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NORDIC HOMICIDE REPORT

HOMICIDE IN DENMARK, FINLAND, ICELAND, NORWAY AND SWEDEN, 2007–2016

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SUMMARY

This report compares the trends and patterns of lethal violence in from 2007 to 2016, in five Nordic countries: Denmark, Finland, Iceland, Norway and Sweden. The report is a product of the "Nordic Homicide from Past to Present" research project, funded by the Scandinavian Research Council for criminology. The main findings include:

- Based on homicide mortality rates, the Nordic countries form currently three groups: compared to the rates in Denmark and Sweden, the homicide mortality rate is about 30 per cent higher in Finland and 30 per cent lower in Norway and Iceland. However, by global standards, all the countries have extremely low rates of homicide mortality.
- In Denmark, Iceland, Norway, and Sweden, the hotspots of lethal violence are the metropolitan areas of the largest cities; in Finland, the rural areas and small towns in the eastern and northern provinces. In this respect, the situation in Scandinavia and Iceland resembles that in western Europe, in Finland again, it resembles that in some of the eastern European countries.
- In all five countries, non-working working-age male substance abusers are hugely over-represented among homicide offenders and victims.
- In the three Scandinavian countries, immigrants make up to 25 to 40 per cent of homicide offenders, while in Iceland and Finland their proportion is about 10 per cent. While this difference reflects the sizes of the immigrant populations, differential risks are also involved. In all Nordic countries, the homicide offending rates of immigrants are higher than those of native residents, but this difference is substantially larger in Scandinavia than in Iceland or Finland.
- The role of alcohol and drinking situations in lethal violence is central in Finland, Iceland and Sweden, but only moderate in Denmark and insignificant in Norway. This is reflected in the temporal distribution of homicide incidents; and to the lower percentage of domestic homicides and the higher percentage of male victims in Finland, Iceland and Sweden.
- Concerning firearm homicides, Sweden is currently a clear outlier in the region with every fourth homicide being perpetrated by firearms. The firearm homicide rate in Sweden is the highest of all the Nordic countries. The situation has deteriorated fast in the last few years. Firearm homicides are concentrated in the metropolitan areas of Stockholm, Gothenburg and Malmö and to a large extent are linked to gang violence in a few residential districts.
- Nordic homicide clearance rates are among the highest in the world; offenders are caught and sentenced almost without exception. The official control policies are effective and arguably contribute to very low homicide rates in the region when compared with the global situation.

FOREWORD

This report has been created in the “Nordic Homicide from Past to Present” (NHPP) project, coordinated by the University of Helsinki and financed by the Scandinavian Research Council for Criminology. The aim of the project has been to extend standardized and individual-level homicide research into the dimension of history, with simultaneous comparisons over a long duration and across nations. This ambitious project provided a natural context for comparing modern homicide in the Nordic countries. This report, the Nordic Homicide Report, is thus a key deliverable of the NHPP project.

During the project, it became clear that extending standardized homicide research into deep history required a new concept and instrument, the Historical Homicide Monitor (HHM). This is so because distant historical periods do not always share the concepts and social phenomena of modernity. However, for the comparison of current homicide in the Nordic countries, it was possible to maintain direct and maximal comparability of analysis. Therefore, in this report, we have mostly used the current European standard of individual-level homicide analysis, the European Homicide Monitor (EHM). This key instrument was developed in the period from 2008 to 2011 by a research consortium coordinated by the Swedish Council for Crime Prevention and funded by the European Union. The EHM manual was published in 2011 (Granath et al. 2011). Currently, the EHM network is being coordinated by Leiden University in the Netherlands.

The NHPP project reflects the long-standing criminological cooperation between the Nordic countries. This report lays the groundwork for future Nordic Homicide Reports, to be repeated at regular intervals. Furthermore, discussions on the possible expansion of this report towards wider country inclusion have also started in the EHM Steering Committee. Who knows; perhaps one day we will even be able to move to the use of individual-level merged datasets, a change that would hugely advance the analytic potential of the data.

We thank the funder, as well as all the institutions, scholars and research assistants involved in the NHPP project. Thanks also to Eira Mykkänen for the layout and to Ian Dobson for language inspection.

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1 INTRODUCTION

During the last few decades, homicide rates have decreased in many developed countries (see for example, Eisner 2015; Lappi-Seppälä & Lehti 2015). There have been signs that many crime types, especially property crime, have decreased (Van Dijk et al. 2012). The strongest evidence of the existence of decline in crime comes from homicide. Criminologists have explored the causes of this crime drop intensively in Europe and the United States (US). The main factors are well known, even though the mechanisms can differ between Europe and the US. According to European studies, an important factor has been the massively-increased efforts in situational crime prevention, including the surveillance of public spaces (Farrell et al. 2011, 2014). Simultaneously, cultural values supporting social control and controlled behaviour have increased (Kivivuori 2007; Kivivuori & Bernburg 2011). Nonetheless, the decrease in crime may not be general, as some types of crime, such as cybercrime, have increased (Aebi & Linde 2010).

The Nordic countries have also witnessed declines in crime, beginning from the 1990s. This has been ascertained in self-report studies on youth crime (Kivivuori 2007; Kivivuori & Bernburg 2011) and in lethal violence (Granath et al, 2011). However, even in crimes for which the trend has been a decreasing one during the last two decades, there is no guarantee of an indefinitely persisting decline. It is therefore essential to examine if the decline in crime has continued in the most recent data. There are certain indications in some of the Nordic countries that the decline in homicide may be levelling out or even reversing (Suonpää et al. 2019). This warrants continued research efforts. Furthermore, Nordic polities have traditionally aimed at egalitarian social policies. Against this backdrop, it is alarming that the benefits of the decline in crime may by unequally distributed across all social strata. There is some evidence that increasing safety mainly concerns the middle and upper strata of the population (Nilsson et al. 2016). Since homicide tends to be over-represented in the lower stratum, this general observation may also apply to lethal violence. Of course, the link between lethal violence and specific offender and victim groups remains an empirical question.

The current report was created under the auspices of a larger Nordic project entitled “Nordic Homicide from Past to Present” (Kivivuori 2018). The aim of the historical project is to create a new research instrument, the Historical Homicide Monitor (HHM), which will allow for disaggregated standardized analysis of homicide across the long historical duration. The emerging HHM is an entirely new research instrument. At the same time, it is largely compatible with the European Homicide Monitor (Granath et al. 2011) by the partial use of equal variables, or by providing ready-made transformation syntaxes described in the HHM manual. Substantially, the aim of the project is to compare the behavioural patterns of homicide and their differences in the Nordic countries diachronically over time, and to analyse these patterns synchronically between the countries.

This report relies heavily on the strong development of homicide research in the Nordic countries. An important boost for this research was the development of the European Homicide Monitor (EHM), a project carried out between 2008 and 2011 by the National Council of Crime Prevention (Sweden), the Institute of Criminology and Legal Policy at the University of Helsinki (Finland), and the Institute for Criminal Law and Criminology at Leiden University (the Netherlands). A key product of that project

was the creation of the EHM manual (Granath et al. 2011). Since the EHM project ended, research cooperation has continued through an open researcher network, which invites new researchers and participating countries. During the last few years, institutions in Denmark, Estonia, Iceland, Norway, and Switzerland have joined the countries using EHM-compatible systems, while France, Poland, and Scotland are currently studying options to join the group. In the current report, Norway and Iceland are for the first time participating in homicide description and analysis based on the EHM framework.

There are two main challenges in homicide research. First, we need to use or create standardized means of describing homicide patterns similarly in different countries. Standardization here refers to both variable content and the structure and observation units of the data. Second, the description should enable the disaggregation of homicide into sub-types, again similarly in different countries. The current publication, the first Nordic Homicide Report, responds to both challenges by using a single conceptual grid for five countries, and by enabling disaggregated analysis. We base our analyses on the national homicide monitors of each Nordic country. These either follow the EHM format or can be transformed into it. While using homicide research databases, we additionally draw on government official statistics. In this report, we compare the homicide victims, offenders and incidents in all five Nordic countries.

2 DATA AND TERMINOLOGY

This report has used a number of official public and non-public data sources. Our main sources are national homicide monitoring systems and published official criminal justice statistics. Except for Denmark, the data consist of police data collected during the preliminary investigations of homicide cases. In this we follow the standard EHM criteria of inclusion (Granath et al 2011, 32–35). The Danish data are based on court data and include only cases with convicted offenders. In addition, for all countries, the description of the long-term homicide trends in Chapter 4.1 are based on published cause-of-death data.

We have used terminology that is similar to that used in the European Homicide Monitor research report (Granath et al 2011). *Homicide* is an intentional criminal act of violence by one or more human beings resulting in the death of one or more other human beings. The definition thus requires intentional violence and death as outcome, but it does not require that the offender intended to kill. In Denmark, Finland, Iceland and Sweden, the definition covers the legal codes of murder, voluntary manslaughter,[1] infanticide and assault leading to death. Attempted homicides, voluntary euthanasia, terminations of life on request, assisted suicides and abortions are not included. Excluded also are cases of involuntary manslaughter due to crimes like drunk driving, and clear cases of legally-justified intentional killings which have not led to an indictment (such as police officers shooting an individual in self-defence). Both solved and unsolved cases of homicide have been included in the data except for in Denmark.[2]

The term “Nordic countries” refers to the five countries of Denmark, Finland, Iceland, Norway and Sweden, while Scandinavia and Scandinavian countries include only Denmark, Norway and Sweden.

2.1 Denmark

The collection of homicide data of the Danish Ministry of Justice[3] began as a separate pilot project. The ministry collected systematically and analysed data on homicides investigated by the Danish police in 2008–2011 and published the results in 2014 (Drab i Danmark 2008–2011). Since 2012, the homicide data collection has been an ongoing project in which the data are digitally stored and coded in accordance with the EHM-compatible standard for coding. The Danish EHM-compatible data rely solely on homicide cases in which the offender is convicted, and the conviction has become legally valid and non-appealable. Excluded are homicides where the perpetrator cannot be identified, committed suicide before apprehension or conviction, or died of some other cause (see Chapter 4.2).

[1] There is no distinction between murder and voluntary manslaughter in the Danish and Icelandic Criminal Code.
[2] The Danish data include only cases of convicted homicide offenders.
[3] For this study the Danish Ministry of Justice has delivered only the data regarding homicides with convicted offenders. The Ministry of Justice is not responsible for any interpretations of the data in the text, but solely for providing the numbers. The Danish supplementary data concerning police statistics and cause of death statistics are from published sources from Statistics Denmark and have been collected by the Finnish project team.

2.2 Finland

The Finnish Homicide Monitor (FHM) is a joint project of the Institute of Criminology and Legal Policy at the University of Helsinki (KRIMO), the Finnish Police University College, and the Finnish Police Board. The FHM is based on police data produced during preliminary investigations and includes detailed information about all homicides committed in Finland since June 2002, covering victim, offender and incident characteristics. The data are collected directly from the police officers investigating the case, who fill in an electronic questionnaire designed by researchers from KRIMO.[4]

The official crime reporting system of the police is used to validate the inclusiveness of the FHM. The police usually submit the requested information after the completion of the preliminary investigation. In cases of crime not solved within a reasonable time, the available data are registered approximately one year after the initiation of the investigation, provided that the case is still being investigated as a probable homicide. All the data are stored in SPSS format, in the FHM format, which with specific transformations, is compatible with the EHM. Annual homicide reports based on the FHM are published by KRIMO (Lehti 2018).

2.3 Iceland

The Icelandic data used in this study cover the period from 1990 to 2016. The observation period was extended because of the smaller population and homicide incident counts in Iceland. The country has a population of fewer than 350,000 inhabitants and a very low homicide rate. The longer observation period does not compromise the comparability of the Icelandic data with the data from the other Nordic countries. There were no great political or social disruptions in Iceland between 1990 and 2007. The developments after 2007 (the global economic crisis and related social and political turbulence) were covered by the data in all the other countries.

The main source of detailed information on homicides of between 1900 and 1997 are verdicts stored in the National Archives of Iceland. Portions of these can be accessed at the Fons Juris website, which is a legal research platform including all published verdicts. The database was searched for all homicide verdicts [in Icelandic: manndráp] in the period from 1900 until 1989 using the following key words: 211. gr. *almennra hegningarlaga*, *manndráp*, *látinn*.

To approximate the EHM “police investigation threshold” criterion of inclusion better, we used additional data sources. We compared the said conviction compilations with Wikipedia lists of homicides in Iceland. Nine cases in the Wikipedia lists were missing from our sources, i.e. unpublished verdicts or homicides following which the perpetrator committed suicide. Information on all missing cases was derived from newspaper reporting stored at the “timarit.is”, an open access digital library of Icelandic newspapers run by the National and University Library of Iceland.

[4] The current FHM questionnaire was designed in 2001–2002 by Janne Kivivuori from KRIMO, with Pekka Santtila and Manne Laukkanen from the Police University College of Finland.

(Concerning the coverage of the data, see Chapter 4.2). When looking up at "timarit.is" we used the information from Wikipedia to find the cases (for example a name or a date) and managed to find all the cases, sometimes in more than one newspaper. It was not possible to look up *manndráp* (i.e. homicide) in "timarit.is" because thousands of articles came up.

For the period since 1998, our sources have been the verdicts of homicide cases and the homicides registered in the LÖKE database. The LÖKE police database includes detailed information on all homicides investigated by the Icelandic police. The data are digitalized and can easily be recoded in accordance with the EHM-compatible standard for coding. A case is registered in the LÖKE database at the time the offence is first reported to the police, including cases in which the offender committed suicide.

The primary source has been the verdicts. When information regarding the name and age of the perpetrator has been missing, we have added this information from the LÖKE database. In cases which did not go to court during the period 1998–2016, the information from the case was gathered from reports and other information in the LÖKE database. Two cases have been excluded; one registered in the police database as homicide but never prosecuted in lack of evidence and one murder at the US navy base at Keflavik investigated and prosecuted by American authorities and not registered by the Icelandic police.

2.4 Norway

In Norway, the Violent Crimes Section at the National Criminal Investigation Service (NCIS) is responsible for collecting, recording and maintaining the national homicide overview. The overview contains information about intentional homicides and premeditated homicides (the Penal Code [1902] section 233 and the Penal Code [2015] section 275) committed on Norwegian territory or on Norwegian ships in international waters. The overview does not cover homicides committed against or by Norwegians abroad. Nor does it include offences covered by other legal provisions, such as fatal violence,[5] involuntary manslaughter or attempted homicide. The overview includes both solved and unsolved cases.

Since the end of the 1960s, the NCIS has been maintaining a list of homicides in Norway, and since 1990, data relating to each case are stored in electronic files. The overview lists homicides by year. It is based on figures from the National Database of Criminal Cases, and on information in the Norwegian police computerised case handling system. The data is extracted from police interviews and reports and is manually entered into an Access database (developed at the NCIS). The database is continually updated and additionally includes the final judgments.

[5] Includes the crimes *grov kroppskrenkelse med dødsfølge* (§ 272) and *grov kroppsskade med dødsfølge* (§ 274) of the Norwegian Penal Code. These cases correspond to those defined as assaults leading to death and included in the data of the other Nordic countries. The number of these cases is small in Norway. In 2016–2018, four cases investigated by the Norwegian police make up for less than five per cent of the total of reported intentional homicides and fatal violence. Thus, excluding them from the Norwegian data has not had significant impact of the results of this study.

The database has three main parts:

- Key information about the case – location of crime scene, modus operandi, police district, date, etc.
- Perpetrator – gender, age, citizenship, relationship to the victim, state and cause of intoxication, social background, prior convictions, conviction and sentence, etc.
- Victim – gender, age, citizenship, relation to the perpetrator, state and cause of intoxication, social background, prior convictions, etc.

Anonymous homicide data can be shared with directorates, ministries, the media and various public services and research institutions, at the national and international level. The NCIS has published information about homicide since 1968. At the beginning, it included only the number of cases/victims published in the Annual Report from the NCIS. Since 1992, the NCIS has published annual homicide reports, *Drapsoversikt*.[6]

In this study, if not otherwise mentioned, the victims of the terror attacks on 22 July 2011 have been excluded in the victim statistics. However, information about the perpetrator of the attacks has been included in offender statistics, as have the data on the attacks in all incident-based statistics.[7] We have left the attacks out of the victim statistics because of their unique nature and very high number of fatalities. The 77 victims of the attacks made up over 20 per cent of all Norwegians killed in homicides in 2007–2016. Including them would have caused a substantial bias in overall victim information.

2.5 Sweden

In Sweden, the Swedish National Council of Crime Prevention (Brå) collects homicide data while the Swedish national homicide database has included detailed information about all homicides committed in Sweden since 1990. The database has 140 variables on crime characteristics, and victims and offenders. The data are stored in SPSS format and have been coded with EHM-compatible standard coding. Data covering the years 1990–2016 are available for scholarly research by all Swedish researchers, although the data for years 2014–2016 have still not been fully coded and as yet, have information on fewer variables than the data for 1990–2013. However, for most of the central variables in regard to this project, the available data already cover information for the entire period from 1990 to 2016. Some information regarding the homicides in 2014–2016 has also been completed by information from the detailed Swedish cause-of-death-statistics and some high-quality mass media databases.

