

#### UNIVERSITY OF BERGEN

Institute of Administration and organization theory

## Master thesis

# **Terrorism and Political Trust**

A study of the relationship between terrorism and political trust in Europe in the time period 2002 to 2016, and a causal exploration of the relationship between the two phenomena

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Spring, 2019

#### **Abstract**

This thesis explores the relationship between terrorism and political trust. This is done in two ways, by two sub-studies, in order to get a more comprehensive understanding of the relationship between the two phenomena. The first sub-study uses *longitudinal multilevel regression* to explore the historical empirical relationship between terrorism and political trust, in Europe for the time period 2002-2016, focusing specifically on the *parliaments*, the *legal systems*, the *police*, and the *politicians*.

The second sub-study consists of a *survey experiment* specifically designed to explore the causal relationship between terrorism and political trust. Concretely, building on trust theories and rooted within an institutional framework, the paper suggests a theoretical framework that has a potential for explaining the causal relationship between terrorism and political trust. A central mechanism in this theoretical framework is individuals' perception of institutions' capacity to deal with terrorism. It is this mechanism, *capacity perception*, that is explored in the survey experiment.

The results from the regressions shows that *within-country variation over time* has affected the political trust in Europe. The effect has, however, been somewhat limited. The effect has also varied between institutions, where the police have received increased trust, while the parliaments and politicians have had their trust reduced, and the legal systems seem unaffected. The results from the survey experiment shows that *capacity perception* is a causal mechanism in the relationship between terrorism and political trust, but that its' influence and role varies depending on the institution at hand.

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### List of abbreviations

ANOVA Analysis of Variance

**AOR** Area of Residence

**BIC** Bayesian Information Criterion

**DGP** Data Generation Procedure

**ESS** European Social Survey

GDP/C Gross Domestic Product per Capita

**GTD** Global Terrorism Database

**GTI** Global Terrorism Index

**HDI** Human Development Index

**ICC** Intraclass Correlation

**IEP** Institute for Economics and Peace

IRA Irish Republican Army

ISIS Islamic State of Iraq and Syria

ISO International Organization for Standardization

MC Methodological Collectivism

MENA Middle East and North-Africa

MI Methodological Individualism

MLR Multilevel regression

MS Mean sum of Squares

NCP Norwegian Citizen Panel

**NORCE** Norwegian Research Centre

**QOG** Quality of Government

**QQ** plot Quantile-Quantile plot

**SCT** Social Contract Theory

SD Standard Deviation

SS Sum of Squares

UK United Kingdom

**UN** United Nations

U.S. United States

VIF Variance Inflation Factor

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## Acknowledgements

This thesis is a result of several months of labour, influenced by several persons.

First and foremost, a thank is owed to my mentor Jacob Aars, who have contributed with important and detailed pieces of advice during the year that this process has lasted.

Second, a thank is owed to Dag Arne Christensen, who has functioned as a co-mentor. His input regarding technical and methodological matters have been priceless.

Third, Sveinung Arnesen has guided the experiment design process, providing valuable insights. Thank you.

In connection with the survey experiment, a great thank is owed to the employees at DIGSSCORE. First of all, for including me in a highly competent environment, marked by interesting discussions and skilled research.

I have also been so fortunate as to receive a stipend from DIGSSCORE, in connection with this thesis.

Furthermore, the experiment would not have been accomplished had it not been for DIGGSCORE and the Norwegian Citizen Panel, since it was implemented in a survey round related to the latter's panel rounds.

I have also received valuable input from the members of the research group 'Political organization and multilevel governance' at the institute of Administration and organization theory.

Not least, a thank is due to family and friends, who have put up with my 'crankiness' and absence, mental or physical, during times that demanded a lot of work.

Thank you all!

## 1 Introduction

#### 1.1 The paper

This paper will explore the relationship between terrorism and political trust. The paper will do this exploration through two different, but at times supplementing, ways. First, the paper will map the empirical relationship between terrorism and political trust in Europe in the time period of 2002 to 2016. Second, the paper will explore if 'capacity perception' is a causal mechanism in the relationship between terrorism and political trust, as assumed by the theoretical perspectives utilized in this paper to explain the causal relationship between terrorism and political trust. At the outset, the goal was to maximize both the number of units and the amount of time to include in this paper. However, there are some factors, mainly relating to what can be summed up as data quality, that limits this goal. The paper therefore ended up with including nineteen European countries, for the time period of 2002 to 2016. The selection of the actors to include in this exploration: the parliaments, the legal systems, the police, politicians and, for parts of the paper, the government, was done in accordance with similar considerations. As for the selection of the causal mechanism to focus on, this was done after reviewing the theoretical foundations for political trust, as well as existing empirical studies. After methodological, theoretical, and empirical considerations, the paper ended up with the following research question:

In what ways has the political trust in Europe been affected by terrorism in the time period of 2002 to 2016, and does capacity perception function as a causal mechanism in the relationship between terrorism and political trust?

The research question actually consists of two separate but related parts, as implied above. The first part, or question, seeks answers relating to the historical empirical relationship between the two relevant phenomena, i.e. how terrorism has affected political trust, while the second part seeks an answer relating to the general relationship between the two phenomena, i.e. through which mechanism has terrorism affected political trust. The two parts are different in that they seek different answers and, as will be discussed further below, will be explored by the use of different methods. At the same time the two parts are related in that they have the same

<sup>&</sup>lt;sup>1</sup> Both questions are designed to explore the causal relationship between the two phenomena, but in order to separate them and to avoid confusion when specifically discussing the two sub-studies they are addressed as one 'general' and one 'empirical' question.

areas of foci, i.e. terrorism, political trust, and the *relationship* between these phenomena. Both parts can also be studied in an empirical manner, based on the same theoretical perspective, and in different ways shed light on the same theoretical perspective. It can be argued that the paper's inclusion of an exploration into the causal relationship between political trust and the chosen topic of interest, instead of taking the causal relationship for granted, is a beneficial, if not necessary, inclusion (Khan, 2016). It is an inclusion that may illuminate the two phenomena even greater, one that many studies focused on political trust either forgets or ignores (Ibid).

The first part of the research question, particularly, has countless dimensions to it. Countless ways of exploring and answering it. Therefore, in addition to dividing the research question into two separate but related parts, the paper concentrates the research question into five hypotheses. Four of the hypotheses are connected to the multidimensional first part of the research question, focused on the historical empirical relationship between the two phenomena. The fifth hypothesis mainly revolves around the more one-dimensional second part of the research question, focused on shedding light on the general causal relationship between the two phenomena. Although the hypotheses have a stronger connection to one part or another of the research question, they can, and will, be discussed in combination. Chiefly in the part of the paper that performs an overall discussion of the paper's theoretical framework. The hypotheses are based on evaluations of relevant theories and existing empirical research, combined with considerations of the availability and quality of relevant data, and they are presented and discussed at the end of the next chapter.

In order to explore the hypotheses and answer the research question the paper employs two different methods. Longitudinal multilevel regression (MLR) will be used in order to explore the historical empirical relationship between terrorism and political trust, where the MLR includes nineteen European countries covering the time period of 2002 to 2016. To explore the general relationship, i.e. if capacity perception is a causal mechanism or not, the paper will analyse the result of a survey experiment especially designed in order to explore this relationship. The paper, thus, performs what Yin calls a non-converging use of methods, where different methods are used in order to explore related but different questions. It is an execution of two sub-studies in order to perform an overarching study of a subject (2014, 120-121). However, since some of the dependent variables are identical in both sub-studies, i.e. *trust the police* and *trust parliament*, the paper will also employ what Yin refers to as a triangulation of methods, where the results from the one study will be discussed in connection with the part of

the research question to which it does not mainly belong. This triangulation is done, as mentioned above, in connection with the analysis of the theoretical framework, where the paper uses the results from both the sub-studies to shed light on the framework's ability to explain the empirical relationship. Thus, two different methods will at times have been used to explore the same questions (Ibid).

The paper's overall design, in its study of the relationship between terrorism and political trust, can be visually illustrated as shown in figure 1.1:

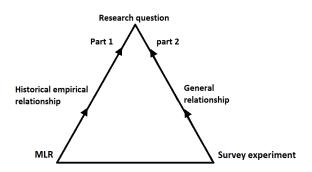


Figure 1.1 illustrates the overall design of this paper, and it shows how the paper plans to shed light on the research question.

It can be argued that the areas of focus in this paper, terrorism and political trust and their relationship, are relevant topics by nature. As discussed further below, political trust is a key phenomenon in society. It ensures the functionality and efficiency of the political system in itself, but also that of society in general. Trust is, according to many, the very essence that binds us together, citizens and politicians alike. It is the glue that holds the societal pieces together (Newton, 2008; Hardin, 2002, 113-120). Terrorism can, on the other hand, in many ways be considered the very antithesis to trust, or at least the essence of terrorism can: fear (Svendsen, 2008). While this section is being written, a terrorist attack has taken place in New Zealand just days ago. An alleged right-wing extremist killed more than fifty people who had gathered to pray (Georg et al., 2019). The incident shocked both New Zealanders, and the rest of the world. Although seemingly united, the political actors, i.e. both politicians and representatives of different political institutions, are discussing what went wrong and who, if someone other than the terrorist, is to blame (Ibid). The terrorist pointed to the Norwegian right-wing terrorist Anders Behring Breivik as an inspiration (Ording et al., 2019), who, not many years ago,

himself executed a terror attack. An attack that shook the political climate in Norway (Stang et al., 2018). Breivik wanted to change the political attitudes and beliefs of Norwegians and Europeans, claiming that political actors on the left in the political spectrum were undermining Christian values (Ibid). These are two somewhat anecdotal examples of persons seeking to change the political system, two persons who have seemingly lost their trust in the political system and, as will be discussed further below, seek new means to change the system. Generally, there are some trends in society indicating that the political trust is in decline (Khan, 2016), and that the political system is under pressure (Van der Meer, 2017).

#### 1.2 Trouble in paradise?

Many people claim that we've never had it better than we do today. The world today is in many ways paradise if one compares the present with the past. This claim does not rule out the fact that many things could be significantly better for a significant amount of people, but the statistical fact of today's societies' relative high levels of prosperity, seen in a historical perspective, still remains (Rosling et al., 2018; Rosling, 2006; Rosling, 2014). <sup>2</sup> This claim is backed up by a comprehensive amount of statistical research. For instance, the renowned economist Thomas Piketty shows that the world economy, although it has gone through some non-optimal trends in recent years, have never in the entire human history been more productive (Piketty, 2014). People generally have more resources available than ever before. Research led by the UN, especially in connection with their Human Development Index (HDI: used in this paper, and elaborated on in chapter 3), shows that since the relevant data collection began in the 1990's, there's been a massive increase in human wellbeing. Since 1990 the average global score on the HDI has increased by 21.7 percent (UNDPa, n.d.). One way to interpret this statistic is that while human beings has existed for millions of years and experienced a gradual increase in wellbeing over this period of time, in less than 30 years in a modern setting the wellbeing for the average global citizen has increased by one fifth.<sup>3</sup> In addition, the ones experiencing the largest share of this increase in wellbeing in recent years are the ones who had the worst starting point in human wellbeing to begin with, i.e. citizens in different African and Asian countries (Ibid).

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<sup>&</sup>lt;sup>2</sup> There are many ways to measure 'wellbeing' and similar subjective experiences, but the indicators discussed in this section are common indicators to use in such measurements (see e.g. Wilkinson and Pickett (2019)).

<sup>&</sup>lt;sup>3</sup> This interpretation depends, of course, on the benchmark. I.e. how the levels of wellbeing was when the measurements of the *HDI* started and how this situation relates to the prior historic period. Nevertheless, the point of the overall increase in wellbeing in a historic perspective remains.

However, while those with the worst starting point has seen the biggest average increase in wellbeing in recent years, there's still a huge gap between citizens in the more prosperous societies and the citizens in the not-so prosperous societies. Europe, and the 'West' in general, scores a lot better than the rest of the world on measurements of wellbeing (Ibid). If the world has become a paradise, then Europe along with the rest of the West is, statistically speaking, seventh heaven. Europe is paradise within paradise. Humans in general, but particularly humans in Europe, live longer than before, have better and longer educations, and have better living standards (Ibid). Approximately half of the (perhaps mainly Western) population, the women, has also experienced, in a historical perspective, a huge increase in their quality of life. This quality of life progression for the women has slowed down but continued at a moderate pace also in recent years (EIGE, 2019). Europe is also a quite peaceful place to live compared to other regions (Roser, 2019), and European citizens enjoy a level of political influence unheard of in many places of the world (Abramowitz, 2018). Studies, furthermore, show that citizens in Europe are very happy (Helliwell et al., 2019-2012). In general, Europe is a relatively good place to live, relatively both in space and in time.

The European prosperity is also reflected in the relatively high levels of trust that Europeans have. Both towards each other, and towards political institutions (Zmerli and Van der Meer, 2017). The national parliaments, legal systems, police, politicians, and other national political actors in Europe receive relatively high amounts of trust from their citizens, especially compared to other regions (Ibid). The high levels of political trust has many advantages, such as greasing the interaction between different societal systems (political, religious, economic, and social), giving the systems increased flexibility and efficiency (Hooghe and Zmerli, 2011, 3), as well as reducing transactions costs between systems (Noteboom, 2012, 10; Newton, 2008, 243). Studies have found that political trust is positively associated with democratic input, as well as macroeconomic output (Zmerli and van der Meer, 2017, 153-374), that citizens living in societies with relatively high amounts of political trust are less inclined to free ride, and that the citizens themselves become more trustworthy (Newton, 2008, 254). In addition, studies have found that citizens become more supportive of (the) legal order, are more altruistic, and that they live longer if they live in high-trust societies (Wilkinson and Pickett, 2019, 83). In addition, citizens not only live longer, their quality of life is in general better, and they have a healthier ageing (Wilkinson and Pickett, 2019, 322). In summary, trust affects both the individual and the society (Wilkinson and Pickett, 2019, 83). If the benefits of trust in themselves are not appealing enough, one could compare it to the usual alternative applied to ensure the functionality of the political system: coercion (Warren, 2012, 33). Thus, trust is, both in itself and compared to its alternative, something beneficial and desirable.

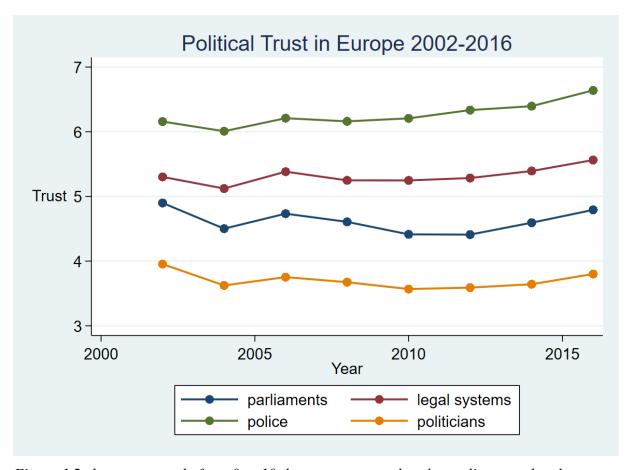


Figure 1.2 shows on a scale from 0 to 10 the average trust that the parliaments, legal systems, politicians, and police, in the nineteen countries included in this paper combined have received, in the time period of 2002 to 2016.

Source: ESS.

In addition to being relatively high compared to other regions, the political trust in Europe has also been relatively stable over the last fifteen years, as shown by figure 1.1. On a scale from 0 to 10, most of the institutions, in the nineteen European countries included in this paper combined, experience little variation in their average trust. In addition, while there are some curves in this illustrative macro perspective of political trust, most of the institutions seem to end up close to their starting point, when it comes to their score on the trust scale. This suggests, as discussed more in the sixth chapter after the results have been presented, that the levels of political trust is somewhat stable, which further implies that it requires a relatively large effort, so to say, to affect the trust that an individual experience. This latter remark is discussed more in the next chapter. The (biggest) exception is the police, which experience a stable and

relatively large increase in the average trust that they receive from the citizens, suggesting that the police, among the included institutions, have a distinct position in the eyes of the citizens. The results in this paper can be used to shed some light on this deviance among institutions, and it will be discussed more in the sixth chapter.

All in all, the situation today, particularly in Europe, is relatively good. One could therefore assume that this prosperity would lead to satisfaction and stability. That European citizens generally would support and trust the political system that they live in. After all, it has produced some beneficial results. There are, however, some potential bumps in this so far optimistic statistical road. For instance, there seem to be a growing amount of hostility towards politicians and a growing discontent with the political system. Polarization and populism have become two common societal phenomena, as indicated by figure 1.2. It shows the term trends for 'populism', 'politician contempt' and 'polarization' on an average yearly basis, in Norwegian newspaper media in the time period of 2000 to 2018. Although there is some variation, there is also a clear increase in the average amount of term usage when it comes to these three terms. While the terms may not always be used in a negative manner or in a negative context, one could assume, given the news medias' nature and their apparent tendency to focus on negative news (as it is probably more interesting to citizens), that the terms are mainly used in a negative manner and in a negative context. And while the Norwegian case may not be representative for other European countries or the European overall state when it comes to polarization, populism and contempt towards politicians, there are signs indicating that the Norwegian case may actually be a positive outlier in this regard. Analyses of election prognoses and election results across Europe shows that in Hungary, Poland, France, Germany, Netherland, Italy, Bulgaria, Austria, Switzerland, Finland, and Sweden, among others, the populistic and the seemingly system critic forces are growing (BBCa, 2018). In 2018 more than 25 percent of the electorate in Europe voted for a populistic party in their national election (Lewis et al., 2018). For the EU Parliament election, the populist parties are expected to receive a large proportion of the votes, probably achieving their highest proportion of EU Parliament representatives ever (Erlanger, 2019). The situation may thus be more dire for the political system elsewhere in Europe, than it is in Norway.

So, the political system in Europe seem to be under pressure. Failing political trust is suggested as one of the explanations for Europe's political challenges, at the same time as the growing political challenges may in return exacerbate the situation for the levels of political trust (Van

der Meer, 2017). On the other hand, considering the fact that the levels of political trust are on the rise in Europe in recent years, as shown in figure 1.1, reallocation of trust may be a more pertinent explanation. Nevertheless, there are variation in the levels of political trust.

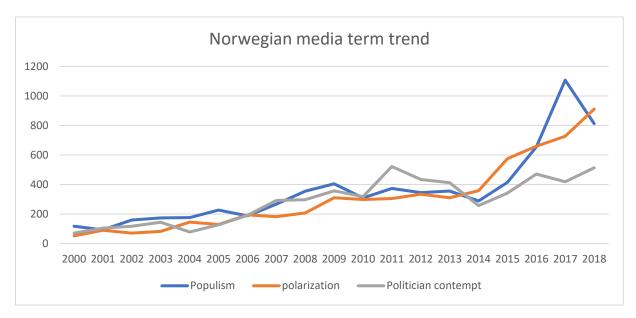


Figure 1.3 shows a quantitative media analysis of Norwegian news media in the time period of 2000 to 2018. The terms 'populism', 'polarization' and 'politician contempt' is becoming more common terms to use in the public discourse.

Source: Atekst/Retriever.

There are probably a lot of factors that have a potential for contributing towards the variation in the levels of political trust in Europe. One potential factor is terrorism. It can first of all be stated that Europe experiences very little terrorism compared to some other regions. The regions hardest hit by terrorism is without a doubt the Middle East and North-Afrika (MENA) (IEP, 2017). Statistic from the *Global Terrorism Database* (GTD) shows that from 1996 to 2017 47 percent of all terror incidents happened in Afrika, 41 percent happened in Asia, while 7 percent happened in Europe. Thus, also this, in addition to the different indicators discussed above, shows that Europe in general is a relatively good place to live.

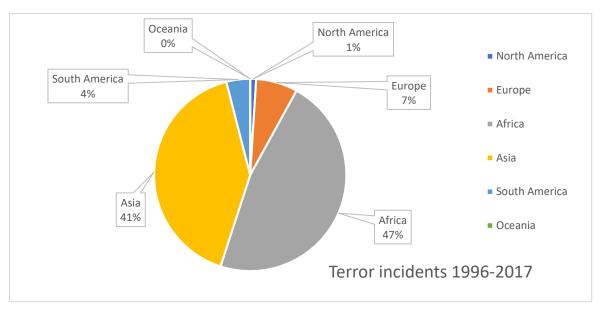


Figure 1.4 shows the distribution by region of all terror incidents worldwide in the period from 1996 to 2017.

Source: GTD.

At the same time as showing that Europe has experienced relatively few terror incidents compared to Asia and Afrika, figure 1.3 also shows that among western regions Europe have experienced relatively many terror incidents. In fact, Europe by itself has experienced more terror incidents than what North America, South Amerika and Oceania have combined. In addition to this, and perhaps even more crucial for the citizens trust towards political institutions, Europe has experienced a massive increase in the amount of terror incidents in recent years. As shown by figure 1.4, the combined average score on the *Global Terrorism Index* (GTI: used in this paper and elaborated on in chapter 3) has increased markedly for the 19 countries included in this paper (see appendix B for each country's variation on the index over time). The average score in 2002 was 1.5, while in 2016 this average had increased to 2.2. The score is still low in absolute terms, given that the index varies from 0 to 10, yet this increase, and the score in itself for that matter, can still have a substantial impact on European citizens, the political institutions of the different European countries, and the relationship between them. That is, at least, one of the assumptions behind this paper.

Europe, i.e. all the European countries and not just the 19 countries included in this paper, experienced 370 percent more terror incidents in 2016 than it did in 2002, and the amount of deaths in 2016 as a result of terrorism was 6000% higher than it was in 2002 (IEP, 2017). Compared to 2004 the increases in incidents and deaths are even greater. Again, in absolute terms and compared to other parts of the world the amount of terror incidents in Europe is relatively low. For instance, in 2016 MENA experienced 4732 terror incidents, resulting in

13 512 deaths, while Europe the same year experienced 630 terror incidents and 826 deaths (although accounting for population size and geographical territory may decrease the differences between Europe and the MENA regions, which could influence the societal effects of terrorism). Nevertheless, one terror incident and one death as a result of terrorism can be considered one terror incident and one death too many. It is not without reason that terrorism is high on the political agenda in Europe, represented by the EU and its firm stance against terrorism (Eurojust, 2019; Europol, 2019; ECFR, n.d.), as well as the stance taken by the different European countries (see e.g. PST, 2017).

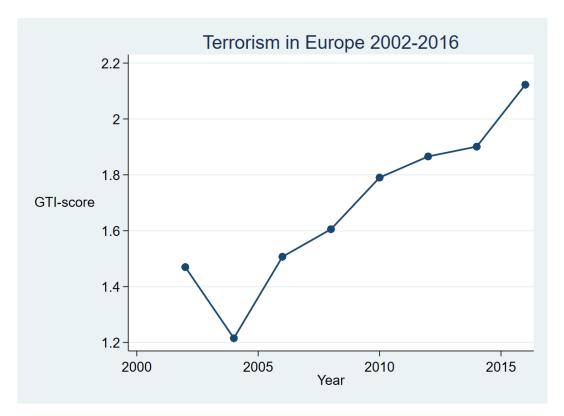


Figure 1.5 shows on a scale from 0 to 10 the combined average GTI-score for the 19 countries in this paper, in the time period 2002 to 2016. Source: QOG/IEP.

A relevant question in connection with this paper is: why is terrorism a political matter? One pertinent reason is, as will be discussed in the next chapter, that terrorism is a reaction to a political environment or to actions that political actors are responsible for. Terrorists, by definition (as illustrated in the next chapter), have a political agenda. They want to achieve political change. Terrorism is in itself an indication of low political trust from the ones committing the act towards a political institution ('institution' here used in a widely manner, and thus encompassing institutions such as 'democracy', as will also be discussed in chapter

2). Terrorist don't trust that political institutions are or will be in their favour, so they take matters into their own hands, employing fear as a tool to achieve political change. The goal: political change, justifies the means: terrorism.

A different but related and perhaps more pressing question, considering the paper's exploration into the relationship between terrorism and citizens' trust towards political institutions, is: why do citizens consider terrorism to be a political matter? This question is important to answer in order to understand the causal relationship between the two phenomena, which will be elaborated on in the next chapter. If citizens do not consider terrorism to be a political responsibility there are few obvious reasons to why terrorism should be connected, at least in a causal and non-spurious way, to political trust. One potential answer to this question derives from social contract theory (SCT). SCT is a dominating theoretical perspective in political theory and philosophy to explain the relationship between the citizens and the 'rulers', and to explain why citizens do, or should, accept political authorities (Boucher and Kelly, 2005, 11; Heywood, 2004, 43-45). There are, however, several SCTs (see e.g. Rosen and Wolff, 1992). At the same time, many, if not most, of the SCTs have a common denominator by arguing that political authorities should protect their citizens from harm, especially from external threats, i.e. other people, groups and other nations. If the political authorities fail to protect their citizens it is hard, or should be hard, for the citizens to accept and trust the political authorities (Rosen and Wolff, 1999, 54, 58, 62, 65, 68; Boucher and Kelly, 2005, 317; Mill, 2010, 140). Furthermore, citizens probably realise that the most efficient and probable way of ensuring their own safety is to have institutions that reflect the collective will to deal with terrorism. To sum up: citizens will look to the state for relief when terrorism threatens (Christensen and Aars, 2018).

It can be pointed out that there are many ways to gain political trust, and many sources of political trust, as will be discussed in the following chapter. Ensuring the safety of the citizens is just one of these ways. However, many of the SCTs referred to above assume that ensuring the citizens' safety is the least political authorities should do in order for the citizens to be able to trust them. If the citizens fear for their life, or safety in general, it is difficult to trust the ones who should keep them safe, but do not. Studies conducted in the U.S. shows that the strongest indicator for political trust is the citizens' impression of the state of the national security (Chanley, 2002, 469). While this study may have a limited transferability to some of the European countries, it is still an empirical finding that suggests that safety is a vital, although

not the exclusive, component for political trust. It is not without reason that political leaders all over the world has declared war on terrorism (Zimmerman, 2018).

Considering what's been discussed so far: the seemingly increasing contempt towards the political system and political institutions, the increase in terrorism in Europe the last two decades, that terrorism is a political matter, a summarizing question is: has terrorism affected the political trust in Europe? These were the founding observations and the basic question for this master thesis.

#### 1.3 The paper's approach

The following chapter, chapter 2: *Theory*, will discuss the theoretical aspects of this paper. The chapter starts by clarifying and discussing the two main concepts in the paper: *terrorism* and *political trust*. The chapter thereafter shifts its focus to the relationship between the two phenomena, and, building on relevant theory, suggests a theoretical framework that can be used to understand how the phenomena can be causally connected. The theoretical framework is also the framework that the causal mechanism that the survey experiment tests is implemented in. The chapter also discusses previous research regarding both political trust in general, and the concrete relationship between terrorism and political trust. Both the theoretical aspects of the concepts themselves and previous relevant research points to the different factors that will be included in the paper, either as dependent variables, independent variables of interest, or as control variables. These factors will be pointed to and discussed, before the chapter culminates with the presentation and discussion of the five hypotheses that are explored in this paper.

Thereafter chapter 3, *Data*, will present and discuss the different data used in this paper. Many of the sections in chapter 3 has, in accordance with the research question, a two-parted layout: the first part of the sections presents and discusses the different dimensions of the data used in the MLR, while the second part of the sections does the same for the data that are produced and used in connection with the survey experiment. In addition, while all of the data will be presented, the discussion mainly focuses on the dependent variables, relating to trust, and the independent variable of interest in the MLR, relating to terrorism. The chapter starts by reviewing the three main data sources: The European Social Survey (ESS), Quality of Government Database (QOG), and The Norwegian Citizen Panel (NCP). Next, the chapter presents and discusses the data, and thereafter how the data has been handled prior to,

and how it has been used in connection with, the different analyses. The chapter ends with a discussion of the data sources' reliability, the data' validity, and the MLR data' equivalency.

Next, chapter 4, Methods, explain the methods that are used in this paper: MLR and survey experiment, as well as Analysis of Variance (ANOVA) in connection with the latter. In order to enhance scientific probity and ensure verifiability, this chapter contain some technical details and descriptions that may be difficult to fully grasp, and thus risks being somewhat redundant. In order to counteract this risk of redundancy, the chapter will try to both elucidate sufficiently and in a plain manner. The chapter begins with a discussion of how the methods, concretely, will be applied in order to explore the different hypotheses. This discussion, in connection with the validity discussion that takes place at the end of the preceding chapter, will clarify exactly what the results of the analyses represents. Then the method explanations follows. The chapter first discusses MLR. Considering the fact that MLR is a methodological extension of standard regression, the discussion will be rooted in the subject of standard regression. This approach may also make it easier to understand MLR. The discussion includes the presentation of both the general statistical model, and the different specific models that are used in this paper, that derives from this general model. The explanation of the MLR method is ended by a discussion of the assumptions, sometimes referred to as prerequisites, that must be met in order to execute a well-founded MLR, and how these assumptions are handled in this paper. Thereafter the focus shifts to the survey experiment, and the discussion regarding this method subsequently ends the chapter. This discussion to a large extent copies the setup of the prior discussion, relating to MLR. The experiment's purpose and its design are discussed, as well as what an ANOVA is, and how ANOVA is executed in order to analyse the experiment result.

The fifth chapter presents the *Results*. This chapter have a two-parted layout, in accordance with the research question. The first part focuses on the results from the MLR, and the second part focuses on the results from the survey experiment. Before the results from the MLR are presented, however, the variation in political trust in Europe

in the relevant time period, i.e. 2002 to 2016, is discussed. This discussion can be beneficial by putting the MLR result in context and clarifying how much overall variation is expected. The latter providing an indication of how much variation can be caused by terrorism. Thereafter the results from empty MLR models are presented and discussed. This is done mainly as a methodological step, in order to ensure that MLR is required instead of a standard (and less demanding) regression. However, it is also done as an epistemic step, in connection with the discussion of the overall variation in political trust, to get a better understanding of how much variation can be caused by terrorism. The chapter then presents and discusses the MLR results. The discussion first focuses on the main independent variables, then the control variables on a micro level, and finally the control variable on a macro level. Thereafter the results from the survey experiment are presented and discussed. This is done first by an overall graphic inspection of the result, before the results from the ANOVA's and the adhering *Benferroni*-analyses are presented in a more detailed tabular format, for each of the three dependent variables, which ends the fifth chapter.

Chapter six: *Analyses* discusses the results in connection with the different hypotheses, as well as in connection with the theoretical framework. The setup of the chapter is according to the aforementioned structure: first the hypotheses are analysed, and then the theoretical framework is analysed. The chapter is somewhat brief but should be seen in connection with the discussions of the results, the difference being the explicit focus on the hypotheses and the theoretical framework. The chapter ends by pointing to an alternative and supplementing theoretical element, that has a potential for explaining large parts of the different divergencies and deviances that this chapter uncovers.

The seventh and final chapter presents the *Conclusion*. The chapter summarizes what this paper have done, sums up some of the limitations in this paper, points to fruitful venues for future exploration, and, by pointing to the main findings, concludes by answering the research questions.

2 Theory

#### 2.1 Introduction

This chapter will discuss the paper's theoretical and empirical foundation. In a paper focusing on how terrorism affects political trust there are some questions that should be answered. First, what is *terrorism*, and what is *political trust*? The answers to these questions are the basis for understanding the phenomena in themselves, but also the relationship between them. Second, what kind of causal mechanisms is likely to exist in the relationship between the phenomena? The answer to this question can help give a more explicit understanding of the causal relationship between the two phenomena, and at the same time it is a question that many forgets to ask and/or answer, as pointed out by Khan (2016). In addition, the existence of a causal *relationship* implicitly requires the existence of causal *mechanisms* in that relationship (Wilkinson and Pickett, 2019, 221), and it is probably more manageable in a paper like this to empirically explore a mechanism rather than the entire relationship. Third, is there an empirical relationship between the two phenomena? This last question can be answered by reviewing previous studies, as well as by the results in this paper. In this paper it is also this question and the answer to it that, arguably, adds the greatest value to the academic field. If there's no empirical relationship between terrorism and political trust some of this paper's value crumbles.

This chapter will address all of these questions. This is done first by clarifying the concept of 'terrorism'. This clarification includes discussing what 'terrorism' is, who the terrorists are, what the terrorists do, and why the terrorists do what they do. Some of this discussion may seem a bit peripheral if seen in connection with the specific relationship between terrorism and political trust which is the main focus in this paper. However, it can be argued that in order to truly understand the concept in itself, but also how it could affect political trust, a somewhat thorough discussion can only be beneficial.

After clarifying the concept of 'terrorism' the focus shifts to 'political trust'. Some of the clarifications starts with a brief discussion of the concept of 'general trust', since a lot of the theoretical literature assumes, either implicitly or explicitly, that the concept of political trust derives from the general concept of trust. This gives the different types of trust several commonalities. General trust is in many ways the foundation for political trust. Despite this

occasional inclusion of the concept of 'general trust', the discussions mainly revolves around the concept of 'political trust'. The clarification of 'political trust' begins with discussing what political trust is, and then moves to how political trust originates, and ends with how political trust is affected.

After addressing the first questions posed in the beginning of this chapter, i.e. what 'terrorism' is and what 'political trust' is, the chapter moves on to the second question. In order to address this question, the chapter describes a theoretical framework that explains the causal relationship between the terrorism and political trust. The theoretical framework is rooted in what Mishler and Rose (2001) refers to as 'institutional theories' of trust, and combines macro theories with micro theories, to create a holistic causal theory. However, while the chapter presents a holistic theory, the paper only empirically tests one element, i.e. one causal mechanism, in this theory, as mentioned earlier. The paper chooses to test a causal mechanism and not an entire causal theory mainly because it is more manageable to test one mechanism, compared to an entire theory. However, as this section of the paper will discuss, some of the elements and relations in the theoretical framework have empirical backing from previous studies. Furthermore, as also mentioned earlier, while only one mechanism is specifically empirically tested, i.e. in the survey experiment, results from the MLR will also be used to discuss the potency of the entire theoretical framework.

With the first two questions addressed, and the theoretical clarifications out of the way, the chapter moves on to address the third and final question, by discussing the paper's empirical foundations. This discussion is performed by reviewing previous studies focusing on political trust, or studies focusing on the specific relationship between terrorism and political trust. There's already been conducted a lot of research on this field that are quite informative when it comes to the relationship between terrorism and political trust. However, as the discussion will illustrate, a lot of the research has had a completely different research design than what employed in this paper, which may yield different results. This is one of the elements of this paper that contributes to the paper's academic relevance and -value. Furthermore, previous research also contributes in the selection of variables to include in the MLR.

Building on the theoretical and the empirical discussions, the chapter ends by presenting and discussing five hypotheses. As mentioned previously, four of these hypotheses are mainly

connected to the MLR and the first part of the research question, while the fifth hypothesis are mainly connected to the survey experiment and the second part of the research question.

#### 2.2 Terrorism

#### 2.2.1 What is it?

Terrorism as a phenomenon has a long history. Law traces the first documented act of terrorism back to the year 647 B.C. when the Assyrian emperor Assurnasirpal II terrorized the village of Susa (2017, 1-13). The term "terrorism", however, became more widely known during the French revolution, when the Jacobines, led by Robespierre, used the state's apparatus to terrorize their political opponents. Today, however, the term is used in different contexts than previously. It is often claimed, usually by states and state representatives themselves, that states and representatives of states cannot be terrorists (McAllister and Schmid, 2011, 203-206; Law, 2017, 338-339; Hoffman, 1998, 13-17; Norris, 2003, 285). This stance can, if not entirely then at least partially, be explained by the fact that a term such as "terrorism" has a large inherent definitional power, a power that many seek to use for their own advantage (Stampnitzky, 2013, 3-4; Norris, 2003, 6). Many also claim that it is impossible to understand the concept of terrorism without considering the context, i.e. the phenomenon's location in both space and time (Shanahan, 2016, 103-113). Terrorism as a concept is therefore essentially contested, *value laden*, and context dependent (Norris et al., 2003, 6; Jackson et al., 2011, 99).

