole.<sup>1</sup>

"Health is important for the wellbeing of individuals and society, but a healthy population is also prerequisite for economic productivity and prosperity."<sup>2</sup>

The EU has proposed measures in order to improve policies and direct future steps regarding healthcare. A 2009 press release from the Commission indicated that one of the EU's proposals was to improve current research related to healthcare. By supporting further development of research regarding healthcare and healthcare inequalities, new and better suited policies can be created. Research regarding European healthcare is a tool for creating a better and healthier society.<sup>3</sup>

The main actors in shaping healthcare are the national governments. Convergence among member states regarding healthcare policies has taken place with a focus on the legal aspects. New challenges, such as growth of cross border care and market liberalization, provide obstacles but also opportunities for the member states. By learning from each other, member states can improve new policies and strategies regarding health care services. Through more research on the perception of healthcare, the views of the citizen are taken in account.

The purpose of this study is to give a better understanding of perception of healthcare by focusing on the role of trust. Healthcare affects the whole population at different stages of life and trust is an important part of the society.<sup>5</sup>

#### 2 Research Aim

Healthcare is one of the main institutions, of the welfare state. With increasing pressure on the welfare state, healthcare will face new obstacles. Therefore it may be necessary to learn more about how people perceive their healthcare.

<sup>&</sup>lt;sup>1</sup> COM(2007)630 Final. White paper Together for health: A strategic approach for the EU 2008-2013

<sup>&</sup>lt;sup>2</sup>COM(2007)630 Final. p.5 White paper Together for health: A strategic approach for the EU 2008-2013

<sup>&</sup>lt;sup>3</sup>Press Release, COM(2009) 567 Final. Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions, Solidarity in Health: Reducing Health Inequalities in the EU.

<sup>&</sup>lt;sup>4</sup>Spencer, E. and Walshe, K. (2008) National quality improvement policies and strategies for European healthcare systems. Qual Saf Health Care, 18 (Suppl I), p.i22–i27.

<sup>&</sup>lt;sup>5</sup>Uslaner, E. (2002) The Moral Foundations of Trust. Cambridge: Cambridge University Press,pp1-13.

Trust is seen as a core value of the society and healthcare is an important part of the society. This study aims to broaden the knowledge on what is influencing the perception of healthcare with a focus on the role of trust.

What do trust and the perception of healthcare have in common? Previous studies have shown that trust can have an impact on the way the patient behaves in the healthcare setting. A study that was conducted at a hospital in Canada showed that trust had an influence on patient preferences for participation in decision-making regarding their healthcare. When patients were more autonomous in their decision-making regarding their treatment, trust played a less central role in their decision making. The study also showed that most of the respondents preferred a less autonomous role.<sup>6</sup>

Healthcare is an institution that requires trust since the patient must entrust their wellbeing to the institution. In the case of healthcare it can be the matter of life and death, even if that does not have to be the case every time. Trust has an influence on the interaction between humans and also on their relationship to their state and institutions. If trust plays an important role both in the way the patient acts and as a prerequisite for a functioning society, then there is a link between trust and healthcare. Even if this could be seen as a vague relationship, one of the aims of this thesis is to gain a better understanding of this relationship.

A common used data for healthcare research have been data from the Euro barometer<sup>7</sup> and OECD.<sup>8</sup> However in this study data will be taken from European Social Survey (ESS) round from 2004, which had in 2004 a module with questions regarding healthcare. By testing new types of data, the material used for research in the field of healthcare can be broadened.

Research including both Western and Central and Eastern European Countries as in this study, has been rare. It is conventional, that either do a study on only Western Countries or only Central and Eastern European Countries. By including countries from all parts of Europe, this study will open up the study of healthcare to all of Europe, rather than splitting it into separate regions which has been the typical approach.

The Central and Eastern European countries have healthcare systems that are still in transition, which open up for new comparisons between healthcare systems that are more stable and healthcare systems that are not. By examining if there are differences between countries included in the study, it will be possible to see which influence type of healthcare, have on the relationship between trust and percep-

<sup>&</sup>lt;sup>6</sup>Deber B. Raisa, Kreatschmer Nancy, Sharpe Natasha, Urowitz Sara,(2004) How does trust affect patient preferences for participation in decision-making? 2004, *Health Expectations*, Blackwell Publishing Ltd, 7, pp. 317-326. <sup>7</sup> Kolh, J. and Mischke, M., et al. (2010) How do European Perceive Their Healthcare System? Pattern of Satisfaction and Preference for State Involvement in the Field of Healthcare. *European Sociological Review*, 26 (3), p.177-192.

<sup>&</sup>lt;sup>8</sup> Wendt, C. and Mischke, M., et al. (2011) Welfare States and Public Opinion- Perception of Healthcare Systems, Family Policy and Benefits for the Unemployed and Poor in Europe. Edward Elgar Publishing.pp24-63.

tion of healthcare. As stated in the introduction, the national governments play the main role, when it comes to shaping the healthcare. By learning from each other the way people perceive their healthcare can be improved. Also with new information, actions that are best suited for the specific healthcare system can be taken.

The aim of this thesis is therefore: to explore the factors influencing the perception of healthcare focusing on the role of trust, across Europe.

# 3 Previous Research and Theory

## 3.1 Perception of Healthcare

In previous research comparative studies have been performed on the public perception of healthcare focusing on the aspect of satisfaction. The question of access to a doctor and the feeling that the practitioner spent enough time with the patient were some of the most important factors of satisfaction with healthcare. The individual experience of healthcare was considered as one of the most important factors for satisfaction with healthcare. The accessibility of the doctors and the feeling that the practitioner spends enough time was central. The number of the General Practitioner (GP) was also important. The satisfaction and preference for state involvement was similar across Europe. 9

The structure itself and regulation of the healthcare had a lower impact on the satisfaction with healthcare. The authors studied different groups' view on healthcare. To explain the differences and patterns between the countries two different categories were used: institutional and personal characteristic. The division into social groups was done by dividing the population by social class and age. By this it was possible to measure differences between countries but also between divergent social groups. The result showed that the perception of different groups varied between the countries. These boundaries were shaped by the type of healthcare the country had. High-income groups were more satisfied with their healthcare and desired reduced state involvement. An overall pattern was that people from higher class tended to be more satisfied with their healthcare. In countries with National health services, the responses of social groups were more homogenous than in countries with Social Health Insurance system of healthcare. The biggest variances between the various social groups could be found in countries with Social Health Insurance System. The selected countries in the study mentioned above were South and Western European countries, the lack of Central and Eastern European countries opens up for further research. It showed that socio-economic factors play a role when it comes to perception of healthcare.

<sup>&</sup>lt;sup>9</sup>Kolh, J. and Mischke, M., et al. (2010pp. 177-192.

<sup>&</sup>lt;sup>10</sup>Kolh, J. and Mischke, M., et al. (2010) pp. 177-192.

Other studies confirm that there are differences between social groups in the society. A Swedish study done by the Institute for Quality Indicators and Swedish Municipalities and Counties, showed that there are differences between social groups in the society. The study Vårdbarometern (Healthcare barometer) is conducted annually to examine the public perception of healthcare in Sweden in Swedish municipalities and counties. In the section of the study dealing with trust in healthcare, those most inclined to trust in healthcare were one-person households without children, while one-person households with children was the group least inclined to trust healthcare. There was also a variation between the age groups, where people aged 80 years and more trusted the healthcare most in comparison to those aged 30-39 who were least inclined to trust. The most common reason why the people did not trust healthcare was fluctuation of doctors (meeting different persons every time), that they did not receive the help they needed and a subjective lack of competence of doctors.<sup>11</sup>

By knowing more about other factors shaping the perception of healthcare, a deeper understanding can be reached. In the next chapter, the concept of trust will examined and explained. As seen above socio-economic factors play a role in stances towards healthcare, can the same pattern be seen when it comes to the relationship between trust and perception of healthcare?