The definition of homicide in the data of the Swedish National Council for Crime Prevention covers all completed intentional criminal killings irrespective of the legal code (murder, manslaughter, infanticide or assault leading to death) the crime has been investigated and if the case has been solved (perpetrator convicted) or not. This

[6] https://www.politiet.no/aktuelt-tall-og-fakta/tall-og-fakta/drapsoversikt/

[7] In the incident-based statistics, we have treated the attacks as two separate homicide incidents because they were carried out in two locations using different killing methods.

sociological/criminological definition of homicide makes the database suitable for robust studies of homicide trends. Brå carries out much of the research on current homicide trends, but active research is done at some universities and by the Swedish Institute for Future Studies (IF). From autumn 2019, fully-coded research data covering the entire period from 1990 to 2017 will be available for academics or other scholars.

2.6 Preparation of the report

The tables and figures for this report were designed by staff from KRIMO, in many cases replicating the analyses of the first EHM report (Granath et al. 2011). The tables were then sent to partners, who filled in the relevant information. The analysis did not involve individual-level data transfers or merged datasets due to data release limitations.

The number of homicides in this study refers to homicide victims, unless otherwise stated. Homicide incident refers to all victims killed in the same situation and is usually synonymous with one homicide case, i.e. when five persons are killed in the same situation, the crime constitutes five homicides but only one homicide incident.

In comparative analysis, we used two homicide indices. First, proportional distributions are shown as percentages. This comparative pattern analysis shows the relative salience of homicide sub-types in a country but ignores the risk differentials of the sub-categories. The reader cannot infer risk differentials from relative distributions of patterns.

Second, we use homicide rates to study the risk differentials of homicide generally and for sub-types. The rates refer to killed victims per 100,000 of resident population per year, unless otherwise mentioned.[8] All our population data have been derived from the official published population statistics of each country. In some cases, it is not possible to count sub-category rates directly, as denominator information is lacking or cannot be retrieved. In these cases, we have estimated rates on the presumption that the total homicide rate of the country can be disaggregated by using the proportional distribution of the relevant subtypes. To give an example, consider a hypothetical case in which the total homicide rate of a country is 2.0 per 100 000, and basic types of homicide are distributed as 40 per cent (acquaintance killings), 20 per cent (domestic), 20 per cent (stranger) and 20 per cent (unknown victim-offender relationship, VOR). In this invented case, we estimate corresponding VOR rates as 0.8 for acquaintance killings and 0.4 for all other types. When estimates have been used, it has always been explicitly mentioned.

[8] The rate calculations include non-resident victims and offenders, except in Chapter 6.3. Because of the small number of non-residents involved in Nordic homicides and their small proportion of the de facto populations, their inclusion does not have a relevant impact on the results.

3 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE NORDIC REGION

The Nordic countries form a distinct cultural region in northern Europe. The five countries share historical roots and have similar socio-political societal structures. In this section, we briefly discuss key societal and crime-related contextual factors, with special attention to possible differences between the five countries. As can be seen from Table 1, the differences between Nordic societies are small. All the countries are relatively wealthy European democracies, high-ranking in global welfare and equality indexes and except for Iceland, have rapidly aging populations. However, smaller differences can also be observed, including factors that potentially influence rates of violent crime.

Iceland has the smallest and youngest population, Sweden the largest, and Finland the oldest population. The size of the Danish, Finnish, and Norwegian populations is similar, roughly half of the population of Sweden.

Differences in age and gender structures may cause differences in violent crime levels between populations. Young men in their teens and early twenties are the most violent demographic group in many societies (see Trend & Pridemore 2012). In this respect, Iceland is the outlier in the Nordic region with a substantially younger population and the largest proportion of young men. In the studied period, the proportion of 15 to 29-year-old men was two percentage points larger in the Icelandic population than in the other Nordic populations. In Finland, the proportion was the smallest but only marginally smaller than in the Scandinavian countries.

Immigrants and the economically inactive working-age population may also influence crime rates (see Granath et al. 2011; Belli & Parkin 2012; Sanandaji 2017). In many Western countries, both are over-represented among violent crime offenders, especially non-western immigrants (see Granath et al. 2011; Trend & Pridemore 2012; Skardhamar et al 2014).[9] In the studied period, Finland had a relatively larger working-age population outside the workforce than in any other Nordic country. At the same time, non-western immigrants in Finland made up a much smaller percentage of the working-age population than in the Scandinavian countries. While the average employment rates of non-western immigrants are lower in Finland than the Nordic average, the difference in the proportion of the native passive population was even larger than the overall rates show (on immigrants in Nordic labour markets, see Skardhamar et al 2014; Lehti et al. 2014; Sanandaji 2017).

[9] Regarding immigrants, the European situation differs from the US research findings for a range of reasons.

Table 1 Socio-demographic indicators for the Nordic countries (% are out of resident population; average values of the studied period*)

	Denmark	Finland	Iceland	Norway	Sweden
Population (average of period)	5,635,471	5,409,507	292,333	4,952,205	9,547,266
Gender					
Males, all ages	49.7%	49.1%	50.3%	50.1%	49.9%
Males, 15 to 29 y	9.6%	9.4%	11.5%	9.9%	9.8%
Age					
<15 y	17.1%	16.5%	22.4%	18.6%	17.0%
15 to 29 y	18.9%	18.4%	22.5%	19.4%	19.2%
30 to 64 y	45.6%	46.5%	43.2%	46.6%	45.0%
65+	18.4%	18.6%	11.9%	15.4%	18.9%
Median (y)[1]	40.6	42.0	34.8	38.7	40.7
Life expectancy at birth[2]					
Men	77.9	77.5	80.8	79.4	79.9
Women	81.9	83.4	83.9	83.4	83.5
Minorities[3]					
Immigrants, all	8.7%	5.1%	9.0%	10.6%	15.4%
Immigrants, non-western	3.7%	1.6%	1.8%	4.8%	7.1%
Political system					
Human Development Index[4]	0.93 (11.)	0.92 (15.)	0.94 (6.)	0.95 (1.)	0.93 (7.)
EIU Democracy Index[5]	9.22 (5.)	9.14 (8.)	9.58 (2.)	9.87 (1.)	9.39 (3.)
Economic activity					
Unemployment[6]	6.2%	8.1%	5.0%	3.4%	7.6%
Employment[7]	74.5%	68.4%	86.1%	73.9%	75.9%
Tax revenue to GDP[8]	45.8%	42.4%	37.0%	40.6%	43.4%
Gini index[9]	27.8	27.1	26.8	25.7	27.6
GDP PPP USD[10]	44,515	40,378	42,916	61,229	44,117
Law and order					
NCS overall crime rate[11]	799	648	..	543	1,195
Prevalence of youth violence[12]	18%	12%	..	10%	12%
Firearm ownership[13]	10%	29%	30%	27%	21%
Substance abuse					
Alcohol consumption[14]	10.6	9.8	7.5	6.6	7.3
Drug-related deaths[15]	5.8	4.3	..	7.6	10.0

* 2007–2016, except Denmark (2012–2016) and Iceland (1990/ 1998–2016).

[1] In 2010, UN World Population Prospects (population.un.org).

[2] In 2012.

[3] These data have been subtracted from the official published population statistics of each country and based on similar definitions. Immigrant status refers to country of birth and the figures include only resident population. Native-born persons with immigrant parents are not included in the proportion of immigrants. Non-western immigrant refers to a person whose country of birth is not in Europe, Armenia, Azerbaijan, Cyprus, Georgia, Malta, Russia, Turkey, Australia, New Zealand, Canada, Greenland or the US.

[4] In 2018 (hdr.undp.org).

[5] In 2018, score and global ranking (Economist Intelligence Unit: www.eiu.com).

[6] For all countries the average of 2007–2016.

[7] Q4/2016 (Eurostat).

[8] Tax revenue to GDP in 2007–2016 (Statistics Finland).

[9] In 2012 (World Bank Open Data: data.worldbank.org/indicator/).

[10] For all countries the average of 2007–2016.

[11] Nordic Criminal Statistics, rate of selected crimes per 10,000 inhabitants a year in 2005 (von Hofer et al. 2012, 28). This source includes only crimes reported to the police.

[12] Kivivuori 2007. Percentage out of 13 to 16-year-olds. This survey-based prevalence information includes unreported crimes but is limited to youth populations.

[13] Rate of civilian firearm possession, 2012 or nearest available year. The rate is calculated by dividing the number of firearms in civilian ownership by resident population. Note that only adults are allowed to possess firearms in the Nordic countries, but on the other hand, firearm ownership is not evenly distributed in the adult population but persons who own legal firearms often have licenses for several firearms (www.gunpolicy.org).

[14] Litres of 100% alcohol per 15+ population in 2011 (Pohjoismainen alkoholitilasto 2011 (2013). Helsinki: THL).

[15] Per 100,000 15 to 64-year-olds (EMCDDA 2017).

Social and economic inequality correlates strongly with national differences in violent crime rates (see Trend & Pridemore 2012; Lappi-Seppälä & Lehti 2015; Cusson et al. 2017). Countries scoring high on inequality also tend to have high crime rates. This correlation can reflect multiple types of causation, including the possibility that cultural, political and population composition factors explain both levels of equality and crime. In the current report, the main point is that the Nordic countries resemble each other closely as high equality societies.

Alcohol, drugs and firearms are factors often associated with aggregate rate differences in lethal violence. Studies exploring the links between alcohol consumption and homicide rates have a long tradition in Nordic criminology (Verkko 1951; Pernanen 1981; Lenke 1990; Skog & Björk 1998; Rossow 2001; Bye 2012; Lehti & Sirén 2018). Per capita alcohol consumption in the studied period was higher in Denmark and Finland than in the other countries, but drug-related deaths were less common in Denmark and Finland than in Sweden or Norway. On the other hand, the differences in the ways alcohol is consumed or drugs are abused seem to explain violent crime rate differences better than mere consumption levels. In this respect, the Nordic countries form two groups; binge drinking, and hard liquor have historically played a lesser role in Danish alcohol consumption than in the other Nordic countries. Based on this, one would except lower levels of alcohol-related violence in Denmark than in Finland, Iceland, Norway or Sweden (see Bye 2012; Lehti & Sirén 2018; but see also Kivivuori 2007).

The role of firearms in homicidal crimes is a central theme in homicide research. Firearms can both create violence and make the consequences of violent behaviour more lethal. This is especially true for handguns (Killias & Markwalder 2012). In contrast with the situation in the US, civilian firearm ownership is strictly regulated and controlled in all the Nordic countries. During the studied period, the ratios of civilian ownership of legal firearms were the highest in Iceland and Finland, and the lowest in Denmark. In all the countries, however, ownership ratios were well below the US level. Firearms owned by civilians were mainly hunting weapons, shotguns and rifles, not handguns (see Killias & Markwalder 2012).

To sum up, differences in sociodemographic indicators were non-existent or marginal between the Nordic countries during the studied period. Contemporary Nordic societies are so similar in this respect that on the basis of discussed societal factors, one would not expect any significant differences in the levels of lethal violence. However, this is not the case. The focus in this study has been the search for crime stimulating factors that might explain the differences by aggregating the datasets for specified analyses.

4 TRENDS AND PATTERNS OF HOMICIDE

4.1 Homicide mortality trend 1946–2016

This chapter describes the long-, medium- and short-term fluctuations of Nordic homicide mortality in the post-Second World War era from official cause-of-death statistics. Homicide victimization rates and gender ratios refer to homicide mortality. Cause of death data include homicide deaths[10] of a certain population irrespective of where the crime has taken place, domestic or abroad. The trends are reliable as measures of homicide rates in the large- and medium-sized countries where the annual number of homicide deaths is substantial, the proportion of homicides taking place abroad is low, and nearly all victims are residents. In the Scandinavian countries and Finland, all these preconditions existed during the studied era. In Iceland with a population of fewer than 350,000 inhabitants, low annual numbers of lethal violence and a large proportion of the population visiting foreign countries each year, cause of death data are less reliable indicators of the national homicide trend. For this reason, we have shown the Icelandic trends as five-year moving averages of annual mortality rates. For all the other countries, we have shown the trends as the actual annual homicide mortality levels.[11]

4.1.1 Overall homicide mortality

Long-term changes in homicide mortality levels in the post-Second World War era have differed considerably in the Nordic region. Table 2 shows the mortality levels at the beginning and at the end of the studied period. In Iceland, the level today has remained the same as it was 60 years ago, whereas the level has risen in Sweden and Norway and fallen in Finland and Denmark (Figure 1 and Table 2)

[10] The statistics include only deaths when a death certificate has been issued. This means that the cause of death is always verified by a doctor or a coroner; for example, cases when the body of the victim has been destroyed are not included.

[11] During the studied period, in all Nordic countries the definition of homicide used in the national cause-of-death statistics was based on the international ICD-classification or its national adaptations. The ICD-classification changed three times during the review period: from ICD-7 to ICD-8 in 1968–1970, from ICD-8 to ICD-9 in 1979–1995, and from ICD-9 to ICD-10 in the years following 1994. The changes took place in different years depending on country. Regarding the definition of a death caused by an intentional assault in all four classifications, changes were negligible. We think that the information on homicide deaths given by the Nordic cause-of-death statistics of the studied period is fully comparable both inside each country and between all the five countries.

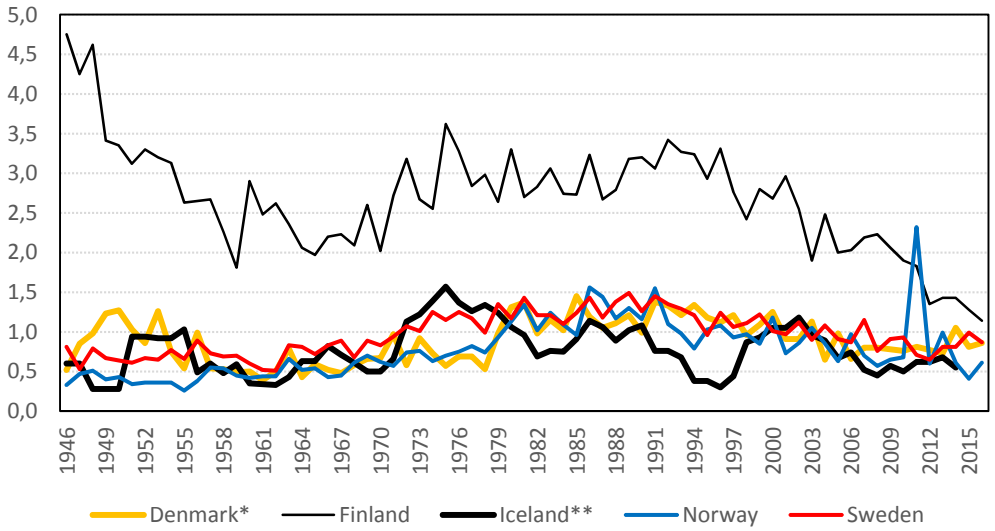

Figure 1 Homicide mortality in the Nordic countries, 1946–2016[12] (per 100,000 pop.; source: Official statistics) * Denmark: 2012–2016 data from police statistics; ** Iceland: five-year moving average.

In the late 1940s and early 1950s, Norway had the lowest homicide mortality and Finland by far the highest, 9.5-fold the Norwegian level. During the last sixty years, the difference between the Finnish level and those of the other Nordic countries has decreased substantially. In 2007–2016, Finland´s homicide mortality was still the highest, but "only" threefold the lowest one, the Icelandic rate (Table 2).

Table 2 Homicide mortality in the Nordic countries 1946–1955 and 2007–2016 (annual average rates, victims per 100,000 pop. a year; source: Official statistics)

Country	1946–1955	2007–2016	Change (%)
Denmark	0.93	0.67–0.82[13]	–12–28%
Finland	3.58	1.68	–53%
Iceland	0.60	0.56	–7%
Norway	0.38	0.66 (0.81)[14]	+74%
Sweden	0.68	0.86	+26%

There are both similarities and differences in the short and mid-term rate fluctuations during the period. In the three Scandinavian countries, the general pattern has been almost identical especially since the 1980s. All three experienced a relatively sharp increase in homicide rates between the mid-1960s and the mid-1970s. In Sweden,

[12] All trends are shown here as published in the official cause of death statistics, i.e. the 2011 figure for Norway includes the Norwegian victims of the 2011 terror attacks. Because we have not had the raw data of the statistics at our disposition, and do not know how they correspond to our own data, we have not been able to make any corrections of our own in the trends.
[13] If we use the cause of death statistics data for 2007–2011 and the police statistics data of homicide cases for 2012–2016, the rate is 0.82; if we use the cause of death statistics data for the whole period of 2007–2016 the rate is 0.67. The information about homicide deaths in the published Danish cause of death statistics may be unreliable from 2012 onwards and not be fully comparable with the earlier years.
[14] Excluding the victims of the 2011 terror attacks 0.66 and including them 0.81 (of the 77 victims of the attacks one was a Georgian visiting Norway and is not included in the Norwegian cause of death statistics).

the increasing trend started a few years earlier than in Norway or Denmark and was more gradual in nature. In the late 1970s, the rates stabilized to a relatively high level until the early 1990s decrease. This decreasing trend has continued until the last few years (Suonpää et al. 2019).