As a consequence of the challenges in understanding the concept, it's not been possible to universally agree upon a definition. According to Norris, what constitutes as "terrorism" is, to some extent, in the eye of the beholder (2003, 6). Thus, there's hundreds of definitions abound (Easson and Schmid, 2011, 99-157), each with their own strengths and weaknesses. This paper uses data on terrorism collected by the *Institute of Economic and Peace* (IEP), which in turn bases their data on terrorism on data collected by the *Global Terrorism Database* (GTD). The paper therefore commits to the definition created and used by the GTD, which is also used by the IEP (IEPa, n.d.). According to this definition, "terrorism" is:

"an intentional act of violence or the threat of violence by a non-state actor." (GTDa, n.d.).

In addition, two of the following three criteria also has to be met:

- "1) The violent act was aimed at attaining a political, economic, religious, or social goal;
- 2) The violent act included an evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) other than the immediate victims, and;
- 3) The violent act was out of the precepts of international humanitarian law". (Ibid).

This definition, like most definitions, has its strengths and weaknesses. First, it can be noted that the definition excludes "state actors" as possible terrorists. A lot of people disagree with such an exclusion (McAllister and Schmid, 2011, 203-206; Law, 2017, 338-339; Hoffman, 1998, 13-17; Norris, 2003, 285). On the other hand, the definition can be considered too inclusive, by including goals such as economic, religious or social, in addition to the more conventional political goal (see e.g. Easson and Schmid, 2011, 99-157). Despite these perhaps critique worthy inclusions and exclusion, GTD's definition is also in line with a lot of the leading definitions in the field (see e.g. Hoffman, 1998, 15; Norris, 2003, 6; Shanahan, 2016, 110; CIA, 2013; NATO, 2016; Kydd and Walter, 2006, 52; Nacos et al., 2011, 35). This enhances the conformity between the background concept, the systematized concept, and the operationalized concept (Adcock and Collier, 2001), and increases the definitional validity, as discussed in the next chapter.

#### 2.2.2 Who, what and why?

Simply put, "terrorists are those who employ the method of terrorism" (Norris, 2003, 6). If one excludes state actors, as GTD does and therefore this paper also, organizational actors and individuals remain as two possible categories of terrorists. Some infamous examples in the former category are ISIS, Al Qaeda, and the IRA. Freedman estimates that there in 2011 existed approximately 120 terrorist organizations around the globe (2011, 350-354), and according to statistics from the GTD terrorist organizations are responsible for 98.2 percent of all the terrorist *incidents* in the world in modern time (Gill, 2015, 16-17). Among the latter category of terrorists some infamous examples are Anders Behring Breivik and Theodore Kaczynski (the UNAbomber). There's no good estimate of how many individual terrorists, often referred to as 'lone wolfs', that exists, partly because 'lone wolfs' are more difficult to detect than terrorist

organizations and their members (Gill, 2015). Nonetheless, using the same statistics from GTD, 'lone wolfs' are responsible for 1.8 percent of all terrorist *incidents*.

A terrorist is, thus, someone who employs terrorism as a method. Such a description could involve a large number of acts. According to the definition used in this paper, the defining characteristics of a terrorist act is that it includes violence, or the threat of violence. This also leaves, in theory, very few acts out as possible terrorist acts. And history shows that terrorists are inventive and resourceful when it comes to working towards their goals. Some common terrorist acts are plane high jacking and -crashing, crashing vehicles into crowds, deploying nerve gas in crowded areas, shooting into crowds, using knives to stab random innocents, assassinations, torture, and kidnapping (Hoffman, 1998, 157-184).

The academic literature points to five categories of causes, five trigger groups, that explains why seemingly ordinary people become terrorists. The first category is *political*, which includes situations such as democratization (which can be both the desire for or opposition against democratization), state suppression, lack of state legitimacy, and a weak civil society. The second category is *socioeconomic*, which focuses on the economic dimensions of social life, and includes situations such as inequality, rapid and/or uneven economic growth, modernization, and urbanization. The third category is *social*, which focuses on the demographic dimensions of social life, where youth waves in combination with high levels of unemployment, and migration are common triggers. The fourth category is *geopolitical*, and globalization, western foreign policies, immigration, and transnational crime are typical situations that triggers terrorism (Jackson et al., 2008, 211). The fifth category is *religion*, which is perhaps the most dominating trigger category in modern time. People and groups of people seem to become more prone, relative to previously and to other triggering categories, to commit acts of terrorism for religious reasons (Neumann, 2009).

When someone first has become a terrorist, there's a lot of different, often quite nuanced, theories that tries to explain the terrorists' *modus operandi* (see e.g. McAllister and Schmid, 2011, 214-255). Common for most of the theories, however, is that they assume that terrorists are utility maximizing beings, and *rational choice* is the dominating paradigm when it comes to explaining terrorists' behaviour (Abrahms, 2008). According to this line of thought, terrorists have a political (and/or economic/religious/social) goal, assesses the available alternatives, execute a cost-benefit analysis, and chooses the alternative that gives the greatest achievement

of objective (Ibid, 78-81; Gill, 2015). It can, at the same time, be mentioned that some researchers suggest that a *logic of appropriateness* is more suited than the more common *logic of consequences* that is usually applied in *rational choice* theories, when it comes to explaining terrorists' behaviour. Perhaps especially when it comes to the behaviour of 'foot soldiers' in terrorist organizations (Abrahms, 2008). According to this perspective, terrorists want to be member of a community, to feel adherence, and both the norms and values, in addition to the goal, affects their behaviour (Ibid). It can also be noted that although terrorists are usually considered to be rational actors, this does not exclude the possibility of the terrorists having mental illness or some sort of mental deficit, or from being socially abnormal in one way or another (Gill, 2015).

One final remark can be made in this section of the chapter, in order to tie the discussion above even closer to the main topic at hand: the relationship between terrorism and political trust. It is not necessarily so that terrorists have as an explicit goal to affect the current patterns of trust in a society, thereunder the trust that citizens' have in political institutions, although this could also be the case. Fear and fearmongering are often the focus of terrorists, i.e. their mean of achieving change. However, by applying fear as a tool for achieving political change it is from a theoretical standpoint logical to assume that the patterns of trust have to change. Citizens, i.e. the terrorists' audience, have to be affected in a way that aligns their behaviour with the terrorists' desire. This can, but does not exclusively, mean that the citizens have to lose trust in some (political) actors and gain trust in some other (political) actors. Hardin (2006, 119-134) also points out that terrorists themselves often feel strong trust towards a particular community, and that they want the rest of the society (local, regional or global) to align themselves more with that particular community, something which strongly implies a shifting of allegiance and, thus, most likely a reallocation of trust within or between societies. In addition, as Svendsen points out, a culture of fear is a culture without trust (2008). Fear and trust are closely connected (Ibid), sometimes considered each other's antithesis, as mentioned above.

#### 2.3 Political trust

#### 2.3.1 What is it?

Trust is a cognitive function and a subjective experience (Hardin, 2006, 16-18; Hardin, 2002, 68-69; Aaronsson, 2015, 23-24), which at the same time manifests itself in the interaction between two or more actors (Blackburn, 1998, 20). It is something that, when first instilled in a person, can be rigid (Hardin, 2002; 2006), like personal beliefs and attitudes often are

(Weinberg, 1994; Brody, 1994). While the data from the GTD is based on a concrete definition, this is not the case with the data from the ESS. This means that the data regarding trust from the ESS is data on what Hardin refers to as 'weak trust' (2006, 26-27). It is difficult to make inferences regarding the ontological content of trust, based on the data. However, since it is not the objective of this paper to make inferences about the ontological content of trust, but rather its relationship with another phenomenon, this is a surmountable challenge. In lack of a concrete definition in the data, the paper therefore bases its understanding of *political trust* on the work of Norris, which in turn is based on that of Easton (1965). According to Norris, "political trust" is:

"the general belief in the performance capacity of political institutions and/or belief in the benevolent motivation and performance capacity of office-holders." (Norris, 2017, 24).

Some remarks can be made regarding the definition. First of all, Norris's definition clearly points to how essential *performance capacity* is in the study of 'political trust'. As mentioned previously, and elaborated later in this chapter, the second part of this paper's research question focuses on citizens' perception of the different political actors' capacity to perform when it comes to dealing with terrorism. The definition thus highlights the relevance of the paper's assumption of capacity perception as a causal mechanism in the causal relationship between terrorism and political trust.

Furthermore, the paper treats all the dependent variables as 'political trust' data. As the definition above points out, political trust relates to both institutions and the individuals, ref. 'office-holders', in these institutions. Therefore, the paper refers to political trust in connection with both the institutions included in the paper, as well as in connection with politicians. In addition, while some of the institutions included in this paper can be considered to be of a more political nature than others, i.e. the parliament and politicians as opposed to the legal system and the police, all institutions are, strictly speaking, strongly connected to the political system in democratic polities such as the European ones. In addition, Marien tests the data quality of the trust-data in ESS and finds, first of all, that they have high levels of quality, especially compared to other data sources. She also conducts a factor analysis and based on this analysis she argues that the respondents participating in the four survey rounds that she examines considers all the institutions in the survey to be political institutions. Respondents in the ESS

considers both the legal system as well as the police to be political institutions, in addition to the parliament. So, in summary, it can be argued that it is legitimate to refer to the data on the dependent variables in this paper as data on *political trust*. This includes the dependent variables in the survey experiment, considering that the similarities between the data sets, as discussed in the next chapter. <sup>4</sup> At the same time, this is a somewhat semantical note, and the denotation is mainly applied as a functional, but legitimate, shortcut.

It can also be pointed out that a lot of scholars argue that it is impossible for citizens to actually trust institutions (Hardin, 2006; Hardin, 2002; Newton, 2008). Instead of using the term 'trust', they prefer terms such as 'belief', 'support', 'confidence' or 'quasi trust' when referring to political trust, especially in connection with institutions if not politicians (Hardin, 2002, 156; Svedin, 2012, 147; Norris, 2017). While this is, in many ways, an ontological debate that runs the risk of being superfluous in connection with this paper, it is important to address the subject ahead of the validity discussions in the upcoming chapter. At the same time, it can be pointed out that the disagreement in itself is rather redundant. It is redundant since the main argument behind using alternative terms instead of 'trust' is that the cognitive distance between citizens and institutions become too great for citizens to truly have knowledge of the institution, and considering that knowledge is, as will be discussed below, the foundation for trust, citizens therefore cannot truly trust institutions (Hardin, 2006). However, as Newton points out, it doesn't matter if the knowledge that the citizens have of the institutions is true or not, all that matters is that the citizens believe in the knowledge that they have of the institutions (2008, 246-248). Or as the definition proposed by Norris points out: "...the general belief...". Askvik et al. remarks that the citizens' perceptions (i.e. regardless of their correctness) of the institutions generate expectations that, in order for trust to flourish, should be met (2011). Thus, in connection with the discussions above, it is fair to refer to 'political trust' in this paper.

#### 2.3.2 The origins of trust, and how it is affected

First of all, it can be pointed out that there's a multitude of literature discussing trust, thereunder political trust. While there are some different perspectives, there's also a lot of similarities between the different perspectives when it comes to how trust originates, and how it is affected.

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<sup>&</sup>lt;sup>4</sup> With all this in mind, the references in this paper to 'political institutions' also includes politicians, if not explicitly stated otherwise. The inclusion of 'politicians' into the category of 'institutions' is also in line with the design of the ESS, which in their questionnaire use the same term (institution) to describe trust in politicians (see ESS questionnaire 1-8).

Some theories seem to dominate the field (see e.g. Grimen, 2009; Hardin, 2002; Hardin, 2006; Zmerli and Van der Meer, 2017; Blackburn, 1998; Luhmann, 1979; Newton, 2008; Rose and Mishler, 2001; Stanford Encyclopaedia of Philosophy, 2015). This section of the paper mainly discusses the commonalities and common denominators in the theories that seem to be dominating in the literature on 'trust'. And while it is assumed to be differences regarding which and how everyday situations affect different types of trust, such as 'general trust', 'social trust' or 'political trust', meaning that different factors have a greater impact on one form of trust or another, the literature does not seem to differentiate in the assumptions regarding the overall elements that create and affects trust. Everything can be boiled down to a couple of concepts that illuminates trust's origin and how it's affected.

Literature on trust assumes that the root source for trust is *subjective experiences* (Hardin, 2006, 16-18; Hardin, 2002, 54-88; Nooteboom, 2012, 12). Subjective experiences generate *knowledge* and *feelings*. And knowledge and feelings, and the interplay between these two phenomena, generate trust (Grimen, 2009; Hardin 2002; Hardin 2006). This is the theoretical assumption behind how trust originates. An individual experience something, that generates feelings and knowledge, which affects trust. For instance, a pedestrian crossing the road gets hit by a car driven by a non-attentive driver. This experience generates, probably, bad feelings and affects the knowledge that the pedestrian has about traffic. This knowledge and these feelings would, likely, reduce the trust that the pedestrian has in, first and foremost, the non-attentive car driver. But the pedestrian would also probably have a reduced trust in every car driver, depending on the severity of his or her previous experience, especially in future situations where the pedestrian is planning on crossing the road.

There are two competing schools within the study of political trust: one adhering to methodological individualism (MI) and one adhering to methodological collectivism (MC).<sup>5</sup> While there seems to be an either implicit or explicit agreement on the theoretical assumptions behind how trust originates, they disagree on the main factors that in everyday life affects trust. The former school mainly focuses on individual characteristics, and argues that these are the main, if not the exclusive, factors affecting trust (Grimen, 2012). The latter school, on the other hand, argues that while individual characteristics do matter, it is mainly structural

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<sup>&</sup>lt;sup>5</sup> There are different ways of conceptualizing the two schools, see e.g. Mishler and Rose (2001). However, except from the different terms, there's a large conceptual overlap between the different ways of conceptualization, and this paper employs terms that are more familiar to the author.

characteristics that affects trust (Ibid). The two directions are, in reality, when it comes to the study of political trust both competing with each other, as well as supplementing each other (Schoon and Scheng, 2011, 619-620; Rose and Mishler, 2011, 117). Most researchers seem to adhere to a standpoint between the two extremes and acknowledges that both individual and structural characteristics matter (Grimen, 2012, 285-287). This paper will combine the theoretical and the empirical insights from both schools, in its study of the relationship between terrorism and political trust.

The focus among MI scholars is on inherent individual characteristics, and it is argued that the ability to trust is mainly influenced during socialization processes during childhood and the formative years. This implies two things. First, that individual characteristics, e.g. age, gender, education etc., is important to include in an analysis of political trust (Newton, 2008, 248-256; Schoon and Scheng, 2011, 619-620; Hooghe and Zmerli, 2011, 3). Second, that the level of trust that a citizen experience is, to some extent, fixed once they reach adolescence. There's a limit to how much an event can influence the political trust that an individual has, something that implies that there's little to no correlation in the levels of trust between different members of the same society vis-a-vis citizens from other but similar countries (e.g. the northern European countries, eastern European countries etc.) (Mishler and Rose, 2001, 33). This latter implication would in turn imply, first, that the use of MLR instead of standard regression is somewhat superfluous, and second, that terrorism has a limited effect on the political trust that members of the society that is exposed to terrorism has. The first implication is tested particularly by executing MLRs with empty models, while the 'full' MLR models checks the relevance of the second implication. It can, at the same time, be noted that the MI school has a lot of empirical backing when it comes to social trust, but not as much when it comes to political trust (Schoon and Scheng, 2011, 619-620). The validity of the MI assumptions and their implications for the study of political trust is therefore uncertain.

Among MC scholars studying political trust system characteristics is the essential factor to take into consideration of how political trust is affected. Common characteristics that are explored is polity, regime transparency, welfare arrangements, and the economic structure. This paper utilizes the HDI in the MLR, as discussed later in this chapter, which encompasses some of these characteristics. Bovens and Wille, positioned in this tradition, argues that political trust is especially affected by the combination of long-term changes of the system characteristics and the *performances* of institutions in a short-term perspective (2011). This implies that terrorism,

when inflicted on a society, do affect the political trust that members of that society experience, and that citizens' perception of the capacity that political institution have in dealing with terrorism do matter. It can be noted that it is the MC oriented scholars that have the most empirical backing when it comes to *political* trust (Newton, 2008, 248-256; Schoon and Scheng, 2011, 619-620; Hooghe and Zmerli, 2011, 3).

#### 2.4 The relationship between terrorism and political trust

The discussions so far have already implied several aspects regarding the relationship between terrorism and political trust. These can, however, be made more explicit and coherent. As mentioned previously, this paper's theoretical framework for explaining the relationship between the two phenomena can be placed in what Mishler and Rose (2001) refers to as an institutional framework. However, as also pointed out above, the paper includes elements not so firmly located in this institutional framework, i.e. individual factors. These elements are addressed in the next section of this chapter.

The theoretical framework that this paper suggests is as followed: terrorism is something undesirable, that is manifested through occurrences that has an enormous potential for damage, something that is illustrated several times throughout history. It is something that is inflicted upon individuals directly afflicted by terrorist attacks, but also something that affects entire societies, i.e. the terrorists' audience(s). Members of society not directly involved in a terrorist attack can be tremendously affected by it, as often illustrated in the aftermath of significant attacks, where entire populations come together to mourn, reflect and act. It is probably safe to assume that most citizens, if not all, agrees that terrorism is something that should be prevented. However, terrorism is not something that individuals in isolation can prevent. It requires some form of collective effort (Christensen and Aars, 2018). As discussed in the introductory chapter, in modern societies, and thus every country that is included in this paper, this collective effort is, at least mainly, left to the state and to political institutions. It is the political institutions', as a reflection of the collective will, responsibility to prevent terrorism. With this as a backdrop, terrorism can be conceived as an occurrence that subject political institutions to what Oliver refers to as functional pressure. Functional pressure is situations induced by demanding situations, i.e. terrorism in this case, that, if not handled properly, can initialize deinstitutionalization processes (Scott, 2014, 167-168), entailing loss of trust. If, however, political institutions handle themselves well when dealing with terrorism and the functional pressure it induces, this could lead to increased trust, as suggested by Albertson and Gadarian (2016a; 2016b; Gadarian, 2014). Terrorism can thus be considered a situation subjecting political institutions to functional pressure, forcing the institutions to act. How the political institutions act, in turn, affects the citizens' perception of the institutions' capacity to handle terrorism. In the phrasing of Geys and Qari: terrorism, as well as the political institutions' handling of terrorism, functions as *environmental cues*, which are important factors for changing individuals' beliefs (2017, 291). An illustration of this causal relationship, of what the paper refers to as its theoretical framework (sometimes causal framework), is illustrated in figure 2.1:

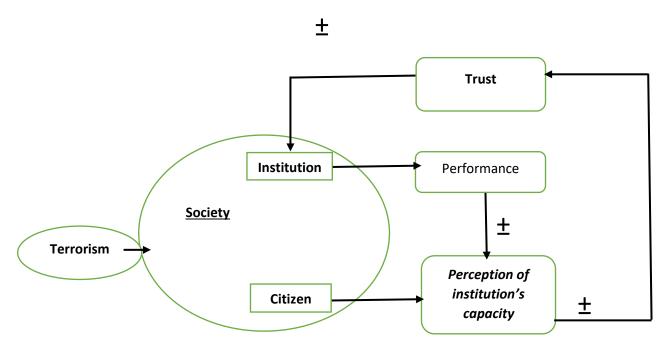


Figure 2.1 illustrates the causal relationship between terrorism and political trust, as well as highlights in cursive the causal mechanism that the paper explores. Elements that the paper has data on is written in bold.

In addition to illustrating the overall causal relationship, as suggested by the theoretical framework discussed above, figure 2.1 also shows the causal mechanism that's tested in this paper, and its assumed role in this theoretical framework. The causal mechanism's role in the overall causal theory is based on the theoretical clarifications regarding trust and how it is affected, as discussed in the previous section (its *position* in the overall framework is not tested empirically, but it is the only logical position for it to have in the relationship between terrorism and political trust, building on the different theories utilized in this paper). The key is to affect the individual's knowledge and feelings, summed up as perception, regarding the institutions' capacity to handle something (e.g. terrorism) in order to change the trust that the individual has toward an institution. If the individual's perception does not change, then neither does the trust

that the individual has. Capacity perception is the mechanism, or the link if one prefer, between terrorism and (political) trust.

So, to concretize the theoretical framework in the case of terrorism (even more than what is done prior to the presentation of figure 2.1): terrorism is inflicted upon both individuals and the society, and it is up to political institutions to deal with terrorism. How they deal with terrorism affects the citizens' perception (i.e. it affects the feelings and knowledge that a person has) of the institutions' capacity to handle terrorism. But, in line with the theoretical discussion in the previous section, so does factors on the individual level, such as age, education, gender, etc. If individuals perceive that the political institutions have enough capacity to deal with terrorism the trust that the individuals experience in relation to those political institutions may increase. If individuals perceive that the political institutions' capacity to deal with terrorism is not sufficient, then the individuals' trust in those political institutions may be reduced. It is, concretely, this assumption that is tested in the survey experiment.

Some remarks can be made regarding the theoretical framework and the assumptions as well as an implication included in it. To begin with the latter, it can first be pointed out that following the line of thought which the framework suggests, it is implied that the fact that terrorism do happen can in itself be claimed to indicate to the citizens that the political institutions' capacity to deal with terrorism is not enough. While the political trust probably is affected by the way political institutions deal with terrorism while it happens and after it has happened, the fact that it happens in the first place indicates that the political institutions failed to prevent it in the first place (although not necessarily in a deterministic manner and not necessarily to everyone). This implication is discussed further in the final section of this chapter, in connection with the first hypothesis.

Regarding the assumptions, the theoretical clarifications discussed earlier in relation to trust shows that it is the knowledge and feelings that is generated on the basis of subjective experience that affects trust. How political institutions deal with terrorism is just one of the countless subjective experiences that affects citizens' *overall* political trust. Trust is a many-faceted phenomenon, and one can trust in someone regarding something, but not regarding something else. For instance, A trusts B to handle  $X_1$ , but A do not trust B to handle  $X_2$  (Grimen, 2009; Luhman, 1979; Hardin, 2006). The overall trust can, in a stylized manner, be considered the sum of A's trust in B to handle all of  $X_n$ . Prior to, but in connection with, the next chapter

and the discussion therein of the data in this paper, it can be here be pointed out that the paper's data measures the *overall* trust that the citizens has in the different institutions. While it can be assumed that terrorism mainly affects the amount of trust that the citizens have in political institutions when it comes to specifically dealing with *terrorism*, a further assumption is that terrorism affects the citizens' overall trust as well. The quality of this assumption is, thus, one of many that is being tested in this paper. At the same time, it can be noted that this assumption, if correct, points to one of the methodological strengths of this paper. As discussed more thoroughly below, a lot of existing research only considers the impact that *one* (significant) terrorist attack have on the political trust that citizens experience. This impact is probably diluted over time, since citizens continually evaluates the capacity of the political institutions and uses a lot of different situations to do so. Not only one event. Accounting for several events (acts of terror) over time, where they exist, may be advantageous.

Before moving on, some conceptual clarifications in connection with the theoretical framework can be made. First, the theoretical framework suggests that political institutions' performance is important because it indicates to citizens to which degree the institutions have capacity to deal with terrorism. Or, using the phrasing of Geys and Qari (2017, 291), the performance provides environmental cues that affect citizens' perception of the institutions' capacity. This paper, unfortunately, does not include any data on political institutions performance in connection with terrorism or otherwise. But, in order to get a clearer understanding of the theoretical framework, a definition of performance can be beneficial to include. By "performance" this paper refers to: "how an actor handles a situation", which concretely means how well political institutions handles terrorism. Furthermore, following crisis literature, handling a crisis such as terrorism includes: 1) prevention; 2) preparation; 3) mitigation, and; 4) handling the aftermath (Christensen et al., 2011, 2). Also, while the paper includes data on capacity, i.e. capacity perception, these data does not contain a definition. The paper can therefore not make any conclusions regarding what "capacity" really is or is understood as in the minds of citizens, something that is also besides the purpose of the paper. But, again, a theoretical understanding may be beneficial. Following crisis literature here as well, "capacity" can be understood in relation to factors such as "...ability, competence, preparedness, organization..." (Ibid).

So, to sum up the theoretical framework of this paper: terrorism is a traumatic phenomenon that political institutions should handle. Handling terrorism includes preventing it, preparing for it,

mitigating its effects, and handling the aftermath. How well political institutions do this affects the citizens' perception of the institutions' capacity, meaning that how the political institutions handle terrorism gives citizens cues about the political institutions' abilities, competencies, preparedness and organization. If the citizens' perception of the institutions' capacity is enhanced, then the overall trust that the citizens have towards the political institutions is increased. If, however, the capacity perception worsens, then the overall trust is reduced.

As a concluding part to this section of the chapter, it can be pointed out that different elements of the theoretical framework have received empirical backing in previous studies. Christensen et al. argues that "a valid approach is to look at how citizens assess the capacity of the authorities to handle tasks in specific public areas/policy fields, as a measurement of trust in and perceived legitimacy of the system" (2011, 5-6). This argument is very much in line with the theoretical framework proposed in this paper. The authors use a multivariat regression analysis to test the relationship between citizens' perception of public authorities' capacity and their trust towards these authorities. They find a significant relationship (Ibid, 14-15), and based on this study concludes that "countries that frequently face "real" threats or crisis have to react but may also face greater losses in confidence and trust at the same time" (Ibid, 23).

A different study with a similar focus as the previously mentioned one, finds that satisfaction with *specific* public services have an impact on people's *overall* trust in public sector institutions (Christensen and Lægreid, 2005, 506-507, own cursive). The study concludes by stating that: "one can firmly conclude that institutions' function and *performance* have an effect on people's trust in them" (Ibid, 505, own cursive).

Thus, several of the theoretical assumptions included in the theoretical framework proposed in this paper have empirical backing from previous studies. First, there is a causal relationship between capacity and trust.<sup>6</sup> Second, institutions' handling of specific societal challenges can have an impact on the overall trust that the institutions receive. And third, how institutions perform do have an effect on the trust that they receive. Previous studies have, in addition to

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<sup>&</sup>lt;sup>6</sup> The authors of the referred-to study operates with a reversed causal relationship compared to the one in this paper. Without going into an ontological debate, and also agreeing that increased trust may free more resources and increase capacity, as is a beneficial consequence of high levels of trust, this paper assumes, based on the discussed trust theories, that capacity *perception* affects trust and not the other way around. It can, at the same time, be noted that scholars have not reached an agreement in this debate (Hutchinson and Johnson, 2011, 742-743), partly because there's usually a high correlation between the two phenomena.

provide empirical backing for different assumptions in the theoretical framework, also provided a lot of knowledge regarding important factors affecting trust, factors that are worth including in a study of political trust.

# 2.5 Existing research

## 2.5.1 Political trust and control variables

Before reviewing studies that explore the specific relationship between terrorism and political trust, it can be worth reviewing studies that includes different factors that are assumed to generally affect political trust. This is done in accordance with the theoretical clarifications discussed previously and will be a guidepost for the MLR.

In their study of political trust<sup>7</sup> Askvik et al. (2011, 422) use the following control variables on the individual level: gender, age, education and religiousness. These variables are also included in comparable studies by Christensen and Lægreid (2005) and Christensen et al. (2011). Regarding gender, it is assumed that women are more trusting towards political (i.e. public) institutions, because women are more often employed by these institutions than men are, because many public institutions has taken over a lot of the tasks previously handled by women (e.g. kindergartens and healthcare), and the fact that in many societies men still pay a lot more in taxes than women and may therefore have more negative predispositions towards political institutions (Christensen and Lægreid, 2005, 495). Regarding age, it is expected that the older one gets, the more trusting towards political institutions one becomes, since older people are more collectively oriented than younger people (Christensen et al., 2011, 6; Christensen and Lægreid, 2005, 495). Education is also expected to have a positive influence on political trust because knowledge and understanding, something that results from education, can improve trust. Knowledge opens the mind to nuances (Christensen and Lægreid, 2005, 494). Degree of religiousness is also expected to have a positive influence on trust, because religious citizens are often better integrated in their community, something that should provide higher levels of trust (Christensen et al., 2011, 7).

In their study of individuals' fear of terrorism (ref: the close conceptual relationship between trust and fear), Christensen and Aars (2018) use several of the variables mentioned above, but also includes *social trust* and *income* as two additional control variables on the individual level.

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<sup>&</sup>lt;sup>7</sup> The authors use the term 'institutional trust' instead of 'political trust', but this has no implications for the knowledge that this paper can extract from their study.

Social trust is expected to be positively correlated with political trust, following the same logic as discussed in connection with degree of religiousness. Low social trust can entail a sceptical attitude towards political institutions (Christensen et al., 2011, 7). Regarding income, Christensen and Aars (2018) notes that citizens that are satisfied with their income are more satisfied with the way democracy works in their country. This satisfaction could indicate a higher degree of overall satisfaction with public institutions, and therefore higher levels of political trust. The authors also remarks that one can expect a connection between fear and trust, suggesting a negative correlation. As mentioned earlier, a culture of fear is a no-trust culture (Svendsen, 2008). This paper incorporates this suggestion, and includes *feeling of safety* into the MLR, something that should give a positive connection between this control variable and the dependent variables. All of the variables mentioned so far are rather standard variables to include in studies of political trust (see e.g. Hutchinson and Johnson, 2017, 478-480; Torcal, 2017, 430; Bargsted et al., 2017, 410; Dalton, 389; Mondak et al., 2017, 152).

On the macro level it is common to include variables that contain information on societal characteristics. As already mentioned, this paper uses the HDI to do this, a move that is partially inspired by the study conducted by Christensen and Aars' (2018). The content of this index will be elaborated on in the next chapter, but a brief summary of that elaboration is that the index contains information on system characteristics relating to life expectancy (health), the education system, and the economy. All these elements: the quality of the health system, the quality of the education system, and the economic prosperity in a society, is expected to be positively associated with political trust (Mayne and Hakhverdian, 2017; Kumlin and Hausgjerde, 2017; Uslaner, 2017). The same logic as discussed in connection with income can be used here: the more satisfied citizens are with the output produced by different societal institutions, the more they are prone to trust these institutions.

# 2.5.2 Remarks on previous studies

As mentioned, there's already been carried out several studies on the relationship between terrorism and political trust. These studies can provide an immense amount of insight into the subject at hand. But before discussing their findings, some remarks can be made regarding the differences between the studies that are being discussed in this section and the studies that are conducted in this paper. The remarks made in this section are mainly related to methodology and therefore originally belongs in the method chapter. However, considering their influence on some of the hypotheses they are discussed here. The remarks will provide a better

understanding for the discrepancy between the hypotheses and the implications that is indicated by the results from the studies that are discussed in this section. The remarks also point out the relevance of this paper and its design in connection with the academic purpose of illuminating the relationship between terrorism and political trust even further.

During the research in connection with this paper it was not possible to uncover any studies that explored the relationship between terrorism and political trust over a long period of time in a systematic way. There are studies that explore the connection between the levels of political trust measured prior to a significant terror attack, compare this measurement of the levels of political trust with the levels of political trust at a later time, and then draw inferences from this comparison (see e.g. Sander and Putnam (2010)). However, these studies do not control for the developments that happens in between the two measurements, and the comparison therefore does not have an optimal degree of certainty. Furthermore, it was also impossible to uncover any studies that systematically compares two or more countries in a study of the relevant relationship. A lot of studies point to the findings from other studies exploring different terror attacks, extract knowledge from different studies (see e.g. Wollebæk et al., 2012; 2013), compare the findings from two or more countries, and so forth, but none seem to incorporate data from more than one country into their study of the relationship between terrorism and political trust.

All the studies reviewed in connection with reviewing previous research relating to the relationship between terrorism and political trust in fact seem to have designs resembling natural experiments, focusing on significant terror events, e.g. 9/11 in the U.S. or 22<sup>nd</sup> of July in Norway. The studies use the significant terror event as a critical juncture, comparing trust measurements done prior to the event with measurements done some time after the event (sometimes close in time, other times further away in time, and sometimes both). This design has many benefits, and since they sometimes resemble natural experiments they can often draw quite solid inferences regarding the effects that *one concrete* terror attack has on political trust. Especially if the measurements of political trust are carried out shortly before and shortly after the terror attack. However, as the theoretical framework points out, a terror attack probably has an effect in the short run, but this effect is diluted over time, as it intermingles with countless experiences providing citizens with environmental cues about the institutions' capacities. This paper, as will be discussed more thoroughly in the next chapter (*Data*), considers the overall average effect that terrorism have had in Europe in recent time. The average effect that *n* attacks,

both big and small ones, has over time may be different than the effect that one big attack has over time. Furthermore, and in relation to the abovementioned comment, existing studies focus on terror *incidents* and treats this as *terrorism*, while this paper studies *terrorism* as perceived by the IEP. The concrete difference between these two perspectives and its consequences is discussed in the next chapter. It can also, as a final remark on previous studies, be noted that a lot of the previous studies has a rather limited inclusion of political institutions in their study. Previous studies primarily focus on the trust that citizens have in their government (Dinesen and Jæger, 2013, 918), while the MLR in this paper includes four political institutions, while the survey experiment considers three political institutions, with a partial overlap between the two different studies.

### 2.5.3 Political trust and terrorism

Previous studies find, across the board, an empirical relationship between a significant terror attack and citizens' trust in political institutions that is positive. The different analyses show that when a comprehensive terror attack occur, the citizens' trust in political institutions subsequently grows. This positive relationship is confirmed by studies conducted in connection with a terror attack in the U.S. (Chanley, 2002; Putnam, 2002; Sander and Putnam, 2010), in Spain (Dinesen and Jæger, 2013), in Sweden (Geys and Qari, 2017), and in Norway (Wollebæk et al., 2012). The positive relationship is considered to be a consequence of what is referred to as a rally around the flag effect, where citizens gather around political institutions and political leaders in response to significant terror attacks. As mentioned earlier, this is a logical response since political institutions probably represent the best option in the fight against terror (Christensen and Aars, 2018). At the same time the rally around the flag effect can also be considered a consequence of the shared identity that a society has, where citizens from that society increases their trust in institutions representing the citizens' shared identity (Dinesen and Jæger, 2013, 918). This last statement can also be seen in connection with some theoretical remarks made earlier. When terrorist attacks do happen, they affect those directly involved, but also citizens in general of the same society that is struck. This happens, at least partially, because the attack leads to a collective loss of a sense of security (Ibid). If a terror attack could hit, let's say, another Norwegian citizen, it could hit every other Norwegian citizen as well.

The strength of the positive relationship varies, but in the short run the relationship is quite strong. Chanley (2002) uncovers a strong relationship, represented by the fact that two weeks after 9/11 the political trust had more than doubled compared to six months before 9/11. In

Norway 64 percent of the respondents reported having higher levels of trust in political authorities after the terror attacks that occurred on 22. July 2011 (Wollebæk et al., 2012). In Spain it was uncovered "...strong evidence of a rally effect since trust in most institutions increased *dramatically* in the wake of the 3/11 attack." (Dinesen and Jæger, 2013, 921, own cursive).

The relationship between terrorism and political trust thus seem to be positive and rather strong. If a terror attack occurs, the political trust increases markedly in the wake of the attack. However, the effect seems to be short lived. Geys and Qari find in their study of the Stockholm terror that took place 11/12/2010 that the terror had a significant effect (in a statistic manner) on citizens' trust, but that the effect was limited and transitory (2017). Wollebæk et al. (2012; 2013) find the same pattern in Norway, Putnam finds the same pattern in the U.S. (Putnam, 2002; Sander and Putnam, 2010), and Dinesen and Jæger uncovers the same pattern in Spain (Dinesen and Jæger, 2013, 921).