#### 3.2 Trust and Perception of Healthcare

Trust is a vital part for the functioning of the society. Trust in welfare institutions strengthens social cohesion which reduces social conflict within society. It is necessary for a functioning welfare state that its citizens trust its institutions. <sup>12</sup> Trust is a concept with a wide definition. Therefore when using the concept of trust in a study, a clarification of which kind of trust that will be used should be made. In an interdisciplinary study of trust, the following basic concept of trust was drafted. <sup>13</sup>

Trust emerges from the identification of a need that cannot be met without the assistance of another and some assessment of the risk involved in relying on the other to meet his need. Trust is a willing dependency on another's actions, but it is limited to the area of need and is subject to overt and covert testing. The outcome of trust is an evaluation of the congruence between expectations of the trusted person and actions.<sup>14</sup>

This a broad concept, but it points out that trust is to rely on another. The *another* can be used for a relations to others, but it can also comprehend institutions or states.<sup>15</sup>

<sup>&</sup>lt;sup>11</sup>Sveriges Kommuner och landsting(2012), Vårdbarometern, Befolkningens attityder till kunskaper och förväntningar på hälsa och sjukvård, Årsrapport, 2011. pp16-18.

<sup>&</sup>lt;sup>12</sup>Wendt and Mischke et al (2011), pp1-24.

<sup>&</sup>lt;sup>13</sup> Hupcey, J. and Mitcham, C., et al. (2001)pp.282-293.

<sup>&</sup>lt;sup>14</sup>Hupcey, J. and Mitcham, C., et al. (2001)p 290.

<sup>&</sup>lt;sup>15</sup>Hupcey, J. and Mitcham, C., et al. (2001)p 290.

The main division found in research about trust, is the one between institutional and interpersonal trust. In order to explain the differences between interpersonal and institutional trust the theory by Mishler and Rose was used. In an article by Mishler and Rose, the authors make a distinction between those two types of trust. Interpersonal trust is the same as cultural trust, where the specific experiences of the individual shape the trust, meanwhile institutional trust is shaped and dependent upon the performance of the institutions and the individual's evaluation of it. Mishler and Rose divided trust into two levels, macro and micro. The macro level represents cultural traditions in the case of interpersonal trust and in the institutional trusts it is, the institutional outputs of the institutions that characters trust. The micro level is individual level, where theories of interpersonal trust focus on the role of individual socialization. The micro level of institutional trust has the focus on the role of personal experiences and preferences, mirrored in the evaluation of performance of the institution. <sup>17</sup>

In this thesis the main focus is on the interpersonal trust and its relationship to perception of healthcare.

According to Mishler and Rose interpersonal trust consists of following elements.

**Table 1 Interpersonal Trust** 

Origin	Macro and Micro	Characteristics
Roots outside the political	Macro: national traditions, limited	Trust is correlated with basic forms of so-
sphere.	space for individual variance.	cial relations.
Extension of interpersonal	Micro: various individuals' so-	People who trust others are more likely to
trust, early life socializa-	cialization creates heterogeneous	form both informal and formal networks.
tion having an important	pattern among people.	Inter-personal trust projected into political
role.		institutions.
		The people get the government they deserve.

Based on own interpretation of Mishler and Rose (2001), pp.30-39.

Why should interpersonal trust be examined in relationship to perception of healthcare?

Is there any relationship between trust and confidence in institutions and interpersonal trust? In an article about state and social capital, Rothstein and Stolle examines how attitudes in institutions are related to changes in interpersonal trust. The findings show that citizens make a distinction between politicised institutions and institutions that are regarded to be more impartial. In their theory the interpersonal trust is shaped by the setting of the institution. The environment that the institutions produce

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<sup>&</sup>lt;sup>16</sup>Mishler, W. and Rose, R. (2001) What are the Origins of Political Trust? : Testing Institutional and Cultural Theories in Post-communist Societies. Comparative Political Studies, 34 (1), p.30-62

<sup>&</sup>lt;sup>17</sup> Mishler and Richard(2001), pp.30-39.

is influencing the way the individual acts in relation to others. Their theory had four parts, the level of institutional fairness and efficiency has an effect on the individual perception of her safety and security. Second the interference with the one who are responsible of protecting the public interests. If the officials act in a bad way why should the individual act better towards others? Third way was that, the institution acts will send out a signal, what can be tolerated and what not. Fourth was the direct contact with the institution. If the individual fell discriminated then it can have a negative influence on stances towards others and by that on interpersonal trust. The way the institution act has an influence on the interpersonal trust. The way people feel about the institution can have an effect on how they act towards other people. 18 Healthcare is an essential part of the society and one of the main institutions of the welfare state and by that it can have an effect on interpersonal trust. Since the focus is on the influence of interpersonal trust, theories about what is influencing trust less important, than what the effects of trust are. As stated in the theory, theoretically healthcare can have an influence on interpersonal trust. Rothstein takes up the influence of institutions on level of interpersonal trust. <sup>19</sup> This thesis wants to examine the reverse relationship and will therefore in this chapter be focusing on the effects of lack of interpersonal trust and the relationship interpersonal trust can have on institutions especially healthcare.

What are the effects of lack of interpersonal trust? In his book Uslaner takes up that low level of trust can have long-term effects on obligation to follow common norms and laws. If people do not trust each other, they can feel less obligated to follow social norms. In an article written about the importance of interpersonal trust in the meeting between the doctor and the patient, the effect of interpersonal trust is taken up. It is necessary the patient and the doctor trust each other in order for the meeting to be successful. If there is a lack of interpersonal trust and there is a climate of suspiciousness then the meeting between the people receiving healthcare and those giving out healthcare is harder.

The level of trust can be changed during a life, but the level of interpersonal trust is relatively stable. People who do not feel they can trust most of the people, but who are putting a high trust in people of the same kind as themselves, are labelled as particular trustees. They are afraid of actions of the people they do not know. They mostly trust their family, church or other social groups they are part of.<sup>22</sup> This can be correlated with the welfare. Earlier studies that have focused on differences in support for welfare between socio-economic groups have shown that most people perceive positively parts of

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<sup>&</sup>lt;sup>18</sup> Rothstein, B and Stolle, D,(2008) The State and Social Capital: An Institutional Theory of Generalized Trust. Comparative Politics, 40(4), p441-459.

<sup>&</sup>lt;sup>19</sup> Rothstein, B and Stolle, D,(2008) The State and Social Capital: An Institutional Theory of Generalized Trust. Comparative Politics, 40(4), p441-459.

<sup>&</sup>lt;sup>20</sup>Uslaner(2002),pp210-216.

<sup>&</sup>lt;sup>21</sup>Fugelli, P(2006), Tillit är medicinens grundämne, Läkartidningen, 2006, 103 (25-26)p1961-1964.

<sup>&</sup>lt;sup>22</sup>Uslaner(2002).pp76-114.

welfare from which they themselves benefit and are disapproving measures with no personal utility to them. On the one hand a factor of importance is also the feeling of security which leads persons to support welfare measures even if the benefits are not meeting their acute needs. With a feeling that other people could be trusted, people are more willing to support. This can lead to people who do not benefit directly from the program, yet are willing to support the welfare program due to the feeling of security.<sup>23</sup>

Healthcare is a cornerstone of the welfare state. It is an institution that most people get in touch with during their lifetime. Even if people are not sick all the time, healthcare can be part of the welfare state that they are willing to support even, if it is not meeting their acute needs.<sup>24</sup>. Going back to the theory by Rothstein, there is a link between institutional trust and interpersonal trust.<sup>25</sup> If healthcare is an essential part of the welfare state and if trust has an effect on how the society looks and functions, then it should be reflected in the healthcare.