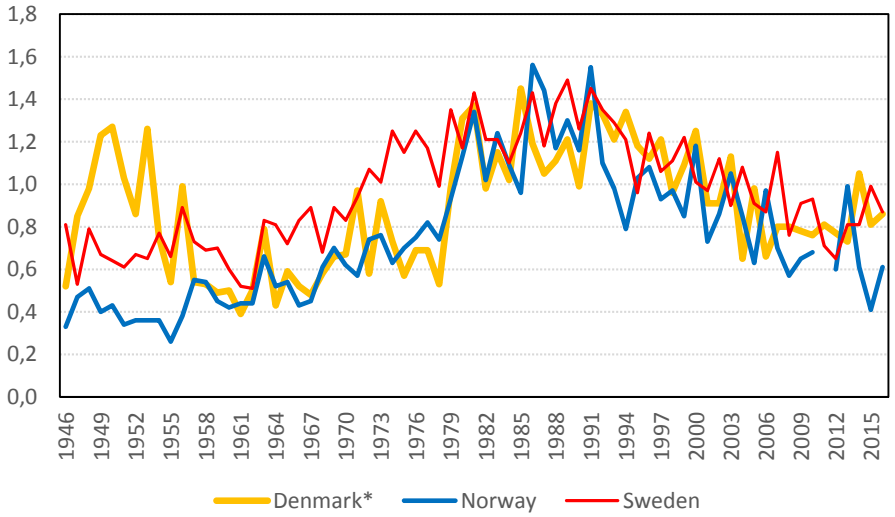

Figure 2 Homicide mortality in the Scandinavian countries, 1946–2016 (per 100,000 pop.; source: Official statistics) * Denmark: 2012–2016 data from police statistics; Norway: excluding 2011.

The most conspicuous exception to the general Scandinavian pattern is the post-war homicide wave in Denmark. Denmark experienced a period of relatively high homicide rates in the late 1940s and early 1950s with no equivalent in Norway or Sweden. According to Hart Hansen (1977), homicides during this period were familial to a large extent, and the decrease in homicide rate in 1955–1970 can largely be attributed to a reduction in such crimes. According to him, a decrease in the use of natural gas in private homes during the same period thwarted access to an easy way of killing entire families. This modus was common especially in homicide-suicides in the 1940s and 1950 when homicide-suicides made up over 40 per cent of all Danish homicides (Liem & Oberwittler 2012, 198). A mere technical change could thus have had a significant (and unintended) effect on the number of homicides. Hart Hansen offers other supplementary explanations as well. Especially in the late 1940s, the poor functioning of crime control authorities may have contributed to high crime rates. The Danish police force was dissolved during the German occupation,[15] and it took several years to rebuild an effective and functioning police force after the war (see Hart Hansen 1977).

The Scandinavian “inverted U”-curve pattern can also be found in the post-war homicide trend in Finland. Although Finland experienced a substantial decrease in long-term homicide levels, there was a clear increase in the rates in the late 1960s and the early 1970s, followed by a relatively stable period up until the early 1990s. During the last two decades, there has been a new decreasing trend (Figure 1).

[15] Reprisals towards Danish citizens colluding with Germans during the occupation may have contributed to the high homicide rates in the late 1940s (Warring 2005).

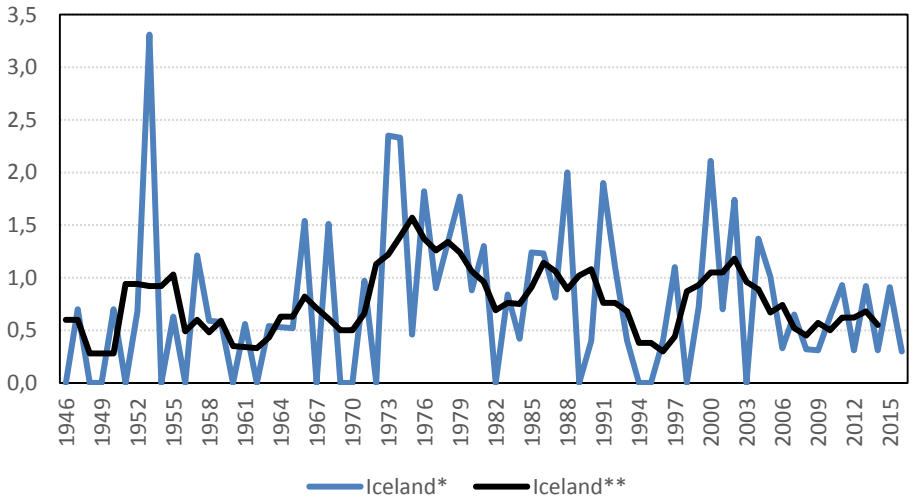

Figure 3 Homicide mortality in Iceland, 1946–2016 (source: Statistics Iceland)
* Annual homicide mortality per 100,000 pop.; **five-year moving average.

In Iceland, the number of homicides has always been small in a population of fewer than 350,000 inhabitants. Consequently, the annual rate fluctuations are sharp and the impact of random factors considerable; trend analyses require data covering several years. Because of this, in Figure 3 we have shown both the annual homicide mortality levels and their five-year moving average. Iceland experienced a substantial increase in homicide mortality during the 1970s and the 1980s. Another shorter increase in the rates took place at the turn of the millennium. Currently the rates correspond well with those of the 1950s and 1960s (Figure 3).

Hence, the overall trend of the short and mid-term fluctuations in homicide rates in all the Nordic countries have followed a similar pattern in the post-Second War era observed in most European countries, North America, Australia and New Zealand. In these countries, there was an increasing trend starting between the early 1960s and mid-1970s, a stabilization of the rates for two decades, and a decreasing trend from the 1990s onwards (see, for example, Eisner 2015; Lappi-Seppälä & Lehti 2015; Suonpää et al. 2019). Nordic research on trend changes originates mainly from Sweden and Finland and focuses on explaining two turning points: the homicide surge of the 1960s and the early 1970s, and the decline in homicide beginning in the late 1990s. In Sweden, the surge has often been explained by immigration, in Finland by changes in alcohol policies. These interpretations appear plausible, because immigrants played a central role in the Swedish lethal violence of the period whereas alcohol-related homicides were the type of violence which surged in Finland in the 1970s (Wikström 1991; Wikström 1992; Rying 2000; Kivivuori 2003; Lenke 2009). The explanations for the decline in rates of homicide that began in the mid-1990s have been less explicit and research has so far mainly focused on disaggregating, analysing and describing the phenomenon (Granath 2011; Lehti 2014; Granath 2015; Suonpää et al. 2019). Because the Nordic trend pattern has been a pan-Western one, it is reasonable to assume that the factors that lie behind the major trend changes of the post-war era are not nation-specific but are such that they have been common to all Western countries. Discussion on the topic continues both internationally and among Nordic researchers (Killias & Aebi 2000; Eisner 2008; Aebi & Linde 2010; Liem et al. 2012; Eisner 2015).

However, the fact is that irrespective of the short and mid-term fluctuations in homicide rates and their explanations, the long-term changes in Nordic homicide mortality in the post-war era have differed between the countries and reduced the intra-regional rate differences.

4.1.2 Homicide mortality by gender

During the last 60 years, if we measure the level of societal violence by homicide rates, in relative terms, the Nordic region has become more violent for men and less violent for women. On the field of lethal violence, gender equality has not progressed but rather has deteriorated (Table 3).

Table 3 Male-female homicide mortality ratios in the Nordic countries 1946–1955 and 2007–2016 (average male mortality/ average female mortality, victims per 100,000 pop.; source: Official statistics)

Country	1946–1955	2007–2016	Change (%)
Denmark	0.95	1.76	+85%
Finland	3.19	2.29	–28%
Iceland*	0.57	1.99	+249%
Norway*	1.43	1.50[16]	+5%
Sweden	1.06	2.25	+112%

*1951–1960 and 2007–2016.

Table 3 shows the male-female homicide mortality ratios[17] in the region at the beginning and the end of the period. Currently, in all Nordic countries, male homicide mortality is substantially higher than female mortality. The difference is most pronounced in Finland and Sweden, but decisive also in the other countries. After the war, during the 1940s and the 1950s, this was not yet the case. In Iceland and Denmark, female mortality was higher than male mortality; in Sweden, the levels were equal. At this point, only in Finland and Norway was the risk for dying of a homicide higher for men than for women.

[16] Excluding the victims of the 2011 terror attacks.

[17] The ratio was calculated by dividing the average male mortality by the average female mortality. A ratio of 1 means that male and female mortality levels are equal, a ratio less than 1 means that female mortality level is higher and a ratio more than 1 that male mortality level is higher. Consequently, a decreasing ratio means that female mortality is increasing in relative terms in comparison with male mortality and an increasing ratio that male mortality is increasing in comparison with female mortality.

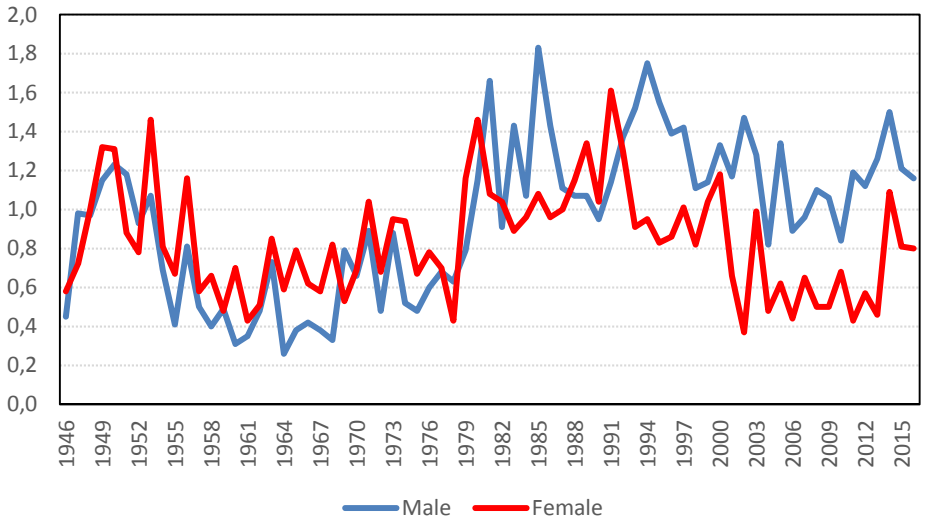

Figure 4 Male and female homicide mortality in Denmark, 1946–2016 (per 100,000 men/women; source: Statistics Denmark: 1946–2011: cause of death statistics and 2012–2016: police statistics, homicide victims)

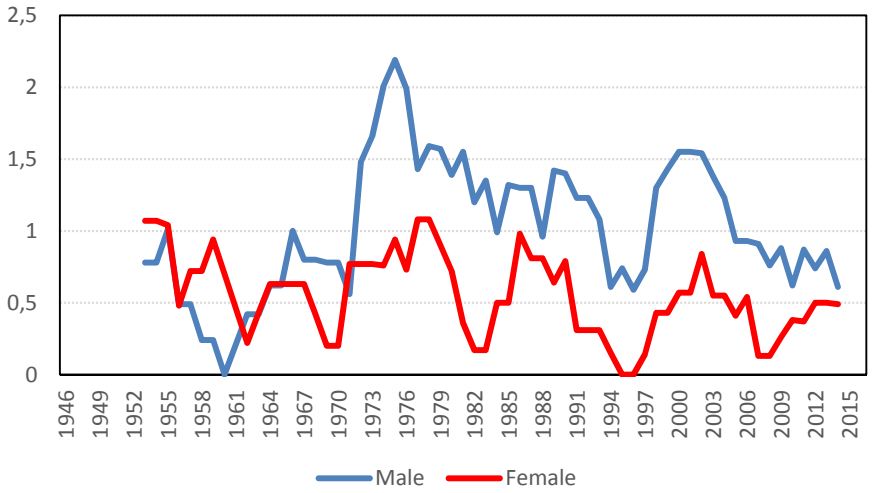

Figure 5 Male and female homicide mortality in Iceland, 1951–2016 (per 100,000 men/women; five-year moving averages; source: Statistics Iceland)

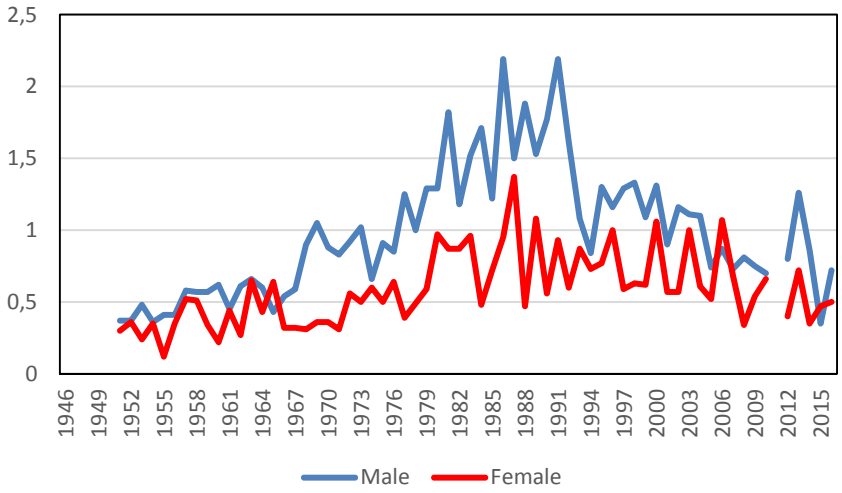

Figure 6 Male and female homicide mortality in Norway, 1951–2016 (per 100,000 men/women; source: Statistics Norway; excluding the 2011 terror attacks)

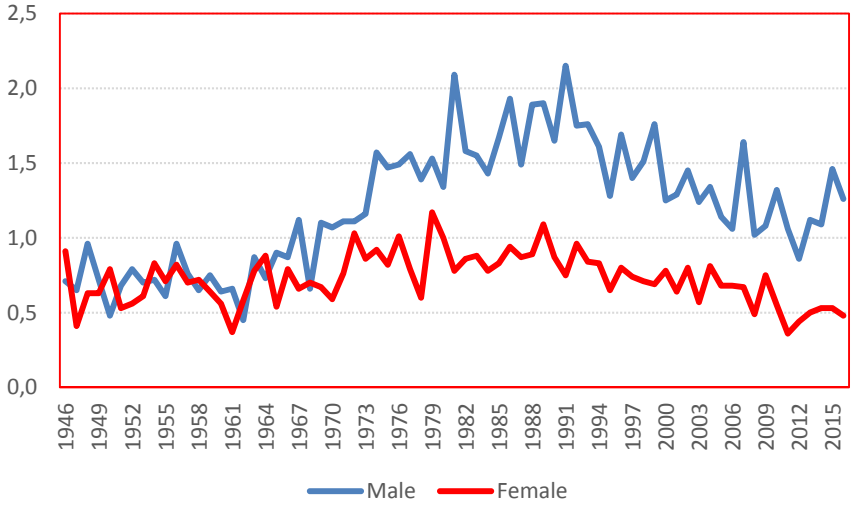

Figure 7 Male and female homicide mortality in Sweden, 1946–2016 (per 100,000 men/women; source: Statistics Sweden)

Male homicide mortality has increased relative to female mortality in the region. In Denmark, Iceland and Sweden, the increase in the ratios have been the result of opposite long-term trends: increasing male mortality and decreasing female mortality. In Norway, both male and female homicide mortality has increased but male mortality faster (Figures 4–7).

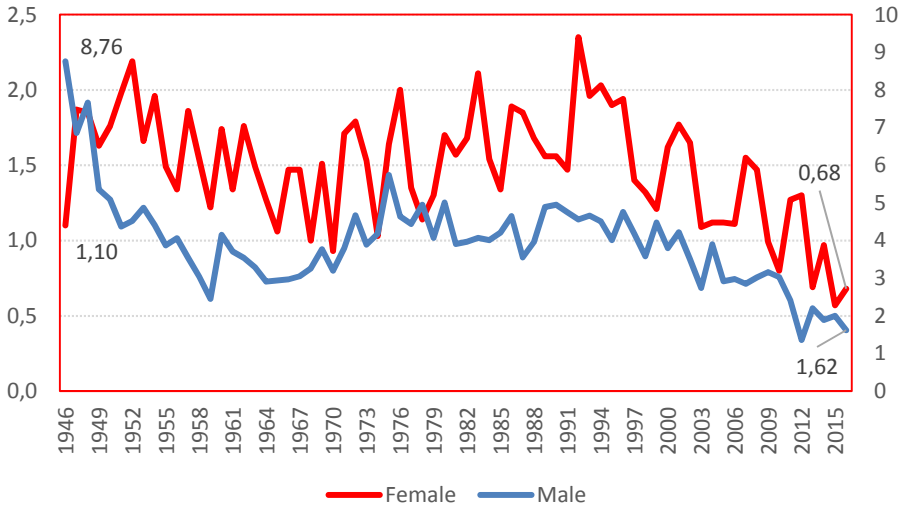

Figure 8 Male and female homicide mortality in Finland, 1946–2016 (per 100,000 men/ women; source: Statistics Finland; left hand scale = female mortality, right hand scale = male mortality)

Only in Finland did the risk of men dying in a homicide decrease between 1946–1955 and 2007–2016. Moreover, Finland also experienced a decrease in female homicide mortality, but the drop was significantly steeper for males (–82%) than females (–38%). Despite this, the gap between male and female mortality in Finland is still the largest in the region (Figure 8 and Table 3).

4.2 Frequency of lethal violence in 2007–2016

This study draws on the national homicide monitoring systems in the five Nordic countries; the sources are described above (Section 2). In total, the research data include information on homicides for the period from 1990 to 2016.[18] Before describing the patterns in the Nordic countries in closer detail, below we have compared our research data to alternative sources.