So, the effect that terrorism has on political trust seem to be rather limited in duration if one specifically focus on measurements of political trust. There are, however, some observations that confounds this impression. Firstly, Putnam finds that the social capital increases significantly in the aftermath of 9/11, and that this increase in social capital is long lasting (Sander and Putnam, 2010). Considering the close relationship between social capital and political trust (Hardin, 2006, 75-97; Castiglione et al., 2008), it is from a theoretical perspective difficult to imagine how the one phenomenon could last without the other phenomenon. In addition to long-lasting increases in the social capital there also seem to be long-lasting increases in the levels of fear that citizens experience in connection with terror attacks (Huddy and Feldman, 2011). Fear is also, from a theoretical perspective, closely associated with political trust (Svendsen, 2008; Geys and Qari, 2017, 292; Esser, 2008; Van Deth, 2008, 160), and again it is difficult, although not necessarily impossible, to see how one phenomenon could last without the other phenomenon lasting. Huddy and Feldman points to the possibility of the effects from a terror attack becoming latent (2011, 463), possibly staying dormant until another terror attack occurs. These observations can be seen in connection with the remarks made in the previous section. While designing studies around significant terror attacks has its benefits, one of them being the opportunity to capture a more detailed view of the effects of *one concrete* terror attack, it also has its limitations, one of them being the loss of opportunity to capture the effects of more than one terror attack. In recent times a more extensive inclusion may be a benefit considering that in the time period of 1997 to 2016 Germany, for instance, have experienced 287 terror attacks, France have experienced 902 terror attacks, and the UK have experienced 1314 terror attacks, according to statistics from the GTD. This may have consequences for the levels of political trust that are different from the consequences of one (major) terror attack.

Moving on, in addition to seemingly being time dependent, the effects that a terror attack has on a citizen's political trust also seem to be dependent on the citizen's proximity to the terror attack. Studies conducted in connection with the 9/11 terror find that the geographical proximity to the terror attack was one of the major, sometimes the major, mediating factors in the relationship between terrorism and political trust. Citizens living in downtown New York was more affected than citizens living in the greater New York territory, which in turn was more affected than citizens living elsewhere in the U.S. (Nacos et al, 2011, 43-44; Huddy and Feldman, 2011, 455; Huddy et al., 2007; Norris et al., 2003, 284). Christensen and Aars (2017) finds the same pattern in a cross-national study exploring the relationship between (non-)democracies and the fear of terrorism, but the pattern is not significant enough to reject the null hypothesis.

Geographical proximity therefore seems to matter, and controlling for this factor thus becomes relevant, something that for instance Dinesen and Jæger (2013, 920) does.<sup>8</sup> The relevance of controlling for residential area increases if seen in connection with the study and argumentation produced by Truc (2018). Based on a series of interviews as well as statistical analysis of social media network communication in the wake of the terror attack in Madrid 03/11/2004 and the terror attack in London 07/07/2005, Truc argues that while most citizens seem to be affected by major terror attacks, it is first and foremost the citizens living in the afflicted cities that are affected, and thereafter citizens elsewhere in the afflicted country. The shared collective identity is, in connection with terror attacks, markedly stronger for citizens residing in the inflicted city than it is for citizens residing elsewhere (2018, 142-158).

The study conducted by Dinesen and Jæger (2013), which is different from a lot of the existing studies that explores the relationship between terrorism and political trust since they include more than one political institution in their study, uncovers that terrorism's effect on political

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<sup>&</sup>lt;sup>8</sup> Unfortunately, the authors do not report their findings regarding this control.

trust is different from institution to institution. Every institution experienced a significant, although short-lasting, increase in the levels of political trust that they received in the aftermath of the Madrid terror, but the level of increase varied markedly between the government, the parliament, the police, the legal system, political parties, and the other institutions they included in their study. In summary, terrorism's effect on political trust seem to be time dependent, dependent on proximity, and dependent on the political institution. Terrorism's effect on political trust varies along several dimensions.

Before presenting and discussing the paper's hypotheses, some of the observations made by the producer of the terrorism-data that is used in this paper, i.e. the IEP, can be noted. In countries experiencing a lot of terrorism, i.e. countries in the MENA-region, there's a correlation of .73 between terrorism and armed conflict. Considering that armed conflict can be perceived as politics by the use of different means (Clausewitz, 1997, 22), this may indicate, although not necessarily or exclusively mean, fragmented and/or low levels of political trust. And some studies confirm this indication, showing that countries in the MENA-region are among the countries in the world with the lowest levels of political trust (Zmerli and Van der Meer, 2017, 375-508). Thus, countries in the MENA-region experiences low levels of political trust simultaneously with high levels of terrorism, while countries in the West experience high levels of political trust simultaneously with relatively low levels of terrorism. This may imply that the relationship between terrorism and political trust has a reversed U-shape, where terrorism first has a positive effect on political trust, before the aggregate effect of terrorism becomes too much and turns negative in relation to political trust. Perhaps the *rally around the flag* effect functions as a temporary cushion.

## 2.6 The hypotheses

Based on the theoretical aspects of the two concepts, their theoretical relationship, and the empirical knowledge generated through relevant existing studies, as discussed in this chapter, one can extract several empirical expectations. This part of the chapter will present and discuss the expectations that are relevant in connection with the research question, and which at the same time can be answered by the data included and the methods employed in this paper. It can, again, be pointed out that the first four hypotheses are mainly connected to the first part of the research question, and will be answered through the MLR and the adhering data, while the fifth hypothesis is mainly connected to the second part of the research question, and will be answered through the survey experiment and the data produced in connection with that process.

It can also be mentioned that the hypotheses will be presented and discussed in relation to their theoretical foundation in this chapter, while the first part of the *Methods*-chapter will clarify exactly how the different methods can be applied to shed light on each of the hypotheses, and, thus, concretely how the paper will explore the hypotheses.

When it comes to the empirical relationship between terrorism and political trust, the theoretical expectations leads to expecting this relationship to be negative. The fact that terrorism occurs and is successfully, i.e. that the incidents inflict either personal or economic damage, as is part of what the data in this paper actually measures, indicates that either the political institutions' capacities are too low, or the aggregate of the resources involved in terrorism is too much, or both. Either way, the political institutions' capacities is not sufficient enough to prevent terrorism from happening. The institutions cannot handle the functional pressure that they're exposed to, as displayed by their actions or lack thereof when it comes to handling terrorism, and this provides the citizens with environmental cues signalling to the citizens that their trust is misplaced. Thus, terrorism has a negative effect on citizens' political trust.

However, the theoretical assumptions are the exact opposite to the expectations generated based on the empirical knowledge produced by existing research. As discussed, every previous study focusing specifically on the relationship between terrorism and political trust that was uncovered in the process of working with this paper, shows that in the aftermath of terror attacks the political trust increases significantly, in some cases "dramatically". This increase in political trust is usually explained by referring to the *rally around the flag* effect, where citizens, both for rational reasons and due to their shared identities, gather around and increases their trust in their common institutions and their leaders. Thus, existing research leads to expectations of terrorism having a positive effect on citizens' political trust.

The first hypotheses therefore become a choice between the theoretical expectations and the empirical evidence. The empirical evidence would often be the safe choice. However, as discussed prior to discussing the existing research focusing on the relationship between terrorism and political trust, there are some elements that distinguishes this paper, its focus and its research, from existing studies. Crucial in this regard, the differences in the amount of terrorism included in the study. Previous studies tend to focus on *one* significant terror attack, while this paper focuses on the aggregate effect that all the terrorism in Europe in the time period of 2002 to 2016 have had. There are logical reasons to assume that a lot of terrorism,

consisting of both big and small incidents, will have a different wear and tear on, or bolstering of, the political trust than one significant large-scale attack will. This possibility is also implicitly pointed out by Huddy and Feldman (2011, 463) by the remark that the effects of terrorism can become latent. Perhaps the effects of terrorism on trust either lay dormant until another act of terrorism occurs or work through different mechanisms, such as social capital (Sander and Putnam, 2010) and fear (Huddy and Feldman, 2011; Svendsen, 2008). Therefore, considering the remarks on the differences between previous studies and the study conducted in this paper, i.e. the MLR, the paper chooses to prioritize the expectations generated by the theoretical framework. The first hypothesis on the relationship between terrorism and political trust is:

#### H1:

In Europe in the time period of 2002 to 2016 terrorism have had a negative effect on the political trust that the parliament, the legal system, the police, and the politicians receive.

The next hypothesis follows in the footsteps of Dinesen and Jæger (2013), by considering their finding that terrorism affects the political trust in different institutions differently. These differences in effect can also be argued to be logical, since the different institutions have different societal tasks to fulfil, something that give the citizens different expectations for each institution. In addition, following the theoretical discussion from earlier where it is assumed that the fact that terrorism occurs is in itself an indication of an institutional lack of capacity, another theoretical assumption is that the phase before the terrorism manifests itself in combination with the phase during an attack (since the attack itself is the manifested proof of too low capacity, while the phase before an attack is *in itself* not a manifested proof unless some actor makes it so, either by actually executing the attack or by informing the citizens of the thwarted attack) have a greater impact on the perceived capacity than the phase after an terror attack. It is the manifestation itself that probably gives the greatest amount of environmental cues. These theoretical aspects lead to expecting a hierarchy amongst the political institutions, in how much the trust vested in them is affected by terrorism.

The *police* are tasked with the hands-on maintenance of law and order and is probably the institution that in the minds of the citizens is strongest associated with terrorism. The police is also directly involved in the phases before and during a terror attack, and as discussed above it

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<sup>&</sup>lt;sup>9</sup> Here and later the phases in a crisis, discussed above, is referred to in a simplified manner.

is probably these phases, as opposed to the phase afterwards, that provide the citizens with the strongest environmental cues in connection with terrorism and the institutions' capacities to handle it. Next, the *parliament* as a legislative institution is involved in creating laws regarding terrorism, and in general regulating the society, something that includes creating a regulative and cultural environment hostile and unfertile to terrorism. Its regulative work includes creating laws to prevent terrorism, providing resources for the police to prevent as well as to deal with terrorism when it occurs, and creating and adapting laws post-hoc. The parliament's central role in every democratic polity in many ways make the other institutions dependent on it. These factors lead to expecting that the trust vested in the parliaments to be relatively strongly affected by terrorism. However, given that the police have a much more hands-on role in dealing with terrorism, the parliaments' trust is not expected to be as affected as the police's trust. The legal system can be assumed to mainly be associated with the phases after a terror event, and terrorism probably does not provide the citizens with many cues regarding its institutional capacity. An occurrence of terrorism does not necessarily indicate a lack of institutional capacity within the legal system. Therefore, the trust vested in this institution is probably the trust that is the least affected, among the different institutions included in this paper. The role of the politicians and how their overall trust is affected by terrorism, is perhaps the most complex role to discuss. On the one hand, politicians as an overall group have extremely diversified tasks and responsibilities, both on a horizontal dimension and on a vertical dimension. For instance, the role of the defence minister is very different from the role of health minister. At the same time the defence minister has completely different tasks and therefore responsibilities than a member on a city council dealing with city-security. Very few politicians are probably directly involved in dealing with terrorism, both in the phase before, during and after an event. The politicians' overall trust should therefore not be very affected by terrorism, if this was the sole element to take into consideration. However, the politicians' actual involvement in dealing with terrorism is not the sole element to take into consideration. Politicians are often the first actors to appear in the news and in different medias in connection with terrorism, something that could lead to citizens getting a strong cognitive association between politicians and terrorism. Also, as discussed in the introductory chapter, there seem to be a lot of resentment directed towards politicians in recent times. Politicians seem to be credited, for better or for worse, for a situation regardless of their actual involvement in or responsibility for a situation. Norris (2017, 28-29) points out that politicians as a group are the most specific indicator of support for the political system. It is the 'institution' that the citizens have the strongest opinion of. At the same time, it is questionable whether citizens associate politicians, as an overall grouping, stronger with terrorism than the police. The second hypothesis, with the first hypothesis regarding the direction of the relationship between the two phenomena in mind, therefore becomes:

### *H2*:

Terrorism affects the trust vested in the different institutions in a negative but different order. The trust vested in the police is most affected, followed by the trust vested in politicians, then the trust vested in the parliaments, and finally the trust vested in the legal system.

The third hypothesis takes the observations from the MENA-region into consideration, in combination with empirical results generated by the studies reviewed and discussed in this chapter. Previous studies finds that *one* terror attack have a positive effect on political trust, while the observations made in, particularly, the MENA-region indicate that many terror attacks coexist with low levels of political trust. This could indicate that terrorism has a positive effect on political trust up until some point, before the terrorism becomes too much and the political trust is affected in a negative manner. The relationship between terrorism and political trust could be non-linear. This hypothesis can in some ways be considered a hypothesis that bridges the theoretical expectations (negative effect) with the empirical results that previous studies have generated (positive effect). The third hypothesis is:

### *H3*:

Terrorism has a non-linear effect on terrorism, where the effect first is positive, and by an increasing amount of terrorism becomes negative.

The fourth hypothesis is based on the studies and arguments that indicates that terrorism's effect on the citizens' beliefs, thereunder their trust, is dependent on the geographical proximity that the citizens' area of residence has to areas exposed to terrorism. This is a logical assumption: exposure leads to change, and, as discussed in this chapter, there's a lot of different studies conducted in somewhat different contexts that find this dependency, i.e. that geographical proximity to terrorism is a mediating factor. However, there are some elements in connection with the data included in this paper that limits the explorations that are possible to conduct, as will be discussed in the first part of the *Methods*-chapter, after having presented and discussed the data in the next chapter. The hypothesis has to take these limitations into account, and in doing so the fourth hypothesis becomes:

### *H4*:

The effect that terrorism has on citizens' political trust is dependent on the geographical proximity that the citizens' area of residence has to geographical areas that are statistically in danger of being exposed to terrorism. This means that citizens living in urban areas have, as a result of their country's exposure to terrorism, less trust in political institutions compared to citizens living in non-urban areas.

The fifth and final hypothesis focuses on the empirical causal relationship between terrorism and political trust, and asks if *capacity perception*, i.e. the citizens perception of the institutions' capacity to deal with terrorism, functions as a causal mechanism between terrorism and political trust. The theoretical framework discussing the causal relationship between these two phenomena has already been discussed explicitly several times in this chapter, so an elaboration here risks being redundant. But the theoretical framework points to the plausibility of *capacity perception* being a causal mechanism, and several aspects of the suggested overall theoretical framework has already received empirical backing from previous studies. The last hypothesis is as follows:

### *H5*:

The citizens' perception of political institutions' capacity to handle terrorism is a causal mechanism in the relationship between terrorism and political trust. This means that the political trust that citizens' experience changes as the citizens' perception of the institutions' capacity to deal with terrorism changes.

# **Summary**

This chapter has discussed the theoretical foundations for the concepts of 'terrorism' and 'political trust'. Building on trust theories and rooted in an institutional framework the chapter suggests a causal framework that could explain how terrorism affects the citizens' political trust, which is summed up in figure 2.1. The chapter also discussed previous research, which guided the selection of variables to include in this paper. Previous research has also been quite informative regarding the relationship between terrorism and political trust, despite having completely different research designs than the one employed in this paper. Previous research along in combination or, as is the case with the first two hypotheses, in competition with previous research resulted in five hypotheses which will be explored in this paper. The next chapter discusses the paper's foundation for exploring these: the data.

3 Data

## 3.1 Introduction

This chapter will discuss the data that is retrieved and used in the MLR, and the data that is produced and used in connection with the survey experiment. In accordance with the paper's two-parted research question and its multiple method approach, several *sections* in this chapter have a two-parted layout. The first part of these sections discusses the data that is used in the MLR, and the second part focuses on the data produced in the survey experiment. In addition, in accordance with the differences in the scope of the data, the MLR data being far more comprehensive than the survey experiment data, some of the sections have an asymmetrical layout, in favour of the MLR data.

The chapter starts by discussing the main data sources utilized in this paper: the *European Social Survey* (ESS), the *Quality of Government* database (QOG), and the *Norwegian Citizen Panel* (NCP). Thereafter the chapter discusses the data' scope and its representativity and, in connection with the data' representativity, discusses the possibility of generalizing from the samples to the population. After discussing data' scope and representativity, the data and its content is described, before it is discussed how the data is treated in accordance with the different methods. The chapter ends by discussing the data' reliability, validity, and equivalence. These elements are crucial for the soundness of the paper's conclusions. Due to the data' scope, both the number of variables as well as its scope in time and space, the reliability discussion centres on the reliability of the data *sources*, while the validity discussion focuses on the dependent variables as well as the independent variable of interest. The equivalence discussion only discusses the equivalence of the MLR data, since it is cross-sectional and longitudinal while the experiment data is neither.

## 3.2 Data sources

### *3.2.1 The MLR*

The MLR uses data retrieved from ESS and QOG. ESS is a survey which gathers data on European citizens, and the data therefore mainly consist of data on the individual level (all data from the ESS utilized in this paper is on the individual level). The data gathering for the first data round (2002) started in 2001, and the process is repeated every second year on randomly selected respondents. The questionnaire that is used in the survey consists of hundreds of

questions, where some of the questions are permanent inclusions in the questionnaire (all of the data from the ESS utilized in this paper are permanent inclusions), some questions are included in the questionnaire on a rotating basis, and some questions are only included in one round. The questions, generally, cover several aspects of a citizen's life, such as their satisfaction with different societal conditions (e.g. the economy, health care system, education system, etc.), their attitude towards immigration and migration, and their happiness. Common for most of the questions is that they deal with citizens' attitudes, beliefs or satisfaction. The survey responses are then stored in the ESS database, and so far (10.10.2018) ESS has published eight survey rounds (ESS, n.d..; ESSa, n.d.).

QOG is a database that consists of data both produced by the QOG employees as well as data compiled from other data sources (QOGa, n.d.). The data that this paper retrieves from the QOG database, the *HDI* and the *GTI*, are originally retrieved from other data sources. The *HDI* consists of register-data and is gathered from statistical reports from the UN (QOG, 2018). The UN in turn creates their reports based on data from a vast number of other sources (UNDPb, n.d.). The *GTI* is gathered from IEP's reports (QOG, 2018), which in turn gathers data from the GTD (IEP, n.d.). The GTD gathers data from all over the world spanning decades, and its main component is (terror) incident data. All the data retrieved from the QOG database that this paper utilizes is macro (country) data.

## 3.2.2 The survey experiment

NCP is a researcher-led internet- and panel-based questionnaire that is executed on a non-regular basis, but at least more than once each year. Due to its panel-based nature the NCP seeks to retain the participants it recruits from one survey to the next. The content of the questionnaire varies, but often includes questions regarding economic, political and social attitudes and beliefs (UIBa, n.d.; UIBb, n.d.). Sometimes, as is the case with this paper, it is possible for external researchers to implement questions or experiments into the overall questionnaire.

# 3.3 Data scope and representativity

### 3.3.1 The MLR

As mentioned earlier, the objective at the outset of this paper was to maximize both the amount of time to include in the study as well as the number of countries, in order to maximize representativity. However, this desire for maximization had to take into consideration the quality and the equivalence of the data. These elements are discussed later, but with these

considerations in mind the study ended up with nineteen European countries, 284 851 individuals, and the time period of 2002 to 2016 (eight ESS data rounds) (see table 3.1).

**Table 3.1** Units included in the MLR

Countries:		Data rounds:	Individuals:
Austria		7	15,237
Belgium		8	14,343
Czech Republic		7	15,216
Denmark		7	10,836
Estonia		7	13,410
Finland		8	16,200
France		8	15,051
Germany		8	23,342
Hungary		8	13,132
Ireland		8	18,247
Netherland		8	15,186
Norway		8	13,248
Poland		8	14,124
Portugal		8	14,988
Slovenia		8	10,914
Spain		8	15,501
Sweden		8	14,390
Switzerland		8	13,860
United Kingdom		8	17,626
Total:	19	148	284,851

The paper focuses on and discusses political trust in a European context. How representative the data is for the European overall, depends on how representative the individuals are for their country, as well as how representative the countries are for Europe. The individuals' representativity is mainly a statistical consideration, while the countries' representativity is mainly a discretionary consideration.

The ESS bases its selection process of individuals on random selection, and it is specified that the selection is based on "strict random probability methods at every stage" (ESSg, n.d.). The samples are intended to be representative of all persons aged fifteen and above (with no upper age limit) that reside within a private household in the participating country (i.e. usually, although not necessarily exclusively, national citizens). The selection requirements in themselves should therefore be satisfying in connection with the data representativity and generalizability. However, there are some potential biases in the ESS data (Häder and Lynn, 2007), but the severity of these biases is hard to estimate. In order to minimize the effects of the biases ESS have developed design-weights. The inclusion of (design-)weights in a MLR is,

however, no straightforward task. The complexity of the task grows with the growing complexity of the MLR model, often because the original weights needs modification to fit the model and the specific data (see Gelman (2007) and Rabe-Hesketh and Skrondal (2006) for further discussions on the subject). Due to the methodological and statistical complexity of including weights in a proper manner, the paper excludes weights from its analyses. The aggregate consequences of this is hard to estimate but given the strictness of the procedures applied by the ESS they should not be too severe. In addition to the strict procedures, ESS requires that countries with more than two million citizens (thus every country included in this paper, except from Estonia and, at times, Slovenia) includes at least 1500 respondents in each survey round (ESSg, n.d.). From a purely statistical viewpoint Ringdal (2014, 269) recommends that a study should include at least 30 respondents from a given population in order to achieve representativeness. The extensive surplus of respondents combined with ESS strict procedures should provide *reasonably* representative data.

As for how representative the countries are for Europe as a whole, the countries included in the MLR study are countries from the northern part of Europe (e.g. Norway and Finland), the southern part (e.g. Spain and Portugal), the western part (e.g. UK and Ireland), the eastern part (e.g. Poland and the Czech Republic) and the central part (e.g. Germany and France). The study includes relatively rich countries in Europe (e.g. Norway and Denmark) and relatively poor countries (e.g. Poland and Slovenia). Countries with relatively large populations (e.g. Germany and France) are represented, as well as countries with relatively small populations (e.g. Estonia and Slovenia). Furthermore, it can be claimed that these economic and sociodemographic differences entail cultural differences. The countries included also varies when it comes to the amount of terrorism that they have experienced, from none (Slovenia) to relatively (in a European context) much (e.g. France, Spain and the UK). Due to data availability and -quality there are some absences that are worth mentioning. First, the south-eastern part of Europe (e.g. Romania, Greece and Turkey, the latter country being the country in Europe hardest hit by terrorism (IEP, 2017)) are not represented. Furthermore, the smallest European states (e.g. the Vatican, Monaco and Luxembourg) are not represented. In addition, some vital European states (e.g. Italy, Ukraine and Russia) are not included. However, despite some shortcomings the included countries can be claimed to largely be representative of Europe.

## 3.3.2 The survey experiment

The data produced in the survey experiment are gathered from *one* population (Norwegian) and is collected at *one* point in time (2019). A total of 2 287 people participated in the survey experiment, portioned into three roughly equal groups. All of the participants in the experiments had participated in at least one panel round prior to the panel round that the experiment was implemented in. The participants were selected randomly from the Norwegian tax registry, and the only selection requirement was that the participants had a permanent residence in Norway and had a phone or mailbox (Skjervheim et al., 2019, 4). Every participant is at least eighteen years old.

The statistical requirements are therefore in place. Both the selection procedure and the number of participants (>30) is satisfactory. However, post-analyses of the samples showed that there was some response bias. For instance, those with little education are underrepresented, while those with a lot of education are overrepresented. Those responsible for the data gathering have developed sample weights to account for this response bias. These weights are, however, not possible to apply in ANOVAs (at least not in Stata). However, the validity of the theoretical framework and the causal mechanism *per se* do not depend on the sample being representative of the population. The theoretical framework argues that 'capacity perception' is a cognitive causal mechanism that exists in the interplay between the individual and actors external to the individual (other persons and institutions). A lot of trust theories (see e.g. Grimen, 2009; Hardin, 2002, Hardin, 2006; Luhmann, 1979; Schoon and Cheng, 2011, Noteboom, 2012) and a lot of institutional theory (see e.g. Scott, 2014; Hall and Taylor, 1996; Peters, 2013; Askvik et al., 2011; Thelen, 1991; Mahoney and Thelen; 2010) assume, either implicitly or explicitly, that 'capacity perception' is a causal cognitive mechanism, as explicitly stated by Hutchinson and Johnson (2011,739). As long as the experimental procedure is adhered to, as discussed in the next chapter, the conclusions regarding the causal mechanism should be valid and generalizable to similar scenarios as the one presented in the experiment. Either 'capacity perception' is a causal mechanism in the relationship between terrorism and political trust in the cognitive apparatus of individuals, or it is not. Strictly speaking, due to the exclusion of design weights, the requirements for statistical generalization is not met, but theoretical generalization is still applicable.

# 3.4 Variables

#### 3.4.1 The MLR

A total of 37 variables form the *basis* of the MLR, counting the treated macro variables (the two original macro variables, *HDI* and *GTI*, are each replaced by two treated variants) and the control indexes that are constructed. Four out of these 37 are dependent variables, and eleven are combined into three control indexes (how the data was treated prior to the MLR, including index construction, is discussed in the next section of the chapter). The dependent variables and all but one control variable are data located on the individual level and are collected from ESS, while the main independent variable and the control variable on the macro level are collected from QOG. Table 3.2 shows the 18 variables that are *used* in the MLR (not counting the treated versions of the *HDI* and the *GTI*, which is explained both below and in the next chapter).

**Table 3.2** Variables in the MLR

Variable description:	Type:	values (original in parenthesis):
1. Trust in parliament	Dependent	0-10
2. Trust in the legal system	Dependent	0-10
3. Trust in the police	Dependent	0-10
4. Trust in politicians	Dependent	0-10
5. Political interest	Control	0-1 (1-4)
6. Feeling of safety	Control	0-1 (1-4)
7. Degree of religiousness	Control	0-10
8. Satisfied w/household income	Control	0-1 (1-4)
9. Area of residence	Control	0-1 (1-5)
10. Gender	Control	0-1 (1-2)
11. Age	Control	15-123
12. Years of education	Control	0-56
13. Social trust	Index, control	0-10
14. Individual wellbeing	Index, control	0-10 (varies)
15. Satisfaction w/societal institutions'	Index, control	0-10
perf.		
16. <i>HDI*</i>	Control (macro)	0-1**
17. <i>GTI*</i>	Independent variable of interest	0-10**
18. i.year	Controls for the time dimension	2002-2016

<sup>\*</sup> It is the treated variants of HDI and GTI that are used in the MLR, in accordance with statistical recommendations/requirements

The dependent variables measure the amount of trust that the respondents have in the different institutions. All the questions behind the dependent variables have the same formulation, except for how the question ends, i.e. which institution is in focus: "Using this card [the interviewer's questionnaire sheet], please tell me on a score of 0-10 how much you <u>personally</u> trust each of

<sup>\*\*</sup> has a decimal level variation

the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly..." and then the institutions are listed (ESS questionnaire 1-8). 10

As for the control variables from the ESS: *Political interest* is based on the question: "How interested would you say you are in politics – are you..." and the scoring goes from '1-very interested' to '4-not at all interested' (Ibid). Feeling of safety is based on the question: "How safe do you - or would you - feel walking alone in this area [respondent's local area or neighbourhood] after dark? Do – or would you – feel..." and the scoring goes from '1-very safe' to '4-very unsafe' (Ibid). Degree of religiousness is based on the question: "Regardless of whether you belong to a particular religion, how religious would you say you are?", and the scoring goes from 0 to 10 (Ibid). Satisfaction with household income is based on the question: "Which of these descriptions on this card comes closest to how you feel about your household's income nowadays?" and is scored from '1-living comfortably on present income' to '4-finding it very difficult on present income' (Ibid). Area of residence is based on the question: "Which phrase on this card best describes the area where you live?" and is scored from '1-a big city' to '5-a farm or home in the countryside' (Ibid). Gender is scored 1 for male and 2 for female, age is continuous from 15 and above, and education is based on the question: "About how many years of education have you completed, whether full-time or part time? [Reported in full-time]" and is continuous from 0 and above (Ibid). Every question in the ESS also contains the option of answering "don't know" and/or "refusal". These responses are, as discussed below, coded as 'missing' prior to the MLR.

The index that the paper refers to as *social trust* consists of the questions: 1) "Using this card, generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?" which is scored from '0-You can't be too careful' to '10-Most people can be trusted'; 2) "Using this card, do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?" which is scored from '0-Most people would try to take advantage of me' to '10-Most people would try to be fair'; and 3) "Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?" which is scored from '0-People mostly look out for them selves' to '10-People mostly try to be helpful' (Ibid).

<sup>&</sup>lt;sup>10</sup> The scoring is reported in its original format, i.e. before the recoding (which is described further below).

The index referred to as *individual wellbeing* consists of the questions: 1) "All things considered, how satisfied are you with your life as a whole nowadays?" which is scored from '0-Extremely dissatisfied' to '10-Extremely satisfied'; 2) "Taking all things together, how happy would you say you are?" which is scored from '0-Extremely unhappy' to '10-Extremely happy'; and 3) "How is your health in general?" which is scored from '1-Very good' to '5-Very bad'.

The index called *satisfaction with societal institutions' performance* consists of the questions: 1) "On the whole how satisfied are you with the present state of the economy in [country]?"; 2) "Now thinking about the [country] government, how satisfied are you with the way it is doing its job?"; 3) "And on the whole, how satisfied are you with the way democracy works in [country]?"; 4) "Now, using this card, please say what you think overall about the state of education in [country] nowadays?"; and 5) Still using this card, please say what you think overall about the state of health services in [country] nowadays?". All of the questions are scored from '0-extremely dissatisfied [or bad]' to '10-extremely satisfied [or good]' (Ibid).

The *pre-constructed* control index *Human Development Index* (*HDI*) is a control index on the macro level. The index is published on a yearly basis and consists of indicators that describes the average life expectancy in a country, average years of full-time education for citizens over 25, and gross domestic product per capita (GDP/C). Regarding GDP/C, it is assumed that GDP/C have decreasing returns for the wellbeing of citizen's, so the GDP/C score is modified by a logarithm accounting for this assumption. In total, the *HDI* is an index that measures and describes several key aspects of a society that an individual is located within, such as the average health of the citizens, the amount of knowledge that the citizens have, and the living standards (UN HDR, 2018). The value of the three indicators are aggregated together in a composite index based on their geometric average (Ibid). The index (as used in this paper) varies from 0 to 1 with a decimal variation.

The second macro variable is the independent variable of interest: *Global Terrorism Index* (*GTI*). The *GTI* is an index constructed by the IEP, based om statistics mainly from the GTD. Before discussing its construction, some remarks can be made on the ontological and methodological assumptions behind the construction. This will, in turn, provide a better understanding of what exactly the *GTI* measures. First, it is assumed that terrorism has an equal effect on every citizen within a country. Thus, each country gets one score each year, which is

assumed to be valid for every citizen within that country. Some of the backing behind this assumption is that media ensures a full and equal distribution of the terrorism's effect within a country (Hyslop and Morgan, 2014). Furthermore, it is assumed that the effect which a terror incident have on citizens decreases as the amount of terrorism increases, i.e. that terrorism has decreasing returns. Every new incident of terrorism has, *ceteris paribus*, less effect on the citizens than preceding attacks. It is not specified what this assumption involves for the index's construction, i.e. how decreasing returns are calculated into the index. However, one logical inference is that the assumption is accounted for in the index's standardization. In theory, a country's raw-score can vary from  $0 - \infty$  (scoring described below), yet the index score only varies from 0 to 10. Thus, if a country gets a raw-score of  $\infty$  this would give the country an index score of 10, which could function as the benchmark point of standardization for the rest of the countries' scores (although this is not certain, as it is not discussed explicitly, neither in the IEP-reports nor in the discovered sources that review the *GTI*) (Ibid). Third, it is assumed that terrorism have a decreasing but a lasting effect over time (Ibid).

With these assumptions in mind, the GTI is published on a yearly basis and is constructed by combining the values of four indicators, which results in the *raw scores*. Each of the indicators are also weighted by their assumed impact on individuals and societies, and thus according to their importance relative to each other. The indicators are: 1) the total amount of terror incidents that a country experiences a given year, which is weighted by a factor of 1; 2) the total number of casualties from terror attacks a given year, which is weighted by a factor of 3; 3) the total number of persons *injured* as a consequence of terror attacks a given year, which is measured by a factor of .5; and 4) the economic costs as a consequence of property damaged by terror attack, which is weighted by a factor of 2 (Hyslop and Morgan, 2014). As mentioned above, the index also takes into consideration the effects that terrorism have over time. The scores from previous years affects the scores of a current year. This is done by weighting the score of the current year with a factor of .52, the score from the previous year with a factor of .26, the score from the year before that with a factor of .13, and so on (Ibid). This procedure gives countries a raw-score which in (an unspecified) turn is transformed into the index-score. All in all, the GTI is a complex index. This complexity has consequences for the validity of the index, something that is discussed towards the end of this chapter.

The two macro-variables, *HDI* and *GTI*, are not used in their original format, however. In compliance with the methodological requirements that have to be met, as discussed more

thoroughly in the next section, each of the two original variables are transformed into a *longitudinal* variant and a *cross-sectional* variant. This methodological modification makes it possible to identify the effects caused by variation within a country, as well as the effects of differences between countries (Fairbrother, 2014, 124).

The MLR also includes a variable that measures and controls for time: *i.year*. This variable is a sequential dummy-variable, where one year (2002) is used as a benchmark that the following years (2004, 2006, 2008, 2010, 2012, 2014 and 2016) in turn are measured against. This is a methodological move that has to be included in the statistical model in order to get correct estimates (Fairbrother, 2014, 124-125; Christensen et al., 2018).

## 3.4.2 The survey experiment

The data in the survey experiment consists of a total of five variables. There's one independent variable (referred to as *treatment* or group(s) from here on) and four dependent variables, where three of the dependent variables are the dependent variables of interest, while the last dependent variable is used to control for the effect of the treatment.

The treatment functions as a stimulus intended to affect the experiment participants' capacity perception, i.e. their perception of the institutions capacity to deal with terrorism. The stimulus comes in the form of a vignette, informing the experiment participants of some (true) characteristics of the institutions' capacity. The vignette comes in three almost identical variants, which means that the treatment has three groupings in which the experiment participants gets randomly placed (the experiment process is discussed more thoroughly in the next chapter): one 'negative' group, one neutral/control group, and one 'positive' group. All the groupings have the same 'neutral' basis, meaning that the content in the negative and the positive group are expansions of the content in the control group. The neutral basis, the vignette, that every group receives is this: "In the last couple of years there has been several terror incidents, including in Norway. Norwegian authorities considers terror one of the biggest threats to the Norwegian society." (translated, see Appendix D for original version). The vignette is neutral in character by not containing any information regarding institutions' capacity. The participants in the control group is therefore not stimulated in any way regarding their capacity perception and can therefore actually function as a control group. In addition, the neutral vignette also *primes* all the participants, since all participants receive this information, to have the perception that terrorism, at least according to Norwegian authorities, is a societal threat (again, all the information presented in the experiment is true). The prime therefore helps setting the frame for the experiment and puts the participant in the right cognitive mindset.

As mentioned, the negative and the positive group receives vignettes that to a large degree are identical to, but extensions of the neutral vignette. The negative group receives a vignette that in the extension of the neutral vignette adds: "...Norwegian authorities have for several years worked systematically to increase their capacity to prevent and combat terrorism, both prior to, during and after terror incidents. Several public reports and sources claim that the authorities' capacities in several regards is still not sufficient." (translated, Ibid, underscored only in this context). The positive vignette is identical to the negative vignette except from the ending. Instead of saying that the capacity is still not sufficient, the ending of the positive vignette says that is has increased. The only element that varies between the three groups is therefore the description of Norwegian authorities' capacity: the control group has no description of the capacity, the negative group has a negative description regarding the capacity, and the positive group has a positive description regarding the capacity.

