In the last century, Europe has witnessed mass expansion of educational levels and substantial declines in church membership, church attendance and religious beliefs. These processes have fundamentally reshaped the socio-demographic composition of European societies. This book explores to what extent these societal developments have been accompanied by changes in public opinions. In four empirical chapters, trends in public support for ethnic prejudice, gender egalitarianism and authoritarian values (in short: cultural conservatism) in the Netherlands and in other European countries are explored, based on representative surveys. In addition, different explanations for the relationship between educational expansion, secularisation, and changes in these public opinions are tested. The results show that public support for cultural conservatism has developed in different directions. Educational expansion and secularisation have to a certain extent contributed to these trends, although the ‘liberalising’ influence of these developments is not as clear-cut as is often expected. This book contributes to the understanding of long term changes in cultural conservatism and puts contemporary societal debates about issues of cultural freedom into a wider perspective.

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Trends in cultural conservatism:
the role of educational expansion, secularisation,
and changing national contexts
Trends in cultural conservatism:

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Van de regen naar de zon

Van de hemel tot de grond

Van de regels naar de waarden

Voor de schepen, voor het water

Van de regen naar de zon en andersom

[Typhoon – Lobi da Basi]
CHAPTER 1

Synthesis
1.1 Introduction

1.1.1 Educational expansion, secularisation, and their consequences

In the last century, European societies have undergone major social, demographic, economic, political, and cultural developments. These changes are considered to be part of a broader modernisation process, in which societies transformed from (pre-)industrial to modern and post-industrial (Inglehart, 1997). One of the most ubiquitous developments in this process is the mass expansion of educational attainment in many parts of the world (Meyer, Ramirez, Rubinson, & Boli-Bennett, 1977; Schofer & Meyer, 2005). Another important development is the changing role of religion in European societies, also referred to as secularisation (Bruce, 2002; Dobbelære, 2002; Tschannen, 1991). Over the past decades, many European countries have witnessed substantial declines in the share of the population that belongs to a Christian religious denomination, attends church, and holds religious beliefs. These developments have fundamentally reshaped the socio-demographic composition of European societies.

At the individual level, educational attainment and religious affiliation are among the most important determinants for a wide range of social, cultural, and political attitudes and values. Time and again, research has shown that higher educated and non-religious people are less conservative with regard to gendered roles, pre-, extramarital, and homosexual relationships, abortion, euthanasia, and more tolerant towards ethnic and religious out-groups (Allport & Ross, 1967; Bobo & Licari, 1989; Davis, 1982; Davis & Greenstein, 2009; Hyman & Wright, 1979; Scheepers & Eisinga, 2015; Scheepers, Te Grotenhuis, & Van der Slik, 2002; Stouffer, 1955; Surridge, 2016; Vogt, 1997; Wagner & Zick, 1995; Wilcox & Jelen, 1991). These specific attitudes can be conceptualised under the heading of “cultural conservatism” (Middendorp, 1978). Given that educational attainment and religious affiliation are such strong predictors of people’s attitudes related to cultural conservatism, shifts in the share of higher educated and non-religious people in European societies may have resulted in a widespread decline in cultural conservatism. In this dissertation, I explore to what extent educational expansion and secularisation have indeed contributed to changes in cultural conservatism.

Changes in cultural conservatism have been widely studied in the social sciences. Scholars have observed changes in the ideological landscape in western societies from conservative to more progressive (e.g., Inglehart, 1990, 1997; Inglehart & Norris, 2003; Middendorp, 1978). It is often theoretically proposed that educational expansion and secularisation play an important role in explaining these changes (Brooks & Bolzendahl, 2004; Cotter, Hermsen, & Vanneman, 2011; Halman & Van Ingen, 2015; Mason, Czajka, & Arber, 1976; Pampel, 2011; Quillian, 1996). However, empirical studies to this relationship are more scarce. An exception is the research of several Dutch sociologists, who empirically analysed the ideological and political consequences of educational expansion and secularisation in the Netherlands (Felling, Peters, & Scheepers, 2000; Scheepers, Te Grotenhuis, & Bosch, 1999;...
Te Grotenhuis, 1999; Te Grotenhuis, Scheepers, & Eisinga, 1998). However, these scholars relied on data collected until 1995 and they could not establish the significance of these developments in explaining trends in cultural conservatism. Hence, to what extent the processes of educational expansion and secularisation continue to contribute to changes in cultural conservatism at the societal level remains a lacuna to be explored.

In addition, shifts in the composition of the population are not the only explanation for changes in cultural conservatism in the population. Educational expansion and secularisation have likely changed the societal context to which people are exposed, which may directly shape people's attitudes and behaviour over and beyond their own social position in society. Moreover, European societies have recently witnessed major economic and cultural challenges. Between 2008 and 2012, an economic recession swept across Europe. Increased unemployment, financial insecurity and austerity measures have put a strain on European countries and their populations (European Commission, 2009). In addition, many European countries have faced rising immigration, which have increased ethnic, cultural and religious diversity, and heightened interethnic tensions (OECD, 2016a). These developments could also have affected people's attitudes, and may even have counterbalanced the supposed “liberalising” influence of educational expansion and secularisation. As yet, few empirical studies have analysed these explanations simultaneously.

The central aim of this study is therefore to provide insights into the relationship of educational expansion, secularisation, and recent economic and cultural developments on the one hand, and changes in cultural conservatism on the other hand. Throughout most of this dissertation, the focus lies on the Netherlands. In the Netherlands, the processes of educational expansion and secularisation have been particularly strong (Bar Haim & Shavit, 2013; De Graaf & Te Grotenhuis, 2008; Tolsma & Wolbers, 2014). In addition, its ideological landscape has shifted considerably. In the first half of the 20th century, a conservative, paternalistic cultural discourse with strong collective values and norms prescribed by the Christian churches characterised public and private life of the Dutch, and politics was dominated by confessional parties (Felling et al., 2000). By the end of the 20th century, the Netherlands was considered as one of the most liberal countries in the world (Jaspers, 2008). For example, the Netherlands was one of the first to grant same-sex couples the right to marry and to remove euthanasia from the penal code (Jaspers, Lubbers, & De Graaf, 2007). It is therefore that the Netherlands provides an interesting case to study the relationship between educational expansion, secularisation and trends in cultural conservatism.

The central research question of this dissertation reads:

To what extent have educational expansion, secularisation, and changes in national economic and cultural contexts contributed to liberalising trends in dimensions of cultural conservatism in the Netherlands and in Europe over the past decades?
1.1.2 Educational expansion and secularisation in the Netherlands

Since the introduction of the Compulsory Education Act in 1901, a number of educational reforms, such as raises of the school-leaving age, the Law on Continued Education (also known as the “Mammoth Law”) in 1962, and the introduction of student grants, have paved the way for a mass expansion of educational levels in the Netherlands. Figure 1.1 shows the average level of education (according to the Dutch Standard Education Classification (SOI)) of those entering the labour market since 1900. Dutch men and women entering the labour market in 1900 were on average primary educated. In 1980, men’s and women’s educational levels had risen to upper secondary education. By 2010, Dutch graduates on average had reached levels above upper secondary education, and women had surpassed men. While the trend in men’s educational levels seems to have stabilised since the late 1990s, women’s educational attainment has continued to rise.

In addition, the Dutch en masse left the traditional Christian churches during the 20th century. Figure 1.2 shows the percentage of the total population in the Netherlands that is not affiliated to a religion over the past century. In 1900, less than 3 percent of the population indicated to have no religious affiliation. This percentage had risen to over 60 percent by 2010. Secularisation was particularly strong during the 1960s, when the Catholic pillar started to crumble, but the decline of religious affiliation has continued well into the 21st century and only recently shows signs of stabilisation.

![Figure 1.1 | Average educational levels in the Netherlands, 1900-2010](Source: Dutch labour force surveys 1992, 1994, 1996, and 2016 (Statistics Netherlands, 1987, 2016); Te Grotenhuis (1999).)
In the early 1970s, the Dutch sociologist Middendorp started to systematically define and conceptualise conservatism as an ideology in the Netherlands. According to Middendorp (1978), an ideology refers to a number of related ideas that are centred around a few central, underlying values. These ideas are shared by certain groups or categories of people and they reflect the social position of these groups and their interests. Middendorp identified two distinct values underlying ideology in the Netherlands: freedom and equality. In addition, he added a distinction between the economic and cultural domain. In the economic domain, conservatives are in favour of freedom, i.e., freedom of the individual businessman, but they oppose to equal economic opportunities for all individuals. In the cultural domain, conservatives are in favour of equality because that means equal adherence of everyone to “absolute” moral values and traditional ways of life. They oppose to individual freedom to choose one’s own lifestyle, because it may damage traditional norms and institutions. Middendorp’s conceptualisation of a progressive ideology is, vice versa, based on the values of cultural freedom, i.e., people should be free to choose their own way of life, and economic equality, i.e., equal economic opportunities for everyone.

In this dissertation, I focus on three dimensions of a cultural conservative ideology that can be considered to reflect the underlying dimension of (opposition to) cultural
freedom: support for ethnic prejudice, support for gender egalitarianism, and support for authoritarian values. Ethnic prejudice refers to negative attitudes towards out-groups with different lifestyles and customs, which supposedly damage the traditional norms and lifestyles of the in-group. Gender egalitarianism refers to the rejection of traditional gender norms that sustain gender inequality and restrict people’s freedom to make their own decisions regardless of gender. Support for authoritarian values refers to a preference for conventionalism, the preservation of the social and normative order, and obedience to traditional authority.

Public support for these dimensions of cultural conservatism may have important societal consequences. Rising levels of ethnic prejudice may induce negative behaviour towards other ethnic groups, such as discrimination and hostility. As a consequence, it may deteriorate interethnic relations and social cohesion in society (Gorodzeisky & Semyonov, 2016; Koopmans & Schaeffer, 2016; Laméris, 2018; Laurence, 2014; Putnam, 2007; Van der Meer & Tolsma, 2014). Moreover, when certain groups in society feel marginalised, excluded, or discriminated against, they may be less inclined to participate in the economic, social and political domain (Verkuyten & Martinovic, 2012; Verkuyten & Zaremba, 2005). This may eventually result in radicalisation and polarisation between ethnic groups in society. Rising support for gender egalitarianism may contribute to a more egalitarian division of work and family responsibilities, and equal opportunities for both men and women in the public and private domain (Charles, 2011; England, 2010; Epstein, 2007; Fortin, 2005). More support for authoritarian values has been found to relate to higher levels of nationalism and nativism, opposition to individual freedom and alternative lifestyles, and to voting for populist radical right (and left) parties (Feldman & Stenner, 1997; Lubbers & Coenders, 2017; Mudde, 2007; Rooduijn, 2014; Scheepers, Felling, & Peters, 1990; Vasilopoulos & Lachat, 2017). Consequently, people may be more willing to submit to authoritarian leaders and accept restrictions of individual freedom for the sake of protecting the traditional social order.

In the societal and political debate, these issues are subject to considerable speculations, for example about the direction in which public opinion is moving. Such speculations are often amplified in online and offline media. By analysing the actual development of public attitudes on these issues and their underlying determinants, this dissertation contributes to the understanding of where such changes come from and where they might be going, thereby putting these societal debates into perspective.

In the remainder of this chapter, I first present an overview of the theoretical perspectives, empirical findings, and knowledge gaps in the literature. Next, I outline the contributions of this dissertation. Subsequently, the data and research design are described, after which I provide an overview of the empirical chapters. Lastly, I present the conclusions, directions for future research and implications of this dissertation.
1.2 Theoretical perspectives, empirical findings, and knowledge gaps

1.2.1 Classic perspectives of macro-level processes

The macro-level relationship between societal developments and ideological changes has been widely studied, starting with the founding fathers of sociology. For example, Karl Marx and Friedrich Engels (1848/2002) argued that changes in the economic system, such as industrialisation, urbanisation, the expanding division of labour, and the accumulation of capital, were related to profound social, political, and ideological transformations, which would eventually result in a revolt of the proletariat against capitalism. Weber (1930/2001) explored how the emergence of the Protestant ethic in Northwestern Europe facilitated the rise of capitalism, which contributed to the rationalisation of all spheres of society. According to Durkheim (1893/1997), as society became more complex, differentiated, and specialised, people would become increasingly dissimilar in their social experiences, material interests, values, and beliefs.

Stemming from these classic perspectives on social change, theories of modernisation and individualisation arose to describe and interpret the profound structural and cultural changes that have taken place over the past decades. Modernisation theory is centred around the idea that technological and economic developments lead to more or less coherent and predictable patterns of cultural and political change. It assumes that societies develop in a rather uniform and linear way, from traditional (agrarian, communal, religious) to modern (secular, individualistic, rational) (Knöbl, 2003; Levy, 1949; Marsh, 2014). The central idea of individualisation theory is that, as part of the process of modernisation, individuals have lost their bonds with traditional institutions, such as the traditional churches. Consequently, people’s attitudes and behaviour have become less determined by the social constraints of their social background and their membership of social institutions, while an increasing emphasis is placed on individual autonomy and freedom to choose one’s own values and lifestyles (Bauman, 2012; Beck & Beck-Gernsheim, 2002; Felling et al., 2000).

Although often criticised for being too general, suggesting linear, universal and irreversible developments (Alexander, 1994; Wallerstein, 1976), these macro-sociological theories have been widely adopted in the social sciences. The majority of research, however, has focused on theoretical conceptualisations and historical descriptions of social processes rather than on specific explanations and explicit hypotheses that can be empirically tested (Felling et al., 2000; Knöbl, 2003). Studies aimed at empirically testing these theories often compared people’s attitudes and behaviour at different points in time, or across societies at different stages of development. For example, based on Murdock’s Ethnographic Atlas, Nolan and Lenski (1996) compared several organisational and normative features of societies, such as norms of premarital sexual conduct for girls, across various types of
societies ranging from hunting and gathering to industrial. However, such macro-level theoretical and descriptive studies are not very helpful to understand how economic, demographic, and ideological developments within a society are related. To derive testable hypotheses, additional assumptions are needed. This dissertation therefore combines macro-sociological theories of social change with other theoretical perspectives to provide insights into the mechanisms behind the relationship between structural developments and changes in cultural conservatism at the macro-level.

1.2.2 Mechanisms of social change: individual, compositional, and contextual explanations

*Individual differences and compositional change*

Every society is made up of a collection of individuals. Individual processes therefore play an important role in explaining the relationship between macro-level societal developments and changes in cultural conservatism. At the individual level, numerous studies have established that higher educated people generally hold less conservative attitudes (Middendorp, 1978), among which lower levels of ethnic exclusionism (Coenders & Scheepers, 2003; Hello, Scheepers, & Sleegers, 2006; Jackman & Muha, 1984; Selznick & Steinberg, 1969; Vogt, 1997), more support for gender egalitarianism (Brewster & Padavic, 2000; Brooks & Bolzendahl, 2004; Davis & Greenstein, 2009; Thornton, Alwin, & Camburn, 1983; Thornton & Freedman, 1979), and lower support for authoritarian values (Baars & Scheepers, 1993; Dekker & Ester, 1991; Gabennesch, 1972; Middendorp, 1978; Middendorp & Meloen, 1991; Stubager, 2008; Vogt, 1997). Religiosity has been identified as another important determinant of cultural conservatism. Empirical research has repeatedly found that individuals who do not belong to a religious denomination and those who do not attend church are less conservative with regard to gender norms, pre- and extramarital relationships, homosexuality, and abortion (Norris & Inglehart, 2011; Scheepers, Te Grotenhuis, et al., 2002; Schnabel, 2016; Volcu, 2009), are less authoritarian (Gabennesch, 1972; Scheepers et al., 1990), and show less ethnic prejudice (Allport & Ross, 1967; Ekici & Yucel, 2014; Gorsuch & Aleshire, 1974; Hall, Matz, & Wood, 2010; Scheepers & Eisinga, 2015; Scheepers, Gijsberts, & Hello, 2002).

Given the importance of education and religiosity in predicting people’s level of cultural conservatism, it has been widely argued that rising levels of education and declining religiosity in the population should have contributed to a decline in cultural conservatism at the societal level (Brooks & Bolzendahl, 2004; Cotter et al., 2011; Halman & Van Ingen, 2015; Mason et al., 1976; Pampel, 2011; Quillian, 1996). Although studies that compared attitudes across different contexts or time periods often accounted for compositional differences in the population, few studies have quantified the actual contribution of changes in the population composition to trends in cultural conservatism. As an exception to this, Dutch sociologists showed that educational expansion and secularisation indeed contributed to a decline in Christian beliefs, Christian voting, and cultural conservatism.
However, these studies relied on data collected until 1995. In this dissertation, I extend their research by analysing whether the liberalising influence of shifts in the educational and religious composition of the population has continued into the 21st century.

**Cohort socialisation and periodic exposure**

Shifts in the distribution of individual characteristics across the population do not tell the whole story of attitude change. Many sociologists have assumed that the societal context also directly influences people’s attitudes and beliefs. For example, Middendorp (1978) argued that ideologies and ideas emerge as a function of the social and cultural context during a certain period.

In the literature on social change, two theoretical perspectives have been commonly used to relate the societal context to individual attitudes. According to the perspective of cohort socialisation, social change may result from the continual replacement of older “participants” of society by newer ones through birth and death. The German sociologist Karl Mannheim (1952) introduced the concept of birth cohort to describe these new participants, who share the same year of birth and the same location in history. According to Mannheim, this location in history is characterised by certain circumstances and events, which shape the formative experiences of each new birth cohort (Mannheim, 1952). Young people in their formative years (late adolescence and early adulthood) are deemed especially “impressionable” to these societal circumstances, which crystallise into basic values, attitudes and world views (Alwin & McCammon, 2003; Krosnick & Alwin, 1989). Once formed, these normative orientations and attitudes are assumed to remain relatively stable over the life course (Inglehart, 1990; Mannheim, 1952). Thus, according to this perspective, social change is the sum of changes in the societal circumstances during which each new cohort is socialised, and the continual replacement of older cohorts by new cohorts with different formative experiences.

In order to study the influence of different formative experiences, the majority of research has compared attitudes and values across subsequent birth cohorts or generations. Such differences are also referred to as “cohort effects”. One of the most well-known applications of the socialisation perspective is Ronald Inglehart’s (1990, 1997, 2008) research on value change. Inglehart’s main hypothesis is that as a result of rapid economic development and the expansion of the welfare state after World War II, the formative experiences of the younger post-war cohorts in most industrial societies differed from those of older cohorts, leading them to give priority to different values. Indeed, Inglehart

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1 Note that Mannheim (1952) used the term “generation” to describe all individuals born in the same year. I use the term birth cohort here, because generation is also used as a kinship term, referring to members of the same family within an ancestral line. Birth cohorts and generations do not necessarily overlap, i.e., generations may consist of varying numbers of birth cohorts due to differences in fertility within and between families (Alwin & McCammon, 2003).
found that pre- and interwar generations attached value to economic and physical security, and traditional authority, while post-war generations placed more emphasis on values of individual autonomy, self-expression, and quality of life. From this, Inglehart concluded that generational replacement has brought about a massive long-term shift – a “silent revolution” – in people’s basic values (Inglehart, 1990, 1997, 2008). Why such value shifts have occurred across cohorts, however, remains empirically understudied in Inglehart’s research.

An alternative perspective on social change proposes that the societal context affects people’s attitudes and behaviour not only during their formative years, but also in other stages of the life course. This perspective assumes that people are open to change throughout their life (Alwin & McCammon, 2003). Historical events and developments in society, such as war, economic depression or social movements, may affect the entire population of a society at the same time, producing a shift in attitudes at the macro-level. Such “period effects” have been mainly studied by comparing attitudes across different national or regional contexts. Research has shown that people in less religious states or countries hold more egalitarian gender attitudes (Moore & Vanneman, 2003), show less disapproval of homosexuality (Van den Akker, Van der Ploeg, & Scheepers, 2012), and are more tolerant towards immigration (Bohman & Hjerm, 2013). More support for gender egalitarianism was found in countries with higher levels of societal gender equality (Dotti Sani & Quaranta, 2017), and higher female labour force participation (André, Gesthuizen, & Scheepers, 2013). Other studies analysed the influence of immigration and unemployment rates on anti-immigrant attitudes in Europe, although evidence for this relation is mixed (Billiet, Meuleman, & De Witte, 2014; Ceobanu & Escandell, 2010).

Explanations for differences in public attitudes between countries are, however, not necessarily generalisable to changes in attitudes within a particular context over time. Countries differ from each other on many characteristics, and inferences about the influence of the societal context may therefore (partly) rely on unobserved or unspecified country-specific characteristics. According to Te Grotenhuis and colleagues (2015), testing the influence of the societal context within countries over time suffers less from such unobserved or unspecified indicators, because people within one country are more likely to resemble one another on important characteristics due to a shared national history. As such, this provides a more stringent test of the theoretically proposed relationship between changes in the societal context and changes in cultural conservatism.

Since data collected at different points in time has become increasingly available, an emerging body of literature has studied dimensions of cultural conservatism in a longitudinal perspective, combining the theoretical approaches of cohort socialisation and periodic exposure. The majority of these studies has focused on the decomposition of time trends into the separate influences of cohort replacement and period effects by comparing the rates of change across cohorts and across time. Evidence has been found
for both cohort and period effects (Brooks & Bolzendahl, 2004; Ciabattari, 2001; Davis, 1975; Firebaugh, 1992; Firebaugh & Davis, 1988; Inglehart, 2008; Mason & Lu, 1988; Pampel, 2011; Quillian, 1996; Scott, Alwin, & Braun, 1996; Smith, 1985; Thornton et al., 1983; Tilley, 2005; Wilkes & Corrigall-Brown, 2010). As yet, it remains ambiguous what the exact contribution of either explanation is, because this depends on the time period that was studied (Glenn, 2005).

Moreover, changes observed among people within the same birth cohort may also be due to people getting older, and differences between cohorts could just as well be due to age differences. Studies that try to decompose the effects of cohort and period therefore face a serious methodological difficulty: when studying change over time using cross-sectional data, it is hardly possible to isolate the net effects of cohort replacement from ageing or life cycle effects because there is a perfect linear relation between these effects (age = period – birth cohort) (Mason, Mason, Winsborough, & Poole, 1973). Although no uncontroversial solution to this problem has been found as yet, many scholars have attempted to circumvent the issue, for example by grouping survey years or birth cohorts, by leaving age out of the analyses altogether, or by substituting age with indicators for important life events, such as marriage, giving birth or divorce. However, one needs a strong set of assumptions to impose such a priori restrictions on models (Alwin & McCammon, 2003; Firebaugh & Chen, 1995). More recently, studies have started to employ hierarchical multilevel models (so-called cross-classified random effect models) to separate the effects of cohort, period and age (Yang & Land, 2006, 2008), proposing that these models could solve the problem of linear dependency (Pampel, 2011; Shu & Meagher, 2017; Tormos, Vaclclair, & Dobewall, 2017; Wilkes & Corrigall-Brown, 2010). However, Bell and Jones (2014) showed that this method may still yield biased results and they casted their doubts about this method as a solution to the APC identification problem.

What is more, even if we would be able to reliably separate the effects of period and cohort, such effects do not tell us why people’s attitudes differ across periods and cohorts. Several scholars have therefore directly tested the theoretically proposed influence of the societal context on people’s attitudes through cohort socialisation and contemporary exposure. Such approach has also been advocated as a way to identify the effects of age, period, and cohort in repeated cross-sectional studies. For example, Converse (1976) proposed that “side information” with a strong theoretical basis could be used to identify and interpret the effects of cohort and period (Alwin & McCammon, 2003). According to Rodgers (1990), “[t]he estimability problems that arise in assessing the effects of temporal dimensions [such as age, period, and cohort] would disappear if those indicator variables were replaced by more direct measures of the substantively relevant variables.” (p. 437).

Studies that analysed the influence of exposure to contemporary events or developments found more negative anti-immigrant and anti-immigration attitudes in Europe in times of increasing unemployment rates (Coenders, Lubbers, Scheepers, & Verkuyten, 2008),
increasing immigration (Hatton, 2016; Meuleman, Davidov, & Billiet, 2009), and strong changes in national debt (Van Setten, Scheepers, & Lubbers, 2017). Scheepers et al. (1999) found lower levels of cultural conservatism in times of higher societal education and secularisation between 1970 and 1992. Studies that focused on the influence of cohort socialisation showed more widespread support for ethnic discrimination among cohorts that have been socialised in times of higher ethnic immigration and unemployment (Coenders & Scheepers, 1998), and more cultural conservatism among cohorts that grew up in times of higher unemployment rates (Scheepers et al., 1999). Kraaykamp (2002) showed higher levels of female labour force participation during people's formative years to be related to more conservative attitudes towards pre- and extramarital sexuality in the Netherlands, whereas Pepin and Cotter (2018) found a small positive influence of higher employment rates of mothers on adolescent girls' gender attitudes in the U.S., but whether this influence persists throughout these girls' lives remains to be seen. However, studies that empirically test the influence of societal conditions during people's formative years on cultural conservatism are still scarce because historical information is difficult to obtain, if available at all.

1.2.3 Towards an integrated framework of social change

The different mechanisms from which the relationship between macro-level societal developments and macro-level changes in cultural conservatism may arise, can be summarised in a diagram that is a version of the so-called “Coleman's Boat” (Coleman, 1990), visualised in Figure 1.3. Arrow A depicts the relationship between (changes in) the societal context and (changes in) cultural conservatism at the macro-level. As discussed above, this macro-level relationship can be viewed as being the result of different individual processes. Each society is made up of a collection of individuals with certain characteristics, which is represented by arrow B. These individual characteristics, such as people's educational level and religious affiliation, in turn influence people's level of cultural conservatism. This relationship at the individual level is represented by arrow C. In addition, people's support for cultural conservatism may be directly shaped and influenced by the societal context, as depicted by arrow D. The average level of cultural conservatism observed at the societal level is in turn the aggregate of attitudes held by all individuals in society. This aggregation is represented by arrow E.²

The relationship between macro-level societal developments and macro-level changes in cultural conservatism in society over time may thus be the result of (a combination of): changes in the distribution of individual characteristics across society, changes in the relationships between individual characteristics and people's levels of cultural conservatism, and changes in the societal context which influences people's support for cultural conservatism directly.

² In this dissertation, arrows A, C, and D are considered to be relationships whereas B and E are studied as aggregations between the micro- and macro-level.
1.3 Contributions to previous theoretical insights

This dissertation contributes to the literature in several ways. First, I provide insight into the relationship between educational expansion, secularisation, and changes in three dimensions of cultural conservatism at the macro-level. For this purpose, I combine general macro-sociological theories of social change with micro-level theoretical perspectives. This allows to derive specific hypotheses that can be empirically tested. Taking the individual level into account is important because the relationship between education or religiosity and cultural conservatism at the level of individuals may be different from that at the level of society, which involves the risk of making an ecological fallacy. For example, we might find that a population's average level of cultural conservatism is lower when this population is more highly educated. We may conclude that educational expansion leads to a decline in cultural conservatism at the societal level. But if lower educated people in particular have become less conservative, then we may observe a decline in cultural conservatism at the macro-level even without an increase in the populations' average educational level. Thus, the relationship between individual characteristics and cultural conservatism may have changed, giving rise to aggregate changes in cultural conservatism. In Chapter 2, I analyse to what extent this has been the case with regard to ethnic prejudice in the Netherlands. Alternatively, aggregate changes in dimensions of cultural conservatism may be due to shifts in the distribution of important characteristics that determine people's cultural conservatism across the population. This is the focus of Chapter 3.

Second, I empirically test the actual contribution of these individual and compositional explanations to trends in dimensions of cultural conservatism using counterfactual simulations (Clogg, 1978). This method, also referred to as purging (Te Grotenhuis, Eisinga, & Scheepers, 2004), allows to answer “what-if-things-had-been-different” questions, such as: how would the level of cultural conservatism have developed over time if the processes of educational expansion and secularisation had not taken place? With this
approach, I am able to isolate and quantify the separate contribution of either changes in individual associations or compositional shifts in the population to the observed trend, which improves upon studies that merely controlled for individual characteristics. By analysing an extended time period and by introducing a test for significance using bootstrapping, I add to previous studies in which the method of purging has been applied to study the consequences of educational expansion and secularisation (De Graaf & Te Grotenhuis, 2005; Felling et al., 2000; Grotenhuis, Eisinga, & Meer, 2012; Te Grotenhuis et al., 1998). In addition, this approach has not yet been used to explain trends in ethnic prejudice and gender egalitarianism.

Third, this dissertation contributes to the extensive body of literature that focuses on so-called cohort and period explanations of changes in cultural conservatism. Theoretically, these studies propose that trends in public attitudes and behaviour can be explained in terms of socialisation under certain societal conditions during people's formative years (cohort effects) or in terms of contemporary exposure to a certain societal context (period effects). To test these explanations, the lion's share of research has compared people's attitudes across different time periods or birth cohorts, or tried to disentangle the two. However, as argued above, these studies generally suffer from the perfectly linear combination of period, cohort, and age effects. Strong assumptions are needed to circumvent this problem. I add to this body of literature by identifying a theoretically justified restriction on the effect of age, which allows to estimate the influences of period and cohort effects on a dimension of cultural conservatism, i.e., gender egalitarianism, in a restricted APC model (constrained generalised linear regression model) (Mason et al., 1973).

Fourth, I aim to bring this field of research further by shifting the question from how cultural conservatism has changed over time and across cohorts to why people in different periods and birth cohorts differ in the first place. Answering this question provides a more direct test of the widely theorised perspectives of cohort socialisation and periodic exposure, and it provides a more meaningful interpretation of period and cohort effects. As such, I advance the hitherto underspecified theoretical propositions of social change. In Chapter 4, I deduce hypotheses about cohort- and period-specific societal conditions that may explain changes in gender egalitarianism. I test these hypotheses by substituting period and cohort effects with theoretically relevant contextual indicators of societal conditions. To date, empirical tests of such contextual cohort explanations for the trend in gender egalitarianism have remained scarce. In Chapter 5, I examine the influence of more recent demographic and economic changes in European countries on public support for authoritarian values. These contextual explanations for trends in authoritarianism have not yet been analysed simultaneously. Moreover, I analyse the effect of both levels and sudden changes in economic and demographic indicators on people's support for authoritarian values, building on scholars who argued that “shocks” in contextual indicators may have a stronger influence on people's attitudes and behaviour than customary levels of these same indicators (Meuleman et al., 2009; Olzak, 1992).
Lastly, I advance the research on trends in dimensions of cultural conservatism by not only studying these trends in the general population, but also how they differ between educational and religious categories (Chapter 2), between men and women (Chapter 3 and 4), and between Western and Eastern European countries (Chapter 5). Exploring under which conditions, among whom, and in which contexts people’s support for dimensions of cultural conservatism has changed allows to test the generalisability of theories of social change and provides a more in-depth understanding of trends in cultural conservatism.

1.4 Studying social change: data and methods

To study changes in cultural conservatism over time, large scale representative surveys are needed that contain information on people’s attitudes at different points in time. In this dissertation, I use repeated cross-sectional data on individuals from three different sources. I complemented these data with macro-level information about the social context from various sources. The following section provides an overview of the data sources, measurements of the dependent variables and the methods that are used throughout this dissertation.

1.4.1 Data and measurements

*Socio-cultural developments in the Netherlands surveys 1985-2011: ethnic prejudice*

In Chapter 2, I use data from the Socio-cultural developments in the Netherlands surveys (“Sociaal-Culturele Ontwikkelingen in Nederland”, SOCON) (Eisinga et al., 2012). Developed as a national survey on religious and secular attitudes and behaviour in Dutch society, these surveys were collected every five years between 1979 and 2011 among a nationally representative cross-section of the Dutch population between 18 and 70 years old. The questionnaires contain only previously tested, valid and reliable measurements. Because the design and the measurements remained unchanged across the surveys, the SOCON data are well suited for long-term comparisons of attitudes over time. I use the surveys of 1985, 1995, 2000, 2005, and 2011 to measure support for ethnic prejudice over time. Respondents were presented five statements measuring common stereotypical views about the five largest minority groups in the Netherlands. Based on factor analyses, I combined the answers on these statements into one scale indicating an individual’s level of ethnic prejudice. The surveys of 1979 and 1990 were excluded because these lack comparable measurements of ethnic prejudice. The SOCON data also contain information on individuals’ educational attainment, religiosity, and a range of other individual characteristics.

*Cultural Changes in the Netherlands surveys 1979-2012: gender egalitarianism*

In Chapter 3 and 4, I employ the Cultural Changes in the Netherlands surveys (“Culturele Veranderingen in Nederland”, CV) (The Netherlands Institute for Social Research,
These data have been collected at least once every two years since 1970 in order to study changes in social and cultural opinions and attitudes of the Dutch population on a wide range of issues. Each survey consists of a nationally representative sample of individuals between 16 and 74 years old. The CV surveys contain measurements of gender attitudes that are comparable across the waves, allowing to analyse changes in gender egalitarianism over time. In Chapter 3, I use 16 waves between 1979 and 2012, which contain information about respondents' gender attitudes, educational attainment, religiosity, and employment status. In Chapter 4, I employ 14 waves between 1979 and 2006, enriched with contextual information on societal circumstances at the province level for each birth cohort and each survey year. Because the surveys from 2006 onwards lacked detailed information about the province in which respondents live, I had to exclude these waves from the analyses. Contextual information was retrieved from Dutch population censuses, labour force surveys, CV surveys 1970-2006, and SOCON surveys 1979-2011. Based on this information, I constructed measures of the average educational level in the Netherlands of the cohort that entered the labour market, the percentage of the Dutch population with no religious affiliation, and the percentage of women participating on the labour market from 1900 onwards. These measures are used as proxies for cohort- and period-specific societal circumstances.

European Social Survey 2002-2014: authoritarian values
Chapter 5 is based on seven rounds of the European Social Survey (ESS), which were collected once every two years between 2002 and 2014 across a large number of European countries. The purpose of these data is to monitor and interpret changing public attitudes and values within Europe. The surveys therefore include several questions to measure authoritarian values. These questions were asked in the same way in each survey and in each country, which makes these data well suited to analyse over time changes in support for these values across European countries. The data were collected through face-to-face interviews among representative samples of all persons aged 15 years and over, living within private households in one of the participating countries. I use information on people's support for authoritarian values, educational level, religiosity, and a number of other individual characteristics in thirteen Western European and five Eastern European countries. To measure the influence of changes in the societal context, I enriched the individual-level data with contextual economic and cultural indicators for each country and survey year, retrieved from the Organisation of Economic Co-operation and Development (OECD) and Eurostat, the statistical office of the European Union.

1.4.2 Methods

In this dissertation, I use different methods to test the mechanisms that I proposed for the relationship between societal developments and changes in cultural conservatism. In Chapter 2 and Chapter 3, I aim to explain trends in dimensions of cultural conservatism at the macro-level as a result of changes in the associations between important individual
characteristics and cultural conservatism, as well as shifts in the distribution of these characteristics in the population. To disentangle these two explanations and to estimate their actual contribution, I conduct counterfactual simulations. These simulations, also called purging, are based on the method described by Clogg (1978), and further developed and employed by Te Grotenhuis, Eisinga, and Scheepers (2004). This method allows to simulate new mean levels of support for cultural conservatism in the sample under the condition that either the individual associations or the distributions of individual characteristics in the sample would not have changed over time. For a straightforward example of this method I refer to the Appendix of Chapter 1. Because the sampling distribution of the simulated mean levels of cultural conservatism is unknown, I use a bootstrap procedure to test the significance of the contribution of these explanations to trends in cultural conservatism.

In Chapter 2, I focus on changes in the associations between individual characteristics and ethnic prejudice as an explanation for the aggregate trend in ethnic prejudice in the Netherlands. I employ multivariate linear regression analyses to establish the associations of education, church membership, and church attendance with ethnic prejudice in each survey year and I investigate changes in support for ethnic prejudice within each category of educational attainment, church membership, and church attendance. The outcomes are subsequently used in counterfactual analyses to estimate and decompose the contribution of these changes to the aggregate trend in ethnic prejudice in the Netherlands, while simultaneously accounting for shifts in the distribution of these characteristics due to educational expansion and secularisation.

In Chapter 3, I analyse the extent to which changes in aggregate support for gender egalitarianism in the Netherlands can be explained by shifts in the social structure of the population due to the demographic processes of cohort replacement, educational expansion, secularisation, and women’s increased labour force participation. To separate the effect of birth cohort from the effects of period and age, I use constrained generalised linear regression models (CGLIM) (Mason et al., 1973) with a theoretically informed restriction on the effect of age. This approach is discussed in detail in Chapter 3. I apply counterfactual simulation analyses to the outcomes of these models to estimate the separate contribution of cohort replacement, educational expansion, secularisation, and the rise of female labour force participation to the trend in support for gender egalitarianism. All analyses are performed for men and women separately, because men and women have different interests in gender equality and may respond differently to questions about gender egalitarianism (Ciabattari, 2001; Jennings, 2006).

In the last two chapters, I analyse the direct influence of the societal context on people’s support for cultural conservatism. Changes in the societal context may account for trends in cultural conservatism. In Chapter 4, I replace the effects of birth cohort and period with theoretically relevant contextual indicators at the province level. This approach has been
proposed as an alternative way to identify the effects of period, cohort, and age (besides restricted APC models), and may provide a more substantive theoretical interpretation of period and cohort effects (Rodgers, 1990). I use multivariate regression analyses to simultaneously estimate the influence of cohort- and period-specific contextual indicators of educational expansion, secularisation, and the feminisation of the labour force, while controlling for age effects. To prevent the estimates from being confounded with age, I apply the same restriction on age as in Chapter 3. The analyses are performed separately for men and women to investigate whether the effects differ for men and women.

In Chapter 5, I focus on the influence of economic and cultural conditions, and sudden changes herein, on support for authoritarian values in Europe. These developments may have counterbalanced the liberalising impact of educational expansion and secularisation. I employ multilevel regression analyses with individuals nested in country-year combinations. This approach takes account of the nested structure of the data. Because I am interested in variation in authoritarian values within countries across time, I include a dummy variable for each country to account for unobserved country characteristics. The analyses are performed for Western and Eastern Europe separately, because the level of support for authoritarian values, as well as its explanations, may differ between Western and Eastern Europe.

Table 1.1 summarises the data sources and methods of the empirical chapters.