The coverage of the research data was 86 per cent when compared to the number of homicide victims recorded in the national police statistics of the era and 106 per cent in comparison with the national cause of death statistics (Table 4).

[18] The studied period was 2007–2016 in Finland, Norway and Sweden, 2012–2016 in Denmark, and 1990–2016 in Iceland.

Table 4 The number of homicide victims in our data and in the official statistics in 2007–2016

Country	Our Data	Cause of death statistics	Police statistics	Coverage (%)
Denmark*	141[19]	154	281	92% / 50%
Finland	1,035	908	1,246	114% / 83%
Iceland**	48	55	44	87% / 109%
Norway[20]	305	326	315	94% / 97%
Sweden	875	820	921	107% / 95%
Total	2,404	2,263	2,807	106% / 86%

* 2012–2016; ** 1990–2016.

When compared to the national police statistics, the coverage of the Danish data was clearly lower than in the other countries. This is understandable, because the Danish data include only homicides with convicted offenders. About this, it is surprising that the coverage when compared to the cause of death statistics was over 90 per cent, higher than in Iceland and similar to Norway. This is probably due to problems in the published Danish cause of death statistics since 2012 (see Thomsen et al. 2019). In the other countries, the coverage of the data seems logical and reliable in comparison with both police and cause of death statistics.

[19] Cases with convicted offenders only.
[20] Excluding the victims of the 2011 terror attacks.

Table 5 Number of intentional homicides committed in the Nordic Countries in 2007–2016 by legal definition (number of killed persons).

Legal definition	Denmark**	Finland	Iceland***	Norway[21]	Sweden	Total
Murder	-	354	39	.	485	.
Manslaughter	117[22]	533	-	.	99	.
TOTAL[23]	*117*	*887*	*39*	*305 (382)[24]*	*584*	*1,932*
Infanticide	1	8	2	.	1	12
Assault lead. to death	23	136	7	.	72	238
Data missing	-	4	-	.	218	222
All cases	141[25]	1,035	48	305 (382)	875	2,404
Annual homicide rate*	1.00[26]	1.91	0.61	0.62 (0.77)	0.92	1.07[27]

* Per 100,000 inhabitants; ** 2012–2016; ***1990–2016.

Our datasets included information on 2,404 homicide victims and 2,190 identified offenders involved in 2,240 homicide incidents. Of the victims, 43 per cent were killed in Finland and 36 per cent in Sweden. In 2007–2016, these two countries were responsible for 70 per cent of all homicides in the Nordic region.[28] Finland´s overall homicide rate was the highest and Iceland´s rate the lowest. In addition, Norway had a relatively low homicide rate (if we exclude the victims of the 2011 terror attacks), clearly lower than in Sweden or Denmark (Table 5).

4.3 Regional variation

The national rate differences were reflected at provincial rates (Figure 9). In 2007–2016, out of 71 Nordic provinces,[29] 16 had a homicide rate less than 0.5, ten of them in Norway or Iceland. On the other hand, all the nine provinces with a rate over 2.0 were situated in Finland.

[21] Intentional and premeditated homicides (PC sections [1902] 233 and [2015] 275).
[22] The Danish Criminal Code does not contain separate legal codes for murder and manslaughter. Criminal acts regarded as murder in the other Nordic Countries are in the Danish Criminal Code labelled manslaughter.
[23] Total of murder, manslaughter, and manslaughter under mitigating circumstances.
[24] The number of victims is 382 if we include the victims of the terror attacks of 22 July 2011, and 305 without them. Correspondingly, the annual homicide rate of the period is 0.77 or 0.62 victims per 100,000 pop. per year.
[25] According to Statistics Denmark, in 2012–2016, the Danish police registered 281 victims of intentional homicides. Compared with that information, the data used in this report would cover about 50% of the homicide victims of the period (Forsaetligt Drab, excl. attempts, Statistisk Årbog). However, Nordic police statistics show the numbers of annual homicide victims higher than they actually are, because the figures include homicide investigations of suspicious deaths from the second half of each year, which later turn out to be natural, drug-related, suicides or accidents. According to a report of the Danish Ministry of Justice, of the 204 homicides reported by the police in 2008–2011, only 168 (82%) were actual intentional homicides (Drab i Danmark 2014). Based on this, it is reasonable to estimate that the coverage of the Danish data as higher than 50% but lower than 70%.
[26] Crimes registered by the police: Forsaetligt Drab, excl. attempts, victims, Statistisk Årbog. Danmarks Statistik
[27] Mean rate weighted by 2016 populations; excl. the 2011 terror attacks in Norway.
[28] Excluding the 2011 terror attacks in Norway; Danish information is based on police statistics.
[29] Excluding Svalbard.

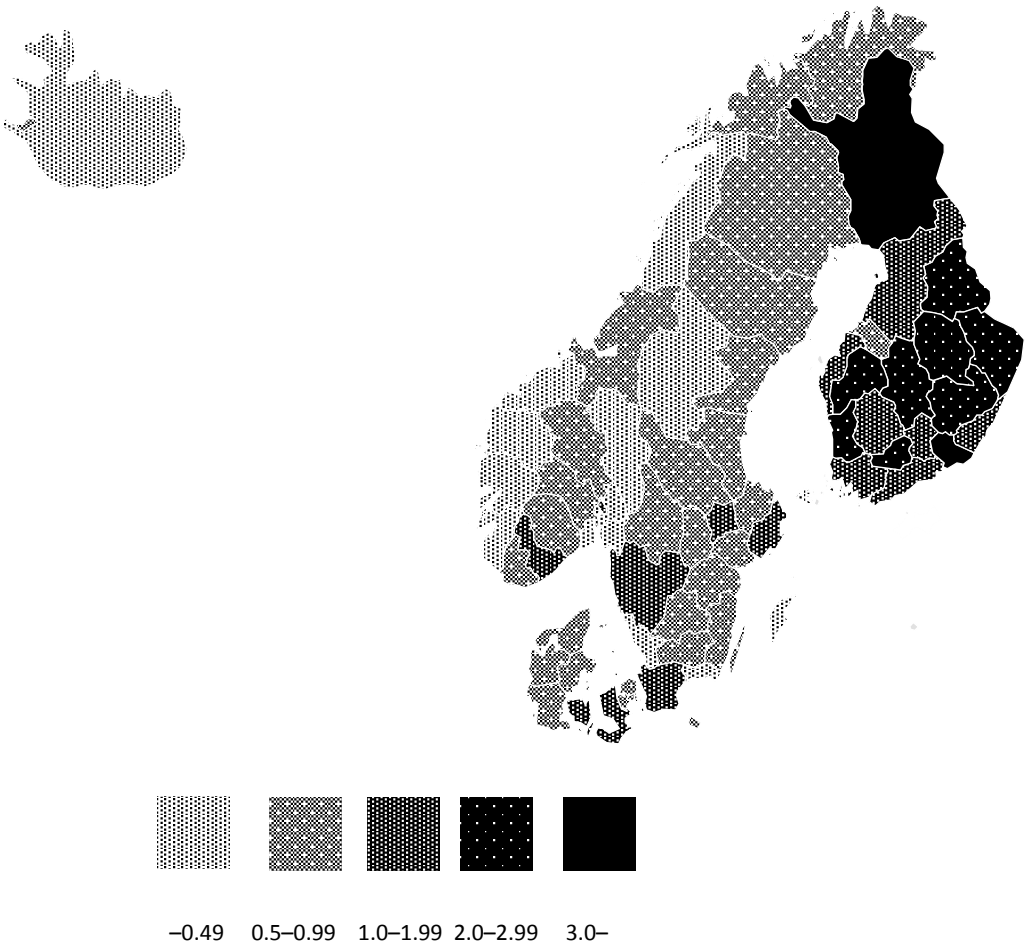

Figure 9 Annual homicide rates in the Nordic Countries by provinces in 2007–2016 (per 100,000 inhabitants).[30]

[30] The Norwegian data exclude the victims of the 2011 terror attacks. Including them would have raised the rate of Buskerud province to 3.19 making it the most violent Nordic province of the period, but the rate for Oslo province would not have changed significantly. The Danish data refer to homicide cases (manddrab excl. attempts) reported to the police in 2007–2017 (Danmarks Statistik).

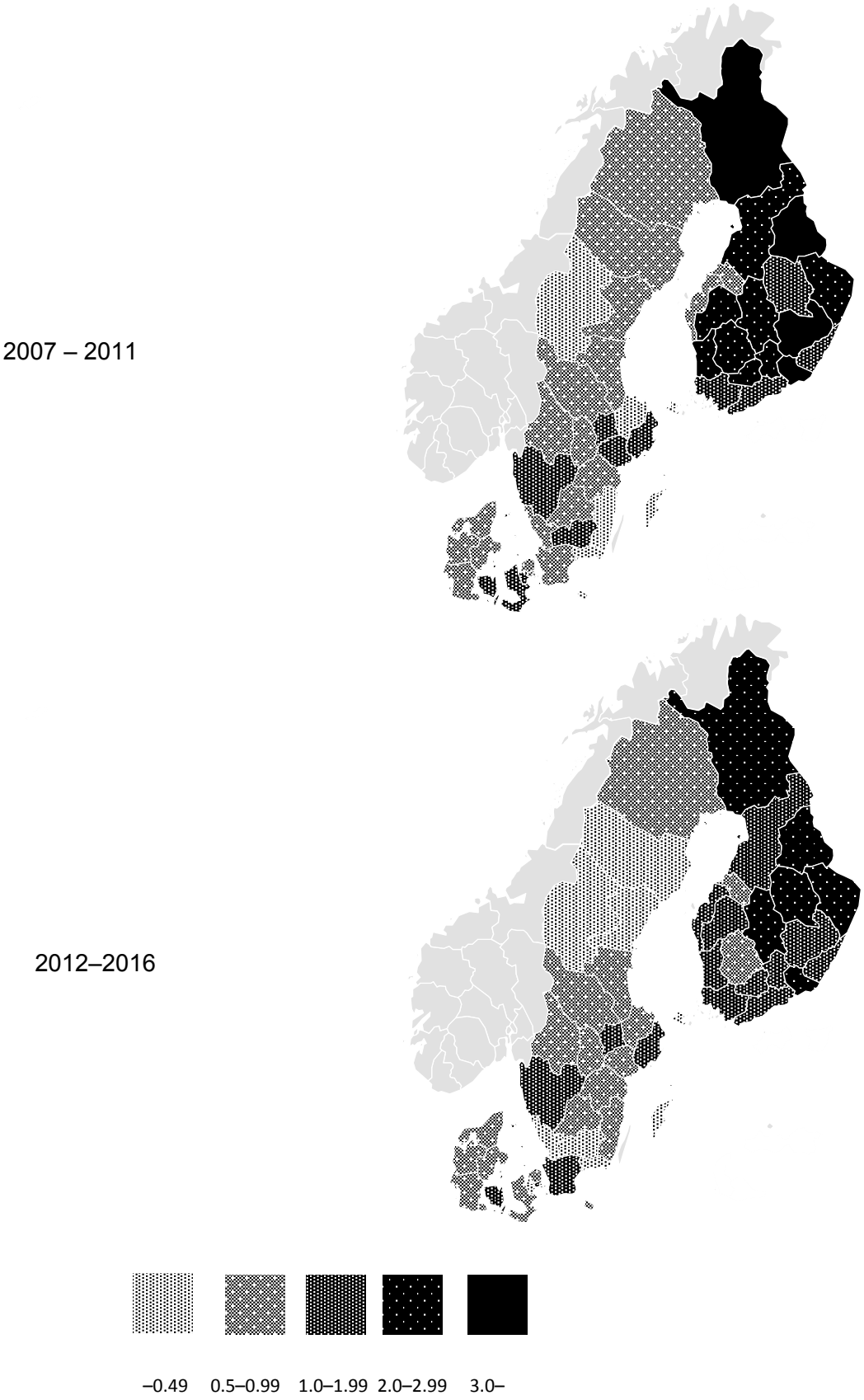

Figure 10 Annual homicide rates in Denmark, Finland and Sweden by provinces in 2007–2011 and 2012–2016 (per 100,000 inhabitants)

Figure 10 shows the changes in the provincial homicide rates of Denmark, Finland, and Sweden between 2007–2011 and 2012–2016.[31] In spite of a much sharper decline in the national homicide rate in Finland (–33%) than in Sweden (–4%) or Denmark (–8%). Finland remained the "black spot" of the Nordic region. The number of Finnish provinces with a homicide rate over 2.0 halved from twelve to six, but during the whole period, only one Finnish province, the Åland Islands had a rate lower than 0.5. In both periods, all provincial rates of Denmark and Sweden were less than 2.0. In Sweden, the number of provinces with a rate less than 0.5 increased from five to seven; in Denmark, it remained unchanged at one.

In addition to systematically higher crime levels, Finland is also an outlier in the region in another respect. In Denmark, Norway, Sweden, and Iceland, the provinces with the main metropolitan areas were the most violent, but in Finland (in the national context), they were among the most peaceful. The most violent provinces in Finland, and hence in the whole Nordic region are the demographically and economically declining northern, eastern and central parts of the country. In the other Nordic countries, lethal violence is concentrated in the largest metropolitan areas. Homicide mortality in Stockholm, Gothenburg, Malmö and Oslo was 60 to 140 per cent higher than the national average; in Copenhagen and Reykjavik, the rate was 20 per cent higher. In contrast, the homicide rates in the largest Finnish cities were 20 to 40 per cent lower than the national average (Table 6).

While homicide rates are above-average in the Nordic metropolises, the urban rates are not very high in global comparison. During the studied period, Malmö was by far the most violent metropolis in the region with an average annual homicide rate of 2.2. The rate corresponded with those in the largest Dutch cities (Granath et al. 2011, 43). Gothenburg, Stockholm, Oslo, and the Finnish cities had homicide rates ranging from 1.2 to 1.6. In Denmark, Iceland and the other Norwegian cities the rates varied between 0.4 and 1.1. Despite nationally-low levels, the Finnish cities were not exceptionally peaceful in the Nordic context, but in fact showed similar absolute homicide rates as the other Nordic metropolises (Table 6).

[31] Because of the small number of homicides per province in Norway and Iceland, we have excluded them from this analysis.

Table 6 The number of homicide victims and annual homicide rates (per 100,000 inhabitants) in the Nordic metropolitan regions in 2007–2016.

Country	Metropolitan region	Number of victims	Homicide rate	Compared to national level*	Population (annual average)
Denmark**	Copenhagen	32 (61)	0.51 (0.98)	102 (119)	1,250,251
	Aarhus Municipality	7 (18)	0.43 (1.11)	86 (134)	324,176
	Odense Municipality	4 (6)	0.41 (0.61)	82 (74)	196,004
Finland	Capital City Region	167	1.56	82	1,070,090
	Tampere Region	53	1.52	80	349,201
	Turku Region	36	1.24	65	289,658
Iceland***	Reykjavik	36	0.74	122	179,667
Norway	Oslo Police District	93[32]	1.20	194	775,069
	Bergen Region	20	0.52	84	386,208
	Greater Stavanger	11	0.36	57	309,576
Sweden****	Stockholm	104	1.44	159	1,201,016
	Gothenburg	59	1.56	171	630,838
	Malmö	41	2.16	237	317,207

Copenhagen is here limited to the municipalities in which the entire or the majority of the population lives in Copenhagen's urban area. These municipalities are: Copenhagen, Frederiksberg, Albertslund, Brøndby, Gentofte, Gladsaxe, Glostrup, Herlev, Hvidovre, Lyngby-Taarbæk, Rødovre, Tårnby, Vallensbæk, Ishøj, Greve and Ballerup; The Finnish Capital City Region: Espoo, Helsinki, Kauniainen and Vantaa; Tampere Region: Kangasala, Lempäälä, Nokia, Pirkkala, Tampere and Ylöjärvi; Turku Region: Kaarina, Lieto, Naantali, Paimio, Raisio, Rusko and Turku; Oslo Police District: Asker, Bærum and Oslo; Stockholm: Municipalities of Stockholm City, Botkyrka, Huddinge, Solna and Sundbyberg; Gothenburg: Municipalities of Gothenburg City and Mölndal; Malmö: Municipality of Malmö.
* (Metropolitan rate/ national rate) x 100: >100 = higher than national average, <100 = lower than national average; ** Data for 2012–2016, numbers and rates without brackets refer to homicide victims in cases with convicted offenders, those in brackets again refer to cases of homicide (manddrab excl. attempts) registered by the police during the period (Statistics Denmark); *** Data for 1990–2016; **** Data for 2011–2016.

[32] Excluding the victims of the 2011 terror attacks.

5 INCIDENT CHARACTERISTICS

This chapter describes the main characteristics of today´s Nordic homicides. Unless stated otherwise, the statistical unit in the presented tables and figures is a victim.

5.1 Number of victims and offenders per incident

Homicides in the Nordic countries usually involve only one victim (95%). Iceland had no single homicides with multiple victims during the studied period. In the other countries, the percentage of homicides with multiple victims ranged from 4.5 per cent out of all homicides in Denmark to 5.8 per cent in Sweden (Table 7).

Table 7 Homicide incidents by the number of victims and offenders involved in the Nordic countries in 2006–2017 (per cent).