If the effect of declining of trust, shapes our relationship to other and by that it can also have an impact on our common institutions. Decision to focus on healthcare is due to its significance for the human being and its importance for the functioning of the welfare state. In healthcare the interpersonal meeting between the people working in the healthcare and the patient is important for the result. <sup>26</sup> If a person has a low level of trust, this can affect his relationship to the one, supposed to take care of him. Both Uslaner and Rothstein are pointing out how trust is crucial for our relationship to others. As seen in the theory by Rothstein there is a link between interpersonal trust and the performance of the institutions. Even if the order is reverse in the article, it shows that a link exists. <sup>27</sup> As seen in Uslaner theory trust shapes how we are acting towards other, meanwhile in Rothstein it is the institutions that can have an impact on the institutional trust. In order to see if trust has any effect on institutions, particular on healthcare, this thesis will examine the relationship. There is reasons to believe that interpersonal trust should have an effect how people perceive their institutions, in this case healthcare is taken up as an example of an institution.

Other variables that could have an effect on trust and healthcare are optimism and subjective health. The correlation between optimism and trust is also significant; more optimistic people tend to trust more. One of the main predictors and a big influence and prime mover of interpersonal trust is economic inequality. In times of rising economic inequality the level of interpersonal trust is subject to

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<sup>&</sup>lt;sup>23</sup>Wendt and Mischke et al (2011), pp1-24.

<sup>&</sup>lt;sup>24</sup>Wendt and Mischke et al (2011), pp1-24.

<sup>&</sup>lt;sup>25</sup>Rothstein, B and Stolle, D,(2008) p441-459.

<sup>&</sup>lt;sup>26</sup>Deber B. Raisa, Kreatschmer Nancy, Sharpe Natasha, Urowitz Sara,(2004)

<sup>&</sup>lt;sup>27</sup>Stolle, D. and Rothstein, B. (2008) The State and Social Capital: An Institutional Theory of Generalized Trust,. Ph.D Program of Political Science of the City University of New York, 40 (4), p.441-459.

change.<sup>28</sup> As control variables optimism will be included to see if it, have any impact on the relationship between trust and perception of healthcare. Subjective health can also have an impact on how people perceive their healthcare Therefore it will be included as a second control variable.

# 3.3 Healthcare types (Institutional setup)

The setup of the healthcare can be different across Europe. This chapter will introduce the reader on how institutions work and how it can affect the individual. In the end four types of healthcare will be presented, those will later be used as interaction variables to see how the impact of trust can vary due to healthcare type (institutional setup).

Institutional theory describing institutions and their role: is divided between three theories of institutionalism: rational choice, sociological and historical. Rational choice is the theory that the behaviour of the individual is primarily shaped by strategic calculus. The individual will make decisions on what he perceives will benefit him the most. The role of the institutions is to reduce uncertainty about the behaviour by creating boundaries affecting and restraining the individuals. Sociological institutionalism is defined as pursuing the cultural approach by pointing out that institutions are defined by unquestioned routines, cognitive scripts, moral values, externally imposed rules and sanctioned procedures. Finally historical institutionalism emphasizes the persistence of institutions. The structures of the institutions establish the foundation.<sup>29</sup> With healthcare being one of the main institutions of the welfare state, institutional theory shows, that it can as an institution influence the way the individual behaves and acts in the society.

In previous research about healthcare and its setup the main differences has been between NHS (National Health Service) and SHI (Social Health Insurance System). The main focus of previous research has been on the organizational form.<sup>30</sup> In order to capture other dimensions of the healthcare institution, as accessibility and provision, additional theory was added. One of the theories that will be used in this study is based on the theory composed by Moran. His theory classifies healthcare using the concept of three governing areas.<sup>31</sup>

<sup>&</sup>lt;sup>28</sup>Uslaner(2002).pp79-159, pp, 160-189.

<sup>&</sup>lt;sup>29</sup>Wendt and Mischke et al (2011) pp1-24.

<sup>&</sup>lt;sup>30</sup>Wendt and Mischke et al (2011),pp24-63.

<sup>&</sup>lt;sup>31</sup>Moran Michael (2000), Understanding the Welfare State, the case of healthcare, British Journal of Politics and International Relations, Vol 2, number 2, June 2000, pp 135-60.

**Table 2 Healthcare Classification by Moran** 

Governing Areas	
Consumption	Patient access to healthcare and allocation of re-
	sources.
Provision	Who controls doctors and hospitals
Production	Regulation of medical innovation.

Based on personal interpretation of Moran(2000), pp147-60.

Moran divided healthcare states into four important families or forms of welfare state: the command and control state, the corporatist state, the entrenched command and supply state. The families differ in the way they combine and use the government areas mentioned above.<sup>32</sup> His theory has been further elaborated by other researchers.

Moran's theory has been used by Wendt, who with this concept in his mind divided the European healthcare system into three ideal types. This thesis will for the purposes of comparing healthcare systems in Europe use the types proposed by Wendt. His categories are based on expenditure and institutional characteristics.<sup>33</sup>

To measure healthcare expenditure, specifically what the states spend, he uses the indicator total health expenditure (THE) healthcare financing (who is financing the system). The healthcare financing indicator contains the share of public funding relative to private cost sharing. Here Wendt argues that high self-funding (out-of-pocket payments) can create barriers for lower-income groups, since they can be more hesitant to use healthcare due to the cost. Availability of healthcare provision was measured by the level of healthcare employment. By constructing two indexes: out (general practitioners, pharmacists) and in (specialists, hospital nurses) patients, Wendt was able to get information if the examined healthcare system relied more on primary healthcare or on specialist healthcare. The last category used was institutional characteristic. The institutional regulations should have an effect for the patient. The mode of entitlement was another measure. The main basis for entitlement in Europe is either social insurance or citizenship. Other institutional characteristics used; by Wendt in his study was remuneration of doctors and regulation of patient access to healthcare providers. The access can either be regulated by the government or there can be direct access to the whole healthcare chain. Direct access is more likely in countries with social insurance schemes. By using a agglomerative

<sup>33</sup>Wendt, C. (2009) Mapping European healthcare systems; a comparative analysis of financing, service provision and access to healthcare. Journal of European Social Policy, 19 (5), pp434-445.

<sup>&</sup>lt;sup>32</sup> Moran(2000), pp147-60.

<sup>&</sup>lt;sup>34</sup>Wendt, C. (2009) Mapping European healthcare systems; a comparative analysis if financing, service provision and access to healthcare. Journal of European Social Policy, 19 (5), pp434-445

clustering technique, three types of healthcare system were found (see table below).<sup>35</sup> His study objects were mainly Western and South-European countries.<sup>36</sup>

In another study from 2011 done in cooperation with Riebling, Wendt mentions that previous research had been too focused on the mode of governance without taking into account the financial constraints or the interests of the health policy actors. The same form of governance can lead to different institutional settings. In this study for measuring the public opinion towards healthcare the authors used data from OECD health data from 2008.<sup>37</sup> Access had no effect on the satisfaction with the healthcare system. Across the study people felt that one of the basic fundamental of healthcare was that no person should be excluded from vital healthcare.<sup>38</sup>

Countries that were not mentioned in most of the previous research are Central and Eastern European Countries. In a paper by Sowa, the author examined the healthcare systems in those countries; she examined institutional characteristic cost-sharing and healthcare expenditure. Most of the Central and Eastern European countries have a social insurance scheme, the biggest variations between the countries can be found in the setup of the institutions. Still there are similarities; most of them have similar pasts, which they have had to handle in different ways. According to an article by Sowa the level of under-the-table payment is also high and common practice in all the public services including healthcare. A centralization of insurance has been done in most of the countries expect for Slovakia and the Czech Republic. In the fields of ownership, handling with healthcare units, and payment and management, decentralization has occurred. The local level becomes more responsible. Co-payment is also a common practice, where the patient is expected to pay a part of the cost; this is especially true in the field of pharmaceuticals and medical aids. The role of primary care has changed since the role of general practitioners (GP) as gatekeepers is growing. The development of healthcare is shaped by the lack of financial stability, which is an obstacle that needs to be handled.<sup>39</sup>

By combining findings from both Wendt and Sowa following healthcare types were created.

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<sup>&</sup>lt;sup>35</sup>Two countries did not match any of the ideal types and are therefore left out from the table, those were Netherlands and Greece.

<sup>&</sup>lt;sup>36</sup>Wendt(2009), pp.431-443.