The three dependent variables of interest measure the amount of trust that the citizens have in the Norwegian 1) Government; 2) Parliament; and 3) police. They all have identical formulations, except for the institution that is included: "How much do you trust [institution]?" (translated, Ibid). The amount of trust is measured on an ordinal scale from '1-very much' to '5-not at all' (translated, Ibid).

The fourth dependent variable, the control variable, measures how much capacity the participants believe that Norwegian authorities have when it comes to dealing with terrorism, and thus controls for the effect of the vignettes. Its formulation is the following: "How much capacity to deal with terrorism, before, during and after terror incidents, do you believe the Norwegian authorities have?" (translated, Ibid). It is measured along the same scoring system as the other dependent variables. If the vignettes' have had an effect, if the experiment is to be valid, there's supposed to be systematic variation between the three groups. This element is discussed more in the next chapter.

### 3.5 Treatment of the data

### 3.5.1 The MLR

The data have gone through several steps of treatment in the computer program Stata<sup>TM</sup>. First all of the 149 datasets were downloaded. These datasets were comprised of 148 ESS sets, one dataset for each country for each year, and one QOG set for all the countries for all the years. Then, all of the irrelevant variables were removed from the datasets, i.e. the variables that was not to be included one way or another in the MLR study. Thereafter the datasets were combined. This procedure included 'appending', i.e. vertically connecting, all the 148 ESS datasets/matrices, by first appending every year for each country together, and then all the countries together. This reduced the 148 ESS datasets to one dataset. After that the QOG dataset was 'merged', i.e. horizontally connected, into the ESS dataset, adding variables and observations to each unit (each country each year, giving every citizen in each country the same *HDI*- and *GTI*-score for each year). The merge was performed by the use of the id-variables *country* and *year*.

After creating one combined dataset, the observations where respondents didn't know or wouldn't answer was coded as 'missing', ensuring that the MLR would ignore these observations. None of the variables, however, had more than 5 percent missing, eliminating the need for data imputation or similar data editing methods (Graham, 2009, 554; Little and Rubin, 2015). The QOG-data had no missing observations, except for the *HDI*-score of 2016. Here, the *HDI*-score of 2015 was duplicated to 2016. Considering the fact that the *HDI*-scores changes very little from year to year, this shouldn't have too detrimental consequences.

After taking care of missing observations, some of the variables coding was reversed. The variables that had a 'negative increase', which many variables had, e.g. *political interest* where 'high interest' had a low score and vice versa, got a reversed order. Furthermore, variables with few values (>7) were recoded as dummy variables. The dummy coding happened usually by splitting the variable in two, e.g. those who are 'very interested in politics' and those who are 'quite interested in politics' were coded as 1, while the two groups not so interested in politics was coded as 0. The only exception from this symmetrical coding was the variable *area of residence* which had five original values. In this case the two most 'central' locations were

coded as 1, while the remaining three values was coded as 0.<sup>11</sup> Gender was recoded to 0 and 1, instead of 1 and 2.

The data had few 'outliers', i.e. few observations that markedly stood out from the rest. As the method chapter will discuss more thoroughly, the data does not have a normal distribution, but every value has a relatively large number of observations. Therefore, there's little room for outliers to be present. Nevertheless, there are some exceptions. Specifically, the continuous variables *age* and *education*. For instance, 22 respondents out of the respondents that had answered at least one of the questions used in the MLRs was at least 100 years old, while 26 persons had more than 40 years of full-time education. These observations were not removed, in order to keep the dataset as similar as possible to the originals. Furthermore, the effect that 48 observations that are, to different degrees, outliers will have in a dataset comprised of more than 284 000 observations will likely be negligible.

As for the index variables that were constructed in connection with the MLR, all of these were constructed in the same manner. The scores on the different original variables was added together for each respondent, and then the total score was averaged by the numbers of original variables that the respondent had answered, which resulted in the index-score. In the few cases where respondents had opted not to answer a question, thus being coded as missing, this observation was left out of the equation.

As mentioned earlier, in order to get correct estimates, the macro variables had to be transformed into what can be referred to as a longitudinal variant and a cross-sectional variant. This transformation ensures the correct attribution of the effects that the independent macro variables has on the dependent variables. The cross-sectional variant, ' $\overline{X}_j$ ', is an expression of more lasting characteristics of a country (either exposure to terrorism or human development), and is created by use of the country's overall average when it comes to these two variables (*HDI* and *GTI*). The longitudinal variant, ' $X_{tjM}$ ', is created by centring the observations around their group average, i.e. group-centring. Meaning that the countries score for a given year, ' $X_{tj}$ ',

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<sup>&</sup>lt;sup>11</sup> This 2/3 splitting had no consequences compared to a 3/2 splitting for the analyses, since neither splitting produced significant results in their combination with neither of the terrorism variables.

is subtracted from the country's overall average, ' $\overline{X}_j$ ', resulting in  $X_{tjM}$ . Or  $\overline{X}_j$  -  $X_{tj} = X_{tjM}$ . This variant is an expression of changes within a country (Fairbrother, 2014, 124-125).

It was also constructed a new variable: country-year, which is simply a combination of country and year. This new variable is used to identify the intermediate level in the data structure, which is a methodological requirement, and it is not used as an independent or dependent variable. Furthermore, in order to achieve an optimal merge, i.e. a so-called 1:1 merge, between the QOG dataset and the ESS dataset, the two datasets should have the same id-variables as well as identical scoring on the id-variables. If they do not, Stata will not know which observations belong together. First, therefore, both datasets were recoded so that one of their countryvariables (they both had several country-variables identifying the countries in different ways) got a standardized ISO-coding. This ensured the same scoring on one of the id-variables. Second, ESS publishes data (for) every second year, e.g. 2002, 2004, etc., while the QOG publishes data (for) every year. Therefore, in order to ensure identical scoring, the GTI scores for two years was averaged into a score for one year (due to small changes in scores this was not necessary for the HDI variable). The data, thus, becomes less nuanced. However, it was a technical necessity. In addition, it could be argued that the average of two years is a truer expression of the effects of terrorism than the score for one year. This is also, as discussed earlier, one of the assumptions that the IEP makes considering they're weighing the scores by time.

### 3.5.2 The survey experiment

There are especially two things that separates the experiment data from the MLR data: its scope and its (purposeful) design. The experiment data is far less comprehensive in its scope and is custom designed to fit the analysis. The experiment data therefore required far less treatment than the MLR data. But some steps were taken. While the participants could not opt to answer 'don't know' or 'refuse', they could choose not to answer by dropping out of the experiment. Very few chose to do this (.3 percent), but those who did were coded as missing observations. The final step was to reverse the coding on all the dependent variables, in order to get a 'positive increase'.

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<sup>&</sup>lt;sup>12</sup> The denotations in this section is related to the denotations in the method chapter and is used as a somewhat 'soft introduction' to the statistical formulas in that chapter.

# 3.6 Reliability

There are several ways to evaluate the reliability of a study. The optimal way is to assess the stability and the equivalency (not in the manner as discussed below) of the data. Assessment of stability involves exploring to what degree the same data generation procedure (DGP) provides the same data at different points in time, while assessment of equivalence involves exploring to what degree different DGP provides the same data at the same point in time (Grønmo, 2015, 222-224). These assessments can be standardized and quantified, providing solid measurements of data quality (Ringdal, 2014, 355-356). However, due to data' comprehensiveness these types of assessments are far beyond the reach of what is possible to perform in this paper. Assessments of reliability can, nonetheless, be done by reviewing the data sources and assessing their DGPs (Ringdal, 2014, 97; Grønmo, 2015, 218).

### 3.6.1 The MLR

The ESS data is generated based on a common questionnaire that is distributed to employees and partners of ESS. As discussed below, the ESS have an entire team dedicated to ensuring the quality and *equivalence* of these questionnaires (ESSb-f, n.d.). The questionnaire is used in face-to-face interviews with respondents (ESSa, n.d.). The sample procedure is already clarified above in connection with the discussion of representativity. ESS also specifies that they have detailed procedures in place to ensure and assess the data quality. The reliability of the data is also from time to time assessed by external actors (ESSh, n.d.). If ESS follows its data generation procedure they should be able to produce reliable data. The fact that ESS is a frequently used data source by a lot of researchers testifies to this reliability.

The QOG data are, as discussed previously, collected from the UN and from the IEP. UN, in turn, gathers date from many sources to produce their reports (UNDP, n.d.; UNDP Technical notes, 2018, 2), which makes the reliability of the data sources hard to evaluate. Nevertheless, considering the UN reputation and the resources and competencies at its disposal, a plausible assumption is that they publish reliable data. Also, *HDI* is a common index to include in studies spanning several domains (see for instance Christensen and Aars, (2018), Lejins (2000, 89), and Hoeller et al. (2014)), which testifies to the index's reliability.

Regarding *GTI*, while QOG collects data from the IEP, the IEP in turn gathers data (mainly) from the GTD. GTD collects data from open accessible sources (often news media), and cross-validates sources when possible. The database also modifies their data retrospectively if new

information surfaces (GTD, n.d.). This transparency, the cross-validation, and the retrospective modification contributes towards the data' reliability. In addition, the database, both in itself and as a foundation for the *GTI*, is a frequently used database in the study of terrorism (see for instance Schmid (2011)). In conclusion, the data utilized in the MLR should be reliable, if the data sources are a valid indication.

However, before concluding the reliability discussion of the MLR data, some remarks can be made regarding the indexes that are constructed in this study. Indexes should be constructed in the cases where their inclusion can help illuminate complex concepts and their effects, and the construction should be based on logical inferences and statistical evaluations (Ringdal, 2014, 96 and 350-358; Tjønndal, 2018, 106-111). Regarding the logical inferences, it can, in short, be argued that the combination of the different variables into indexes should not be controversial. The variables are all, at least to a moderate degree, natural inclusions into their respective index. The index on *social trust* includes variables that sheds light on the respondent's confidence in other individuals, while the index on *individual wellbeing* measures physical and psychological wellbeing, and the index on *satisfaction with societal institutions' performance* asks about how satisfied the respondent is with different societal institutions and different societal situations. Every index providing a more comprehensive and complete understanding of their respective purpose, than each variable alone could.

When it comes to the statistical evaluations, correlation analysis, factor analysis and Cronbach's Alpha (a reliability test) are common evaluations to perform. The result from these three evaluations are shown in table 3.3. In summary, every index performs well in the evaluations. In every case the correlation was above .3 and below .75, the factor analysis showed an *eigenvalue* over 1, the score in Cronbach's alpha was at least .6. These are all statistical indicators showing that the variables are suited to be combined into an index (Tjønndal, 2018, 106-111). Table 3.3 also shows the same statistical evaluations of an index containing the dependent variables used in the MLR. As mentioned earlier, Marien (2017) analyses the different variables that is used in this study as dependent variables, and argues that they are all, in the eyes of the respondents, considered to be some sort of political institutions. The results here, especially the factor analysis, supports her conclusion (she builds her conclusion mainly on the results from the factor analysis, the different *eigenvalues*, and logical inferences). The factor analysis, as shown in table 3.3, resulted in an *eigenvalue* of 2.77, which is relatively high compared to two of the other indexes shown in table 3.3, and the strongest factor loading was

on the parliament. This indicates that the parliament and its political dimension is the dominant factor and dimension (Ringdal, 2014, 96). One way to interpret this is that the four institutions are, if anything, political institutions (Marien, 2017, 96). Again, it makes sense to use the term 'political trust', since all the institutions to some extent are political institutions.

**Table 3.3** Statistical evaluations of indexes

Index	Correlation	Eigenvalue	Cronbach's
			Alpha
Trust in political institutions	0.47-0.73	2.77	0.85
Satisfaction w/ soc. Institutions' perform.	0.41-0.63	2.90	0.82
Social trust	0.48-0.57	2.03	0.76
Individual wellbeing	0.34-0.70	1.95	0.71

## 3.6.2 The survey experiment

The data in the survey experiment is produced in collaboration with the NCP and the fourteenth panel round. The NCP is a collaborative organization, consisting of representatives from the seemingly highly esteemed research institutions NORCE and the University of Bergen (UIBa, n.d..; UIBb, n.d.). In general, the institutions and their representatives that is responsible for the overall survey designs seems to have long experience when it comes to research (Ibid). The researchers at NORCE claim to have extensive academic interests, as well as offering environments that promotes knowledge (NORCE, n.d.). The execution and the digital technicalities of the surveys is handled by the analytical company 'ideas2evidence'. This company is regularly used by different institutions, both private and public (ideas2evicende, n.d.). In summary, the actors responsible for the DGP of the experiment data (disregarding the experiment design itself, which the author is liable for) seem competent and reliable, which should produce reliable data.

# 3.7 Validity

While reliability assessments focus on the confidence one can have in the data, validity assessments revolve around the applicability of the data in connection with their intended use, i.e. in connection with the research question and the hypotheses. Generally, one tries to assess how qualified the data are when it comes to shedding light on the question at hand. In quantitative studies it is especially the measurement validity that is evaluated (Grønmo, 2015, 231-233). This entails exploring if the variables measure what they are supposed to measure. A

systematic way to do this is by exploring the relationship between the *background concept* and the *systematized concept*, between the *systematized concept* and the *indicators*, and between the *indicators* and their *scores* (Adcock and Collier, 2001, 531). In experiments it's also relevant to assess the internal and the external validity, which can be considered to represent as to which degree the experiment participants environment is under control (i.e. how well isolated the participants are from unplanned interference) and to which degree the participants' experiment environment coincides with the participants' natural environment, respectively (Grønmo, 2015, 233). The internal validity has to be in place to some degree in order to be able to make valid inferences, while the external validity has to be in place to some degree in order to generalize the inferences made in the experiment (Ibid).

### 3.7.1 The MLR

The MLR consists of many variables, as shown in table 3.2, and in consideration of the available volume that a paper such as this has, the validity discussion of the MLR data is limited to the central concepts: political trust and terrorism. When it comes to terrorism, the discussion should start with the data produced by the GTD. The definitions, both the one utilized by the GTD and other leading definitions of terrorism, was demonstrated in the previous chapter. And as mentioned in that chapter, although there are some elements that are not universally agreed upon, there is to a large degree compliance between the definition provided and utilized by the GTD and other leading definitions. The leading definitions of terrorism are, arguably, the best expressions of the background concept. There is, thus, compliance between the background concept and the systematized concept, the latter being represented by GTD's definition. Furthermore, GTD's definition explicitly includes all the indicators that is used in the observing of cases. It is, therefore, compliance between the systematized concept and the indicators. When it comes to the scores and how these are actually set, this is somewhat harder to assess. However, considering the fact that GTD measures incidents and not attitudes or beliefs, the scores are set on a more objective footing. They should be more straightforward, relatively speaking. In addition, considering the procedure with cross-validity and retrospective modification, this increases the belief in the validity of the scores. Therefore, the GTD data should be valid data on terror incidents.

There are, however, some elements to keep in mind when interpreting the results. As discussed above, the IEP constructs their own index of *terrorism*. This is done by using the definition of terrorism as well as the data produced by GTD. However, their construction includes combining

the original data on terror incidents with data on economic consequences, injuries and fatalities, and weighing the different elements with different factors. The data on terrorism in this paper is therefore different from the data on terror incidents that is produced by GTD. It is still the same incidents, but it is also more than just these incidents. The data from IEP measures terrorism in a way that encompasses different aspects of terrorism than just the incident in itself. The IEP data can therefore be considered as 'terrorism with dimensions', and the scores may be considered terrorism of 'this magnitude'. An *a priori* interpretation of the results in connection with terrorism's effect on political trust is that: given that terrorism of these dimensions, of this magnitude, occurs (instead of just the occurrence in itself), it has this effect on the political trust. Which kind of data that is preferable can be debated, but the IEP data is quite functional when it comes to longitudinal and cross-sectional comparisons. Mainly due to the fact that the IEP data are more functional when it comes to comparing similar scores with similar scores, since the scores contain more information than just the incident in itself. A score of 1 on the GTI in one country is more comparable with a score of 1 in another country than an incident (by itself) in one country is with an incident in another country.

It is more complicated to discuss the measurement validity of *political trust*, since the ESS does not present the respondents with a definition. What is actually measured is "trust" as the respondent relates to the concept. A systematic evaluation of the measurement validity, akin to the one performed in connection with terrorism, is therefore impossible. It can, however, be argued that trust is a phenomenon everybody relates to. Citizens understands the confinements produced by trust (Hardin, 2002, 113-120). Trust is, as discussed earlier, the glue that holds society together. To function as a societal glue trust needs to entail predictability in social interaction, which presupposes a shared understanding. The inferences made should therefore be considered inferences regarding terrorism, as measured by the IEP, and its effect on trust, as understood by the respondents.

### 3.7.2 The survey experiment

To begin with, it can be pointed out that the survey experiment does not provide the experiment participants with any definitions. Therefore, in line with the ESS data, the data in the survey experiment relies on the participants own understanding of the different concepts. A systematic evaluation of the measurement validity is therefore precluded. However, the term "trust" is used in both the MLR and the experiment, and inferences from the previous discussion can be transferred to this discussion. The dependent variables in the survey experiments are formulated

similarly to the dependent variables in the MLR and measures the same phenomenon. "Trust", as an actual existing phenomenon, requires a shared understanding in order to exist. The same can, to some extent, be argued in connection with the concept of "capacity". It is a concept and a term that most citizens past their adolescence with basic verbal training and some life experience probably can relate to. It should therefore, to some extent, exist a shared understanding of the concept. Nevertheless, the inferences that are possible to make mirrors the one regarding political trust. The paper cannot make any conclusions regarding the ontological content of capacity but given that capacity is whatever the participants make of it, it has this [result] relation to trust.

Before discussing the internal and the external validity of the experiments, some notes on the terms used in the prime and in the dependent variables can be made. First of all, the vignettes as well as the dependent variable controlling for the general effect of the treatment uses the term "authorities" as an encapsulating term for political institutions, one that probably is more common to use in the day-to-day language for most citizens, while the dependent variables of interests uses three concrete manifestations of political institutions. This difference in wording between the encapsulating term and the concrete manifestations did not seem to have any practical consequences, however, as indicated by the high response percentage (99.7 percent). Participants seem to have understood the connection between "authorities" and the concretized political institutions. Furthermore, the dependent variables measure the trust that the "Government" and the "Parliament", i.e. with capital lettering, receive. This means, grammatically, that the two variables measure the trust that the current government and the current parliament receives. However, it is not certain to what degree this grammatical detail was picked up by the participants. Nevertheless, this is one difference between the ESS data and the NCP data, where the former measures the trust that the "parliament" receives while the latter measures the trust that the "Parliament" receives. 13 The focus on the current parliament and the current government should not produce any politically biased results, since the randomization procedure, as explained in the next chapter, prevents this from happening.

The experiment is conducted as an internet-based survey experiment, which means that the participants can participate from wherever they are located (as long as they have a computer, tablet or smart-phone nearby), whenever they want. This setup makes it impossible to control

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<sup>&</sup>lt;sup>13</sup> The ESS does not measure trust in "Government/government", and the term for the police is identical in the two datasets.

the participants' environment, and therefore reduces the internal validity compared to the levels of lab experiments. However, the different elements that may interfere with the experiment and its internal validity will most likely not be vary systematically. For instance, some participants may be watching a movie showing terrorists and therefore be extra *primed*, but on the other hand some may be watching a comedy and be less *primed* than others. If the participants are randomized there should be no elements that systematically affects the participants, and the internal validity should therefore be more than sufficient for drawing solid inferences. A final note regarding the experiments internal validity can be made. The survey experiment is located in a larger survey which potentially could affect the participants in a systematic manner, if the participants were exposed to any systematic differences. However, every participant received the same line of questioning before (and after) the survey experiment. All in all, the participants have not been exposed to any systematic differences, so the internal validity should not be affected.

While internet-based surveys can entail complications regarding the internal validity, they on the other hand can have advantages when it comes to the external validity (Grønmo, 2015, 233). While the participation in a survey can be a unique experience in itself, the fact that the participants participates through their phone (or similar device) ensures that they most likely are situated in an environment that is natural to them. In addition, the information that the participants receive, as illustrated earlier, is information that they could receive every day from every news media. The vignettes does not contain any obvious controversial information, and the information in them are information that have been published and discussed by several news media. In sum, the combination of (presumably) being located within their natural environment and receiving information that they could receive regardless of participation in the experiment, ensures a high level of external validity for the experiment.

# 3.8 Equivalence

A discussion of equivalence regarding the experiment data is, as mentioned at the beginning of this chapter, redundant considering that the data is gathered from one country and at one point in time. The MLR data, however, spans 19 countries and 15 years, and therefore requires a consideration of its equivalence. Equivalent data is a necessity that has to be in place in order to compare countries with each other, as well as countries (both with themselves as well as with others) over time. Comparisons should be made on a common ground (Grønmo, 2015, 388-389). This discussion limits itself to concerning the ESS data, since the GTD and the UN use

either register data or incident data, and are therefore measured on a more objective and, probably, equivalent ground from country to country and year to year.

First of all, as mentioned earlier, the selection of which units to include was made by taking equivalence into consideration. So, all the included countries have participated in the same amount of survey rounds and answered the same questions. The exceptions are Austria, Denmark, Estonia, and the Czech Republic, which, at least in the published data sets, lacks one round each. Furthermore, all the respondents in every country included have had the opportunity to answer the same questions every year. As mentioned briefly earlier, the ESS has a team dedicated to ensuring that the data quality is sufficient. This includes translating the questionnaire to different languages while keeping the questions intended meaning intact (ESSb-f, n.d.). The method employed, face-to-face interview, is also standardized both over time and between countries, ensuring methodological equivalency. To sum up, the ESS data consists of data that presumedly have the same meaning both over time and between countries, produced in the same manner, and the data should be equivalent.

# 3.9 Summary

This chapter have discussed the data sources, the data' scope and representativity, described the content of the data and how the data is treated in compliance with its intended use, and discussed the data' reliability, its validity, and its equivalence. While it would have been optimal to include design weights in both the MLRs and the ANOVAs, this is for different reasons not possible. Nevertheless, this exclusion of weights should not have too detrimental consequences, as discussed above. All in all, the data and its treatment can be claimed to be reliable, valid, and suitable to use in this paper. That is, provided that the methods are executed properly, and that the right considerations are made. This is the topic for the next chapter.

4 Methods

### 4.1 Introduction

This chapter will explain the methods that are used in this paper. The chapter will also discuss different characteristics of the data that, depending on the methods and the statistical models, has to be accounted for in order to get reliable results. As mentioned in the paper's introduction, the chapter may be a bit demanding due to its *relatively* detailed methodological review, depending, of course, on readers' prior knowledge of MLR and regression. As a counterbalance to this somewhat technical review, the chapter will expound the topics at hand as extensively as the scope of the paper allows, and in a clear as possible manner. The *chapter's* layout is two-parted (and not the *sections*, as is the case with the preceding chapter), in accordance with the research question: the first part focuses on the MLR, while the second part focuses on the survey experiment.

The chapter starts, however, by discussing explicitly how the methods can be used to shed light on the different hypotheses, and thus contribute toward falsifying or verifying them. After this initial discussion, the chapter explains what *multilevel regression* (MLR) is. Considering that MLR is an extension of the more comprehendible standard regression, the explanation of MLR and how it is performed in this paper uses standard regression as a starting point. After clarifying what MLR is, the statistical models is discussed and demonstrated. The MLR part ends with a discussion of the MLR data characteristics. As the discussion will show, there are some assumptions, some prerequisites, of the data that are not met, and the chapter explains how these breaches of assumptions are dealt with. Thereafter the focus shifts to the survey experiment, and it is explained how this was executed. Then it is discussed how the *analysis of variance* (ANOVA), the method employed to analyse the experiment data, is performed. The chapter ends with a discussion of the experiment data' characteristics, and how these characteristics do fit the assumptions of ANOVAs.

## 4.2 How to explore the hypotheses

The research question is divided into two parts, and these two parts are, in turn, concretized into five hypotheses. As discussed in the introductory chapter, the first part of the research question has a large array of possible directions to explore, and it has therefore been concretized into

four different directions of exploration, four hypotheses, while the second part of the research question has a much more limited array of possible directions, and is therefore operationalized into one hypothesis. Following this division, four of the hypotheses will be explored through use of MLR, while the fifth hypothesis will be explored through the survey experiment. As mentioned earlier, some of the dependent variables in the MLR and in the survey experiment are (nearly) identical, i.e. *trust the police* and *trust P/parliament*, and the results from each of the processes can therefore, to some degree, be used to shed light on hypotheses mainly belonging to the other process.

The *first hypothesis* derives insights from theories on trust and is rooted in institutional theory, and assumes that terrorism has had a negative effect on the political trust in Europe in the time period of 2002 to 2016. This hypothesis can be explored by running a MLR and inspecting the direction of the resulting (beta)coefficients and their level of significance. If the coefficients have a negative direction, i.e. they are less than 0, and are also significant, the result verifies the hypothesis. However, the interpretation of the result also has to take into account the nature of the variables and what they represent. As mentioned in the previous chapter, the variables located on the macro level are each treated and transformed into two different variants. One variant represents the longitudinal aspect of terrorism (and *HDI*) and another represents lasting cross-sectional differences. Both variable-variants can be used to illuminate this hypothesis, as well as the others, in different ways. <sup>14</sup>

The *second hypothesis* builds on previous studies as well as on logical inferences, and assumes that terrorism has a negative, in accordance with the first hypothesis and its theoretical foundation, but different effect on the trust that the different institutions receives. This hypothesis can be explored by running four MLRs that are identical except from their dependent variable, i.e. the institution, and compare the results from the different regressions. Keeping the MLRs identical except from their dependent variable maintains the *ceteris paribus* assumption, which is needed to perform valid comparisons. The comparisons can revolve around the coefficients, the level of significance, and their combination. Greater coefficients signify greater effect from terrorism, while lower p-values signifies a higher certainty.

<sup>&</sup>lt;sup>14</sup> The different ways will be demonstrated in the actual analysis.

The third hypothesis takes the situation with low levels of political trust and high levels of terrorism in (particularly) the MENA-region into consideration, and it assumes that the relationship between terrorism and political trust is a non-linear one. This hypothesis can be explored by creating a polynomial variant of GTI. This means, simply, multiplying the GTIvariables with themselves  $(X^2)$ . If the relationship between terrorism and political trust is nonlinear, the polynomial variables will be significant. Inferences can also be made on the basis of the differences in the levels of significance between the polynomial variants and their original variants. However, one complication to keep in mind, especially if the polynomial variant do achieve significance, is that the GTI is constructed in a manner that accounts for decreasing returns from terrorism, as discussed in the previous chapter. While it, unfortunately, has been difficult to uncover exactly what this entails, one logical inference is that the IEP uses a logarithm in their construction of the GTI. 15 Therefore, if this inference is correct, the GTI score can be perceived as an already 'curbed score', a curbed representation of terrorism. The polynomial variables thus, if this is correct, represents a 'curbed score' multiplied with a 'curbed score', and one ends up with a variable that is an exponential representation (i.e. greater than the intended quadratic function which creates the polynomial variable) of terrorism. To sum up in plainer words, the interpretation of the results regarding the polynomial variables in this study are complicated to do properly, and any significant findings should be considered soberly.

The *fourth hypothesis* builds on the results from studies of terrorism that occurred in the U.S., Madrid, and London, and assumes that geographical proximity to terrorism mediates the effect that terrorism has on citizens' beliefs. I.e. the closer geographical proximity a citizen has to an act of terror, the greater effect that act of terror has on that citizen. This hypothesis can be explored by implementing an interaction-variable in the MLR, combining (multiplying) *GTI* with *area of residence*. If the results show that the interaction-variable is significant one can infer that geographical proximity do mediate the effect that terrorism has. However, it should be pointed out that the characteristics of the variable *area of residence*, its actual content, limits the inferences that are possible to make. While the variable is a good indication of where the respondents spend most of their time, i.e. in urban or rural areas, it is not a solid indication of actual exposure to terrorism. Nevertheless, while not being a solid indicator of actual exposure to terrorism, it is, at least, a rough indicator of geographical proximity to terrorism, if terrorism

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 $<sup>^{15}</sup>$  This is a logical assumption since, as explained in the previous chapter, the *GTI* raw-scores are transformed into index-scores: a potential raw-score of ∞ becomes an index-score of maximum 10.

has taken place in the respondents' country. Statistics from the GTD shows that in the period of 1996 to 2017 in the 19 countries that this paper includes, 97.89 percent of all terror *incidents* occurred in urban areas. Therefore, a citizen living in an urban area have had a far greater chance of being exposed to terrorism, if terrorism has taken place in that country. The interaction-variable is, thus, a *faint* expression of the relationship between terrorism and geographical proximity to terrorism. Given the faintness of this expression, the results in connection with the interaction-variable should be interpreted soberly. They can, even more than usual, only be considered as indications of falsification or verification of this hypothesis.<sup>16</sup>

The *fifth hypothesis* builds on particularly theories on trust, but also institutional theory, and assumes that *capacity perception* is a causal mechanism in the relationship between terrorism and political trust. Given experiments exceptional ability to isolate and explore causal relationships, it is by nature a suited method to explore this hypothesis. While the procedure will be discussed later in this chapter, it can be noted here that if the procedure is executed properly, it will isolate the causal relationship sufficiently to determine if *capacity perception* is a causal mechanism in the relationship between the two phenomena. It can also be pointed out that the experiment itself will only determine whether or not *capacity perception* has a causal effect on political trust, and the experiment does therefore not shed light on *capacity perception* place in the causal chain, i.e. if it's a causal mechanism in the relationship between terrorism and political trust. However, if *capacity perception* does not have a causal effect in the survey experiment, the result rules out *capacity perception* as both a causal element, thereunder a causal mechanism. If *capacity perception* do have an effect it is at least a causal element. And building on trust theories and institutional theory it can be assumed to be a causal mechanism, i.e. a factor that the effects of terrorism on political trust is filtrated through.

# 4.3 Regression

In this paper it is executed (to be exact) *longitudinal multilevel regressions* to explore the empirical relationship between terrorism and political trust. This is a methodological extension to standard regression (Robson and Pevalin, 2016, 8). Regression is a suitable method to explore, strictly speaking, covariation between two or more phenomena. The application of regression results in quantified expressions of the empirical relationship between two or more

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<sup>&</sup>lt;sup>16</sup> It can be noted that the *IEP* data do not include any details about location, beyond countries. The *GTD* data do, however, but to use the *GTD* data instead of, or as a supplement to the *IEP* data would require a tremendous amount of work, far beyond the resources available in connection with this paper.

phenomena (Thrane, 2017, 16-17), and it is possible to estimate the degree of certainty associated with the results. It is this *quantified expression* (i.e. the beta coefficient) and the *degree of certainty* (i.e. the p-value) that will be used to verify or falsify the first four hypotheses, through the procedure explained in the previous section. The general statistical equation for a (multiple) regression is (Ringdal, 2014, 394):

$$Y = b_0 + b_n X_n + e_i.$$

In this equation, 'Y' represents the independent variable, ' $b_0$ ' represents the constant, ' $b_n X_n$ ' represents the independent variables and their beta-coefficients, and ' $e_i$ ' represents the errorterm (Ringdal, 2014, 390-402). There are, however, some assumptions that has to be met in order to produce reliable and valid results from a regression. Most of these will be discussed later in this chapter, but one of the most important assumptions is that the residuals are uncorrelated with each other (Thrane, 2017, 102-103), meaning that the observed score of one unit should not be dependent on an observed score of a different unit. Standard regression and how it calculates estimates do not take into consideration units that are somehow clustered together, e.g. citizens in countries, which leads to non-optimal estimates. Usually the standard error gets estimated too low, which gives too low p-values, and one risks committing type-I errors where the null-hypothesis is rejected on a faulty basis (Ibid, Ringdal, 2014, 416, Grønmo, 2004, 327). Regressions therefore have to account for clustered observations.

The observations in this study are located in different clusters. There are 284 851 individuals in total, that are divided into 19 countries, in a total of 8 survey rounds. This means that the data are clustered as well as hierarchical, and that one of the assumptions for standard regressions are breached. However, MLR can account for this breach. MLR models, often referred to as *variance component models*, consist of one *fixed* part and one *random* part (Rabe-Hesketh and Skrondal, 2008, 51). These models account for clusters by ensuring that estimates takes the clusters into consideration. This is done by having a *fixed* part of the regression model revolve around a *random* part of the regression model (Rabe-Hesketh and Skrondal, 2008, 51-62), which means that, for instance, the citizens in Germany and the adhering observations (as the *fixed* part) revolve around the overall German' observations (as the *random* part).

This entails statistical modifications, which will make the estimates more optimal and reliable (Robson and Pevalin, 2016, 7 and 16). The equation of a general MLR model, in this case a general *random intercept* MLR model (Robson and Pevalin, 2008), with two levels can be described as such (Fairbrother, 2014, 123)

2. 
$$Y_{ij} = b_0 + b_n X_{in} + b_n X_{jn} + U_j + e_{ij}$$

$$Fixed \qquad Random$$

The difference between the first equation and the second equation is, firstly, that a random part has been added, represented by ' $U_j$ '. There's also been added a second variable-level to equation 2, represented by ' $b_n X_{jn}$ ', in addition to the original variable-level represented by ' $b_n X_{in}$ '. The study in this paper requires, however, a statistical model that accounts for three, not two, levels in the data structure. Following the advices from Fairbrother (2014; Fairbrother and Schmidt-Catran, 2016) the observations included in the MLR gets structured into level 1) individuals; that are clustered together into 2) country-years; that are clustered into 3) countries. This hierarchical cluster structure is illustrated in figure 3.1 (a more correct illustration would have depicted 19 identical figures as this one, side by side):

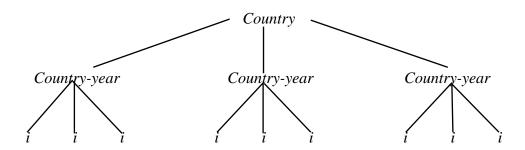


Figure 4.1 illustrate the structure of the MLR data.

By structuring the data into three levels as is done here, the dimension of time is accounted for. This statistical model is based on the work by Fairbrother (Ibid) and complies with what he refers to as *model D* in his article (Fairbrother and Schmidt-Catran, 2016). One element that this model does not account for is that it ignores the fact that citizens from every country in the same year will have more likeness with each other than they'll have with citizens from every country in a different year. Thus, the model does not account for same-year *inter*-country

country are more alike each other than citizens from different countries, i.e. the *general* intracountry correlation, in addition to accounting for the fact that citizens from the same country for the same year will be more alike each other than citizens from the same country but a different year would be, i.e. *same-year* intra-country correlation (Schmidt-Catran and Fairbrother, 2016, 25). All in all, the model is a step forward when it comes to providing correct estimates in MLR models, compared to a lot of previous MLR models (Schmidt-Catran and Fairbrother, 2016; Fairbrother, 2013).

A statistical model that has this structure: *individuals* within *country-years* within *countries*, can be expressed like so (Fairbrother, 2014, 124):

3. 
$$Y_{iti} = b_0 + b_n X_{iti} + b_n X_{tiM} + b_n \overline{X}_i + b_n tim e_{ti} + U_i + U_{ti} + e_{iti}$$

This is the statistical equation that functions as the foundation for the regressions executed in this study. In this equation, 'Yiti' represents the dependent variable's value for an individual in a country for a given year. The constant is still represented by ' $b_0$ ', while ' $X_{itj}$ ' represents a dependent variable located at the lowest level, i.e. for an *individual* in a *country* for a *year*. As mentioned earlier, the macro levels have to be treated, i.e. transformed, in a certain manner. This transformation has to be done in order to get correct estimations of the effects, as well as correct attribution of these effects (Fairbrother; 2013; Schmidt-Catran and Fairbrother, 2016). One way of understanding the reason for the transformation is that citizens can be affected by living in a country that has relatively permanent characteristics, relatively long-long lasting traits, but citizens can also be affected by the changes that occur in these country' traits. Many statistical models do not account for this difference and are therefore unable to attribute effects correctly (or at least not as specific). In this third equation, ' $X_{tjM}$ ' represents the centred GTI version, i.e. the longitudinal component and the changing aspect of a country's exposure to terrorism, while ' $\overline{X}_{j}$ ' represent the averaged *GTI* version, i.e. the cross-sectional component and the more permanent aspect of a country's exposure to terrorism. The equation also contains an expression for time, 'timeti', which is used to control for simultaneous but separated trends in the data (Fairbrother, 2014, 124). Furthermore, 'U<sub>i</sub>' represents the random part of the equation that the *country-years* varies around, and thus represents the third level in the data structure, while 'Uti' represents the random part of the equation that the individuals vary around, and thus

represents the second level in the data structure. The last expression in the equation is 'e<sub>itj</sub>', which represent the error-term of the equation.