Country	One victim, one offender	One victim, multiple offenders	Multiple victims, one offender	Multiple victims, multiple offenders	One victim, offender unknown	Multiple victims, offender unknown	N
Denmark*	88.7	6.8	4.5	-	.	.	133
Finland	78.3	15.3	4.8	0.4	1.2	-	956
Iceland**	89.6	10.4	-	-	-	-	48
Norway[33]	83.6	7.3	5.2	-	3.8	-	287
Sweden	70.6	5.8	4.8	0.2	17.8	0.9	816
Total	77.1	10.2	4.7	0.3	7.5	0.3	2,240

* Number of incidents with convicted offenders in 2012–2016; ** 1990–2016.

The average number of victims per homicide was 1.0 in Iceland and 1.1 in the other countries.[34] There were five homicide incidents with five or more victims in the region during the period, three of them took place in Finland. The 2011 terror attacks in Norway involving 77 fatalities had by far the largest number of victims. In Finland, the two crimes with the largest number of victims were school attacks. All the crimes were carried out by a single offender (Table 8).

Table 8 Homicide incidents with five or more killed victims in the Nordic countries in 2007–2016

Country	Place	Date	Number of victims	Number of offenders
Finland	Jokela	7.11.2007	8	1
Finland	Kauhajoki	23.09.2008	10	1
Finland	Espoo	31.12.2009	5	1
Norway	Oslo	22.07.2011	8	1
Norway	Utøya	22.07.2011	69	1

The percentage of homicides with multiple offenders was higher in Finland (16%) and Iceland (10%), than in Denmark, Norway or Sweden (6% to 7%).This may partly have

[33] Including the 2011 terror attacks as two incidents.
[34] Denmark 1.06, Norway and Sweden 1.07, and Finland 1.08 (Norway including the 2011 terror attacks 1.34).

been due to national differences in the used data but might also depend on the lower percentage of domestic homicides in Finland and Iceland (see chapter 5.5).

5.2 Seasonal, weekly and daily variations

Information about homicide time cycles was available from all the countries except Norway. While the weekly and daily distributions of the crimes were largely similar in all four countries for which data were available, no common pattern could be found in seasonal distribution (Figure 11).

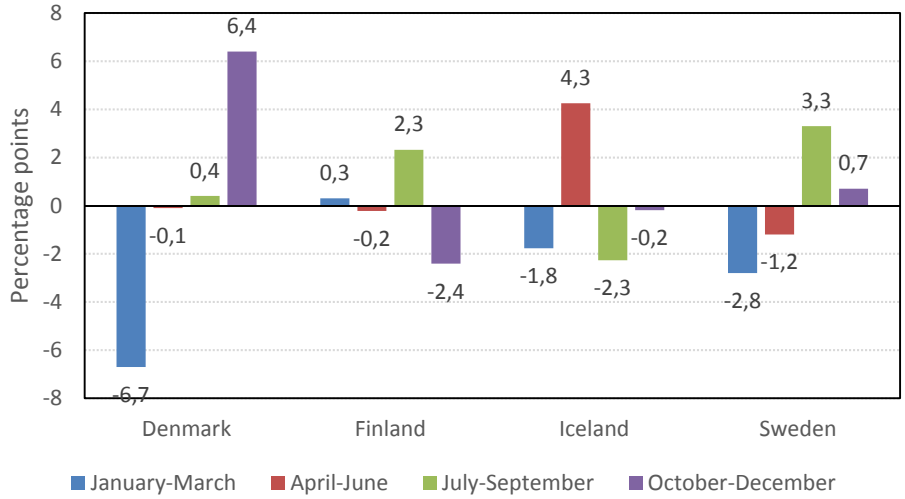

Figure 11 The seasonal variation of homicides in the Nordic countries in 2007–2016 (by incident; difference from even distribution in percentage-points) (Denmark: Homicides with convicted perpetrators in 2012–2016; Iceland: 1990–2016).[35]

The seasonal distribution of homicides in Finland and Sweden differed from observations in earlier studies, including the original EHM study (Granath et al. 2011, 45). As concluded by Granath et al. 2011, the current results do not indicate any stable patterns in the annual variance of homicides in the Nordic countries. The results in various studies since the 1970s differ and may have been caused mainly by factors other than seasonality. In the Nordic countries, today´s variance of homicides does not seem to correlate with annual variance of the daily mean temperature, daylight hours, or holiday seasons, all of which are factors used in earlier research to explain observed variance patterns (Hakko 2000). One reason for the absence of the seasonal variance patterns of today´s Nordic homicides may be their connection to extreme social marginalisation and abuse of intoxicants. A substantial percentage of the crimes takes place in rental flats on public housing estates in situations in which persons with severe substance abuse problems consume alcohol and other intoxicants together. It is reasonable to assume that seasonal variance in the frequency of these situations is relatively small – smaller

[35] One should note that because of the shorter study period and a relatively small number of homicides, random factors probably had greater impact on the Danish results than in the other countries.

than weekly or daily variance (see chapter 6). Decreasing seasonality has also been linked to interaction of physiological and societal factors (Hakko et al. 1998).

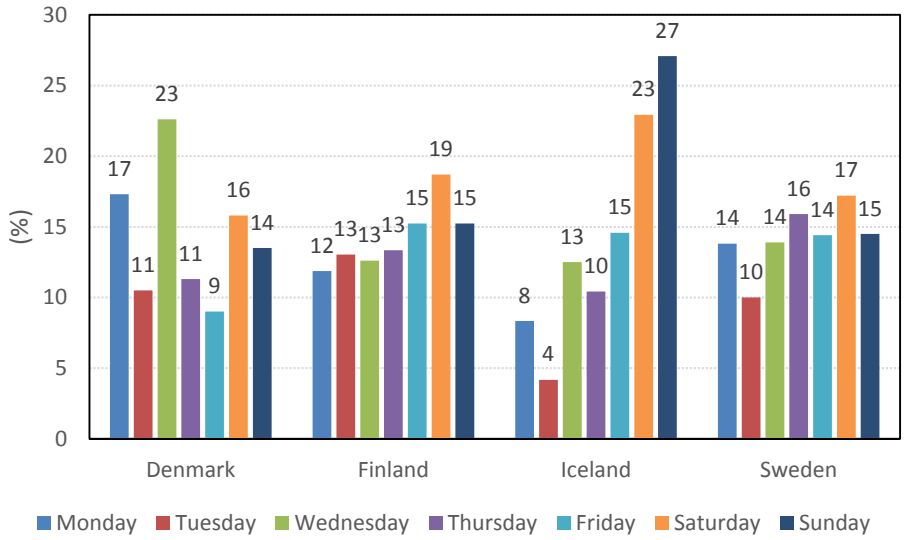

Figure 12 The weekly distribution of homicides in the Nordic countries in 2007–2016 (by incident; %) (Denmark: Homicides with convicted perpetrators in 2012–2016; Iceland: 1990–2016)

In contrast to seasonal patterns, the weekly distribution of homicides shows a pattern that is clearly similar to that observed in earlier Nordic research (Granath et al. 2011). In Finland, Iceland and Sweden, weekends were more lethal than weekdays (Figure 12). This pattern was more pronounced in Finland and Iceland, where domestic homicides played a lesser role than in Sweden. The concentration of homicides at weekends has often been explained by routine activities (e.g. Kivivuori 2003). Homicides, especially those outside the family circle, usually take place in leisure hours and often in alcohol consumption situations. The frequency of these situations is at its highest during weekends in contemporary Nordic societies (Trend & Pridemore 2012).

In Denmark, the weekly distribution pattern was more difficult to interpret. Wednesday was the most violent day of week, but also the number of homicides perpetrated on Mondays and Saturdays was higher than the average. Because of the shorter study period and a relatively small number of homicides, random factors probably had greater impact on the Danish results than in the other countries. Nonetheless, it seems that the weekly distribution of homicides in Denmark is currently more even than in Finland, Iceland or Sweden (Figure 12).

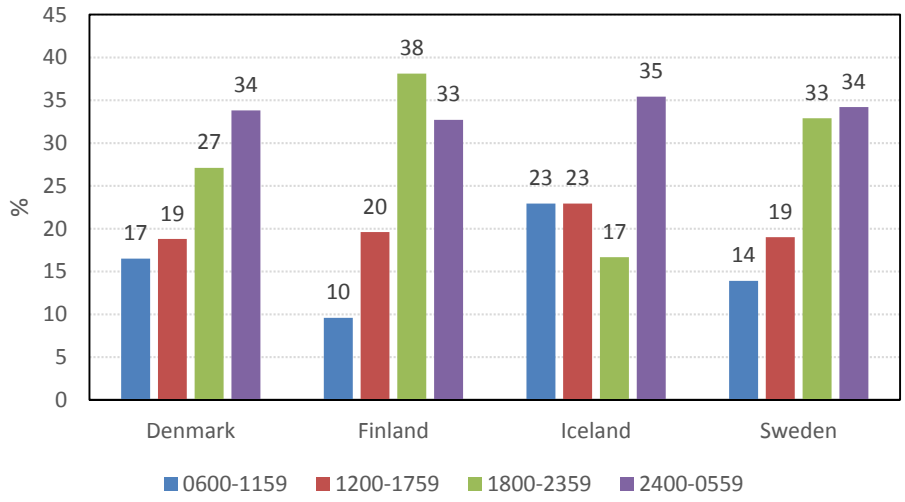

Figure 13 The daily distribution of homicides in the Nordic countries in 2007–2016 (by incident; %) (Denmark: Homicides with convicted perpetrators in 2012–2016; Iceland: 1990–2016)

Likewise, the daily variance of homicides showed a clear pattern which corresponded with earlier observations (Verkko 1951; Ylikangas 1976; Kivivuori 1999). In all four countries, most homicides were perpetrated outside working hours, in the evenings and at night. This was especially true in Finland and Sweden (67 to 71%) whereas the percentage of crimes committed between 6 am and 6 pm was the highest in Iceland (46%). According to earlier studies, the daily distribution of lethal violence is closely linked to patterns of alcohol consumption in north-eastern Europe (Verkko 1951; Ylikangas 1976; Kivivuori 1999; Lehti 2001; Lehti 2002). As follows, this explanation is like that of explaining the weekly variance of violence (Granath et al. 2011, 47).

5.3 Location

In all Nordic countries, most homicides took place in private homes but substantially more often in Finland and Norway (73% and 77% respectively), than in Denmark, Iceland or Sweden (61% to 63%). Correspondingly, the proportion of homicides committed in public places was lowest in Finland and Norway, and highest in Sweden (Table 9). In Finland and Sweden, the location distribution had remained stable when compared to that at the beginning of the millennium (Granath et al. 2011, 48).

Table 9 Location of crime in Nordic homicides in 2007–2016 (by victims)

Location	Denmark*		Finland		Iceland**		Norway		Sweden	
	N	%	N	%	N	%	N	%	N	%
Private home	90	***64***	790	***77***	30	***63***	220	***73***	519	***61***
Mutual home	37	*26*	168	*16*	11	*23*	91	*30*	151	*18*
Victim´s home	31	*22*	232	*23*	7	*15*	81	*27*	233	*27*
Offender´s home	18	*13*	173	*17*	7	*15*	48	*16*	87	*10*
Other private home	4	*3*	217	*21*	5	*10*	-	-	48	*6*
Public place	33	***24***	153	***15***	12	***25***	54	***18***	281	***33***
Street, road, public place	30	*21*	96	*9*	7	*15*	..	..	183	*22*
Park, forest etc.	1	*1*	38	*4*	1	*2*	..	..	62	*7*
Shop, bar etc.	2	*1*	19	*2*	4	*8*	..	..	36	*4*
Semi-public place	17	***12***	68	***7***	5	***10***	2	***1***	46	***5***
Institution, dormitory	10	*7*	26	*3*	3	*6*	..	..	9	*1*
Hotel or motel	-	-	4	*0.4*	-	-	..	..	-	-
Private vehicle	3	*2*	15	*1*	1	*2*	..	..	11	*1*
Workplace	4	*3*	23	*2*	1	*2*	..	..	26	*3*
Other	-	**-**	14	***1***	1	***2***	27	***9***	4	***0.5***
N	140		1,025		48		303		850	
Unknown	1	*1*	10	*1*	-	-	2	*1*	25	3
N	141		1,035		48		305		875	

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

In absolute crime levels, Finland had the highest rate of homicides in private homes and semi-public places, Sweden of those in public places (although only 3 per cent higher than the Finnish rate). Iceland had the lowest rate for homicides in private homes and Norway of those in semi-public and public places (if we did not include the victims of the 2011 terror attacks) (Table 10).

Table 10 Location of crime in Nordic homicides in 2007–2016 (by annual average crime rates per 100,000 pop.)[36]

	Private home	Semi-public place	Public place	Overall homicide rate
Denmark*	0.64	0.12	0.24	1.00
Finland	1.47	0.15	0.29	1.91
Iceland**	0.38	0.08	0.15	0.61
Norway	0.44	0.04	0.11	0.62
Sweden	0.54	0.05	0.29	0.92

* 2012–2016; ** 1990–2016.

Gender-related differences in the location of crime were substantial and similar. The percentage of victims killed in private homes was higher among women (75% to 85%) than among men (49% in Sweden, 53% to 55% in Iceland and Denmark, and 70% to 75% in Norway and Finland) (Figure 14).

[36] The Danish rates have been calculated using the proportion of each location type in the EHM data and the average rate of homicide victims in homicides registered by the Danish police in 2012–2016 (Statistics Denmark). The rates in the other countries are based on the EHM data. Missing data cases have been excluded from the location type calculations but have been included in the overall homicide rate.

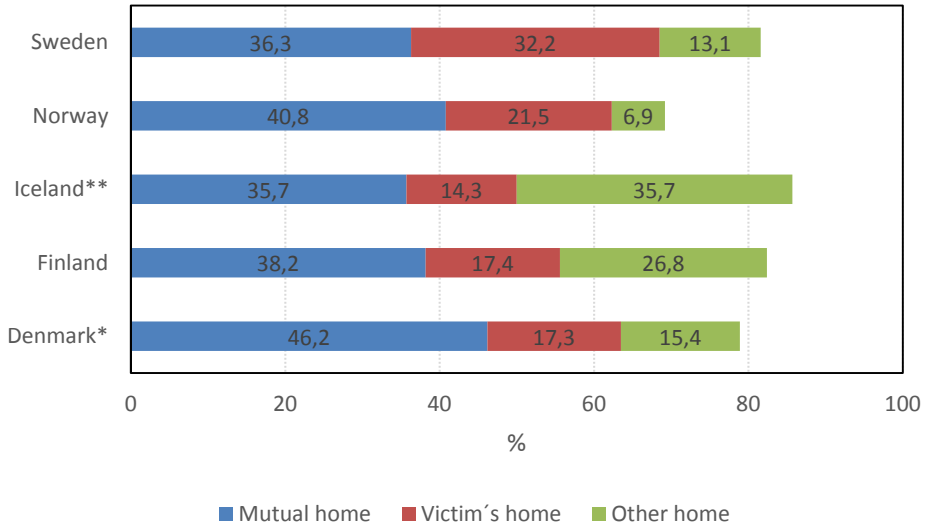

Figure 14 Female victims killed in private homes by type of home in Nordic homicides in 2007–2016 (%; by victims) (*Homicides with convicted perpetrators in 2012–2016; ** 1990–2016)

5.4 Modus operandi

Sharp instruments (including axes) were the most commonly used weapons in Nordic homicides. During the studied period, 40 to 50 per cent of homicides were carried out with them irrespective of country. The percentage was the lowest in Finland and the highest in Denmark and Norway. Firearms were used in less than 10 per cent of Icelandic homicides and in every fourth Swedish homicide. In the other countries, their proportions were between 10 and 20 per cent. Killings perpetrated without a weapon by battering or strangling the victim to death made up every third homicide in Iceland and Norway, and every fourth in Denmark and Finland but only 16 per cent of homicides in Sweden (Table 11).

Table 11 Modus operandi in Nordic homicides in 2007–2016 (%; by victims)[37]

Location	Denmark*		Finland		Iceland**		Norway		Sweden	
	N	*%*	N	*%*	N	*%*	N	*%*	N	*%*
Hitting/ kicking	11	*8*	162	*16*	7	*15*	44	*16*	68	*8*
Strangulation	25	*18*	92	*9*	9	*19*	40	*14*	68	*8*
Sharp instrument/ axe	73	*52*	418	*41*	22	*46*	145	*52*	382	*45*
Blunt object	7	*5*	88	*9*	4	*8*	-	-	67	*8*
Firearm	19[38]	*14*	173	*17*	4	*8*	36	*13*	224	*26*
Handgun	10	*7*	89	*9*	-	-	..	..	(78)[39]	..
Shotgun	..	..	41	*4*	4	*8*	..	..	(28)[40]	-
Explosive	-	-	-	-	-	-	1	*0.4*	6	*1*
Poison	-	-	21	*2*	-	-	8	*3*	4	*0.5*
Drowning	-	-	21	*2*	-	-	1	*0.4*	8	*1*
Fire (incl. smoke)	2	*1*	17	*2*	-	-	-	-	9	*1*
Motor vehicle	3	*2*	23	*2*	1	*2*	-	-	7	*1*
Other	-	-	11	*1*	1	*2*	6	*2*	8	*1*
N	140		1,026		48		281		851	
Unknown	1	*1*	9	*1*	-	-	6	*2*	24	*3*
N	141		1,035		48		287		875	

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

Despite their high relative proportion and absolute numbers in Sweden, the overall level of firearm homicides (FAH) was not the highest there but in Finland.[41] The smallest number was in Iceland and Norway (if we do not include the victims of the Utøya terror attack)[42] (Table 12).