<sup>&</sup>lt;sup>37</sup>Wendt and Mischke et al,(2011, pp1-24.

<sup>&</sup>lt;sup>38</sup>Wendt and Mischke et al (2011), pp1-24.

<sup>&</sup>lt;sup>39</sup> Sowa, A. (2007) National social insurance systems and their reforms, Health care systems in the NMS. Annex 10 Euroframe-EFN Autumn Report,pp 1-23.

**Table 3 Healthcare Types** 

Type of Healthcare	Characteristic	Countries
Health Service Provision-	High level of service provision in	Austria, Belgium, France,
Oriented Type	the outpatient sector.	Germany, Luxembourg
	Social Insurance Contributions	
	Free Access and Free Choice of	
	Medical Doctors.	
Universal Coverage-Controlled	Universal Coverage	Denmark, Great Britain, Sweden,
Access Type	Access to Health care Regulated	Italy, Ireland
	Strong State Responsibility for	
	Health Care Services	
Low Budget- Restricted Access	Low level of health	Portugal, Spain, Finland
Туре	expenditure( per capita)	
	Patient Access to Health care	
	Restricted due to high- private out-	
	of-pocket payments.	
Central and Eastern European	Social Insurance Scheme.	Estonia, Hungary, Czech Republic,
Countries	Co-payment where, patient expect	Slovenia, Slovakia, Poland, Bulgar-
	to pay part of the cost.	ia, Latvia, Lithuania, Romania.
	Decentralization of ownership,	
	local level more responsible.	
	Growing role of the GP as gate-	
	keepers.	

Evolution of Wendt (2009), pp.431-443 and Sowa (2007). 40

When it comes to trust, post-communist countries have large groups of the population distrusting both people and institutions. Research conducted by Mishler and Rose shows that for the purpose of explaining the level of trust in these countries, the most applicable theory was institutional theory.<sup>41</sup>

Post-Communist societies are divided into large groups of individuals who fundamentally distrust both political institutions and their follow citizens, or at least are deeply sceptical of them, and a smaller group who trust institutions and people, if only superficially.<sup>42</sup>

Those countries have a low level of institutional trust which could affect their perception of institutions as healthcare. 43

<sup>&</sup>lt;sup>40</sup>Sowa, A. (2007)

<sup>&</sup>lt;sup>41</sup>Mishler and Rose (2001)

<sup>&</sup>lt;sup>42</sup>Mishler and Rose(2001) p55.

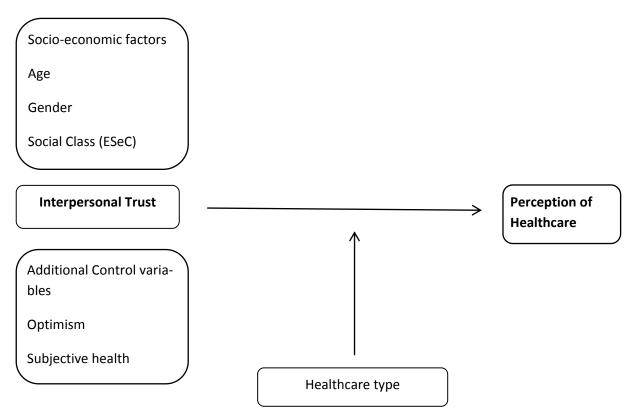
<sup>&</sup>lt;sup>43</sup>Mishler and Rose(2001)

Institutional theory shows that institutions have an influence on the way people behave and that they matter. Therefore in order to see the influence of the setup of healthcare, the above mentioned healthcare types will be used as interaction variables.

#### 3.4 Research Model

The assumption as showed, above with performance of institution being related to interpersonal trust, this study wants to examine if the same can be seen about the opposite direction. As also stated in the theory both the level of trust and the way people perceive healthcare varies between social groups, therefore socio-economic factors are included. Optimism play an important role in trust and subjective health could have an impact on how people perceive their healthcare, those will therefore be included as additional control variables. To see if the type of setup of the healthcare matter, healthcare types will be used as interaction variables.

#### Research model



# 4 Objective of the Study

The objective of the study is to: examine the relationship between interpersonal trust and perceptions of healthcare. This is done to get a better understanding on what influences perception of healthcare across Europe.

As seen in the theory part there is a link between institutions and interpersonal trust. Interpersonal trust is influencing, the way we relate to each other. But since the way people perceive their healthcare can be influenced by other factors, social-economic factors are also included, since they according to theory have an impact on perception of healthcare. As additional control variables optimism and subjective health will be done. By this the study wants to capture other aspects that can also have an influence on the relationship.

By comparing different healthcare types, more knowledge can be added on to the differences between healthcare types. As stated in the introduction, by understanding what shapes how people perceive their healthcare, a better foundation for future decisions can be created.

It also aims to have countries from all parts from Europe in the same study, instead of the split that have been common, where the studies either deals with Western European countries or Central and Eastern European countries. This thesis will include both Western and Central and Eastern European countries in the same study.

#### **4.1 Research Question**

The main focus for this thesis: is to get a better understanding on what shapes perception of healthcare by analysing the influence of different factors, with a special focus on the impact of trust. The main research questions are therefore:

What impact does interpersonal trust have on perception of healthcare?

What impact do other factors as gender, social class and age have on perception of healthcare in comparison with interpersonal trust?

Which contrasts regarding interpersonal trust and perception of healthcare can be seen between the different healthcare types, especially between Western and Central Eastern European Countries?

#### 5 Method

This chapter will start with a short description of the data that will be used in the study. It will thereafter continue with presentation of variables included and end in description of the method.

#### **5.1 Data**

This study will uses, data from the European Social Survey (ESS) round 2 from 2004. ESS is a survey conducted every second year. It covers a range of various aspects shaping the life of the individual European. Each time there is a rotating module with a specific theme, in addition to the standard questionnaire. In 2004 the rotating module was about healthcare. The ESS is a widely used source for research. It is on an individual level, with the possibility to download individual data for countries involved. As stated in the research aim, there are other options when doing research regarding healthcare that could be used. This thesis uses the ESS to help broaden the field of data used for research regarding healthcare. Other sources that have been used for research on healthcare are for example statistics from WHO or Eurobarometer.

The decision to use data from 2004 is based on the selection of countries by Wendt, but mainly because that the rotating module about healthcare was this year. There was a wish to include more years in the study, but it was found that countries included in the study changed from year to year. Therefore the proposal to include more years in the study failed. This could be a proposition for future research, to include more years, in order to see if the relationship change.

#### **5.2 Individual level: Variables**

In order to answer the research questions the following variables have been chosen based on previous research and theory.

#### **Perception of healthcare**

For the perception of healthcare the variable **state of health care services** was used. The variable is a 10 scale variable where the respondents had to rank what they thought, about the state of healthcare services in their country from very bad to very well.<sup>46</sup>

#### **Interpersonal Trust**

To measure interpersonal trust the variable, **most people can be trusted or you cannot be too careful** was used. It is an ordinal variable with a scale ranging from 1 to 10, where 1 is low trust and 10 high.<sup>47</sup>

<sup>&</sup>lt;sup>44</sup>ESS Round 2: European Social Survey Round 2 Data (2004). Data file edition 3.3. Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data.

<sup>&</sup>lt;sup>45</sup>http://ess.nsd.uib.no/ 15/05/2013

<sup>&</sup>lt;sup>46</sup>The variable was an ordinal variable composed as a scale 0: Extremely bad to 10 extremely good. The original name in the ESS round 2, 2004 dataset was stfhlth.

<sup>&</sup>lt;sup>47</sup> The variable was an ordinal variable composed as a scale going from O: you can't not be too careful to 10: most people can be trusted. The original name in the ESS round 2, 2004 dataset was ppltrst.

#### Control Variables Socio-economic factors, Optimism and Subjective Health

Socio-economic factors have been chosen in order to get more knowledge on perception of healthcare and for a comparison with the impact of trust. First is **age**<sup>48</sup>, it will be used to see if age plays any role in how people perceive their healthcare. **Gender** was included.<sup>49</sup> And also **Social class The European Socio-Economic Classification** (ESeC classification) will be used.