Table 1.1 | Overview of data sources and methods of the empirical chapters

<table>
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1.5 Overview of the empirical chapters

Chapter 2: The paradox of rising ethnic prejudice in times of educational expansion and secularisation in the Netherlands, 1985-2011

In Chapter 2, I investigate the trend in ethnic prejudice in the Netherlands. Despite rising educational levels and declining religious affiliations, it seems that the Dutch have increasingly expressed ethnic prejudice over the past decades. I propose two possible theoretical explanations for this apparent paradox. First, the rise in ethnic prejudice could have been so strong, that it has offset the liberalising impact of educational expansion and secularisation. Second, the individual relationship between having a higher educational level and/or being non-religious, and rejecting ethnic prejudice could have decreased over time. As a consequence, increases in the shares of highly educated and non-religious individuals in the population have not automatically been accompanied by the expected decline in ethnic prejudice.

In order to test these theoretical explanations, I examine whether higher educated people and non-religious people have become more prejudiced over time than others, and, if so, to what extent these changes have contributed to the observed rise in ethnic prejudice in the Netherlands. I use nationally representative data from five waves of cross-sectional surveys (SOCON) collected in the Netherlands between 1985 and 2011. To test the unique contribution of changes in ethnic prejudice within each category of educational attainment, church membership and church attendance, I use counterfactual simulations. This method allows to investigate whether the observed rise in ethnic prejudice would still be present if the levels of ethic prejudice within specific categories of education and religious affiliation had not changed over time (over and above the overall increase in ethnic prejudice), while taking into account the rising shares of higher educated and non-religious individuals in society.

The results show that support for ethnic prejudice has indeed increased in the Netherlands between 1985 and 2011. Although people’s educational levels appear an important determinant of lower levels of ethnic prejudice, the rise in ethnic prejudice was stronger among higher educated individuals in particular. The liberalising influence of educational expansion has consequently been smaller than expected. In addition, I hardly find any differences in ethnic prejudice between religiously affiliated and non-affiliated individuals in the Netherlands. It is therefore that the rising shares of non-religious people in the Dutch population have not automatically resulted in a decline of prejudice. Moreover, the overall rise in ethnic prejudice has been stronger than the gradual processes of educational expansion and secularisation could compensate for, which suggests that certain societal developments have offset the liberalising influence of educational expansion and secularisation.
Chapter 3: The relationship between societal change and rising support for gender egalitarianism among men and women: results from counterfactual analyses in the Netherlands, 1979-2012

In Chapter 3, I examine the widely theorised relationship between shifts in the social, cultural, and economic structure of the population, and rising support for gender egalitarianism in the Netherlands between 1979 and 2012. Despite theoretical speculations, the actual contribution of demographic changes in the population to the trend in support for gender egalitarianism has been hardly quantified in previous research. I therefore analyse the exact contribution of shifts in the composition of the population due to cohort replacement, educational expansion, secularisation, and changes in labour force participation to the trend in gender egalitarianism. In addition, I investigate whether the trend in gender egalitarianism, as well as its explanations, differ between men and women.

I use data on people's support for gender egalitarianism with regard to the care for little children from 16 cross-sections of nationally representative surveys (CV), which were collected in the Netherlands between 1979 and 2012. First, I estimate constrained age-period-cohort regression models, and I subsequently perform counterfactual simulations on the outcomes. This method allows to investigate how support for gender egalitarianism would have developed between 1979 and 2012 if the demographic composition of the Dutch population had not changed in this period.

This study shows that support for gender egalitarianism indeed increased between 1979 and 2012, albeit stronger among women than men. Changes in women's demographic composition in society could well explain the rise in gender egalitarianism among women. Especially the replacement of older female cohorts by younger ones seems to have propelled support for gender egalitarianism. By contrast, only a small part of men's increase in support for gender egalitarianism can be attributed to cohort replacement, because the differences in support for gender egalitarianism between older and younger male cohorts are small. The increase of educational levels in the population has also contributed somewhat to the trends, but the impact of secularisation and the rise of women's labour force participation is limited. Apparently, either the individual-level effects religiosity and employment status or shifts in the distribution of these characteristics in the population were not strong enough to exert a substantive influence on aggregate support for gender egalitarianism.

Chapter 4: Cohort and period explanations for the upward trend in support for gender egalitarianism in the Netherlands, 1979-2006

Chapter 4 builds upon the previous chapter by further exploring why support for gender egalitarianism has increased over time, and across Dutch birth cohorts in particular. Structural and cultural developments such as educational expansion, declining religiosity, and the rise of women's employment have not only shifted the composition
of the population, but have likely also changed the normative societal discourse. Despite theoretical speculations, however, few studies have empirically tested why people living and growing up under different societal circumstances vary in their support for gender egalitarianism. I therefore explore to what extent the upward trend in support for gender egalitarianism can be explained by specific changes in the historical and contemporary societal context. I use levels of educational expansion, secularisation, and women's labour force participation as theoretically relevant proxies for the societal context to which people are exposed. In addition, I investigate whether these explanations differ between men and women.

I use data from 14 waves of cross-sectional surveys (CV) collected in the Netherlands between 1979 and 2006. I enriched these data with contextual information at the province level per birth cohort and survey year, retrieved from Dutch population censuses and labour force surveys. The influence of period- and cohort-specific contextual indicators is analysed simultaneously in multivariate regression analyses, controlled for age and individual characteristics.

The results reveal that educational expansion has contributed to the rise in gender egalitarianism, especially among women. Being socialised in a more highly educated context during the formative years is a strong indicator of support for gender egalitarianism. This suggests that educational expansion has induced more gender egalitarianism in each subsequent cohort. Periodic exposure to a context in which educational levels of the population are higher exerts an additional influence on people's support for gender egalitarianism, independent of their own social position or the birth cohort they belong to. I find that the contribution of secularisation in explaining the rise in gender egalitarianism is modest, whereas exposure to higher levels of female labour force participation could not in itself explain the upward trend in support for gender egalitarianism and may even have induced a counter-reaction to gender egalitarianism.

Chapter 5: Changes in support for authoritarian values in Western and Eastern Europe in times of insecurity, 2002-2014

In Chapter 5, I analyse recent changes in support for authoritarian values in Europe, and to what extent these changes can be explained by different economic and demographic developments. Based on the scarcity hypothesis, I propose that economic development, secularisation and educational expansion should have decreased Europeans' support for authoritarian values, whereas the recent economic crisis and mass immigration should have increased support for authoritarian values. In addition, I aim to explore to what extent these explanations differ between Western and Eastern European countries.

To test these expectations, I use data from 18 countries in seven waves of the European Social Surveys (ESS) 2002-2014, enriched with contextual economic and cultural indicators. I perform stepwise multilevel regression analyses for Western and Eastern Europe.
separately, including contextual indicators, sudden changes in these indicators, country
dummies, and individual characteristics.

The results show that support for authoritarian values in Europe have, on average,
remained rather stable over time, albeit at higher levels in Eastern Europe than in Western
Europe. Despite little variation within countries over time, I show that changes in
support for authoritarian values can partly be explained by economic and demographic
developments in national contexts. In contrast to the expectation derived from
modernisation theory, support for authoritarian values in Western Europe appears to
be higher in times of higher levels of economic prosperity. In both Western and Eastern
Europe, support for authoritarian values is stronger in times of sudden economic decline,
which may explain the slight increase in support for authoritarianism in Europe during
the economic crisis. I find no influence of educational expansion on Western Europeans’
support for authoritarian values, once controlled for levels of economic prosperity, but
continuing secularisation seems to have reduced support for authoritarian values in
Western Europe. In Eastern Europe, educational expansion has contributed to a slight
increase rather than a decrease in support for authoritarian values, reflecting the legacy
of the former communist regimes. Although secularisation has also taken place in Eastern
Europe, this process has not influenced Eastern Europeans’ support for authoritarian
values. Rising immigration seems unrelated to support for authoritarian values when the
economic situation is taken into account.

1.6 Conclusions

Over the past decades, Europe has witnessed mass expansion of educational levels and
substantial declines in church membership, church attendance, and religious beliefs.
These processes have fundamentally reshaped the socio-demographic composition
of European societies. In this dissertation, I explored to what extent these societal
developments have been accompanied by changes in ideological views from conservative
to more progressive. I focused on three dimensions of cultural conservatism which reflect
the underlying value of cultural freedom, as conceptualised in the work of the Dutch
sociologist Middendorp (1978). I compared people’s responses to questions regarding
ethnic prejudice, gender egalitarianism, and authoritarian values in the Netherlands and
in other European countries, which were collected with representative surveys at different
moments in time during the past decades. At this point, it is time to take stock of the role
of educational expansion and secularisation. To what extent have these developments
indeed contributed to liberalising trends in cultural conservatism?

The trend in ethnic prejudice

Between 1985 and 2011, people’s support for ethnic prejudice increased rather than
decreased in the Netherlands. So why has the expected liberalising trend in ethnic
prejudice not taken place, despite educational expansion and secularisation? The answer is threefold. First, the influence of educational expansion has been smaller than expected, because the differences in ethnic prejudice between higher and lower educated individuals have declined. Second, the increase in the shares of secular individuals hardly affected the level of ethnic prejudice in society, because the differences in prejudice between religiously affiliated and secular individuals were small to begin with. Third, the liberalising potential of educational expansion and secularisation has apparently been offset by certain societal pressures, which seem to have induced a general rise in ethnic prejudice among the entire Dutch population.

These findings are in line with theories of individualisation (Bauman, 2012; Beck & Beck-Gernsheim, 2002; Felling et al., 2000), which propose that people’s social background and membership of institutions have to some extent lost their determining influence on people’s attitudes and behaviour. Consequently, people may have become increasingly susceptible to societal uncertainty and threats. The persistent inflow of both economic and political migrants along with fluctuating numbers of refugees, for example, may have induced perceptions of ethnic threat and ethnic prejudice in society (Coenders & Scheepers, 1998; Hatton, 2016; Meuleman et al., 2009), in particular with regard to Muslims (Savelkoul, Scheepers, Tolsma, & Hagendoorn, 2011; Strabac & Listhaug, 2008). Even higher educated individuals may not be immune to such perceptions of threat. In addition, ethnic minorities and immigrants have become increasingly framed as undermining the liberal Dutch values. This may have gradually legitimised the expression of prejudice against ethnic minorities.

The trend in gender egalitarianism
With regard to support for gender egalitarianism, Dutch people’s responses have shifted in a less conservative direction between 1979 and 2012. The rise is stronger among women than among men. Educational expansion appears to play an important role in explaining this upward trend. For a small part, this is due to the rise in the share of higher educated individuals – who are generally more supportive of gender egalitarianism – in the population. Much more pronounced, however, is the direct influence of educational expansion in shaping people’s attitudes, in particular during the formative years but also later in life. In line with theories of socialisation (Inglehart, 1990, 1997; Mannheim, 1952), this dissertation shows that people who have been socialised in times of higher educational levels in society are more supportive of gender egalitarianism. The replacement of birth cohorts therefore substantially contributed to the rise in gender egalitarianism, in particular among women.

Moreover, educational expansion has exposed all individuals in society to a more highly educated societal context. As a consequence, people may have increasingly adopted the more egalitarian norms that prevail in such context regardless of their social position or birth year, which provides an additional explanation for the upward trend in support
for gender egalitarianism in the Netherlands. The findings of this study therefore also support the perspective of exposure and life-long openness to change, which argues that societal circumstances or events affect all individuals who are exposed to such conditions at a particular moment in time (Alwin & McCammon, 2003). Educational expansion thus serves as an important indicator of a changing normative societal climate in which people grow up and live. The contribution of educational expansion to the trend in gender egalitarianism is stronger for women than for men, suggesting that women have a greater interest in challenging existing gender structures and promoting gender equality (Bolzendahl & Myers, 2004; Dotti Sani & Quaranta, 2017). It is women from younger cohorts who appear to be the forerunners in the process towards gender egalitarianism.

Secularisation plays a less decisive role in explaining trends in gender egalitarianism. Although people who are religiously affiliated and who attend church generally adhere to more traditional norms about gender, the decline in the shares of people who attend church in the Netherlands only marginally contributed to the rise in gender egalitarianism in the period that I studied. As yet, I cannot exclude that the influence of secularisation would have been stronger when analysed over a more extended time period. In addition, I found that socialisation in, and exposure to a more secularised societal context slightly increased people’s support for gender egalitarianism. Thus, next to educational expansion, secularisation has also had some liberalising influence on support for gender egalitarianism, but its influence was limited.

In addition to the role of educational expansion and secularisation, I analysed the influence of women’s increased labour force participation. In contrast to widely theorised propositions (e.g., Banaszak & Plutzer, 1993; Brooks & Bolzendahl, 2004; Cotter et al., 2011; Mason & Lu, 1988), demographic shifts in the labour force hardly contributed to the rise in gender egalitarianism in the Netherlands between 1979 and 2012. A possible explanation is that the difference in gender egalitarianism between employed and non-employed women is not very substantial in the Netherlands, and the rise in women’s labour force participation has apparently not been strong enough to induce more support for gender egalitarianism at the societal level.

Growing up or living in times of high female labour force participation even seems to have reduced support for gender egalitarianism when educational expansion was taken into account. This finding may not be as surprising as it seems, since Dutch women’s labour force participation remained stable at a fairly low level during the first half of the 20th century and has only taken off substantially since the late 1980s, while the trend in support for gender egalitarianism by that time already started to slow down. Moreover, women’s increased labour force participation may have evoked a counter-reaction in people’s support for gender egalitarianism. One explanation for such reaction could be that women have adopted more traditional views on men’s and women’s role in child care as a way to deal with the double burden of career expectations and family responsibilities.
(Damaske, 2013; Johnston & Swanson, 2006; Van der Lippe & Van Dijk, 2001). Indeed, full-time working Dutch women still spend more time on household tasks and child care than Dutch men (Merens & Van den Brakel, 2014). Another possible explanation is that female labour force participation has raised concerns in society about good motherhood, which may have intensified a motherhood ideology that stresses mothers’ responsibility for the child’s well-being (Douglas & Michaels, 2005; Hays, 1996). Such a counter-reaction may also explain the slowdown of people’s support for gender egalitarianism in the Netherlands during the second half of the 1990s, although further research is clearly warranted.

**Trends in authoritarian values**

Widening my scope to the larger European context, I found no clear trend towards lower support for authoritarian values in Western and Eastern European countries between 2002 and 2014. Educational expansion has not contributed to a liberalisation of authoritarian values in Western Europe: in times of a more highly educated societal context, people did not support authoritarian values significantly less. By contrast, in Eastern Europe, people even attached more importance to authoritarian values with the continuous expansion of education. This supports the notion that the influence of education on liberal values is conditional on which values are transmitted in educational systems (Weil, 1985). In Eastern European countries, the content of school curricula may echo the legacy of the former communist regimes, with a focus on obedience and conformity (Dobbins & Kwiek, 2017; Kováts, Heidrich, & Chandler, 2017; Mishler & Rose, 2002). Secularisation exerted a small liberalising influence on support for authoritarian values in Western Europe, but not in Eastern Europe.

In addition, I analysed the influence of recent changes in the economic and cultural context in European societies. In contrast to modernisation theory (Inglehart, 1997), Western Europeans’ support for authoritarian values increased rather than decreased with rising levels of economic prosperity. This suggests that economic development does not automatically contribute to an ever declining emphasis on authoritarian values beyond a certain level of existential security, which challenges the assumption that modernisation is an irreversible and unidirectional process. Although economic prosperity continues to rise in Western Europe, people may have become more aware of the limits and darker sides of economic growth, and their sense of existential security may have become increasingly threatened.

The economic crisis has likely intensified perceptions that financial security and stability cannot be taken for granted (Mols & Jetten, 2017). Indeed, in both Western and Eastern Europe, the economic crisis appeared to be partly responsible for the small increase in support for authoritarian values between 2008 and 2012. This is in line with the scarcity hypothesis, which predicts that conditions of economic insecurity increase the importance that people attach to authoritarian values (Inglehart, 1997, 2008). The findings also support the idea that it is sudden changes in the societal context that affect people’s attitudes in particular (Olzak, 1992).
Overall conclusion
This dissertation demonstrates that educational expansion and secularisation have indeed contributed to trends in several dimensions of cultural conservatism in the Netherlands and in Europe over the past decades. However, the liberalising influence of these developments is neither linear nor universal. First, the exact contribution varies between the different dimensions of cultural conservatism that were studied. The liberalising influence is more pronounced regarding gender egalitarianism, but less regarding ethnic prejudice and authoritarianism. Second, the contribution of educational expansion and secularisation is not equally strong for everyone, nor is it present in every time period or context. Some groups in society seem more responsive to societal conditions, depending on their interest or social position. Third, as far as the processes of educational expansion and secularisation have had a gradually liberalising impact, several developments have counterbalanced this effect. Contemporary changes in the national context, such as worsening economic conditions, act as a cross-pressure against the liberalising influence of educational expansion and secularisation. Such developments in the national context may account for deviations from the supposed liberalising trend in cultural conservatism, such as the slowdown of gender egalitarianism in the 1990s, the increase in ethnic prejudice over the past decades, and stability of authoritarian values since the turn of the century.

1.7 Directions for future research
This dissertation leaves several questions unanswered and raises new ones. I propose a few directions for future research that may provide answers to these questions. First, in this dissertation I focused on the cultural dimension of the progressive-conservative antithesis that refers to the approval or rejection of values of individual freedom. The economic dimension, referring to the underlying value of equal economic opportunities, is not covered in this dissertation. Cultural conservatism in turn consists of several subdimensions, which are only partially covered by the three dimensions that I explored in this study (Van de Vijver & Leung, 1997). This leaves the question unanswered whether the trends and explanations identified in this dissertation also apply to other dimensions of cultural conservatism, such as attitudes towards abortion and euthanasia, tolerance towards homosexuals and other sexual minorities, other dimensions of gender equality, prejudice against other out-groups, or questions about civil liberties such as freedom of speech. A lack of cross-sectional data covering an extended period of time often impairs answers to these questions. I therefore advocate the continuation of data collection with surveys containing repeated measurements that are comparable over time.

In addition, this dissertation mainly focused on the Netherlands. Although similar societal developments have taken place in other (western) countries, the degree of change, as well as its impact on trends in cultural conservatism may differ across countries or regions. For
example, I found that obtaining higher education in Eastern European countries was related to more support for authoritarian values rather than less. The liberalising potential of educational expansion thus seems to depend on the specific national history (Inglehart & Baker, 2000; Weil, 1985) and the content of school curricula (Quillian, 1996). Future research could establish whether the results of this study can be generalised to other contexts.

Besides educational expansion and secularisation, western societies have witnessed other developments that have changed both the socio-demographic composition and the normative context of these societies, such as urbanisation, declining fertility, increasing divorce rates, and changing living arrangements. Questions about the influence of such developments remain unanswered, however, because appropriate and valid contextual indicators that cover a substantial number of birth cohorts and time periods are scarce, if available at all. Collecting such contextual indicators to empirically test the theoretical speculations about the influence of these developments provides a promising direction for future research.

The rise of female labour force participation is another frequently proposed explanation for social change. By contrast, however, I found that this measure could not explain the rise in support for gender egalitarianism in the Netherlands when accounted for rising educational levels. Exposure to higher levels of female labour force participation even seemed to induce lower support for gender egalitarianism. I proposed that the strong motherhood ideology in the Netherlands, which seems to linger as a residue of Christian norms regarding the role of women in society (Voas, McAndrew, & Storm, 2013), could possibly account for this unexpected finding. Despite women’s increased labour force participation, gendered divisions of labour persist in both the public and private domain. For example, Dutch women work part-time, the majority works in traditionally female sectors such as education and care, and full-time working women in the Netherlands generally spend more time on household tasks and childcare than men (Merens & Van den Brakel, 2014). Future research should further explore the role of female labour force participation – and mother’s employment in particular – in explaining trends in public support for gender egalitarianism, taking into account occupational segregation and part-time employment.

In addition, the influence of social movements and networks, policies, political elites, role models such as public figures, the media, and specific events remains overlooked in this study. Recently, social media have become increasingly influential in the public debate. Moreover, people are not only exposed to conditions and developments at the level of society or province, but also to their more immediate social environment such as their family, school, workplace, and neighbourhood. Future research would benefit from including contextual indicators that are closer to people’s direct living environment to analyse their contribution to changes in cultural conservatism over time.
Lastly, the mechanisms that lie behind the influence of educational attainment and religiosity at the individual level received little attention in this dissertation. For example, several explanations for the liberalising influence of education on conservatism have been proposed and tested, but the empirical evidence regarding the underlying determinants remains ambiguous (Easterbrook, Kuppens, & Manstead, 2016; Hello et al., 2006; Surridge, 2016; Vogt, 1997). Next to an actual influence of education on people’s attitudes, social desirability and selection may play a role. That is, the more progressive views of higher educated individuals may be an artefact because higher educated people know how to respond to questions in surveys (Jackman & Muha, 1984), or because children and adolescents who express less conservative attitudes end up at higher educational levels with the help of their parental background (Lancee & Sarrasin, 2015). Understanding the underlying mechanisms of the effects of education and religiosity, for example benefitting from a panel design, may provide further insights into the liberalising potential of rising educational levels and declining religiosity. In addition, more research is needed to investigate why certain groups in society have changed their attitudes more strongly than others, and how people respond to changes in the social context throughout the life course. Panel studies may be employed to analyse such changes within individuals over time, whereas (survey) experiments and qualitative studies could be used to get more in-depth knowledge about the motivations behind people’s attitudes and values.

1.8 Implications

1.8.1 Implications for the study of social change

The findings of this dissertation have several implications for research on social change. These implications are not limited to the study of cultural conservatism, but in principle apply to research on any trend in public attitudes or behaviour over time.

First, theories of social change are often stated in very general terms. As a consequence, additional assumptions are needed to empirically test these theories. By integrating macro- and micro-level perspectives, more specific hypotheses can be derived to answer questions such as to what extent changes in the societal context have contributed to trends in cultural conservatism, and why, among whom, where, and when that has happened. For example, I have proposed that formulating and testing hypotheses on why people differ across birth cohorts and over time allows for a more direct test of the theoretical propositions of cohort socialisation and periodic exposure as explanations for social change. The study of social change would theoretically benefit from further specifying why, and under what conditions changes in public attitudes can be observed.

Second, since theories about the influence of the social context are mostly stated in terms of changes, the literature would benefit from comparisons over time based on data from
as many points in time as possible. To date, conclusions about the influence of changes in the societal context over time are still regularly drawn on the basis of static analyses comparing different countries at one moment in time. Previous research has shown that such conclusions are not necessarily generalisable to changes within a particular context over time (Te Grotenhuis et al., 2015). It is therefore important to continue the collection of repeated cross-sectional data on individuals’ attitudes and behaviour, as well as macro-level indicators, that allow for comparisons across time. Moreover, this dissertation demonstrated that the existing research on social change can be extended with studies that include sudden changes in macro-level conditions, which allows for a more stringent test of hypotheses regarding changes in the societal context.

Third, I have demonstrated that the impact of demographic changes on trends in cultural conservatism depends on a combination of changes in the association between individual characteristics, and shifts in the distribution of these characteristics across the population. Hence, future research should take into account that either may change over time in possibly different directions. I showed that counterfactual simulations can be used to separate the influence of changes in individual associations from compositional shifts.

Lastly, scholars of social change face the impossibility of identifying age, period, and cohort effects. In this dissertation, it was shown that it is possible to estimate the effects of age, period, and cohort simultaneously by constraining one of the effects. Such constraint should be based on strong theoretical assumptions that can be empirically supported, since the estimates are only unbiased if the constraint is valid. Moreover, sociologists might also (or principally) be interested in the underlying determinants of period and cohort effects, especially if they aim to test expectations derived from the theoretical perspectives of cohort socialisation and exposure. Research on period and cohort explanations of social change can be fruitfully extended by replacing the effects of period and cohort with theoretically relevant indicators of specific conditions or developments that supposedly underlie these effects. This approach is more informative than the mere decomposition of age, period, and cohort effects, for it yields insight into the possible root causes of social change.

1.8.2 Societal implications

The conclusions of this dissertation may also have implications for Dutch society and Europe as a whole. The dimensions of cultural conservatism that I studied relate to issues that have received considerable attention in contemporary political and public debates. One of these issues concerns the rise of ethnic diversity and its consequences for social cohesion. Immigration of refugees and economic migrants, in particular from Muslim majority countries, has recently incited heated debates in Europe, including the Netherlands. The findings of this dissertation indicate that exclusionary reactions towards ethnic out-groups have their roots in the slowly growing ease with which people seem to express prejudice.
towards ethnic minorities. It appears that ethnic minorities and immigrants – Muslims in particular – have become increasingly framed as undermining Dutch progressive values (Spierings, Lubbers, & Zaslove, 2017). Ironically, the liberal values that have been the basis of tolerance towards different out-groups have become a source of exclusion. This may have detrimental consequences for interethnic relations and social cohesion in society.

Another issue that is high on the policy agenda is gender equality. This dissertation highlights that support for gender egalitarianism has become increasingly widespread among the Dutch public, which may pave the way for a more egalitarian division of work and family responsibilities, and equal opportunities for men and women (Charles, 2011; England, 2010; Epstein, 2007; Fortin, 2005). Women's improved position in Dutch society notwithstanding, there are still domains in which actual progress is slow. For example, women continue to be underrepresented in politics and in management positions (Portegijs & Van den Brakel, 2016), and women's increased labour force participation has not yet been matched with men's equal involvement in traditionally “feminine” tasks, such as family responsibilities. Despite the rise in support for gender egalitarianism, stereotypical expectations about men's and women's roles and behaviour have by no means disappeared in Dutch society. This affects the choices that men and women make in their everyday lives. Emancipation policies could therefore be aimed at removing structural barriers and addressing cultural expectations that impede further progress towards gender equality.

In the wake of increasing electoral success of populist, conservative, and authoritarian political parties and leaders, the media have speculated about a supposed rise in authoritarianism among the public. This dissertation puts these speculations in perspective by highlighting that a rise in support for authoritarian values has hardly taken place among the general European public. This finding raises questions about the legitimacy of political parties and leaders that aim to curb cultural freedom to preserve or restore the traditional social order. Why authoritarian regimes have nevertheless gained foothold in several Eastern European countries, such as Hungary and Poland, and why radical right parties have mobilised increasing shares of the Western European electorate, needs further investigation.

Lastly, this dissertation causes to reflect upon the future of religion and education in Dutch society. The Christian church seems to have lost its influence in determining attitudes, values and beliefs in the general population. Although its cultural heritage is still visible in the older cohorts, it is a matter of time before these older cohorts are replaced by new cohorts that have not been socialised with the traditional norms of the Christian church. Education, on the other hand, continues to be one of the most important determinants of cultural conservatism. The expansion of education has played an important role in reducing cultural conservatism in the population. However, the liberalising potential of education appears to depend on which values are transmitted in the educational system. The role of education in liberalising trends in cultural conservatism should therefore not be taken for granted.
CHAPTER 2

The paradox of rising ethnic prejudice in times of educational expansion and secularisation in the Netherlands, 1985-2011

A slightly different version of this chapter has been published as: Thijs, P., Te Grotenhuis, M., & Scheepers, P., (2017). The Paradox of Rising Ethnic Prejudice in Times of Educational Expansion and Secularization in the Netherlands, 1985–2011. *Social Indicators Research*, 139, 653-678. doi.org/10.1007/s1120 (open access). The authors jointly developed the idea and design for this study. Thijs wrote the main part of the manuscript and conducted the analyses. Te Grotenhuis and Scheepers substantially contributed to the manuscript. An earlier version of this chapter was presented at the Day of Sociology (Amsterdam, The Netherlands, 2015).
2.1 Introduction

Throughout the 20th century, Western European societies have witnessed a considerable increase in educational levels (Meyer et al., 1977; Schofer & Meyer, 2005). Over the same period, religious affiliation and religious participation have declined (Norris & Inglehart, 2011). The Netherlands is a leading country with regard to these processes of educational expansion and secularisation (Bar Haim & Shavit, 2013; Becker & De Hart, 2006). Since the second half of the 20th century, the educational levels of the Dutch have risen substantially (Tolsma & Wolbers, 2014; Van Hek, Kraaykamp, & Wolbers, 2015), which coincided with strong declines in religious affiliation, church attendance, and traditional Christian beliefs (De Graaf & Te Grotenhuis, 2008; Need & De Graaf, 1996).

Previous research consistently found higher educated individuals to show less ethnic prejudice than lower educated individuals (Coenders & Scheepers, 2003; Hello, Scheepers, & Gijsberts, 2002; Wagner & Zick, 1995). In addition, people with no religious affiliation and people who do not attend church were found less prejudiced than church members and regular churchgoers (Allport & Ross, 1967; Scheepers & Eisinga, 2015). Thus, education, religious affiliation, and attendance are statistically related to ethnic prejudice at the individual level, while the shares of highly educated and non-religious individuals have increased. Consequently, one would expect a longitudinal decline in prejudice at the national level.

Contrary to this expectation, however, levels of ethnic prejudice seem to have risen in the Netherlands. Several scholars found more widespread support for ethnic discrimination in the housing and labour markets since the late 1980s (Coenders et al., 2008; Coenders & Scheepers, 1998; Huijink & Dagevos, 2012), and stronger support for ethnic prejudice since the 1990s (Coenders, Lubbers, Grotenhuis, Thijs, & Scheepers, 2015). Similar changes have been found in other European countries (see Ceobanu and Escandell, 2010 for an overview). For example, Semyonov, Raijman and Gorodzeisky (2006) found a rise in anti-foreigner sentiment between 1988 and 2000 in 12 European countries. Other studies have shown considerable differences between European countries in the direction and magnitude of changes in anti-immigrant and anti-immigration attitudes since 2000, with attitudes recently becoming somewhat less negative in several countries, including among others the Netherlands, Germany and Poland (Hjerm & Bohman, 2014; Meuleman et al., 2009; Van Setten et al., 2017). Although there are indications that Dutch public opinions on ethnic diversity have recently become milder (Huijnk & Andriessen, 2016), the documented increase in ethnic prejudice over the past decades gives rise to a puzzling paradox: while the shares of higher educated people and non-affiliated people in Dutch society – known for their relatively lower levels of prejudice – have increased over time, prejudice against ethnic out-groups has yet increased.

There are two possible explanations for this. First, ethnic prejudice may have risen to such a degree throughout society that it has offset the impact of educational expansion
and secularisation. In this scenario, the levels of ethnic prejudice within all categories of education and religious affiliation have risen to the same extent. Second, the levels of ethnic prejudice may have risen particularly within the higher educated and the non-affiliated. As a consequence, educational expansion and secularisation could then hardly have reduced prejudice in society.

Few studies, however, have examined whether the relationship of education and religious affiliation with prejudice has changed over time and empirical findings are mixed. For example, Quillian (1996) and Jaspers (2008) showed that the effect of education increased over time in the U.S. and in the Netherlands, whereas Easterbrook, Kuppens, and Sears (2016) found stable relationships between education and anti-immigrant attitudes over time based on British and cross-national surveys. In their meta-analysis, Hall, Matz, and Wood (2010) found decreasing associations between extrinsic religiosity and ethnic prejudice over time, whereas Jaspers (2008) found no changes in the effect of church membership over time in the Netherlands.

In addition, if the relationship of education and religious affiliation with ethnic prejudice has indeed changed, it remains unclear which educational and religiously (non-)affiliated groups are responsible for these changes by expressing more or less ethnic prejudice over time. In a Dutch study, De Lange, Tolsma, and Wolbers (2015) found a widening gap in ethnic threat between higher and lower educated people, caused by a stronger increase among the latter. However, the authors only considered linear trends. We therefore examine whether the levels of ethnic prejudice within categories of education, church membership, and church attendance have changed over time at any (non-linear) rate.

Most importantly, it remains unknown to what extent these changes in the levels of ethnic prejudice can explain the longitudinal rise in ethnic prejudice despite educational expansion and secularisation. Although few studies considered the effect of changing levels of prejudice within particular groups, none of these studies took distributional shifts of these groups into account, which may have resulted in biased effects. To overcome this lacuna, we use counterfactual analyses (Te Grotenhuis et al., 2004). We examine whether the rise in ethnic prejudice is still present if the levels of ethnic prejudice within categories of education and religious affiliation would not have changed over time, while controlling for distributional shifts, i.e., educational expansion and secularisation. This leads to the following research questions: Have the higher educated and the non-affiliated become more prejudiced than others between 1985 and 2011? If so, to what extent have these changes contributed to the observed rise in prejudice in the Netherlands between 1985 and 2011, while taking into account educational expansion and secularisation?

Rising levels of ethnic prejudice may have detrimental consequences for interethnic relations in society. Ethnic prejudice may lead to negative intergroup behaviour, such as discrimination, exclusion or hostility (Allport, 1954). Feelings of exclusion
and discrimination may hamper ethnic minorities' social integration and increase withdrawal into one's own ethnic group, which could eventually result in radicalisation or criminalisation (Huijnk & Dagevos, 2012). Understanding to what extent the rise in ethnic prejudice can be explained by certain groups in society expressing more prejudice over time may inform policies aimed at reducing interethnic tensions.

2.2 Theory and hypotheses

2.2.1 Ethnic competition theory

On the individual level, ethnic competition theory has proven fruitful to explain differences in ethnic prejudice between the higher and lower educated (Coenders & Scheepers, 2003; Hello et al., 2002; Wagner & Zick, 1995), and between non-religious and religiously affiliated individuals (Allport & Ross, 1967; Scheepers & Eisinga, 2015; Scheepers, Gijsberts, & Hello, 2002). Competition between in-group members and ethnic out-group members over scarce economic or cultural resources poses a real threat to the social position of the in-group as a whole, and in particular to those competing more severely with ethnic out-groups (Blalock, 1967; Coenders, 2001). This encourages perceptions of interethnic threat, which in turn induce ethnic prejudice and exclusionism (Quillian, 1995; Scheepers, Gijsberts, & Coenders, 2002).

In general, ethnic minorities have more disadvantaged socio-economic positions and less education than the average population (Gijsberts, Huijnk, & Dagevos, 2012). Natives with lower education are more likely to hold similar economic positions to ethnic minorities than higher educated natives. Lower educated natives may therefore have stronger perceptions of threat from ethnic minorities over economic resources, such as jobs and social security benefits than higher educated individuals, which induces prejudice against ethnic minorities (Hello et al., 2002, 2006). Higher educated individuals may perceive less ethnic threat because they compete less with ethnic minorities, but also because they may be less susceptible to ethnic threat. It is argued that education increases awareness to alternative viewpoints and broadens people's perspectives, including ideas of cultural relativity and diversity (Gabennesch, 1972). As a consequence, higher educated individuals will be better able to recognise cultural expressions and more willing to accept cultural and ethnic differences (Manevska & Achterberg, 2013). Likewise, the educational system is argued to transmit democratic norms and values that emphasise individual and cultural freedom, and enables pupils to generalise these principles to minority groups (Vogt, 1997). The higher people's educational level, the longer their exposure to this "liberalising" influence of education and the less ethnic prejudice they have (Hello et al., 2002).

Competition between Dutch natives and ethnic minorities may also concern cultural resources, that is, belief systems and dominant cultural norms and values. Ethnic
minorities often belong to non-Christian religions and have different cultural norms and values, or are perceived as such by Dutch natives. Consequently, these conflicting values may be perceived as a threat to the central values of the in-group (Schneider, 2008; Stephan & Stephan, 2000), which could evoke prejudice against any ethnic out-group (Sniderman, Hagendoorn, & Prior, 2004). Religiously affiliated natives may perceive ethnic minorities’ beliefs as a threat to their own religious beliefs and practices, which would induce higher levels of prejudice among the religiously affiliated than among non-affiliated people (Coenders, 2001; McLaren, 2003).

2.2.2 Changing levels of ethnic prejudice: education

According to ethnic competition theory, actual economic competition increases perceptions of ethnic threat, in particular among those who are in similar socio-economic positions as most members of ethnic out-groups. During the second half of the 20th century, the number of low educated, unskilled migrants has increased in the Netherlands and the established minority groups maintained a disadvantaged socio-economic position compared to Dutch natives (Gijsberts et al., 2012; Gijsberts & Lubbers, 2014). Consequently, ethnic competition may have increased among lower educated individuals in particular, inducing higher levels of ethnic prejudice among the lower educated.

In addition, modernisation has considerably improved educational opportunities for children from lower socio-economic backgrounds (Breen & Jonsson, 2005). As a result, the group of lowest educated people in Dutch society has become smaller and more homogeneous, with fewer cognitive, financial, and social resources (Gesthuizen, De Graaf, & Kraaykamp, 2005), and less cultural capital (Manevska & Achterberg, 2013). Following the “losers of modernisation” thesis, the lowest educated categories in society lack sufficient cultural capital to get ahead in a rapidly changing world and find themselves in an increasingly vulnerable and isolated social position (Betz, 1994). As a result, lower educated individuals may have become more susceptible to perceptions of ethnic threat, inducing higher levels of ethnic prejudice among these individuals. Either perspectives predict that the average level of prejudice has risen because the lower educated – who already held more ethnic prejudice – have become even more prejudiced than before. We hypothesise that particularly lower educated people have become more prejudiced over time, which consequently increased the general level of ethnic prejudice in the Netherlands (H1a).

Although the established minority groups in the Netherlands still have a disadvantaged socio-economic position compared to the native majority, their educational levels and participation in senior or academic level occupations have improved over the past decades (Dagevos & Gijsberts, 2010; Gijsberts, 2004). Following ethnic competition theory, middle and higher educated natives may therefore have increasingly perceived economic threat from ethnic out-groups, inducing higher levels of ethnic prejudice among these categories. Lancee and Sarrasin (2015), for example, found that higher educated individuals
in Switzerland show more negative attitudes towards immigrants once they enter the labour market on which they compete with ethnic minorities.

Moreover, increased educational opportunities due to modernisation have likely resulted in a more heterogeneous group of higher educated individuals, with more variation in parental background, cognitive abilities, and cultural capital. Although scholars have demonstrated the importance of education in reducing people’s ethnic prejudice, others also found that part of the educational effect originates from differences in cultural capital (Manevska & Achterberg, 2013), or even from factors that influence people's level of ethnic prejudice before they attend secondary education, such as parental background (Lancee & Sarrasin, 2015). The heterogenisation of higher education may therefore imply that people who are more susceptible to ethnic threat have increasingly attained higher educational levels. As a result, higher educated individuals as a group may have become more prejudiced over time, thereby reducing the liberalising effect of educational expansion. Based on these arguments, we expect that the higher educated have converged towards the already prejudiced lower educated over time, which consequently increased the general level of ethnic prejudice in the Netherlands (H1b).