[37] Norway by incidents; including the 2011 terror attacks as two separate incidents.

[38] Our Danish data have probably biased the comparisons regarding modus and underestimated the proportion of FAH. Certain modi are not evenly distributed among unsolved and solved cases, and therefore the loss of Danish cases without conviction probably makes the Danish FAH rate underestimated in relation to other modi. According to Thomsen et al. (2019) FAH made up 22% of all Danish homicides in 1992–2016; according to the official COD statistics, the percentage was 24% in 2010–2015.

[39] About 50% missing data regarding type of firearm among Swedish cases.

[40] About 50% missing data regarding type of firearm among Swedish cases.

[41] The Finnish figures include the 22 victims killed by handgun in the massacres of Jokela, Kauhajoki and Espoo in 2007–2009. Excluding them would give Finland a FAH rate of 2.79 per million inhabitants, still 16% higher than the Swedish rate.

[42] Including the victims of the Utøya terror attack would give Norway a FAH rate of 2.18 per million inhabitants, still lower than the Swedish or Finnish rates.

Table 12 Modus operandi in Nordic homicides in 2007–2016 (by annual average crime levels per million pop.)[43]

	Firearm homicides	Other homicides	Overall homicide rate
Denmark	1.35	8.61	9.96
Finland	3.20	15.93	19.13
Iceland	0.51	5.57	6.08
Norway	0.79	5.37	6.16
Sweden	2.35	6.57	9.16

The figures in Table 12 are based on the data of the whole study period and for Finland, Norway, and Sweden they show the ten-year averages for 2007–2016. More recent data are available from cause of death statistics. Based on these, the firearm homicide rates for 2015–2017 were: Sweden 3.1, Finland 1.5, Denmark 1.8, and Norway 0.8 per million inhabitants. During the current decade, firearm homicide rates have been relatively stable in Norway and Denmark, dropped in Finland (simultaneously with other types of homicides), and increased sharply in Sweden (Figure 15).[44]

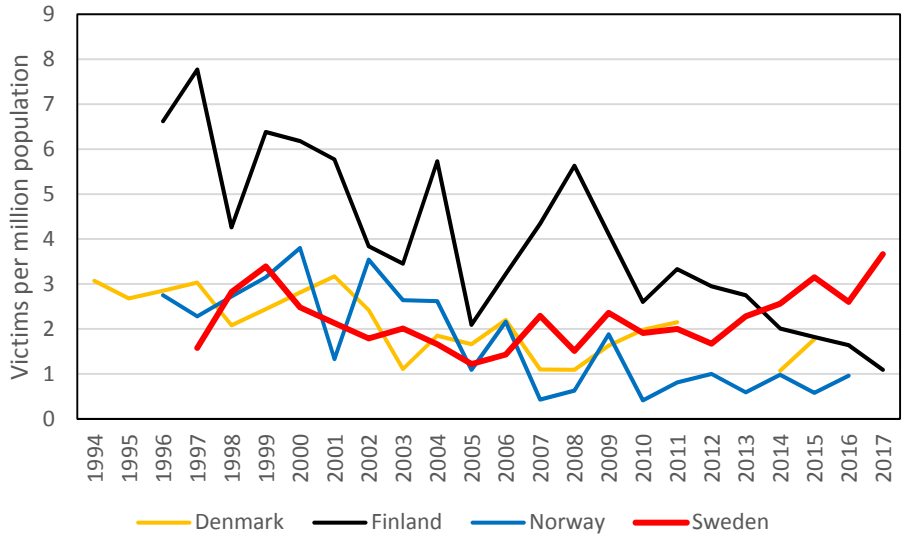

Figure 15 The trend of firearm homicide mortality in the Nordic countries in 1994–2017 (WHO)[45]

[43] The Danish rates have been calculated using the proportion of FAH homicides and other homicides in the EHM data and the average rate of homicide victims in homicides registered by the Danish police in 2012–2016 (Statistics Denmark). The rates of the other countries are based on the EHM data. Missing data cases have been excluded from the modus type calculations but have been included in the overall homicide rate.

[44] If we take a little longer perspective and compare today´s situation to that of the 1990s, the Swedish exception becomes even more conspicuous. Since the mid-1990s, the FAH rate has decreased in Norway by 67%, in Denmark by 46%, and in Finland by 81%. In Sweden it has increased by 43%. Correspondingly the percentage of FAH homicides out of all homicides has dropped in Norway from 30% to 13%, in Finland from 22% to 13%, and decreased also in Denmark. In Sweden it has increased (Figure 15).

[45] Because of the problems related to the published Danish cause of death statistics mentioned earlier in this report, we have left out the years 2012 and 2013; the Danish data for 2016 and 2017 were not available for this study.

Behind the exceptional trend in Sweden lies the situation in the largest cities. In 2011–2016, 68 per cent of all Swedish firearm homicides were perpetrated in the metropolitan areas of Stockholm, Gothenburg and Malmö. In Gothenburg and Malmö, they made up over 50 per cent of all homicides, in Stockholm almost 40 per cent. The firearm homicide levels in these metropolises were 2.2- to 5.3-fold the national average. In Copenhagen and Oslo, firearm homicide levels were also substantially higher than the national averages but much lower than those in the Swedish metropolises. In Iceland and Finland, the situation was the opposite one; firearm homicides were rarer in the largest cities than in the other parts of the country (Table 13).

Table 13 The number and rate of firearm homicides (FAH) in the Nordic metropolitan regions in 2007–2016.

Country	Metropolitan region	Number of FAH victims	Out of all homicides	FAH rate (per million pop.)	Compared to national level*
Denmark**	Copenhagen	8	25%	1.28 (2.55)	190
	Aarhus Municipality	0	0%	-	-
	Odense Municipality	0	0%	-	-
Finland[46]	Capital City Region	18	11%	1.68	53
	Tampere Region	4	8%	1.15	36
	Turku Region	1	3%	0.35	11
Iceland***	Reykjavik	1	3%	0.21	41
Norway	Oslo Police District	13	14%	1.68	237[47]
Sweden****	Stockholm	37	36%	5.13	224
	Gothenburg	30	51%	7.94	346
	Malmö	23	56%	12.10	528

Copenhagen is here limited to the municipalities, in which the entire, or the majority of the, population lives in Copenhagen's urban area. The municipalities are: Copenhagen, Frederiksberg, Albertslund, Brøndby, Gentofte, Gladsaxe, Glostrup, Herlev, Hvidovre, Lyngby-Taarbæk, Rødovre, Tårnby, Vallensbæk, Ishøj, Greve and Ballerup; The Finnish Capital City Region: Espoo, Helsinki, Kauniainen and Vantaa; Tampere Region: Kangasala, Lempäälä, Nokia, Pirkkala, Tampere and Ylöjärvi; Turku Region: Kaarina, Lieto, Naantali, Paimio, Raisio, Rusko and Turku; Oslo Police District: Asker, Bærum and Oslo; Stockholm: Municipalities of Stockholm City, Botkyrka, Huddinge, Solna and Sundbyberg; Gothenburg: Municipalities of Gothenburg City and Mölndal; Malmö: Municipality of Malmö.
* (Metropolitan rate/ national rate) x 100: >100 = higher than national average, <100 = lower than national average; ** Data for 2012–2016, numbers and rates refer to cases with convicted offenders only and are about 50% lower than the number of homicide victims registered by the police during the period; *** Data for 1990 –2016; **** Data for 2011–2016.

The situation in Sweden also differed from that in the other countries by the very high percentage of firearm homicides out of crimes in public places like streets, squares and parks. Forty-six per cent of homicides in public places in Sweden had been perpetrated by firearms but only 15 per cent of those in private homes. In Denmark, Iceland and Finland, the differences between location types were in this respect much smaller (Figure 16).

[46] The Finnish and Norwegian rates refer to 2007–2016, the Danish rates to 2012–2016 and the Swedish rates to 2011–2016. In 2011–2016 the FAH rate of the Finnish Capital City Region was 1.06 and percentage out of all homicides 7%.
[47] Excluding the victims of the 2011 terror attacks.

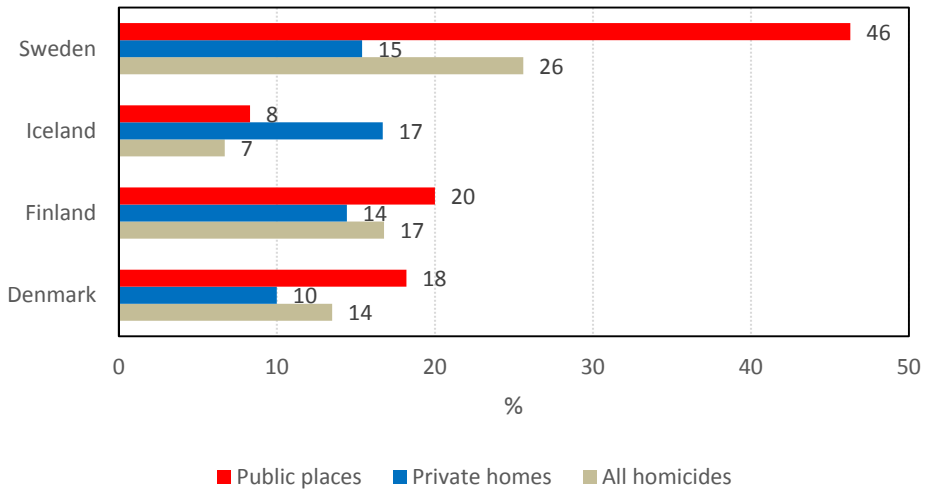

Figure 16 The percentage of firearm homicides by location in the Nordic countries in 2007–2016 (%; by victims) (Denmark: Homicides with convicted perpetrators in 2012–2016; Iceland: 1990–2016)

5.5 Victim-offender relationship

In most Nordic homicides the persons involved knew each other. The proportion of crimes between strangers[48] varied from 10 to 17 per cent, Denmark having the lowest percentage and Iceland the highest. However, one should note that in Sweden, in 22 per cent of homicides in the data, the relationship was unknown and most of these were also unsolved. Also, the Danish data probably underestimated the proportion of homicides involving strangers because the data included only homicides with convicted offenders. Homicides involving strangers are harder to solve than crimes between acquaintances and usually make up a higher percentage of unsolved cases (Liem et al. 2019). Both in Sweden and Denmark, the proportion of homicides between strangers was thus probably higher than that shown in Table 14.

[48] Persons who did not know each other at all before the crime took place, i.e. at the time of the crime, the offender did not have any knowledge whom he/she was killing.

Table 14 Victim-offender relationship in Nordic homicides in 2007–2016 (by victims)

Victim was offender´s	*Denmark**		*Finland*		*Iceland***		Norway[49]		Sweden	
	N	*%*	*N*	*%*	*N*	*%*	N	*%*	N	*%*
Partner/ ex-partner	***34***	***24***	***227***	***22***	***10***	***21***	**84**	***29***	**167**	***24***
Wife/girlfriend/ex-	*25*	*18*	*176*	*17*	*6*	*13*	72	*24*	138	*20*
Husband/ boyfriend/ex-	*9*	*6*	*45*	*4*	*4*	*8*	12	*4*	28	*4*
Homosexual partner	*-*	*-*	*6*	*1*	*-*	*-*	-	*-*	1	*0.1*
Child	***11***	***8***	***60***	***6***	***4***	***8***	**20**	***7***	**30**	***4***
Less than 18 year of age	*8*	*6*	*53*	*5*	*4*	*8*	20	*7*	26	*4*
18 years and older	*3*	*2*	*7*	*1*	*-*	*-*	-	*-*	4	*1*
Parent	***16***	***11***	***46***	***5***	***2***	***4***	**27**	***9***	**46**	***7***
Biological father	*5*	*4*	*22*	*2*	*1*	*2*	9	*3*	14	*2*
Step father	*1*	*1*	*5*	*1*	*1*	*2*	2	*1*	3	*0.4*
Biological mother	*10*	*7*	*19*	*2*	*-*	*-*	15	*5*	27	*4*
Step mother	*-*	*-*	*-*	*-*	*-*	*-*	1	*0.3*	2	*0.3*
Sibling	***4***	***3***	***18***	***2***	***1***	***2***	**5**	***2***	**4**	***1***
Brother/ stepbrother	*3*	*2*	*14*	*1*	*-*	*-*	5	*2*	2	*0.3*
Sister/ stepsister	*1*	*1*	*4*	*0.4*	*1*	*2*	-	*-*	2	*0.3*
Other relative	***4***	***3***	***16***	***2***	***1***	***2***	**9**	***3***	**28**	***4***
Grand parent	*1*	*1*	*1*	*0.1*	*-*	*-*	-	*-*	..	
Other biological	*1*	*1*	*6*	*1*	*-*	*-*	-	*-*	..	
Other in-law	*2*	*1*	*9*	*1*	*-*	*-*	-	*-*	...	
Domestic TOTAL	***69***	***49***	***367***	***36***	***18***	***38***	**145**	***49***	**275**	***40***
Acquaintance	***57***	***41***	***510***	***50***	***22***	***46***	**102**	***35***	**307**	***45***
Stranger	***14***	***10***	***141***	***14***	***8***	***17***	**47**	***16***	**104**	***15***
N	*140*		*1,018*		*48*		294		686	
Unknown	*1*	*1*	*17*	*2*	*-*	*-*	11	*4*	189	*22*
N	*141*		*1,035*		*48*		305		875	

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

The proportion of domestic homicides was the highest in Norway (excluding the 2011 terror attacks) and the lowest in Finland and Iceland. Here again we should note the probable biases in the Danish and Swedish data. In Sweden, it was 31 per cent when we included unsolved cases in the calculation, of the same magnitude as in Finland and Iceland. In Denmark, the percentage would probably have been somewhere in between that in Norway and that in Iceland without the bias. The same applies to intimate partner homicides which made up most domestic homicides in all five countries.[50] Homicides between acquaintances other than partners and relatives were the most common in Finland, many of the persons involved described as "drinking pals" in the national data, and the least common in Norway.

The differences between male and female victimization patterns were similar in all five countries. Adult women were usually killed by their male partners, children by their parents and adult men by male acquaintances (Figures 17 and 18).

[49] Excluding the victims of the 2011 terror attacks: 77 victims, all strangers to the offender.

[50] In Denmark, homicide-suicides were not included in our data. They are usually connected to intimate partner and child homicides, but their exclusion seems not to have had any major effect on our results. In the study of Thomsen et al. (2019), they were included and the proportion of intimate partner homicides was 27% and that of all domestic homicides 44%.

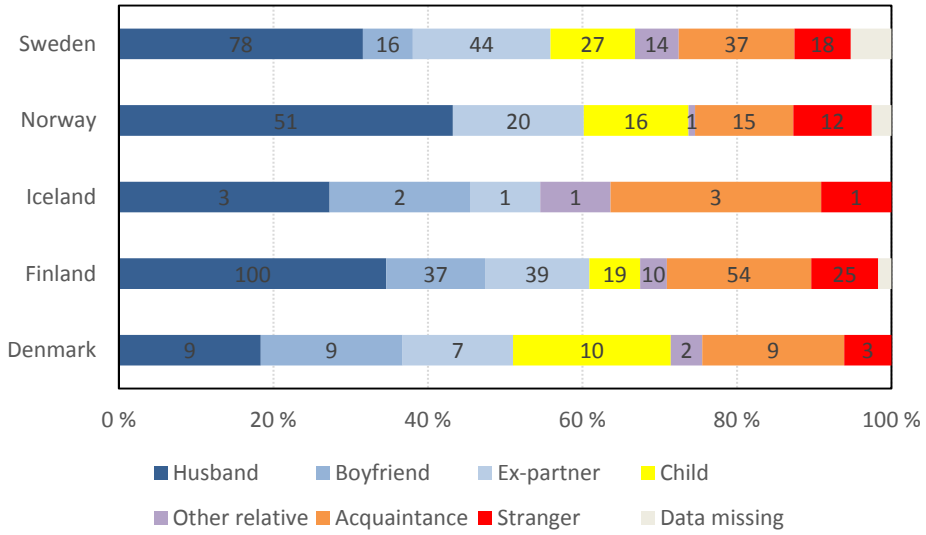

Figure 17 Offender in the homicides against women 15 years of age and older in the Nordic countries in 2007–2016 (%, by victims) (Denmark: Homicides with convicted perpetrators in 2012–2016; Iceland: 1990–2016; Norway: husband = partner or ex-partner)

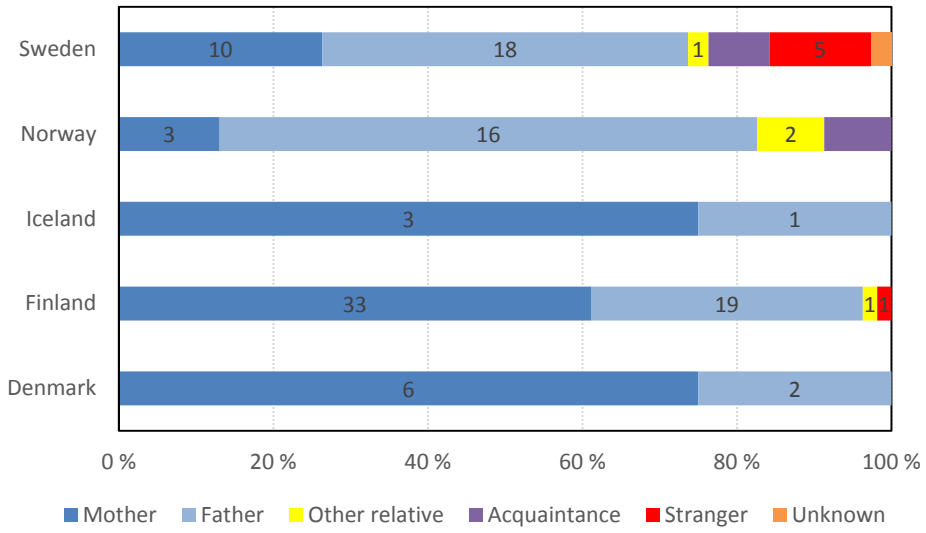

Figure 18 Offender in the homicides against children younger than 15 years of age in the Nordic countries in 2007–2016 (%, by victims) (Denmark: Homicides with convicted perpetrators in 2012–2016; Iceland: 1990–2016)

Table 15 shows the rates per million inhabitants of the most common homicide types by victim-offender relationship. In Finland all the main homicide types were more prevalent than in the other Nordic countries. The difference was the greatest in homicides between acquaintances and the smallest in intimate partner homicides against women. Here again one should note the probable impact of unsolved and not prosecuted cases in the Swedish and Danish data. However, it is unlikely that the substantial difference between Finland and the other countries was caused only by the differences in quality of the data.