It can be noted that the *random* part of the model can together with *intra-class correlation* (ICC) be used to estimate how much of the variance which is located at the different levels of the data structure (Christensen et al., 2018; Robson and Pevalin, 2016, 35). One of the prerequisites to use MLR instead of a standard regression is that more than one level contributes in explaining the variance. The ICC provides a solid quantified measure, indicating how much variance can be explained by factors at the different levels. ICC varies between 0 and 1, where 0 means that none of the variance can be explained by factors at a given level, while 1 means that all of the variance can be explained by factors at a given level. There's no formal limit or universal rule for when a MLR is to be preferred instead of a standard regression, but one rule of thumb is that an ICC of .10 is a non-trivial ICC (Robson and Pevalin, 2016, 35). Therefore, each level in the structure should provide an ICC of at least .10. The levels which do not meet this standard can be dropped from the statistical model, most likely resulting in a simpler statistical model.

### 4.4 The models

The statistical model (equation) as recommended by Fairbrother, described and discussed above, functions as the basis for the different regression models that are run in this study. In accordance with the four hypotheses connected to the MLR, it is developed three different regression models. They all have an identical basis, where the second model extends the first model, and the third model extends the second model. In addition, each of the dependent variables are implemented into each of the three models, creating a total of twelve MLRs to run. The first model focuses on hypothesis 1, which speculates on the direction of the effect that terrorism has on political trust, and it includes one dependent variable (*trust in* [institution]), all of the control variables located on the individual level, the two (i.e. the treated/transformed) control variables located on the macro level, and the two independent variables of interest (the longitudinal variant of *GTI* and the cross-sectional variant of *GTI*), which is also located on the macro level.

The second model extends the first model, in order to shed light on the third hypothesis. The third hypothesis draws on findings from the MENA-region (particularly) and assumes that the relationship between terrorism and political trust is non-linear. As mentioned in the beginning of this chapter, this can be explored by including a polynomial variable  $(X^2)$ , and model 2

therefore includes a polynomial variable for each of the two *GTI* variants. It can be pointed out that the statistical model is still a linear model, but the inclusion of polynomial variables and interaction variables enables the exploration of non-linear relationships (Tjønndal, 2018, 99 and 119-124; Thrane, 2017, 108-111).

Model 3, in turn, extends the second model in order to explore the fourth hypothesis. In order to check if the combination of a citizen's *area of residence* with the country's exposure to terrorism (*GTI*) have a different effect on political trust than just terrorism alone, an interaction variable consisting of the two aforementioned variables is included in the third model. Table 4.1 illustrates the setup for the models, and their purpose.

**Table 4.1** Regression models and their purpose

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#### Statistical illustration of the three models:

$$\begin{split} & \underline{Y_{itj}} = (\text{model 1 ->}) \ b_0 + b_1 X_{itj} + b_2 X_{itj} + b_3 X_{itj} + b_4 X_{itj} + b_5 X_{itj} + b_6 X_{itj} + b_7 X_{itj} + b_8 X_{itj} + b_9 X_{itj} + b_{10} X_{itj} + b_{11} X_{itj} + b_{12} X_{tjM} + b_{13} \overline{X_j} + + b_{14} X_{tjM} + b_{15} \overline{X_j} + b_{16} tid_{tj} \ (\text{model 2 ->}) + b_{17} X_{tjM} * b_{18} X_{tjM} + b_{19} \overline{X_j} * b_{20} \overline{X_j} \ (\text{model 3 ->}) + b_{21} X_{tjM} * b_{22} X_{itj} + b_{23} \overline{X_j} * b_{24} X_{itj} \end{split}$$

# Concretized illustration of the three models:

<u>Trust [institution]</u> = (model 1 ->) (constant) + political interest + feeling of safety + degree of religiousness + area of residence + satisfied w/ household income + social trust + individual wellbeing + satisfied w/ societal institution's performance + gender + age + years of education + HDI-centered + HDI-averaged + GTI-centered + GTI-averaged + i.year (model 2 ->) + GTI-centered\*GTI-centered + GTI-averaged\*GTI-averaged (model 3 ->) + GTI-centered\*area of residence + GTI-averaged\*area of residence

Before continuing to the other assumptions of regression analysis besides non-correlated observations, two remarks can be made. First, each of the hypotheses related to the MLR have a regression model specifically adapted to explore it, except from the second hypothesis. However, as mentioned in the beginning of this chapter, the exploration of the second hypothesis will be performed by comparing the results from the same model for each of the dependent variables. Second, a technical and methodological note that so far has gone unmentioned is worth making after having discussed the regression models. In addition to accounting for correlation between observations, MLR is a beneficial regression method since it by design handles the statistical requirements needed to avoid ecological as well as atomistic fallacies. While many theoretical assumptions have been made explicit in the theory chapter, one further assumption employed in this paper, which has methodological implications, is that a characteristic at one level (i.e. a country's exposure to terrorism) can affect the characteristic at a different level (i.e. the trust that citizens have). Such assumptions and adhering explorations could lead to committing ecological fallacies, where inferences on the bottom-level (regarding individuals) are made based on results from the top-level (regarding a country's exposure to terrorism). However, MLR enables the combination of data from different levels so that ecological and atomistic fallacies can be avoided (Robson and Pevalin, 2008, 4-8).

#### 4.5 Assumptions of regression

There are several assumptions that need to be met in order to execute reliable and valid regressions. Non-correlated observations, or in statistical terms: non-correlated residuals, is one of these assumptions, which MLR handles if it is not met. The residuals should also be homoscedastic, meaning that the variance of each residual should be equal for different values of the same X variable. In somewhat plainer words, the residuals' (the actual observations)

distribution on every variable, i.e. every relationship between  $X_n$  and Y, should have an approximately equal distance to the estimated relationship represented by the regression line. If the observations do not have a somewhat equal distance to this line, the residuals are heteroscedastic (Ringdal, 2014, 422; Thrane, 2017, 97). Heteroscedasticity affects the estimate's degree of certainty (Ibid). To check for heteroscedasticity the study conducts a postestimation control, i.e. a control that is conducted in connection with but after each of the different regressions are run. In this case a 'Breusch-Pagan / Cook-Weisberg'-test is conducted. The result of this shows that the residuals most likely are heteroscedastic (see Appendix E).

Furthermore, the residuals should not only be non-correlated and not heteroscedastic, they should also be *approximately* normally distributed (Ringdal, 2014, 422). The normality of the residuals' distribution can be explored graphically, which is done in this case through histograms and QQ-plots. The results (see Appendix F) shows that the residuals on the second and the third level in the regression model is not normally distributed. However, the importance of the normality assumption is contested. Some describe it as the least important assumption of regression (Tjønndal, 2017, 162). Others point to the fact that this assumption, if important to begin with, loses its significance in studies with many observations. An informal limit is set at 100 observations (Thrane, 2017, 101-104). This study has more than 284 000 units, with each of them generating observations on most of the variables. However, the second level only has 148 observations while the third level only has 19 observations, which could lead to complications.

So far, three of the assumptions of regression are breached: there is correlation between the residuals, there is heteroskedasticity, and the residuals do not have a normal distribution. MLR handles the correlation between observations. That leaves heteroscedasticity and the nonnormal distribution of residuals. These two breaches of assumptions can be handled by employing a Huber-White estimator. The Huber-White estimator, often referred to as a 'sandwich-estimator' due to the visual appearance of its statistical formula, is an estimator that accounts for these breaches of assumptions and produces robust standard-errors (Rabe-Hesketh and Skrondal, 2008, 20, 39 and 74). It is an estimator that is frequently used since it is one of relatively few alternatives that in many cases, perhaps particularly in cases involving MLR, produces reliable estimates (StataCorpLLC, n.d., 48-50). The downside, depending on the perspective, is that by producing robust standard-errors these are often higher compared to non-

robust standard-errors, and thus make it harder to achieve statistical significance (Ibid).<sup>17</sup> In addition to producing robust standard-errors, the sandwich-estimator also produces quasi-likelihood estimates instead of ordinary likelihood estimates. However, provided that the sample selection procedure is done in accordance with principles of generalizability, as random selection is, this shouldn't have any consequences (Rabe-Hesketh and Skrondal, 2008, 393).

The three assumptions discussed so far are assumptions that need to be met or handled, in order to generalize regression results from sample to population (Thrane, 2017, 97 and 103). There are, in addition, some assumptions that should be met regardless of generalizability. One of these is the absence of multi-collinearity, i.e. that the independent variables used in the same regression model should not be too strongly correlated with each other. One way of exploring if multi-collinearity is present or not, is to perform a VIF-test of the regression model. The results from the test of each model (see Appendix G) shows that some of the scores are above 10, which *could* be problematic (Tjønndal, 2018, 166-168; Thrane, 2017, 90). The somewhat high scores are caused mainly by the interaction variables, the macro variables, and the polynomial variables (Thrane, 2017, 132). At the same time, the polynomial variables' high VIF-scores can be ignored since the polynomial variable cannot be linearly connected to its two original variables (Thrane, 2017, 111). The presence of multi-collinearity requires linear relations. This reduces the severity of the somewhat high VIF-scores. Furthermore, variables with too high VIF-scores leads to, if anything, the inflation of the standard-error estimates (Ringdal, 2014, 426). This in turn leads to too high p-values, which in turn could lead to a faulty retention of the null-hypothesis. Although this type-II error is undesirable, it is preferable to type-I errors. In addition, the potentially troublesome variables, i.e. the macro variables, has to remain intact in their present state, in accordance with the methodological advices from Fairbrother. With all this in mind, the study ignores the somewhat high VIF-scores.

Furthermore, there should be no significant 'outliers', the relationship between the dependent variable and the independent variables should be linear, and all relevant variables should be included in the model and all irrelevant variables should be excluded from the model (Thrane, 2017, 87-97). Regarding the first recently aforementioned assumption, the previous chapter clarified the number of outliers, and concluded that they would likely not markedly impact the estimates. Regarding the second assumption, the shape of the relationship between terrorism

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<sup>&</sup>lt;sup>17</sup> This is of course an advantage if one considers the goal of producing 'true' estimates.

and political trust, if its linear or not, can be explored in several ways. The best way is perhaps to do post-hoc assessments of the MLR results (Thrane, 2017, 95; Tjønndal, 2018, 166, Ringdal, 2014, 417). As mentioned previously, the MLR is executed as a linear regression. However, the models include non-linear expressions, and if these turn out to be significant that would indicate that the MLR should be executed non-linearly. As the next chapter will show, the Results, the MLR seem to have the correct functional form. The evaluations regarding inclusion and exclusion of variables, the third and fourth recently aforementioned assumptions, should be done based on theoretical grounds and in accordance with previous research, as well as posthoc assessments (Thrane, 2017, 95-97 and 103). Regarding the variables included in the models, their selection are based on previous research and theoretical evaluations, as explained in the theory chapter. The variables included have both a theoretical value and has shown empirical relevance. The inclusion is also backed up by the results, as demonstrated in the next chapter. The evaluation of omitted variables and the avoidance of omitted variable bias is harder to perform, and the evaluation can never be complete in its scope. However, by basing this study on previous studies as well as theoretical insights, the risk of excluding relevant variables and producing omitted variable bias is much reduced (Ibid). There is, thus, a theoretical chance of having excluded relevant variables in this study. This chance is, however, relatively small.

One final note can be made regarding the assumptions of regression. As briefly mentioned earlier, while there are some regression types that come close to the 'experiment standard' (Moses and Knutsen, 2012, 52) of uncovering causality (e.g. *instrumental variable analysis* (Thrane, 2017, 227)), most regressions, including MLR, do not in themselves prove causality. Regressions quantify the co-variation between two or more phenomena, while controlling for influencing factors, and can indicate causality (Ringdal, 2014, 390-391; Thrane, 2017, 225-227; Grønmo, 2015, 361-363). However, the indications of causality that regression analyses provide can be significantly strengthened by including a causal theory which explains the empirical relationship that the regressions uncover (Ringdal, 2014, 390-391). That is one of the chief reasons for including a theoretical framework in this paper, in addition to gaining a greater understanding for the phenomena in themselves. Claims about causality and effects that the paper presents later may because of this theoretical inclusion have a sounder backing. The combination of empirical results and a theoretical framework, and foremost their potential correspondence, can give rather solid foundations for causal inferences.

## 4.6 Survey experiments

Experiments are often considered the holy grail of methods, particularly due to their ability to uncover causal relationships. If experiments are conducted in a reliable manner with reasonable theoretical backing, in line with the discussion in the preceding section, they are great at mapping causality (Moses and Knutsen, 2012, 52). The fundamental logic behind experiments is to show that when X is present so is Y, while at the same time controlling the environment in a way that demonstrates that variation in X leads to variation in Y (Ringdal, 2014, 128-129). Survey experiments tries to transfer this ability at uncovering causality to larger samples, and thus combines the goal of uncovering causality with the desire for generalizability (Krupnikov and Findley, 2016, 2).

The survey experiment conducted in this paper can be described as what Ringdal refers to as a *genuine field experiment with a post-test* (2014, 131-132). This means that the participants are randomized into their groups, that they participate through surveys which they respond to in their natural environment, and that the estimations of effects is based on comparisons between groups at the same time, and not (also) within groups over time (which would require a pre-test as well as a post-test, i.e. measurements before and after exposure to *treatment*) (Ibid). In connection with the validity discussion in the previous chapter, it can again be pointed out that this process can be claimed to produce high levels of both internal and external validity. Field experiments are generally, arguably, suited at exploring the relationship between individuals and institutions.

The survey experiment has a design where the participants are randomly selected from the NCP, which in turn randomly selects its participants, and randomized into the three experiment groups (i.e. the 'negative' group, the control group, and the 'positive' group). The selection procedures enable generalization, while the randomization procedure enables the making of causal inferences. Every experiment group receive the same vignette, i.e. the neutral one. This vignette also functions as a prime, inducing the participants to perceive terrorism as a societal threat, or at least to think about terrorism. Thereafter, the negative group receives the negative treatment, while the positive group receives the positive treatment, where the treatments are the two different extensions of the neutral vignette. The treatments are, as discussed in the previous chapter, formulated in a way that ensures that the only thing that varies between them, and thus that the only element that systematically varies between the three randomized experiment groups, are the capacity perception that they're introduced to. After the participants receive

their treatment, they answer questions that measures how much they trust 1) the *Government*; 2) the *Parliament*; and 3) the *police*. These questions are introduced in a random order, ensuring that no systematic variation in the line of questioning is present. The experiments end by measuring, in the same way as with the preceding variables, how much capacity the participants believe that the *authorities* (as an overall term for the three governing institutions, although this is not specified in the survey that the participants receive) have when it comes to dealing with terrorism. This control variable, thus, investigates whether or not the treatment has had an effect. An effect from the treatment is a prerequisite for solid causal inferences in experiments. Table 4.2 summarizes the survey experiment's design.

Table 4.2 The survey experiment's design

Gruppe:	Vignette:	Treatment 1	Treatment 2	Independent variables	Control variable
Control	X	-	-	X	X
Group 1	X	X	-	X	X
Group 2	X	-	X	X	X

#### **4.7 ANOVA**

If the survey experiment is conducted properly, there'll be only one thing that varies between the three groups: their *capacity perception*. This is then the only causal factor that can explain the differences in political trust between the three groups (Ringdal, 2014, 140). The fifth hypotheses assume that capacity perception is a causal mechanism in the relationship between terrorism and political trust, and in line with the theoretical framework further assumes that reduced capacity perception, *ceteris paribus*, will result in reduced trust. This assumption can be tested by performing an *analysis of variance* of the experiment result (Ringdal, 2014, 377; Rabe-Hesketh and Skrondal, 2008, 8-10). ANOVA's is a common way to analyse experiment outcomes.

To analyse the outcome of the experiment study, the paper employs a *one-way* ANOVA (referred to simply as ANOVA from here on). ANOVAs can be considered a generalization of the t-test that is common in connection with regression analysis, modified in order to account for multiple groupings (Ringdal, 2014, 377; Rabe-Hesketh and Skrondal, 2008, 8-10). An ANOVA involves running a F-test, which is based on the F-distribution developed by Fischer (Ringdal, 2014, 378). The F-tests uses the averages of the different groupings to explore how

much variation exists between the groups, at the same time as it considers how much variation exists within the groups, i.e. deviation from the overall mean between groups and deviation from the group mean within groups (Ibid). The statistical formula can be expressed like this:

$$F = \frac{SS_M / K - 1}{SS_R / n - K}$$

In this equation ' $SS_M$ ' represents sum of squares deriving from the statistical model representing the data, i.e. variation from the overall mean between groups. The variation within groups is represented by ' $SS_R$ ', which is the sum of squares derived from each observation's deviation from the group mean. 'K' represents the number of experiment groups, while 'n' represents the number of experiment participants (Ibid).

If the null-hypothesis is true, and there is no variation between the groups, this will result in an F-score of 1.0. However, the critical F-score, how large the F-score should be in order to reject the null-hypothesis, depends on the number of degrees of freedom in both the numerator and the denominator, and on the preferred p-value (Ringdal, 2014, 380; Rabe-Hesketh and Skrondal, 2008, 8-10). In this case, where there's two degrees of freedom in the numerator and more than 120 degrees of freedom in the denominator, and with a preferred p-value of .05, the critical F-score is 3.07 (Ringdal, 2014, 524-526).

The analysis will also include a *Bonferroni* test, *post-hoc* to the ANOVA. A *Bonferroni* test includes conducting multiple-pairwise comparisons, which also takes the multiple comparison into consideration when estimating the p-value (Ringdal, 2014, 380-382). The multiple comparison gives a more nuanced result than the result from the ANOVA alone, and it can contribute towards determining where and to what degree there are differences between the experiment groups. The ANOVA performs an overall general analysis, and will therefore be used in the overall conclusion, i.e. determining if the treatment has worked and if *capacity perception* is a causal mechanism, while the *Benferroni*-analysis will provide more statistical details which can help understand which of the experiment groups was more affected, and then perhaps why some was more affected.

The assumptions of an ANOVA are mainly the same as for a regression (Shaw, n.d.). Given the experiment's design, and experiments ability to uncover causal relationships, some of the

aforementioned assumptions are left out of the discussion in this section. Furthermore, since there's only one independent variable, i.e. the vignette, multi-collinearity is out of the question. That leaves the assumptions of non-correlation between residuals (i.e. observations), homoskedasticity, and normally distributed residuals (Ibid). At the same time, as discussed previously, the relevance of the latter assumption is debatable. Especially considering the fact that the experiment has more than 2000 observations. Generally, the integrity of ANOVA's is intact even in the cases where the residuals do not have a normal distribution (Ibid).

So, first of all, the participants are, as explained earlier, randomly selected from all over Norway, and the experiment itself includes randomization. The observations, and thus the residuals, should therefore not be correlated to each other in a manner that could affect the reliability of the results. Second, a Levene's test is performed in order to check for heteroskedasticity. Levene's test tests the null hypothesis that assumes that the residuals are homoscedastic, versus the alternative hypothesis which assumes heteroscedasticity. The result (see Appendix H) show that the p-value for all the ANOVA's are above .05, and therefore the null-hypothesis cannot be rejected. The residuals can therefore be assumed to be homoscedastic, as they should be. To check if the residuals are normally distributed the paper performs a Shapiro-Wilk's test, in addition to inspecting the residuals graphically. The result (see Appendix I) indicate that the residuals are not normally distributed, but as the graphic illustrations show, they are not too far from a normal distribution. Given this assumption's contested nature, this relatively small breach of assumption is ignored. All in all, the assumptions that needs to be in place in order to execute reliable ANOVA's are met.

# 4.8 Summary

This chapter started by explaining how, concretely, the different hypotheses will be explored. Next, rooted in standard regression, the chapter discussed how the MLR will be performed, and, building on Fairbrother's work, discussed and illustrated the statistical models that is used. After having discussed the assumptions of regression, the chapter shifted its focus to the survey experiment's design and how the ANOVAs would be performed. While the breaches of the assumptions of regressions are handled, the assumptions of ANOVAs are in order, ignoring the somewhat non-normally distributed residuals. All in all, the methods are suited to the explorations at hand, and they should produce reliable results.

5 Results

## 5.1 Introduction

This chapter will present and discuss the results from the MLR and the survey experiment. This chapter also have a two-parted layout in accordance with the research question, where the first part of the chapter focuses on the results from the MLR and the second part focuses on the result from the survey experiment. The chapter starts by discussing the overall variation in political trust in Europe in the time period of 2002 to 2016. By exploring how much variation there is in the level of political trust, one obtains a general impression of how much variation could possibly be explained by variation in terrorism. After this overall discussion, the result from MLRs' empty regression models, i.e. the models containing only the dependent variable, is presented. This result shows how much variation there is between individuals, how much variation there is between countries, and, in the hybrid-model (encompassing time as part of a level), how much variation there is within and between countries over time. The empty model can also contribute in evaluating how much variation in political trust can explained by factors at different levels (and thus also indicate how much variation can possibly be explained by terrorism), and also shows whether or not MLR is to be preferred instead of standard regression. After presenting and discussing the result from the empty models, the same is done for the complete models, i.e. the models containing independent variables as well. Thereafter, the result from the survey experiment is presented, first graphically and then in more detailed tabular formats, and discussed. The discussions in this chapter will be general in their form, while the next chapter, Analyses, discusses the results and their relation to the hypotheses and the theoretical framework that the paper suggests.

## **5.2 Variation in political trust**

Figure 5.1 shows the variation in the level of political trust that all the 19 countries in the paper experiences through the time period in question. Political trust is in this case measured by an index consisting of the four dependent variables used in the MLR, and the scores are the average of the total of the four scores of the dependent variables. It can, therefore, be pointed out that figure 5.1 actually shows the *minimal* variation in the level of political trust as indicated by the ESS data, since one institution may gain trust over time while another loses trust over time, and they can thus cancel each other out when it comes to how much of the true variation is

represented in the total score and in the average. In the spirit of parsimony, in considering the paper's scope and its presentability, more detailed tables describing the variation in political trust for each institution for each country for each year is relegated to Appendix A.

To start with the within-country variation: despite being an underestimation, figure 5.1 shows that there is variation in political trust in Europe in the relevant time period. Every country seem to experience at least some variation. To use Norway as an example, figure 5.1 shows that Norway for a long time had an average score of about 6.0, but from 2010 and onwards Norway continually had a score above 6.0. and from 2014 Norway had the highest average score in political trust amongst all the 19 countries. Norway's overall score was 6.7 in 2016, up from 5.9 in 2002 and 5.8 in 2004. On a scale from 0 to 10, measuring trust which is assumed to be somewhat stable, a variation of .9 (6.7-5.8) is notable. The biggest variation in political trust is experienced by Hungary, both when it comes to the overall average (1.8), but also for each of the four institutions (see Appendix A). However, figure 5.1 in combination with Appendix A also shows that while there is some within-country variation over the entire time period, the variation is somewhat limited for several countries. The more detailed numeric tables in Appendix A shows that the (overall) within-country variation for several country is close to non-existent. For instance, France has a maximum overall variation of .2, and Finland and Denmark experiences a maximum overall variation of .3. In total, many countries experiences a notable overall maximum variation in the levels of political trust, while other countries have quite stable levels of political trust. This, in turn, indicates between-country variation.

The between-country variation also somewhat limited in some respects. Denmark, for instance, is the country that usually experience the highest levels of trust. This goes for each of the included institutions, except for the legal system where it's usually Finland that has the highest scores (see Appendix A). At the other end of the scale is Poland. Poland is, usually, the country that experiences the lowest levels of trust in most political institutions (Ibid). In general, the Northern countries usually scores at the top of 'their class', while the East-European countries usually scores at the bottom of the same class. Central-European and the UK usually scores inbetween the bottom and the top. However, both figure 5.1 and Appendix A shows that while the between-country variation is limited in some respects, there is also some variation. For instance, none of the countries keep their original ranking for the entire time period. Every country moves up and/or down the ranking at least once, and in most cases several times and ranks.

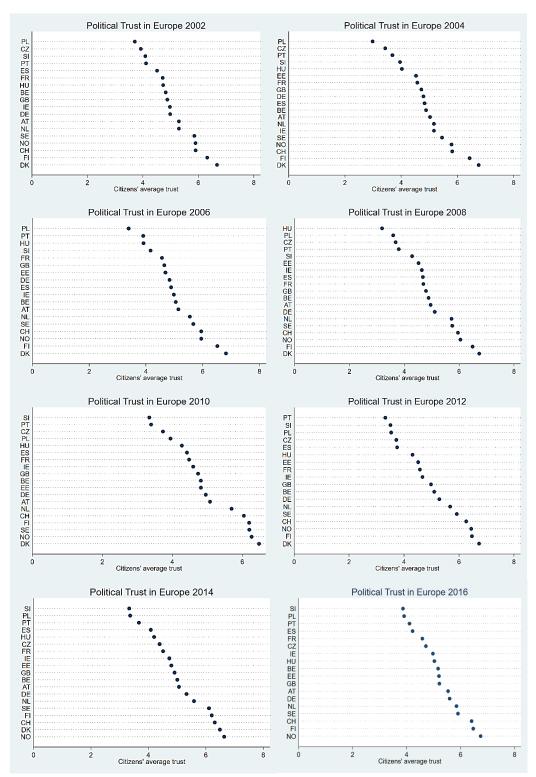


Figure 5.1 illustrates the overall variation in political trust for each country for each survey round.

Overall, there is some variation in the levels of political trust, both within countries and between countries. Every country experience a within-country variation in the levels of political trust, as well as a between-country variation. The variation is, however, somewhat limited. Hungary can be used as an illustrative example. As mentioned, Hungary is the country that experiences

the *largest* variation in the level of political trust over time. However, the score varies from 3.2 to 5.0, which is a total maximum variation of 1.8 for the entire time period. Considering the fact that the index varies from 0 to 10, a maximum variation of 1.8 is notable considering the assumed rigidity of trust, but it is not, statistically speaking, extra-ordinary. Furthermore, the within-country maximum variation is often far below 1.8. In fact, most of the countries experience a maximum variation well below 1.0 (both in the overall level of political trust and for each of the institutions, in the entire time period). Again, this is in line with the theoretical assumption of trust as being somewhat rigid once first instilled. Furthermore, as discussed in the introductory- and in the theory chapter, terrorism can logically be assumed to have an effect on political trust. There are however, both on theoretical and empirical grounds, reason to expect that a lot of other factors, e.g. education, income, gender, etc., contributes in affecting the levels of political trust. In other words, while there is some variation, and thus an opening for different factors to explain this variation, the total variation probably leaves a rather small portion of variation to be explained by terrorism. Since terrorism is measured on the country level, thus being an explanatory factor located on the macro-level, the results from the empty MLR models can help further nuance this impression.

## 5.3 Empty models

The result from a statistical analysis with an empty MLR model is shown in table 5.1. For similar reasons as discussed in the previous section regarding the scope and presentability of the paper, table 5.1 only shows the result from empty models containing the dependent variable *trust parliament*. The results relating to the other dependent variables are relegated to Appendix J. However, it can be noted here that the pattern that surfaces from the results related to the different dependent variables is quite similar, and the discussion below can be considered as a discussion that encompasses the results in connection with all the dependent variables. The conclusions therefore pertain to all the models. Also, before discussing the result some technical details from the two previous chapter can be repeated: the two-level model contains factors located on the individual level and on a country level, while what is here referred to as the *hybrid model* contains factors located on the individual level as the bottom level, on *country-years* as the intermediate level, and on country as the top level. The two-level model therefore checks the relevance of using a two-level model instead of a standard regression model, while the hybrid model checks the relevance of using a three-level model instead of a two-level model.

**Table 5.1** The result from the empty two-level and three-level models

	Two-level model: country	Hybrid model: country-year
	(s.e)	(s.e.)
Constant	4.629019 (.214751)***	4.635715 (.2155008)***
Individual level variance	5.446557 (.014627)	5.299441 (.0142353)
Country level variance	.8758578 (.2842761)	.8591736 (.2862895)
Country-year level variance		.1772364 (.0224565)
ICC country	.1385322 (.0387357)	.1356051 (.0390672)
ICC country-year		.1635787 (.0378822)
BIC	1257269	1250222***
N, individuals	277,327	277,327
N, countries	19	19
N, country-years		148

<sup>\*\*\* 1%-</sup>level (Change in variance tested against the two-level model) Chi=7060.08, p<0.0000

Table 5.1 and the result from the two-level model shows that most of the variation is located on the individual level, i.e. among all the individuals in the 19 countries included, which is expected (Christensen et al., 2018). Nevertheless, there is also some variation on the country-level. The ICC indicates that 13.8 percent (.138 X 100) of the variance can be explained by factors located on the country-level, i.e. between-country differences (Robson and Pevalin, 2008, 35). At the same time, the ICC indicates that roughly 86 percent of the variance in political trust can be explained by something else than factors that varies between countries.

The result from the empty three-level model backs the result from the empty two-level model. Most of the variation is located at the bottom-level, with markedly less variation on the top-level, and even less variation at the intermediate level represented by *country-years*. There is, thus, most variation between all the individuals from all the included countries, and then between countries, and least variation within (and therefore also between) countries from year to year. Again, this is as expected in such data (Christensen et al., 2018). The result from the three-level model also shows that roughly 13 percent of the variance can be explained by factors located at the top-level, as in the two-level model. However, 16.3 percent of the variance can be expected to be explained by factors located on the intermediate-level, i.e. *country-years*. In other words, approximately 70 percent of the variation can be expected to be explained by factors located at the individual level, 13.5 percent of the variation can be explained by factors

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<sup>&</sup>lt;sup>18</sup> The paper often alternates between the term 'variation' and the term 'variance', since both concepts are different ways of expressing the same phenomenon. Variance is a particular expression of variation and can be considered deviation from the typical ( $variance = \frac{\sum (X_1 - \bar{X})^2}{N-1}$ ) (Midtbø, 2010, 41).

that varies between countries, and 16.3 percent of the variance can be explained by factors that varies within countries over time. The increase in variance is significant, as shown by the Chiestimate and p-value (which in the case of *Trust parliament* as the dependent variable is Chi=7060.08 and p<0.0000).

So, first of all, considering that the ICCs should be above 10 percent in order to correctly utilize a MLR instead of a standard regression, the results indicate that both the second level and the third level in the data structure should be included, and therefore that MLR is preferable to standard regression. Furthermore, in addition to having an ICC of more than 10 percent at the intermediate level, the hybrid model has a BIC-score that is lower than the BIC-score in the two-level model. In general, a lower BIC-score is preferable (Robson and Pevalin, 2008, 58). Therefore, the hybrid model is the preferable model, both compared to a two-level model and therefore compared to a standard regression model. Second, the variance-estimates show that most of the variation in political trust can be explained by factors located at the individual level. So, while the discussion in the previous section showed that there is a relatively small, statistically speaking on a scale from 0 to 10, variation in political trust in Europe from 2002 to 2016, the result in this section indicates that only some of this variation can be explained by terrorism, which is located at the non-individual levels. On the other hand, this also means that there actually is some variation in the levels of political trust, and that some of this variation can be explained by factors located on the non-individual levels. To sum up, although terrorism can be expected to have a limited impact on the variation in political trust, there is room for it. The results of the MLR will show if terrorism actually have had an impact. 19

## 5.4 The MLR

The next step is filling in the empty hybrid models. This is done in three steps, as explained in the previous chapter. Table 5.2 shows the result from the third and most comprehensive model for each of the dependent variables. Here too are the other results (from model 1 and 2) relegated to the appendix (J). The patterns discussed here are, however, valid for all the models, and conclusions are therefore made in a manner encompassing all the models. These encompassing conclusions are also made possible since no variables move loses their significance (p < .5) or

<sup>&</sup>lt;sup>19</sup> The results from the empty models also shows that an intermediate position between the two extremes of the MI school and the MC school is wise, since variation in the levels of political trust probably can be explained by both individual and by structural factors. The result from the empty models also show that there is some within-country correlation, as expressed by the ICC, which at least modifies the MI school's assumption (if interpreted to its extreme) that there's no more correlation between citizens within the same country than there are between citizens from different but similar countries.

vice versa between the different models. It can also be noted that the results are statistically robust, since the MLR employs a Huber-White estimator which produces robust standard errors. All of the estimates therefore have a high degree of certainty.