2.2.3 Changing levels of ethnic prejudice: church membership and attendance

Following ethnic competition theory, strong identification with a religious group, as well as the belief that one’s religion is the only true religion, increase (perceptions of) competition with out-group members from different religions (Ekici & Yucel, 2014; Glock & Stark, 1965; Scheepers, Gijsberts, & Hello, 2002). Due to immigration of in particular non-Christian migrants, cultural and religious diversity has increased considerably in the Netherlands. The percentage Muslims as part of the Dutch population has risen from 0.4 percent in 1971 (Statistics Netherlands [CBS], 2004) to 5 percent in 2012 (Maliepaard & Gijsberts, 2012). Hence, over time, Christian natives have likely perceived increasing threat from ethnic minorities belonging to other religions, especially in a secularising country as the Netherlands (Becker & De Hart, 2006; McLaren, 2003). As a consequence, people affiliated to Christian churches may have become more inclined to preserve their religious identity by stressing the boundaries between the Christian religious in-group and other (non-Christian) out-groups, increasing their levels of ethnic prejudice. Based on these arguments, church members and regular churchgoers may have become even more prejudiced over time. Thus, we expect that particularly church members (H2a) and regular churchgoers (H2b) have become more prejudiced over time, which consequently increased the general level of ethnic prejudice in the Netherlands.

On the contrary, the increased salience of cultural and religious threat posed by ethnic minorities may have also affected the non-affiliated part of the Dutch population. Due to modernisation and individualisation, the significance of traditional Christian norms
and values has diminished over the past decades (Felling et al., 2000; Inglehart, 1997). At the same time, the increasingly secular Dutch population has been confronted with rising numbers of ethnic minorities belonging to non-Christian religions (Maliepaard & Gijsberts, 2012). Hence, the debate on ethnic minorities has become increasingly centred around value conflicts. Ethnic minorities have often been framed as undermining liberal and democratic “Dutch” values, such as gender equality and tolerance towards homosexuals, which are particularly cherished by the secular part of the population (Koopmans, 2015; Vasta, 2007). It is argued that secular natives want to defend their liberal values against the perceived moral conservatism of ethnic minorities’ religions (Schuh, Burchardt, & Wohlrab-Sahr, 2012). This could have induced higher levels of prejudice among the non-affiliated in particular, thereby reducing the positive effect of secularisation. We therefore hypothesise that non-church members (H2c) and non-churchgoers (H2d) have converged towards the already prejudiced religiously affiliated over time, which consequently increased the general level of ethnic prejudice in the Netherlands.

2.3 Data and measurements

To test our hypotheses, we used data from the Socio-Cultural Developments in the Netherlands (SOCON) surveys. Between 1979 and 2011, seven cross-sectional waves were conducted, with each successive wave being a replication and extension of the previous waves (Eisinga et al., 2012). The methodological design of the repeated cross-sections has remained largely similar and comparable over time. Each survey consists of a representative sample of the Dutch population between 18 and 70 years, and contains questions on a wide variety of social issues derived from previously tested, valid, and reliable measurements. We used the surveys of 1985, 1995, 2000, 2005, and 2011, which were combined into one pooled data set. The surveys of 1979 and 1990 were excluded because comparable measures on ethnic prejudice were missing. Questions measuring ethnic prejudice were administered solely to respondents whose nationality and that of their parents and grandparents. Therefore, our study only includes native Dutch individuals.

2.3.1 Dependent variable

To measure ethnic prejudice, respondents were presented five statements indicating prejudice against ethnic out-groups: “With Moroccans you never know for certain whether they are going to be aggressive or not”, “Most people from Surinam work quite slowly”, “Gypsies are never to be trusted”, “Turks are backward” and “When you do business with Jews, you have to be extra careful” (Cronbach’s alpha = 0.77, see Table A2.1, Appendix Chapter 2). These statements are based on common stereotypes about Moroccans, Turks, and Surinamese, which are members of the three largest out-groups in the Netherlands, and gypsies and Jews, which had often been the object of prejudice and derogation in the past (Hagendoorn & Janssen, 1983). The items are a selection of a wider range of similar
items which were previously tested and often used to measure prejudice against ethnic minorities (Scheepers et al., 1990). Response categories on each statement ranged from (1) agree entirely to (5) do not agree at all, constituting a five-point Likert-scale. The response category never thought about was excluded from analysis.

In 1985 and 1995, the five questions on ethnic prejudice were filled out by a random subsample of the total sample in these waves, resulting in a total sample size of 5,530 respondents. To further limit the loss of cases on the dependent variable due to missing answers (1,256 respondents), we conducted multiple imputation of missing values in SPSS for respondents with a valid answer on at least three of the five items. Respondents with missing answers on more than two of the five items were excluded from the analyses. Five sets of imputed values were independently drawn, which were combined into one pooled set on which the analyses were performed. After imputation, 5,229 respondents with a valid answer were left.

Factor analysis of the five items indicated that the items refer to one single underlying dimension.1 Separate factor analyses per wave showed acceptable factor loadings and communalities, which were comparable across the surveys (see Table A2.1, Appendix Chapter 2). Factor scores were computed, representing the weighted linear combination of the five items.2 We subtracted the minimum value from the factor scores to have the dependent variable starting at zero. A higher score on the scale indicates more ethnic prejudice.

2.3.2 Independent variables

Educational attainment was measured as the respondent’s highest education completed after elementary school. Response categories were recoded into seven categories ranging from primary education to master’s or equivalent level and higher. Responses on the other category were treated as missing values (0.2 percent) and excluded from analysis. Between 1985 and 2011, the relative share of lower educated individuals decreased significantly from 14.3 to 2.8 percent for people with only primary education, while the relative share of highly educated individuals increased significantly from 3.5 to 11.4 percent for people holding a master’s degree or equivalent (see Figure A2.1, Appendix Chapter 2).

To measure religious affiliation, we used both church membership and church attendance. Respondents were first asked whether they considered themselves a member of a (Christian) church or religious community (yes/no). Next, respondents who answered yes were asked which church or religious community they considered themselves a member of. We

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1 Factor analyses performed before and after imputation yielded similar results.
2 Factor scores take account of the factor structure of the data and different weights are applied to items according to the factor loadings. The mean values on the ethnic prejudice scale calculated with factor scores were highly comparable to the mean values on a scale based on Likert scores.
combined these questions into one variable indicating church membership and reduced the response categories to Catholic, Protestant, other Christian, non-Christian, and non-member. We excluded individuals belonging to other Christian and non-Christian religions because of their marginal numbers in the sample (less than five percent), and because secularisation has mainly taken place within the Catholic and Protestant churches in the Netherlands (Becker & De Hart, 2006). Church attendance was measured by a question on the frequency at which one attends services of a church or religious community: about once a week, about once a month, once or twice a year or hardly ever/never. Respondents who had no valid answer on the variable for church attendance (0.2 percent) were excluded from analysis. Between 1985 and 2011, the relative share of people considering themselves non-religious increased significantly from 47.3 to 68.3 percent (see Figure A2.2, Appendix Chapter 2). The percentage hardly ever or never attending services of a church or religious community increased significantly from 43.1 percent in 1985 to 58.3 percent in 2011 (see Figure A2.3, Appendix Chapter 2).

2.3.3 Control variables

Birth cohort, sex, socio-economic position, degree of urbanisation, and province were included as control variables in the analyses, as these characteristics are shown to be related to the dependent variable (Coenders & Scheepers, 1998), and could possibly confound the relation of education, church membership, and church attendance with prejudice. Birth cohort was derived from the respondent’s birth year. A linearity test indicated that we could include birth cohort linearly in the analyses without significant loss of explanatory power. Sex was measured as male (0) or female (1). To obtain one measure for socio-economic position, the EGP classification of social class (Erikson, Goldthorpe, & Portocarero, 1983) and main activity of the respondent were combined. Degree of urbanisation was based on a measure of address density per square kilometre provided by Statistics Netherlands (Den Dulk, Van de Stadt, & Vliegen, 1992), divided in five categories. Province was measured as which of the twelve Dutch provinces the respondent was living in at the time of the interview. To control for possible non-linear relations between the dependent variable and the independent variables, dummy variables were created for each category of our individual and control characteristics except for birth cohort.

Missing values on the independent and control variables were deleted listwise, resulting in a sample size of 4,780 respondents in our analyses. See Table 2.1 for descriptive statistics of all variables in the analysis.

3 We controlled for the province respondents live in, because levels of prejudice differ considerably across the twelve Dutch provinces.

4 In the survey of 1985 a different categorisation was used which was not comparable with the address density measure of the other waves. Therefore, we classified the municipalities of the 1985 survey according to their score on degree of urbanisation in 1995. These data are retrieved from Statistics Netherlands (Statistics Netherlands, 1995).
Table 2.1 | Descriptive statistics of the dependent and independent variables

<table>
<thead>
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<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
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<td>1.74</td>
<td>0.88</td>
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<td>Educational attainment</td>
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<td></td>
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<tr>
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<tr>
<td>Degree of urbanisation</td>
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<td>0.20</td>
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<td>0.05</td>
<td></td>
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<td>Drenthe</td>
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<td>1</td>
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<td>0.07</td>
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<td>Gelderland</td>
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<td>Utrecht</td>
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<td>0.07</td>
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<tr>
<td>Noord-Holland</td>
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<td>0.14</td>
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<td>Zuid-Holland</td>
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<tr>
<td>Noord-Brabant</td>
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<td>0.13</td>
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<td>Limburg</td>
<td>0</td>
<td>1</td>
<td>0.09</td>
<td></td>
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</table>

Source: SOCON 1985-2011; N = 4,780.

2.4 Methods

To investigate whether and how prejudice has changed over time within the different categories of educational attainment, church membership, and church attendance, we used multivariate OLS regression models. To account for non-linear changes, we performed these analyses for each survey year separately. Next, we calculated mean levels of prejudice for each category of educational attainment, church membership, and church attendance, while controlling for all relevant variables. Secondly, we examined the relative contribution of these changes to the observed trend in prejudice in a counterfactual simulation analysis (Te Grotenhuis et al., 2004). We simulated the trend in prejudice as if the differential changes in prejudice within each category of education, church membership, and attendance had not taken place since 1985. We chose 1985 as a reference point, because educational expansion and secularisation were on their lowest in the period under study. We used the predicted levels of prejudice in 1985 within all categories of education, church membership, and church attendance as found in the multivariate regression models to estimate a new (simulated) mean level of prejudice in each subsequent survey year, while taking into account the rising shares of higher educated and non-religious individuals. The differences between the observed and the simulated trends in prejudice show to what extent the observed trend is due to differential changes in prejudice within categories of education, church membership, and church attendance between 1985 and 2011. See the Appendix of Chapter 1 for an explanation of this counterfactual simulation method using a straightforward bivariate example for two survey years.
2.5 Results

2.5.1 General and differential trends in prejudice

Figure 2.1 shows the general trend in ethnic prejudice over time. We observe a significant increase in prejudice against ethnic minorities (Moroccans, Turks, Surinamese, gypsies, and Jews) from 1.59 in 1985 to 1.89 in 2011 (on the scale ranging between 0 and 4.52).\(^5\) Between 1995 and 2000, and between 2005 and 2011 the change in ethnic prejudice was not significant.\(^6\)

![Figure 2.1 | The trend in ethnic prejudice in the Netherlands, 1985-2011](image)

Source: SOCON 1985-2011; N = 4,780.

Note: filled markers indicate a significant mean difference compared to the previous survey year. The grey area shows the 95% confidence interval.

---

\(^{5}\) Separate investigations of the five items revealed that three items showed a similar pattern, i.e., prejudice against Moroccans, Surinamese and gypsies has increased over the years, whereas two items deviated slightly from this pattern. To test for robustness of the findings, the multivariate regression model was tested on a scale based on these three items. The results did not deviate notably from the model including all five minority groups. As an additional robustness test, we estimated a model without Jews and Gypsies. The results are virtually similar to the model with all five minority groups included. We also estimated the model for Turks and Moroccans only, as it is argued that prejudice against Muslims in particular might have increased. Again, there are no substantial differences between this model and a model including all five minority groups.

\(^{6}\) The overall increase in prejudice is significant \((F = 23.11, p < .001)\). A post hoc Bonferroni test revealed that the change in the mean between 1995 and 2000 and between 2005 and 2011 was not significant at \(p < .05\) (two-tailed).
Table 2.2 shows the associations of education, church membership, and church attendance with ethnic prejudice per survey year, based on multivariate OLS regression analyses. For ease of interpretation, we transformed the regression coefficients in such way that the intercept represents the weighted (sample) mean level of prejudice in each year, while the dummy variable coefficients reflect the deviance from this overall sample mean (Sweeney & Ulveling, 1972; Te Grotenhuis et al., 2016). In line with previous research, Table 2.2 shows a positive relationship of educational attainment with prejudice. In each survey year, lower educated individuals held significantly more prejudice than average, while the higher educated (upper secondary education or higher) held significantly less prejudice than average. In 1985, for example, the mean level of prejudice among people with primary education lies 0.38 points above the average of 1.59. People with master’s or equivalent level show a prejudice level that lies 0.60 points below the average of 1.59. The standardised coefficient (beta) shows a considerable impact of education, which seems to have slightly decreased over time. The influence of church membership and church attendance on prejudice was very small, as indicated by the low standardised coefficients. Only in 2011 the categories of church membership added significantly to the model, as indicated by a significant beta-coefficient of 0.13, because Catholics were significantly more prejudiced than average, i.e., 0.23 points above the average of 1.89. Together, the characteristics in the model explained 24 percent of the individual variation in prejudice in 1985, which dropped to 12 percent in 2011.

To analyse whether and how ethnic prejudice has changed over time within categories of education, church membership, and church attendance, we calculated the controlled predicted mean levels of prejudice for each category (i.e., by adding the intercept to the coefficients from Table 2.2), which are presented in Table 2.3. To test whether the mean level of prejudice in each category has changed significantly between two subsequent survey years, we used a statistical test for the difference between two regression coefficients across independent samples as suggested by Paternoster and colleagues (1998).

Table 2.3 shows that the trend in ethnic prejudice developed differently within each category of educational attainment. Between 1985 and 1995, particularly higher educated people became more prejudiced, as their mean level of prejudice rose significantly from 0.99 (1.59-0.60) to 1.44 (1.72-0.28). Consequently, higher educated individuals converged towards the lower and middle educated. The last column of Table 2.3 shows the increase in prejudice between 1985 and 2011, which was stronger among the higher educational levels and weaker among people with vocational training. The strongest increase is found among people with a master’s degree or equivalent level (+0.59, significant). This can also be seen in Figure 2.2, in which we visualised the changes in ethnic prejudice among the lowest, middle and highest educated individuals.

Additional regression analyses indicated that the non-significant difference in prejudice between the categories of church attendance is partly due to the inclusion of church membership in the model.
Rising ethnic prejudice in the Netherlands

Table 2.2 | Unstandardised and standardised regression coefficients of educational attainment, church membership, and church attendance on ethnic prejudice, expressed as the deviance from the sample mean in each survey year

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
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<td></td>
<td>(N = 1,491)</td>
<td>(N = 743)</td>
<td>(N = 772)</td>
<td>(N = 1,029)</td>
<td>(N = 745)</td>
</tr>
<tr>
<td>B</td>
<td>Beta$a$</td>
<td>B</td>
<td>Beta$a$</td>
<td>B</td>
<td>Beta$a$</td>
</tr>
<tr>
<td>Intercept</td>
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<td>1.72***</td>
<td>1.71***</td>
<td>2.03***</td>
<td>1.89***</td>
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<td>Educational attainment</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary education</td>
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<td>.30**</td>
<td>.32**</td>
<td>.43***</td>
<td>.52**</td>
</tr>
<tr>
<td>Lower vocational</td>
<td>.21***</td>
<td>.29***</td>
<td>.32***</td>
<td>.25***</td>
<td>.24**</td>
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<tr>
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<td>.03</td>
<td>.20*</td>
<td>.16*</td>
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</tr>
<tr>
<td>Secondary vocational</td>
<td>.02</td>
<td>.05</td>
<td>.07</td>
<td>-.02</td>
<td>.02</td>
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<tr>
<td>Upper secondary</td>
<td>-.19**</td>
<td>-.16*</td>
<td>-.19*</td>
<td>.00</td>
<td>-.04</td>
</tr>
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<td>Bachelor’s or equivalent</td>
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<td>-.29***</td>
<td>-.22***</td>
<td>-.13**</td>
</tr>
<tr>
<td>Master’s or equivalent</td>
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<td>-.28**</td>
<td>-.26**</td>
<td>-.39***</td>
<td>-.31***</td>
</tr>
<tr>
<td>Church membership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-member</td>
<td>-.07</td>
<td>-.06</td>
<td>-.06</td>
<td>-.02</td>
<td>-.03</td>
</tr>
<tr>
<td>Catholic</td>
<td>.09</td>
<td>.10</td>
<td>.12</td>
<td>.08</td>
<td>.23**</td>
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<td>Protestant</td>
<td>.01</td>
<td>.07</td>
<td>.05</td>
<td>-.03</td>
<td>-.12</td>
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<td>Church attendance</td>
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<tr>
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<td>-.04</td>
<td>.00</td>
<td>-.02</td>
<td>-.04</td>
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<td>-.01</td>
<td>.04</td>
<td>.01</td>
<td>.06</td>
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<td>Yes, about once a month</td>
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<td>.17</td>
<td>-.06</td>
<td>.03</td>
<td>-.09</td>
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<tr>
<td>Yes, about once a week</td>
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<td>-.06</td>
<td>.08</td>
<td>.16</td>
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<td>Variance explained</td>
<td>24%</td>
<td>21%</td>
<td>15%</td>
<td>16%</td>
<td>12%</td>
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</tbody>
</table>

Source: SOCON 1985-2011; N = 4,780.

Note. Effects are estimated simultaneously and controlled for cohort, socio-economic position, sex, degree of urbanisation, and province. The analyses are performed on the pooled data set after missing imputation, in which the results of the five imputations are combined.

*a To obtain a standardised coefficient which summarises the effect of the dummy variables, we calculated a shear-coefficient for each set of dummy variables (Heise, 1972).

*p < .05, **p < .01, ***p < .001 (two-tailed).
Table 2.3 also shows significant increases in prejudice among Protestants, non-members and monthly churchgoers between 1985 and 1995, and among non-members and weekly churchgoers between 2000 and 2005. Yet, the last column of Table 2.3 shows that the overall increase in prejudice between 1985 and 2011 was strongest among Catholics (+0.43, significant) and weekly churchgoers (+0.48, significant), by which they diverged from the average prejudice level. Notwithstanding, the differences in prejudice levels between these groups remain very small.

Table 2.3 | Predicted mean levels of ethnic prejudice in each survey year per category of educational attainment, church membership, and church attendance (intercept + coefficient)

| Source: SOCON 1985-2011; N = 4,780. |
| Note: Controlled for cohort, socio-economic position, sex, degree of urbanisation, and province. |

| * significant mean difference (p < .05, two-tailed) as compared to the previous survey year, tested with a Paternoster test (Paternoster, Brame, Mazorolle, & Piquero, 1998). |

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<td>(N = 772)</td>
<td>(N = 1,029)</td>
<td>(N = 745)</td>
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<td>Intercept</td>
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<td>1.71</td>
<td>1.88*</td>
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<td>+0.30*</td>
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<td>2.03</td>
<td>2.31</td>
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<td>Lower vocational</td>
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<td>2.13</td>
<td>2.13</td>
<td>+0.33*</td>
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<td>1.78</td>
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<td>1.53</td>
<td>1.88</td>
<td>1.84</td>
<td>+0.44*</td>
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<tr>
<td>Bachelor’s or equivalent</td>
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<td>1.43</td>
<td>1.66*</td>
<td>1.76</td>
<td>+0.51*</td>
</tr>
<tr>
<td>Master’s or equivalent</td>
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<td>1.44*</td>
<td>1.45</td>
<td>1.49</td>
<td>1.58</td>
<td>+0.59*</td>
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<td>Church membership</td>
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</tr>
<tr>
<td>Non-member</td>
<td>1.52</td>
<td>1.66*</td>
<td>1.66</td>
<td>1.86*</td>
<td>1.85</td>
<td>+0.33*</td>
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<tr>
<td>Catholic</td>
<td>1.68</td>
<td>1.82</td>
<td>1.84</td>
<td>1.96</td>
<td>2.12</td>
<td>+0.43*</td>
</tr>
<tr>
<td>Protestant</td>
<td>1.60</td>
<td>1.80*</td>
<td>1.76</td>
<td>1.85</td>
<td>1.77</td>
<td>+0.17</td>
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<td>Church attendance</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>No, hardly ever/never</td>
<td>1.59</td>
<td>1.68</td>
<td>1.71</td>
<td>1.86*</td>
<td>1.84</td>
<td>+0.26*</td>
</tr>
<tr>
<td>Yes, once or twice a year</td>
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<td>1.76</td>
<td>1.88</td>
<td>1.94</td>
<td>+0.36*</td>
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<td>Yes, about once a month</td>
<td>1.63</td>
<td>1.89*</td>
<td>1.65</td>
<td>1.91</td>
<td>1.79</td>
<td>+0.16</td>
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<tr>
<td>Yes, about once a week</td>
<td>1.57</td>
<td>1.77</td>
<td>1.65</td>
<td>1.96*</td>
<td>2.05</td>
<td>+0.48*</td>
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</tbody>
</table>
2.5.2 Counterfactual analyses

To this point we have found considerable changes in levels of prejudice among the categories of educational attainment, while the changes within the categories of church membership and church attendance were limited (see Table 2.3 and Figure 2.2). Although prejudice on average rose significantly across all of these groups in society between 1985 and 2011, we found stronger increases among higher educated individuals, Catholics and weekly churchgoers. To test whether these differential changes have contributed significantly to the observed overall increase in prejudice, we used the outcomes of the multivariate regression analyses from Table 2.3 in a series of counterfactual simulations. Figure 2.3 graphically presents the observed trend in prejudice and the simulated trends resulting from simulations for which we held the levels of prejudice within each category of educational attainment, church membership and church attendance constant on the 1985 level, while taking into account the shifts in the distribution of these categories.
within the sample. The exact differences between the observed and simulated means and the corresponding bootstrapped confidence intervals are shown in Table 2.4.8

In Figure 2.3, the horizontal baseline (a) represents a simulated *null-model* with no change in the levels of prejudice within categories of education, church membership, and church attendance, and no shift in the distribution of these characteristics since 1985. The exact differences between the flat baseline (no trend) and the actual observed trend are shown in Table 2.4, row (a). The corresponding confidence intervals all indicate that the observed means differ significantly from the baseline mean in each survey year. To illustrate, the difference between the 1985 baseline mean and the observed mean in 2011 is 0.30 (that is the difference between the intercepts 1.59 and 1.89 from Table 2.2). The corresponding bootstrapped 95% confidence interval for this difference indicates that the true difference in the population is to be found between 0.26 and 0.33.

![Figure 2.3 | Observed and simulated trends in ethnic prejudice with differences between social categories on the 1985 level](image)

Source: SOCON 1985-2011; N = 4,780.

---

8 The sampling distribution of the differences between the observed and the simulated means is unknown and depends on the estimated and simulated effects, on the observed distributions, and the co-variances between all variables. Therefore, we used a bootstrapping procedure to empirically determine the shape of the sample distribution for each estimated difference in Table 2.4. For each survey year, we drew 25,000 bootstrap samples (5,000 for each of the 5 imputation data sets) with replacement from the original sample. Based on these samples we could determine the lower and upper boundaries of the 95% confidence interval to test the significance of the difference between the observed means and our simulated means. For instance, the difference between the total simulated mean in 2011 and the baseline mean (the observed mean in 1985), which amounts to -0.15, will most likely lie somewhere between -0.16 and -0.13 in the target population (see Table 2.4, row (e)).
Next, we simulated a new mean level of prejudice in each survey year for which only the levels of prejudice within each category of educational attainment were held constant on the 1985 level, whereas all other levels as well as the sample distributions of all variables were allowed to vary across subsequent years.

Line (b) in Figure 2.3 shows the resulting simulated trend. As previously demonstrated, the three highest educational levels showed a stronger increase in their mean levels of prejudice between 1985 and 1995 than the other educational categories (see Table 2.3 and Figure 2.2). Consequently, these categories converged towards the average level of prejudice (see Table 2.2). In Table 2.4, row (b) shows that if levels of prejudice within these educational categories had not changed since 1985, the overall level of prejudice would have significantly decreased with 0.07 points compared to the baseline, which reflects the counterfactual situation in which everyone would have had the overall 1985 level of prejudice. Any difference between this baseline and line (b) reflects differential changes in levels of prejudice within the categories of education.

In addition, prejudice rose strongly among lower educated individuals between 2000 and 2011 (see Table 2.3 and Figure 2.2), who consequently moved further away from the average level of prejudice (see Table 2.2). Row (b) of Table 2.4 shows that the simulated trend continues to decline if these changes had not taken place and that this decline is significant in each survey year. To illustrate, the simulated mean prejudice level in 2011 would lie 0.12 points below the baseline. The corresponding confidence interval indicates that the true decline in the mean level of prejudice in the population probably lies somewhere between 0.10 and 0.13. Thus, the stronger rises among higher educated and lower educated people have either contributed to the observed trend in ethnic prejudice in the Netherlands, over and above the general rise in the average prejudice level. If these changes within the educational groups had not taken place, the rising proportion of higher educated people in the Netherlands would have resulted in a longitudinal decline in the mean level of prejudice in society. This supports hypothesis 1a (for the period 1985-1995) and hypothesis 1b (for the period 2000-2011).

Line (c) in Figure 2.3 shows the simulated trend for a situation in which only the levels of prejudice within categories of church membership with prejudice were held constant on the 1985 level, whereas all other levels as well as all distributions could vary across the survey years. Because we found little influence of church membership on ethnic prejudice (see Table 2.2), line (c) shows a minimal decline in the mean level of prejudice between 1985 and 2011. In row (c) of Table 2.4, for example, the simulated mean in 2011 would have been 0.03 points lower than the baseline. The corresponding confidence interval indicates that the true decline in the mean level of prejudice in the population probably lies somewhere between 0.02 and 0.04. Row (c) of Table 2.4 also shows that the differences between the baseline and the simulated means with constant levels for church membership in each survey year are significant, albeit very small. Thus, the rise in ethnic prejudice between
1985 and 2011 among Catholic church members (from 1.68 to 2.12, see Table 2.3), and to a lesser extent among non-members (from 1.52 to 1.85, Table 2.3) has contributed for a very small part to the observed trend, supporting both hypothesis 2a and 2c.

Line (d) in Figure 2.3 demonstrates the simulated trend in prejudice for which we held only the prejudice levels within categories of church attendance constant on the 1985 level. In the previous section, we found little influence of church attendance on ethnic prejudice (see Table 2.2). As a consequence, the simulated trend (d), for which the rising shares of non-churchgoers are taken into account, hardly deviates from the baseline. This is confirmed by row (d) of Table 2.4, which shows no significant differences between the baseline means and the simulated means with constant levels for church attendance. Therefore, we found no support for hypothesis 2b and hypothesis 2d.

The separate contributions of differential changes in levels of ethnic prejudice within the various categories of educational attainment (b), church membership (c), and church attendance (d) add up to the total simulated trend (e) in Figure 2.3. If each of these levels had remained constant since 1985, the average level of prejudice would have declined between 1985 and 2011. Table 2.4, row (e) shows that this decline amounts to 0.15 points below the baseline by 2011, and probably lies between 0.13 and 0.16 in the population. The confidence intervals in row (e) of Table 2.4 indicate that the difference between the total simulated means and the baseline is significant in each survey year.

Table 2.4 | Estimated differences between observed, baseline, and simulated mean levels of ethnic prejudice [with bootstrapped 95% confidence intervals]

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Baseline – observed (a)</td>
<td>0</td>
<td>-.13*</td>
<td>-.13*</td>
<td>-.29*</td>
<td>-.30*</td>
</tr>
<tr>
<td>Educational attainment – baseline (b)</td>
<td>0</td>
<td>-.07*</td>
<td>-.10*</td>
<td>-.09*</td>
<td>-.12*</td>
</tr>
<tr>
<td>Church membership – baseline (c)</td>
<td>0</td>
<td>-.02*</td>
<td>-.02*</td>
<td>-.02*</td>
<td>-.03*</td>
</tr>
<tr>
<td>Church attendance – baseline (d)</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Total – baseline (e)*</td>
<td>0</td>
<td>-.09*</td>
<td>-.12*</td>
<td>-.11*</td>
<td>-.15*</td>
</tr>
</tbody>
</table>

Source: SOCON 1985-2011; N = 4,780.

*row e is sum of Δ educational attainment (b) + Δ church membership (c) + Δ church attendance (d).

* significant with α = .05 (two-tailed).
2.6 Conclusion and discussion

This study was aimed at providing insights into the paradox of increasing shares of highly educated and non-religious individuals in Dutch society—categories which generally hold less prejudice—on the one hand, and yet, on the other hand, a longitudinal rise in ethnic prejudice in the Netherlands. Based on ethnic competition theory we formulated hypotheses on differential changes in prejudice within specific educational and religiously (non-)affiliated groups in Dutch society that could explain the observed rise in ethnic prejudice despite educational expansion and secularisation. We added to previous research by testing the unique contribution of these differential changes to the observed trend in ethnic prejudice, while controlling for shifts in the distribution of these characteristics. For this purpose, we used five nationally representative cross-sectional surveys collected between 1985 and 2011 in counterfactual analyses.

In line with prior studies, we found that lower educated people held significantly more, and higher educated people significantly less prejudice than average. While the average level of prejudice rose significantly between 1985 and 2011 across all educational categories in society, the increase was stronger among the higher educated, who thus converged towards the average level of prejudice, particularly between 1985 and 1995. This stronger increase in ethnic prejudice among higher educated individuals in particular could partially explain why an overall rise in ethnic prejudice is observed despite educational expansion. We further found a weak and largely non-significant influence of church membership and church attendance on prejudice. Although Catholics and weekly churchgoers showed a stronger increase in ethnic prejudice than Protestants, non-church members, and people less frequently or never attending church, differences in prejudice between these groups remained small. We showed that, as a consequence, rising shares of non-members and non-churchgoers have hardly resulted in a decline of prejudice. Additionally, all Dutch individuals have become more prejudiced between 1985 and 2011, irrespective of their educational level and religious affiliation, which has partly offset the supposed liberalising influence of educational expansion and secularisation. This development is not limited to the Netherlands. Research has shown similar increases in negative attitudes towards minorities, immigrants, and immigration in other European countries over the past decades (see Ceobanu & Escandell, 2010).

This study has several implications for research on the relationship of education and religious affiliation with ethnic prejudice. Our results suggest that the liberalising influence of education on ethnic prejudice as suggested by several researchers (Vogt, 1997; Weil, 1985) has decreased. Hence, the idea that liberal attitudes automatically diffuse from higher educated individuals to lower educated, in part through the educational system (Weil, 1985), has contemporarily become open to doubt. Higher educated individuals do not seem immune to (perceptions of) ethnic threat, either due to increasing shares of ethnic minorities obtaining higher levels of education, due to increasing salience of cultural and
religious differences, or due to a heterogenisation of higher education, which may have changed the composition of the group higher educated individuals. Alternatively, some researchers have argued that higher educated are less prejudiced because they are more skilled at suppressing prejudiced responses in survey research and more sophisticated in defending their group ideology (Jackman, 1978; Jackman & Muha, 1984). Although this approach is sometimes contested, it provides an alternative explanation for our findings, namely that a taboo to express prejudice against ethnic minorities among higher educated individuals has been slowly disappearing. However, it is beyond the scope of our contribution to test the mechanisms behind the differential changes in ethnic prejudice among the educational categories. Therefore, we propose this as a direction for future research.

Moreover, we found the relationship of church membership and attendance with ethnic prejudice to be largely absent. This suggests that the generally accepted idea that religious affiliation strongly influences people’s level of ethnic prejudice may need refinement. This was also proposed by other researchers. For example, Hall et al. (2010) found that the positive relationship between extrinsic religiosity and racism declined over time in the United States. It seems that modernisation has indeed eliminated the importance of religion (Norris & Inglehart, 2011), although there might be a small group of religiously affiliated whose identity has become increasingly threatened in the secular Dutch society.

Finally, we showed that even substantial shifts in the relative shares of highly educated and secular individuals have had little impact on the general level of ethnic prejudice over time, because the differences in prejudice between higher and lower educated individuals declined and the differences between the religiously affiliated and non-affiliated were small to begin with.

Overall, these findings are perfectly in line with individualisation theory (e.g., Beck & Beck-Gernshein, 2002; Felling et al., 2000), which proposes that people’s attitudes have become less and less determined by individual backgrounds and social institutions, such as their educational level and religious affiliation. Therefore, it is exactly this process of individualisation that provides an answer to the paradox: as the importance of educational attainment and religious non-affiliation as barriers to ethnic prejudice has diminished, educational expansion and secularisation have not resulted in the expected decrease in prejudice in the Netherlands over time.

Several limitations of this study should be acknowledged. Since data containing comparable measures of prejudice over such extended time periods are scarce, we could not determine whether the upward trend in prejudice is a recent or contemporary phenomenon, or had already started before 1985. In addition, educational expansion and secularisation took off in the 1950s. Therefore, these processes may have actually reduced prejudice in the period before our data were collected. Likewise, we were not able
to include more recent developments in ethnic prejudice. Although studies have shown slight decreases in negative public opinions towards the presence of ethnic minorities, immigration, and ethnic diversity in the Netherlands (Hjerm & Bohman, 2014; Meuleman et al., 2009; Van Setten et al., 2017), future research should indicate whether that also holds for ethnic prejudice. Moreover, we possibly underestimated the trend towards more prejudice because we were not able to examine prejudice against other ethnic minorities than the five groups in this research. Recently, the numbers of Eastern European and Muslim migrants have increased substantially in the Netherlands, which may have evoked stronger prejudice against these groups than against the five established minority groups included in the SOCON surveys. For example, Strabac and Listhaug (2008) found prejudice against Muslims in Europe to be more widespread than prejudice against other immigrants. In the Netherlands, a considerable share of recently migrated Poles and Bulgarians in the Netherlands reported perceptions of frequent discrimination of their own ethnic group and these perceptions have recently intensified (Gijsberts & Lubbers, 2015; McGinnity & Gijsberts, 2017).

Lastly, the question remains why ethnic prejudice has increased in the Netherlands “across-the-board”. Along with differential changes within particular social categories, it seems that all social categories have become somewhat more prejudiced over time, though some at a stronger pace than others. Certain societal circumstances could have affected all Dutch individuals similarly, further increasing the general level of ethnic prejudice. This supposition leads us to speculate on which societal circumstances may have reinforced the general level of prejudice. The persistent inflow of both economic and political migrants along with fluctuating numbers of refugees have repeatedly incited societal debates on the influx and presence of ethnic minorities. This might have increased perceptions of threat among all individuals in society. Moreover, from the 1980s onwards, several liberal Dutch politicians and opinion leaders (Bolkestein, Scheffer, Fortuyn, and more recently Wilders) have openly voiced concerns about immigration and poor integration of ethnic minorities. Ethnic minorities are increasingly framed as undermining the liberal Dutch values, which may have gradually legitimised the expression of prejudice against ethnic minorities in society, justified by an appeal to “free” speech. Ironically then, the liberal values which have long been the basis of tolerance towards minorities have over time become a source of free expressions of prejudice and exclusion. Unfortunately, we could not analyse which societal changes have contributed to the upward trend in prejudice due to the confounding of age, period and cohort explanations. Further research should address this question.

To summarise, a longitudinal increase in ethnic prejudice has taken place in the Netherlands despite educational expansion and secularisation, which was the puzzling paradox we tried to solve. The answer is twofold. Firstly, the liberalising influences of educational expansion and secularisation have diminished over time: higher educated Dutch people have converged towards the secondary and lower educated Dutch, whereas
the differences between the religiously affiliated and secular Dutch were largely absent from the beginning. Secondly, these processes seem to have set all Dutch individuals “free” to become more prejudiced over time. Because immigration of ethnic minorities into the Netherlands as well as to other European countries is not likely to cease, these findings suggest that the trend towards more ethnic prejudice will likely continue, which may further heighten interethnic tensions in society.
CHAPTER 3

The relationship between societal change and rising support for gender egalitarianism among men and women: results from counterfactual analyses in the Netherlands, 1979-2012

A slightly different version of this chapter has been published as: Thijs, P., Te Grotenhuis, M., & Scheepers, P., (2017). The relationship between societal change and rising support for gender egalitarianism among men and women: Results from counterfactual analyses in the Netherlands, 1979–2012. Social Science Research, 68, 176-194. doi: 10.1016/j.ssresearch.2017.05.004. The authors jointly developed the idea and design for this study. Thijs wrote the main part of the manuscript and conducted the analyses. Te Grotenhuis and Scheepers substantially contributed to the manuscript. An earlier version of this study was presented at the Dutch Demography Day (Utrecht, The Netherlands, 2015), at the Day of Sociology (Tilburg, The Netherlands, 2016), and at the European Consortium for Sociological Research (ECSR) General Conference “Stratification and Population Processes in European Societies” (Oxford, United Kingdom, 2016).
3.1 Introduction

Many countries have witnessed over time increases in support for gender egalitarianism during the past decades (e.g., Bolzendahl & Myers, 2004; Inglehart & Norris, 2003; Lee, Alwin, & Tufi, 2007). As men and women differ in their support for gender egalitarianism (Bolzendahl & Myers, 2004; Ciabattari, 2001; Davis & Greenstein, 2009; Mason & Lu, 1988), these trends may have developed differently for men and women. Some studies reported that the rise in support for gender egalitarianism has been similar among men and women (Bolzendahl & Myers, 2004; Neve, 1995), others found stronger rates of change among women than among men over time (Brewster & Padavic, 2000; Lee et al., 2007) and across cohorts (Brewster & Padavic, 2000; Inglehart & Norris, 2003; Pampel, 2011; Shorrocks, 2016). Moreover, even a reversal of the gender gap regarding support for gender egalitarianism was found (Jennings, 2006).