Table 15 Homicide rate (per million population a year) in selected victim–offender relationship types in Nordic homicides in 2007–2016 (by victims)[51]

Victim was offender´s	Denmark*		Finland		Iceland**		Norway[52]		Sweden	
	N	*Rate*	N	*Rate*	N	*Rate*	N	*Rate*	N	*Rate*
Partner[53]	69	*.*	227	*5.03*	11	*1.79*	84	*2.08*	167	*2.11*
Wife[54]	51	*.*	176	*7.60*	7	*2.28*	72	*3.56*	138	*3.41*
Husband[55]	18	*.*	45	*2.04*	4	*1.30*	12	*0.60*	27	*0.68*
Child under 18 y.[56]	.	.	60	*5.55*	4	*1.88*	20	*2.17*	30	*1.58*
Domestic TOTAL[57]	.	*4.91*	367	*6.78*	18	*2.27*	145	*2.93*	275	*2.89*
Acquaintance[58]	.	*4.05*	510	*9.43*	22	*2.78*	102	*2.06*	307	*3.25*
Stranger[59]	.	*1.00*	141	*2.61*	8	*1.01*	47	*0.95*	104	*1.10*

* 2012–2016 (Statistics Denmark); ** 1990–2016.

[51] The Danish rates have been calculated using the proportion of each victim-offender relationship type in the EHM data and the average rate of male, female, and all homicide victims in homicides registered by the Danish police in 2012–2016 (Statistics Denmark).
[52] Excluding the victims of the 2011 terror attacks: 77 victims, all strangers to the offender. Including the victims of the attacks, the rate for homicides involving strangers would be 2.50 and the national rate 7.71.
[53] Including ex-partners. Per million 15+ population per year.
[54] Including girlfriends and ex-partners. Per million 15+ women per year.
[55] Including boyfriends and ex-partners. Per million 15+ men per year.
[56] Per million 0–17-year-olds per year.
[57] Per million population per year.
[58] Per million population per year.
[59] Per million population per year.

5.6 Alcohol and drugs

Information about substance use in connection with homicides was available from all countries except for victims of homicide in Denmark. According to earlier studies, at least since the 19th century, alcohol-related homicides have had a central role in lethal violence in Finland, a more moderate but substantial one in Sweden, but only a marginal one in Norway (Lehti & Sirén 2018).[60]

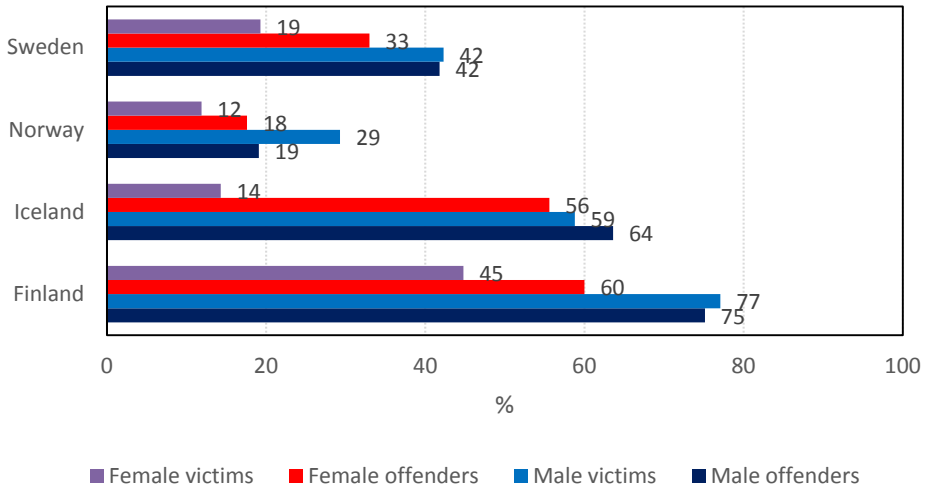

Figure 19 Percentage of alcohol intoxicated adult homicide victims and perpetrators in Nordic homicides in 2007–2016 (%, by persons; Iceland: 1990–2016)

This was also the case in the studied period. The percentage of intoxicated offenders was the highest in Finland (77%), and the lowest in Norway (19%). In this respect, Norway was the outlier in the group. In Denmark 41 per cent, in Sweden 50 per cent, and in Iceland 66 per cent of offenders had perpetrated their crime while under the influence of alcohol or alcohol and other drugs. For adult victims, corresponding percentages were 66 per cent in Finland, 51 per cent in Iceland, 42 per cent in Sweden, and in Norway, 22 per cent.[61]

[60] The causes of these differences are not clear but in earlier research they have often been linked to differences in drinking patterns which seem to be more explosive in Finland and Sweden than in Norway (Lehti & Sirén 2018).

[61] The percentages for offenders and victims refer to both males and females and have been calculated excluding cases with missing data. Information about victims has not been available in Denmark. In the offenders´ data the dark number was 5% in Finland and Iceland, 10% in Norway and Denmark, and 21% in Sweden; in the victims´ data the corresponding percentages were Finland 3%, Norway 6%, Iceland 10%, and Sweden 24%.

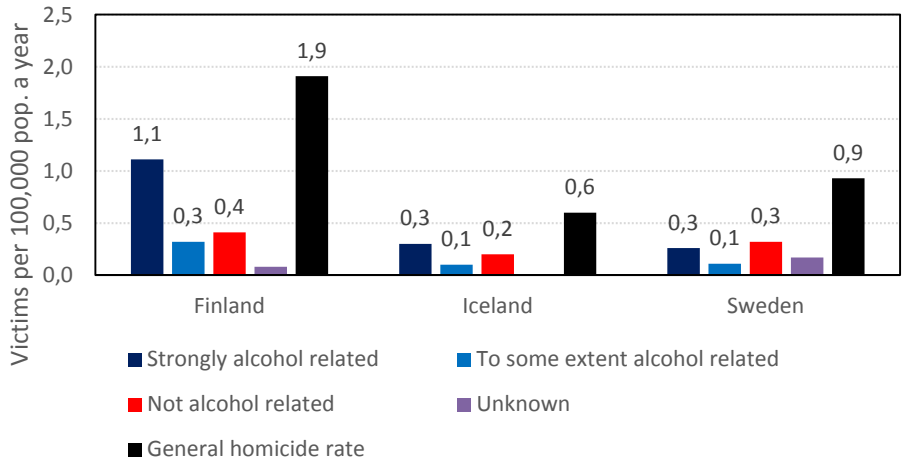

Figure 20 The annual victimization rates of alcohol related and not alcohol related homicides in the Nordic countries in 2007–2016 (strongly alcohol-related = all the persons involved intoxicated; to some extent alcohol-related = some of the persons involved intoxicated; not alcohol-related = all the persons involved sober)

If alcohol had an exceptionally insignificant role in homicides in Norway, in Finland the role was the most prominent. Compared to Iceland and Sweden, the countries with the second and third largest percentages of intoxicated offenders and adult victims, Finland´s rate of alcohol-related homicides was 3.5-fold. Also, the level of homicides with no connection to alcohol consumption was higher in Finland but the difference to the other Nordic countries was much smaller (Figure 20).

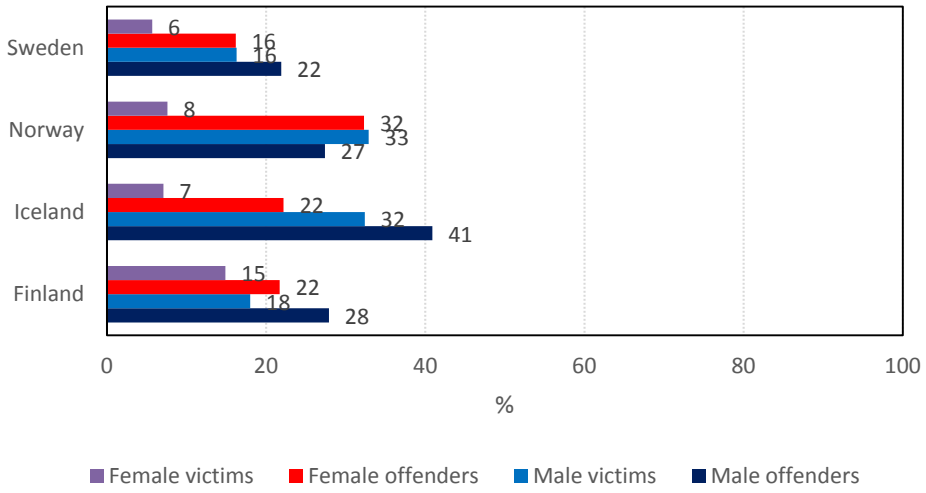

Figure 21 Percentage of adult homicide victims and perpetrators under influence of drugs at the time of crime in the Nordic countries in 2007–2016 (%, by persons; Iceland: 1990–2016)

Alcohol was not the only drug that appeared often in connection of Nordic homicides. In Iceland, 42 per cent of offenders had perpetrated their crime while under the influence of other drugs (although often mixed with alcohol). In Finland (19%), Sweden (21%), Denmark (25%), and Norway (28%) the percentage was lower but

substantial. For adult victims the corresponding percentage was in Iceland 30 per cent, Sweden 13 per cent, Finland 19 per cent, and Norway 23 per cent.[62]

5.7 Victim´s death and professional medical care

Information about whether victim received professional care before or during her/his death, was available in all countries except Norway. There were no major differences in this respect between the countries, 70 to 80 per cent of victims had died before they had had chance to receive any professional care, about 10 per cent had received care but died at the crime scene, and 15 to 20 per cent had died later when receiving hospital care.

Table 16 Homicide victims and professional medical care in Nordic homicides in 2007–2016 (by victims)

Medical care received	Denmark*		Finland		Iceland***		Sweden	
	N	%	N	%	N	%	N	%
Deceased before care/ declined care	108	*78*	807	*79*	39	*81*	455	*72*
Deceased during care in the location/ ambulance	.	.	73	*7*	..	..	66	*10*
Deceased during care in hospital**	29	*21*	139	*14*	8	*17*	115	*18*
Deceased after hospital care	1	*1*	5	*0.5*	-	-	..	..
N	138		1,024		47		636	
Unknown	3	*2*	11	*1*	1	*2*	239	*27*
All	141		1,035		48		875	

* Homicides with convicted perpetrators in 2012–2016; ** Denmark: Deceased during care in the location of crime, in ambulance or in hospital: *** Iceland: 1990–2016.

5.8 Offender´s suicide

Homicide-suicides were rare events in all Nordic countries. In Iceland, 4 per cent of offenders, in Finland, Norway, and Sweden 7 to 8 per cent had killed themselves in the connection of their crime.

For Denmark, only cases with a convicted offender were included in our data, and information on homicide-suicides was not available. For this reason, we use findings published by Thomsen et al. (2019) to describe homicide-suicide in Denmark. According to them, homicide-suicides made up 10 per cent of all Danish homicide events between 1992 and 2016 (Thomsen et al. 2019, 4–5).

The homicide-suicide rates of Iceland, Norway, and Sweden were of the same magnitude, 0.03 to 0.05; about one third of the Finnish rate. In Denmark, in 1992–2016, the rate was 0.10 (Thomsen et al. 2019, 4–5). Compared to earlier studies from the 1970s and the 1980s, in Sweden, both the rate and the percentage of homicide-suicides had halved; in Finland, the percentage had remained the same, but the rate had decreased by 30 per cent (Liem & Oberwittler 2012).

[62] The percentages for offenders and victims refer to both males and females and have been calculated excluding cases with missing data. Information about victims was not available in Denmark.

Table 17 Offenders´ suicide by gender and relation to principal victim in Nordic homicides in 2007–2016 (%, by offenders)

Victim was offender´s	Finland		Iceland		Norway[63]		Sweden	
	Male	Female	Male	Female	Male	Female	Male	Female
All homicides	*7.4*	*7.0*	*3.8*	-	*6.9*	*8.8*	*8.2*	*7.1*
Partner/ ex-part.	*21.1*	*13.3*	*10.0*	-	*20.9*	*8.3*	*15.9*	*10.7*
Homosexual part.	*0*	-	-	-	.	.	..	..
Child	*50.0*	*6.9*	-	-	*38.5*	*100.0*	*40.9*	*10.0*
Other relative	*1.4*	*0*	-	-	*13.5*	*0*	*11.6*	*0*
Non-relative	*3.3*	*0*	*3.3*	-	*1.2*	*0*	*2.0*	*0*
N	827	115	44	9	277	34	572	56
Unknown	*0.2*	-	-	-	-	-	*9.6*	-
All	829	115	44	9	277	34	633	56
Homicide-suicide rate	0.13		0.03		0.04		0.05	

Offender suicides are usually linked to homicides against biological children or intimate partners and this was also the case in the Nordic data. During the studied period, the share of offender suicides was the highest among men that killed their biological children (40 to 50%) or female partner (10 to 20%). In Finland, Norway and Sweden, suicides were almost equally common among male and female offenders; this was also the case in Denmark in 1992–2016 (Thomsen et al. 2019, 4–5). In Iceland, male offenders killed themselves more often than female offenders. After disaggregating the data into different relationship-type homicides, the latter was also the case in Sweden, Norway and Finland. The equal percentages out of all homicides were the result of the fact that crimes against partners and children made up a much higher proportion of women´s homicides than men´s. It is probable that this was also the case in Denmark in the period 1992–2016, because homicide-suicides mainly occurred in connection with intimate partner and domestic homicides and these types of homicides made a larger share out of female offender´s crimes (Thomsen et al. 2019).

[63] By victims.

6 CHARACTERISTICS OF VICTIMS AND OFFENDERS

In the following we describe the main socio-demographic characteristics of persons involved in current Nordic homicides, victims and offenders.

6.1 Gender

The percentage of men out of all homicide victims was higher in Iceland (71%), Finland (69%), and Sweden (69%), than in Denmark (63%) or Norway (57%). This did not quite concur with the often-observed pattern that the higher the homicide rate in a certain country, a certain part of the world or a certain historical time, the higher the proportion of male victims (von Hofer, 2008) (Table 18).

Table 18 Victims´ gender in Nordic homicides, annual average number of victims and annual mortality rate per 100,000 men/ women in 2007–2016

Victim´s gender	Denmark*		Finland		Iceland**		Norway[64]		Sweden	
	Annual average	*Rate*	Annual average	*Rate*	N	*Rate*	N	*Rate*	Annual average	*Rate*
Male	35.0	*1.25*	71.4	*2.69*	1.3	*0.85*	17.5	*0.71*	60.8	*1.29*
Female	21.2	*0.75*	32.1	*1.17*	0.5	*0.36*	13.0	*0.53*	26.7	*0.57*
Unknown	-	-	-	-	-		-	-	-	-
All	56.2	*1.00*	103.5	*1.91*	1.8	*0.61*	30.5	*0.62*	87.5	*0.93*
Male/female ratio		*1.7*		*2.3*		*2.4*		*1.3*		*2.3*

* Based on victims of homicides registered by the police in 2012–2016 (Statistics Denmark); ** 1990–2016.

Both male and female homicide mortality levels were the highest in Finland, the male level 2.5-fold and female level double the average of the other Nordic countries. Female mortality was the lowest in Iceland, male mortality in Norway. The male-female mortality ratio was substantially higher in Finland, Iceland, and Sweden than in Denmark or Norway, meaning a higher difference in the risk of dying violently between the genders (Table 18).

Table 19 Offenders´ gender in Nordic homicides in 2007–2016

Offender´s gender	Denmark*		Finland		Iceland**		Norway[65]		Sweden	
	N	*Rate*[66]	N	*Rate*	N	*Rate*	N	*Rate*	N	*Rate*
Male	125	*1.60*	832	*3.13*	44	*1.10*	278	*1.12*	670	*1.42*
Female	20	*0.25*	115	*0.42*	9	*0.23*	34	*0.14*	63	*0.14*
N	145		947		53		312		733	
Unknown	.	.	12		-		11		149	
All	145	*0.92*	959	*1.77*	53	*0.67*	323	*0.65*	882	*0.92*

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

[64] Excluding the 2011 terror attacks.
[65] Including the 2011 terror attacks.
[66] These are indicative rates only; they have been calculated on the basis of the gender distribution and the average number of offenders per case (1.09) in the data and the number of homicide cases in the official police statistics in 2012–2016.