**Table 5.2** The MLR result

	Parliament	Legal system	Police	Politicians
Constant	-1.263983	-5.776835	-2.363525	-4.527088
	(2.502738)	(3.38027)*	(2.1094)	(2.18994)**
Year				
2004	251747	.0277891	0489093	2047002
	(.069381)***	(.062934)	(.0725267)	.(0428874)***
2006	2296633	.2046509	0525208	2138589
	(.10354)**	(.0898462)**	(.0762098)	(.0806311)***
2008	0890956	.4176425	.0980643	0526179
	(.1372696)	(.1225043)***	(.1158655)	(.1016213)
2010	2202167	.4923431	.1796089	1272503
	(.132483)	(.1503133)***	(.1360016)	(.0983286)
2012	2665146	.5768286	.2895931	1682555
	(.1665416)	(.1703659)***	(.1565467)*	(.1306146)
2014	0492124	.7943007	.379869	0691447
	(.2168049)	(.1968259)***	(.1779096)**	(.1580205)
2016	0014714	.8861133	.5488127	0379509
	(.2116924)	(.2036179)***	(.1971499)***	(.1473628)
Individual level	,	, , , , , , , , , , , , , , , , , , ,	,	,
Political Interest	.5236903	.2055874	.0577129	.5590483
	(.0265534)***	(.0202604)***	(.02051)***	(.0282075)***
Feeling of safety	.0604371	.1592306	.0604947	.0100667
	(.0167272)***	(.0180037)***	(.0312432)*	(.0137731)
Degree of	.0339864	.0239109	.0329049	.0407261
religiousness	(.0032162)***	(.0048929)***	(.0057495)***	(.0029258)***
Satisfied w/	.0742459	.0364185	.0419049	.0819143
househ. income	(.0201813)***	(.0170898)**	(.0174769)**	(.0173382)***
Education	.0404745	.040732	.0050116	.0063374
	(.0049353)***	(.0050463)***	(.0024473)**	(.0027275)**
Social trust	.1724568	.1954764	.1874679	.1858303
	(.0085069)***	(.0104445)***	(.0086942)***	(.011183)***
Individual	0443164	.0223835	.1105438	0679599
wellbeing	(.0098657)***	(.0114007)**	(.009772)***	(.0087647)***
Satisfied w/	.7244031	.6203231	.471354	.6741157
societal inst. Perf.	(.0133651)***	(.0142412)***	(.0155576)***	(.0129248)***
Area of residence	.1265065	.0754438	0510042	.0532314
(AOR)	(.036375)***	(.0354666)**	(.0358403)	(.0262524)**
	0035624	0053984	.0062014	0027871
Age	(.0010477)***	(.0013391)***	(.0012962)***	(.0010492)***
Gender	0091424	.0320241	.1487685	.1464728
Genuei	(.016331)	(.0293386)	(.0210443)***	(.0181775)***
Macro level	(.010551)	(.0493300)	(.0210443)	(.0101//3)
	0860022	1967001	0219200	0724791
HDI-centered	.0860022	.1867981	.0318299	.0734781
	(.0533682)	(.0443483)***	(.0392898)	(.0394904)*

HDI-average	.0060771	.0638511	.0411411	.0401163
J	(.0298471)	(.041063)	(.0266692)	(.0265002)
GTI-centered	0466589	0189699	.1028139	0538557
	(.0181292)***	(.0347162)	(.0344938)***	(.0156666)***
GTI-average	.1459465	0848444	1368071	.0631676
	(.1939661)	(.3806849)	(.3006131)	(.165281)
GTI-centered^2	0115463	0242353	0226222	0100099
	(.0073219)	(.019794)	(.0221596)	(.0113228)
GTI-average^2	0244414	.011373	.0318185	0195254
	(.0384256)	(.0673119)	(.0538582)	(.0315717)
GTI-	.0152745	.0303239	.0078311	.0037201
centered*AOR	(.0129091)	(.0200512)	(.0127113)	(.009782)
GTI-	.0020811	.002698	.0031409	0004161
average*AOR	(.0154917)	(.0132525)	(.011133)	(.0060213)
Random effects (V	ariance components	)		
Individual level	3.457605	3.977583	3.986024	3.048211
variance	(.1136834)	(.1445106)	(.2035173)	(.0987658)
Country level	.1056196	.198476	.1400631	.0714519
variance	(.0271582)	(.0551829)	(.0429612)	(.0246188)
Country-year	.0383141	.0413967	.0567539	.027398
level variance	(.0088907)	(.0079361)	(.0116665)	(.0055267)
BIC	1075689	1116345	1130978	1052066
N, individuals	263,535	264,420	267,746	265,968
N, countries	19	19	19	19
N, country-years	146	146	146	146

<sup>\*\*\* = 1%-</sup>level, \*\* = 5%-level and \* = 10%-level

To start with the subject at hand: terrorism. First, none of the polynomial variants  $(X^2)$  nor the interaction variables (X<sub>1</sub>\*X<sub>2</sub>) have a significant relationship with any of the dependent variables. Not even at a 10 percent significance level. This is also the case with GTI-average, the cross-sectional and more permanent variant of the original GTI variable. On the other hand, GTI-centered, the longitudinal version of the original GTI variable, have a strong significant relationship (p<.01) to every dependent variable, except for the variable trust legal system where it does not even achieve a 10 percent significance level. Table 5.2 further shows that among the significant GTI variables, both the coefficients and the level of significance varies (as indicated by the ratio between the beta-coefficient and the standard error (Midtbø, 2010, 93)). The coefficient of GTI-centered in its relation to trust police is more than twice as large as the combined coefficients of the same variable related to trust parliament and trust politicians. Furthermore, the former coefficient is positive while the two latter coefficients are negative. So to temporarily summarize in advance of the upcoming discussion in the next chapter, 1) the relationship between terrorism and political trust seem to be linear, as represented by the non-significant relationship between the dependent variables and the polynomial variables (the models therefore seem to have the correct functional form, as

discussed in the *Methods*-chapter); 2) the relationship between a country's exposure to terrorism and citizens political trust does not seem to be affected by *area of residence*, as represented by the interaction variables; 3) citizens' political trust does not seem to be affected by their countries' long-lasting levels of exposure to terrorism, as represented by *GTI-average* but; 4) the trust that citizens have in their parliaments, police and politicians do seem to be affected by variation in their countries' exposure to terrorism over time, as represented by *GTI-centered*. A preliminary overall conclusion is, thus, that the remark made in the introductory chapter was correct: citizens in Europe seem to be more affected by the relatively large increase in the amount of terrorism, than they are affected by the relatively lasting levels of terrorism in themselves.

As for the size of the coefficients, the effects that the significant *GTI*-variables have, this varies markedly between dependent variables, as mentioned earlier. The overall effect that terrorism seem to have had on the levels of political trust is rather limited. Using the largest coefficient, related to the police, as an example. When the *GTI* increases with 1 score, which is a marked increase which indicates a rather large increase in a society's exposure to terrorism, the levels of trust in the police is shifted .1, on a scale from 0 to 10. A large increase in exposure to terrorism has a weak effect on trust that citizens vest in the police. And, as mentioned above, the police is more than twice as affected than the other two significant institutions. The significant *GTI*-variables effect relatively to the other variables are discussed below.

When it comes to the control variables there are several significant relationships. Citizens' trust in every political institution increases the more interested they are in politics, the more religious they are, the more satisfied they are with their household's income, the more educated they are, the more social trust they have, and the more satisfied they are with societal institutions' performance. These results are as expected.

There are, however, some deviances from the expectations discussed in the *Theory* chapter. First, citizens' trust in the parliament, the legal system and in politicians decrease with *age*, contrary to expectations, while their trust in the police increases, as expected. Furthermore, citizens' trust in parliament and the legal system seem to be independent of *gender*, while women, as expected, have more trust in the police and in politicians compared to men. Although no assumptions was discussed explicitly in the *Theory* chapter regarding the variable *area of residence*, the relationship between *area of residence* and trust in the different institutions

follows no obvious pattern *prima facie*. Citizens living in urban areas have higher levels of trust in the parliament, the legal system, and politicians, but there's no difference when it comes to trust vested in the police. This can be a bit confounding, but as hinted to in the discussion above and as the discussions below will show, the police are often the 'odd institution out'. Moving on, when it comes to *individual wellbeing*, it seems that the better perception individuals have of their own wellbeing, the less they trust their parliaments and their politicians, while their trust in the legal system and the police increases. *Feeling of safety* does not seem to affect citizens' trust in their police nor their trust in politicians, but it does have a significant impact on their trust in their parliaments and their legal system. This also can be a bit confounding, considering that it is the police's responsibility in every-day life to ensure the citizens' feeling of safety.

Overall, the results in connection with the control variables located on the individual level are mainly as expected. But there are some deviancies from the expected result. Some of these deviancies are related to non-significant relationships, but a lot of the deviancies are related to variables having a significant relationship to some of the dependent variables but not others, while some deviancies is related to variables having a positive relationship with some of the dependent variables and negative relationships to others. While there seem to be no permanent or obvious pattern in the deviancies, a lot of the deviances revolves around citizens' trust in the police. The deviancies, and the discrepancies between this study and previous studies (i.e. the results both relating to terrorism as well as the control variables, although the latter is not explicitly discussed previously in this paper beyond the expectations that are discussed in the *Theory* chapter), also shows that trust is not a clear-cut matter, and that it does not have a deterministic relationship to other phenomena. An element that can function as a theoretical supplement to the theoretical framework discussed in this paper, and possibly explain parts of the deviances between institutions, is discussed at the end of the *Analyses*.

When it comes to the control variables located on the macro level, *HDI-average* and *HDI-centered*, it can first be pointed out that the former is not significant in any of the analyses. The latter is only significant in its relationship to the trust that citizens have in their legal system. This indicates, first, that the levels of political trust are not affected by living in societies with relatively high or high but relatively lower levels of human development. However, changes in the societies' levels of human development do affect the political trust, but only the trust that citizens vest in their legal system. The lack of significant relationships is, perhaps, a paradoxical

finding. However, one potential explanation may be that citizens care more about their own education, own income, and own health, than they do about the country average, as represented by HDI. Living in a country where your co-citizens have high levels of education, for instance, may not affect you in the same manner as your own education. At least not as strongly. Many of the factors that the HDI controls for on the macro level, may already be accounted for on the individual level. And, as discussed in the two previous sections of this chapter, it is mainly factors located at the individual level that explain variation in political trust, leaving relatively little room for both the HDI and the GTI. Furthermore, relatively few observations on the macro level combined with relatively little variation (19 observations each year that varies relatively little from year to year) makes it difficult to get statistical significance (suggesting, of course, that there is no or a weak empirical relationship) (Thrane, 2017, 80; Midtbø, 2010, 67; Wheelan, 2013, 195-198). One important remark, however, is that terrorism seem to matter more for political trust than a society's 'capital of human development. At least among the countries included in this study. This remark can be seen in connection with the remark made in the introductory chapter, where a previous study finds that the main factor determining political trust in the U.S. is national security, and not e.g. the economy, health care or education (without excluding these factors as relevant).

Some notes can be made regarding the two different academic schools within the study of (political) trust, referred to in the *Theory*-chapter, in connection with the size of the coefficients, i.e. the strength of the explanatory factors. The MI-school focuses on individual explanatory factors, while the MC-school focuses on societal (i.e. structural) explanatory factors, as already discussed. The results from the MLRs may indicate that a compromise between the two schools may be most advantageous, at least when it comes to the study of political trust. It is factors located at the lower level that, generally, has the largest explanatory power, as indicated by the beta-coefficients and their level of significance, as well as by the empty models discussed above. At the same time, a lot of the factors located on the individual level is in reality hard to separate from structural factors. For instance, the factor with the strongest effect on political trust is the individuals' satisfaction with societal institutions' performance, i.e. the state of the country's economy, satisfaction with how the government performs its job, how democracy works in their country, the state of education in the country, and the state of the country's healthservices. These are individual factors that presumedly are quite dependent on structural factors. In real life there are close connections between individual and structural factors in many respects. If comparing the significant GTI-variables with age and gender, two factors that are not connected with structural factors, the results shows that terrorism have a stronger effect on the levels of political trust in some cases, and in other cases not (keeping in mind the different variables' range of variation, e.g. age can vary from 15 to over 100). Overall, the results show that variation in terrorism and its effect over time (*GTI-centered*) is on par with several factors on the individual level. In many cases, however, factors on the individual level have a stronger effect on political trust.

As for the models themselves, table 5.2 shows that most of the variation is located at the lowest level in the model, and then at the country level, and that least of the variation is located at the country-year level, in line with the previous results. Furthermore, the BIC is reduced in model 3 compared to both the empty models, as well as compared to model 1 and model 2 (see table 5.2, Appendix J and Appendix K). Since the BIC increases with the amount of include variables, as mentioned above, a reduced BIC score is a positive sign for model 3.

## **5.5** The survey experiment

Figure 5.2 is a graphic display of the results from the survey experiment. More concrete, the figure shows the average scores of each of the three experiment groups, for each of the dependent trust variables as well as their average score on the variable measuring the impact of the treatment. From the figure one can see that the result generally matches the theoretical expectations, where the group that receives the negative vignette has the lowest average trust in the different institutions, the control group has an average score between the negative group and the positive group, and the group that receives the positive vignette has the highest average trust in the three institutions. The exception from this pattern is the result pertaining to the police. In this case, the group that received the positive vignette still has the highest average score, as expected, but the group that received the negative vignette has a higher average score than the control group. Overall, the graphic result indicates that capacity perception does matter in the relationship between terrorism and citizens' trust. Furthermore, figure 5.2 also indicate that the *treatment* have worked as expected, since the aforementioned validating pattern is present also in this case. The treatment does seem, however, to have had a limited impact on the participants, considering the relatively small differences between the three groups. The ANOVA's can help concretize these impressions.

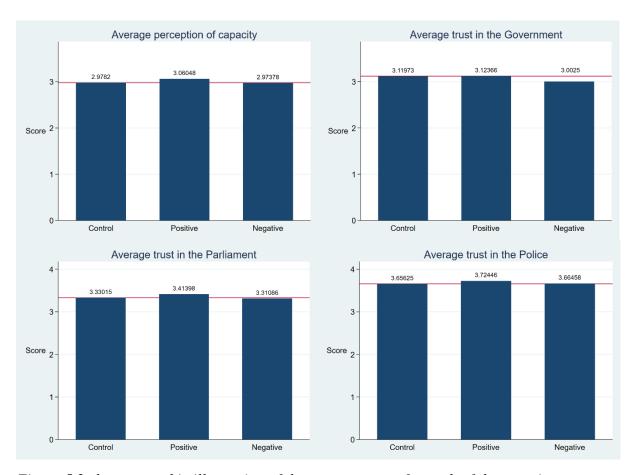


Figure 5.2 show a graphic illustration of the average score for each of the experiment groups for each of the dependent variables, with a reference line for the control group score.

# 5.6 ANOVA

## 5.6.1 Treatment

First of all, it is relevant to investigate if the treatment had an effect, and if the effect was as intended, before exploring in a concrete manner to what degree the average levels of trust was affected by the treatment. This investigation can help strengthen the reliability of the causal inferences, as well as provide an indication of the strength of the treatment, which in turn provides an indication of how much variation in *trust* can be expected. Table 5.3 shows descriptive statistics of the result pertaining to the dependent variable that measures the participants' perception of the authorities' capacity to deal with terrorism.

**Table 5.3** Descriptive statistics of the groups' average *capacity perception* 

	Average score	sd	Skewness	Kurtosis
Control group	2.978202	.7004688	0416002	2.780887
Larger capacity	3.060484	.6982753	.0834629	2.743305
Not large	2.973783	.671239	.1048997	3.046652
enough capacity				
Overall	3.002816	.689928	.0532521	2.867263
average				

First of all, it can be noted that table 5.3 (as well as table 5.6, 5.9, and 5.12) contains descriptive statistics relating to data diagnostics (sd, skewness, and kurtosis), i.e. statistics used to check, among other things, if the statistical assumptions are met. Each table containing descriptive statistics for each of the dependent variables will contain such diagnostic statistics, but as discussed at the end of the previous chapter, all assumptions relating to diagnostics are met. These results, although included in the descriptive tables, will therefore not be discussed further.

As one can see from table 5.3, there is a difference between the three groups, and the difference is as expected. The negative group has the lowest average score, i.e. the lowest average perception of the authorities' capacity to deal with terrorism, while the positive group has the highest average score. However, the effect of the treatment variable seems to be rather small, as indicated by figure 5.2. On a scale from 1 to 5, the difference in the average score between the negative group and the positive group is .09. The *treatment*, i.e. the vignettes, have therefore had an effect on the participants *capacity perception*, but the effect was limited. Next, an ANOVA is used to explore if the differences in effect was large enough to be significant.

**Table 5.4** The result from the ANOVA of the participants' *capacity perception* 

	SS	df	MS	F-score	p-value
Between-	3.55769235	2	1.77884618	3.75	0.0238
group var.					
Within-	1080.77184	2276	.474855816		
group var.					
Total	1084.32953	2278	.476000671		

Eta/'effect size': 0.003281 chi2(2) = 2.3477 Prob>chi2 = 0.997

Table 5.4 shows the result from the ANOVA of the dependent variable measuring *capacity perception*. In this table, 'df' refers to 'degrees of freedom', 'SS' refers to 'Sum of Squares', and 'MS' refers to 'Mean sum of Squares' (=SS/df). SS and MS are two different ways of demonstrating the variance, which is done for the between-group variance and within-group variance. These elements, df, SS and MS, are however, as discussed in the *Method* chapter when noting the statistical formula, what leads to the F-score. And it is the F-score and the p-value that are the main elements to consider in this regard. Therefore, the discussions will focus on these two scores. As also mentioned in the *Method* chapter, the critical F-score for the ANOVAs in this study is 3.07. As table 5.4 shows, the ANOVA of the dependent variable measuring capacity perception provides an F-score of 3.57, and the p-value is .0238. One can therefore conclude with a significance level of 5 percent, that the treatment has worked. The

treatment has altered the participants *capacity perception*, and the direction of the effect have been as intended. The Eta-score has no straightforward interpretation but can be considered as a measurement of the strength that the effect of the treatment has had (Ringdal, 2014, 382). The Eta-score therefore indicates that the treatment, i.e. the vignette, explains .3 percent (0.003 X 100) of the variation (Ibid). Overall, the ANOVA supports the impression one gets from the descriptive statistics. The treatment has had a significant effect on the participants as intended, but the effect is limited. A *Benferroni*-analysis can provide a more nuanced image of which groups was more and less affected by the treatment.

**Table 5.5** The result from the *Benferroni*-analysis of participants' capacity perception

Benferroni comparisons	Control group (p-value)	Larger capacity (p-value)
Larger capacity	.082282 (0.065)*	
Not large enough capacity	004419 (1.0000)	086701 (0.041)**

<sup>\*\*\* = 1%-</sup>level, \*\* = 5%-level and \* = 10%-level, p-value modified to account for multiple pairwise comparisons

Table 5.5 shows the result of the *Benferroni* multiple pairwise comparison of the dependent variable measuring *capacity perception*. In the comparison between the control group and the positive group one sees that there is a difference, but that the difference between the two groups is not large enough to reach a significance level of 5 percent. If one compares the control group with the negative group one sees that the difference is very small between the two groups, and the difference is not nearly significant. On the other hand, the comparison between the positive group and the negative group shows that there is a difference, a slightly larger difference than the one between the control group and the positive group, and that the difference is significant with a p-value of .04.

Overall, the results from the ANOVA of the relationship between the vignettes and the variable measuring the participants *capacity perception* shows that the vignettes have worked as intended. The effect, however, seems rather limited as indicated (particularly) by the Eta-score. This impression is backed up by both the descriptive statistics as well as the *Benferroni*-analysis, where the latter shows that the largest difference is between the positive group and the negative group, as could logically assume. The descriptive statistics in table 5.3 shows that it was the positive vignette that had the strongest effect and the trust that the groups exhibit towards the different institutions should therefore, *ceteris paribus*, be more positively affected than negatively affected.

It can also be pointed out that the limited effect that the treatment apparently have had was expected. As discussed in the *Theory* chapter, citizens (represented here by the experiment participants) continually throughout their entire lifespan receive cognitive 'updates', environmental cues, that provide them with information regarding political institutions capacities. Both when it comes to dealing with terrorism and in general. Citizens therefore probably have a perception of the political institutions' capacities that are somewhat fixed. This paper assumes that terrorism is an event that can function as both a critical juncture that can stir, as well as an element that wear and tear on this fixed image. It was, however, at the outset questionable whether a vignette in the form of a couple of written lines would be able to affect the participants' capacity perception when it comes to institutions' capacity to deal with terrorism. Merolla and Zechmeister (2009, 49-74), for instance, recommends that experiments that wants to explore how terrorism affects citizens use video clips and similar graphical elements as *treamtents*, in order to ensure a treatment effect. This approach, although perhaps more effective, involves some ethical complications. Terrorism is by nature traumatic. To simulate something relating to terrorism may affect the participants too much or in an undesirable manner. The approach is also more resource demanding, especially if one is to tailor the treatment to the experiment, as is done in this case. An additional potential downside is that it is more difficult to infer exactly what it is (about the video/graphical element) that affects the participants, since some elements may affect some participants and other elements may affect other participants. These complications are limited by using text. So, the fact that the treatment actually has had an effect, and that the effect has been as intended is good news. This provides a stronger certainty for the causal inferences regarding the remaining dependent variables.

## 5.6.2 The Parliament

**Table 5.6** Descriptive statistics of the groups' average response to *trust Parliament* 

	Average score	sd	Skewness	Kurtosis
Control group	3.33015	.7979685	3875091	3.005073
Larger capacity	3.413978	.7504997	5942856	3.392934
Not large	3.310861	.7395907	343671	2.94489
enough capacity				
Overall	3.349769	.7626185	4355082	3.090905
average				

Table 5.6 shows the descriptive statistics for the relationship between the *treatment* and the dependent variable measuring how much the participants *trust Parliament*. The table supports the impression from the graphic illustration in figure 5.2, where the positive group has the highest average degree of trust in the Parliament, while the negative group has the lowest average degree of trust in the Parliament. The descriptive statistics also show that the group that received the positive *treatment* has a markedly difference from the two other groups in how much it trusts the parliament, while the other two groups has a smaller difference between them. This indicates, in line with the expectation pointed out above, that the trust that the parliament receives is, *ceteris paribus*, more affected by the positive capacity perception, i.e. an improved capacity, than it is by the negative capacity perception, i.e. not large enough capacity.

**Table 5.7** The result from the ANOVA of how much participants *trust Parliament* 

	SS	df	MS	F-score	p-value
Between-	4.54528409	2	2.27264205	3.92	0.0200
group var.					
Within-	1319.72811	2275	.580100268		
group var.					
Total	1324.27339	2277	.581586909		

Eta/'effect size': 0.003432 chi2(2) = 2.3477 Prob>chi2 = 0.309

Table 5.7 shows the result from the ANOVA of the dependent variable that measures how much the participants *trust Parliament*. First of all, the F-score of 3.75 is above the critical value of 3.07, and the p-value of .02 is significant. One can therefore with a large degree of certainty conclude that *capacity perception* affects citizens' trust in Parliament, and, thus, functions as a causal mechanism in the relationship between terrorism and political trust. The Eta-scores of .003 shows, as in the case with the variable measuring *capacity perception*, that the *treatment* has had a relatively weak effect, where it is estimated that the *treatment* can explain .3 percent of the variance. This is in line with the discussion above, where it is assumed that citizens' political trust is a relatively fixed 'property'. The fact that a couple of written lines have had an effect of .3 percent actually becomes somewhat remarkable if seen through this lens.

**Table 5.8** The result from the *Benferroni*-analysis of participants' trust in *Parliament* 

Benferroni comparisons	Control group (p-value)	Larger capacity (p-value)
Larger capacity	.083828 (0.104)	
Not large enough capacity	019289 (1.000)	103117 (0.024)**

\*\*\* = 1%-level, \*\* = 5%-level and \* = 10%-level, p-value modified to account for multiple pairwise comparisons

Table 5.8 shows the result from the *Benferroni*-analysis of the dependent variable measuring how much the participants *trust Parliament*. This result is quite similar to the *Benferroni*-analysis of the dependent variable measuring the participants' *capacity perception*, in that it is only the difference between the positive group and the negative group that reaches a significance level lower than 5 percent, with a p-value of .02. This can probably, as is the case above as well as below, be seen as a consequence of a relatively weak *treatment*. The *treatment* barely affects the participants away from their original position, as represented by the control group, but the total effect that the *treatment* has on the two groups are significant.

#### 5.6.3 The Government

**Table 5.9** Descriptive statistics of the groups' average response to *trust Government* 

	Average score	sd	Skewness	Kurtosis
Control group	3.119728	.8477121	2433075	2.80177
Larger capacity	3.123656	.843488	4253012	2.771768
Not large	3.0025	.8446215	2167297	2.676615
enough capacity				
Overall	3.077697	.8468138	2891765	2.732535
average				

Table 5.9 shows the descriptive statistics of the variable measuring how much the participants trust Government. Here too is the impression from the graphical display in figure 5.2 backed up. The positive group has the highest average trust in the Government, while the negative group has the lowest average trust in the Government. However, in contrast to the case with the Parliament, here it is the negative group that stands out markedly from the other two groups. This could indicate that the citizens' trust in the Government, at least in a Norwegian context, is more affected by a negative capacity perception than it is by a positive one. This is in spite of the fact that the positive treatment seems to have had a stronger effect than the negative treatment, something which further indicates that the trust in Government (at least the current Norwegian Government) is particular susceptible to relatively negative (capacity) perceptions.

**Table 5.10** The result from the ANOVA of how much participants trust Government

	SS	df	MS	F-score	p-value
Between-	7.54896458	2	3.77448229	5.28	0.0051
group var.					
Within-	1625.99026	2276	.714406968		
group var.					
Total	1633.53922	2278	.717093601		

Eta/'effect size': 0.004621 chi2(2) = 1.5360 Prob>chi2 = 0.464

Table 5.10 shows the result from the ANOVA of the dependent variable measuring how much the participants *trust Government*. The F-score of 5.28 is above the critical value of 3.07, and the p-value is .005, which makes the relationship significant at a significance level of below 1 percent. One can therefor conclude with a large degree of certainty that the citizens' perception of how much capacity the authorities have when it comes to dealing with terrorism affects how much trust the citizens vest in the Government. The Eta-score indicates that the *treatment* explains .4 percent of the variance. This is not much but it is still some, at least seen through the lens mentioned earlier. It is also more than the case with the Parliament, indicating that the Government is more affected by changes in *capacity perception* than the Parliament is. This could be because the trust vested in the Government is more affected in a negative manner than the trust vested in the Parliament.

**Table 5.11** The result from the *Benferroni*-analysis of participants' trust in Government

Benferroni comparisons	Control group (p-value)	Larger capacity (p-value)
Larger capacity	.003928 (1.000)	
Not large enough capacity	117228 (0.020)**	121156 (0.015)**

\*\*\* = 1%-level, \*\* = 5%-level and \* = 10%-level, p-value modified to account for multiple pairwise comparisons

Table 5.11 shows the result from a *Benferroni*-analysis of how much the participants *trust Government*. The analysis is in line with the graphic display in figure 5.2, as well as with the ANOVA above. One sees that the largest difference lies between the positive group and the negative group (p-value of .015), still, but that the difference between the negative group and the control group is significant (p-value of .02), while the difference between the positive group and the control group is not significant. The *Benferroni*-analysis therefore backs up the impression that the trust vested in the Government is more affected by negative *capacity perception* than by a positive one, contrary to the case with the participants' trust in the Parliament.

## 5.6.4 The police

**Table 5.12** Descriptive statistics of the groups' average response to *trust police* 

	Average score	sd	Skewness	Kurtosis
Control group	3.65625	.7577547	7631443	4.099906
Larger capacity	3.724462	.7080719	6658474	3.997436
Not large	3.664581	.7168817	7119263	4.239482
enough capacity				
Overall	3.681083	.727435	7204899	4.142101
average				

Table 5.12 shows the descriptive statistics of the variable measuring how much the participants *trust police*. The statistics shows, firstly, that after the *treatment* has been introduced the police have the highest amount of average trust, with an overall average of 3.68, while the Parliament and the Government has an overall average of 3.35 and 3.01, respectively. This difference in average trust probably has many explanations, but the two latter institutions have a more political nature, thus probably being more contested, than the former institution, something which can affect the overall trust that they receive (Norris, 2017). Table 5.12 also shows that the positive group has the highest amount of average trust in the police, as expected. However, contrary to expectations, the negative group have a higher average amount of trust in the police than the control group. The negative vignette therefore seems to have had a positive effect when it comes to the trust that the participants have in the police. The table further shows that the positive group markedly stands out from the two other groups, suggesting that the participants' trust in the police is more affected by a relatively positive *capacity perception* than it is by a negative perception. Although this is not as easy to determine as with the previous institutions, since the negative *treatment* also had a positive effect despite its negative intention.

**Table 5.13** The result from the ANOVA of how much participants trust police

	SS	df	MS	F-score	p-value
Between-	2.03577342	2	1.01788671	1.93	0.1416
group var.					
Within-	1203.39443	2276	.528732177		
group var.					
Total	1205.43021	2278	.529161637		

Eta/'effect size': 0.0030331 chi2(2) = 3.1828 Prob>chi2 = 0.204

Table 5.13 shows the result from the ANOVA of the dependent variable measuring how much the participants *trust police*. The table shows that the F-score of 1.93 is below the critical value

of 3.07, and that the p-value is .1416. So, *capacity perception* does not seem to be a causal mechanism in the relationship between terrorism and citizens' trust in the police since the variation is too small, but this cannot be stated with sufficient certainty since the p-value is too high. Furthermore, the table shows that the *treatment* has an explained effect of approximately .3 percent, which is roughly the same as in the previous cases, something which again indicates a (relatively) weak *treatment*.

It can, however, be pointed out that the difference between the control group and the positive group is roughly the same size as in the case with the Parliament, and that it is bigger than the difference in the case with the variable measuring the participants *capacity perception*, both of which produced significant ANOVAs (table 5.6, 5.9 and 5.12). The difference in the F-score and the p-value can be ascribed to the somewhat puzzling fact that the group that receive a negative treatment actually experience an increase in their trust. This increase, as opposed to a decrease as in the other cases, leads to a reduced overall variance. This reduced overall variance, in turn, leads to a low and not sufficient F-score, which can be derived from the F-score formula presented in the previous chapter (overall variance representing the numerator in the Fischer equation). Furthermore, reduced between-group variation reduces the p-value, as can be derived from the statistical formula behind the p-value (one way of expressing the effect of the treatment, referred to as beta-coefficient in regressions, is by the between-group variation) (Midtbø, 2010, 93). This explains, at least partially, the *statistical* outcome (but not the empirical relationship).

**Table 5.14** The result from the *Benferroni*-analysis of participants' trust in police

Benferroni comparisons	Control group (p-value)	Larger capacity (p-value)				
Larger capacity	.068212 (0.214)					
Not large enough capacity	.008331 (1.000)	059882 (0.318)				

<sup>\*\*\* = 1%-</sup>level, \*\* = 5%-level and \* = 10%-level, p-value modified to account for multiple pairwise comparisons

Table 5.14 shows the result from the *Benferroni*-analysis of the dependent variable measuring how much the participants trust the police. This backs up the impression from the graphic display in figure 5.2, and the statistics presented above. The differences in trust are largest between the control group and the positive group, and smallest between the control group and the negative group. None of the differences are, however, significant. Overall, the trust vested

in the police stands out from the trust vested in the Government and the trust vested in the Parliament in how it is affected.

# 5.7 Summary

This chapter have presented and discussed the results from the MLR and the survey experiment. Generally, the results was as expected. There were, however, some deviations from the theoretical expectations discussed earlier in the paper. Both in the MLR results and in the survey experiment results. How the results relate to the hypotheses and the theoretical framework is the topic for the next chapter, which also at the end suggests a theoretical element that could supplement the theoretical framework suggested in this paper. This element could explain at least some of the deviances from the expectations and increase the theoretical framework's explanatory power.

# 6 Analyses

#### 6.1 Introduction

This chapter will analyse the result from the MLR and the survey experiment. This is done, first, by discussing the results implications for the hypotheses, and then how the results fit the theoretical framework. In accordance with this sequential discussion, some of the theoretical implications stemming from the results that are connected to the analysis of the hypotheses will be reserved for the discussion of the theoretical framework, in order to avoid redundant repetition. This mainly regards the first and the fifth hypothesis, since these two are tightly connected to the framework. The chapter concludes with a brief discussion of an alternative, or perhaps best envisioned as a supplementing, theoretical element. This could element could help explain the deviancies between the results and the expectations derived from the paper's theoretical framework.

# 6.2 Hypothesis 1

In Europe in the time period of 2002 to 2016 terrorism have had a negative effect on the political trust that the parliament, the legal system, the police, and the politicians receive.

The results from the MLRs showed two major trends. First, that a country's relatively long-lasting exposure to terrorism do not have a significant effect on political trust. The variable *GTI-average* did not have a significant relationship with the trust that parliaments, legal systems, police, and politicians receive. This means that citizens in France, a country that has experienced a considerable amount of terrorism over time, compared to, for instance, citizens in Norway, a country that has experienced a small amount of terrorism, do not have less trust in political institutions as a result of living in a country which have been more permanently exposed to terrorism. This trend can be in line with previous empirical studies which suggest that the effects of terrorism are relatively short-lived. And while it at first glance might seem like the result does not fit the theoretical framework, this is not necessarily so. The framework, which will be discussed more in detail later, assumes that *changes* in capacity perception lead to changes in the levels of trust. Changes in capacity perception, in turn, requires new information, information that alters the perception. Persistent levels of terrorism as is measured by this variable could, perhaps, usually confirm already existing information, i.e. the information that already influences the capacity perception, thus confirming the capacity

perception and fortifying the levels of trust. This is only speculation but, considering the second resulting trend, it is a plausible speculation.

The second trend that appears in the result is that *changes* in the amount of terrorism that a country experiences do affect the levels of political trust in that country. At least the trust that the parliaments, the police and the politicians receive from the citizens. The variable GTIcentered had a significant relationship to all of the dependent variables, except for how much citizens trust their legal system (the differences between institutions will be discussed below in connection with the second hypothesis). Citizens, therefore, seem to reduce or increase their trust in the different institutions when hit by a new terror attack. One implication of this result is that the it is the citizens in Spain, Norway and Sweden, in that order, that have had their political trust most affected by terrorism during the relevant time period out of the citizens in the 19 included countries, since it is these countries whom in the same time period experience the largest overall variation in the GTI-score/terrorism (see Appendix B).<sup>20</sup> By resulting in two negative relations (the parliaments and politicians) and one positive relation (the police), the results are in line (and not in line) with both the theoretical expectation and previous empirical studies. The negative relations are in line with the theoretical framework, while the positive relation is in line with previous empirical studies. This discrepancy between institutions and a possible reason for it is discussed more later.

The first hypothesis, as it is formulated, is falsified. Variation in terrorism within a country over time has had a negative effect on the political trust in Europe in the time period of 2002 to 2016, but it has only contributed toward a reduction in the trust that the parliaments and the politicians received. The legal systems seem to be unaffected, while the trust that the police received was improved as a consequence of increasing amounts of terrorism.

# 6.3 Hypothesis 2

Terrorism affects the trust vested in the different institutions in a negative but different order. The trust vested in the police is most affected, followed by the trust vested in politicians, then the trust vested in the parliaments, and finally the trust vested in the legal system.

This hypothesis has two dimensions. The first is the direction of the effect that terrorism has, and the second is the ranked order of the effect that terrorism has on the trust that the different

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 $<sup>^{20}</sup>$  This is a prediction that can increase the reliability of the result, but a prediction that nonetheless is left untested in this paper.

institutions receive. The first dimension was a continuation of the first hypothesis and has already been discussed and falsified. When considering the significant variable *GTI-centered*, changing amounts of terrorism do affect the trust that three of the institutions receive, but the trust in the police is affected in a positive manner, while the trust in the legal system is not affected. As for the second dimension, the ranking, also considering the significant result, this is correct. The citizens' trust in the police was more than twice as affected than the trust in the parliament and the politicians combined, while the trust that the politicians receive was slightly more affected than the trust that the parliaments receive, and the legal systems seem unaffected by changes in the amount of terrorism.

These institutional differences may have several causes, which perhaps works from different directions. The differences is discussed more thoroughly in the section on the theoretical framework, but a preliminary discussion is in order. First, it can be caused by the fact that the more specifically political institutions such as the parliament and politicians are often used as scapegoats. When something goes wrong, e.g. a terror attack, they are often the first actors that come to the citizens' mind and, thus, are blamed (Norris, 2017; Norris, 2003). Terrorism can of course function as a critical juncture, which politicians can exploit for their own benefit (Albertson and Gadarian, 2016a; 2016b; Gadarian, 2014). And some politicians, perhaps especially conservative ones (Huddy and Feldman, 2011; Huddy et al., 2007), could of course come out on top. However, this probably demands a rather skilful handling of the aftermath by the politicians and the parliament, and it is doubtful that parliaments and politicians overall (as measured by the ESS, and the focus in this paper) can do this skilfully enough to come out on top. This could explain why the more specifically political institutions receive reduced trust following a terrorist attack. At the opposite end of this effect-distribution is the police. The police may receive increased trust following a terrorist attack because it is they who in everyday life are supposed to protect the citizens. Citizens, in most cases, do not have an alternative to the police when it comes to combating terrorism. They therefore not only could, but also should rally around the police. It is their last resort. Increased trust in the police (perhaps reallocating it from other institutions, e.g. the parliament and politicians) is a rational outcome, since it can increase the police' capacity. Increased police capacity could manifest itself through more authorizations, increased legal room to manoeuvre in, and different anti-liberal legislation (as is often the case in the aftermath of large-scaled terror attacks), in order to get increased protection against terrorism. <sup>21</sup> As for the citizens' trust in their legal system, which is unaffected, this may be because the citizens do not associate terrorism strongly enough with the legal system, so terrorism do not affect the citizens' overall trust in the system. There could of course be individual special cases which do affect the citizens' overall trust in the legal system, but these are, if present, too rare to produce a statistical connection in this case.