Previously proposed explanations for the general trend towards more gender egalitarianism relate to the different historical and contemporary circumstances in which people are socialised and live, i.e., cohort and period effects (Brewster & Padavic, 2000; Inglehart, 1997; Inglehart & Norris, 2003; Mannheim, 1952). Other researchers stress the importance of shifts in the social, cultural and economic structure of the population, such as educational expansion, secularisation, and the feminisation of the labour force (Brooks & Bolzendahl, 2004; Cotter et al., 2011; Mason et al., 1976; Pampel, 2011).

Because men and women benefit differently from supporting gender egalitarianism (Bolzendahl & Myers, 2004; Ciabattari, 2001), the liberalising processes of educational expansion, secularisation and labour force participation, together with cohort replacement, may affect the trend among men less as compared to women. So far, however, there remains a lacuna in our knowledge regarding how strong these processes are related to the trend in support for gender egalitarianism among men and women. Previous studies speculated about the influence of important societal changes in the social, cultural, demographic and economic structure of a population, but the actual contribution of these changes to the trend was neither tested nor quantified. Studies on the effects of cohort and period have difficulties disentangling cohort, period and age effects due to methodological problems (Mason et al., 1973). Moreover, the conclusions drawn in these studies rely on models in which only the effect sizes of certain individual characteristics were estimated, but the actual strength of societal processes related to such characteristics originates from the interplay between effect sizes and rates of change. As a consequence, the contribution of societal processes like cohort replacement may have been over- or underestimated, if tested at all.

In this study, we aim to shed light on the extent to which the processes of cohort replacement, educational expansion, secularisation, and labour force participation have affected the trend in support for gender egalitarianism among men and women. We
analyse to what extent cohort, education, church attendance, and labour participation are related to support for gender egalitarianism and whether the estimated effect sizes differ for men and women. We advance upon previous research by taking into account both the effect sizes of the individual characteristics, and – importantly – their distributional shifts in the structure of the population as observed in our samples. For this purpose, we employ a counterfactual simulation analysis (Te Grotenhuis et al., 2004), allowing to examine to what extent the observed trend is still present if the aforementioned shifts in distributions would not have taken place, given the estimated effect sizes. By analysing the combination of effect sizes of individual characteristics and the sizes of shifts in the distribution of these characteristics, we are, to our knowledge, the first to quantify the actual contribution of societal changes in the social, cultural, demographic and economic structure of a population to the trend in support for gender egalitarianism.

We investigate trends in support for gender egalitarianism for men and women in the Netherlands between 1979 and 2012. We focus on one specific aspect of gender egalitarianism related to the private dimension (Wilcox & Jelen, 1991), i.e., whether a woman is more suited to raise little children than a man. This measure is an important indicator of support for gender egalitarianism because it captures a notion of gendered separate spheres rooted in a distinct male and female “nature” that goes beyond the mere division of roles (Davis & Greenstein, 2009), which may have substantial consequences for gender equality (Charles, 2011; England, 2010). As such, low levels of support for this item may imply persistent gender inequality in societies with relatively widespread norms of gender egalitarianism, such as the Netherlands.

The Netherlands provides an interesting case to study the liberalising influence of societal processes to the trend in gender egalitarianism, because the average educational level of the Dutch population has increased substantially since the 1950s (Bar Haim & Shavit, 2013; Tolsma & Wolbers, 2014), while church attendance has dropped considerably (De Graaf & Te Grotenhuis, 2008). Moreover, increasing numbers of Dutch women have entered the labour force over the last decades (OECD, 2016b; Van der Lippe & Van Dijk, 2002). As similar social, cultural, economic, and demographic changes have occurred in many other western countries, the results may be generalisable to and tested in other regions in which comparable increases in support for gender egalitarianism have been observed. In sum, the following research questions are addressed: How has support for gender egalitarianism developed among men and women in the Netherlands between 1979 and 2012? And to what extent are these trends due to important societal changes in the Dutch population, i.e., a) cohort replacement, b) educational expansion, c) secularisation, and d) rising labour force participation?


3.2 Theory and hypotheses

3.2.1 Demographic change: cohort replacement

According to theories of social change, demographic shifts are a driving force behind changes in public opinions in society (Firebaugh, 1992; Ryder, 1965). The composition of the population partly changes due to the gradual replacement of older cohorts by younger cohorts. Each birth cohort consists of individuals with similar formative experiences, socialised in specific historical and cultural circumstances which, according to Mannheim (1952) and Inglehart (1997), crystallise into normative orientations and values that are largely stable over the life course. These historical and cultural circumstances include normative conceptions of appropriate behaviour and activities for women and men. Due to societal modernisation, younger cohorts are generally socialised in times in which more liberal gender norms prevail (Brewster & Padavic, 2000; Brooks & Bolzendahl, 2004; Inglehart, 1997; Inglehart & Norris, 2003). Consequently, we expect each new cohort to support gender egalitarianism more than the previous.

The adoption of more liberal gender norms among subsequent cohorts may, however, differ between men and women. According to an interest-based perspective, individuals adopt and maintain attitudes that are in line with their interests (Bolzendahl & Myers, 2004; Kroska & Elman, 2009). Bolzendahl and Myers (2004) argued that women have stronger interests in gender egalitarianism than men because they benefit more from gender equality. In addition, girls’ socialisation into gendered behaviours and activities has likely changed more strongly than boys’. Changes in the historical and cultural context towards more liberal gender norms mainly concerned the emancipation of women. Women’s movements were first and foremost aimed at improving women’s position in society. Welfare reforms have been aimed at encouraging women’s employment and participation in male dominated educational subjects and occupations, while there have been fewer economic, cultural, and institutional incentives for men to enter traditionally “female” jobs or to cut down working hours to be involved with the family (England, 2010). Young female birth cohorts may therefore be more inclined to challenge existing gender structures and to adopt gender egalitarianism.

Indeed, previous research has found a growing gender gap in support for gender egalitarianism across cohorts, with women born after the 1950s being more egalitarian than men (Inglehart & Norris, 2003; Pampel, 2011; Schnabel, 2016). Hence, we predict a stronger effect of birth cohort on gender egalitarianism among women and we subsequently expect the contribution of cohort replacement to be stronger among women as compared to men. We therefore hypothesise that the process of cohort replacement has contributed to an increase in support for gender egalitarianism in the Netherlands over time, and this contribution was stronger for women than for men (H1).
3.2.2 Social, cultural, and economic changes

Educational expansion

The structure of the population has also changed due to several other important developments. Since the second half of the 20th century, the educational level has increased rapidly among the Dutch population (Bar Haim & Shavit, 2013; Tolsma & Wolbers, 2014). Many scholars have argued that education has a “liberalising” influence on people’s values (Vogt, 1997), because the educational system transmits liberal gender norms and challenges essentialist assumptions. The longer students are socialised into these norms during their formative years through education, the more they will support these norms throughout their lives (Bolzendahl & Myers, 2004). Indeed, previous research has repeatedly shown that higher educated people support gender egalitarianism more strongly than lower educated individuals (Bolzendahl & Myers, 2004; Thornton et al., 1983; Thornton & Freedman, 1979). Hence, the increased proportion of higher educated individuals in society may have contributed to the rise in support for gender egalitarianism.

The rise in the average education level in the Dutch population has not developed similarly for men and women. Since the 1950s, higher education has expanded more rapidly among women than men (Tolsma & Wolbers, 2014; Van Hek et al., 2015). Consequently, the proportion of women exposed to liberal values taught through formal education has grown stronger than the proportion of men exposed to these norms. In addition, the liberalising influence of education on gender role opinions may be stronger for women.

From an interest-based perspective, women have a stronger interest in the egalitarian gender norms that are transmitted through formal education; particularly women in non-traditional positions (Bolzendahl & Myers, 2004; Kroska & Elman, 2009). Higher education increases women’s occupational opportunities, economic independence and non-traditional family arrangements. It is therefore argued that higher educated women benefit most from gender egalitarianism (Brooks & Bolzendahl, 2004; Pampel, 2011), such as the equal responsibility for care of little children, because it may reduce restrictions such as gender discrimination in the workplace and the double burden of paid work and family responsibilities (Van der Lippe & Van Dijk, 2001).

Men may also have an interest in gender egalitarianism because they attach value to taking care of the children themselves or because they want equal opportunities for their wives and daughters (Ciabattari, 2001). However, given that (full-time) work still is the dominant norm for most men – in particular among the lower educated – supporting gender egalitarianism often contradicts men’s social position and the benefits they gain from maintaining a traditional gender division (Poortman & Van der Lippe, 2009).

Previous studies have shown that differences in educational levels across time explained more of women’s over time variation in support for gender egalitarianism than men’s (Lee
et al., 2007; Neve, 1995; Pampel, 2011). Yet, these studies could not quantify whether this was due to stronger educational effects or due to stronger educational expansion among women than men. Thus, given the expected gender dependent educational effect and differential rates of educational expansion among men and women, we hypothesise that the process of educational expansion has contributed to an increase in support for gender egalitarianism in the Netherlands over time, and this contribution was stronger for women than for men (H2).

**Secularisation**

People are also socialised through religious organisations and communities (Scheepers, Te Grotenhuis, et al., 2002). In general, Christian churches advocate a traditional division of gendered roles based on a notion of separate spheres and religious organisations have long tried to sustain the social norms of women as caregivers and men as providers (Inglehart & Norris, 2003). The stronger people are integrated in a religious community, the more they are exposed to traditional norms and the less they will support gender egalitarianism. Previous studies found that individuals who are affiliated to a religion and people who frequently attend church indeed support gender egalitarianism less than non-religious individuals (Bolzendahl & Myers, 2004; Schnabel, 2016; Thornton & Freedman, 1979). The share of Dutch individuals belonging to a religious denomination and attending church has dropped substantially over the past decades (De Graaf & Te Grotenhuis, 2008). Consequently, the decline in the proportion of religiously integrated people has likely contributed to an increase in support for gender egalitarianism.

In general, women are more religious than men (Norris & Inglehart, 2011; Voas et al., 2013), and secularisation first affected men before women (Trezebiatowska & Bruce, 2012), also in the Netherlands (Becker & De Hart, 2006). Since the 1970s, however, church attendance declined more strongly among women than among men (Becker & De Hart, 2006). In addition, the traditional gender norms of the religious community mainly affect the position of women, restricting their opportunities to participate in the public domain while reinforcing men’s dominant position in society. We thus expect the influence of church attendance on support for gender egalitarianism to be stronger for women than for men. The differential shifts in the proportion of church attendees, together with the expected gender dependent influence of church attendance on gender egalitarianism leads us to hypothesise that the process of secularisation has contributed to an increase in support for gender egalitarianism in the Netherlands over time, and this contribution was stronger for women than for men (H3).

**Feminisation of the labour force**

A third important development that has changed the composition of the Dutch population is the rise of female labour force participation. In recent decades, the proportion of women participating in the labour market has increased considerably (OECD, 2016b). Working women are argued to have more interests in supporting gender egalitarianism because
they often experience a double burden of paid work and family responsibilities (Van der Lippe & Van Dijk, 2001), which likely increases their support for egalitarian child care responsibilities. Based on the exposure perspective, Bolzendahl and Myers (2004) argued that labour force participation exposes women to gender discrimination and inequality in the work place as well as to their own capabilities to perform outside the household, and allows them to build social networks of other working women. These factors would also increase support for gender egalitarianism among working women.

Previous research has indeed found a positive influence of women’s employment on their support for gender egalitarianism (Cunningham, Beutel, Barber, & Thornton, 2005). We expect no such effect of men’s labour force participation on their support for gender egalitarianism. Indeed, men with full-time employment may support gender egalitarianism even less than part-time and non-working men, because they benefit more from a gendered breadwinner-homemaker division of paid and unpaid labour (Ciabattari, 2001). In addition, even though men’s participation in the Dutch labour market has changed as the proportion of part-time working men has risen (OECD, 2016b), this development remains limited when compared to the rise in the proportion of working women. Hence, we expect that the changes in labour force participation have contributed to an increase in support for gender egalitarianism in the Netherlands over time, and this contribution was stronger for women than for men (H4).

3.3 Data and measurements

To test our hypotheses, we used repeated cross-sectional data from 16 national samples of the Cultural Changes in the Netherlands surveys (CV), collected between 1979 and 2012 (The Netherlands Institute for Social Research, 2016). Each wave consists of a nationally representative sample from the Dutch population of around 2000 individuals who are interviewed face-to-face. Response rates varied between 52 percent (in 2008) and 80 percent (in 1983). The sampling procedure and measurements are highly comparable across the waves. We combined all 16 cross-sectional waves into one pooled data set, containing 31,668 respondents aged between 16 and 74 at the time of the interview.

3.3.1 Dependent variable

We measured our dependent variable support for gender egalitarianism with the question: “A woman is more suited to raise little children than a man”. Response categories ranged from (1) strongly agree to (5) strongly disagree. The data contained more questions on gender egalitarianism such as the division of paid labour, which have often been used in previous research (Davis & Greenstein, 2009), but these items were only available in a limited number of waves. The measurement of our dependent variable not only reflects beliefs about preferred gendered roles but may also capture “gender essentialist”
assumptions of men and women having innately different interests and skills, such as the ability to raise little children. This idea of gender essentialism can be used to justify gender stereotypes and a gendered division of roles (Charles, 2011; England, 2010). We therefore believe that this measure lies at the basis of gender egalitarianism. Moreover, the measure is frequently used in Dutch studies (e.g., Poortman & Van der Lippe, 2009), and relates to questions on gendered separate spheres that have been widely used in previous research (Ciabattari, 2001; Davis & Greenstein, 2009; Norris & Inglehart, 2011). We consider a higher score on the dependent variable as indicating more support for gender egalitarianism. Missing values on the dependent variable (1.5%) were deleted listwise.

3.3.2 Independent variables

The independent variable birth cohort was measured as the respondent’s year of birth. We excluded the oldest and youngest cohorts (born before 1907 and after 1992) in which the number of respondents was lower than 50 to avoid unreliable estimates.

Educational attainment was measured as the respondents’ highest educational level followed. We harmonised the educational categories over the waves, resulting in seven categories of educational attainment ranging from primary to university education. Over time, the share of men who obtained primary education dropped from 17.6 percent in 1979 to 5.3 percent in 2012 (see Figure A3.1, Appendix Chapter 3). The share of men with tertiary education increased from 8.2 to 11.4 percent in this period. The share of women with primary education decreased from 21.4 to 5.9 percent between 1979 and 2012. The share of tertiary educated women rose substantively from 3.5 to 11.2 percent. Thus, educational expansion between 1979 and 2012 was stronger among women.

Church attendance was measured by a question on how often the respondent had attended a church in the past half year, ranging from attending church once a week or more to never going to church. Between 1979 and 2012, the share of men never attending church rose from 52.8 percent to 62.6 percent. The share of women who do not attend church increased from 52.0 percent in 1979 to 58.3 percent in 2012 (see Figure A3.2, Appendix Chapter 3). Thus, secularisation has continued over time, albeit somewhat stronger among men (c.f. Becker & De Hart, 2006).

1 Educational attainment was measured as the respondents’ highest educational level followed, because the respondents’ highest education completed was not available in each survey year or suffered from too many missing answers.

2 Note that the share of higher educated individuals was larger in 2002. This is possibly due to an overrepresentation of younger respondents in the survey of 2002 (Verhagen, 2007). Hence, the results in 2002 should be interpreted with care. However, this overrepresentation cannot explain the drop in support for egalitarian attitudes between 1996 and 2002 (see Figure 3.2), as younger people generally show more support for gender egalitarianism than older people.
Labour force participation was in most survey years only available as measured in three categories: full-time working (more than 35 hours a week), part-time working (12-35 hours working per week) and non-working (0-12 hours a week) based on the commonly used Statistics Netherlands definition (Janssen & Dirven, 2015; Kraaykamp, 2012). In 1979, 69.6 percent of the men worked full-time and 2.9 percent worked part-time. By 2012, the share of full-time working men had dropped to 57.8 percent while the share of part-time working men had risen to 11.2 percent. Among women, 13 percent worked full-time and 12.5 percent part-time in 1979, which increased to 14.8 percent full-time working and 45.7 percent part-time working in 2012 (see Figure A3.3, Appendix Chapter 3). These changes indicate that feminisation of the labour force in the Netherlands mainly comes down to an increase in women's part-time work. Among men, part-time work has also risen whereas the share of full-time working men decreased.

We control for age as measured in years and period as measured with year of survey. Missing values on the independent variables and control variables (1.9 percent of the cases) were deleted listwise, resulting in a sample size to be analysed of 30,852 respondents. See Table 3.1 for descriptive statistics of the dependent and independent variables.

### 3.4 Methods

We followed a two-step strategy to estimate 1) the individual-level effects of cohort, education, church attendance, and labour force participation, and 2) the relative contribution of the societal processes of cohort replacement, educational expansion, secularisation, and the feminisation of the labour force to the trend in support for gender egalitarianism among men and women.

#### 3.4.1 Multivariate regression analysis

First, we determined the effect sizes of cohort, education, church attendance, and labour force participation, while controlling for period and age effects. For this purpose, we performed an age-period-cohort regression analysis for men and women separately, including the effects of education, church attendance and labour force participation. However, the effects of cohort, period and age are generally difficult to estimate in statistical models because of the linear dependency between these measures (i.e., cohort + age = period). Although a completely appropriate solution to this problem has not yet been found, one accepted way of dealing with this conundrum is to impose a grounded restriction on one of the measurements of age, period, or cohort (Glenn, 2005; Mason et al., 1973). Because our dependent variable is related to the care for children, we expect that younger men and women who are not yet confronted with raising little children may show comparable levels of support for this item, while more variation is expected among older men and women. Previous studies indeed showed that entry into marriage
and birth of the first child decrease support for gender egalitarianism among male and female adolescents (Baxter, Buchler, Perales, & Western, 2015; Corrigall & Konrad, 2007; Fan & Marini, 2000; Kaufman, Bernhardt, & Goldscheider, 2016). This would theoretically allow a restriction on the effect of age.

Table 3.1 | Descriptive statistics of the dependent and independent variables

<table>
<thead>
<tr>
<th></th>
<th>Men (N = 14,616)</th>
<th></th>
<th>Women (N = 16,236)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Support for gender egalitarianism</td>
<td>1</td>
<td>5</td>
<td>2.75</td>
<td>1.16</td>
</tr>
<tr>
<td>Cohort</td>
<td>1907</td>
<td>1992</td>
<td>1951.45</td>
<td>17.88</td>
</tr>
<tr>
<td>Age</td>
<td>16</td>
<td>74</td>
<td>42.96</td>
<td>15.79</td>
</tr>
<tr>
<td>Educational attainment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>0</td>
<td>1</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Primary vocational</td>
<td>0</td>
<td>1</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Lower secondary</td>
<td>0</td>
<td>1</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Secondary vocational</td>
<td>0</td>
<td>1</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Upper secondary</td>
<td>0</td>
<td>1</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s or equivalent</td>
<td>0</td>
<td>1</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Master’s or equivalent</td>
<td>0</td>
<td>1</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>Church attendance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a week</td>
<td>0</td>
<td>1</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>Once a fortnight</td>
<td>0</td>
<td>1</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Once a month</td>
<td>0</td>
<td>1</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Less than once a month</td>
<td>0</td>
<td>1</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>1</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>Labour force participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-working</td>
<td>0</td>
<td>1</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>Part-time working</td>
<td>0</td>
<td>1</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Full-time working</td>
<td>0</td>
<td>1</td>
<td>0.57</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.

To determine whether such a restriction can be statistically supported, we examined the bivariate age effect on support for gender egalitarianism in Figure 3.1. Figure 3.1 shows lower levels of support for gender egalitarianism among older men and women than among younger individuals. In addition, men and women aged 16 to 29 seem to hold largely similar levels of support for gender egalitarianism while there is more variation among people aged 30 years and older. Multiple t-tests revealed no significant differences within the age group of 16 to 29 years in all survey years separately as well as combined, among both men and women.3

3 We performed post-hoc Bonferroni tests for each combination of age within the category 16-29 years, in each survey year and in all survey years combined, for men and women separately. We found no significant differences in mean levels of support for gender egalitarianism (p < .05).
Although the effects of age may be confounded with cohort and period effects, this finding seems theoretically plausible, for younger men and women mostly find themselves in a specific life phase with a higher likelihood to be single and – more important – childless as compared to older people, who have divergent experiences and life trajectories. This resembles a watered-down version of a “natural experiment” in which certain categories of age, cohort, or period are set equal by exogenous processes, such as the limited voting rights for women in the late 19th century (Firebaugh & Chen, 1995).

Figure 3.1 | Mean levels of support for gender egalitarianism by age

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.

Additional analyses revealed that the share of unmarried and childless people is considerably lower among individuals aged 30 and older. We found similar results when we analysed a different representative Dutch dataset (SOCON). Based on these arguments, we imposed a theoretically driven and statistically supported restriction on the effects of individuals aged from 16 to 29, i.e., we constrained these effects to be equal for all respondents aged 16 to 29. This allowed to obtain stable estimates for the effects of cohort, period and age using constrained generalised linear regression models (CGLIM) (Mason et al., 1973).

We used dummy variables for each birth cohort and survey year to control for their potentially non-linear relationships with the dependent variable. We included age as a ratio scaled variable (including the aforementioned restriction) in the model because it is close to linearly related to the dependent variable for people aged 30 and over.

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4 We performed a robustness check by analysing models with variations of the restrictions imposed on the effect of age. These analyses led to similar conclusions.

5 We tested whether age was linearly related to the dependent variable. We found no significant difference between a model with age as dummies and age as a linear variable (including the age restriction).
controlled for changes in the effects of education, church attendance, and labour force participation over time by including interaction terms of these variables with year of survey (mean centred). Because our models may suffer from multicollinearity, we checked collinearity statistics, which were acceptable (see Table A3.1, Appendix Chapter 3).

3.4.2 Counterfactual simulation analyses

The impact of compositional shifts results from a combination of the effect size of a variable and its distributional shift. Therefore, estimating individual-level effects is not sufficient to draw conclusions on the actual contribution of compositional shifts to the trend in support for gender egalitarianism. So once we determined the effects sizes of cohort, education, church attendance, and labour force participation on the individual level, we analysed to what extent shifts in the distribution of these characteristics have contributed to the trends in support for gender egalitarianism among men and women. For this purpose, we simulated a counterfactual situation in which the composition of the Dutch population had not changed since the beginning of the surveys, i.e., as if the existing cohorts in 1979 had not been replaced by younger cohorts, and as if there had been no educational expansion, secularisation, and changes in labour force participation between 1979 and 2012. We used the survey year 1979 as a reference point because these processes were then on their lowest in the period under study. This analysis technically comes down to imposing the frequency distributions found in the 1979 sample to all subsequent samples and estimating a new mean level of support for gender egalitarianism in each survey year under this condition, thereby using the estimates of the effect sizes from our multivariate regression analyses obtained in the first step. As a result, we could measure the unique contribution of longitudinal shifts in the composition of the population due to cohort replacement, educational expansion, secularisation, and changes in labour force participation to the trend in support for gender egalitarianism. For a straightforward example of the counterfactual simulation method, see the Appendix of Chapter 1. Standard errors for each contribution were obtained with a bootstrap procedure.

As a robustness check, we analysed a model including additional individual-level characteristics that possible confound the relationship with the dependent variable, such as marital status and whether the respondent has children. The results did not alter our main conclusions. We therefore decided to estimate a more parsimonious model.

Although the Variance Inflation Factor (VIF) was rather high for the age effect, the estimate remains significant for both men and women, so multicollinearity does not seem harmful here.

The sampling distribution of the differences between the observed and the simulated means is unknown and depends on the estimated and simulated effects, on the observed distributions, and the co-variances between all variables. Therefore, we used a bootstrapping procedure to empirically determine the shape of the sample distribution for each estimated difference between the observed and simulated means (see Table A3.3 and A3.4, Appendix Chapter 3). For each survey year, we drew 1,000 bootstrap samples with replacement from the original sample. Based on these samples we could determine the lower and upper boundaries of the 95% confidence interval to test the significance of the difference between the observed means and our simulated means.
3.5 Results

3.5.1 The trend in support for gender egalitarianism for men and women

To answer our first research question, we examined the trend in support for gender egalitarianism for men and women. Figure 3.2 shows that the mean levels of support for gender egalitarianism increased between 1979 and 2012, albeit somewhat stronger among women. The mean level increased from 2.50 to 2.94 among men and from 2.78 to 3.43 among women. Between 1996 and 2002, there was a temporary drop for both men and women, which stabilised from 2002 onwards.9

![Graph showing trends in support for gender egalitarianism for men and women, 1979-2012](image)

Figure 3.2 | Trends in support for gender egalitarianism for men and women, 1979-2012

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.

3.5.2 Results from multivariate regression analysis

Table 3.2 shows the individual-level effects of birth cohort, educational attainment, church attendance, and labour force participation, controlled for period and age, for men and women separately.10 Because we used dummy variables for each category of birth

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9 The increase in support for gender egalitarianism was significant between 1979 and 2012 as tested with ANOVA (men: F = 30.30, women: F = 13.76, p < .001). Interactions between sex and year of survey in regression analyses showed that the increase in support for gender egalitarianism between 1979 and 2012 was significantly stronger for women than for men. Post-hoc Bonferroni tests showed that the mean level of support for gender egalitarianism dropped significantly between 1996 and 2002 among both men and women (p < .05).

10 Because our dependent variable is an ordinal outcome measure, we also analysed the model using an ordinal logistic regression analysis (polytomous universal models or PLUM) in SPSS as a robustness check. The results are highly similar to the outcomes of our linear regression model.
cohort and survey year, we obtained a large number of cohort and period estimates. We therefore only displayed the standardised sheaf coefficients (Heise, 1972) in Table 3.2, summarising the effects of all dummies for cohort and for period.

Table 3.2 | Unstandardised and standardised regression coefficients of birth cohort, educational attainment, church attendance, labour force participation on support for gender egalitarianism for men and women, controlled for age (constrained) and period

<table>
<thead>
<tr>
<th></th>
<th>Men (N = 14,616)</th>
<th>Women (N = 16,236)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.77***</td>
<td>2.53***</td>
</tr>
<tr>
<td>Birth cohort (1951 = ref.)</td>
<td>.11***</td>
<td>.37***</td>
</tr>
<tr>
<td>Period (1993 = ref.)</td>
<td>.10***</td>
<td>.10***</td>
</tr>
<tr>
<td>Age (16 to 29 years = ref.)</td>
<td>-.02***</td>
<td>-.19***</td>
</tr>
<tr>
<td>Educational attainment (primary = ref.)</td>
<td>.13***</td>
<td>.19***</td>
</tr>
<tr>
<td>Primary vocational</td>
<td>.01</td>
<td>.19***</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>.17*</td>
<td>.34***</td>
</tr>
<tr>
<td>Secondary vocational</td>
<td>.15*</td>
<td>.46***</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>-.30***</td>
<td>.52***</td>
</tr>
<tr>
<td>Bachelor's or equivalent</td>
<td>-.34***</td>
<td>.63***</td>
</tr>
<tr>
<td>Master's or equivalent</td>
<td>.43***</td>
<td>.75***</td>
</tr>
<tr>
<td>Church attendance (once a week = ref.)</td>
<td>.10***</td>
<td>.12***</td>
</tr>
<tr>
<td>Once a fortnight</td>
<td>.12*</td>
<td>.26***</td>
</tr>
<tr>
<td>Once a month</td>
<td>.21***</td>
<td>.14***</td>
</tr>
<tr>
<td>Less than once a month</td>
<td>.19***</td>
<td>.21***</td>
</tr>
<tr>
<td>Never</td>
<td>-.33***</td>
<td>.39***</td>
</tr>
<tr>
<td>Labour force participation (non-working = ref.)</td>
<td>.03*</td>
<td>.06***</td>
</tr>
<tr>
<td>Part-time working</td>
<td>.08</td>
<td>.15***</td>
</tr>
<tr>
<td>Full-time working</td>
<td>-.06*</td>
<td>.10***</td>
</tr>
<tr>
<td>Variance explained</td>
<td>12.6%</td>
<td>16.6%</td>
</tr>
</tbody>
</table>

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.

Note. The model is controlled for the interaction terms of educational attainment, church attendance, and labour force participation with period (ratio scaled) (see Table A3.2, Appendix Chapter 3 for all interaction coefficients). For this purpose, we mean centred the period variable, which roughly corresponds to the survey year 1993. The main effects in the table therefore represent the effects around 1993.

Standardised sheaf coefficients in bold indicate a significant difference (p < .05, two-tailed) between men and women (Paternoster et al., 1998).

To save space, we do not present the coefficients for each dummy category but instead calculated one standardised coefficient (beta) summarising the effect for all dummy categories (Heise, 1972).

* p < .05, ** p < .01, *** p < .001 (two-tailed).
The standardised coefficients for birth cohort in Table 3.2 show a significant influence of birth cohort on support for gender egalitarianism, all other things being equal, which is about three times stronger for women (beta = 0.37) than for men (beta = 0.11). This gender difference in the cohort effect is significant as tested with a z-test derived from the work of Paternoster and colleagues (1998). The strong cohort effect suggests that the process of cohort replacement may have contributed to the rise in support for gender egalitarianism, particularly among women. Controlled for cohort and age, the period effect is small and equal for men and women (beta = 0.10). The controlled effect of age is significantly different for men and women, with older men supporting gender egalitarianism less than younger men (b = -0.01) and older women being somewhat more egalitarian than younger women (b = 0.01).

Table 3.2 also demonstrates that the higher men and women are educated, the more they support gender egalitarianism. The influence of educational attainment on support for gender egalitarianism is stronger for women (beta = 0.19) than for men (beta = 0.13), yet the difference is not significant. Men and women who attend church less than once a week support gender egalitarianism significantly more than those attending church weekly. The influence of church attendance on support for gender egalitarianism is again stronger for women (beta = 0.12) than for men (beta = 0.10), albeit not significantly. Full-time working men support gender egalitarianism significantly less than non-working men (b = -0.06), whereas part-time working men do not differ from the latter (b = 0.08, not significant). Both part-time and full-time working women show significantly more support for gender egalitarianism than non-working women (b = 0.15 respectively 0.10). However, the overall effect of labour force participation on support for gender egalitarianism is weak (beta = 0.03 respectively 0.06) and not significantly different for men and women. Due to these relatively small effects, shifts in the distribution of these characteristics should have been considerable in order to have propelled support for gender egalitarianism over time.

We controlled for changes in the effects of educational attainment, church attendance and labour force participation over time by including interaction terms (coefficients are displayed in Table A3.2, Appendix Chapter 3). The effects of these individual characteristics hardly changed over time.

Because the standardised coefficients of period and cohort in Table 3.2 tell little about either the direction of the effects (i.e., the sheaf-coefficient is always positive) or their non-linear relation with support for gender egalitarianism, we graphically presented the predicted mean levels of support for gender egalitarianism over the survey years and across birth cohorts in Figure 3.3, based on the controlled regression coefficients of all period dummies (a) and all birth cohort dummies (b). Figure 3.3a shows that men’s and women’s support for gender egalitarianism increased between 1979 and 1996, controlled for all other factors. Between 1996 and 2002 there was a small drop, after which the trend recovered again. Figure 3.3b shows that the estimated mean level of support for gender egalitarianism
across birth cohorts. With all other characteristics held equal, the rise of support for gender egalitarianism across cohorts appears to be much stronger for women than for men, which was also indicated by the standardised coefficients for birth cohort in Table 3.2 (beta = 0.37 respectively 0.11). Older female cohorts support gender egalitarianism less than their male counterparts, but the gender gap reversed among cohorts born after 1950. As birth cohort is the strongest predictor for women’s level of support for gender egalitarianism, replacement of more traditional cohorts by the more egalitarian cohorts born between the 1950s and 1970s is likely to have contributed to the upward trend among women in particular.

Figure 3.3 | Predicted mean levels of support for gender egalitarianism for men and women by period (a) and cohort (b) based on multivariate regression analyses

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.

Note: Estimates are controlled for educational attainment, church attendance, labour force participation, and age. The predicted means per year and birth cohort are expressed as the controlled deviations from the sample mean levels of support for gender egalitarianism.
3.5.3 Results from counterfactual analysis

Once we determined the influence of birth cohort, educational attainment, church attendance, and labour force participation on the individual level, controlled for period and age, we analysed the actual contribution of cohort replacement and shifts in the distribution of the individual characteristics over time to the longitudinal rise in support for gender egalitarianism. This allows us to answer our second research question. Given the cohort effect size as shown in Table 3.2, we expected the trend towards more gender egalitarianism to be mainly due to the replacement of older cohorts by younger cohorts, and particularly so for women. Given the effects of educational attainment, church attendance, and labour force participation, we expected additional yet weaker contributions of shifts therein over time.

Based on our multivariate regression estimates (Table 3.2), we simulated trends in support for gender egalitarianism as if a) the cohorts that were present in the sample of 1979 had not been replaced by younger cohorts, and the distribution of b) educational attainment, c) church attendance, and d) labour force participation had not changed in our sample since 1979.

Figure 3.4 presents the trends resulting from these counterfactual simulations for men and women separately. The dotted line shows the observed trend in support for gender egalitarianism over time (taken from Figure 3.2). The differences between the observed mean and the simulated means in each survey year indicate the contribution of cohort replacement and shifts in the distribution of educational attainment, church attendance, and labour force participation in the population since 1979. The larger these differences, the stronger the relative contribution of compositional shifts to the rise in support for gender egalitarianism. To test whether the differences between the observed and simulated means are significant, we calculated 95% confidence intervals per survey year.

For the calculated differences and corresponding confidence intervals we refer to Table A3.3 (men) and A3.4 (women) in the Appendix of Chapter 3.

Line (a) in Figure 3.4 shows the simulated trend with cohorts in the sample of 1979 constant over the years (i.e., as if no cohort replacement had taken place). For men, the simulated trend only marginally deviates from the observed trend and the difference is not significant. This is due to the fairly small differences in mean levels of support for gender egalitarianism between older and younger male cohorts (see Figure 3.3b) that were used to calculate the simulated trend. By contrast, the simulated trend among women suggests that the longitudinal increase in support for gender egalitarianism would have been significantly less strong if the cohorts in the sample of 1979 (who were born between 1907 and 1963) would not have been (partly) replaced by younger cohorts. If older female birth cohorts had not been replaced by more egalitarian female cohorts, then support for gender egalitarianism would even have declined over time. Based on these results, cohort
replacement mainly accounted for the rise in support for gender egalitarianism among women, supporting hypothesis 1.

Figure 3.4 | Observed and simulated trends in support for gender egalitarianism based on the distribution of cohorts, educational attainment, church attendance, and labour force participation within the sample of 1979, for men and women separately

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.
Line (b) shows the simulated trend with the sample distribution of educational attainment among men and women held constant since 1979 (i.e., as if no educational expansion had taken place). Under this condition, men’s rise in support for gender egalitarianism would have been slightly less strong than observed. The differences between the observed and simulated means are small yet significant in each survey year (except in 1980). For women, the differences between the observed and simulated means are larger, indicating that educational expansion has contributed more to the rise in support for gender egalitarianism among women than among men. Between 1979 and 2002, the difference between the observed and the simulated trend increases over time as educational expansion advances. Between 2002 and 2008, however, the difference between the observed and simulated means decreases, which can be attributed to the temporary slowdown of the process of educational expansion in our sample during this period (see Figure A3.1, Appendix Chapter 3). These results provide support for hypothesis 2: educational expansion has contributed to the observed rise in support for gender egalitarianism in the Netherlands over time, and this contribution was stronger among women than among men. We should note, however, that the contribution of educational expansion is rather small.

Line (c) shows the simulated trend with the sample distribution of church attendance constant since 1979 (i.e., as if no secularisation had taken place). For both men and women, the simulated trend indicates that the rise in support for gender egalitarianism would have been slightly less strong than observed if secularisation had not taken place in the period under study. Although the differences between the observed and the simulated means are minimal, the contribution of secularisation is significant (except between 1980 and 1987 for women) and stronger for men, corresponding to the somewhat stronger process of secularisation among men than among women (see Figure A3.2, Appendix Chapter 3). Thus, secularisation has indeed contributed to the rise in gender egalitarianism, albeit only slightly, and stronger for men than for women, which contradicts hypothesis 3.

Line (d) shows the simulated trend with the distribution of labour force participation in the sample constant since 1979 (i.e., as if no changes in labour force participation had taken place). The simulated trend among men hardly deviates from the observed trend (yet significantly from 1996 onwards). Shifts in the male distribution of labour force participation mainly came down to an increase in the share of part-time working men. This shift has contributed little to the rise in support for gender egalitarianism. Also for women, we find marginal differences between the observed and simulated means (albeit significant from 1993 onwards). Thus, although we found a considerably increase in the proportion of – mainly part-time – working women between 1979 and 2012 (see Figure A3.3, Appendix Chapter 3), the contribution of the rise in female labour force participation to the trend was limited because the effect of labour force participation on support for gender egalitarianism is rather small (see Table 3.2). Thus, we found some support for hypothesis 4 that the feminisation of the labour force has contributed to the trend in support for gender egalitarianism, but its impact is minimal.
Line (e) shows the total simulated trend with cohorts and the distribution of education, church attendance and labour force participation in the 1979 sample constant over the survey years. For men, the simulated trend suggests that cohort replacement and shifts in the distribution of characteristics have had a modest influence on the trend in support for gender egalitarianism. The difference between the observed and simulated means is small but significant (except in 2008 and 2012). For women, the total simulated trend indicates that the observed trend would be largely absent, and that women would even be less egalitarian after the turn of the century compared to 1979, if the existing cohorts in 1979 had not been replaced by younger cohorts, and, to a lesser extent, if there had been no educational expansion. Secularisation and changes in the share of women in the labour force between 1979 and 2012 hardly played a role in explaining the rise in support for gender egalitarianism.