ESeC classification is a concept used to capture social class and stratification. It was developed to simplify comparative research regarding social class. By using the classification of social class by ESeC, the variable can be used as a tool to be able to compare social class distribution across Europe. The main focus for the ESeC classification is employment status. The employment status of the individual determines social class. The main distinction is between employers (those who buy labour from others and are taking charge and some degree of control over employees). Self-employee (those one who do not sell or buy labour), Employees (the ones who sell their labour and by that place themselves under the authority of their employer.) There is also a fourth category the excluded (those who are not anything of the above.). In EseC, there are ten classes ranging from Class One, Large Employees, higher grade professional, administrative and managerial positions, to Class Ten: Never Worked and Long Term Unemployed. <sup>50</sup>

To create an ESeC variable from the ESS dataset following syntax was used.<sup>51</sup> The variable was inverted so instead of ranging from nine to one, the scale is from one to nine.

To capture other aspects than socio-economic factors that could have an influence on interpersonal trust and healthcare, two additional control variables were chosen and included. Those were optimism and subjective health status. Optimism is according to the previous theory by Uslaner associated with trust.<sup>52</sup> By using optimism as a control variable it will be possible to distinguish between the impact of trust and the impact of external factors such as optimism. Optimism will be captured by the variable **how happy are you.**<sup>53</sup>

<sup>&</sup>lt;sup>48</sup>Age is a scale ranging from 13 to 102 years. The original name in the ESS round 2, 2004 dataset was agea. Regression for age categories was also tried out, but since it does not showed any significant variation between the age groups, the decision to use the age as a continuous variable stayed.

<sup>&</sup>lt;sup>49</sup>Gender is a categorical variable, where 1 stands male and 2 for female. The original name in the ESS round, 2 dataset was gndr.

<sup>&</sup>lt;sup>50</sup>Rose D., And E Harrison (2009), The European socio-economic classification, Social Class in Europe. An Introduction to the European Socio-Economic Classification, London and New York, Routledge, pp 3-39.

<sup>&</sup>lt;sup>51</sup>http://www.svt.ntnu.no/iss/EseC2.htm 16/4/2013

<sup>&</sup>lt;sup>52</sup>Uslaner(2002),p189.

<sup>&</sup>lt;sup>53</sup>The variable is a ordinal variable composed as a scale, with 0: extremely unhappy and 10: extremely happy. Histogram showed that the variable was skewed to the right. Decision not to log the variable was made. The original name in the ESS round 2, 2004 dataset was happy.

The second control variable is **subjective health status**; the assumption here is that the health of the individual can have an impact on their stances towards healthcare. To clarify the impact of selected factors and variables a control variable regarding the health of the individual can be necessary.<sup>54</sup>

## **5.3** Healthcare types

Cases will be divided along four healthcare provision types. The countries included will be taken from the study, "Mapping European Healthcare systems: a comparative analysis of financing, service, provision and access to healthcare" by Wendt, except the Central and Eastern European Countries. The three first categories are taken from the theory based on the above mentioned study; the fourth category is the Central and Eastern European countries, which form their own category to enable the measurement of differences between new and old member states. The interest here is the differences between the healthcare types and also the division between Central and Eastern European countries and other countries. The choice of CEEC countries is limited to countries included in the European Social Survey round 2, 2004. <sup>56</sup>

**Table 4 Selected Countries per Healthcare Type** 

Countries Selected			
Type 1	Type 2	Type 3	Type 4
Health-Service Provi-	Universal Coverage-	Low Budget-Restricted	Central and Eastern
sion Oriented	Controlled Access	Access	European Countries in
			EU
Austria	Denmark	Portugal	Estonia
Belgium	Great Britain	Spain	Hungary
France	Sweden	Finland	Czech Republic
Germany	ermany Italy		Slovenia
Luxemburg	Ireland		Slovakia
			Poland

<sup>56</sup>The division of the countries was done by creating new variable that divided the countries into four categories.

<sup>&</sup>lt;sup>54</sup>The variable was ordinal variable first ranging from 1: very good, 2: good, 3: fair, 4:bad, 5:very bad. After the inversion the new value was the opposite, with 1:very bad, 2: bad, 3: fair, 4: good and 5:very good. The original name in the ESS round 2, 2004 dataset was health.

<sup>&</sup>lt;sup>55</sup>Wendt(2009) pp434-445.

#### Short description of the Healthcare types included

The Health Service Provision Oriented type is characterized with a high level of service contribution in the outpatient sector. The mode of financing is Social Insurance contributions, which is also the mode of entitlement. The access to doctors and the choice of doctors is open, there is no gatekeeping.<sup>57</sup>

The Universal Coverage- Controlled Access Healthcare type is characterized by strong state responsibility for healthcare care provision with universal coverage. Also the access to the healthcare is regulated by the state and the free choice is limited. <sup>58</sup>

The low budget-restricted access healthcare type is characterized by low level of health expenditure and patient access to healthcare is restricted by high-out-of-the-pocket payments but also due to institutional characteristics. <sup>59</sup>

There is a variation in the setup of healthcare system in Central and Eastern European countries. Still there are similarities that are common in all countries. The level of informal payment as under-the table payment is high and widely used practice in all public services including healthcare. Another common practice is co-payment, where the patient is expected to pay a part of the cost. Majority of the countries have a social insurance scheme and a centralization of the insurance have been taken place with the exception of Slovakia and Czech Republic. There is bigger burden on the local level, since decentralization has taken place in the fields of for example ownership and handling of healthcare units. The development of healthcare is constrained by lack of financial stability in the area. <sup>60</sup>

<sup>&</sup>lt;sup>57</sup>Wendt (2009), pp438-442.

<sup>&</sup>lt;sup>58</sup>Wendt (2009), pp438-442.

<sup>&</sup>lt;sup>59</sup>Wendt (2009), pp438-442.

<sup>&</sup>lt;sup>60</sup>Sowa(2007) pp 1-23.

#### 5.4 Method

The fundamental limitation of a quantitative study is that is not as exhaustive as a qualitative. The positive of doing a qualitative study is that you can get more depth. The reason to use a quantitative method is due to the nature of the study. It aims to cover a large quantity of data; the quantitative method is better suited for the purpose than the qualitative method.<sup>61</sup>

The method that will be used is statistical analyse and the level of unit will be individuals. By using linear regression it will be possible to distinguish and determine the effect of the variables on the perception of healthcare.

#### 5.5 Regression

Regression is used for measuring the impact of the independent variable on the dependent. The regression used in this study will be linear regression. All of the variables are ordinal except age and gender. Age is a scale and gender is a categorical variable.<sup>62</sup>

The ordinal variables will in this study be used as scales. Linear regression will produce a more robust model than an ordinal regression and it will be easier to measure impact of independent variables on the dependent. Another option would be to use ordinal regression.<sup>63</sup> To test if there would be another result with ordinal regression, a test regression was made. The result and the values were similar to the result from the linear regression.<sup>64</sup> Therefore the decision to stay with the linear regression was made. The regression was done in following way, first there was a bivariate regression for all the independent variables in correlation with the dependent variables and the control variables. This highlighted the impact of every single independent variable on the independent variable. This was labelled as model one in the regression table. In model two all independent variables were included; with this regression it was possible to see how the independent variables influenced the dependent variable under control for each other. In model three additional control variables were included; this made it possible to see the influence of the independent variables with the influence of additional control variables. Control variables are selected based on an assumption that they can have an impact on the dependent variable that is not captured by the independent variables.<sup>65</sup>

With the result from the regression, it will be possible to answer my research questions and the results will be presented under the headline result.

<sup>&</sup>lt;sup>61</sup> Esaiasson, P. and Gilljam, M., et al. (2007) Metodpraktikan. 3rd ed. Stockholm: Norstedts Juridik, p.393-440.pp.393-440.