A second reason, one that is connected to both the first reason and the theoretical framework, but more concretized than the first more general reason, is that it is both the *quantity* of information and the *type* of information that determines how trust (and beliefs in general) is affected (Kahneman, 2013, 129-137). If the scapegoats, the strictly political institutions, somehow gets portrayed as having (too) low capacity to deal with terrorism, and this is sufficiently repeated in order to get the message through to the audience (the citizens actually absorbs the information), then the audience will probably reduce their trust in these institutions. And, perhaps, vice versa for the police. The point being that it is the information that is *associated* with the different institutions that probably matters to how the capacity perception is influenced. This is discussed further in the section focusing on the theoretical framework.

To sum up the discussion relating to the second hypothesis, the hypothesis as it stands is falsified, since not all the institutions' trust was negatively affected. The ranking was, however, correct. There could be several reasons for this result, but a logical assumption is that it is the type and quantity of information associated with each of the institutions when it comes to terrorism that affects the trust that each of the institutions receive. Since political institutions are often used as scapegoats they may, perhaps regardless of their actual performance, receive reduced trust from the citizens. The police, on the other hand, may be the hero in the eyes of the citizens, thus having beneficial information associated with them, thus increasing the capacity perception and, in turn, increasing trust.

#### 6.4 Hypothesis 3

Terrorism has a non-linear effect on terrorism, where the effect first is positive and by an increasing amount of terrorism becomes negative.

<sup>&</sup>lt;sup>21</sup> A common response to large-scaled terror attacks are often the implementation of a state of emergency (UNODC, n.d.), giving the police a vast room of manoeuvring and increased capacity to 'serve and protect'.

The results from the MLR shows that neither the polynomial GTI-average nor the GTI-centered variant reached a relevant level of significance. This indicates that changes in the amount of exposure to terrorism (keeping in mind the non-significant, and thus irrelevant, GTI-average variables) operates in one direction when it comes to the effect that it has on the citizens' trust in the parliaments, the police, and the politicians (considering the previous results connected to the two first hypotheses, it would also be somewhat paradoxical if the variables connected to the parliament and the politicians had a reversed U-relation to terrorism). It is at the same time important to keep in mind the limitations in the data that is used to test this hypothesis. The included countries in the MLR have experienced a relatively small amount of terrorism compared to the countries which inspired the hypothesis, with the highest GTI-score being 5.87 in Spain in 2004 and the highest overall average score being France's 4.73 (see Appendix B). The upper end of the GTI-scale (5<) is therefore largely unexplored. Furthermore, as discussed in the Method chapter, the GTI seem to already be curved in its construction, somehow. This may not be optimal but as pointed out in the validity discussion, the GTI is still one of the best, if not the best, measurements applicable to cross-sectional as well as longitudinal comparisons in the case of terrorism. In sum, while the result may have a limited transferability, for instance to the MENA-region, it is still valid for Europe for the relevant time period using the GTI as a measurement of terrorism. The hypothesis is therefore falsified.

One explanation for this result may be that Europe has not experienced an amount of terrorism that is sufficient to 'flatten the temporary cushion' that the *rally around the flag* effect may be. If the European overall exposure to terrorism increases, perhaps then will the effects be nonlinear. Another explanation may be that citizens' perceptions (which shape their beliefs) is quite fixed, at least when it comes to terrorism. The 'strictly' political institutions may suffer from a relatively poor perception in the minds of the citizens, while the police in Europe may generally have a high standing in the minds of the citizens, as discussed above. An indication of this is found in figure 1.1., which shows the high levels of trust that the police generally and persistently seem to receive. Perceptions can in general and for better or worse be hard to change, and there seem to be a growing amount of general animosity towards politicians and 'strictly' political institutions, as discussed in the introductory chapter. These general persistent perceptions may therefore generally, and particularly when it comes to the effects of terrorism, shape the citizens' attribution of trust. As long as the perception of who is the 'good guys' and who is the 'bad guys' remain fixed when it comes to terrorism, so does perhaps the (direction of the) attribution of trust.

### 6.5 Hypothesis 4

The effect that terrorism has on citizens' political trust is dependent on the geographical proximity that the citizens' area of residence has to geographical areas that are statistically in danger of exposure to terrorism. This means that citizens living in urban areas have, as a result of a country's exposure to terrorism, less trust in political institutions compared to citizens living in non-urban areas.

This hypothesis, using residential area as a suggestive proxy to citizens' exposure to terrorism (given that the country has experienced terrorism), is falsified. Neither of the two interaction variables, *GTI*-variables in combination with the variable measuring residential area, was significant. Therefore, the trust that the citizens vest in the different institutions is not dependent on the citizens' residential areas statistical chance of exposure to terrorism, and it can be claimed that citizens living in urban areas do not trust political institutions less than citizens living in rural areas, as a consequence of their country's exposure to terrorism.

However, the result should perhaps be interpreted as a finding suggesting that citizens living in central areas are not markedly more worried about terrorism, at least not in a sufficient manner enough to affect their responses to how much they trust political institutions, than citizens living in less central areas. Therefore, the combination of residential area and the citizens' country's exposure to terrorism do not have an additional effect on citizens in urban residential areas and their levels of trust, and vice versa. This is a somewhat logical interpretation considering that extremely few citizens are directly affected, and thus perhaps rarely consciously worried about terrorism.<sup>22</sup> The information regarding terrorism that is associated with the institutions capacities probably do not differ between citizens living in rural areas compared to those living in urban areas, in the same country.

It can as a concluding remark be pointed out that the connection between citizens' residential area and its exposure to terrorism on the one hand, and a country's exposure to terrorism on the other hand, probably is quite weak. This finding, although only suggestive by nature at its outset, is not qualified to refute or otherwise contest previous empirical studies that do find a

<sup>&</sup>lt;sup>22</sup> Although many surveys shows that 'terrorism' frequently is one of the major concerns for citizens when citizens are asked to rank their concerns (see e.g. DSB (2016)), surveys seldom, if ever, explore how *often* citizens actually think or worry about terrorism. It is therefore hard to estimate how worried they generally are in their every-day life of being struck by terrorism.

significant relationship between *actual* exposure, instead of statistical *chance* of exposure, to terrorism and political trust.

# 6.6 Hypothesis 5

The citizens' perception of political institutions' capacity to handle terrorism is a causal mechanism in the relationship between terrorism and political trust. This means that the political trust that citizens' experience changes as the citizens' perception of the institutions' capacity to deal with terrorism changes.

Overall, the survey experiment produced mixed results regarding the different institutions. Capacity perception was not a causal mechanism in the relationship between terrorism and the trust that the police receives from the citizens, but this result was not significant and can therefore not be included in the same manner as with the remaining cases. On the other hand, capacity perception was a causal mechanism in the case of the Parliament and the Government, and these two results was significant. It can therefore be claimed that the hypothesis is confirmed. The trust that political institutions receive changes as the citizens' perception of the institutions capacity to deal with terrorism changes. Capacity perception is a causal mechanism, and the significant results showed that a reduced capacity perception will reduce the trust that the institutions receive, and vice versa. The mechanism at the same time has a varying degree of influence and, as indicated by the differences between the three institutions, where the Parliament was more prone to be affected by a positive capacity perception, while the Government was more prone to be affected by a negative capacity perception. Furthermore, the non-significant result regarding the police was somewhat confounding, showing that the police receives increased trust from both the positive experiment group as well as the negative group. As has already been mentioned and as will be discussed further below, the police is for some reason the 'odd institution out' in this paper.

A supplementing conclusion to this hypothesis could be, as briefly touched upon in the theoretical chapter, that the new information that the participants was introduced to (regarding the authorities' capacity to deal with terrorism) was coalesced with all the old information that they had. And that the overall effect that the new information had in the experiment was, to put it in a *stylistic* and *illustrative* form, the total sum of the old and the new information. The old knowledge may have mediated the effect that the new information had. This could also explain why the Eta-estimates showed that the *treatment* explained relatively little of the variance, where one possible explanation is that the old knowledge (in addition to the emotions generated

by countless experiences, as assumed by the trust theories elucidated on in the *Theory*-chapter) explains the rest of the variance. Before moving on to the theoretical framework (which also partially analyses this hypothesis, considering the mechanisms' key role in the framework) it is worth repeating that the survey experiment itself do not prove that *capacity perception* is a causal *mechanism*, but building on the suggested theoretical framework it is conceived as a mechanism in the relationship. To sum up, the fifth hypothesis is verified.

#### **6.7** Theoretical framework

So, what does the results imply for the theoretical framework that this paper suggest? Before discussing how the results relate to the framework, a brief repetition of the framework may be in order. Building on trust theories and institutional theory, this paper argues that terrorism can expose political institutions (including politicians) to *functional pressure*. How the institutions deals with this pressure provides the citizens with an experience, which in turn gives the citizens knowledge (information) about (and emotions relating to) the institutions. The new knowledge influences the citizens' perception of the capacity that the institutions have when it comes to dealing with terrorism, where capacity together with motivations are considered to be the two determinants of trust. If altered, the citizens' capacity perception will alter the amount of trust that the citizens vest in the institutions.

One can use figure 2.1 as a concrete reference point for a discussion of the results' implications for the theoretical framework. In connection with this discussion it is first, however, beneficial to summarize some of the discussions made so far in this paper that contains elements that do support the framework, but elements that remain untested in this paper. First, there can be little doubt that terrorism do affect society, therein both institutions and citizens. Second, political institutions should, according to many SCTs, and do try to prevent terrorism. Both the terrorism in itself and the political institutions handling of it, both prior to, during, and after it has struck, probably/logically affects citizens and their' impression.

Next, regarding the elements of the theoretical framework that are tested in this paper, the paper have shown that variation in individuals' perception of institutions' capacity do affect the trust that the citizens vest in the institutions, although the effect is not always present (depending, probably, on the type and strength of the *treatment*/knowledge/information). The paper has also shown that variation in terrorism leads to variation in the levels of political trust, depending on which political institution one considers (the legal system seem to be unaffected by

terrorism). Considering the fact that somewhat permanent exposure to terrorism seem to not have had an effect on political trust, but that variation in the levels of a country's exposure to terrorism do affect the citizens' political trust, as shown in the MLR, this indicates alongside the results from the survey experiment that *variation* in experience, thus *variation* in knowledge, leads to *variation* in capacity perception, which leads to *variation* in political trust. Several parts of the suggested theoretical framework have thus received validation through the studies conducted in this paper, and the framework has some explanatory power.

There are, however, one central element that remains unexplored in this paper. The paper have not investigated whether or not variation in the institutions handling of terrorism, i.e. their performance, *actually* leads to variation in the citizens' perception of the institutions' capacity (or perception of motivation for that matter), although this is logically assumed. This element was, as mentioned previously, not possible to implement in either of the two studies. Therefore, while the results in this paper supports a large part of theoretical framework, it cannot be claimed that the entire framework has been verified through the studies in this paper.

It can also be pointed out that while the paper can conclude that *capacity perception* is a causal mechanism in the pertinent relationship, the paper cannot conclude the primacy, so to speak, of this causal mechanism. First of all, the paper has not explored how *motivation perception* and *capacity perception* relates to each other, and which mechanism, if any, has supremacy in the relationship between terrorism and political trust. Studies conducted by Merolla and Zechmeister (2009), although not directly comparable to this paper, find solid empirical results showing that terrorism has a somewhat large effect on citizens' emotions. These affected emotions can, in turn, have a large effect on the citizens' capacity perception.

The consequences of these missing elements and explorations are perhaps best illustrated by the fact that there are some results that deviates from the expectations derived from the suggested framework. As mentioned in the *Theory* chapter, one key assumption for, particularly, the first hypothesis is that the fact that terrorism happens in the first place provides the citizens with an environmental cue (information) that indicates to the citizens that the institutions capacity to deal with terrorism is not sufficient. They have, arguably, already failed if there's an increase in the amount of terrorism. The first hypothesis, therefore, assumed that *all* the institutions' level of trust would suffer from increases in terrorism. However, as the result showed, the institution which perhaps should receive the majority of blame for failing to

prevent an increase in terrorism due to their societal role, the police, and thus experience the largest reduction in the levels of trust (as assumed by the second hypothesis), experienced relatively large *increases* in the trust that they received.

Three conclusions can be derived from the discussions above. First, the theoretical framework do have potential for explaining how terrorism affects political trust. Second, there are a missing element, i.e. variation in perception of institutions handling of terrorism, that would be advantageous to include and explore. In addition, it is relevant to explore to what degree and in which ways *motivation perception* matter as a causal mechanism. Third, there are some outcomes that the theoretical framework cannot explain, i.e. that increase in terrorism in some instances lead to an increase in trust. The paper have already pointed to a potential explanation that can explain the outcome regarding the police, i.e. that the police may be considered the last resort for the citizens. They may have no choice but to increase their trust in the police (or the military, in general 'security' institutions), either consciously or subconsciously, in order to deal with terrorism. The citizens therefore out of necessity rally around the police.

Before moving on to the paper's conclusion, a final theoretical supplement can be discussed, which has been touched upon briefly during some of the discussions above. Supplement that can further nuance the theoretical framework that is suggested in this paper, and one that could be included in empirical studies, provided that the data were (made) available. One that also relates to the second conclusion above regarding variation in (perception of) performance, which in turn, assumedly, leads to variation in capacity perception. Norris et al. (2003), amongst others (see also Nacos et al. (2011) and Svedin (2012)), points to the key role played by the news media when it comes to how political trust is influenced in the cases of terrorism (and crises in general). This is also implicitly done by the IEP in their construction of the GTI, as discussed in the Data-chapter, where they assume that the media will distribute the effects of terrorism equally throughout the populace. As assumed by the trust theories that the paper's theoretical framework is built on, it is knowledge/information (together with emotions) that determines how trust is affected. That includes both the amount of knowledge, and the type of knowledge. This assumption is verified in several studies (Kahneman, 2013). Norris et al. (2003) argues, by use of a different phrasing, that most citizens receive their information of the institutions' capacity to deal with terrorism through the media, and therefore that the medias' role is crucial in understanding how trust is affected. Svedin (2012, 101-107) also argues that the media mediates the effect that crises has on the public and is a key institution in holding political institutions accountable (see also Bovens (2007) for a discussion on holding, among others, political institutions accountable, and therein the medias' role). The quantity and the content of the information that the media provides the citizens with may therefore have a crucial impact on how the citizens' trust is affected. By investigating the quantity and the type of information that the media provides the citizens with (therein how the political institutions perform), perhaps investigating somehow how much and what type of the mediated information that is absorbed by the citizens, one probably improves the explanatory power of the theoretical framework significantly.

The media's role could explain why the police experience increases in the trust that they receive in connection with terrorism. Perhaps the police, in the European overall, have received (relatively) positive media coverage. This positive media coverage can have given the citizens the impression that the police have sufficient capacity to deal with terrorism, while the 'strictly' political institutions (the typical scapegoats) have not been as fortunate in how they're portrayed. At the same time and on the other hand, the survey experiment indicates (although not with sufficient certainty) that the trust that the police receive increases whether the information is favourable or not. This can perhaps be explained by the assumption that the new information is mixed with old information, and that it's the sum of the information that determines how and to what degree trust is affected.

### **6.8 Summary**

This chapter have analysed the results and their implications for the hypotheses and the theoretical framework. The first hypothesis was falsified, since the police have received increased trust following within-country variation in exposure to terrorism. The second hypothesis, building on the first, was also falsified. The proposed ranking in the second hypothesis was, however, correct. The third hypothesis was falsified, since none of the polynomial variables was significant. The fourth hypothesis was also falsified, since none of the interaction variables was significant. The results in connection with the fifth hypothesis was mixed, but the significant results verified the hypothesis. Overall, the results shows that the theoretical framework employed in this paper has some explanatory power. There is, at the same time, room for improvements. The chapter also points to a theoretical supplement that could be included in empirical studies to improve the frameworks' explanatory power: the role of the media. All in all, the paper have produced several results with several implications, and an overall summary as well as a conclusion to the research question may be due.

# 7 Conclusion

In a historical perspective, the world today can be called a paradise. People live longer than before, have healthier lives, are more educated, have access to more resources, and are generally happier. This is statistical facts, based on different studies measuring the levels of citizens' well-being all over the globe. The same statistics, furthermore, also show that Europe can be considered paradise within paradise. There are few places on this earth where the citizens enjoy the same levels of prosperity as Europeans do, that enjoy the same levels peace and harmony, and few places where the citizens have the same levels and type of political influence. Overall, Europe is a good place to live.

There are however some clouds on the horizon. There seem to be a growing amount of animosity towards political authorities and, in general, the political system. Polarization is more prominent in politics, and populism seem to be on the rise. Both of which seem to become more pronounced in the public discourse. In several European countries populistic, often right-winged, parties receive a growing share of the popular vote. In many of those countries populistic parties have entered government. Receding levels of political trust is often pointed to as one source of explanation for the increase in populism, although reallocation of trust may be a more pertinent explanation. There are, nevertheless, variation in the levels of political trust, both within and between countries over time. Variation that must have explanatory factors behind it.

This paper explores whether or not terrorism can help explain this variation in the levels of political trust. Although Europe is relatively spared from terrorism compared to some parts of the world, particularly the MENA-region, it is relatively exposed to it compared to other parts of it. Europe has also experienced a rather large increase in the levels of terrorism since 2002. Thousands of citizens have been killed as a result of terrorism (IEP, 2017), and terrorism is high on the political agenda. It is, arguably, the main purpose of political authorities to protect the citizens from harm. Therefore, whether or not the rising levels of terrorism have affected the citizens' trust in political institutions, the apparatus of the authorities, becomes a pertinent question.

In order to explore the general question that inspired this paper, the paper put forward a research question (discussed below). The research question actually consists of two sub-questions, where the first part of the research question focuses on the historical empirical relationship between terrorism and political trust in Europe in the time period of 2002 to 2016, while the second part focuses on the causal relationship between the two phenomena. The paper have, therefore, executed two sub-studies in order to explore the research question, each study mainly focused on a designated part of the question. Furthermore, particularly the first part of the research question has several suitable venues of exploration, i.e. several directions to explore. The paper have, therefore, concretized the first part of the research question into four hypotheses, while the second part of the research question, being more specified by nature, was concretized into one hypothesis.

The second chapter of this paper, the *Theory*-chapter, discussed the concepts of terrorism and political trust, and different empirical aspects of those phenomena. The chapter also proposed a theoretical framework that could explain the relationship between the two phenomena. The theoretical framework was derived from trust theories and rooted in institutional theory, and the line of thought in the theoretical framework was that terrorism is a political problem, it exposes political institutions, including politicians, to functional pressure. This pressure has to be dealt with by the political institutions. The terrorism and how the institutions deal with the terrorism provides the citizens with information which influence the citizens' perception of the institutions capacity to deal with terrorism. This capacity perception, in turn, affects the citizens' trust in the political institutions. If the capacity perception increases, so does the trust, and vice versa. A central assumption guiding the explorations, however, was that the fact that terrorism occurs in the first place, as indicated by an increase in the GTI-score, signals to the citizens that the institutions had already failed. I.e. their capacity to deal with terrorism is insufficient. This assumption guided particularly the first hypothesis, and thus the second hypothesis as well. The hypotheses was presented and discussed after having discussed previous empirical studies and concluded the *Theory*-chapter.

The third chapter, the *Data*-chapter, presented and discussed the data that have been utilized in this paper. The discussion included elaborations on the data-sources: *ESS* and *QOG*, and within the latter the *GTD* and the *UN*. The discussion, furthermore, included elaborations on data' scope and representativity, accounting for all the variables and their content, and how the data

was treated in order to be utilized properly in MLR and the ANOVA. The chapter ended with discussions of the data sources' reliability, the data' validity, and the ESS data' equivalency.

The fourth chapter, the *Method*-chapter, started with a concrete explanation of how the methods would be applied to explore the five hypotheses, pointing to how the results would verify or falsify the hypotheses, and also discussing some limitations to be aware of regarding the relationship between the data and the hypotheses, and the formers' ability to illuminate the latter. Thereafter, building on standard regression, the chapter discussed the method of MLR, therein the models that are employed in the regression, and discussed the assumptions of regression and how these were handled. After having discussed MLR, the focus shifted to the survey experiment, with a discussion of its design. Then, in connection with the survey experiment, the chapter discussed what an ANOVA is, and how it is used to explore the data produced in the survey experiment, which ended the fourth chapter.

The fifth chapter presented the *Results*. The presentation started with a presentation of the variation of political trust in the 19 countries included in this paper for the relevant time period. The presentation showed that the within- and the between-country variation over time was not large, which limits the impact that terrorism can have had on political trust. There was, nonetheless, some variation, which warrants the explorations that this paper conducts. Then the results from the empty model was presented and discussed. This result showed that most of the variation in the levels of political trust was located at the individual level, as expected, but that there was some variation at the country-level as well as the country-year level. Pertinently, the ICC showed that more than 10 percent of the variation in political trust can be explained by factors at the non-individual levels, which, together with the BIC-score, warrants the use of the multi-level hybrid model employed in this paper. Everything, including the data, the method, and the theoretical assumptions, should therefore be in place in order to produce reliable results from the MLRs.

The results from the 'full' MLR models showed that the cross-sectional variant of *GTI*, *GTI-average*, representing the more permanent country-exposure to terrorism, was not significant. Therefore, it does not seem to matter for the citizens' political trust whether or not they live in a country more permanently exposed to terrorism or more permanently spared from terrorism. On the other hand, the result also showed that the longitudinal variant of *GTI*, *GTI-centered*, representing variation in the amount of terrorism over time, was significant in every case, except

from when it comes to the trust that the citizens vest in their legal system. It therefore matters for the citizens' political trust if their country experiences increases and decreases in the amount of terrorism. If their country experiences increases the citizens' trust their parliaments and their politicians less, but, somewhat paradoxically following the suggested theoretical framework and its assumptions, their trust in the police increases. As for the control variables, the variables located on the individual level produced results mainly as expected. There were, however, some deviations from the theoretical expectations and previous empirical studies as discussed in the *Theory*-chapter. Although the paper did not try to explain these deviations in a marked and explicit manner, they can be considered to indicate that trust is a complex phenomenon. It is a phenomenon that probably is affected in a multitude of complex ways. As for the control variable located on the macro level, the *HDI*, this showed no results which were significant at a level of .05, except for when it came to the legal system. This result is discussed, but perhaps the main point of interest in this regard was the fact that the variation in political trust seem to be more affected by variation in terrorism than a society's average state of well-being, as represented by the *HDI*.

After the MLR results was presented, the chapter presented the results from the survey experiment and the ANOVAs and the succeeding *Benferroni*-analyses. These results was mainly as expected, i.e. variation in capacity perception lead to variation in the participants levels of trust. But again, there was a somewhat paradoxical finding. The result regarding the police was not significant, but the non-significant result showed that even a relatively bad capacity perception, i.e. not sufficient capacity to deal with terrorism, lead to a small increase in the participants trust in the police. The results, at the same time, indicated that the treatment had worked as intended, but that it had a relatively weak effect on the participants. This, however, was as expected, considering that perceptions and trust is something that probably requires a great deal of information to change. The ANOVA results ended the *Result*-chapter.

The *Analyses* of the results was conducted in the sixth chapter. The analyses was first conducted on each of the five hypotheses, and then overall on the theoretical framework that the paper suggests.

The *first hypothesis* was falsified, since it assumed that each of the institutions would experience decreased levels of political trust as a consequence of increased or high levels of terrorism. High levels of exposure to terrorism did not matter more than low levels of exposure

to terrorism, and the police experienced increases in the trust that they receive from the citizens as a consequence of an increases in the amount of terrorism.

The *second hypothesis* further assumed that the police would be more affected by terrorism than the politicians, followed by the parliaments, and finally the legal systems. In concordance with the first hypothesis, the second hypothesis was also falsified. The suggested ranking was, however, correct.

The *third hypothesis*, building on impressions from particularly the MENA-region, assumed that the relationship between terrorism and political trust would be non-linear, i.e. curved, and that if the trust do increase following terrorism, as previous empirical studies have found, then the relatively high levels of political trust would deteriorate as the amount of terrorism increases. The hypothesis was falsified, and the result in itself that suggests that the effect that terrorism has on political trust only works in one direction.

The *fourth hypothesis* took into consideration several studies which find that the citizens' proximity, i.e. their residential area, to terrorism, i.e. terrorist attacks, mediates the effect that terrorism has on their political trust. There are, however, limitations regarding the data that are available from the *IEP* today. Taking these into account, the hypothesis was created to explore whether or not the political trust of citizens living in urban areas, which are considerably more statistically exposed to terrorism than citizens living in non-urban areas, was more affected by their country being exposed to terrorism than citizens living in non-urban areas. The results were not significant, indicating that the political trust of citizens living in central areas are not more affected by their country's exposure to terrorism than citizens living in non-central areas.

The *fifth hypothesis* was the sole hypothesis mainly intended to shed light on the second part of the research question. It assumed that capacity perception is a causal mechanism in the relationship between terrorism and political trust, and that variation in the citizens' capacity perception would lead to variation in the citizens' political trust. Using a survey experiment which ensured that the only thing that varied systematically between the different groups was their capacity perception, the experiment uncovered that capacity perception is a causal mechanism.

The theoretical framework did in some respects receive empirical backing from the results. The MLR showed that variation in terrorism over time is associated with variation in political trust, and the survey experiment showed that capacity perception is a causal mechanism in the relationship between terrorism and political trust. A confounding mechanism, but a mechanism, nonetheless. If one take into consideration previous studies with similar explorations (as referred to in the *Theory*-chapter), where they find confirmation that societal institutions' performance do affect citizens' political trust, a somewhat large portion of the theoretical framework, as summarized and illustrated in figure 2.1, have received empirical backing. There are, however, some venues included in or assumed by the theoretical framework that this paper have not had the chance to explore. The trust theories that the theoretical framework is based on assumes that emotions, in addition to information, influence capacity perception. The theories, furthermore, assume that the citizens' perception of the institutions' motivation (i.e. the different actors that constitutes that institution) in combination with capacity perception affects the citizens' political trust. These lacking elements could increase the theoretical frameworks explanatory power. Citizens may, for instance, have a particular pessimistic view of politicians' motivations (i.e. 'they only seek to enhance their own status' etc.). The previous chapter, inspired by several scholars, also discusses the role of the medias and how they mediate the effects that terrorism has on political trust, considering the fact that most citizens receive the majority share of information, i.e. one of their two assumedly capacity perception shaping elements (and motivation perception shaping, for that matter), from the media. The quantity and the type of information that they do receive from the media therefore probably have a huge impact on the effect that terrorism have on political trust, which perhaps could explain the divergencies between the institutions in this paper. Perhaps the police is portrayed in a beneficial way in the media, while the other institutions are not.

Some of the results in the MLR diverge from previous empirical studies. This divergence could, in part, be explained by the differences in design between this paper and the previous studies, where this paper includes a significantly larger amount of data (both time and units) than previous studies. But it also points to the fact that trust is a complex phenomenon, as mentioned several times in this paper. A phenomenon that would be beneficial to explore further, especially considering its important function as a societal glue. Considering the limitations in this paper, especially the limitations regarding the data that is utilized and their aptness to explore the third and the fourth hypothesis, and the theoretical elements that are not implemented into the suggested theoretical framework, as well as the discrepancy between this

study and previous studies, the future is ripe with possible venues of exploration. In this regard, perhaps an inclusion of state terrorism, which the *GTD* and thus the *IEP* excludes from their data, would also be a pertinent venue of exploration. This form of terrorism is probably far more detrimental for the citizens' political trust (although being somewhat absent in a modern European context).

All in all, the paper do produce some conclusions that can be used to answer the research question. The question being:

In what ways has the political trust in Europe been affected by terrorism in the time period of 2002 to 2016, and does capacity perception function as a causal mechanism in the relationship between terrorism and political trust?

Terrorism have affected the political trust in Europe in the time period of 2002 to 2016. Overall, when European countries have experienced increases in the amount of terrorism the citizens' trust in the parliaments and their politicians decreases. The trust in their police, however, increases, while the trust in their legal systems remain unaffected. Furthermore, it is the trust that the police receives which is affected the most, followed by the trust that the politicians receive and then the parliaments. The effect has been linear, and it has been distributed equally between citizens living in central areas and citizens living in non-central areas. Furthermore, it is uncovered that terrorism's effect on political trust works through capacity perception, although not necessarily exclusively through this mechanism.

To end with a truism: it is important to prevent terrorism. First of all, due to the horrendous elements encompassed into it. Almost by definition, those hurt the most by it are the innocents. But also due to its effect on citizens' trust in political institutions. To prevent terrorism is even more vital in the coming years, considering the already growing populism and the growing number of citizens adhering to this line of thinking. If the parliaments and the politicians want to avoid decreasing trust as a result of increases in the amount of terrorism they have to provide the citizens with the impression that they are motivated to prevent terrorism and not least, as shown in this paper, that they have the capacity to do so. Somewhat paradoxically, the parliaments and the politicians are dependent on the police, the institution that experiences increased levels of trust following terrorism and actually 'benefits' from terrorism in that respect, to both display capacity to deal with terrorism, as well as actually preventing terrorism.

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# **Appendix**

### **Content:**

- **A) Institutional trust:** The tables shows the variation in the amount of trust that each institution receive, for each country for each year.
- **B) GTI-scores:** The table shows each country's *GTI*-score for each year.
- **C) ESS-questionnaire:** An overview of the relevant questions in the ESS, that is used as variables in this paper.
- **D)** Original experiment phrasing: Print screen of the survey experiment codebook, which shows the question phrasing in Norwegian.
- **E) Breusch-Pagan / Cook-Weisberg:** An overview and explanation of the Breusch-Pagan / Cook-Weisberg-test.
- **F) Histogram and QQ-plot:** The figure shows the histograms and the QQ-plots used to assess the index variable *Political trust* (comprised of the four dependent variables used in the MLRs, each variable having the same weight in the index). The figure shows, from left to right, the output regarding the individual level, country-year level, and country level. Histograms of each dependent variable (not shown) gave similar results.
- **G) VIF-scores:** The table shows the average VIF-scores of each of the models, in addition to highlighting the most troublesome variable in each model.
- **H)** Levene's test: Explanation of a Levene's test, and the result from a Levene's test of ANOVAs of each of the models.
- I) Shapiro-Wilk test: Explanation of a Shapiro-Wilk's test, and the result from this test in connection with the survey experiment data. Appendix H also contains histogram portraits of each of the three dependent variables of interests' response distribution.
- **J) Empty MLR models:** The tables shows the results from empty MLR models for each of the dependent variables. Both the two-level model and the hybrid model.
- **K) MLR models:** The tables shows the results from the MLR models for each of the dependent variables.

# A) Institutional trust:

# Political trust

	2002	2004	2006	2008	2010	2012	2014	2016	Aver.	min-
										max
Belgium	4.8	4.9	5.0	4.9	4.8	5.1	5.0	5.2	5.0	4.8-5.2
Denmark	6.7	6.8	6.8	6.7	6.5	6.7	6.5	-	6.7	6.5-6.8
Estonia	4.7	4.5	4.8	4.8	4.5	4.8	4.8	5.2	4.7	4.5-5.2
Finland	6.3	6.4	6.5	6.5	6.2	6.5	6.2	6.5	6.4	6.2-6.5
France	4.7	4.6	4.6	4.7	4.5	4.6	4.5	4.6	4.6	4.5-4.7
Ireland	5.0	5.2	5.0	4.6	4.6	4.7	4.7	5.0	4.8	4.6-5.2
Netherland	5.3	5.2	5.5	5.7	5.7	5.7	5.6	5.8	5.6	5.2-5.8
Norway	5.9	5.8	5.9	6.0	6.3	6.4	6.4	6.7	6.2	5.8-6.7
Poland	3.7	3.0	3.4	3.6	4.0	3.5	3.4	3.9	3.6	3.0-4.0
Portugal	4.1	3.7	3.9	3.8	3.4	3.3	3.7	4.1	3.7	3.3-4.1
Slovenia	4.1	4.0	4.2	4.3	3.3	3.5	3.3	3.9	3.8	3.3-4.4
Spain	4.5	4.8	4.9	4.7	4.4	3.7	4.1	4.2	4.4	3.7-4.9
GB	4.9	4.7	4.6	4.8	4.7	5.0	4.9	5.2	4.9	4.6-5.2
Switzerland	5.9	5.8	5.9	6.0	6.0	6.3	6.3	6.4	5.8	5.8-6.4
Sweden	5.9	5.5	5.7	5.7	6.2	5.9	6.1	5.9	6.0	5.5-6.2
Czech Rep.	3.9	3.4	-	3.7	3.7	3.7	4.4	4.8	3.9	3.4-4.8
Germany	5.0	4.8	4.8	5.1	5.0	5.3	5.3	5.6	5.1	4.8-5.6
Hungary	4.7	4.0	3.9	3.2	4.3	4.3	4.2	5.0	4.2	3.2-5.0
Austria	5.2	5.0	5.1	5.0	5.0	-	5.0	5.5	5.2	5.0-5.5

<sup>\*</sup> Rounded off to one decimal, - = missing.

Trust parliament

	2002	2004	2006	2008	2010	2012	2014	2016	Aver.	min-
										max
Belgium	5.0	4.7	5.0	4.6	4.5	5.0	4.8	4.8	4.8	4.5-5.0
Denmark	6.2	6.3	6.4	6.5	5.8	6.1	5.9	-	6.2	5.8-6.5
Estonia	-	4.2	4.6	3.9	4.2	3.9	4.4	4.5	4.2	3.9-4.6
Finland	5.8	6.0	6.0	6.0	5.4	6.0	5.6	5.7	5.8	5.4-6.0
France	4.5	4.3	4.3	4.5	4.2	4.1	4.0	4.0	4.2	4.0-4.5
Ireland	4.4	4.7	4.8	3.8	3.6	3.6	3.8	4.5	4.1	3.6-4.7
Netherland	5.2	4.6	5.3	5.5	5.3	5.2	5.2	5.5	5.2	4.6-5.5
Norway	5.7	5.4	5.7	5.8	6.0	6.3	6.7	6.8	6.0	5.4-6.8
Poland	3.5	2.4	2.7	3.0	3.4	3.0	2.8	3.4	3.0	2.4-3.5
Portugal	4.3	3.7	3.8	3.5	2.9	2.6	3.2	3.9	3.4	2.6-4.6
Slovenia	4.0	4.1	4.2	4.4	3.0	3.0	2.8	3.3	3.6	2.8-4.4
Spain	4.9	5.0	5.0	5.0	4.3	3.4	3.7	4.0	4.4	3.4-5.0
GB	4.6	4.2	4.2	4.3	4.1	4.2	4.3	4.6	4.3	4.1-4.6
Switzerland	5.7	5.5	5.7	5.8	5.8	6.1	6.2	6.3	5.9	5.5-6.3
Sweden	5.9	5.4	5.6	5.7	6.3	5.9	6.2	5.9	5.9	5.4-6.3
Czech Rep.	3.2	3.2	-	3.2	3.3	3.1	3.9	4.3	3.5	3.1-4.3
Germany	4.3	4.1	4.1	4.6	4.2	4.7	5.0	5.2	4.5	4.1-5.2
Hungary	5.0	3.6	3.4	2.6	4.2	3.9	3.9	4.5	3.9	2.6-5.0
Austria	5.1	4.8	4.9	4.8	4.9	_	4.6	5.0	4.9	4.6-5.1

<sup>\*</sup> Rounded off to one decimal, - = missing.