### 3.6 Conclusion and discussion

In this research, we aimed to provide insight in the rise in support for gender egalitarianism among men and women and the extent to which important societal shifts in the demographic structure of the Dutch population could explain these trends. We used 16 waves of nationally representative cross-sectional data from the Netherlands between 1979 and 2012. The answer to our first research question is in line with previous research on gender egalitarianism: we found that both men's and women's support for gender egalitarianism concerning the care for children has increased during this period, with a temporary decline between 1996 and 2002. Women support gender egalitarianism more than men, and the development of these opinions over time was stronger for women than for men.

We found birth cohort to be a strong determinant of support for gender egalitarianism, especially among women. The oldest female cohorts in our study were least supportive of the idea that men and women are equally suited to raise children, even less than men born in the same birth cohorts. As each subsequent female cohort supports gender egalitarianism more, women have gradually caught up with and even by-passed men's support for gender egalitarianism. The gender gap reversed with the cohorts born after the Second World War, who were socialised during the “cultural revolution” of the 1960s and 1970s. These findings support Mannheim's (1952) notion, followed up by Inglehart (1997), that cohorts (generations) differ from each other because they have had different formative experiences which were specific for the historical and cultural situation in which they grew up. However, we found that this holds more strongly for women. As a consequence, changes in the female demographic composition could well explain the observed trend among women, as previously proposed (Brooks & Bolzendahl, 2004; Cotter et al., 2011; Pampel, 2011).
We answered our second research question by actually showing that the rise in support for gender egalitarianism was mainly due to the replacement of older female cohorts by the younger, more egalitarian female cohorts born between the 1950s and 1990s, taking advantage of counterfactual simulation analyses to fill this lacuna in the existing knowledge. However, only a small part of men’s increase in support for gender egalitarianism could be attributed to shifts in the demographic composition, as the differences between older and younger male cohorts in their mean levels of support for gender egalitarianism were fairly small. Recent female cohorts indeed seem to have more interest in challenging the existing gender structures than male cohorts (Bolzendahl & Myers, 2004). Moreover, women may have benefited more from changes in the cultural and institutional discourse in which they were socialised. In the Netherlands, for example, several policies and media campaigns have been designed to encourage girls and women to enter male dominated educational subjects and occupations, such as science and technology (Wilson & Dekkers, 2013), while it has been less accepted and certainly not encouraged for men to take on female jobs or activities.

The increase of the share of higher educated women has also contributed somewhat to the trend, while the impact of secularisation and the feminisation of the labour market was marginal. This implies that the effect sizes of these characteristics and/or shifts in their distribution in the population were not strong enough to make a substantive impact on support for gender egalitarianism. Although we found that female church attendees differ significantly from non-attendees, Dutch women’s secularisation was seemingly not substantial enough to change support for gender egalitarianism at the societal level. Likewise, the increase in the share of (mainly part-time) working women has not contributed to the rise in gender egalitarianism, contrary to what has been widely theorised (e.g., Bolzendahl & Myers, 2004), because the effect size of labour force participation was rather small.

This study contributed to our understanding of the rise in support for gender egalitarianism in the Netherlands by showing that cohort replacement could well explain the trend among women, whereas it only explained a minor part of the observed trend among men. We showed that the strength of demographic compositional changes as an explanation for the rise in support for gender egalitarianism is a combination of the effect size of demographic characteristics and their distributional shifts in the population, which differ between men and women. We added to previous propositions by quantifying the often theorised relationship between important social, cultural, economic, and demographic societal changes and men’s and women’s rising support for gender egalitarianism. In addition, we demonstrated that the explanations for these trends are gender-specific. Hence, future research is advised to consider differential explanatory models for men and women.

Several limitations of this study should be addressed. First, gender egalitarianism consists of different dimensions (Davis & Greenstein, 2009), but we could only measure a specific
aspect of support for gender egalitarianism based on one question concerning care for
little children. This item was the best measure at hand, because we needed as many time
points as possible to perform a counterfactual analysis and other measures in the data
were only available in a limited number of waves. One could argue that the question
whether a woman is more suited to raise little children not only measures preferences for
gendered child care responsibilities but also captures gender essentialist beliefs of women
having an inherently greater ability of caregiving and nurturing. Such gender essentialist
assumptions of men and women having equal but essentially different natures may be
used to justify role specialisation and may reproduce gender stereotypes and existing
inequalities in the household and in society at large (Charles, 2011; England, 2010; Epstein,
2007). For example, England (2010) and Charles (2011) have argued that, even (or particularly)
in countries in which women have formally or legally gained equal opportunities and
support for gender equality is widespread, men and women often work in traditionally
male and female jobs. Also in the Netherlands, sex segregation in educational fields
and on the labour market is considerably high, and women still allocate more time to
household tasks than men (Portegijs & Van den Brakel, 2016). Although gender essentialist
notions seem to persist, our findings indicate that more and more people have moved
away from the belief that women are better suited to raise little children than men, which
would contribute to greater gender equality. Disentangling various forms of gender
egalitarianism in future research may add to a better understanding of changes in gender
ideology. Notwithstanding, our findings are highly comparable to other studies using
different measures of gender egalitarianism in different contexts (e.g., Cotter et al., 2011;
Donnelly et al., 2015; Inglehart & Norris, 2003; Schnabel, 2016; Shorrocks, 2016).

Second, due to the cross-sectional nature of our data, we cannot rule out the possibility
of a reversed relationship between labour force participation and support for gender
egalitarianism; higher levels of support for gender egalitarianism may have driven more
women to enter the labour force. The use of panel data in future research may shed light
on this issue. Yet, we consider cohort replacement to have actually influenced the rise in
support for gender egalitarianism, as the reverse is highly unlikely.

Third, we could fairly well explain the rise in women’s support for gender egalitarianism,
but the smaller rise in men’s support for gender egalitarianism remains largely
unexplained. Certain periodic societal events or developments, such as female labour
force participation, emancipation policies or governmental measures concerning child
care may have directly influenced men’s support for gender egalitarianism, but we were
not able to include these contextual measures in our study. Besides, men have likely
adopted support for gender egalitarianism at a slower pace than women because of their
stronger interests in protecting the traditional gender hierarchy. With advanced gender
equality, support for gender egalitarianism will possibly diffuse from young female
cohorts to male cohorts.
Finally, we found a temporary decline between 1996 and 2002 which remained unexplained. Yet, the downturn in support for gender egalitarianism was not limited to the Dutch case, as a similar drop was found in other contexts (Cotter et al., 2011; Donnelly et al., 2015; Schnabel, 2016). This suggests that certain societal or even broader events may play a role in explaining periodic fluctuations in the trend towards support for gender egalitarianism. Although this study is confined to the Netherlands, similar social, cultural, economic and demographic societal changes have taken place in other western countries. Therefore, this study provides general insights in explaining the rise in support for gender egalitarianism and may inspire theory driven hypotheses on gender-specific period and cohort events affecting the rise in support for gender egalitarianism.
CHAPTER 4

Cohort and period explanations for the upward trend in support for gender egalitarianism in the Netherlands, 1979-2006

A slightly different version of this chapter is currently under review at an international journal. Paula Thijs wrote the main part of the manuscript and conducted the analyses. Te Grotenhuis, Scheepers, and Van den Brink substantially contributed to the manuscript. An earlier version of this study was presented at the Day of Sociology (Brussels, Belgium, 2017), and at the European Consortium for Sociological Research (ECSR) General Conference “Institutions, Inequality and Social Dynamics” (Milan, Italy, 2017).
4.1 Introduction

Although gender equality has improved throughout the world, considerable gender based inequality, discrimination, and exclusion persist (World Economic Forum, 2015). Public support for gender egalitarianism may be an important factor in achieving gender equality, because it contributes to a more egalitarian division of work and family responsibilities between partners, and increases women’s opportunities, political participation, and labour market outcomes (Corrigall & Konrad, 2007; Fortin, 2005; Inglehart & Norris, 2003).

Since the 1960s, a liberalising trend towards greater public support for gender egalitarianism has been found in a wide range of countries, including the United States (Cotter et al., 2011; Mason & Lu, 1988; Thornton et al., 1983), Western Europe (Kraaykamp, 2012; Lee et al., 2007; Scott et al., 1996), Australia (Van Egmond, Baxter, Buchler, & Western, 2010), as well as in non-western countries (Inglehart & Norris, 2003).

Theoretically, it is argued that structural and cultural developments, such as increasing levels of education, declining religiosity and the rise of women’s employment have propelled support for gender egalitarianism (Brewster & Padavic, 2000; Cotter et al., 2011; Mason & Lu, 1988; Pampel, 2011; Scott et al., 1996). These developments have supposedly transformed the dominant societal discourse, exposing all individuals, and particularly those in their formative years, to more egalitarian ideas (Inglehart & Norris, 2003). Instead of testing these explanations directly, however, previous research has mainly compared levels of support for gender egalitarianism over time and across different birth cohorts (so-called period and cohort effects) (Brewster & Padavic, 2000; Brooks & Bolzendahl, 2004; Cotter et al., 2011; Firebaugh, 1992; Kraaykamp, 2012; Mason & Lu, 1988; Neve, 1995). By using temporal measures of birth cohort and survey year as broad indicators of historical and contemporary developments, these studies leave unexplained why people living and growing up in times of different societal circumstances vary in their support for gender egalitarianism. For example, in their literature review, Davis and Greenstein (2009) concluded that “several researchers have found period effects, but the impetus for change continues to be unclear” (p. 91). Hence, a lacuna remains in the existing literature with regard to the underlying determinants of the well-documented trends in support for gender egalitarianism.

More recently, scholarly attention has been directed to an apparent slowdown of the trend towards gender egalitarianism in the mid-1990s, also referred to as the “stalled gender revolution” (Cotter et al., 2011; England, 2010; Pepin & Cotter, 2018; Shu & Meagher, 2017). These studies have started to take the societal context into account to explain this stall in gender egalitarianism. For example, Shu and Meagher (2017) found that increased gender equality in the labour force partly accounted for the rise in gender attitudes in the U.S. in the 1980s, whereas the rise of men’s overwork appeared to explain part of the slowdown in gender attitudes in the 1990s as well as a “restart” of liberal gender attitudes from 2004.
onwards. Pepin and Cotter (2018), by contrast, found that contextual increases in mothers’ education and employment played a minimal role in explaining American high school students’ gender attitudes about work and family. Based on cross-national comparisons, Dotti Sani and Quaranta (2017) found that adolescents’ gender attitudes are influenced by the dominant societal discourse on gender inequality. However, still surprisingly little is known about the underlying determinants of the upward trend in support for gender egalitarianism in the past decennia. To our knowledge, no prior study has yet tested the widely theorised contribution of important structural and cultural developments in the societal context during people’s formative years to the upward trend in public support for gender egalitarianism.

In this research, we aim to contribute to the existing literature by empirically analysing the influence of three theoretically relevant societal developments, i.e., educational expansion, secularisation, and the rise of women’s labour force participation on the trend towards stronger support for gender egalitarianism among women and men in the Netherlands. Gender egalitarianism is referred to as a belief system that advocates equal rights, roles, and responsibilities for men and women; and, vice versa, opposes the notion that men and women have innately different roles, for example that women are essentially more suited for care taking and home making whereas men’s ‘natural’ role is that of the breadwinner (Davis & Greenstein, 2009).

In the Netherlands, public support for gender egalitarianism has risen substantially to one of the highest levels in Europe (Merens & Van den Brakel, 2014). Notwithstanding, views on child care arrangements and responsibilities seem more ambivalent, since women are still being held primarily responsible for the children and they spend more time on caregiving than men (Knijn, 1994; Merens & Van den Brakel, 2014; Wiesmann, Boeije, Doorne-huiskes, & Den Dulk, 2008). We therefore focus on one aspect of support for gender egalitarianism that seems of particular interest in the Netherlands as well as in many other western countries, i.e., whether women are more suited to raise little children than men.

Moreover, the Netherlands provides an interesting case as the Dutch societal and cultural context has vastly changed since the 1960s. As compared to many other countries, the Netherlands has been in the vanguard of educational expansion (Bar Haim & Shavit, 2013) and secularisation (Becker & De Hart, 2006). In addition, Dutch women’s labour force participation has increased rapidly, shifting from one of the lowest in Europe to one of the highest in only a few decades (although the majority of women works part-time) (Merens & Van den Brakel, 2014; Pott-Buter, 1993).

To analyse whether these societal developments explain changes in support for gender egalitarianism, we replace the temporal effects of time period and birth cohort with theoretically relevant indicators of period- and cohort-specific structural and cultural circumstances (Menard, 1991), while controlling for age effects and differences in
Explaining trends in gender egalitarianism in the Netherlands

the composition of the population. We add to the emerging literature on contextual explanations of trends in gender egalitarianism by providing more a thorough test of previously developed theoretical arguments, and we contribute to the interpretation of changes in support for gender egalitarianism over time and across cohorts. In addition, we analyse whether the influence of structural and cultural developments is gender-specific, as men and women have different interests in gender equality and may respond differently to questions about gender egalitarianism (Ciabattari, 2001; Jennings, 2006). We address the following research question: To what extent can the trend towards stronger support for gender egalitarianism among men and women in the Netherlands since 1979 be explained with historical and contemporary contextual characteristics?

We use nationally representative cross-sectional data from the Cultural Changes in the Netherlands (CV) surveys between 1979 and 2006. We complement these data with historic and contemporary indicators of educational expansion, secularisation, and female labour force participation collected from the Dutch population censuses and labour force surveys, covering a timespan of about 100 cohort years and about 25 survey years.

4.2 Theory and hypotheses

4.2.1 From micro-level theories to macro-level explanations

Two theoretical approaches are mainly used to explain individual variation in support for gender egalitarianism: the interest-based approach and the socialisation or exposure approach. The interest-based perspective argues that people adopt and maintain attitudes that are in line with their personal goals and interests (Bolzendahl & Myers, 2004). According to theories of socialisation and exposure, people adopt egalitarian beliefs when socialised into liberal gender norms or when exposed to egalitarian ideas about gender (Bolzendahl & Myers, 2004; Inglehart & Norris, 2003). These perspectives are often employed to explain why women support gender egalitarianism more than men (Davis & Greenstein, 2009). Since women in general continue to have a deprived position in society as compared to men (Epstein, 2007; World Economic Forum, 2015), promoting gender equality benefits their interests best (Bolzendahl & Myers, 2004). Men, by contrast, gain less from supporting gender egalitarianism because it may undermine their dominant position or because they are simply unaware of their favourable position (Baxter & Kane, 1995; Ciabattari, 2001). In addition, childhood socialisation in, and exposure to egalitarian ideas and contexts are supposed to impact women more than men (Bolzendahl & Myers, 2004; Dotti Sani & Quaranta, 2017), resulting in stronger support for gender egalitarianism among women.

These individual-level theoretical perspectives, however, cannot explain changes in support for gender egalitarianism over time. Previous studies have therefore argued that
people's interest in, and exposure to gender egalitarianism may have changed due to societal developments that have taken place during the past decades. For example, it is argued that women's interest in gender egalitarianism in society has increased due to their rising educational levels, their declining religiosity and their increasing labour market participation, which makes them more likely to adopt gender egalitarian views (Brooks & Bolzendahl, 2004; Pampel, 2011). Yet, the influence of these societal developments may even spill over to other people by shifting the normative societal climate to which all individuals – including men – are exposed (Inglehart & Norris, 2003).

4.2.2 Historical and contemporary societal developments

Building on theories of social change, societal developments could have influenced support for gender egalitarianism in two ways. According to socialisation theories, historical circumstances and events shape the experiences that people have during their formative years (Mannheim, 1952). These so-called cohort effects are supposed to have a lasting influence on people's attitudes throughout the life course (Inglehart, 1997). People who are socialised under societal circumstances in which egalitarian gender norms prevail, may therefore support gender egalitarianism more, even at later stages in life.

Alternatively, it is assumed that people are open to change throughout the life course and that they alter their attitudes in response to certain events and developments (Alwin & McCammon, 2003). Contemporary societal circumstances at a certain period in time, also referred to as period effects, may expose the entire population equally and simultaneously to a certain cultural discourse of gender egalitarianism, resulting in a broad shift in aggregate support for gender egalitarianism from one period to another (Inglehart & Norris, 2003).

Drawing on these theoretical notions of socialisation and exposure, we derive predictions on cohort- and period-specific societal developments in the Netherlands that may play a role in explaining the upward trend towards gender egalitarianism. Given the greater interest of women in supporting gender egalitarianism due to their relatively disadvantaged position, as well as their supposedly stronger socialisation in and exposure to egalitarian beliefs (Brooks & Bolzendahl, 2004), we expect the influence of these societal circumstances to be consistently stronger for women than for men. Adopting egalitarian gender norms could benefit women's educational and occupational opportunities and may reduce the “double burden” of paid labour and family responsibilities that women often experience (Bolzendahl & Myers, 2004; Van der Lippe & Van Dijk, 2001). Dotti Sani and Quaranta (2017) indeed found that the dominant societal discourse on gender equality had a strong influence on young women's gender egalitarianism, but not on young men's.
Educational expansion

The educational level of the Dutch population has increased substantially in the last century (Bar Haim & Shavit, 2013). It is argued that education has a “liberalising” influence, transmitting ideas about diversity and equality, countering gender stereotypes, and increasing individuals’ openness to alternative perspectives on the role of women and men in the public and private sphere (Bolzendahl & Myers, 2004; Vogt, 1997). Previous research has consistently shown that obtaining a higher educational level is related to more support for gender egalitarianism (Bolzendahl & Myers, 2004; Brewster & Padavic, 2000). When educational levels rise in society, the likelihood of interacting with people who endorse more egalitarian gender attitudes increases. Moreover, educational expansion may shift the dominant societal discourse regarding gendered roles, signalling a cultural shift towards more opportunities for women. As a consequence, people in their formative years have become socialised into an increasingly egalitarian societal context, instilling stronger support for gender egalitarianism in these cohorts. Although Pepin and Cotter (2018) found that increases in mother’s educational levels in the U.S. played a minimal role in explaining changes in adolescents’ gender attitudes, a stronger influence of rising educational levels may be found when comparing gender egalitarianism across a larger number of generations. Hence, we derive that: the higher the level of education in society that people are exposed to during their formative years, the stronger people will support gender egalitarianism, and this effect will be stronger for women than for men (H1a).

Contemporary exposure to a highly educated societal context, characterised by a more egalitarian discourse, may also spill over to other individuals in such context, inducing support for gender egalitarianism regardless of people’s social positions. For example, Banaszak and Plutzer (1993) found stronger support for gender egalitarianism in U.S. regions where women’s educational attainment approached that of men. To investigate whether this also applies when comparing different time points instead of regions, we formulate the following hypothesis: the higher the level of education that people are exposed to in contemporary society, the stronger people will support gender egalitarianism, and this effect will be stronger for women than for men (H1b).

Secularisation

Traditional religious institutions have for long prescribed and actively enforced social norms regarding which activities and behaviours are considered appropriate for men and women. These traditional norms assign a subordinate position to women that is confined to the care for children and household chores (Inglehart & Norris, 2003; Peek, Lowe, & Williams, 1991). According to Voas et al. (2013), “[t]he conservative ethos of religious organisations validates and reinforces the choice [of a woman] to be a home-maker” (p.264). Over the past decades, the Netherlands has witnessed a dramatic decline in church membership, church attendance, and religious beliefs (De Graaf & Te Grotenhuis, 2008). This process of secularisation is supposed to have weakened the strength of traditional gender norms, leading people to dissociate themselves from their prescribed
roles as homemakers or breadwinners (Inglehart & Norris, 2003). Previous studies indeed found higher levels of support for gender egalitarianism among non-religious individuals (Bolzendahl & Myers, 2004; Thornton et al., 1983; Voicu, 2009). With advancing secularisation, people in their formative years are likely socialised into an increasingly egalitarian cultural climate, which may have instilled higher levels of support for gender egalitarianism in these cohorts. We thus expect that the higher the level of secularisation in society that people are exposed to during their formative years, the stronger people will support gender egalitarianism, and this effect will be stronger for women than for men (H2a).

Exposure to a context with higher shares of non-religious people may not only influence support for gender egalitarianism among people in their formative years, but may affect all individuals in such context. Comparing differences in gender attitudes between U.S. states, Moore and Vanneman (2003) found that people living in states with higher proportions of religious fundamentalists hold less egalitarian beliefs. Hence, we expect that the decline of religiosity in society exposes both religious and non-religious people to increasingly egalitarian gender norms. We expect that the higher the level of secularisation that people are exposed to in contemporary society, the stronger people will support gender egalitarianism, and this effect will be stronger for women than for men (H2b).

**The feminisation of the labour force**
The rise of women's labour force participation is one of the most frequently mentioned explanations for the increase in support for gender egalitarianism (e.g., Banaszak & Plutzer, 1993; Brooks & Bolzendahl, 2004; Cotter et al., 2011; Mason & Lu, 1988). In the Netherlands, women's participation in the labour force increased considerably over the past decades (Merens & Van den Brakel, 2014; Pott-Buter, 1993). As a consequence, people are more likely to interact with working women as family, friends, neighbours, and colleagues. Such interactions may challenge ideas about a traditional division of paid and unpaid labour, and women’s dependency on men, in turn legitimising alternative family and child care arrangements. It is argued that exposure to working women’s ability to be self-reliant and to perform in the labour market induces higher levels of gender egalitarianism (Meuleman, Kraaykamp, & Verbakel, 2016). Moreover, societal norms on women’s capability to work outside the home may be more widespread when female labour force participation is higher. Particularly for people during their formative years, socialisation in such normative climate may have a lasting influence on their support for gender egalitarianism. Dotti Sani and Quaranta (2017), for example, showed that adolescents (especially young women) are more likely to internalise gender egalitarian attitudes in countries where women are more emancipated and visible in the public sphere. To analyse whether this also holds within one country over time, we formulate the following hypothesis: the higher the level of female labour force participation in society that people are exposed to during their formative years, the stronger people will support gender egalitarianism, and this effect will be stronger for women than for men (H3a).
Increased female labour force participation may also influence people who are not in their formative years, exposing the entire population to a more egalitarian normative climate. In addition, employed women’s viewpoints may spill over to other individuals in society, inducing more support for gender egalitarianism independent from people’s own employment status. In a cross-national study, André, Gesthuizen and Scheepers (2013) indeed found stronger support for gender egalitarianism in countries with higher female labour force participation, particularly among women. By contrast, Meuleman and colleagues (2016) found no such effect, whereas Banaszak and Plutzer (1993) found regional rates of labour force participation in the United States to be related to lower gender egalitarianism among non-working women. Focusing on changes over time instead of differences between countries or regions, Shu and Meagher (2017) found that contextual changes in women’s labour force participation in the U.S. indeed partly accounted for the rise in support for gender egalitarianism, as well as for the mid-1990s slowdown. Hence, we expect that: the higher the level of female labour force participation that people are exposed to in contemporary society, the stronger people will support gender egalitarianism, and this effect will be stronger for women than for men (H3b).

Figure 4.1 presents our theoretical expectations in a conceptual model.
4.3 Data and measurements

To test our hypotheses, we employed repeated cross-sectional data from 14 waves of the Cultural Changes in the Netherlands surveys (CV). These data were collected in face-to-face interviews between 1979 and 2006 by the Netherlands Institute for Social Research and Statistics Netherlands (SCP & CBS, 2016) to monitor opinions about society and culture among the Dutch population. Each wave consists of a representative national sample of around 2,000 individuals between 16 and 74 years old. We combined all 14 waves into one pooled data set, containing 28,091 respondents. We enriched these data with contextual data to measure period- and cohort-specific societal circumstances.

4.3.1 Dependent variable

Support for gender egalitarianism was measured with the question: “A woman is more suited to raise little children than a man”. Response categories ranged from (1) strongly agree to (5) strongly disagree. This question is related to a specific aspect of the private dimension of gender egalitarianism (Wilcox & Jelen, 1991) and captures a “gender essentialist” notion of women and men having innately different interests and skills, which may guide preferences for a sex-typed division of roles (Charles, 2011). Although gender egalitarianism consists of various dimensions (Davis & Greenstein, 2009), other questions on gender egalitarianism in the data were only available in fewer waves. A higher score on the dependent variable indicates more support for gender egalitarianism. We excluded individuals with a missing value on the dependent variable (2.7 percent).

4.3.2 Individual characteristics

The respondents’ sex was measured as (0) male or (1) female. We operationalised educational attainment as the respondents’ highest educational level followed. We harmonised the educational categories over the waves, resulting in seven categories of educational attainment ranging from primary education to university education. To measure church attendance, respondents were asked how often they had attended church in the past half year, ranging from once a week or more to never. In addition, respondents indicated whether or not they considered themselves a member of any church or religious community. To measure people’s socio-economic position, we combined information about the respondents’ employment position and working hours, based on the commonly used definition of Statistics Netherlands (Janssen & Dirven, 2015; Kraaykamp, 2012), which distinguishes between full-time employment (more than 35 hours a week), part-time employment (12-35 hours working per week), and non-working (0-12 hours a week). We grouped respondents in the latter category into four additional categories based on information about their socio-economic position (e.g., unemployed or household labour). We included a variable indicating whether or not there are any children in the
household. Because people may become more conservative as they age, we included age of the respondent as a control variable. We excluded missing values on the individual characteristics (3 percent).

### 4.3.3 Historical and contemporary contextual characteristics

To measure historical and contemporary societal circumstances, we complemented the data with contextual information on the average educational level, the share of non-religious people, and women’s participation in the labour force at the province level. The Netherlands is divided into 12 provinces, with on average about 1.5 million inhabitants per province. Considerable differences exist in the levels and rates of educational expansion, secularisation, and rising female labour force participation between these provinces. We propose that (formative) circumstances at the province level provide a more direct measurement of socialisation or exposure than national-level circumstances. Moreover, contextual characteristics on the national level show far less variation. For each birth cohort, born between 1905 and 1990, we calculated a five-year average of these indicators for the period when the respondent was aged between 16 and 20 years (i.e., an important part of people’s formative years). Period characteristics were measured using the average values on the indicators from the year preceding the survey year (i.e., lagged by one year) per province.

We measured **educational expansion** by calculating per province the average educational level of the cohort that entered the labour market, derived from the Dutch population census 1960 (Statistics Netherlands, 1999) and the Dutch labour force surveys 1992, 1994, 1996, and 2016 (Statistics Netherlands, 1987, 2016). We used the Dutch Standard Education Classification (SOI), which ranges from 1 (primary education) to 5 (tertiary education). In 1900 the average educational level of people who entered the labour market amounted to 1.06 (1.04 among women and 1.07 among men), which is just above primary education level (see Figure A4.1, Appendix Chapter 4). By 2006, the Dutch educational level had risen to 3.44 (3.55 among women and 3.33 among men), corresponding to (upper) secondary education. In the early 1990s, women’s educational level surpassed that of men.

**Secularisation** was measured as the percentage of individuals not belonging to any religious denomination per province, derived from the Dutch population censuses from 1899, 1909, 1920, 1930, 1947, 1960, and 1971 (Statistics Netherlands, 1999), the Cultural Changes in the Netherlands surveys (CV) 1970-2006 (SCP & CBS, 2016), and the Socio-Cultural Developments in the Netherlands surveys (SOCON) 1979-2011 (Eisinga et al., 2012). Between 1900 and 2006, the share of non-religious individuals increased from 2.6 percent (2.5 among women and 2.3 among men) to 63.0 percent (59.2 among women and 67.4 among men) (see Figure A4.2, Appendix Chapter 4).
Female labour force participation was measured as the percentage women above 14 years of age who were active in paid labour in each province, derived from the Dutch population censuses from 1899, 1909, 1920, 1930, 1947, 1956, 1960, and 1971 (Statistics Netherlands, 1999) and the Dutch labour force surveys 1981-2013 (Statistics Netherlands, 2014). The share of women participating in the labour force more than doubled between 1900 and 2006, from 16.7 to 35.4 percent (see Figure A4.3, Appendix Chapter 4). However, female labour force participation only slightly increased in the years before the Second World War, and even dropped below 15 percent afterwards. From the late 1950s, women’s participation on the labour market increased again, but it was not until the second half of the 1980s that women’s employment really took off.

Missing values on the contextual measures were replaced using linear interpolation. Because one of the Dutch provinces (Flevoland) was established only in 1986, we lacked information on cohort-specific circumstances for people in this province. We excluded respondents living in Flevoland from our analyses (1.2 percent), resulting in a sample size of 26,004 individuals (12,146 men and 13,858 women). Descriptive statistics for the individual and contextual variables are presented in Table 4.1.

4.4 Methods

To test our hypotheses, we estimated OLS regression models for men and women separately, using historical and contemporary contextual characteristics as proxies for cohort and period effects (Menard, 1991). This method allowed us to estimate the separate influences of three indicators of important societal circumstances, and, moreover, to provide a more meaningful interpretation of previously proposed theoretical explanations of the rise of public support for gender egalitarianism over time. All cohort- and period-specific contextual characteristics were mean centred and the values of the percentage non-religious people and percentage employed women were divided by ten to facilitate interpretation of the unstandardised coefficients. All control variables, including age, were entered as dummy variables to allow for possible non-linear relationships with the dependent variable. Because we expected the influence of all contextual characteristics to differ between men and women, we analysed models for men and women separately. To assess whether the effects for men and women are significantly different, we used a z-test for the difference between two regression coefficients, based on the work of Paternoster et al. (1998).
Table 4.1 | Descriptive statistics of the dependent and independent variables

<table>
<thead>
<tr>
<th>Source</th>
<th>Cultural Changes in the Netherlands 1979-2006; N = 26,004.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>(N = 12,146)</td>
</tr>
<tr>
<td>Women</td>
<td>(N = 13,858)</td>
</tr>
<tr>
<td></td>
<td>Min</td>
</tr>
<tr>
<td>Support for gender egalitarianism</td>
<td>1</td>
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</tbody>
</table>

*Individual characteristics*

<table>
<thead>
<tr>
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<th>74</th>
<th>42.66</th>
<th>15.85</th>
<th>16</th>
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<th>41.85</th>
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<td>0.09</td>
<td></td>
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<td>0.11</td>
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</tr>
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<td>Master’s or equivalent</td>
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<td>1</td>
<td>0.15</td>
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</tr>
<tr>
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<td>1</td>
<td>0.04</td>
<td></td>
<td>0</td>
<td>1</td>
<td>0.05</td>
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</tr>
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</tr>
<tr>
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<tr>
<td>Socio-economic position</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td>0</td>
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<td>0.13</td>
<td></td>
</tr>
<tr>
<td>Part-time employment</td>
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<td>0.21</td>
<td></td>
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<tr>
<td>Unemployed</td>
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<td>0.02</td>
<td></td>
</tr>
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<td>Household labour</td>
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<td>0.01</td>
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<td>0</td>
<td>1</td>
<td>0.47</td>
<td></td>
</tr>
<tr>
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<td></td>
<td>0</td>
<td>1</td>
<td>0.07</td>
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</tr>
<tr>
<td>In education</td>
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<td>0.09</td>
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<td>0</td>
<td>1</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Other position</td>
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<td>0.02</td>
<td></td>
<td>0</td>
<td>1</td>
<td>0.03</td>
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<tr>
<td>Children (yes)</td>
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<td>0.54</td>
<td></td>
<td>0</td>
<td>1</td>
<td>0.58</td>
<td></td>
</tr>
</tbody>
</table>

*Contextual characteristics*

| Cohort-specific educational expansion | 1.17  | 3.78  | 2.58  | 0.57  | 1.17  | 3.78  | 2.61  | 0.55  |
| Cohort-specific secularisation | 0.64  | 76.87 | 34.60 | 19.70 | 0.70  | 76.87 | 35.28 | 19.36 |
| Cohort-specific female LFP | 11.85 | 41.42 | 20.05 | 4.29  | 11.85 | 41.42 | 20.04 | 4.29  |
| Period-specific educational expansion | 2.82  | 3.85  | 3.26  | 0.22  | 2.82  | 3.85  | 3.26  | 0.21  |
| Period-specific secularisation | 15.12 | 77.39 | 54.96 | 13.63 | 15.12 | 77.39 | 55.01 | 13.63 |
| Period-specific female LFP | 16.56 | 38.72 | 26.99 | 5.60  | 16.56 | 38.72 | 26.92 | 5.52  |

*Source:* Cultural Changes in the Netherlands 1979-2006; N = 26,004.
First, we analysed the influence of cohort- and period-specific educational expansion, secularisation, and feminisation of the labour force separately, while controlling for a dummified age variable (see Table A4.1, Appendix Chapter 4). To analyse the influence of each of these developments net of one another, we subsequently included all contextual characteristics simultaneously in one model. We could, however, not obtain reliable estimates due to harmful multicollinearity resulting from the confounding of the contextual characteristics with age. One solution to this conundrum is to impose a restriction on the effect of age, i.e., we constrained the effects for all respondents between 16-29 years to be equal (following the approach of Firebaugh & Chen, 1995). This restriction can be theoretically justified because younger men and women, who are not yet confronted with the care for little children, are likely to respond similarly to the question whether women and men are equally suited to raise little children, whereas older people may respond differently depending on their experiences regarding family formation and parenthood. In the Netherlands, the average age at which couples expect their first child lies around 29 years (Statistics Netherlands, 2017). Previous studies indeed showed that support for gender egalitarianism decreases after marriage, and after the birth of the first child (Baxter et al., 2015; Corrigall & Konrad, 2007). Moreover, models in which we separately analysed the influence of cohort- and period-specific educational expansion, secularisation, and feminisation of the labour force, while controlling for age (see Table A4.1, Appendix Chapter 4), showed that the older people are, the less they support gender egalitarianism, starting from their mid-thirties. People aged 16 to 29 years seem not to differ in their support for gender egalitarianism (see Figure A4.4, Appendix Chapter 4), providing statistical support for a restriction on age. We therefore analysed the influence of all period- and cohort-specific characteristics simultaneously, and controlled for a dummified age variable with respondents aged 16 to 29 collapsed into one reference category in Model 1a and 1b.

Because the structure of the population may change with respect to individual characteristics that disposition people towards more support for gender egalitarianism, we included the individual characteristics in Model 2a and 2b to account for compositional differences.

4.5 Results

4.5.1 Support for gender egalitarianism over time

Figure 4.2 shows the trend in support for gender egalitarianism for men and women in the Netherlands over time. The average level of support for gender egalitarianism among men increased from 2.5 in 1979 to almost 2.8 in 1996 (on a scale from 1-5). Women’s support for gender egalitarianism was higher and increased somewhat stronger from 2.8 in 1979 to 3.4 in 1996. Between 1997 and 2002, however, the trend reversed slightly and stabilised after 2002.
4.5.2 Explaining the upward trend in support for gender egalitarianism

Table 4.2 shows the multivariate results from regression analyses including period- and cohort-specific contextual characteristics simultaneously, controlled for age. Models 1a and 1b demonstrate that socialisation in times of a higher average educational level in the population during people’s formative years exerts a substantial positive and significant influence on men’s and women’s support for gender egalitarianism ($b = 0.42$ respectively $b = 0.92$). For example, women socialised in times of the highest average level of education in Dutch society (3.78) score on average 2.40 points higher (on a scale from 1-5) on the measure of gender egalitarianism than women socialised when the average educational level in the Netherlands was at its lowest (1.17) (calculation: $(3.78 - 1.17) * 0.92 = 2.40$). The influence of cohort-specific educational expansion is twice as strong for women as for men ($\beta = 0.43$ vs. $0.21$) and the difference between the coefficients is significant ($p < .05$). This provides preliminary support for hypothesis 1a.

Contemporary exposure to a higher average educational level in society has an additional positive influence on both men’s ($b = 0.26$, $\beta = 0.05$) and women’s ($b = 0.44$, $\beta = 0.08$) support for gender egalitarianism, although the effects are less strong than the influence of educational expansion during the formative years. The effect is not significantly stronger for women than for men ($p < .05$). Thus, we find partial support for hypothesis 1b.
Models 1a and 1b show that socialisation in times of higher shares of non-religious people during people’s formative years has a small, yet significant influence on men’s support for gender egalitarianism \((b = 0.05, \beta = 0.09)\), whereas such effect is absent for women. This suggests that hypothesis 2a is only partially supported. Contemporary exposure to higher shares of non-religious people in society exerts a small significant influence on women’s support for gender egalitarianism \((b = 0.07, \beta = 0.08)\), but not on men’s. Hence, hypothesis 2b also seems only partially supported.

Contrary to our expectation, socialisation in times of higher female labour force participation during the formative years is related to significantly lower levels of support for gender egalitarianism among men \((b = -0.12, \beta = -0.04)\) and women \((b = -0.20, \beta = -0.07)\). This would lead to a rejection of hypothesis 3a. Yet, Dutch women’s participation on the labour market remained rather stable for a long period, and even declined during the first half of the 1950s. Only since then, people in the Netherlands started to be exposed to rising female labour force participation. Hence, we do expect an influence of contemporary exposure to rising female labour force participation.

Model 1a and 1b show a negative effect of period-specific female labour force participation for both men \((b = -0.16, \beta = -0.08)\) and women \((b = -0.31, \beta = -0.14)\), indicating that contemporary exposure to working women in society reduces people’s support for gender egalitarianism. Additional analyses showed that this effect of period-specific labour force participation was positive when analysed in a model without educational expansion (see also Table A4.1, Appendix Chapter 4), but the effect turned negative (but remained significant) once the level of educational expansion was taken into account. Lastly, the results show that the older men are, the less they support gender egalitarianism, whereas there is no significant age effect for women.