<sup>&</sup>lt;sup>62</sup> Field, A. (2009) Discovering Statistics using SPSS. 3rd ed. London: SAGE Publications Ltd, pp197-261.

<sup>&</sup>lt;sup>63</sup>Field(2009), pp.264-313.

<sup>&</sup>lt;sup>64</sup>The syntax and data can be provided upon request from the author.

<sup>&</sup>lt;sup>65</sup>Esaiasson and Gilljam et al., (2007)pp.393-441.

# 6 Results and Analysis

The results are presented in the following way; first there is a brief description of the variables. Since the method for analysis is regression, a multicollinearity diagnostic for all the variables was performed in order to determine if a regression can be performed.

The results are presented in three different models. First there is bivariate regression; this shows the influence and significance of the single variables on the dependent variable (perception of healthcare). Thereafter a regression with all variables used was performed. This shows the impact of the variables on each other in correlation with the dependent variable. The last model adds control variables to control for the result.

All of the results are presented in their own table starting with the result for all countries and thereafter results for each healthcare type. With this there is the possibility of comparing the results between the healthcare type and through that answer the research question about the differences between healthcare systems.

#### **6.1 Descriptive Statistic**

In the table the min and max describes the highest and lowest value of the variables. When reading the mean, the highest and lowest values should be taken in account.

There are differences across the healthcare types. In type one the perception of healthcare has the highest value. Trust and optimism are highest in healthcare type three. According to the theory by Uslaner about the impact of optimism on trust, the result supports his theory, where optimism is high, the trust is also high. In healthcare type four, Central and Eastern European Countries, the mean for all variables are lower than in rest of the healthcare types.

Since the gender variable is categorical, a better description of the variable is to show the distribution in the healthcare types. This shows that the distribution of gender is equivalent in all the healthcare types with slightly more women than men in all the groups.<sup>68</sup>

<sup>&</sup>lt;sup>66</sup>Uslaner(2002),p189.

<sup>&</sup>lt;sup>67</sup>For composition of groups and individual countries mean, see Appendix 1-4.

<sup>&</sup>lt;sup>68</sup>See Appendix 6.

**Table 5 Descriptive Statistics All variables** 

Descriptive S	ta-(Min-Max	) All countries	All Countries	Type 1	Type 2	Type 3	Type 4
tistics		Standard	Mean				
		Deviation					
State	of 0-10	2,485	5,41	6,07	4,97	6,39	4,45
Healthcare							
Trust	0-10	2,40	5,05	4,84	5,31	5,78	4,21
Age	13-102	18,337	46,92	45,70	47,62	46,29	45,76
Gender	1-2	0,499	1,53	1,52	1,52	1,51	1,54
Class	1-9	2,84725	4,83	5,02	4,86	4,57	4,23
Optimism	0-10	1,946	7,24	7,40	7,22	7,73	6,61
Subjective	1-5	0,89463	3,84	3,8392	3,9549	3,7484	3,5162
Health							

The collinearity diagnostic showed that risk for multicollinearity is low, with a tolerance value under 1 and a variance inflation factor (VIF) value under 2, the risk is low.<sup>69</sup> This allowed for the option to run a regression analysis. If the value of tolerance would be over 1, it would not be a good option to run a regression. Also if the VIF value is above 5 it is not a good option to perform a regression analysis.<sup>70</sup>

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<sup>&</sup>lt;sup>69</sup> See Appendix 5.

<sup>&</sup>lt;sup>70</sup>Field, A. (2009) Discovering Statistics using SPSS. 3rd ed. London: SAGE Publications Ltd, 2009,pp197-261.

### 6. 2 Regressions

#### **6.2.1 Model One Bivariate Regression**

#### **Table 6 Model One**

Model One	All Coun-	Type 1	Type 2	Type 3	Type 4
(Bivariate)	tries	Health Ser-	Universal	Low Budget-	Central And
DV State of	All countries	vice Provi-	Coverage-	Restricted	Eastern Eu-
Healthcare		sion Oriented	Controlled	Access.	ropean Coun-
			Access		tries
Interpersonal	0,217	0,190	0,194	0,237	0,175
Trust	(0,006)**	(0,010)**	(0,010)**	(0,016)*	(0,011)*
Age	0,001	-0,004	0,011	0,005	0,001
	(0,001)***	(0,001)***	(0,001)***	(0,002)**	(0,001)***
Gender	-0,376	-0,398	-0,378	-0,134	-0,035
	(0,006)**	(0,048)*	(0,044)*	(0,071)	(0,010)**
Social Class	0,018	0,015	0,003	-0,016	0,60
(ESeC)	(0,006)**	(0,009)**	(0,008)**	(0,013)*	(0,052)
Control Vari-					
able					
Subjective	0,318	0,482	0,143	0,242	0,230
Health	(0,017)*	(0,027)*	(0,027)*	(0,041)*	(0,027)*
Optimism	0,326	0,339	0,240	0,276	0,181
	(0,007)**	(0,012)*	(0,011)*	(0,021)*	(0,012)*
Constant					
R2					
N:					

<sup>\*</sup>p<.05 \*\* p<.01 \*\*\*p<.001. Standard errors within parentheses

The largest significance for trust can be found in type four *CEEC* and type three *Low Budget-Restricted Access*. The largest influence on perception of healthcare due to trust is found to be type three *Low Budget-Restricted Access* compared with the results from all countries.

The results for the socio-economic factors showed that age was significant across all healthcare types, even if the influence was small. Result for gender shows that it is the most significant parameter for all countries, especially in healthcare type four *CEEC*. But gender is also significant in type one

Health Service Provision Oriented, and in type two Universal Coverage-Controlled Access. Gender is important when it comes to perception of health. The social class has a relationship where going up on class variable, is increasing perceptions of healthcare.

The results for the control variables reveal that: subjective health impact on perception of healthcare is large. Subjective health had the largest influence in type one. For the control variable optimism, the result showed that in all countries, that optimism was significant in all healthcare types.

The result from the bivariate regression shows that trust is related to perceptions of healthcare, across all healthcare types. It also tells that there is variation between the healthcare types. The influence so-cio-economic factors will be presented in model two.

#### 6.2.2 Model 2

**Table 7 Model two** 

Model 2	All Coun-	Type 1	Type 2	Type 3	Type 4
DV State of	tries	Health Ser-	Universal	Low Budget-	Central and
Healthcare		vice Provi-	Coverage-	Restricted	Eastern Eu-
		sion Orient-	Controlled	Access	ropean
		ed Type	Access		Countries
					Type
Interper-	0,224	0,198	0,213	0,245	0,179
sonal Trust	(0,006)**	(0,0011)*	(0,010)**	(0,017)*	(0,012)*
Age	0,005	0,001	0,014	0,007	0,008
	(0,001)***	(0,002)**	(0,001)***	(0,002)**	(0,002)**
Gender	-0,350	0,427	-0,376	-0,126	-0,54
	(0,031)**	(0,051)	(0,046)*	(0,073)	(0,010)**
Social Class	-0,006	-0,008	-0,020	-0,033	0,080
(ESeC)	(0,005)**	(0,009)**	(0,008)**	(0,013)*	(0,056)
Control					
Variable					
Subjective					
Health					
Optimism					
Constant	4,572	5,789	3,795	5,004	3,308
	(0,077)	(0,126)	(0,116)	(0,186)	(0,131)
R2	0,052	0,045	0,060	0,064	0,031
N:	25145	8911	10380	3139	8535
·	alesteste OO1 G	1 1 1.11	1	1	1

<sup>\*</sup>p<.05 \*\* p<.01 \*\*\*p<.001. Standard errors within parentheses

When it comes to the effect of trust on perception of healthcare there are variations across the healthcare types. In both type one *Health Service Provision Oriented* and type three *Low Budget-Restricted Access*, the effect of trust is higher than for the rest of the countries. The findings for trust in type three show that trust has large influence on perception of healthcare. The smallest effect of trust on perception of healthcare can be found in healthcare type four *CEEC*. Compared to all countries the influence of trust is lower in both type one and type four.