Trust legal system

	2002	2004	2006	2008	2010	2012	2014	2016	Aver.	min-
										max
Belgium	4.4	4.8	4.9	4.9	4.9	4.9	5.0	5.3	4.9	4.4-5.3
Denmark	7.1	7.2	7.5	7.3	7.4	7.7	7.4	-	7.4	7.1-7.7
Estonia	-	4.9	5.1	4.8	5.2	4.9	5.2	5.8	5.2	4.8-5.8
Finland	6.8	6.9	7.0	7.1	6.9	7.0	6.8	7.2	7.0	6.8-7.2
France	4.8	4.8	4.9	5.0	4.9	5.0	5.1	5.0	4.9	4.8-5.1
Ireland	5.1	5.2	5.0	5.0	5.0	5.2	5.3	5.4	5.2	5.0-5.4
Netherland	5.4	5.4	5.7	5.9	5.9	6.0	5.9	6.2	5.8	5.4-6.2
Norway	6.3	6.4	6.6	6.8	6.9	7.2	7.2	7.4	6.8	6.3-7.4
Poland	3.7	3.0	3.8	3.9	4.3	3.7	3.5	4.0	3.7	3.0-4.3
Portugal	4.0	4.3	4.0	3.8	3.4	3.5	3.7	4.0	3.8	3.4-4.0
Slovenia	4.3	3.8	4.2	4.3	3.1	3.3	3.1	3.6	3.7	3.1-4.3
Spain	4.3	4.7	5.0	4.3	4.4	3.7	4.0	3.9	4.3	3.7-5.0
GB	5.0	5.0	5.0	5.1	5.2	5.5	5.5	5.9	5.3	5.0-5.9
Switzerland	6.1	6.1	6.2	6.3	6.3	6.5	6.6	6.6	6.3	6.1-6.6
Sweden	6.1	5.8	6.0	6.1	6.5	6.3	6.4	6.2	6.2	5.8-6.5
Czech Rep.	3.8	3.7	-	4.1	4.1	4.0	4.7	5.2	4.2	3.7-5.2
Germany	5.6	5.4	5.5	5.6	5.5	5.8	5.7	6.0	5.7	5.4-6.0
Hungary	5.1	4.4	4.4	3.8	4.6	4.7	4.6	5.4	4.6	3.8-5.4
Austria	6.1	5.0	6.0	5.5	5.7	-	5.6	6.3	5.9	5.0-6.3

<sup>\*</sup> Rounded off to one decimal, - = missing.

Trust the police

	2002	2004	2006	2008	2010	2012	2014	2016	Aver.	min-
										max
Belgium	5.6	5.8	5.9	6.0	6.0	6.1	6.0	6.4	6.0	5.6-6.4
Denmark	7.9	7.9	7.8	7.6	7.7	8.0	7.7	-	7.8	7.6-8.0
Estonia	-	5.7	5.5	6.0	6.2	5.9	6.1	6.8	6.1	5.5-6.8
Finland	8.0	8.0	8.0	8.0	8.0	8.1	7.9	8.2	8.0	7.9-8.2
France	5.9	5.8	5.7	5.8	5.6	5.9	6.1	6.2	5.9	5.6-6.2
Ireland	6.5	6.7	6.2	6.5	6.5	6.7	6.3	6.2	6.4	6.2-6.7
Netherland	5.8	6.0	6.2	6.3	6.3	6.4	6.4	6.7	6.2	5.8-6.7
Norway	7.0	7.1	7.2	7.0	7.2	7.2	7.4	7.4	7.2	7.0-7.4
Poland	4.9	4.6	5.0	5.1	5.4	5.2	5.0	5.7	5.1	4.6-5.7
Portugal	5.0	5.0	5.2	5.4	5.1	5.4	5.7	6.0	5.3	5.0-6.0
Slovenia	4.9	4.7	5.0	5.0	5.0	5.4	5.5	6.0	5.2	4.7-6.0
Spain	5.5	5.9	6.0	6.0	6.2	5.9	6.3	6.6	6.1	5.5-6.6
GB	6.1	6.1	6.0	6.2	6.2	6.5	6.3	6.6	6.3	6.0-6.6
Switzerland	6.8	6.9	6.9	6.8	7.0	7.2	7.2	7.2	7.0	6.8-7.2
Sweden	6.8	6.5	6.5	6.6	7.0	6.7	6.9	6.7	7.0	6.5-7.0
Czech Rep.	5.0	4.2	-	4.8	4.9	5.1	5.7	5.8	5.0	4.2-5.8
Germany	6.6	6.4	6.5	6.7	6.8	6.8	6.7	7.0	6.7	6.4-7.0
Hungary	4.9	5.2	4.4	5.1	5.3	5.3	5.3	6.4	5.2	4.4-6.4
Austria	6.5	6.2	6.3	6.0	5.9	_	6.5	7.0	6.3	5.9-7.0

<sup>\*</sup> Rounded off to one decimal, - = missing.

# Trust politicians

	2002	2004	2006	2008	2010	2012	2014	2016	Aver.	min-
										max
Belgium	4.3	4.2	4.4	4.0	3.9	4.3	4.1	4.1	4.2	3.9-4.4
Denmark	5.5	5.6	5.6	5.6	5.6	5.2	5.0	-	5.3	5.0-5.6
Estonia	-	3.3	3.5	3.3	3.6	3.3	3.5	3.6	3.4	3.3-3.6
Finland	4.8	4.9	4.9	4.9	4.4	4.8	4.6	4.7	4.8	4.4-4.9
France	3.7	3.5	3.3	3.5	3.2	3.2	2.8	2.9	3.2	2.8-3.7
Ireland	3.8	4.0	3.9	3.2	3.1	3.1	3.3	3.7	3.5	3.1-4.0
Netherland	4.8	4.6	5.0	5.2	5.2	5.0	4.8	5.0	5.0	4.6-5.2
Norway	4.6	4.2	4.4	4.6	5.0	5.1	5.3	5.4	4.8	4.2-5.4
Poland	2.7	1.9	2.1	2.3	2.7	2.2	2.0	2.5	2.3	1.9-2.7
Portugal	2.8	2.0	2.6	2.4	2.0	1.8	2.0	2.5	2.2	1.8-2.5
Slovenia	3.1	3.1	3.2	3.4	2.3	2.3	1.9	2.4	2.7	1.9-3.4
Spain	3.4	3.7	3.5	3.3	2.7	1.9	2.2	2.4	2.9	1.9-3.7
GB	3.8	3.5	3.4	3.5	3.4	3.6	3.5	3.7	3.5	3.4-3.8
Switzerland	4.9	4.7	4.9	4.8	5.0	5.2	5.6	5.4	5.0	4.7-5.6
Sweden	4.7	4.2	4.5	4.5	5.0	4.7	5.0	4.7	4.7	4.2-5.0
Czech Rep.	3.2	2.7	-	2.6	2.6	2.6	3.3	3.6	2.9	2.6-3.6
Germany	3.4	3.2	3.2	3.5	3.3	3.7	3.8	4.0	3.5	3.2-4.0
Hungary	3.9	2.7	2.6	1.9	3.2	3.3	3.0	3.7	3.0	1.9-3.9
Austria	3.5	3.3	3.3	3.5	3.7	-	3.4	3.9	3.5	3.3-3.9

<sup>\*</sup> Rounded off to one decimal, - = missing.

# **B) GTI-scores:**

	2002	2004	2006	2008	2010	2012	2014	2016	Aver.	min-max
Belgium	1.68	1.99	.73	.94	1.28	1.04	1.51	1.25	1.30	.73-1.99
Denmark	0	0	0	.15	.23	.12	.14	-	.09	023
Estonia	-	.03	0	0	0	.19	.12	1.10	.22	023
Finland	0	0	0	.63	.45	.11	0	2.38	.43	0-2.38
France	4.62	4.57	4.84	4.38	3.82	5.15	4.72	5.60	4.73	3.82-5.60
Ireland	.09	.12	.80	1.57	1.94	2.62	3.42	3.43	1.87	.09-3.43
Netherland	2.03	1.94	.81	.70	2.48	2.03	.73	.86	1.47	.70-2.48
Norway	0	.12	.62	.42	.84	4.39	3.08	2.08	1,36	0-4.39
Poland	.96	.26	.04	0	0	0	0	0	.18	096
Portugal	0	0	0	0	0	1.52	.41	.06	.26	0-1.52
Slovenia	0	0	0	0	0	0	0	0	0	0
Spain	5.62	5.87	5.80	5.06	4.59	3.27	2.68	1.20	4.24	1.20-5.87
GB	5.05	4.46	5.37	4.83	4.76	4.82	5.53	5.08	4.99	4.76-5.53
Switzerland	1.66	1.40	.23	1.08	.24	1.23	1.69	.29	1.01	.23-1.69
Sweden	.25	.07	1.95	1.28	2.05	2.33	2.40	3.98	1.70	.07-3.98
Czech Rep.	.55	.32	-	.09	1.72	.67	1.67	2.18	1.04	.09-2.18
Germany	3.01	2.39	2.45	2.32	2.41	2.37	2.60	4.31	2.73	2.32-4.31
Hungary	.07	0	0	1.00	1.99	.73	.67	.23	.59	0-1.99
Austria	.01	0	.72	2.34	2.84	1	1.89	.18	1.13	0-2.84

<sup>\*</sup> Rounded off to two decimals, - = missing.

#### **C) ESS-questionnaire:**

Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly... READ OUT...

	No trust	Complete	(Refusal)	(Don't
	at all	trust		know)
B6[country]'s parliamen	t? 00 01 02 03 04 05 06 07 0	8 09 10	77	88
B7the legal system?	00 01 02 03 04 05 06 07 0	8 09 10	77	88
B8the police?	00 01 02 03 04 05 06 07 0	8 09 10	77	88
B9politicians?	00 01 02 03 04 05 06 07 0	8 09 10	77	88

B1 How interested would you say you are in politics – are you... READ OUT...

very interested, 1

quite interested, 2

hardly interested, 3

or, not at all interested? 4

(Refusal) 7

(Don't know) 8

C6 How safe do you – or would you – feel walking alone in this area after dark? Do – or would – you feel... READ OUT... ...

very safe, 1

safe, 2

unsafe, 3

or, very unsafe? 4

(Refusal) 7

(Don't know) 8

C15 CARD 24 Regardless of whether you belong to a particular religion, how religious would you say you are? Please use this card.

Not at all	Very	(Refusa	l) (Don't	
Religious	religious		know)	
00 01 02 03 04 05 06 07 08 09 10		77	88	

F42 CARD 68 Which of the descriptions on this card comes closest to how you feel about your household's income nowadays?

Living comfortably on present income 1

Coping on present income 2

Finding it difficult on present income 3

Finding it very difficult on present income 4

(Refusal) 7

(Don't know) 8

F2 Sex [writes 1 for man and 2 for woman]

F3 Year born [Fills in birth year -> calculated into 'agea'/age variable]

F14 CARD 61 Which phrase on this card best describes the area where you live?

A big city 1

The suburbs or outskirts of a big city 2

A town or a small city 3

A country village 4

A farm or home in the countryside 5

(Refusal) 7

(Don't know) 8

ASK ALL F16 About how many years of education have you completed, whether full-time or part-time? Please report these in full-time equivalents and include compulsory years of schooling. INTERVIEWER NOTE: round answer up or down to the nearest whole year.

WRITE IN: [writes number of years]

(Refusal) 77

(Don't know) 88

A4 CARD 2 Using this card, generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? Please tell me on a score of 0 to 10, where 0 means you can't be too careful and 10 means that most people can be trusted.

You can't be	Most people can	(Refusal)	(Don't
too careful	be trusted		know)
00 01 02 03 04 05 06 07 08 09 10		77	88

A5 CARD 3 Using this card, do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?

Most people would try	Most people wou	ld (Ref	usal) (Don't	
to take advantage of me	try to be fair		know)	
00 01 02 03 04 05 06 07 08 09 10			77 88	
A6 CARD 4 Would you say that molooking out for themselves? Pleas		o be helpful or t	hat they are mostly	
People mostly look	People mostly try	(Refusal)	(Don't	
for themselves	to be helpful		know)	
00 01 02 03 04 05 06 07 08 09 10		77	88	
C1 CARD 19 Taking all things toget	ther, how happy would you	ı say you are? Pl	ease use this card.	
Extremely unhappy Ex	ktremely happy	(Refusal)	(Don't know)	
00 01 02 03 04 05 06 07 08 09 10		77	88	
C7 How is your health in general?	Would you say it is READ	OUT		
very good, 1				
good, 2				
fair, 3				
bad, 4				
or, very bad? 5				
(Refusal) 7				
(Don't know) 8				
B27 CARD 11 All things considered answer using this card, where 0 m		•	•	ase
Extremely dissatisfied	Extremely satisfied	(Refusal)	) (Don't know)	
00 01 02 03 04 05 06 07 08 09 10		77	88	
B28 STILL CARD 11 On the whole I [country]? Still use this card.	now satisfied are you with	the present state	e of the economy in	
Extremely dissatisfied	Extremely satisfied	(Refusal)	) (Don't know)	
00 01 02 03 04 05 06 07 08 09 10		77	88	
B29 STILL CARD 11 Now thinking a it is doing its job? Still use this care		ment, how satis	fied are you with the	way
Extremely dissatisfied	Extremely satisfied	(Refus	al) (Don't know)	

00 01 02 03 04 05 06 07 08 09 10

B29 STILL CARD 11 Now thinking about the [country] government, how satisfied are you with the way it is doing its job? Still use this card.

Extremely dissatisfied	Extremely satisfied	(Refusal)	(Don't know)
00 01 02 03 04 05 06 07 08 0	09 10	77	88
B31 CARD 12 Now, using thi [country] nowadays?	s card, please say what you think	overall about the sta	te of education in
Extremely bad 00 01 02 03 04 05 06 07 08 0	Extremely good 09 10	(Refusal) 77	(Don't Know) 88
B32 STILL CARD 12 Still using this card, please say what you think overall about the state of health services in [country] nowadays?			e state of health
Extremely bad 00 01 02 03 04 05 06 07 08 0	Extremely good 09 10	(Refusal) 77	(Don't Know) 88

<sup>\*</sup> The questions are from round 8, but there are few or none differences in the questions' formulations from round to round.

# D) Original Experiment phrasing:

Informasjon		[Type= diskret] [Format=numeric] [Rekkevidde= 1-3] [Missing=*]		
Statistikk [N	w/w]	[Gyldige=2287 /-] [Ugyldig=669	2 /-]	
Spørsmålstel		som en av de største truslene mot  Vignett 2 = Les teksten under, og trykk så på Det har i løpet av de siste årene s som en av de største truslene mot kapasiteten for å kunne forhindre rapporter og kilder peker på at m  Vignett 3 = Les teksten under, og trykk så på Det har i løpet av de siste årene s som en av de største truslene mot kapasiteten for å kunne forhindre rapporter og kilder peker på at m	kjedd en rekke terrorhendelser, blant annet i N det norske samfunnet.  «meste». kjedd en rekke terrorhendelser, blant annet i N det norske samfunnet. Norske myndigheter ha og bekjempe terror, både i forkant av, under o yndighetenes kapasitet på flere områder har bli «meste». kjedd en rekke terrorhendelser, blant annet i N det norske samfunnet. Norske myndigheter ha og bekjempe terror, både i forkant av, under o yndighetenes kapasitet på flere områder fortsat	orge. Norske myndigheter vurderer terror ur i flere år arbeidet systematisk med å øke g etter terrorhendelser. Og flere offentlige tt større.  orge. Norske myndigheter vurderer terror ur i flere år arbeidet systematisk med å øke g etter terrorhendelser. Men flere offentlig t ikke er stor nok.
Instruksjone intervjueren		[Randomiserer hvis r14group = 2	. Respondenten blir vist en tilfeldig valgt vigne	ett. ]
Verdi	Merkela	арр	Enheter	Prosent
1	Vignett		738	32.3%
2	Vignett 2	2	746	32.6%
3	Vignett 3	3	803	35.19

# r14pad3: Hvor høy tillit har du til Regjeringen.		
Informasjon	[Type= diskret] [Format=numeric] [Rekkevidde= 1-5] [Missing=*]	
Statistikk [NW/W]	[Gyldige=8979 /-] [Ugyldig=0 /-]	
Tekst før spørsmål	[Tilfeldig valgt vignett. Se r14pad1_ran]	
Spørsmålstekst	Hvor høy tillit har du til Regjeringen?	
Instruksjoner til intervjueren	[Spurt dersom r14group = 2. Rekkefølgen til r14pad2, r14pad3 og r14pad4 er randomisert. Se r14pad_order. Respondenten ble vist en tilfeldig valgt vignett før r14pad2, r14pad3 og r14pad4. Se r14pad1_ran. ]	

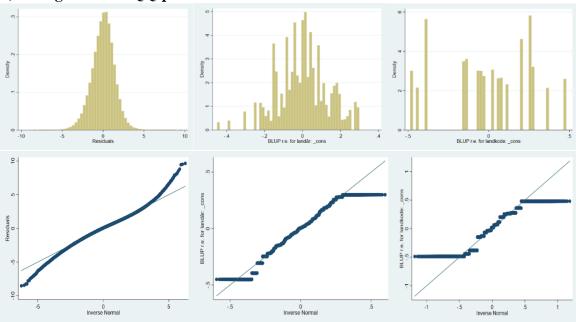
#### E) Breusch-Pagan / Cook-Weisberg:

Breusch-Pagan / Cook-Weisberg is a test where the null-hypothesis, assuming that the data are heteroscedastic, are tested. The critical value, the value that should *not* be surpassed, depends on the degrees of freedom in the regression model that is being tested. If the critical value is surpassed, and the result is significant, the null hypothesis cannot be rejected, and the data are most likely heteroscedastic.

The MLR models used in this paper have degrees of freedom between 22 to 26. This gives a critical value of 33,92-38,89, with a significance level of five percent (Ringdal, 2014, 523).

The Breusch-Pagan / Cook-Weisberg produced results with values of 254-13 749 with a p-value of 0.000, far beyond the critical value. The data are, thus, most likely heteroscedastic.

# F) Histograms and QQ-plots:



## **G) VIF-scores:**

Model:	Average VIF-score	Max VIF-score (variable)
Trust parliament 1	3.27	11.02 (2016 – time variable)
Trust parliament 2	4.71	19.30 (GTI-average)
Trust parliament 3	4.59	21.68 (GTI-average)
Trust legal system 1	3.26	10.99 (2016 - time variable)
Trust legal system 2	4.71	19.40 (GTI-average)
Trust legal system 3	4.59	19.40 (GTI-average)
Trust the police 1	3.26	10.95 (2016 - time variable)
Trust the police 2	4.71	21.27 (GTI-average)
Trust the police 3	4.58	21.76 (GTI-average)
Trust politicians 1	3.26	10.96 (2016 - time variable)
Trust politicians 2	4.71	21.26 (GTI-average)
Trust politicians 3	4.58	21.76 (GTI-average)

#### H) Levene's test:

Levene's test tests the null-hypothesis assuming that the data are homoscedastic (i.e. the opposite of a Breusch-Pagan / Cook-Weisberg test). The test principle is similar to the Breusch-Pagan / Cook-Weisberg test, but is adapted to experiment designs. If the F-value, from the test result, is greater than the critical F-value, and the result is significant, the null-hypothesis can be rejected. The data is, thus, probably heteroscedastic.

The result produced p-values of 0.071 for the dependent variable measuring trust in the parliament, 0.115 for the Government, and 0.053 for the police. In every case the p-value was greater than .05, and the null-hypothesis can therefore not be rejected. One can therefore assume that the data are homoscedastic.

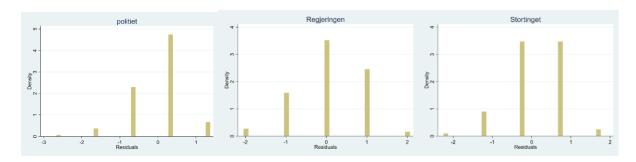
#### I) Shapiro Wilk test:

Shapiro-Wilks test is a test with a null-hypothesis that assumes that the data have a normal distribution. The principle is the same as for the aforementioned tests. In this case the critical (Z-)value is 1.96 for a two-tailed test (Ringdal, 2014, 520).

The result produced values of 13.166 for the Parliament, 11.858 for the Government, and 13.597 for the police. All with p-values of less than 0.000. One can therefore, considering the significant transgressions of the critical value, assume that the data are not normally distributed.

#### Histograms:

The histogram supports the Shapiro-Wilks test, but shows that the data in some cases are not far from normally distributed.



## J) Empty MLR models:

Trust parliament (included in the Results)

	Two-level model, land (s.e)	Hybrid model, country-year
		(s.e.)
Constant	4.629019 (.214751)***	4.635715 (.2155008)***
Individual level variance	5.446557 (.014627)	5.299441 (.0142353)
Country level variance	.8758578 (.2842761)	.8591736 (.2862895)
Country-year level variance		.1772364 (.0224565)
ICC country	.1385322 (.0387357)	.1356051 (.0390672)
ICC country-year		.1635787 (.0378822)
BIC	1257269	1250222***
N, individuals	277,327	277,327
N, countries	19	19
N, country-years		148

<sup>\*\*\* 1%-</sup>level (change in variance tested against the two-level model: Chi=7060.08, p<0.0000)

#### Trust legal system

	Two-level model, land (s.e)	Hybrid model, country-year
		(s.e.)
Constant	5.304467 (.2459453)***	5.307342 (.2468429)***
Individual level variance	5.571447 (.0149348)	5.488068 (.0147148)
Country level variance	1.148901 (.3728629)	1.144412 (.3756283)
Country-year level variance		.10015 (.0128664)
ICC country	.1709585 (.045999)	.1699799 (.0463127)
ICC country-year		.1848552 (.0455004)
BIC	1268231	1264504***
N, individuals	278,352	278,352
N, countries	19	19
N, country-years		148

<sup>\*\*\* 1%-</sup>level (change in variance tested against the two-level model: Chi=3739.58, p<0.0000)

#### Trust police

	Two-level model, land (s.e)	Hybrid model, country-year
		(s.e.)
Constant	6.239614 (.1931176)***	6.246328 (.1922786)***
Individual level variance	5.119804 (.0136324)	5.039992 (.013423)
Country level variance	.7082386 (.2298875)	.6899899 (.2279388)
Country-year level variance		.0940276 (.0120622)
ICC country	.1215225 (.0346528)	.1184733 (.0345047)
ICC country-year		.1346182 (.0339053)
BIC	1261494	1257536***
N, individuals	282,110	282,110
N, countries	19	19
N, country-years		148

<sup>\*\*\* 1%-</sup>level (endring i varians testet opp mot to-nivåmodellen: Chi=3970.67, p<0.0000)

# Trust politicians

	Two-level model, land (s.e)	Hybrid model, country-year
		(s.e.)
Constant	3.716032 (.2143511)***	3.721457 (.2152424)***
Individual level variance	4.752768 (.0127018)	4.649679 (.0124292)
Country level variance	.8726495 (.2832171)	.8637871 (.285576)
Country-year level variance		.1253599 (.0159477)
ICC country	.1551262 (.0425374)	.1531856 (.0428932)
ICC country-year		.1754172 (.041811)
BIC	1231413	1225792***
N, individuals	280,040	280,040
N, countries	19	19
N, country-years		148

<sup>\*\*\* 1%-</sup>level (change in variance tested against the two-level model: Chi=5633.37, p<0.0000)

## **K) MLR models:**

## Trust parliament

	Model 1	Model 2	Model 3
Constant	-1.773095 (2.325789)	-1.269265 (2.507886)	-1.263983 (2.502738)
Year (round)			
2004	2524731	2518387	251747
	(.0693801)***	(.0694369)***	(.069381)***
2006	2258028	2301341	2296633
	(.1032526)**	(.103723)**	(.10354)**
2008	0837659 (.1366574)	0894359 (.1374368)	0890956 (.1372696)
2010	2160111 (.133011)	2206951	2202167 (.132483)
		(.1325974)*	
2012	2659989 (.1654428)	2671469 (.1666686)	2665146 (.1665416)
2014	0455158 (.2178696)	0495738 (.2168699)	0492124 (.2168049)
2016	0090119 (.2140572)	0020351 (.2118704)	0014714 (.2116924)
Individual level			
Political interest	.523708	.5237294	.5236903
	.(0265655)***	(.0265621)***	(.0265534)***
Feeling of safety	.0604866	.0604787	.0604371
	(.0167731)***	(.016781)***	(.0167272)***
Degree of	.034006	.0340064	.0339864
religiousness	(.0031851)***	(.0031855)***	(.0032162)***
Satisfied w/household	.0743004	.0743066	.0742459
income	(.0202117)***	(.020206)***	(.0201813)***
Education	.0404651	.0404632	.0404745
	(.0048959)***	(.0048952)***	(.0049353)***
Social trust	.1724449	.1724455	.1724568
	(.0085135)***	(.0085155)***	(.0085069)***
Individual well-being	0443465	0443397	0443164
<u> </u>	(.009857)***	(.009857)***	(.0098657)***
Satisfaction w/societal	.724414	.7244156	.7244031
institutions' perf.	(.0133396)***	(.01334)***	(.0133651)***
Area of residence	.1298031	.1298126	.1265065
A	(.0231103)*** 0035621	(.0231107)***	(.036375)***
Age	(.0010445)***	0035621 (.0010444)***	0035624 (.0010477)***
Gender	0091541 (.01632)	0091555 (.0163204)	0091424 (.016331)
Macro level	0091341 (.01032)	0091333 (.0103204)	0091424 (.010331)
HDI-centered	.0864211 (.0536184)	.0860018 (.053375)	.0860022 (.0533682)
	.0126335 (.0271448)	.0060924 (.0298551)	.0060771 (.0298471)
HDI-average	,	` ′	` '
GTI-centered	0395098 (.0174513)**	0420085 (.018279)**	0466589 (.0181292)***
GTI-average	.0213903 (.0436632)	.1468027 (.1934652)	.1459465 (.1939661)
GTI-centered^2	.0213703 (.0430032)	0117566 (.0073009)	0115463 (.0073219)
		0244782 (.0384164)	0244414 (.0384256)
GTI-average^2		0244702 (.0304104)	` '
GTI-average*AOR			.0020811 (.0154917)
GTI-centered*AOR			.0152745 (.0129091)

Random effects			
(Variance			
components)			
Variance ind. level	3.457641 (.1136973)	3.457642 (.1136974)	3.457605 (.1136834)
Variance country level	.1058652 (.0283978)	.1055999 (.027156)	.1056196 (.0271582)
Variance C-Y level	.0385686 (.008866)	.0383104 (.0088995)	.0383141 (.0088907)
BIC	1075643	1075667	1075689
N, individuals	263,535	263,535	263,535
N, countries	19	19	19
N, country-years	146	146	146

# Trust legal system

	Model 1	Model 2	Model 3
Constant	-5.44107	-5.783766	-5.776835
	(2.585111)**	(3.378795)*	(3.38027)*
Year (round)			
2004	.0263126 (.0624197)	.027628 (.0630014)	.0277891 (.062934)
2006	.2130755	.2037116	.2046509
	(.0880181)**	(.0899773)**	(.0898462)**
2008	.4286613	.4169422	.4176425
	(.1231739)***	(.122544)***	(.1225043)***
2010	.5008134	.4913797	.4923431
	(.1490179)***	(.1503409)***	(.1503133)***
2012	.5776491	.5755409	.5768286
	(.1680234)***	(.1704166)***	(.1703659)***
2014	.8012645	.7935258	.7943007
	(.1949888)***	(.1970989)***	(.1968259)***
2016	.8688507	.8849601	.8861133
	(.1982879)***	(.2039567)***	(.2036179)***
Individual level			
Political interest	.2056417	.2056701	.2055874
	(.0202191)***	(.0202161)***	(.0202604)***
Feeling of safety	.159307	.1592877	.1592306
	(.0179837)***	(.017997)****	(.0180037)***
Degree of	.023938	.0239377	.0239109
religiousness	(.0048537)***	(.0048539)***	(.0048929)***
Satisfied w/household	.0365777	.0365516	.0364185
income	(.0170188)**	(.0170317)**	(.0170898)**
Education	.0407174	.0407162	.040732
	(.0050466)***	(.0050463)***	(.0050463)***
Social trust	.1954573	.1954559	.1954764
	(.0104651)***	(.0104654)***	(.0104445)***
Individual well-being	.0223363	.0223517	.0223835
J	(.0113783)**	(.011383)**	(.0114007)**
Satisfaction w/societal	.6203545	.620341	.6203231
institutions' perf.	(.0142401)***	(.0142364)***	(.0142412)***
Area of residence	.0796291	.0796448	.0754438
,	(.0232573)***	(.023261)***	(.0354666)**

Age	0053969	0053969	0053984
	(.0013388)***	(.0013387)***	(.0013391)***
Gender	.0320163 (.0293034)	.0320057 (.0293037)	.0320241 (.0293386)
Macro level			
HDI-centered	.1873752	.1867901	.1867981
	(.0443897)***	(.04442)***	(.0443483)***
HDI-average	.059384 (.0304643)	.0638749 (.0410575)	.0638511 (.041063)
GTI-centered	0045778 (.029912)	0097505 (.0307206)	0189699 (.0347162)
GTI-average	0290603 (.0621207)	0835949 (.3808977)	0848444 (.3806849)
GTI-centered^2		0246596 (.0199695)	0242353 (.019794)
GTI-average^2		.0113027 (.0672911)	.011373 (.0673119)
GTI-average*AOR			.002698 (.0132525)
GTI-centered*AOR			.0303239 (.0200512)
Random effects			
(Variance			
components)			
Variance ind. level	3.977723 (.1446071)	3.977724 (.1446072)	3.977583 (.1445106)
Variance country level	.1983858 (.0529002)	.1984444 (.0551745)	.198476 (.0551829)
Variance C-Y level	.0421833	.0413658 (.0079109)	.0413967 (.0079361)
	(.00841829)		
BIC	1116307	1116330	1116345
N, individuals	264,420	264,420	264,420
N, countries	19	19	19
N, country-years	146	146	146

## Trust police

	Model 1	Model 2	Model 3
Constant	-1.577758 (1.808638)	-2.371385 (2.113448)	-2.363525 (2.1094)
Year (round)			
2004	0501485 (.0727033)	0489572 (.0725269)	0489093 (.0725267)
2006	043978 (.0756892)	0527716 (.0760438)	0525208 (.0762098)
2008	.1086207 (.1200299)	.0978707 (.1157772)	.0980643 (.1158655)
2010	.1879079 (.136477)	.1793246 (.1358155)	.1796089 (.1360016)
2012	.2911297	.2892181	.2895931
	(.1574259)*	(.1563394)*	(.1565467)*
2014	.3865262	.3796739	.379869
	(.1780128)**	(.1778415)**	(.1779096)**
2016	.5330469	.5484852	.5488127
	(.1845168)***	(.1971156)***	(.1971499)***
Individual level			
Political interest	.0577202	.0577293	.0577129
	(.0205156)***	(.020516)***	(.02051)***
Feeling of safety	.0605734	.0605543	.0604947
	(.0312752)*	(.0312812)*	(.0312432)*
Degree of	.0329292	.0329291	.0329049
religiousness	(.0057921)***	(.0057931)***	(.0057495)***
Satisfied w/household	.0419374	.0419027	.0419049
income	(.0174546)**	(.0174509)**	(.0174769)**

Education	.0049944	.0049954	.0050116
	(.0024475)**	(.0024478)**	(.0024473)**
Social trust	.1874624	.1874619	.1874679
	(.0087025)***	(.0087021)***	(.0086942)***
Individual well-being	.1105051	.1105175	.1105438
	(.0097908)***	(.0097974)***	(.009772)***
Satisfaction w/societal	.4713827	.471368	.471354
institutions' perf.	(.0155689)***	(.0155704)***	(.0155576)***
Area of residence	0458913	0458825	0510042 (.0358403)
	(.0238409)*	(.0238398)*	
Age	.0062003	.0062004	.0062014
	(.0012945)***	(.0012945)***	(.0012962)***
Gender	.148748	.1487372	.1487685
	(.0210503)***	(.0210515)***	(.0210443)***
Macro level			
HDI-centered	.0322306 (.0392309)	.0318265 (.039298)	.0318299 (.0392898)
HDI-average	.0308034 (.0217809)	.041159 (.0266652)	.0411411 (.0266692)
GTI-centered	.1099616	.1051859	.1028139
	(.0305093)***	(.0353011)***	(.0344938)***
GTI-average	.0229055 (.0447069)	1357015 (.3000459)	1368071 (.3006131)
GTI-centered^2		0227462 (.0221444)	0226222 (.0221596)
GTI-average^2		.0317931 (.0538384)	.0318185 (.0538582)
GTI-average*AOR			.0031409 (.011133)
GTI-centered*AOR			.0078311 (.0127113)
Random effects			
(Variance			
components)			
Variance ind. level	3.986038 (.2035388)	3.986038 (.2035389)	3.986024 (.2035173)
Variance country level	.1417087 (.0472014)	.1400074 (.0429535)	.1400631 (.0429612)
Variance C-Y level	.0575579 (.0125008)	.0567354 (.0116612)	.0567539 (.0116665)
BIC	1130931	1130954	1130978
N, individuals	267,746	267,746	267,746
N, countries	19	19	19
N, country-years	146	146	146

## Trust politicians

	Model 1	Model 2	Model 3
Constant	-4.927846	-4.528155	-4.527088
	(1.965877)**	(2.193148)**	(2.18994)**
Year (round)			
2004	2052703	2047218	2047002
	(.043005)***	(.0429079)***	.(0428874)***
2006	2103037	213974	2138589
	(.0780693)***	(.0807417)***	(.0806311)***
2008	0478687 (.0990256)	0527041 (.1017176)	0526179 (.1016213)
2010	1233852 (.0976982)	1273693 (.0984691)	1272503 (.0983286)
2012	1674908 (.1295458)	1684158 (.1307867)	1682555 (.1306146)
2014	0658011 (.1576709)	0692405 (.1580823)	0691447 (.1580205)

2016	0440976 (.1481343)	0380924 (.1475051)	0379509 (.1473628)
Individual level			
Political interest	.5590357	.559058	.5590483
	(.0282099)***	(.0282117)***	(.0282075)***
Feeling of safety	.0100834 (.0137819)	.0100747 (.013785)	.0100667 (.0137731)
Degree of	.0407299	.0407299	.0407261
religiousness	(.0029211)***	(.0029204)***	(.0029258)***
Satisfied w/household	.0819245	.0819276	.0819143
income	(.0173531)***	(.017344)***	(.0173382)***
Education	.0063367	.006335	.0063374
	(.0027323)**	(.0027318)**	(.0027275)**
Social trust	.1858261	.1858279	.1858303
	(.0111808)***	(.0111827)***	(.011183)***
Individual well-being	0679708	067964	0679599
	(.0087571)***	(.0087592)***	(.0087647)***
Satisfaction w/societal	.6741178	.6741183	.6741157
institutions' perf.	(.0129116)***	(.0129134)***	(.0129248)***
Area of residence	.053878	.0538878	.0532314
	(.0184612)***	(.0184609)***	(.0262524)**
Age	002787	002787	0027871
	(.0010486)***	(.0010485)***	(.0010492)***
Gender	.1464707	.1464701	.1464728
	(.0181727)***	(.018176)***	(.0181775)***
Macro level	0720214	0.50 4.550	0.00 1.001
HDI-centered	.0738314	.0734772	.0734781
	(.0395037)*	(.0394918)*	(.0394904)*
HDI-average	.0453081	.0401197 (.0265078)	.0401163 (.0265002)
CTI southand	(.0232704)*	0527261	0520557
GTI-centered	0505943 (.0157579)***	0527261 (.015231)***	0538557
CTI quaraga	0368086 (.0225709)	.0633465 (.1655098)	(.0156666)*** .0631676 (.165281)
GTI-average GTI-centered^2	0308080 (.0223709)	, ,	, , , ,
		` /	0100099 (.0113228)
GTI-average^2		0195341 (.0315743)	0195254 (.0315717)
GTI-average*AOR			0004161 (.0060213)
GTI-centered*AOR			.0037201 (.009782)
Random effects			
(Variance			
components)			
Variance ind. level	3.048213 (.0987637)	3.048214 (.0987638)	3.048211 (.0987658)
Variance country level	.0734372 (.0261963)	.0714484 (.0246194)	.0714519 (.0246188)
Variance C-Y level	.0274702 (.0055564)	.0273932 (.0055264)	.027398 (.0055267)
BIC	1052017	1052041	1052066
N, individuals	265,968	265,968	265,968
N, countries	19	19	19
N, country-years	146	146	146