In Models 2a and 2b in Table 4.2, the individual characteristics are taken into account to control for compositional differences in the structure of the population. The results show that the influences of historical and contemporary societal circumstances on gender egalitarianism remain present once accounted for people’s structural positions in society. The estimates of educational expansion and secularisation becomes slightly smaller, indicating that a small part of these contextual effects is due to changes in the composition of the population with respect to the individual characteristics. The negative influence of period-specific female labour force participation becomes somewhat stronger for both men and women, once the individual characteristics are taken into account. This suggests that shifts in the population composition for a small part counterbalance the negative influence of exposure to women on the labour market. The individual characteristics in Model 2a and 2b indicate that support for gender egalitarianism is stronger among higher educated people, people who attend church less than once a week, non-religious people, full-time and part-time working men and women, men working in the household, and when there are no children present in the household.
Table 4.2 | Unstandardised and standardised regression coefficients of period- and cohort-specific contextual characteristics on support for gender egalitarianism, controlled for age (constrained) (Model 1) and individual characteristics (Model 2)

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1a</td>
<td>Model 2a</td>
</tr>
<tr>
<td></td>
<td>$B^a$</td>
<td>Beta</td>
</tr>
<tr>
<td>Intercept</td>
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<td>2.40***</td>
</tr>
<tr>
<td><strong>Cohort-specific</strong></td>
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<td></td>
</tr>
<tr>
<td>Educational expansion</td>
<td>.42***</td>
<td>.21</td>
</tr>
<tr>
<td>Secularisation (/10)</td>
<td>.05***</td>
<td>.09</td>
</tr>
<tr>
<td>Female LFP (/10)</td>
<td>-.12**</td>
<td>-.04</td>
</tr>
<tr>
<td><strong>Period-specific</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational expansion</td>
<td>.26**</td>
<td>.05</td>
</tr>
<tr>
<td>Secularisation (/10)</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Female LFP (/10)</td>
<td>-.16**</td>
<td>-.08</td>
</tr>
<tr>
<td>Age (16 to 29 years = ref.)$^b$</td>
<td>1.00**</td>
<td>-.10</td>
</tr>
<tr>
<td><strong>Individual controls</strong></td>
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<td></td>
</tr>
<tr>
<td>Educational attainment (primary = ref.)</td>
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<td></td>
</tr>
<tr>
<td>Primary vocational</td>
<td>.03</td>
<td>.20***</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>.17***</td>
<td>.35***</td>
</tr>
<tr>
<td>Secondary vocational</td>
<td>.14***</td>
<td>.47***</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>-.31***</td>
<td>-.53***</td>
</tr>
<tr>
<td>Bachelor’s or equivalent</td>
<td>-.31***</td>
<td>.62***</td>
</tr>
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<td>.69***</td>
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<td></td>
</tr>
<tr>
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<td>.24***</td>
</tr>
<tr>
<td>Once a month</td>
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<td>.14***</td>
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<tr>
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<td>.14***</td>
<td>.15***</td>
</tr>
<tr>
<td>Never</td>
<td>.15***</td>
<td>.20***</td>
</tr>
<tr>
<td>No church member (yes = ref.)</td>
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<td>.08</td>
</tr>
<tr>
<td>Socio-economic position (full-time = ref.)</td>
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<td></td>
</tr>
<tr>
<td>Part-time employment</td>
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<td>.07*</td>
</tr>
<tr>
<td>Unemployed</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Household labour</td>
<td>.26*</td>
<td>-.10**</td>
</tr>
<tr>
<td>Pensioned</td>
<td>.06</td>
<td>-.08</td>
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<tr>
<td>In education</td>
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<td>.02</td>
</tr>
<tr>
<td>Other employment position</td>
<td>.11</td>
<td>-.05</td>
</tr>
<tr>
<td>Children (no children = ref.)</td>
<td>-.11***</td>
<td>.05</td>
</tr>
<tr>
<td>Variance explained</td>
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<td>13.7%</td>
</tr>
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</table>

Source: Cultural Changes in the Netherlands 1979-2006; N = 26,004.

$^a$ Coefficients in bold indicate a significant difference (p < .05, two-tailed) between men and women (see Paternoster et al., 1998).

$^b$ To save space, we calculated one standardised coefficient (beta) summarising the effect for all dummy categories of age, with age categories 16-29 collapsed into one category (Heise, 1972).

*p < .05, **p < .01, ***p < .001 (two-tailed).
To summarise, people who are exposed to a higher average educational level in society, particularly during their formative years, support gender egalitarianism more, independent of their own social position. The latter influence is stronger for women than for men, supporting hypothesis 1a. Being socialised in a more secular society increases men’s, but not women’s support for gender egalitarianism, which only partly supports hypothesis 2a. On the contrary, women who were exposed to higher shares of non-religious people in a specific time period show more support for gender egalitarianism, over and above their own level of religiosity, but this was not found among men. This confirms hypothesis 2b, albeit for women only. Finally, once accounted for the level of educational expansion in society, people who have been exposed to larger shares of employed women in society seem to support gender egalitarianism less. This contradicts hypothesis 3a and 3b.

We also analysed the contextual influence of sex-specific educational expansion and secularisation on men’s and women’s support for gender egalitarianism. For example, we analysed whether the rise of men’s educational levels in society influenced women’s support for gender egalitarianism, and vice versa. These analyses do not alter our conclusions based on the influence of educational expansion and secularisation in the general population, with the exception that contemporary exposure to higher educated women in society has no significant influence on men’s support for gender egalitarianism.

4.6 Conclusion and discussion

In this study, we aimed to answer the question to what extent the trend towards stronger support for gender egalitarianism among men and women in the Netherlands could be explained by changes in the historical and contemporary societal context. This study makes several contributions to the current literature in this particular domain of research.

First, using data from 16 waves of nationally representative surveys collected in the Netherlands between 1979 and 2006, we showed that the liberalising trend towards greater gender egalitarianism that has been found in a wide range of countries (e.g., Cotter et al., 2011; Inglehart & Norris, 2003; Lee et al., 2007) was also present in the Netherlands. Moreover, a temporary reversal of the trend in support for gender egalitarianism has taken place in the Netherlands during the late 1990s, which appears very similar to the downward trend in the United States (e.g., Cotter et al., 2011; Shu & Meagher, 2017) and Australia (Van Egmond et al., 2010) during the same period, in particular with regard to attitudes about the role of men and women in the family (Pepin & Cotter, 2018). This suggests that a rather universal development, that is not limited to a specific national context, may explain the “stalled gender revolution” in the 1990s. For example, Shu and Meagher (2017) found that a rise of men’s overwork partially accounted for the stagnation in Americans’ gender attitudes. It remains to be seen whether this explanation also holds in the Dutch context.
Second, we empirically tested the influence of three important, and widely theorised societal developments that have taken place in many countries over the past decades, including the Netherlands: educational expansion, secularisation, and the rise of female labour force participation. By substituting cohort and period effects with relevant contextual indicators, we were able to test the separate influence of societal explanations for the rise in support for gender egalitarianism. In this way, we offered a closer look into the “black box” of cohort and period effects that drive the upward trend towards gender egalitarianism. We showed that changes in the societal context in which people have grown up and live partly explain the upward trend in support for gender egalitarianism.

Of the three explanations we tested, educational expansion proved the most important societal development that has contributed to the upward trend. The cohort-specific effect of educational expansion was particularly strong, which suggests that people in their formative years are especially susceptible to the societal climate, providing support for the socialisation perspective (Mannheim, 1952). That is, due to educational expansion, subsequent cohorts have been socialised in a more egalitarian normative climate, which has induced support for egalitarianism regarding the care for little children among men, and especially among women. Exposure to such a climate exerts an additional influence on people’s support for gender egalitarianism, independent of their own social position (Alwin & McCammon, 2003). Although the contribution of secularisation is modest, increased shares of secular individuals in Dutch society during the formative years have promoted some support for gender egalitarianism among men, whereas contemporary exposure to higher shares of secular individuals positively influenced women’s support for gender egalitarianism. A possible explanation for this differential finding is that men are, in general, less religious than women and leave the church at younger ages. Moreover, it is argued that religious socialisation differs between men and women (Trzebiatowska and Bruce 2012). As a consequence, boys may be more susceptible to secular influences in the social context during their formative years than girls.

In contrast to the theoretical expectation, we found that exposure to the rise of female labour force participation could not in itself explain the upward trend in support for gender egalitarianism. Given that women’s labour force participation in the Netherlands remained stable at a rather low level during the first half of the 20th century and only started to rise substantially since the late 1980s, many Dutch cohorts have been exposed to low levels of female labour force participation during their formative years. Kraaykamp (2002) also observed high levels of female labour force participation in people’s pre-adult years to be related to more conservative attitudes towards premarital and extramarital sexuality in the Netherlands.

Moreover, we found that people who are exposed to higher rates of female labour force participation during later periods also support gender egalitarianism less, once accounted for the level of educational expansion. Possibly, the increased participation of women
on the labour market has evoked a discussion in society about motherhood and raised concerns about who should care for the children when women work (Damaske, 2013). This explanation might well apply to the Dutch context. Although support for mothers’ employment is high in the Netherlands (Merens & Van den Brakel, 2014), and views towards men’s and women’s (“natural”) roles concerning the care for little children have become increasingly egalitarian, a strong motherhood ideology – with the mother seen as primarily responsible for the child’s well-being – has long been present in the Netherlands, originating from the strong Christian tradition and emphasised by the government as women’s contribution to the rebuilding of the country after the Second World War (Knijn, 1994). This motherhood ideology may have become more culturally salient as women entered the workforce (Douglas & Michaels, 2005; Hays, 1996). For example, Damaske (2013) argued that “the tension between rising workforce participation and intensive mothering, (...) appears resolved not through a reduction in mothering efforts, but through a discourse that emphasises conformity to good mothering ideals.” (p. 441). In a context in which women’s employment becomes more common, women (and especially working mothers) may adopt more traditional views on child care responsibilities as a strategy to legitimise their lower commitment to their careers and/or their higher involvement with child care and household tasks relative to men (Johnston & Swanson, 2006).

Moreover, increased labour force participation in the Netherlands does not necessarily reflect an increasingly egalitarian societal discourse. About three-quarters of Dutch women work part-time, and the majority works in traditionally female sectors, such as education and care. In addition, full-time working women in the Netherlands generally spend more time on household tasks and childcare than men (Merens & Van den Brakel, 2014). Hence, women’s increased participation in the labour force has not yet been met with symmetrical changes in men’s position in the public and private domain (England, 2010). Notwithstanding, the results regarding the rise of female labour force participation should be interpreted with caution, as our contextual measures may not provide a complete picture of changes in the societal context to which individuals have been exposed. Future research should further explore the role of female labour force participation – and mother’s employment in particular – in explaining trends in public support for gender egalitarianism, taking into account occupational segregation and part-time employment.

Lastly, in line with previous research (Dotti Sani & Quaranta, 2017), we found that the influence of changes in the societal context was generally stronger for women than for men. Young women appear the forerunners in the process towards more gender egalitarianism, which signifies their greater interest in promoting gender equality (Bolzendahl & Myers, 2004). But also men’s support for gender egalitarianism has benefited from the rise of societal educational levels and secularism during their formative years.
Notwithstanding the contributions of this study, several limitations and directions for future research should be discussed. First, only one item in the data was suited to indicate changes in support for gender egalitarianism in the Netherlands over a longer period of time. Although gender egalitarianism consists of various dimensions (Davis & Greenstein, 2009), we could only study one dimension related to the raising of little children. The picture we have sketched of changes in gender ideology in the Netherlands may therefore be incomplete.

Second, we could not explain why support for gender egalitarianism temporarily reversed in the Netherlands, despite continuing educational expansion, secularisation and rising female labour force participation. Nevertheless, this finding is highly consistent with a reversal of the trend in other parts of the world during the same period (e.g., Cotter et al., 2011; Shu & Meagher, 2017; Van Egmond et al., 2010). Rising female labour force participation has possibly induced an essentialist counter-reaction in the family domain, but whether progress of women’s positions in the public domain indeed produces resistance to egalitarianism in the private domain (Pepin & Cotter, 2018) needs further investigation.

Third, absence of information on which province respondents lived in after 2006 hindered the inclusion of contextual data for more recently interviewed respondents. We also lacked information on the employment status of the respondents’ mother and partner, which may either affect people’s support for gender egalitarianism. In addition, fathers’ part-time work and involvement in the family during people’s – and especially men’s – formative years may also influence their support for the statement that women and men are equally suited to raise little children.

Lastly, our study is limited to three measures of contextual developments due to the lack of other contextual measures going back to the formative years of the older cohorts in the data. Previous studies have argued that, among others, rising employment of married mothers, increased divorce rates, declining fertility, and the emergence of women’s movements may have advanced public support for gender egalitarianism (Brewster & Padavic, 2000; Brooks & Bolzendahl, 2004; Cotter et al., 2011; Inglehart & Norris, 2003; Lee et al., 2007; Pampel, 2011). Moreover, family policies may play a role in changing public views on gender egalitarianism. Future research could take more historical and contemporary contextual factors into account, although such data are scarce, if available at all.

To conclude, this study highlights that the societal normative climate people are exposed to, especially during their formative years, plays an important role in shaping their current views on gender egalitarianism. Promoting educational levels seems to have far-reaching benefits for advancing support for gender equality, not only for men and women who obtain higher educational levels themselves, but also for society at large.
CHAPTER 5

Changes in support for authoritarian values in Western and Eastern Europe in times of insecurity, 2002-2014

A slightly different version of this chapter is currently under review at an international journal. Paula Thijs wrote the main part of the manuscript and conducted the analyses. Te Grotenhuis and Scheepers substantially contributed to the manuscript. I thank prof. Evans for his valuable comments on the idea and design of this study. An earlier version of this study was presented at the “Politicologenetmaal” (Leiden, The Netherlands, 2018) and at the European Consortium for Political Research (ECPR) General Conference (Hamburg, Germany, 2018).
5.1 Introduction

Authoritarian values are related to a wide range of social and political attitudes and behaviours, such as nationalism and nativism; opposition to individual freedom, gay rights and gender equality; negative attitudes towards ethnic out-groups; and voting for populist radical (right) parties (Feldman & Stenner, 1997; Inglehart & Norris, 2017; Lubbers & Coenders, 2017; Mudde, 2007; Rooduijn, 2014; Scheepers et al., 1990; Vasilopoulos & Lachat, 2017). Changes in Europeans' support for authoritarian values may therefore have important consequences for the acceptance of differences and for the future of democracy in European societies.

There are several reasons to expect changes in support for authoritarian values over time. Over the past decades, European countries have seen considerable economic and demographic developments, such as economic growth, the rise of educational levels, and secularisation (Brenner, 2016; OECD, 2017; Reitsma, Pelzer, Scheepers, & Schilderman, 2012; Schofer & Meyer, 2005). According to modernisation theory, such developments have induced shifts in advanced industrialised societies in the importance people attach to absolute rules, order, and traditional authority, towards values of individual autonomy, self-expression, and acceptance of difference (Inglehart, 1990, 1997). As a result of these developments, support for authoritarian values should have decreased over time.

By contrast, Europe recently witnessed an economic and financial crisis and mass immigration. These developments may have given rise to a greater need for order, stability and strong authority to protect national security, which may have increased people's support for authoritarian values (De Jonquières, 2017; Feldman & Stenner, 1997; Hetherington & Suhay, 2011; Inglehart & Norris, 2017). However, a knowledge gap remains regarding to what extent support for authoritarian values in Europe has risen over time as a result of these developments.

Moreover, there are considerable differences between Western and Eastern European countries with respect to economic and demographic developments. For example, whereas the populations of most Western European countries have become increasingly secular, this trend is far less clear in Eastern European countries and has even reversed in some of these countries (Brenner, 2016; Reitsma et al., 2012). And while Eastern European economies were booming after the fall of communism as compared to Western Europe, the economic crisis hit both Western and Eastern European countries, although to different degrees (European Commission, 2009). Hence, the development of support for authoritarian values over time likely differs between Western and Eastern European countries.

In this study, we aim to investigate whether Europeans' support for authoritarian values has changed over time due to economic and demographic developments. In
addition, we analyse whether differences in these developments between Western and Eastern European countries have resulted in differential trends in people's support for authoritarian values.

We contribute to previous research in several ways. First, we shed light on the relationship between changes in the societal context and trends in support for authoritarian values. Concerned with the rise of fascism and submission to authoritarian leaders, early scholars in the field of authoritarianism focused on the authoritarian personality type (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). Whereas these scholars deemed the social situation of the 1930s – characterised by a severe economic and political crisis – to be the main source of this authoritarian personality type (Baars & Scheepers, 1993), most research has regarded authoritarianism as a predisposition that is stable over time and has therefore mainly focused on individual determinants (Adorno et al., 1950; Dekker & Ester, 1987; Lipset, 1959; Van Snippenburg & Scheepers, 1991). Even though authoritarian predispositions may be stable within individuals, the average level of support for authoritarian values in society may change as a result of changing societal conditions (Hetherington & Weiler, 2009; Inglehart, 1997). As yet, it remains largely unclear whether developments in the societal context over the past decades have contributed to changes in support for authoritarian values.

Second, we aim to test the generalisability of modernisation theory by analysing both upward and downward trends in the societal context, as well as differences between Western and Eastern Europe. Previous research has indeed shown that support for authoritarian values varies between Western and Eastern Europe (Schwartz & Bardi, 1997), but few studies have analysed whether changes in authoritarian values and its determinants differ between Western and Eastern Europe.

Third, it is argued that sudden changes or “shocks” in contextual indicators may have a stronger influence on people's attitudes and behaviour than customary levels of these same indicators (Olzak, 1992). We therefore empirically analyse the effects of both levels and sudden changes in economic and demographic indicators on people's support for authoritarian values in Europe.

We aim to answer the following research questions: What is the over time variation in support for authoritarian values between 2002-2014 within European countries and does this over time variation differ between Western European countries and Eastern European countries? To what extent can this variation within Western European countries and Eastern European countries be explained by differential trends in economic indicators (economic development, unemployment, and national debt) and demographic indicators (educational expansion, secularisation, and immigration)?
To answer these questions, we use seven rounds of the European Social Surveys covering the period between 2002-2014, which we complemented with national-level indicators. We conceptualise authoritarian values as the importance individuals attach to tradition and customs, obedience, living in a safe and secure surrounding, and a strong government that ensures safety. These values correspond to elements of classical measures of (right-wing) authoritarianism, such as conventionalism, obedience to authority, and the preservation of social order by deferring to legal and moral authority (Adorno et al., 1950; Altemeyer, 1981). We employ multilevel regression analyses with individuals nested in country-year combinations to analyse the relationship between economic and demographic developments, and changes in support for authoritarian values within Western and Eastern European countries over time.

5.2 Theory and hypotheses

According to modernisation theory, economic development and demographic changes have shifted the importance people attach to absolute rules, order, and traditional authority, towards values of individual autonomy, self-expression, and acceptance of difference in advanced industrialised societies (Inglehart, 1990, 1997, 2008). One of the basic assumptions of this version of modernisation theory is the scarcity hypothesis, which proposes that, under conditions of existential insecurity, people are willing to submit to absolute rules and seek strong authority to protect them from danger (Inglehart, 1997). This sense of existential insecurity may arise from events or circumstances in the societal context, such as threat of invasion, internal disorder or economic collapse. Conversely, conditions of existential security may reduce deference to all forms of external authority (Inglehart, 1997). Over the past decades, Europe has witnessed several economic and demographic developments that may have increased, as well as decreased people's sense of existential security. Hence, we expect changes in the national contexts in European societies to be associated with changes in people's support for authoritarian values.

5.2.1 Economic development and crisis

Modernisation theory's central claim is that economic growth and the accompanying increase of existential security in advanced industrialised societies after the Second World War has induced a de-emphasis of all forms of authority (Inglehart, 1997). Previous research indeed found lower support for authoritarian values in more industrialised, wealthier western countries, as well as among younger birth cohorts (Inglehart, 1997; Schwartz & Bardi, 1997; Tilley, 2005). If modernisation theory holds true, the substantial economic development that characterised European countries over the past decades (OECD, 2017) should have resulted in a decline in support for authoritarian values. We therefore formulate the following hypothesis: support for authoritarian values among Europeans is less strong in times of economic prosperity (H1a).
More recently, Europe has witnessed an economic and financial crisis, accompanied by increasing unemployment rates and rising national debts. Following the scarcity hypothesis, conditions of economic decline induce (perceptions of) economic insecurity among the population. If people fail to achieve the means from which they subjectively derive status, or if people are uncertain whether they are able to achieve these means in the future, feelings of status-frustration and -anxiety arise, which may in turn increase people's willingness to submit to strong authorities or to strong traditional norms (Scheepers et al., 1990). Moreover, under conditions of a worsening economy, people may be more inclined to submit themselves to authorities that promise to tackle the economic malaise. Comparing archival data from two periods in time, Sales (1973) indeed found that aggregate levels of authoritarianism were higher in a period characterised by high levels of macro-economic threat, a finding that was replicated by Doty, Peterson and Winter (1991). More recently, Miller (2017) showed that an increase in a composite measure of economic threat coincided with an increase in support for strong leaders, support for military rule, and a greater belief that having a democracy is bad for one's country. By contrast, Tormos et al. (2017) found no significant influence of changes in economic development and unemployment on support for authoritarian values in European countries.

In addition, it is argued that sudden changes in the social and economic context may exert a stronger influence on people's attitudes and behaviour, because sudden changes or shocks generally occur faster than people in society can absorb and often receive media attention (Meuleman et al., 2009; Olzak, 1992). Sudden economic decline and abrupt increases in unemployment rates are therefore more likely to be noticed by the general public. Hence, rapid changes in economic conditions may lead to more severe (perceptions of) insecurity than gradual developments, giving rise to a stronger need for authority, order, and firm actions by a strong leader or government. We expect that: 

*support for authoritarian values among Europeans is stronger in times of sudden economic decline (H1b).*

Yet, the rates of economic development and decline differ between European countries. After the collapse of the communist regimes, Eastern Europe has seen unprecedented economic growth, which replaced the uncertainty and insecurity of the transformation to a market economy with a record of performance (Mishler & Rose, 2002). Based on modernisation theory, we therefore expect a stronger decline in support for authoritarian values in Eastern European countries. The economic and financial crisis also affected Western and Eastern European countries differently. We explore to what extent different rates of economic development and decline have resulted in different trends in support for authoritarian values in Western and Eastern Europe.
5.2.2 Demographic developments

Educational expansion

Another argument for a potential decline in support for authoritarian values can be found in the rationalisation of worldviews (Weber, 1920). Education is argued to broaden and diversify people’s socio-cultural perspective, and to expand people’s awareness of alternative viewpoints, which reduces their transcendent faith in authorities and rigid social norms (Gabennesch, 1972; Hello et al., 2002). Theoretical perspectives of liberalisation and socialisation argue that education as an institution transmits liberal democratic values and norms of tolerance and equality (Stubager, 2008; Surridge, 2016; Vogt, 1997). Over the past decades, educational opportunities have increased for large segments of European populations, giving rise to an ongoing expansion of education in European countries. For example, the percentage of Europeans between 25-64 years old with tertiary education has increased from 20 percent in 2002 to 30 percent in 2016 (Eurostat, 2017c). As a consequence, not only the higher educated, but the entire population has likely become exposed to increasingly liberal democratic values, which may have reduced support for authoritarian values.

However, the effect of rising educational levels may differ across Europe, depending on the democratic history of a country and the dominant values that are transmitted in the educational system (Weil, 1985). According to Weil (1985) “the impact of education on liberal values is weaker, non-existent, or sometimes even reversed in non-liberal democracies or countries which did not have liberal democratic regimes in earlier decades” (p.470). Under the former communist regimes in Eastern Europe, citizens were controlled and demanded to conform to superiors in all spheres of life (Mishler & Rose, 2002). Hence, we expect that educational institutions in authoritarian communist regimes transmitted values of conformity and obedience to authority for the purpose of indoctrination and political repression (Dobbins & Kwiek, 2017). The educational systems in Eastern European countries have been reformed after the collapse of communism, but not without problems (Dobbins & Kwiek, 2017). We therefore expect the influence of educational expansion to be less strong in countries with an authoritarian communist legacy. We formulate the following hypotheses: support for authoritarian values among Europeans is less strong in times of educational expansion (H2a), and this negative relationship is stronger in Western Europe than in Eastern Europe (H2b).

Secularisation

According to theories of rationalisation and secularisation, technological and scientific advances have presented alternatives to the dominance of theological and supernatural explanations to provide people with a sense of security and meaning in life. Consequently, religious institutions have lost their influence and authority over people’s beliefs and moral principles (Wilson, 1966). According to Chaves (1994), people therefore search elsewhere than the established churches and religious traditions to derive their values
and moral standards from. Moreover, due to declining church attendance, people are less strongly integrated into a religious environment, which makes them less likely to comply with the (traditional) norms of the religious community. We expect that individuals show lower support for authoritarian values when they are exposed to a more secular societal climate in which conformity to religious prescriptions is no longer the rule. We formulate the following hypothesis: \textit{support for authoritarian values among Europeans is less strong in times of secularisation (H3)}.

Over the past decades, religious affiliation and church attendance have indeed dropped substantially in a majority of European countries (Brenner, 2016), although evidence for this process in former communist countries is less clear. For example, Reitsma et al. (2012) found that religious affiliation and church attendance increased, rather than decreased in Eastern Europe after the collapse of communist regimes, whereas Brenner (2016) argued that, more recently, attendance rates are overall stable or declining in most of these countries. We therefore explore to what extent different rates of secularisation have resulted in varying trends in support for authoritarian values between Western and Eastern Europe.

\textit{Rising ethnic diversity}

In the last few years, several armed conflicts and humanitarian crises have unleashed large numbers of refugees and other immigrants from non-western parts of the world to move to European countries (OECD, 2016a). This has raised major concerns all over Europe, for example about threats to national order, security and identity, and the erosion of shared norms and values. People in countries that experienced strong increases in the inflow and presence of immigrants may develop stronger perceptions of normative insecurity and threat, inducing a stronger need for order, security, and strong leaders that protect borders and national identity. Previous research argued that (the perception of) cultural and normative threat activates authoritarian reactions, either among people with an authoritarian predisposition (Feldman & Stenner, 1997), or among those still low in authoritarianism (Hetherington & Suhay, 2011; Hetherington & Weiler, 2009). Other studies have shown that perceived cultural threat arising from changes in the size of the minority population heightens exclusionary reactions towards immigrants (Coenders et al., 2008; Meuleman et al., 2009), and support for radical right parties (Lubbers & Coenders, 2017; Rydgren, 2007). Hence, we expect that: \textit{support for authoritarian values among Europeans is stronger in times of increasing ethnic diversity (H4)}.

There are considerable differences between European countries with regard to the actual inflow and settlement of immigrants and asylum seekers. While Western European countries have seen considerable fluctuations in the numbers of asylum seekers, immigration to Eastern European countries remained low and has only taken off since 2012 (OECD, 2016a). Hence, we explore to what extent these differences in immigration between Western and Eastern European countries have resulted in different trends in support for authoritarian values.
5.3 Data and measurements

We use data from seven rounds of the European Social Surveys (ESS), collected in 2002, 2004, 2006, 2008, 2010, 2012, and 2014. The ESS is a cross-national survey conducted every two years across Europe, to monitor and interpret changing public attitudes and values within Europe. Data are collected through face-to-face interviews among representative samples of all persons aged 15 years and over living within private households in one of the participating countries. To ensure high quality data that are comparable across the participating countries, the survey implements high standards with regard to the sampling procedure, response rates, questionnaire design, translation, and fieldwork process (more information about the ESS and country-specific methodology is available at www.europeansocialsurvey.org). We selected countries that participated in at least six out of seven rounds (i.e., thirteen Western European and five Eastern European countries), because participation in the survey likely depends on a country’s economic situation, i.e., wealthier countries are more likely to be surveyed across all rounds whereas less wealthy countries are more likely to participate in recent rounds. The pooled dataset consists of 216,611 individuals in 124 country-year combinations.

5.3.1 Dependent variable

To measure support for authoritarian values, we used five questions asking about the importance people attach to: living in a secure surrounding, following rules, having a strong government that ensures safety and defends its citizens, behaving properly, and following customs and traditions, derived from the Schwarz value orientation scale (for exact wording of the questions, see Table A5.1, Appendix Chapter 5). Respondents could answer these questions on a scale ranging from 1 to 6. Factor analyses showed that these items constitute one factor (see Table A5.1, Appendix 5 for factor loadings and Cronbach’s alphas per survey year). We constructed a scale based on the mean scores of respondents with at least four valid answers on the five questions (overall Cronbach’s alpha = 0.70 in Western Europe and 0.69 in Eastern Europe). We reversed the answering categories so that a higher score on the scale indicates stronger support for authoritarian values. Missing values on the dependent variable were deleted listwise (4.5 percent).

5.3.2 Contextual characteristics

Economic development was measured with GDP, deficit or surplus on the national balance, and unemployment level. We took a country’s Gross Domestic Product (GDP) per capita

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1 Removing the item with the lowest factor loading (“important to do what is told and to follow rules”) from the scale did not alter the results. In addition, the item “important to live in a safe and secure surrounding” may seem conceptually different from the other items, but removing this item from the scale did not alter the results.
National balance was measured as the net government borrowing (−) or lending (+) of the general government as a percentage of GDP (Eurostat, 2017b). Unemployment rate was measured as the annual average unemployment rate as a percentage of the active population (Eurostat, 2017d). Educational expansion was measured as the percentage of the population aged 25–74 years that obtained tertiary education (ISCED 5–8) (Eurostat, 2017c). To measure the level of secularisation in a country, we aggregated per country and survey year the percentage of people who never attend church and those who attend less often than on special holy days based on the variable “How often do you attend religious services apart from special occasions?”. Immigration was measured as the percentage asylum applicants of the total population (Eurostat, 2015, 2017a). Abrupt changes in GDP, national balance, unemployment rate, and immigration were calculated by taking the difference between the level of these characteristics in the survey year and the preceding year. All contextual characteristics were centred on the grand mean.

Figure A5.1 in the Appendix of Chapter 5 shows the trends in economic and demographic indicators in Western and Eastern European countries over time. Figure A5.1a shows an increase in GDP between 2002 and 2014 in both Western and Eastern Europe. Between 2008 and 2009, the economic crisis can be observed as a reduction in GDP, which appeared to be somewhat stronger in Western Europe. In addition, Figure A5.1b shows a deterioration of the national balance (increase in government debt) since 2007, after a few years of improvement. Government debt increased more strongly in Western Europe and even surpassed the debt in Eastern Europe in 2010. After that, the national balance improved again in either part of Europe. Figure A5.1c shows a decline of unemployment rates from 10 percent to 6 percent in Eastern European countries between 2001 and 2008, while unemployment rates remained around 6 percent in Western Europe in this period. Since the economic crisis in 2008, however, unemployment rates increased in both Western and Eastern Europe. Whereas unemployment has declined again in Eastern Europe since 2010, it continued to rise in Western Europe until 2013. Figure A5.1d shows an increase in the percentage tertiary educated people from 25.3 percent to 35.9 percent in Western Europe, and from 16.3 percent to 27.6 percent in Eastern European countries. Figure A5.1e shows that the percentage secular individuals in Western Europe remained rather stable between 2002 and 2014 at around 60 percent, whereas the percentage individuals not attending church rose from about 39.6 to 51.9 in Eastern Europe. Figure A5.1f shows

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2 We also performed the analyses using a logarithmic function of GDP, but this did not change the results.

3 Information about the percentage tertiary educated individuals in Austria was missing between 2000 and 2003. We replaced the missing values using linear interpolation based on the values in 1999 and 2004.

4 The number of asylum applicants is not a perfect representation of immigration because not all immigrants apply for asylum. However, information on the number of immigrants was lacking for France in several waves.

5 Different lags for the contextual characteristics were tested. These did not alter our conclusions.
that the percentage asylum applications declined in Western Europe between 2002 and 2006, followed by an increase. In Eastern European countries, the percentage of asylum applications declined until 2012, with a sharp increase since 2012.

5.3.3 Individual characteristics

To account for shifts in the composition of the population within European countries, we included several individual characteristics which have been shown to relate to support for authoritarian values. To measure individuals’ educational attainment, we used the highest level of education respondents have achieved. For reasons of comparison between countries and over time, we collapsed responses in four categories based on ISCED levels: (i) primary education, (2) lower secondary education, (3) upper secondary education, and (4) tertiary education. We excluded people who indicated to have had other education, because of the relatively low number of respondents in this category (0.2 percent). Socio-economic position was based on the EGP class scheme (Erikson, Goldthorpe, & Portocarero, 1979), collapsed into two categories: non-manual workers and manual workers, supplemented with the categories unemployed, in education, and ‘other’, which includes people who are disabled, retired or working in the household. Because the influence of contextual economic conditions may be confounded with individual perceptions of economic strain, we included a measure of perceived economic strain based on the respondents’ feeling about their household’s income. Response categories were (i) living comfortably on present income, (2) coping on present income, (3) finding it difficult on present income, and (4) finding it very difficult on present income. To measure religiosity, respondents could indicate how religious they are on a scale between 0 (not at all religious) and 10 (very religious). To measure church attendance, we used the question “How often do you attend religious services apart from special occasions?”. Response categories were: everyday, more than once a week, once a week, at least once a month, only on special holy days, less often and never. We reversed these categories so that a higher score represents more frequent church attendance. To distinguish between older and younger people, we included people’s year of birth. Community size was based on respondents’ description of their domicile, ranging from (1) big city to (5) farm or home in countryside. We included respondents’ sex (0 = men, 1 = women) and ethnic minority status (0 = no, 1 = yes). In addition, we included dummies for the country in which people live to account for unobserved country differences. Missing values (6 percent) on the individual characteristics were deleted listwise. Table 5.1 presents the descriptive statistics of the dependent and independent variables.

6 Birth year was linearly related to the dependent variable. As the model fit of a model including dummies for each birth year only slightly improved as compared to a model including a linear measure for birth year, we chose a more parsimonious model.
Table 5.1 | Descriptive statistics of the dependent and independent variables

<table>
<thead>
<tr>
<th></th>
<th>Western Europe (N = 165,279)</th>
<th>Eastern Europe (N = 51,332)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td><strong>Support for authoritarian values</strong></td>
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<td>6</td>
</tr>
<tr>
<td><strong>Contextual characteristics</strong></td>
<td></td>
<td></td>
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<tr>
<td>GDP (/1000)</td>
<td>20.37</td>
<td>65.79</td>
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<tr>
<td>National balance (-/+</td>
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<td>Unemployment rate (%)</td>
<td>2.50</td>
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<td>% tertiary educated</td>
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<td>42.30</td>
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<tr>
<td>Secularisation</td>
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<tr>
<td>Asylum applicants (%)</td>
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<td>Δ GDP (/1000)</td>
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<tr>
<td>Δ National balance (-/+</td>
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<td>4.61</td>
</tr>
<tr>
<td>Δ Unemployment rate (%)</td>
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<td>3.40</td>
</tr>
<tr>
<td>Δ Asylum applicants (%)</td>
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<td>0.27</td>
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<td><strong>Individual characteristics</strong></td>
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<td>Education</td>
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<tr>
<td>Other</td>
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<tr>
<td>Perceived economic strain (living on present income)</td>
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<tr>
<td>Comfortably</td>
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<tr>
<td>Coping</td>
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<tr>
<td>Very difficult</td>
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<td>Church attendance (never - every day)</td>
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<td>Country village</td>
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</tr>
<tr>
<td>Farm or countryside</td>
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</tr>
</tbody>
</table>

Source: ESS round 1-7; N level 1 = 216,611; N level 2 = 124.
5.4 Methods

Since individuals in our data are observed at one point in time and the same countries are observed multiple times, the data are cross-sectional in nature at the individual level and have a panel structure at the contextual level. In order to test our hypotheses, we estimated multilevel regression models with individuals nested in country-year combinations for Western and Eastern Europe separately. We started with a null-model, estimating the amount of variation in support for authoritarian values at the country-year level. In Western Europe, 4.9 percent of the total variance is can be found at the country-year level; in Eastern Europe this amounts to 5.2 percent.

Because we are interested in the within-country relationships between changing contextual characteristics and changes in support for authoritarian values, we included country dummies to account for unobserved country characteristics rather than measuring country variation at a third level. As a consequence, all variance that is left unexplained at the country-year level cannot be attributed to country differences (Te Grotenhuis et al., 2015). Once we included the country dummies, the variance at the country-year level dropped to a meagre 0.5 percent in Western Europe and to 1.0 percent in Eastern Europe. Differences between countries thus explain most of the country-year variation.

When we subsequently included the individual characteristics, the proportion of the total variance explained at the country-year level increased from 0.5 to 1.0 percent in Western Europe and from 1.0 to 1.9 percent in Eastern Europe. This indicates that a part of the true underlying variance in support for authoritarian values within countries is masked due to changes in the composition of the population. That is, the actual change in support for authoritarian values within countries is larger when accounted for the individual characteristics, because the distribution of these characteristics within European populations has changed in an opposite direction.7

Next, we included the contextual characteristics in the model, using a stepwise procedure. First, we estimated the relationship between each of the contextual characteristics and our dependent variable for Western and Eastern Europe separately, controlled for country dummies and individual characteristics (see Table A5.2 and A5.3, Appendix Chapter 5). In each subsequent step, we entered to the equation the variable with the smallest p-value, until the criterion (p < .10) was exceeded. This resulted in two final models for Western and Eastern Europe, including those contextual characteristics that significantly contributed to the within-country variation in support for authoritarian values, controlled for relevant individual characteristics and country dummy variables.

7 Additional analyses showed that the largest compositional effect comes from cohort replacement: younger people are less supportive of authoritarian values than older people; the replacement of older people by younger less authoritarian people has therefore resulted in lower aggregate levels of support for authoritarian values over time.
5.5 Results

5.5.1 Descriptive results

The first part of our research question focused on the extent to which there is over time variation in support for authoritarian values within European countries and to what extent this variation differs between Eastern and Western Europe. Figure 5.1 shows the trend in support for authoritarian values in Western and Eastern countries over time. Between 2002 and 2014, the overall trend seems rather stable (given that the scale ranges from 1-6). In Eastern Europe, however, support for authoritarian values declined significantly between 2002 and 2008.8 Between 2008 and 2012, there has been a slight, yet significant increase in support for authoritarian values in both Western and Eastern Europe, which was significantly stronger in the latter.9 Between 2012 and 2014, this upsurge stabilised in Eastern Europe, and reversed significantly in Western Europe.

Figure 5.1 | Trends in support for authoritarian values in Western and Eastern Europe, 2002-2014

Source: ESS round 1-7; N = 216,611.

---

8 We tested the significance of the differences in the mean level of support for authoritarian values between the survey years using a post hoc Bonferroni test ($p < .05$).