When compared to model one; the influence of trust on perception of healthcare is higher.

An examination of the socio-economic factors, reveals that: the influence and significance of gender changes from model one, gender remains still significant in type four and type two: *Universal Coverage-Controlled Access*, but the significance is lower for the other healthcare types. Age and gender are more important for predicting perception of healthcare than social class in this model. The influence of class diminishes in this model. The results are controlled for in model three. R2 is small; the model can only explain five per cent of the changes in the dependent variable.

#### **6.2.3 Model 3**

#### **Table 8Model Three**

Model 3	All Coun-	Type 1	Type 2	Type 3	Type 4
DV State of	tries	Health Ser-	Universal-	Low Budget-	Central and
Healthcare		vice Provi-	Coverage	Restricted	Eastern Eu-
		sion Orient-	Controlled	Access	ropean
		ed	Access		Countries
Interper-	0,166	0,145	0,174	0,189	0,152
sonal Trust	(0,007)**	(0,011)*	(0,011)*	(0,018)*	(0,012)*
Age	0,008	0,006	0,015	0,012	0,016
	(0,001)***	(0,002)**	(0,001)***	(0,002)**	(0,002)**
Gender	-0,022	-0,033	-0,028	-0,045	0,095
	(0,006)	(0,009)**	(0,009)**	(0,013)*	(0,055)
Class	-0,386	-0,434	-0,406	-0,171	-0,076
(ESeC)	(0,32)	(0,049)*	(0,049)*	(0,072)	(0,010)**
Control					
Variable					
Subjective	0,100	0,287	0,009	0,198	0,215
Health	(0,020)*	(0,032)*	(0,032)*	(0,048)*	(0,036)*
Optimism	0,268	0,268	0,196	0,232	0,148
	(0,009)**	(0,014)*	(0,014)*	(0,024)*	(0,014)*
Constant	2,554	2,787	2,591	2,649	1,360
	(0,120)	(0,188)	(0,184	(0,295)	(0,207)
R2	0,093	0,105	0,084	0,100	0,054
N:	22818	8874	9224	3131	8472

<sup>\*</sup>p<.05 \*\* p<.01 \*\*\*p<.001. Standard errors within parentheses

#### **Trust**

The effect of trust is lower than in model two. Also the significance for trust changes in healthcare type two *Universal Coverage-Controlled Access*. The influence of both additional control variables shows that the influence of trust is changed in comparison to model two. The change is moderate with trust still being significant in all healthcare types and also in *All countries*. The lowest influence of trust on perception of healthcare is type one *Health Service Provision Oriented* compared to result of *All countries*. Compared to *All countries*, type four *Central and Eastern European Countries* trust had also a lower influence. In both type one *Health Service Provision Oriented* and four *Central and Eastern European Countries*, social insurance is the most common form of contribution to health payment. This shows similarities with the previous research where there are differences between Social Insurance System and National Health System<sup>71</sup> When comparing the results from healthcare type two *Universal Coverage-Controlled Access* and healthcare type three *Low Budget-Restricted Access* those two healthcare types show a higher value on the effect on trust than the result for *All Countries*.

#### **Socio-Economic factors**

The relationship between social class and perception of healthcare confirms results from a similar research about satisfaction with healthcare where people from higher classes tend to more satisfied with their healthcare system<sup>72</sup>. The influence of class is largest in model one, especially in healthcare type one *Health Service Provision Oriented*. At the same time the influence of class is smallest in type four compared to the results from all countries. In the healthcare type three *Low- Budget-Restricted Access*, the access of healthcare is restricted due to high out-of-pocket payments. Age is significant in all types and also for *All countries*. The significance of gender has diminished in healthcare type four *Central and Eastern European Countries*; there is a possibility that the significance is influenced by the influence of the control variables. Gender is significant in type one *Health Service Provision Oriented* and two *Universal Coverage-Controlled Access*.

#### **Additional Control Variables**

In model three *Low-Budget-Restricted Access* the control variables subjective health and optimism were added. The influence of both control variables are high compared to the other variables. The influence of subjective health is high, but the difference between the influence of trust and the influence of subjective health is not so wide. Optimism the second control variable influence on the perception of healthcare has a large influence on perception of healthcare and is also significant. In model three the control variables subjective health and optimism were added. The influence of both control variables are high compared to the other variables.

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<sup>&</sup>lt;sup>71</sup>Kolh, J. and Mischke, M., et al. (2010), pp. 177-192

<sup>&</sup>lt;sup>72</sup>Kolh, J. and Mischke, M., et al. (2010) pp. 177-192

## **6.2.4** Comparison of the models

#### **Trust**

When adding control variables the influence of trust is lower, but has the same significance. Compared to model one and model two the influence of trust is lower in model three. Trust has an influence on the perception of healthcare.

#### **Socio-economic factors**

Age is in all three models most significant in healthcare type two Universal-Coverage, Controlled Access. The significance of age changed in healthcare type four Central and Eastern European Countries. Findings from another study from a country (Sweden) in healthcare type three Low Budget-Restricted Access showed that there is difference between the age group and their trust in healthcare. Eighty and older were more inclined to trust healthcare and thirty-to thirty-nine were least inclined to trust healthcare.<sup>73</sup> When it comes to perception of healthcare this relationship cannot be proved to be same, the results show that effect of the age variable on perception of healthcare is higher than for other types, in all three models. The significance of gender is most significant in healthcare type two Universal Coverage- Controlled Access. It is significant in healthcare type two, in all three models. In model one and two, gender was still significant, but changed in model three. The impact of the control variables takes away the significance of gender in the healthcare type four Central and Eastern European Countries. Healthcare type one Health Service Provision Oriented show the opposite result, adding the control variables raises the significance for gender. The influence of and significance of class change between the models, in model one class has a positive relationship, which changes to an inverse relationship in model three. The impact of the other variables changes the effect and significance of class.

#### **Additional Control Variables**

The high influence of the additional control variables on perception of healthcare, are high, but the significance is not larger than for other variables. The influence of subjective health is high across all models. Optimism on has a large influence on perception of healthcare and is also significant. Compared to the results from all countries subjective health is larger in healthcare type one *Health Service Provision Oriented* and type four *Central and Eastern European Countries*. This finding supports the previous research statement, that there are differences between Social Insurance System and National Health System.<sup>74</sup>

<sup>&</sup>lt;sup>73</sup>Sveriges Kommuner och landsting(2012), Vårdbarometern, Befolkningens attityder till kunskaper och förväntningar på hälso och sjukvård, Årsrapport, 2011.

<sup>&</sup>lt;sup>74</sup> Kolh. J. and Mischke. M., et al. (2010), pp. 177-192

R2 is low across the models are, ten per cent or less, which mean that general assumptions cannot be drawn. The result is valid for this study, but in order to draw general conclusion the R2 should have been higher.

#### 7 Conclusion

Interpersonal trust had an influence on perception of healthcare, across all healthcare types. Others factors as age, gender and social class also influence perception of healthcare.

There are differences between individual characteristic and level of interpersonal trust and a part of the variances can be explained by type of healthcare. Both Central and Eastern European Countries have a lower level of both interpersonal trust and perception of healthcare compared to the rest of the countries.

The healthcare types used provision and access as the main distinctions.<sup>75</sup> The impact of access is found in the results of the two healthcare types with limited or restricted access: trust had a larger impact on the perception of healthcare. Provision had a minor role in the correlation between trust and healthcare; access was the dominant factor. It shows that the institutional setup have an influence on the relationship between trust and perceptions of healthcare.

Results for the class variable showed that across all healthcare types in model three there exist a positive correlation between perception of healthcare and class. The finding for age showed, that age has an impact on perception of healthcare. The influence of gender varied between the healthcare types and the models. Results showed that the significance of gender on healthcare perception is influenced both by the healthcare type and by the impact of the additional control variables; subjective health and optimism.