9 We tested whether the increase in support for authoritarian values between 2008 and 2014 differed significantly ($p < .01$) between Western and Eastern Europe in a non-hierarchical linear regression model including interaction terms between dummy variables for survey year and a dummy for Western/Eastern Europe.
5.5.2 Multivariate results

Table 5.2 and 5.3 show the multivariate results from the stepwise multilevel regression analyses of the contextual characteristics for Western and Eastern Europe respectively, controlled for relevant individual characteristics and country dummies (for regression estimates of the country dummy variables, see Table A5.4 and A5.5, Appendix Chapter 5). Table 5.2 shows a significant positive effect of GDP on Western Europeans’ support for authoritarian values ($b = 0.01, p < .001$).\(^{10}\)

Although we found an influence of unemployment in Western Europe in a model analysing this variable separately from the other contextual indicators (see Table A5.2, Appendix Chapter 5), it disappeared when accounted for GDP. This finding contradicts hypothesis 1a in Western Europe: in times of economic prosperity, Western Europeans even showed more support for authoritarian values rather than less. In Eastern Europe, levels of GDP did not significantly influence support for authoritarian values. Although GDP also has a positive effect in Eastern Europe when analysed separately from the other contextual characteristics (see Table A5.3, Appendix Chapter 5), this effect disappeared when educational expansion was taken into account. Table 5.3 shows that support for authoritarian values in Eastern Europe was significantly stronger in times of higher unemployment rates ($b = 0.01, p < .001$). This partly supports hypothesis 1a that support for authoritarian values is lower in times of economic prosperity, but only in Eastern Europe, and only when measured as a country’s unemployment rate.

Table 5.2 and 5.3 show that support for authoritarian values was less strong in times of sudden increases in GDP in both Western and Eastern European countries ($b = -0.01, p < .10$ respectively $b = -0.04, p < .05$). This finding support hypothesis 1b that people attach more importance to authoritarian values in times of sudden economic decline, when measured as changes in GDP. Moreover, Table 5.2 indicates that in times of sudden increases in the unemployment rate, Western Europeans showed more support for authoritarian values ($b = 0.01, p < .10$). The sudden rise in unemployment rates due to the economic recession in Western Europe since 2008\(^{11}\) (see Figure A5.1c, Appendix Chapter 5) therefore seems to have contributed to the slight increase in support for authoritarian values since 2008. We found no significant influence of government debt and sudden changes herein on people’s support for authoritarian values.

With regard to developments in the demographic context, Table 5.3 presents a positive effect of educational expansion in Eastern Europe ($b = 0.02, p < .001$), which indicates that

\(^{10}\) To assess whether the positive effect of GDP is driven by any particular country, we analysed the model excluding the countries in the model one by one. These analyses revealed that the positive effect of GDP in Western Europe is robust.

\(^{11}\) Additional analyses revealed that individual perceptions of economic strain do not mediate the relationships between the contextual characteristics and support for authoritarian values.
Eastern Europeans supported authoritarian values more in times of higher percentages of tertiary educated individuals in their country, accounted for the other contextual indicators in the model. In Western Europe, we found a positive effect of the percentage tertiary educated in society when analysed separately from the other contextual characteristics (see Table A5.2, Appendix Chapter 5), but this influence disappeared once GDP was taken into account. Thus, although educational levels have continued to rise in both Western and Eastern Europe, we found no evidence for hypothesis 2a that support for authoritarian values was less strong in times of a higher percentage of tertiary educated individuals in society. Educational expansion even seems to have increased rather than decreased people’s support for authoritarian values in Eastern European countries, leading us to reject hypothesis 2a and 2b. Yet, this may not be very surprising given that higher educated Eastern Europeans do not show less support for authoritarian values in the first place (see the individual-level effect of education in Table 5.3).

Table 5.2 shows that Western Europeans’ support authoritarian values was lower in times of higher rates of secularisation ($b = -0.01$, $p < .05$), accounted for the other contextual characteristics in the model. This supports hypothesis 3. The ongoing process of secularisation thus seems to have contributed to slightly lower aggregate support for authoritarian values in Western Europe, thereby counterbalancing the influence of adverse economic conditions. In Eastern Europe, secularisation had a significant positive influence on support for authoritarian values when analysed separately (see Table A5.3, Appendix Chapter 5), but this effect disappeared when educational expansion was taken into account in Table 5.3. Hence, we find no support for hypothesis 3 in Eastern Europe. Although Eastern European countries have become more secular (see Figure A5.1e, Appendix Chapter 5), this development did not contribute to lower support for authoritarian values in these countries.
### Table 5.2 | Stepwise multilevel regression coefficients of contextual characteristics on support for authoritarian values in Western Europe, controlled for country dummies and individual characteristics

<table>
<thead>
<tr>
<th>Time-varying effects (level 2)</th>
<th>B</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (/1000)</td>
<td>.01***</td>
<td>.00</td>
</tr>
<tr>
<td>Δ GDP (/1000)</td>
<td>-.01~</td>
<td>.01</td>
</tr>
<tr>
<td>Δ Unemployment rate (%)</td>
<td>.01~</td>
<td>.01</td>
</tr>
<tr>
<td>Secularisation</td>
<td>-.01*</td>
<td>.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fixed effects (level 1)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational attainment (primary = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower secondary</td>
<td>-.03***</td>
<td>.01</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>-.07***</td>
<td>.01</td>
</tr>
<tr>
<td>Tertiary</td>
<td>-.24***</td>
<td>.01</td>
</tr>
<tr>
<td>Socio-economic position (non-manual workers = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual workers</td>
<td>.09***</td>
<td>.01</td>
</tr>
<tr>
<td>In education</td>
<td>-.05***</td>
<td>.01</td>
</tr>
<tr>
<td>Unemployed</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Other</td>
<td>.10***</td>
<td>.01</td>
</tr>
<tr>
<td>Perceived economic strain (living comfortably on present income = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping on present income</td>
<td>.01*</td>
<td>.00</td>
</tr>
<tr>
<td>Difficult on present income</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Very difficult on present income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church attendance (never – every day)</td>
<td>.04***</td>
<td>.00</td>
</tr>
<tr>
<td>Religiosity (not at all – very)</td>
<td>.05***</td>
<td>.00</td>
</tr>
<tr>
<td>Birth year(a)</td>
<td>-.01***</td>
<td>.00</td>
</tr>
<tr>
<td>Sex (men = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>.02***</td>
<td>.00</td>
</tr>
<tr>
<td>Ethnic minority (no = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>.20***</td>
<td>.01</td>
</tr>
<tr>
<td>Community type (big city = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburbs</td>
<td>.01~</td>
<td>.01</td>
</tr>
<tr>
<td>Town or small city</td>
<td>.04***</td>
<td>.01</td>
</tr>
<tr>
<td>Country village</td>
<td>.04***</td>
<td>.01</td>
</tr>
<tr>
<td>Farm or countryside</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Intercept</td>
<td>3.65***</td>
<td>.04</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variance components</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual (level 1)</td>
<td>.64***</td>
<td>.00</td>
</tr>
<tr>
<td>Country-years (level 2)</td>
<td>.00***</td>
<td>.00</td>
</tr>
<tr>
<td>ICC (%)</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>-2LL</td>
<td>395563.51</td>
<td></td>
</tr>
</tbody>
</table>

Source: ESS round 1-7; N level 1 = 165,279; N level 2 = 91.

\(a\) We centred the birth year variable on the mean, so that the reference category represents respondents in the average birth year.

- * p < .10, ** p < .05, *** p < .01 (two-tailed).
Table 5.3 | Stepwise multilevel regression coefficients of contextual characteristics on support for authoritarian values in Eastern Europe, controlled for country dummies and individual characteristics

<table>
<thead>
<tr>
<th>Time-varying effects (level 2)</th>
<th>B</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Δ GDP (/1000)</td>
<td>-.04*</td>
<td>.01</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>.01***</td>
<td>.00</td>
</tr>
<tr>
<td>% tertiary educated</td>
<td>.02***</td>
<td>.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fixed effects (level 1)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational attainment (primary = ref.)</td>
<td></td>
</tr>
<tr>
<td>Lower secondary</td>
<td>.05*</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>.07***</td>
</tr>
<tr>
<td>Tertiary</td>
<td>.03</td>
</tr>
</tbody>
</table>

| Socio-economic position (non-manual workers = ref.) |       |
| Manual workers                 | .03*  | .01 |
| In education                   | -.07***| .01 |
| Unemployed                     | -.06***| .02 |
| Other                          | .02*  | .01 |

| Perceived economic strain (living comfortably on present income = ref.) |       |
| Coping on present income      | .06***| .01 |
| Difficult on present income   | .06***| .01 |
| Very difficult on present income | .07***| .02 |

| Church attendance (never – every day) |       |
|                                        | .05***| .00 |

| Religiosity (not at all – very)       | .02***| .00 |
| Birth yeara                             | -.01***| .00 |

| Sex (men = ref.)                      |       |
| Women                                  | .11***| .01 |

| Ethnic minority (no = ref.)           |       |
| Yes                                    | .12***| .01 |

| Community type (big city = ref.)      |       |
| Suburbs                                | .01   | .01 |
| Town or small city                     | .00   | .01 |
| Country village                        | .02   | .01 |
| Farm or countryside                   | .03   | .02 |

| Intercept                              | 4.30***| .03 |

| Variance components                   |       |
| Individual (level 1)                  | .53***| .00 |
| Country-years (level 2)               | .00***| .00 |
| ICC (%)                                | 0.28  |
| -2LL                                   | 112746.77 |

Source: ESS round 1-7; N level 1 = 51,332; N level 2 = 35.

*a We centred the birth year variable on the mean, so that the reference category represents respondents in the average birth year.

~ p < .10, * p < .05, ** p < .01, *** p < .001 (two-tailed).
Lastly, Table 5.2 and 5.3 indicate that there is no significant influence of the percentage asylum applicants in a country, nor of sudden changes therein, once controlled for the other contextual characteristics in the model. In a bivariate analysis, we found significantly stronger support for authoritarian values in Western Europe in times of higher percentages of asylum seekers and in times of sudden changes therein (see Table A5.2, Appendix Chapter 5). The rise in the percentage asylum seekers in Western Europe since 2006 thus seems related to the rise in support for authoritarianism, but this relationship disappeared when accounted for the rise in GDP and the sudden increase in unemployment that took place in the same period. In Eastern Europe, we found stronger support for authoritarian values in times of a sudden increase in the percentage of asylum seekers (see Table A5.3, Appendix Chapter 5), which has indeed increased as from 2012, but this reduced to a non-significant effect when educational expansion was taken into account. This leads us to reject hypothesis 4: Europeans’ support for authoritarian values was not significantly stronger in times of increasing ethnic diversity, once accounted for other contextual conditions. As a robustness check, we analysed the models presented in Table 5.2 and 5.3 again, excluding the countries one by one. These analyses did not lead to different conclusions.

The individual characteristics in Table 5.2 show that support for authoritarian values in Western Europe is stronger among lower educated individuals, non-manual workers, people who frequently attend church and those who consider themselves as religious, older people, women, people belonging to an ethnic minority group, and people living in small cities and country villages. We find little evidence that being unemployed and perceiving economic strain is significantly associated with more support for authoritarian values in Western Europe, but this appeared largely due to the inclusion of educational attainment in the model.

Table 5.3 shows that lower and upper secondary educated Eastern Europeans show more support for authoritarian values than the lower educated, whereas tertiary educated individuals are as supportive of authoritarian values as lower educated individuals. In Eastern Europe, support for authoritarian values is stronger among manual workers, people who perceive economic strain, people who frequently attend church, people who consider themselves religious, older people, women, and people belonging to an ethnic minority group. We find no significant difference in support for authoritarian values between Eastern Europeans living in different community types.

### 5.6 Conclusion and discussion

In this study, we investigated changes in support for authoritarian values over time in Western and Eastern Europe. In addition, we examined whether the over time variation could be explained by differential economic and demographic developments that have
characterised European countries over the past decades. Building on modernisation theory, we expected that economic development, educational expansion, and secularisation would have reduced Europeans’ support for authoritarian values. On the other hand, we expected the economic crisis and rising immigration to have increased support for authoritarian values in Europe.

Based on data from seven waves of the European Social Surveys, covering 18 European countries in the period between 2002-2014, we found that people’s support for authoritarian values remained rather stable between 2002 and 2014 in both Western and Eastern European countries. In line with previous research (Schwartz & Bardi, 1997), support for authoritarian values was more widespread in Eastern European countries than in Western European countries. Although variation in support for authoritarian values within countries was minimal, we found that changes over time could be partly explained by counterbalancing economic and demographic developments in national contexts. In contrast to modernisation theory, rising economic prosperity in both Western and Eastern European countries has not evidently decreased support for authoritarian values. Surprisingly, in Western Europe, economic development even contributed to a slight increase in support for authoritarian values. In Eastern Europe, an improvement of the labour market seemed to lower people’s support for authoritarian values. The reduction of the unemployment rate by half between 2002 and 2008 seemed partly responsible for the slight decline in support for authoritarian values in this period.

The result of this study (at least partly) support the scarcity thesis. We showed that economic insecurity arising from sudden drops in GDP and (sudden) increases in unemployment rates, have induced stronger support for authoritarian values, even over and above individual perceptions of economic strain. The economic recession has been partly responsible for the slight increase in Europeans’ support for authoritarian values since 2008. The basic assumption of modernisation theory that people are more inclined to support authoritarian values under conditions of economic decline (Inglehart, 1997) thus seems to hold. In line with Olzak (1992), especially sudden changes in economic conditions affect people’s support for authoritarian values, presumably because such “shocks” are most likely to be noticed by the general public, for example through the media.

We also expected that educational expansion and secularisation would have decreased people’s support for authoritarian values, whereas rising ethnic diversity due to immigration would increase the importance people attach to these values. We found no support for a liberalising effect of educational expansion at the country level on people’s support for authoritarian values (Vogt, 1997). In Eastern Europe, educational expansion even contributed to a slight increase in support for authoritarian values. This supports Weil’s argument that the influence of education on liberal values is conditional on which values are transmitted in schools (Weil, 1985). Apparently, educational institutions in Eastern Europe have socialised people into more authoritarian values (although we could
not rule out the possibility that people get promoted to higher educational levels, because they demonstrate more conformity and obedience). As a consequence, in times of higher educational expansion, Eastern Europeans seem more exposed to values of conformity and obedience to authority, echoing the legacy of authoritarian communist regimes (Mishler & Rose, 2002).

Continuing secularisation has contributed to a decline in support for authoritarian values in Western Europe only, which has possibly counterbalanced the negative influence of adverse economic conditions. In line with secularisation theories (Chaves, 1994; Wilson, 1966), secularisation indeed seems to have reduced the dominance of religious institutions in determining people's beliefs and opened up alternatives to compliance to religious norms and authorities – at least in Western Europe. Although church attendance also decreased in Eastern European countries between 2002 and 2014, this has not resulted in a decline in Eastern Europeans' support for authoritarian values.

Lastly, we found no influence of increases in ethnic diversity as measured by the percentage of asylum applicants in a country, despite recent increases in immigration. Other (economic) societal conditions proved more important. One could argue that the percentage of asylum applicants does not adequately measure rising ethnic diversity in society as this measure may depend on application procedures. However, we found no influence of other measures of rising ethnic diversity, such as the percentage foreign born people or immigrants in a country (although these measures were not available for each country). Another explanation could be that it is not rising ethnic diversity or immigration itself, but perceptions of ethnic threat that influence support for authoritarian values, regardless of actual immigration. Previous research has shown that perceptions of ethnic threat explain negative out-group attitudes (e.g., Schlueter & Scheepers, 2010; Schneider, 2008), and radical right-wing voting (e.g., Lubbers & Coenders, 2017; Lucassen & Lubbers, 2012). Such explanation may also hold for rising support for authoritarian values.

Our study has several implications for future research. In the media and in the rapidly expanding literature on the rise of populism, the supposed rise in European's support for authoritarian values has been advanced as a popular explanation for the increasing electoral success of populist parties and authoritarian leaders in Europe. However, we found that support for authoritarian values has hardly become more widespread in Europe over the past two decades. This suggests that an explanation for the rise of populist voting may not directly be found in a rise of support for authoritarian values. In addition, it raises questions about the legitimacy of the increasingly authoritarian governments in for example Hungary and Poland. Nevertheless, those supportive of authoritarian values may have become more inclined to support populist radical right parties over time, either because they feel increasingly threatened by certain economic or cultural conditions (Feldman & Stenner, 1997), or because populist parties increasingly managed to attract their votes. This remains an interesting direction for future research.
Unfortunately, we could analyse support for authoritarian values over a relatively short time period only. We may have found a decrease in support for authoritarian values due to modernisation if we had been able to analyse data covering a longer time span. Moreover, since 2015, more than a million refugees and asylum seekers crossed into Europe, triggering a crisis on how to deal with the influx and creating sharp divides in the EU regarding the relocation of migrants. In this period, Europe has also suffered from a series of terrorist attacks. These developments may have aggravated perceptions of societal threat and insecurity, possibly giving rise to stronger support for authoritarian values after 2014.

We conclude that the process of modernisation is not as unidirectional and universal as initially suggested. Economic growth, secularisation and educational expansion have not necessarily reduced support for authoritarian values among all individuals in society who have been exposed to these changes. These developments have also had a different influence in Western and Eastern European countries. Although modernisation processes may have diminished Europeans’ support for authoritarian values in the long run because subsequent generations have been socialised under more secure societal circumstances, we were unable to directly test this socialisation hypothesis due to the lack of contextual data for each birth cohort in each of the European countries that allow to measure exposure to modernisation processes during people’s formative years. We consider it plausible that beyond a certain level of existential security, economic development may not further contribute to a de-emphasis of authoritarian values. In addition, although economic prosperity continues to rise in Western Europe, people may have become more aware that economic growth has its limits and limitations. The global financial crisis has likely induced perceptions that stability and security cannot be taken for granted (Mols & Jetten, 2017).

Moreover, even a counter-reaction to modernisation may have taken place in Western Europe. According to the losers of modernisation theory, modernisation has left behind a group of people who are unable to cope with the acceleration of economic, social, and cultural modernisation because they are stuck in the lowest social strata and risk to become superfluous and useless for society (Betz, 1994). Similar arguments have been made by Norris and Inglehart (2017), who recently argued that modernisation has triggered a cultural backlash among the older and less-secure individuals in society. The growing emphasis on the individual, increasing civil liberties for ethnic and cultural minorities, the breakdown of communities, and the erosion of once dominant traditional norms, may have induced perceptions of threat, anxiety and resentment. These developments may even have induced a feeling that people have become “strangers in their own lands”, left behind by the increased emphasis on values they do not share (Hochschild, 2016). Whether support for authoritarian values has indeed increased more strongly among the groups that suffered from modernisation remains a question for future research.
Appendices
Appendix Chapter 1

Example counterfactual analysis
In this Appendix, I explain counterfactual analysis in a straightforward example, based on a sample of the Dutch population from the Socio-Cultural Developments in the Netherlands surveys (SOCON) of 1985 and 2011 (Eisinga et al., 2012; Felling, Peters, & Schreuder, 1985). As the outcome variable, I use people’s responses on a measurement of ethnic prejudice in two survey waves. The independent variable is education, divided in two categories: low/middle education and high education.

Table A1.1 shows the association between education and ethnic prejudice in 1985. In the column totals it can be seen that, in this example, 68.4 percent of the Dutch had a low or middle education and 31.6 percent had a high education in 1985. The inner cells (grey area) show that within the category of lower educated respondents, the percentage holding ethnic prejudice was 51.6 and among the higher educated it was 22.5. In total, 42.2 percent of the sample gave an answer indicating ethnic prejudice.

Table A1.2 shows the association between education and ethnic prejudice in 2011. The educational distribution of the sample had changed considerably compared to 1985: looking at the column totals, the share of lower or middle educated Dutch decreased to 53.9 percent and the percentage higher educated increased to 46.1 percent. The inner cells (grey area) show that the relative share supporting ethnic prejudice increased to 68.5 percent among the low/middle educated respondents (compared to 51.6 percent in 1985) and to 51.7 percent among the higher educated respondents (compared to 22.5 percent in 2011). The statistical association therefore dropped with 0.05 between 1985 and 2011 (Cramér’s V = 0.27 in 1985 and 0.22 in 2011). In total, the percentage holding ethnic prejudice increased from 42.2 percent in 1985 to 60.8 percent in 2011.

Table A1.1 | The association between education and ethnic prejudice in the Netherlands in 1985

<table>
<thead>
<tr>
<th>Year: 1985</th>
<th>low/middle education</th>
<th>high education</th>
<th>row totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>no ethnic prejudice</td>
<td>419 48.4%</td>
<td>310 77.5%</td>
<td>729 57.6%</td>
</tr>
<tr>
<td>ethnic prejudice</td>
<td>446 51.6%</td>
<td>90 22.5%</td>
<td>536 42.2%</td>
</tr>
<tr>
<td>column totals</td>
<td>865 68.4%</td>
<td>400 31.6%</td>
<td>1,265 100%</td>
</tr>
</tbody>
</table>

Source: SOCON 1985, 2011; N = 1,265.
Note. Strength of association in Cramér’s V = 0.27.
Table A1.2 | The association between education and ethnic prejudice in the Netherlands in 2011

<table>
<thead>
<tr>
<th>Year: 2011</th>
<th>low/middle education</th>
<th>high education</th>
<th>row totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>no ethnic prejudice</td>
<td>119 (31.5%)</td>
<td>156 (48.3%)</td>
<td>275 (39.2%)</td>
</tr>
<tr>
<td>ethnic prejudice</td>
<td>259 (68.5%)</td>
<td>167 (51.7%)</td>
<td>426 (60.8%)</td>
</tr>
<tr>
<td>column totals</td>
<td>378 (53.9%)</td>
<td>323 (46.1%)</td>
<td>701 (100%)</td>
</tr>
</tbody>
</table>

Source: SOCON 1985, 2011; N = 701.
Note. Strength of association in Cramér’s V = 0.22.

**Simulating a fixed association**

The observed increase in ethnic prejudice between 1985 and 2011 may be due to changes in the association between education and ethnic prejudice, i.e., shifts in the relative percentage of respondents that supports prejudice within each category of education. To estimate the actual contribution of such associational changes in explaining the increase in ethnic prejudice, we can simulate a counterfactual situation in which the association had not changed between 1985 and 2011, and calculate a new percentage of respondents with ethnic prejudice. In other words, we impose the 1985 association on the sample of 2011. To do so, we need the association in 1985 from Table A1.1 together with the sample of 2011 and the distribution in the 2011 sample from Table A1.2.

Table A1.3 shows the simulated association between education and ethnic prejudice in 2011. The column totals show the sample size and the distribution of education in the sample in 2011. The inner cell percentages, on which the association between education and prejudice is based, are from 1985. With these inner cell percentages from 1985 and the absolute numbers in the column totals from the 2011 sample, we can calculate the new “simulated” absolute numbers in the inner cells. In the simulated situation, there are 195 respondents with prejudiced attitudes in the category with low/middle education (0.516 * 378) and only 73 in the category with higher education (0.225 * 323). Now we can sum the absolute numbers to obtain the simulated number of respondents that holds ethnic prejudice, which amounts to 38.2 percent of the sample ((195 + 73) / 701)). Thus, if the association between education and ethnic prejudice had not changed since 1985, then the percentage prejudiced individuals in 2011 would amount to 38.2, instead of the observed 60.8 percent. The difference of 22 percent points between the observed and simulated situation (60.8 - 38.2) represents the actual contribution of shifts in the association between education and ethnic prejudice to the observed increase in ethnic prejudice between 1985 and 2011.
Table A1.3 | The simulated association between education and ethnic prejudice, with the 1985 association and the 2011 distribution of education and sample size

<table>
<thead>
<tr>
<th>Year: 2011</th>
<th>low/middle education</th>
<th>high education</th>
<th>row totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>no ethnic prejudice</td>
<td>183</td>
<td>250</td>
<td>433</td>
</tr>
<tr>
<td></td>
<td>48.4%</td>
<td>77.5%</td>
<td>61.8%</td>
</tr>
<tr>
<td>ethnic prejudice</td>
<td>195</td>
<td>73</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td>51.6%</td>
<td>22.5%</td>
<td>38.2%</td>
</tr>
<tr>
<td>column totals</td>
<td>378</td>
<td>323</td>
<td>701</td>
</tr>
<tr>
<td></td>
<td>53.9%</td>
<td>46.1%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: SOCON 1985, 2011; own calculations.

Table A1.4 | The simulated association between education and ethnic prejudice, with the 1985 distribution of education and the 2011 association and sample size

<table>
<thead>
<tr>
<th>Year: 2011</th>
<th>low/middle education</th>
<th>high education</th>
<th>row totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>no ethnic prejudice</td>
<td>151</td>
<td>107</td>
<td>258</td>
</tr>
<tr>
<td></td>
<td>31.5%</td>
<td>48.3%</td>
<td>36.8%</td>
</tr>
<tr>
<td>ethnic prejudice</td>
<td>328</td>
<td>115</td>
<td>443</td>
</tr>
<tr>
<td></td>
<td>68.5%</td>
<td>51.7%</td>
<td>63.2%</td>
</tr>
<tr>
<td>column totals</td>
<td>479</td>
<td>222</td>
<td>701</td>
</tr>
<tr>
<td></td>
<td>68.4%</td>
<td>31.6%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: SOCON 1985, 2011; own calculations.

**Simulating a fixed distribution**

The observed increase in ethnic prejudice between 1985 and 2011 may also be due to shifts in the distribution of education across the sample. To estimate the actual contribution of such compositional shifts to the increase in ethnic prejudice, we can simulate a counterfactual situation in which the distribution of education had not changed between 1985 and 2011, and calculate a new percentage of respondents with ethnic prejudice. In this example, we impose the 1985 distribution on the sample of 2011. Now we need the distribution of education in 1985 from Table A1.1, together with the sample of 2011 and the association between education and ethnic prejudice in 2011 from Table A1.2.

Table A1.4 shows the simulated association between education and ethnic prejudice in 2011, with the distribution of education fixed on the situation of 1985. The column totals show the sample size in 2011 and the relative distribution of education as it was in 1985. The inner cell percentages, on which the association between education and prejudice is based, are from 2011. Based on the sample size and the percentages in the column totals,
we can calculate the number of respondents in each category of education. With the
distribution of education from 1985, there would be 479 low/middle educated respondents
(.684 * 701) and 222 respondents with high education (.361 * 701). With these numbers
and the inner cell percentages from 2011, the number of respondents that holds ethnic
prejudice within each educational category is calculated: 328 (.685 * 479) among the low/
middle educated and 115 (.517 * 222) among the higher educated. Summing these numbers
gives a simulated number of respondents with ethnic prejudice, which amounts to 63.2
percent of the sample ((328 + 115) / 701). This means that support for ethnic prejudice in 2011
would be slightly higher than observed if the distribution of education in the sample had
not changed between 1985 and 2011. The shift in the educational distribution appears to
have reduced ethnic prejudice with about 2.4 percent points.
Appendix Chapter 2

Table A2.1 | Factor scores, eigenvalues and Cronbach’s alphas of ethnic prejudice items per survey year and in total

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>With Moroccans you never know for certain whether they are going to be aggressive or not</td>
<td>.731</td>
<td>.607</td>
<td>.682</td>
<td>.651</td>
<td>.652</td>
<td>.715</td>
</tr>
<tr>
<td>Most people from Surinam work quite slowly</td>
<td>.691</td>
<td>.754</td>
<td>.640</td>
<td>.620</td>
<td>.591</td>
<td>.674</td>
</tr>
<tr>
<td>Gypsies are never to be trusted</td>
<td>.757</td>
<td>.713</td>
<td>.754</td>
<td>.650</td>
<td>.621</td>
<td>.668</td>
</tr>
<tr>
<td>Turks are backward</td>
<td>.602</td>
<td>.424</td>
<td>.586</td>
<td>.462</td>
<td>.594</td>
<td>.604</td>
</tr>
<tr>
<td>When you do business with Jews, you have to be extra careful</td>
<td>.706</td>
<td>.500</td>
<td>.631</td>
<td>.564</td>
<td>.609</td>
<td>.518</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>2.949</td>
<td>2.453</td>
<td>2.738</td>
<td>2.395</td>
<td>2.506</td>
<td>2.622</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.825</td>
<td>.735</td>
<td>.793</td>
<td>.727</td>
<td>.751</td>
<td>.772</td>
</tr>
<tr>
<td>N</td>
<td>1,606</td>
<td>800</td>
<td>831</td>
<td>1,165</td>
<td>827</td>
<td>5,229</td>
</tr>
</tbody>
</table>


Figure A2.1 | The distribution of educational attainment in the Netherlands, 1985-2011

Figure A2.2 | The distribution of church membership in the Netherlands, 1985-2011


Figure A2.3 | The distribution of church attendance in the Netherlands, 1985-2011

Figure A3.1 | The distribution of educational attainment for men and women in the Netherlands, 1979-2012

Source: Cultural Changes in the Netherlands 1979-2012.
Figure A3.2 | The distribution of church attendance for men and women in the Netherlands, 1979-2012

Source: Cultural Changes in the Netherlands 1979-2012.
Figure A3.3 | The distribution of labour force participation for men and women in the Netherlands, 1979-2012

Source: Cultural Changes in the Netherlands 1979-2012.
Table A3.1 | Collinearity statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Men (N = 14,616)</th>
<th>Women (N = 16,236)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period (1993 = ref.)(^\text{a})</td>
<td>12.83</td>
<td>10.91</td>
</tr>
<tr>
<td>Birth cohort (1951 = ref.)(^\text{a})</td>
<td>2.83</td>
<td>2.57</td>
</tr>
<tr>
<td>Age (16 to 29 years = ref.)</td>
<td>45.85</td>
<td>37.81</td>
</tr>
<tr>
<td>Educational attainment (primary education = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary vocational</td>
<td>2.86</td>
<td>2.96</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>1.83</td>
<td>2.20</td>
</tr>
<tr>
<td>Secondary vocational</td>
<td>3.04</td>
<td>3.00</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>2.01</td>
<td>2.10</td>
</tr>
<tr>
<td>Bachelor’s or equivalent</td>
<td>2.57</td>
<td>2.51</td>
</tr>
<tr>
<td>Master’s or equivalent</td>
<td>2.50</td>
<td>2.19</td>
</tr>
<tr>
<td>Church attendance (once a week = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a fortnight</td>
<td>1.28</td>
<td>1.30</td>
</tr>
<tr>
<td>Once a month</td>
<td>1.35</td>
<td>1.40</td>
</tr>
<tr>
<td>Less than once a month</td>
<td>2.03</td>
<td>2.07</td>
</tr>
<tr>
<td>Never</td>
<td>2.28</td>
<td>2.33</td>
</tr>
<tr>
<td>Labour force participation (non-working = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time working</td>
<td>1.56</td>
<td>1.42</td>
</tr>
<tr>
<td>Full-time working</td>
<td>1.95</td>
<td>1.23</td>
</tr>
<tr>
<td>Interactions educational attainment * period (primary education = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary vocational * period</td>
<td>3.20</td>
<td>3.18</td>
</tr>
<tr>
<td>Lower secondary * period</td>
<td>1.73</td>
<td>2.11</td>
</tr>
<tr>
<td>Secondary vocational * period</td>
<td>4.24</td>
<td>3.84</td>
</tr>
<tr>
<td>Upper secondary * period</td>
<td>1.97</td>
<td>1.90</td>
</tr>
<tr>
<td>Bachelor’s or equivalent * period</td>
<td>3.18</td>
<td>2.94</td>
</tr>
<tr>
<td>Master’s or equivalent * period</td>
<td>2.52</td>
<td>2.22</td>
</tr>
<tr>
<td>Interactions church attendance * period (once a week = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a fortnight * period</td>
<td>1.32</td>
<td>1.36</td>
</tr>
<tr>
<td>Once a month * period</td>
<td>1.43</td>
<td>1.49</td>
</tr>
<tr>
<td>Less than once a month * period</td>
<td>2.52</td>
<td>2.63</td>
</tr>
<tr>
<td>Never * period</td>
<td>5.69</td>
<td>5.34</td>
</tr>
<tr>
<td>Interactions labour force participation * period (non-working = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time working * period</td>
<td>4.04</td>
<td>2.05</td>
</tr>
<tr>
<td>Full-time working * period</td>
<td>1.69</td>
<td>1.51</td>
</tr>
</tbody>
</table>

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.

\(^{\text{a}}\) Lowest tolerance value and highest VIF value are reported.
Table A3.2 | Unstandardised regression coefficients of educational attainment, church attendance, and labour force participation interacted with survey year (extension of Table 3.2)

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( N = 14,616 )</td>
<td>( N = 16,236 )</td>
</tr>
<tr>
<td>Interactions educational attainment * period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(primary education = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary vocational * period</td>
<td>.001</td>
<td>.003</td>
</tr>
<tr>
<td>Lower secondary * period</td>
<td>.001</td>
<td>.000</td>
</tr>
<tr>
<td>Secondary vocational * period</td>
<td>.002</td>
<td>-.005</td>
</tr>
<tr>
<td>Upper secondary * period</td>
<td>-.005</td>
<td>-.010</td>
</tr>
<tr>
<td>Bachelor’s or equivalent * period</td>
<td>.000</td>
<td>-.003</td>
</tr>
<tr>
<td>Master’s or equivalent * period</td>
<td>-.005</td>
<td>-.008</td>
</tr>
<tr>
<td>Interactions church attendance * period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(once a week = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a fortnight * period</td>
<td>.005</td>
<td>.003</td>
</tr>
<tr>
<td>Once a month * period</td>
<td>.003</td>
<td>.003</td>
</tr>
<tr>
<td>Less than once a month * period</td>
<td>.012***</td>
<td>.005</td>
</tr>
<tr>
<td>Never * period</td>
<td>.005</td>
<td>.000</td>
</tr>
<tr>
<td>Interactions labour force participation * period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(non-working = ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time working * period</td>
<td>.002</td>
<td>-.001</td>
</tr>
<tr>
<td>Full-time working * period</td>
<td>.000</td>
<td>.009**</td>
</tr>
</tbody>
</table>

Source: Cultural Changes in the Netherlands 1979-2012; \( N = 30,852 \).

Note: For the interactions, period was measured as ratio variable (each unit increase corresponding to the next survey year) centred on the survey year 1993.

\* \( p < .05 \), \*\* \( p < .01 \), \*\*\* \( p < .001 \) (two-tailed).
Table A3.3 | Estimated differences between observed and simulated mean levels of gender egalitarianism and corresponding 95% bootstrapped confidence intervals for men

<table>
<thead>
<tr>
<th>Year</th>
<th>cohort - observed (a)</th>
<th>education - observed (b)</th>
<th>church attendance - observed (c)</th>
<th>labour force participation - observed (d)</th>
<th>total - observed (e)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Δ 95% CI</td>
<td>Δ 95% CI</td>
<td>Δ 95% CI</td>
<td>Δ 95% CI</td>
<td>Δ 95% CI</td>
</tr>
<tr>
<td>1979</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1980</td>
<td>-.01 -.03, .01</td>
<td>-.02 -.03, .00</td>
<td>-.01* -.03, .01</td>
<td>.00 -.01, .00</td>
<td>-.03* -.09, -.06</td>
</tr>
<tr>
<td>1981</td>
<td>-.02 -.05, .00</td>
<td>-.03* -.05, -.02</td>
<td>-.01* -.02, .00</td>
<td>-.01 -.01, .00</td>
<td>-.08* -.12, -.04</td>
</tr>
<tr>
<td>1985</td>
<td>-.04 -.09, .01</td>
<td>-.03* -.05, -.02</td>
<td>-.01* -.02, .00</td>
<td>-.01 -.02, .00</td>
<td>-.09* -.15, -.04</td>
</tr>
<tr>
<td>1986</td>
<td>-.03 -.08, .02</td>
<td>-.05* -.06, -.03</td>
<td>-.01* -.02, .00</td>
<td>-.01 -.02, .00</td>
<td>-.08* -.14, -.02</td>
</tr>
<tr>
<td>1987</td>
<td>-.04 -.10, .02</td>
<td>-.06* -.07, -.04</td>
<td>-.02* -.03, -.01</td>
<td>-.01 -.02, .00</td>
<td>-.12* -.19, -.06</td>
</tr>
<tr>
<td>1991</td>
<td>-.05 -.13, .03</td>
<td>-.05* -.07, -.04</td>
<td>-.02* -.04, -.01</td>
<td>.01* -.02, -.01</td>
<td>-.13* -.21, -.04</td>
</tr>
<tr>
<td>1992</td>
<td>-.06 -.15, .03</td>
<td>-.05* -.06, -.03</td>
<td>-.03* -.04, -.02</td>
<td>-.01 -.02, .00</td>
<td>-.14* -.23, -.04</td>
</tr>
<tr>
<td>1993</td>
<td>-.06 -.16, .03</td>
<td>-.06* -.07, -.04</td>
<td>-.03* -.05, -.02</td>
<td>-.01 -.02, .00</td>
<td>-.15* -.26, -.05</td>
</tr>
<tr>
<td>1996</td>
<td>-.06 -.17, .04</td>
<td>-.07* -.09, -.06</td>
<td>-.04* -.05, -.02</td>
<td>-.02* -.02, -.01</td>
<td>-.15* -.27, -.03</td>
</tr>
<tr>
<td>1997</td>
<td>-.07 -.19, .04</td>
<td>-.06* -.07, -.04</td>
<td>-.04* -.05, -.03</td>
<td>-.01* -.02, -.01</td>
<td>-.16* -.28, -.03</td>
</tr>
<tr>
<td>2002</td>
<td>-.08 -.23, .06</td>
<td>-.11* -.13, -.09</td>
<td>-.05* -.07, -.04</td>
<td>-.01* -.02, -.01</td>
<td>-.23* -.40, -.07</td>
</tr>
<tr>
<td>2004</td>
<td>-.08 -.23, .06</td>
<td>-.07* -.09, -.05</td>
<td>-.05* -.07, -.04</td>
<td>.01* -.02, -.01</td>
<td>-.17* -.35, -.00</td>
</tr>
<tr>
<td>2006</td>
<td>-.09 -.25, .07</td>
<td>-.08* -.10, -.06</td>
<td>-.06* -.08, -.04</td>
<td>-.01* -.02, -.01</td>
<td>-.20* -.38, -.01</td>
</tr>
<tr>
<td>2008</td>
<td>-.08 -.26, .10</td>
<td>-.04* -.06, -.02</td>
<td>-.07* -.09, -.05</td>
<td>-.02* -.03, -.01</td>
<td>-.16 -.36, .05</td>
</tr>
<tr>
<td>2012</td>
<td>-.09 -.27, .09</td>
<td>-.08* -.11, -.05</td>
<td>-.07* -.10, -.05</td>
<td>-.02* -.03, -.01</td>
<td>-.18 -.41, .05</td>
</tr>
</tbody>
</table>

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.

* significant with α = .05 (two-tailed).
Table A3.4 | Estimated differences between observed and simulated mean levels of gender egalitarianism and corresponding 95% bootstrapped confidence intervals for women

<table>
<thead>
<tr>
<th>Year</th>
<th>cohort - observed (a)</th>
<th>education - observed (b)</th>
<th>church attendance - observed (c)</th>
<th>labour force participation - observed (d)</th>
<th>total - observed (e)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>∆</td>
<td>95% CI</td>
<td>∆</td>
<td>95% CI</td>
<td>∆</td>
</tr>
<tr>
<td>1979</td>
<td>0</td>
<td>0.07, 0.00</td>
<td>0</td>
<td>0.03, 0.00</td>
<td>0</td>
</tr>
<tr>
<td>1980</td>
<td>-0.04</td>
<td>-0.07, -0.02</td>
<td>-0.06</td>
<td>-0.03, 0.00</td>
<td>-0.04</td>
</tr>
<tr>
<td>1981</td>
<td>-0.04</td>
<td>-0.08, 0.00</td>
<td>-0.05</td>
<td>-0.03, 0.00</td>
<td>-0.01</td>
</tr>
<tr>
<td>1985</td>
<td>-0.15*</td>
<td>-0.20, -0.11</td>
<td>-0.08</td>
<td>-0.03, 0.00</td>
<td>-0.02</td>
</tr>
<tr>
<td>1986</td>
<td>-0.16*</td>
<td>-0.20, -0.11</td>
<td>-0.07</td>
<td>-0.02, 0.00</td>
<td>0</td>
</tr>
<tr>
<td>1987</td>
<td>-0.21*</td>
<td>-0.27, -0.16</td>
<td>-0.10</td>
<td>-0.02, 0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>1991</td>
<td>-0.31*</td>
<td>-0.39, -0.24</td>
<td>-0.13</td>
<td>-0.03, 0.01</td>
<td>-0.03</td>
</tr>
<tr>
<td>1992</td>
<td>-0.32*</td>
<td>-0.40, -0.24</td>
<td>-0.11</td>
<td>-0.03, 0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>1993</td>
<td>-0.34*</td>
<td>-0.43, -0.26</td>
<td>-0.13</td>
<td>-0.03, 0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>1996</td>
<td>-0.37*</td>
<td>-0.46, -0.28</td>
<td>-0.14</td>
<td>-0.02, 0.01</td>
<td>-0.04</td>
</tr>
<tr>
<td>1997</td>
<td>-0.40*</td>
<td>-0.49, -0.30</td>
<td>-0.12</td>
<td>-0.03, 0.01</td>
<td>-0.05</td>
</tr>
<tr>
<td>2002</td>
<td>-0.48*</td>
<td>-0.59, -0.36</td>
<td>-0.17</td>
<td>-0.05, -0.03</td>
<td>-0.06</td>
</tr>
<tr>
<td>2004</td>
<td>-0.48*</td>
<td>-0.60, -0.36</td>
<td>-0.14</td>
<td>-0.04, -0.05</td>
<td>-0.05</td>
</tr>
<tr>
<td>2006</td>
<td>-0.49*</td>
<td>-0.61, -0.36</td>
<td>-0.13</td>
<td>-0.04, -0.05</td>
<td>-0.05</td>
</tr>
<tr>
<td>2008</td>
<td>-0.56*</td>
<td>-0.70, -0.41</td>
<td>-0.08</td>
<td>-0.04, -0.06</td>
<td>-0.06</td>
</tr>
<tr>
<td>2012</td>
<td>-0.57*</td>
<td>-0.72, -0.42</td>
<td>-0.13</td>
<td>-0.05, -0.07</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

Source: Cultural Changes in the Netherlands 1979-2012; N = 30,852.
* significant with $\alpha = .05$ (two-tailed).
Appendix Chapter 4

Figure A4.1 | Average educational levels in the Netherlands, 1900-2010


Figure A4.2 | Percentage of the total population without a religious affiliation in the Netherlands, 1900-2010

Figure A4.3 | Percentage women in paid labour in the Netherlands, 1900-2010

Table A4.1 | Unstandardised and standardised regression coefficients of period- and cohort-specific contextual characteristics on support for gender egalitarianism, controlled for age

<table>
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<tr>
<th></th>
<th>Men (N = 12,146)</th>
<th>Women (N = 13,858)</th>
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<tbody>
<tr>
<td></td>
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<td>Model IIa</td>
</tr>
<tr>
<td>B</td>
<td>Beta</td>
<td>B</td>
</tr>
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<td>2.87***</td>
<td>2.98***</td>
</tr>
<tr>
<td>Cohort effects</td>
<td></td>
<td></td>
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<tr>
<td>Cohort-specific educational expansion</td>
<td>.35***</td>
<td>.17</td>
</tr>
<tr>
<td>Cohort-specific secularisation (/10)</td>
<td>.06***</td>
<td>.10</td>
</tr>
<tr>
<td>Cohort-specific female LFP (/10)</td>
<td>-11**</td>
<td>-0.4</td>
</tr>
<tr>
<td>Period effects</td>
<td></td>
<td></td>
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<tr>
<td>Period-specific educational expansion</td>
<td>.14</td>
<td>.03</td>
</tr>
<tr>
<td>Period-specific secularisation (/10)</td>
<td>.03*</td>
<td>.04</td>
</tr>
<tr>
<td>Period-specific female LFP (/10)</td>
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<td>.11</td>
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<tr>
<td>Age (16 = ref.)^a</td>
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<tr>
<td>Variance explained</td>
<td>10.2%</td>
<td>10.3%</td>
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Source: Cultural Changes in the Netherlands 1979-2006; N = 26,004.

^To save space, we calculated one standardised coefficient (beta) summarising the effect for all dummy categories of age (Heise, 1972). B-coefficients of the age dummies are shown in Figure A4.4.

* p < .05, ** p < .01, *** p < .001 (two-tailed).
Figure A4.4 | B-coefficients of the age dummies from Model I-III

Source: Cultural Changes in the Netherlands 1979-2006; N = 26,004.
Now I will briefly describe some people. Please listen to each description and tell me how much each person is or is not like you.

(1) Very much like me – (6) Not like me at all

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</thead>
<tbody>
<tr>
<td>WE</td>
<td>.599</td>
<td>.597</td>
<td>.589</td>
<td>.611</td>
<td>.602</td>
<td>.577</td>
<td>.574</td>
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<tr>
<td>EE</td>
<td>.556</td>
<td>.591</td>
<td>.552</td>
<td>.589</td>
<td>.604</td>
<td>.613</td>
<td>.601</td>
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</tbody>
</table>

It is important to her/him to live in secure surroundings. She/he avoids anything that might endanger her/his safety.

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<tr>
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<td>.525</td>
<td>.532</td>
<td>.553</td>
<td>.554</td>
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<td>.526</td>
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<tr>
<td>EE</td>
<td>.452</td>
<td>.494</td>
<td>.421</td>
<td>.429</td>
<td>.438</td>
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</table>

She/he believes that people should do what they are told. She/he thinks people should follow rules at all times, even when no-one is watching.

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<td>.525</td>
<td>.532</td>
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<td>.421</td>
<td>.429</td>
<td>.438</td>
<td>.435</td>
<td>.432</td>
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</tbody>
</table>

It is important to her/him that the government ensures her/his safety against all threats. She/he wants the state to be strong so it can defend its citizens.

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<td>.581</td>
<td>.599</td>
<td>.583</td>
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<td>.555</td>
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<td>.566</td>
<td>.608</td>
<td>.595</td>
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It is important to her/him always to behave properly. She/he wants to avoid doing anything people would say is wrong.

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<td>.655</td>
<td>.636</td>
<td>.645</td>
<td>.642</td>
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<tr>
<td>EE</td>
<td>.652</td>
<td>.660</td>
<td>.617</td>
<td>.630</td>
<td>.664</td>
<td>.614</td>
<td>.643</td>
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</table>

Tradition is important to her/him. She/he tries to follow the customs handed down by her/his religion or her/his family.

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<td>.513</td>
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<th>EE</th>
<th>WE</th>
<th>EE</th>
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<th>EE</th>
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<td>2.314</td>
<td>2.244</td>
<td>2.221</td>
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Source: ESSround 1-7.
Appendix Chapter 5

Figure A5.1 | Economic and demographic developments in Western and Eastern Europe 2002-2014

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<th>SE</th>
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<td>3.99***</td>
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<td>3.99***</td>
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<tr>
<td>GDP (/1000)</td>
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<td>0***</td>
<td>.00</td>
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<td>.00</td>
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<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
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<td>.00</td>
<td>.00</td>
<td>.00</td>
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<td>Δ GDP (/1000)</td>
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<td>.01</td>
<td>-.02*</td>
<td>.01</td>
<td>-.02*</td>
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<td>-.02*</td>
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<td>Δ National balance (-/+)</td>
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<td>Δ Unemployment rate (%)</td>
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<tr>
<td>Individual (level 1)</td>
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<td>.00</td>
<td>.64***</td>
<td>.00</td>
<td>.64***</td>
<td>.00</td>
<td>.64***</td>
<td>.00</td>
<td>.64***</td>
<td>.00</td>
<td>.64***</td>
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<tr>
<td>Country-years (level 2)</td>
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<td>.00</td>
<td>.01***</td>
<td>.00</td>
<td>.01***</td>
<td>.00</td>
<td>.01***</td>
<td>.00</td>
<td>.01***</td>
<td>.00</td>
<td>.01***</td>
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<tr>
<td>ICC (%)</td>
<td>0.56</td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
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<tr>
<td>-2LL</td>
<td>395577.26</td>
<td>395622.11</td>
<td>395620.35</td>
<td>395617.96</td>
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<th>B</th>
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<td>3.96***</td>
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<td>4.00***</td>
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<tr>
<td>% tertiary educated</td>
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<td>.00</td>
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<td>Δ Asylum applicants (%)</td>
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<tr>
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<td>.00</td>
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<td>.00</td>
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<td>.01***</td>
<td>.00</td>
<td>.01***</td>
<td>.00</td>
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<td>0.92</td>
<td>0.91</td>
<td>0.92</td>
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<td>395618.40</td>
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Source: ESS round 1-7; N level 1 = 165,279; N level 2 = 91.
~ p < .10, * p < .05, ** p < .01, *** p < .001 (two-tailed).
### Table A5.3: Multilevel regression coefficients of contextual characteristics on support for authoritarian values in Eastern Europe, controlled for country dummies and individual characteristics

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
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<td>SE</td>
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<td>SE</td>
<td>B</td>
<td>SE</td>
<td>B</td>
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<tr>
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<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>.03**</td>
<td>.01</td>
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<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
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<tr>
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<td>.01</td>
<td>.01</td>
<td>.01</td>
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<td>.01</td>
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<td>Δ National balance (+/-)</td>
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<tr>
<td>Δ Unemployment rate (%)</td>
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<td>Variance components</td>
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<td>.53***</td>
<td>.00</td>
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<td>.00</td>
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<td>.00</td>
<td>.01***</td>
<td>.00</td>
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<td>.00</td>
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Source: ESS round 1-7; N level 1 = 51,332; N level 2 = 35.

- p < .10, * p < .05, ** p < .01, *** p < .001 (two-tailed).
### Table A5.4 | Multilevel regression coefficients of countries in Western Europe
(extension of Table 5.2)

<table>
<thead>
<tr>
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<td>.04</td>
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<td>Country dummies</td>
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<tr>
<td>(Sweden = ref.)</td>
<td></td>
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</tr>
<tr>
<td>Belgium</td>
<td>.42***</td>
<td>.03</td>
</tr>
<tr>
<td>Switzerland</td>
<td>.01</td>
<td>.06</td>
</tr>
<tr>
<td>Germany</td>
<td>.29***</td>
<td>.04</td>
</tr>
<tr>
<td>Denmark</td>
<td>.26***</td>
<td>.04</td>
</tr>
<tr>
<td>Spain</td>
<td>.65***</td>
<td>.05</td>
</tr>
<tr>
<td>Finland</td>
<td>.32***</td>
<td>.04</td>
</tr>
<tr>
<td>France</td>
<td>.14***</td>
<td>.03</td>
</tr>
<tr>
<td>Great-Britain</td>
<td>.42***</td>
<td>.03</td>
</tr>
<tr>
<td>Ireland</td>
<td>.23*</td>
<td>.11</td>
</tr>
<tr>
<td>Netherlands</td>
<td>.22***</td>
<td>.03</td>
</tr>
<tr>
<td>Norway</td>
<td>.16***</td>
<td>.04</td>
</tr>
<tr>
<td>Portugal</td>
<td>.12</td>
<td>.07</td>
</tr>
</tbody>
</table>

Source: ESS round 1-7; N level 1 = 165,279; N level 2 = 91.
~ p < .10, * p < .05, ** p < .01, *** p < .001 (two-tailed)

### Table A5.5 | Multilevel regression coefficients of countries in Eastern Europe
(extension of Table 5.3)

<table>
<thead>
<tr>
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<tr>
<td>Intercept</td>
<td>4.30</td>
<td>.03</td>
</tr>
<tr>
<td>Country dummies</td>
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<tr>
<td>(Czech Republic = ref.)</td>
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<tr>
<td>Belgium</td>
<td>-.69***</td>
<td>.05</td>
</tr>
<tr>
<td>Switzerland</td>
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</tr>
<tr>
<td>Germany</td>
<td>-.00</td>
<td>.03</td>
</tr>
<tr>
<td>Denmark</td>
<td>-.11***</td>
<td>.03</td>
</tr>
</tbody>
</table>

Source: ESS round 1-7; N level 1 = 51,332; N level 2 = 35.
~ p < .10, * p < .05, ** p < .01, *** p < .001 (two-tailed).
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Nederlandse samenvatting

Inleiding

In de afgelopen eeuw hebben Europese samenlevingen veelomvattende sociale, demografische, economische, politieke en culturele veranderingen doorgemaakt. Deze ontwikkelingen hebben de bevolkingssamenstelling van deze samenlevingen aanzienlijk veranderd. Zo hebben steeds meer mensen een hoger opleidingsniveau weten te bereiken en is het aantal mensen dat lid is van een (Christelijke) geloofsgemeenschap, naar de kerk gaat of in God gelooft aanzienlijk gedaald. Ook in Nederland hebben deze ontwikkelingen zich in sterke mate voorgedaan.

In dit proefschrift bestudeer ik de relatie van deze ontwikkelingen met veranderingen van opvattingen in de samenleving. Daarbij richt ik mij in het bijzonder op drie sociaal-culturele thema’s die volgens gevestigde theoretische inzichten deel uitmaken van een progressief-conservatief tegenstelling, waarvan de basiswaarde van culturele vrijheid ten grondslag ligt. ‘Cultureel conservatisme’ verwijst daarbij naar opvattingen die gericht zijn op het afwijzen of inperken van culturele vrijheden, aangezien deze de traditionele normen van de eigen groep zouden kunnen aantasten. Daartegenover staan opvattingen die gericht zijn op het afwijzen of inperken van culturele vrijheden, aangezien deze de traditionele normen van de eigen groep zouden kunnen aantasten. Daartegenover staan opvattingen die gericht zijn op het afwijzen of inperken van culturele vrijheden, aangezien deze de traditionele normen van de eigen groep zouden kunnen aantasten.

Concreet bestudeer ik houdingen ten aanzien van etnische minderheden, opvattingen over de rol van mannen en vrouwen en het belang dat mensen hechten aan autoritaire waarden. Publieke steun voor zulke opvattingen kan belangrijke gevolgen hebben voor de sociale samenhang en ongelijkheid tussen groepen in de samenleving.

Sociale wetenschappers houden zich al geruime tijd bezig met het bestuderen van veranderingen in cultureel conservatieve opvattingen. Verschillende onderzoekers hebben geconstateerd dat mensen in westerse samenlevingen in de loop van de 20e eeuw steeds minder conservatief zijn geworden en steeds meer waarde zijn gaan toekennen aan culturele vrijheid. Deze grootschalige verschuiving in publieke opvattingen is vaak toegeschreven aan een voortschrijdende modernisering, zoals toenemende welvaart, een stijging van het opleidingsniveau van de bevolking en ontkerkelijking. Veel studies naar sociale veranderingen zijn echter voornamelijk beschrijvend van aard. Daarmee blijft het de vraag of deze maatschappelijke ontwikkelingen ook daadwerkelijk met elkaar verband houden of slechts toevallig tegelijkertijd plaatsvonden. Er zijn maar weinig onderzoeken waarin de specifieke bijdrage van onderwijsexpansie, ontkerkelijking en andere ontwikkelingen wordt getoetst aan de hand van gegevens over individuen. Met dit proefschrift heb ik daarom als doel om meer inzicht te krijgen in hoeverre en op welke manier deze ontwikkelingen invloed hebben gehad op trends in cultureel conservatisme.

Er zijn verschillende manieren waarop de relatie tussen ontwikkelingen als onderwijs-expansie en ontkerkelijking enerzijds en veranderingen in cultureel conservatisme ander-
zijds, tot stand kan komen. Ten eerste heeft onderzoek keer op keer aangetoond dat de opleiding die individuen hebben genoten en hun kerkelijkheid belangrijke voorspellers zijn voor de mate van cultureel conservatisme. Zo blijken mensen die een hoger opleidingsniveau hebben genoten en mensen die niet naar de kerk gaan stevast meer ‘liberaal’ in hun culturele opvattingen, terwijl mensen met een lager opleidingsniveau en kerkgangers meer conservatief zijn in hun opvattingen omtrent culturele thema’s. Gegeven het feit dat steeds meer mensen een hoger opleidingsniveau behalen alsook de kerk verlaten, verwachten we logischerwijs een afname van cultureel conservatieve opvattingen in de samenleving. Daarnaast kunnen onderwijsexpansie en ontkerkelijking ook een invloed hebben op de opvattingen van alle mensen in de samenleving, ongeacht hun opleidingsniveau of kerkelijkheid. Wanneer een groeiend aantal mensen een hogere opleiding behaalt of de kerk verlaat, dan zal het minder conservatieve gedachtegoed van dit deel van de bevolking steeds wijder verbreid raken, ook onder hen die zelf een lagere opleiding hebben of kerkelijk zijn. Tot slot hebben zich nog andere ontwikkelingen in Europese samenlevingen voorgedaan die de rol van onderwijsexpansie en ontkerkelijking kunnen hebben afgezwakt of tegengewerkt. Deze verschillende verklaringen onderzoek ik in vier empirische studies, die hieronder worden beschreven.

**Hoofdstuk 2**

In Hoofdstuk 2 richt ik mij op veranderingen in de mate waarin Nederlanders negatieve vooroordelen hebben ten aanzien van etnische minderheden. Ondanks onderwijsexpansie en ontkerkelijking lijken etnische vooroordelen in de afgelopen decennia toch in opmars te zijn. Dit is verrassend, gegeven het feit dat mensen naarmate zij hoger opgeleid en minder religieus zijn over het algemeen juist minder weerstand tegen etnische minderheden hebben. In deze studie onderzoek ik waarom de toename van het aantal mensen met een hogere opleiding en het aantal onkerkelijke mensen in Nederland niet het veronderstelde ‘liberaliserende’ effect op publieke steun voor etnische vooroordelen heeft gehad.

Om dit te onderzoeken maak ik gebruik van gegevens die zijn verzameld in het kader van het grootschalige *Sociaal-Culturele Ontwikkelingen in Nederland* onderzoek (SOCON). Voor dit onderzoek is op vijf momenten tussen 1985 en 2011 een representatieve doorsnede van de Nederlandse bevolking tussen de 18 en 70 jaar ondervraagd. Vooroordelen over etnische minderheden worden gemeten aan de hand van een vijftal stellingen, die gebaseerd zijn op negatieve opinies over verschillende etnische groepen in Nederland: Marokkanen, Turken, Surinamers, zigeuners en Joden. De antwoorden op deze stellingen geven tezamen een indicatie voor de mate van negatieve vooroordelen ten aanzien van deze etnische groepen.

Een vergelijking van de antwoorden tussen 1985 en 2011 laat zien dat de gemiddelde steun voor etnische vooroordelen inderdaad is toegenomen. Bovendien was deze toename over het algemeen sterker onder hogeropgeleiden dan onder mensen met een ander opleidingsniveau. Juist de groep van wie we de minste vooroordelen zouden verwachten,
is zich dus negatiever gaan uitlaten over etnische minderheden. De bevindingen van deze studie tonen aan dat de toename van publieke steun voor etnische vooroordelen minder sterk zou zijn geweest als deze groep zich niet negatiever was gaan uitleten over etnische minderheden. De stijging van het aantal mensen met een hoger opleidingsniveau in Nederland is daarom niet vanzelfsprekend gepaard gegaan met een afname van negatieve vooroordelen.

Daarnaast blijken er maar weinig verschillen in vooroordelen te bestaan tussen mensen die naar de kerk gaan en hen die dit niet doen. De veronderstelling dat de ontkerkelijking in Nederland tot een afname van etnische vooroordelen onder de bevolking zou leiden, gaat daarom niet op. Tot slot worden negatieve uitingen over etnische minderheden steeds breder gedeeld in de Nederlandse samenleving. Deze algehele stijging van weerstand tegen etnische minderheden in de samenleving heeft de veronderstelde ‘liberaliserende’ werking van onderwijsexpansie en ontkerkelijking deels teniet gedaan.

**Hoofdstuk 3**

In Hoofdstuk 3 bestudeer ik veranderingen in egalitaire genderopvattingen. Dit heeft betrekking op de opvatting dat mannen en vrouwen in menig opzicht gelijk zijn (of zouden moeten zijn). Verschillende onderzoekers hebben geopperd dat deze veranderingen kunnen worden toegeschreven aan ontwikkelingen in de sociale structuur van de bevolking, zoals de stijging van het opleidingsniveau van de bevolking, ontkerkelijking en een toename van vrouwen op de arbeidsmarkt. Eerder onderzoek heeft namelijk aangetoond dat hogeropgeleiden, mensen die niet naar de kerk gaan en vrouwen die actief zijn op de arbeidsmarkt meer egalitaire genderopvattingen onderschrijven. Daarnaast blijkt uit onderzoek dat jongere generaties er meer egalitaire genderopvattingen op na houden dan oudere generaties. De natuurlijke opeenvolging van generaties zou daarom eveneens kunnen hebben bijgedragen aan een toename van publieke steun voor egalitaire genderopvattingen. Hoewel deze verklaringen veelvuldig zijn getheoretiseerd, is er nog weinig empirisch onderzoek gedaan naar de afzonderlijke bijdragen van bovengenoemde ontwikkelingen aan de trend in deze genderopvattingen. In deze studie probeer ik een antwoord te vinden op de vraag in hoeverre veranderingen in genderopvattingen in Nederland kunnen worden toegeschreven aan de hierboven geschatste demografische ontwikkelingen. Ook onderzoek ik in hoeverre deze verklaringen verschillen tussen mannen en vrouwen.

Ik maak gebruik van data die is verzameld het kader van het onderzoek *Culturele Veranderingen in Nederland* (CV). Voor dit onderzoek wordt sinds 1975 elke twee jaar een representatieve steekproef van zo’n tweeduizend Nederlanders tussen 16 en 74 jaar ondervraagd met behulp van enquêtes. Om veranderingen in egalitaire genderopvattingen over de tijd te onderzoeken vergelijk ik de antwoorden van deze Nederlanders op de stelling “een vrouw is geschikter om kleine kinderen op te voeden dan een man” op zestien
tijdstippen tussen 1979 en 2012. Ik veronderstel dat hoe minder men het eens is met deze stelling, des te meer men egalitaire genderopvattingen onderschrijft.

De resultaten van deze studie laten zien dat Nederlanders tussen 1979 en 2012 gemiddeld genomen steeds minder instemden met de stelling dat een vrouw geschikter is voor het opvoeden van kleine kinderen. Nederlanders zijn in de afgelopen tijd dus in toenemende mate gaan denken in termen van gelijkheid tussen mannen en vrouwen. De toename is sterker onder vrouwen dan onder mannen. Deze trend is deels toe te schrijven aan de geleidelijke vervanging van oudere generaties door jongere generaties die er meer egalitaire genderopvattingen op na houden. Met name onder vrouwen vormt deze demografische ontwikkeling een belangrijke verklaring voor de trend naar meer egalitaire genderopvattingen. Ook de stijging van het aantal mensen met een hogere opleiding heeft bijgedragen aan de trend. Daarentegen is de bijdrage van ontkerkelijking en de stijging van het aantal werkende vrouwen in Nederland beperkt. Blijkbaar zijn deze demografische verschuivingen in de onderzochte periode niet sterk genoeg geweest om hun weerslag te hebben op de mate van publieke steun voor egalitaire genderopvattingen.

Hoofdstuk 4

In het vierde hoofdstuk bouw ik voort op de voorgaande studie waarin ik veranderingen in egalitaire genderopvattingen onderzocht. Uit deze studie bleek de mate waarin Nederlanders egalitaire genderopvattingen onderschrijven te zijn toegenomen, zowel over de tijd als onder opeenvolgende geboortecohorten (generaties). In deze studie bleef de vraag echter onbeantwoord waarom de opvattingen van mensen die in verschillende tijden leven of opgroeien van elkaar verschillen, ongeacht hun opleidingsniveau of mate van religiositeit. Gaat de invloed van onderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonderwijsonnder
Voor deze studie maak ik opnieuw gebruik van gegevens die voor het *Culturele Veranderingen in Nederland* (CV) onderzoek zijn verzameld. Daarnaast heb ik op basis van de Nederlandse Volkstellingen en arbeidsmarktonderzoeken gegevens verzameld over de mate van onderwijsexpansie, ontkerkelijking en de arbeidsdeelname van vrouwen vanaf 1900. Deze gegevens gebruik ik als indicatie voor de specifieke maatschappelijke context waaraan mensen zijn blootgesteld tijdens hun jeugd en gedurende de rest van de levensloop.

Op grond van de resultaten concludeer ik dat Nederlanders inderdaad meer egalitaire genderopvattingen onderschrijven in tijden dat de bevolking gemiddeld een hoger opleidingsniveau heeft. Dat geldt met name voor mensen die in zulke maatschappelijke contexten zijn opgegroeid, ongeacht hun eigen opleidingsniveau. Bovenop de invloed van onderwijsexpansie heeft de ontkerkelijking van Nederland nog maar een kleine invloed. Rekening houdend met beide ontwikkelingen blijkt dat de toegenomen arbeidsparticipatie van vrouwen niet de veronderstelde ‘liberaliserende’ invloed heeft gehad op egalitaire genderopvattingen. Een mogelijke verklaring voor deze onverwachtse bevinding is dat de toename van de arbeidsdeelname van vrouwen in Nederland pas laat op gang kwam en nog steeds werken Nederlandse vrouwen grotendeels in deeltijd. Het is dus de vraag in hoeverre de toegenomen participatie van vrouwen op de Nederlandse arbeidsmarkt daadwerkelijk een cultuurveranderingen in het denken over de rol van mannen en vrouwen teweeg heeft gebracht of dat deze cultuurverschuiving op conto van het toegenomen opleidingsniveau van de bevolking moet worden geschreven.

**Hoofdstuk 5**


Ik maak gebruik van gegevens die zijn verzameld voor het grootschalige European Social Survey. Dit onderzoek wordt sinds 2002 elke twee jaar in een groot aantal Europese landen afgenomen. Autoritaire waarden worden gemeten aan de hand een vijftal stellingen,
waarbij mensen aangeven hoe belangrijk bepaalde zaken voor hen zijn, zoals gebruiken en tradities, zich houden aan de regels en een sterke overheid die haar burgers beschermt.

De antwoorden op deze stellingen zijn beschikbaar voor dertien West-Europese landen en vijf Oost-Europese landen op zeven meetpunten tussen 2002 en 2014. Daarnaast heb ik gegevens verzameld over de stand van de economie, het percentage tertiair opgeleide mensen, de mate van ontkerkelijking, en het aantal asielverzoeken in dezelfde periode.


Conclusie en discussie

In de afgelopen decennia hebben steeds meer mensen een hoger opleidingsniveau bereikt en is het aantal kerkleden en kerkgangers aanzienlijk gedaald. In dit proefschrift onderzocht ik in hoeverre en op welke manier deze maatschappelijke ontwikkelingen gepaard zijn gegaan met veranderingen in publieke steun voor cultureel conservatieve opvattingen. Daarbij heb ik mij in het bijzonder gericht op drie dimensies van cultureel conservatisme, voornamelijk in de Nederlandse context. Deze dimensies reflecteren de onderliggende waarde van culturele vrijheid zoals die in eerdere studies inzichtelijk is gemaakt. Ik vergeleek de mate van steun voor etnische vooroordelen, egaalitaire genderopvattingen en autoritaire waarden op verschillende momenten in de tijd gedurende een periode van zo’n tien tot veertig jaar.

Concluderend hebben de ontwikkelingen van onderwijsexpansie en ontkerkelijking deels bijgedragen aan trends in verschillende dimensies van cultureel conservatisme in Nederland en Europa. Op grond van de bevindingen van dit onderzoek constateer ik dat
de rol van de christelijke kerk in het vormen en beïnvloeden van normen, waarden en opvattingen is afgenomen. Terwijl de culturele erfenis van de kerk nog steeds zichtbaar is bij oudere generaties, zal het een kwestie van tijd zijn voordat deze generaties zijn vervangen door jongere generaties die in een andere tijdsgeest zijn opgegroeid. Het opleidingsniveau van mensen blijkt daarentegen nog steeds van grote betekenis als voorspeller voor welke waarden en opvattingen zij eropna houden. De expansie van onderwijs heeft daarom een belangrijke rol gespeeld in het reduceren van cultureel conservatisme in de bevolking. Bij deze conclusies zijn echter drie kanttekeningen te maken.

Ten eerste is het van belang een onderscheid te maken tussen de verschillende dimensies van cultureel conservatisme. De veronderstelde liberaliserende invloed van onderwijsonderwijsexpansie en ontkerkelijking komt wel naar voren met betrekking tot genderopvattingen, maar niet met betrekking tot steun voor etnische vooroordelen en autoritaire waarden. Ondanks de stijging van opleidingsniveaus en de toegenomen ontkerkelijking, is de weerstand tegen etnische minderheden in Nederland gestegen en bleef de steun voor autoritaire waarden in Oost- en West-Europa nagenoeg gelijk. Wel heeft de expansie van onderwijs, en ontkerkelijking in mindere mate, een bijdrage geleverd aan de toename van steun voor egalitaire genderopvattingen in Nederland. Met deze ontwikkelingen is de samenstelling van de bevolking, alsmede het maatschappelijke klimaat waaraan iedereen is blootgesteld veranderd. Toekomstig onderzoek moet uitwijzen in hoeverre deze bevindingen ook gelden voor andere opvattingen die onder de noemer van cultureel conservatisme kunnen worden gerekend, zoals afwijzende houdingen ten aanzien van homoseksualiteit alsook afkeuring van euthanasie en abortus. Daarvoor is het van belang om de verzameling van grootschalige representatieve gegevens met meetinstrumenten die vergelijkbaar zijn over de tijd voort te zetten.

Ten tweede concludeer ik op grond van de bevindingen van dit onderzoek dat de bijdrage van onderwijsonderwijsexpansie en secularisering niet overal en voor iedereen even sterk is geweest. Sommige groepen of individuen in de samenleving lijken meer ontvankelijk voor veranderingen in de maatschappelijke context, bijvoorbeeld vanwege hun sociale posities en belangen. Zo is de toename in egalitaire genderopvattingen onder vrouwen sterker en tevens beter te verklaren aan de hand van demografische ontwikkelingen dan onder mannen. Met name jongere generaties hogeropgeleide vrouwen hebben er baat bij gehad om de traditionele gendernormen die een ondergeschikte positie van vrouwen in de maatschappij in stand houden, in twijfel te trekken. Toekomstig onderzoek zou zich kunnen richten op de vraag welke factoren of maatregelen tot meer egalitaire genderopvattingen onder mannen leiden. Beantwoording van deze vraag kan aanknopingspunten bieden voor beleid ter bevordering van gendergelijkheid.

Ook constateer ik op basis van de bevindingen dat de invloed van onderwijsonderwijsexpansie en ontkerkelijking afhankelijk is van de historische en culturele context waarin deze ontwikkelingen zich voordoen. Zo blijkt de toename van het opleidingsniveau van de
bevolking in Oost-Europese landen gepaard te gaan met een lichte stijging van de publieke steun voor autoritaire waarden. Het lijkt erop dat de erfenis van de voormalige autoritaire communistische regimes in deze landen nog weerklinkt in het onderwijssysteem. Voor de ‘liberaliserende’ invloed van onderwijs is het dus van belang welke waarden er worden overgedragen binnen socialiserende contexten zoals scholen. Met behulp van panelstudies en kwalitatief onderzoek kan meer inzicht worden verkregen in de specifieke rol die het onderwijs speelt in de overdracht van deze waarden alsook in de mechanismen die ten grondslag liggen aan verschillen in opvattingen tussen mensen met uiteenlopende opleidingsniveau’s.

Tot slot hebben zich de laatste decennia maatschappelijke ontwikkelingen voorgedaan die de veronderstelde invloed van onderwijsexpansie en ontkerkelijking hebben tegengewerkt. Zulke ontwikkelingen kunnen verklaren waarom trends in cultureel conservatisme afwijken van de veronderstelde richting. Zo heb ik in dit proefschrift laten zien dat iedereen in Nederland zich – tegen de aanvankelijke verwachting in – negatiever is gaan uiltalen tegenover etnische minderheden. Mogelijk liggen toenemende zorgen over immigratie en etnische diversiteit hieraan ten grondslag. Maar we zien ook dat belangrijke publieke figuren zich de laatste jaren steeds openlijker negatief uiltalen over etnische minderheden, waarbij regelmatig wordt benadrukt dat zij de typisch Nederlandse waarden zouden ondermijnen. Daarmee lijk het eens zo sterke taboe op het uitspreken van negatieve vooroordelen over etnische minderheden onder alle lagen van de bevolking langzaam te verdwijnen.

Daarnaast lijkt er sprake te zijn van een tegenreactie op de alsmaar toenemende steun voor egalitaire genderopvattingen, die mogelijk verband houdt met de toegenomen arbeidsdeelname van vrouwen. Nog steeds heersen er in Nederland sterke ideeën over het moederschap. Arbeidsdeelname maakt het voor moeders moeilijker om aan het ideaalbeeld te voldoen. Ook leidt een toenemende arbeidsdeelname van vrouwen mogelijk tot conflicten over de rolverdeling binnen het gezin en tot zorgen over het welzijn van het kind. Het bijstellen van opvatting over de geschiktheid van vrouwen om kinderen op te voeden zou een manier kunnen zijn om met zulke conflicten, zorgen of schuldgevoelens om te gaan. Meer onderzoek is nodig om inzicht te krijgen in welke andere ontwikkelingen een rol spelen in het verklaren van trends in cultureel conservatisme, niet alleen op het niveau van de samenleving maar ook in de meer directe leefomgeving, zoals het gezin en de buurt waarin iemand opgroeit. Daarbij zou het waardevol zijn om ook te kijken naar de invloed van sociale bewegingen en netwerken, rolmodellen, publieke figuren, de media, specifieke gebeurtenissen en beleidsmaatregelen.

Samenvattend acht ik met dit proefschrift een bijdrage te hebben geleverd aan kennis over sociale veranderingen door te bestuderen hoe publieke steun voor cultureel conservatisme zich op de lange termijn heeft ontwikkeld en op welke manier onderwijsexpansie, ontkerkelijking en andere maatschappelijke veranderingen hierin een rol hebben gespeeld. Daarmee plaatst deze studie hedendaagse maatschappelijke discussies over culturele thema’s in een breder perspectief.
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Paula Thijs
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About the author

Paula Thijs was born in Maastricht, the Netherlands, on the 3rd of April, 1990. In 2012, she obtained her Bachelor of Science degree (cum laude) in Sociology from Radboud University, Nijmegen. During her studies, she conducted research internships at the Ministry of Education, Culture and Science and the Verwey-Jonker Institute. In 2014, she completed her Research Master’s degree (cum laude) in Social and Cultural Science at Radboud University. Her master thesis was awarded the Wout Ultee master thesis award, the Radboud University Study Award, and the J.C. Baak thesis prize and Jan Brouwer thesis prize by the Royal Holland Society of Social Sciences and Humanities. In September 2014, she started as a PhD Candidate at the Interuniversity Center for Social Science Theory and Methodology (ICS) and the Department of Sociology at Radboud University, where she conducted the present dissertation under the supervision of Manfred te Grotenhuis and Peer Scheepers. Paula taught courses on Research Methodology and Social Capital, and she supervised several research projects and master theses. From October to December 2017, she was a visiting scholar for two months at Nuffield College (University of Oxford), hosted by Geoffrey Evans. Since 2014, she has been a board member of the James Coleman Association, the alumni association of the ICS. During the final year of her PhD, she was the chair of the Halkes Women Faculty network, Radboud University’s women’s network. As of September 2018, Paula works as a postdoctoral researcher on an interdisciplinary research project about the longitudinal development of democratic core values and educational trajectories among adolescents at the Department of Sociology of the University of Amsterdam.
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In the last century, Europe has witnessed mass expansion of educational levels and substantial declines in church membership, church attendance and religious beliefs. These processes have fundamentally reshaped the socio-demographic composition of European societies. This book explores to what extent these societal developments have been accompanied by changes in public opinions. In four empirical chapters, trends in public support for ethnic prejudice, gender egalitarianism and authoritarian values (in short: cultural conservatism) in the Netherlands and in other European countries are explored, based on representative surveys. In addition, different explanations for the relationship between educational expansion, secularisation, and changes in these public opinions are tested. The results show that public support for cultural conservatism has developed in different directions. Educational expansion and secularisation have to a certain extent contributed to these trends, although the ‘liberalising’ influence of these developments is not as clear-cut as is often expected. This book contributes to the understanding of long term changes in cultural conservatism and puts contemporary societal debates about issues of cultural freedom into a wider perspective.

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