The impact of gender, age and social class varied between the healthcare types, which showed that the result differs due to healthcare type. Results showed that there can be differences between various social groups in the society. It is hard to distinguish the differences between the healthcare types and determine which parameter causes the change. Still there are differences as presented above.

Central and Eastern European countries had both lower interpersonal trust and perception of healthcare compared to the rest of the countries included in the study. Using the theory about the connection between interpersonal trust and institutions, it can that the structure of the institutions and their performance that could be mirrored in the low level of interpersonal trust. The effect of trust on perception of healthcare was low in this region. In this region it was rather one of the additional con-

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<sup>&</sup>lt;sup>75</sup>Wendt(2009) pp434-445.

trol variables that had the largest effect. It can be that a society with lower levels of trust, other aspects can become more important when it comes to shaping perception of healthcare.<sup>76</sup>

The R2 value was low which means that a general conclusion cannot be drawn from this study. The results are valid only for this study. Still this study shows that there are differences between what is shaping the perception of healthcare, even if only valid for this study, it has a contribution to a better understanding. Every small piece of new knowledge is valuable, in the search for more knowledge and for understanding of the human society.

#### 8 Discussion

What can be learned from this study? The aims of this study was to acquire more knowledge about what shapes the perception of healthcare with a special focus on trust and to determine if there were contrasts between the healthcare systems. More knowledge can give a better foundation for decision making about European healthcare. Going back to the introduction of the thesis, research was one of the main tools specified by the EU in their healthcare strategy 2008-2013.<sup>77</sup>

The strength of this study could be improved by increasing the time span and also by taking into account external factors. The reason to not include more years was that changing composition of countries disallowed more years. The study was general and covered a wide range of subjects. This can either be seen as a weakness or as strength. It touches upon and opens up for additional research, with new correlations to discover.

A contribution was also that a comparative study including all parts of Europe was made. It shows that is possible to include all types of countries in the same study. On one side it can be easier to have similar healthcare types if the aim is for example to study correlation between trust and healthcare. But in a study like this where the impact of the healthcare types is important, it is strength to have different kind of countries included. To take all parts of Europe in account when describing perceptions of European healthcare provides for a better understanding and possibility to influence the future decisions regarding healthcare in each region. It was also done to inspire future research, to think outside the box and include all Europe when doing comparative research on European welfare. This can be a challenge, but also an opportunity.

Another contribution that was made was that the results, varied between the healthcare types. It shows the impact of institutional setup, when it comes to shape the perception of the people. On the other hand it can be hard to know, what is influencing. Is the people that are influencing the system or is the sys-

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<sup>&</sup>lt;sup>76</sup>The overall levels of trust in CEEC countries are lower as shown in other studies on trust. One example is: Delhey, J. and Newton, K. (2003) Who Trusts?: The Origins of Social Trust in seven societies, . European Societies, 5 (2), p.93-137.

<sup>&</sup>lt;sup>77</sup>Press Release, COM(2009) 567 Final.

tem that is influencing the people? Why is it so relevant to know about perception of healthcare? Healthcare is one of the institutions that every individual meet on some stage of their life and is essential part of the welfare state. To know what shaping perception of healthcare is, is to know what is shaping perception of the institutions nearest the individual's wellbeing.

The result for gender shows that gender plays a major role in some healthcare types. Previous research has not mentioned the role of gender; this study shows it can have an impact on the perception of healthcare. Can it be that the systems themselves create the differences or are other factors more important to explain the impact of gender? In this study the impact of the control variables changed the effect of gender in two of the healthcare types. To examine gender and the correlation between subjective health and perception of healthcare would be an interesting opportunity for future research to achieve a better understanding of the role of gender in perception of health. A proposition for new research would be to examine the impact of healthcare system on gender and class in correlation with perception of healthcare.

This study contributes with a new understanding on what is influencing people to perceive their healthcare in a positive way. In a society where voices are raised about the decline of healthcare and discontent with healthcare, knowledge about what makes people perceiving their healthcare in a more positive way is important. The welfare state is under pressure and healthcare by being one of main foundations of healthcare will face obstacles. It will be interesting in the future, to see how the continuous transformation of healthcare will be reflected in trust. Why is trust important? Is it the bond that link us people together, a prerequisite for a functioning society. Therefore it was relevant to have a focus on the aspect of trust and its impact on perception of healthcare.

# 9 Summary

The aim of this thesis was to examine the relationship between interpersonal trust and perceptions of healthcare. The introduction takes up the need for more research on European Healthcare. In their health strategy for the years 2008 to 2013, the EU calls out for the need for more research regarding healthcare.

Trust has a wide definition. The main division is between interpersonal and institutional trust. The focus of in this thesis was the relationship between interpersonal trust and perception of healthcare. Theory showed that there could be a relationship between performance of institutions and interpersonal trust. The thesis wanted to examine the opposite relationship and to justify this, theory about effects of lack interpersonal trust and its relationship to welfare and welfare institutions.

Previous research about healthcare typologies had not taken in account access and type of provision. Therefore the thesis uses typology created by Wendt, where he by using statistical analyse divides chosen European countries into three type of ideal types: Health Service Provision Oriented, Universal Coverage-Controlled Access, Low budget-Restricted Access. In order to incorporate more countries in the study Central and Eastern European Countries were included in their own category. Healthcare types were used as interaction variables.

The objectives of the study and research question were specified in the research aim. The impact of socio-economic factors was added.

The method used was linear regression. The data used was from European Social Survey round 2 from 2004. The dependent variable was perception of healthcare with the trust, age, social class and gender used as independent variables. As control variables optimism and subjective health were used.

Results show that there are differences between the healthcare types, both in significance and effect of trust on perception of healthcare. Socio-economic factors had an influence. CEEC Countries had the lowest score on both interpersonal trust and healthcare perception and also the effect of trust was lower than for other healthcare types. The effect of trust varied between the healthcare types. This confirms that institutional setup matter.

In the conclusion the results were summarized. In the discussion contributions of the study was taken up. One of the contributions was that it included countries from all parts of Europe.

# **Appendix**

# 1. Composition Health Service Provision Oriented Healthcare type 1

Countries Included	State of healthcare( 0-	Trust (0-10)
	10)Mean	Mean
Austria	6,49	5,11
Belgium	7,19	4,79
Germany	4,68	4,75
Luxemburg	7,06	5,01
Healthcare Type 1 Overall	6,07	4,84
Score		

# 2. Composition Universal Coverage-Controlled Access Healthcare type 2

Countries Included	State of Healthcare(0-10) Mean	Trust (0-10)
		Mean
Denmark	6,42	6,76
Great Britain	5,43	5,14
Sweden	5,21	6,05
Italy	4,65	4,30
Ireland	4,10	5,89
Healthcare Type 2	5,08	5,64
Overall Score		

# 3. Composition Low Budget-Restricted Access healthcare type 3

Countries Included	State of Healthcare	Trust
Portugal	3,47	3,88
Spain	5,79	4,89
Finland	6,89	6,52
Healthcare Type 3 Overall	6,39	5,78
Score		

# 4. Composition Central and Eastern European Countries Healthcare type 4

Countries Included	State of Healthcare (0-10) Mean	Trust
		Mean
Estonia	4,25	5,18
Czech Republic	5,33	4,16
Poland	3,10	3,60
Slovakia	5,65	4,02
Slovenia	4,89	4,13
Healthcare Type 4 Overall	4,45	4,21
Score		

# 5. Collinearity diagnostic

Dependent Variable	Tolerance	VIF Value
State of Healthcare		
Trust	0,917	1,090
Age	0,873	1,146
Gender	0,997	1,003
Class	0,964	1,037
Subjective Health Status	0,769	1,3010
Happiness	0,854	1,170

# 6. Distribution of Gender

Distribution of Gender	Male %	Female %
All countries	47,5	52,5
Health Service Oriented Type 1	48,2	51,8
Universal Coverage- Controlled Access Type 2	47,6	52,4
Low Budget- Restricted Access Type 3	48,8	51,2
Central and Eastern European Countries Type 4	45,9	54,1

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