The proportion of men out of all homicide offenders varied between 83 per cent in Iceland and 91 per cent in Sweden. Again, both male and female offending rates were the highest in Finland, being about double the average of the other countries. Iceland had the lowest male offending rate, and Sweden and Norway had the lowest female offending rate (Table 19).

6.2 Age

Based on the age of homicide victims, the Nordic countries formed two groups. Both percentagewise and by mortality levels, male victims were on the average substantially older in Finland and Iceland than in the three Scandinavian countries (Table 20).

The proportion of child victims was the highest in Norway, and the child homicide mortality level was highest in Finland, about double compared to her Nordic neighbours (Tables 20 and 21).

Table 20 Homicide victims´ age division by gender in Nordic homicides in 2007–2016 (%, by victims)

Victim´s age	Denmark*			Finland			Iceland**		
	Male	Female	All	Male	Female	All	Male	Female	All
0	*2.3*	*1.9*	*2.1*	*1.8*	*3.8*	*2.4*	*2.9*	*7.1*	*4.2*
1-9	*3.4*	*3.9*	*3.6*	*1.1*	*5.3*	*2.4*	-	*7.1*	*2.1*
10-14	-	-	-	*0.3*	*0.6*	*0.4*	-	*7.1*	*2.1*
<15	*5.6*	*5.8*	*5.7*	*3.2*	*9.7*	*5.2*	*2.9*	***21.4***	*8.3*
15-20	*9.0*	-	*5.7*	*4.9*	*6.9*	*5.5*	*2.9*	*14.3*	*6.3*
21-30	***22.5***	***23.1***	***22.7***	*13.6*	*14.1*	*13.8*	*14.7*	***28.6***	***18.8***
31-40	*11.2*	***21.2***	*14.9*	*17.7*	*12.9*	*16.2*	***26.5***	*14.3*	***22.9***
41-50	*19.1*	*17.3*	*18.4*	***24.7***	***22.3***	***24.0***	***26.5***	-	***18.8***
51-60	*14.6*	*17.3*	*15.6*	***23.5***	*13.8*	***20.5***	***20.6***	*7.1*	*16.7*
61-	*18.0*	*15.4*	*17.0*	*12.4*	*20.4*	*14.8*	*5.9*	*14.3*	*8.3*
N	89	52	141	712	319	1,031	34	14	48
Unknown	-	-	-	*0.3*	*0.6*	*0.4*	-	-	-
N	89	52	141	714	321	1,035	34	14	48
	Norway (excl. 2011 attacks)			Norway (incl. 2011 attacks)			Sweden		
	Male	Female	All	Male	Female	All	Male	Female	All
0	*1.1*	*0.8*	*1.0*	*0.9*	*0.6*	*0.8*	*0.2*	*0.8*	*0.4*
1-9	*3.4*	*5.4*	*4.3*	*2.8*	*4.1*	*3.4*	*2.8*	*4.6*	*3.4*
10-14	*1.7*	*3.1*	*2.3*	*1.9*	*2.9*	*2.4*	*0.4*	*1.5*	*0.7*
<15	*6.3*	*9.2*	*7.5*	*5.7*	*7.7*	*6.5*	*3.3*	*7.0*	*4.5*
15-20	*5.1*	*6.9*	*5.9*	*16.0*	*22.4*	*18.9*	*10.3*	*8.9*	*9.9*
21-30	*18.9*	*17.7*	*18.4*	*18.9*	*15.9*	*17.5*	***28.1***	***19.3***	***25.4***
31-40	***21.1***	***24.6***	***22.6***	*18.4*	*19.4*	*18.9*	*17.5*	*13.5*	*16.2*
41-50	***20.0***	*17.7*	***19.0***	*17.0*	*14.7*	*16.0*	*16.1*	*13.9*	*15.4*
51-60	*15.4*	*10.8*	*13.4*	*13.2*	*9.4*	*11.5*	*13.4*	*14.7*	*13.8*
61-	*13.1*	*13.1*	*13.1*	*10.9*	*10.6*	*10.7*	*11.3*	*22.8*	*14.9*
N	175	130	305	212	170	382	573	259	832
Unknown	-	-	-	-	-	-	*5.8*	*3.0*	*4.9*
N	175	130	305	212	170	382	608	267	875

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

Iceland and Finland, the countries with the lowest and the highest overall homicide mortality, had a relatively similar age-specific mortality structure for men. In both countries, 40 to 60-year-old men had the highest risk of death by homicide. For females, new-borns had the highest mortality rate (this was also the case in Denmark). Among adult women, in Finland the risk was highest for women in their 40s, in Iceland for teenagers and young adults in their 20s. In the three Scandinavian countries, male mortality peaked in Denmark and Sweden among 21 to 30-year-olds, and in Norway among those aged 31 to 40 years. In all three countries, the mortality of adult women was at its highest in the same age groups as that of adult men. (Table 21).

Table 21 Homicide mortality rates by age and gender in Nordic homicides in 2007–2016 (annual averages per 100,000 men/ women).

Victim´s	Denmark[67]		Finland		Iceland*		Norway[68]		Sweden	
age	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0	**2.69**	**1.42**	**4.35**	**4.20**	**1.64**	**1.71**	0.65	0.34	0.26	0.36
1-9	0.41	0.29	0.29	0.65	-	0.19	0.21	0.26	0.31	0.24
10-14	-	-	0.13	0.14	-	0.35	0.19	0.26	0.09	0.14
<15	0.40	0.25	0.50	0.71	0.11	0.35	0.23	0.27	0.23	0.23
15-20	1.46	-	1.78	1.16	0.28	0.57	0.45	0.48	1.64	0.66
21-30	**2.19**	**1.39**	2.79	1.36	0.82	0.68	1.01	0.73	**2.46**	**0.80**
31-40	1.14	1.26	3.66	1.26	1.53	0.35	**1.04**	**0.95**	1.63	0.58
41-50	1.61	0.90	**4.86**	**2.01**	**1.68**	-	0.96	0.67	1.38	0.54
51-60	1.42	0.99	**4.42**	1.15	**1.66**	0.24	0.86	0.46	1.31	0.65
61-	1.02	0.46	1.54	0.88	0.36	0.31	0.51	0.32	0.62	0.51
All	1.25	0.75	2.69	1.17	0.85	0.36	0.71	0.53	1.29	0.56

* 1990–2016

In our data, percentagewise, young adult men in their 20s were the largest offender group and also had the highest age-group-specific offending rate (Tables 22 and 23).

[67] These are indicative rates only for showing the relative differences of victimization levels between age groups. The calculation is based on the number of homicide victims in the police statistics in 2012–2016 (Statistics Denmark) and the age distribution in the Danish Ministry of Justice data. The basic level of female and male mortality is from the police statistics and the age division of mortality from the Ministry of Justice data.

[68] Excluding the 2011 terror attacks.

Table 22 Homicide offenders´ age division by gender in Nordic homicides in 2007–2016 (%, by offenders).

Offender´s age	Denmark*			Finland			Iceland**		
	Male	Female	All	Male	Female	All	Male	Female	All
<15	.	.	.	*0.1*	-	*0.1*	-	-	-
15-17	*7.2*	*10.0*	*7.6*	*1.0*	*4.3*	*1.4*	*2.3*	*11.1*	*3.8*
18-20	*12.8*	*5.0*	*11.7*	*8.1*	*7.8*	*8.1*	*4.5*	*11.1*	*5.7*
21-30	***32.0***	***35.0***	***32.4***	***28.4***	***26.1***	***28.1***	***52.3***	*11.1*	***45.3***
31-40	***20.0***	***15.0***	*19.3*	***23.1***	***26.1***	***23.5***	***31.8***	***44.4***	***34.0***
41-50	*15.2*	*10.0*	*14.5*	*19.5*	*20.9*	*19.6*	*4.5*	-	*3.8*
51-60	*6.4*	*10.0*	*6.9*	*12.1*	*12.2*	*12.1*	*2.3*	*22.2*	*5.7*
61-	*6.4*	*15.0*	*7.6*	*7.7*	*2.6*	*7.1*	*2.3*	-	*1.9*
N	125	20	145	827	115	942	44	9	53
Unknown	.	.	.	-	-	*1.8*	-	-	-
N	125	20	145	827	115	959	44	9	53

	Norway (incl. 2011 attacks)			Sweden			All Nordic countries***		
	Male	Female	All	Male	Female	All	Male	Female	All
<15	*0.7*	-	*0.6*	*0.8*	-	*0.7*	*0.4*	-	*0.4*
15-17	*0.7*	*5.9*	*1.3*	*5.2*	-	*4.8*	*2.8*	*4.3*	*2.9*
18-20	*6.8*	-	*6.1*	*8.9*	*1.8*	*8.3*	*8.4*	*5.1*	*8.0*
21-30	***37.4***	***32.4***	***36.9***	***32.8***	***24.6***	***32.1***	***32.0***	***26.8***	***31.4***
31-40	*24.5*	*32.4*	*25.3*	*22.8*	***36.8***	*24.0*	*23.2*	***29.4***	*23.9*
41-50	*18.4*	*11.8*	*17.6*	*14.4*	*21.1*	*15.0*	*17.0*	*17.9*	*17.1*
51-60	*8.3*	*17.7*	*9.3*	*10.6*	*12.3*	*10.7*	*10.4*	*13.2*	*10.7*
61-	*3.2*	-	*2.9*	*4.6*	*3.5*	*4.5*	*5.8*	*3.4*	*5.6*
N	278	34	312	632	57	689	1,906	235	2,141
Unknown	-	-	*3.4*	*5.7*	*9.5*	*21.9*	*2.0*	*2.5*	*9.4*
N	278	34	322	670	63	882	1,944	241	2,362

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016; *** Combined national data of this study.

Female offenders had a slightly higher mean age than male offenders. Women in their 20s and 30s had the highest age-specific offending rates.

Table 23 Homicide offending rates by age and gender in Nordic homicides in 2007–2016 (annual averages per 100,000 men/ women)

Offender´s age	Denmark[69]*		Finland		Iceland**		Norway[70]		Sweden	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15[71]	.	.	0.07	-	-	-	0.13	-	0.19	-
15-17	**3.00**	**0.70**	0.83	0.54	0.55	0.58	0.20	0.21	1.89	-
18-20	**5.10**	**0.34**	**6.67**	**0.94**	1.09	0.57	1.91	-	**2.95**	0.06
21-30	**4.01**	**0.73**	**6.75**	**0.91**	**3.79**	0.17	**3.19**	**0.35**	**3.25**	0.22
31-40	2.54	0.31	5.55	**0.92**	**2.38**	**0.71**	1.92	**0.33**	**2.30**	**0.44**
41-50	1.66	0.18	4.45	0.68	0.37	-	1.40	0.12	1.38	0.18
51-60	0.78	0.20	2.64	0.37	0.24	0.49	0.73	0.20	1.13	0.12
61-	0.47	0.15	1.12	0.04	0.18	-	0.20	-	0.27	0.02
All	1.60	0.25	3.13	0.42	1.10	0.23	1.12	0.14	1.42	0.14

* 2012–2016; ** 1990–2016.

6.3 Country of birth

The role of immigrants[72] in homicidal crime is influenced by national differences in the composition, volume and historical traditions of immigration and vary between the European countries (Belli & Parkin 2012). During the studied period, in Finland and Iceland, the immigrant proportion of homicide victims corresponded to their presence in the resident population, especially considering that not all foreign victims were residents. In the Scandinavian countries, however, the percentage of foreign victims was substantially larger than the percentage of resident immigrants and ranged from 25 per cent in Denmark to 36 per cent in Norway (Table 24).

[69] These are indicative rates only that have been calculated on the basis of the age and gender distribution and the average number of offenders per case (1.09) in the data and the number of homicide cases in the official police statistics in 2012–2016.
[70] Including the 2011 terror attacks.
[71] Per 100,000 10 to 14 year old boys/ girls per year.
[72] Immigrant status has been defined in this report by the country of birth. Immigrant background of native-born persons has been defined by the parents' country of birth.

Table 24 Victims´ country of birth in Nordic homicides in 2007–2016

Victim´s country of birth	Denmark[73]*		Finland		Iceland**		Norway		Sweden	
	N	%	N	%	N	%	N	%	N	%
Country the crime took place in	106	*75.2*	977	*94.8*	42	*87.5*	196	*64.3*	393	*64.5*
Native pop.	100	*70.9*	972	*94.3*	..	..	..	..	..	..
Imm. backgr.[74]	6	*4.3*	5	*0.5*	..	..	..	..	..	..
Abroad	35	*24.8*	54	*5.2*	6	*12.5*	109	*35.7*	198	*32.5*
Other Nordic	4	*2.8*	5	*0.5*	-	-	2	*0.7*	18	*3.0*
Other EU[75]	9	*6.4*	18	*1.7*	3	*6.3*	18	*5.9*	14	*2.3*
Other Europe[76]	2	*1.4*	11	*1.1*	1	*2.1*	19	*6.2*	44	*7.2*
Africa	8	*5.7*	7	*0.7*	-	-	23	*7.5*	23	*3.8*
Asia	11	*7.8*	9	*0.9*	2	*4.2*	45	*14.8*	53	*8.7*
North America	-	-	1	*0.1*	-	-	-	-	2	*0.3*
Latin America[77]	1	*0.7*	1	*0.1*	-	-	2	*0.7*	9	*1.5*
Oceania	-	-	-	-	-	-	-	-	-	-
Unknown f. c.	-	-	2	*0.2*	-	-	-	-	53	*8.7*
N	141		1,031		48		305		609	
Unknown	-	-	4	*0.4*	-	-	-	-	266	*30.4*
N	141		1,035		48		305		875	

Native pop. = native population; Imm. backgr. = immigrant background; Unknown f. c. = unknown foreign country; * Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

In all Nordic countries except Finland, immigrants´ homicide mortality rates were two- to four-times higher than those of natives. The difference was the smallest in Iceland with relatively few non-western immigrants, and the largest in Norway. In Finland, the situation was the opposite one, with the risk of native Finns dying due to homicide was 30 per cent higher than that of foreign-born residents. This did not mean that immigrants´ homicide mortality would have been lower in Finland than in the other Nordic countries. Actually, it was at the same level as in Denmark or Sweden and higher than in Iceland. What was different in Finland was the exceptionally high mortality of the native population (Table 25).

[73] The Danish data only include homicide cases with convicted perpetrators. The proportion of homicide victims born abroad might have been different if victims of homicides with no convicted perpetrator were included.
[74] Person whose both parents are immigrants.
[75] Including also Andorra, the Holy See, Liechtenstein, Monaco, San Marino, Switzerland, and the United Kingdom with her European dependencies.
[76] Including also Armenia, Azerbaijan, Georgia, Northern Cyprus, and Turkey.
[77] Including Central America, the Caribbean and South America

Table 25 Homicide mortality by country of birth in Nordic homicides in 2007–2016 (incl. resident victims only; per 100,000 pop. a year)

Victim´s country of birth	Denmark[78]*		Finland		Iceland**		Norway[79]		Sweden	
	N	*Rate*	N	*Rate*	N	*Rate*	N	*Rate*	N	*Rate*
Country the crime took place in	106	*0.41*	973	*1.90*	30	*0.57*	196	*0.44*	393	*0.49*
Native pop.	100	*0.40*	968	*1.90*	..	..	..		..	..
Imm. backgr.	6	*0.78*	5	*1.23*	..	..	..		..	..
Abroad	35	*1.42*	41	*1.48*	6	*1.15*	109	*2.08*	194	*1.58*
Other Nordic	4	..	5	*1.47*	..	..	2	*0.32*	18	*0.75*
Finland	1	..	.	.	..	..	-	-	15	*1.01*
Norway	1	..	-	-	..	..	.	.	2	*0.42*
Sweden	2	..	5	*1.59*	..	..	2	*0.63*	.	.
Other EU	9	*1.18*	10	*1.51*	..	..	18	*1.08*	14	*0.33*
Other Europe	2	,,	10	*1.27*	..	..	19	*3.25*	40	*1.27*
Africa	8	*4.24*	6	*2.39*	..	..	23	*3.81*	23	*1.39*
Asia	11	*1.42*	7	*1.22*	..	..	45	*3.05*	52	*1.02*
North America	-	-	-	-	..	..	-	-	2	*0.67*
Latin America	1	,,	1	*1.86*	..	..	2	*1.15*	9	*1.53*
Oceania	-	-	-	-	-	-	-	-	-	-
Unknown f. c.	-	-	2	.	-	-			53	.
N	141	*0.50*	1,014	*1.88*	36	*0.62*	305	*0,62*	609	*0.64*
Unknown	-	-	7	.					266	.
N	141	*0.50*	1,021	*1.89*	36	*0.62*	305	*0.62*	875	*0.92*

Native pop. = native population; Imm. backgr. = immigrant background; Unknown f. c. = unknown foreign country; * Homicides with convicted perpetrators in 2012–2016; ** 1998–2016.

Immigrants and foreigners were over-represented in terms of their population size among homicide offenders in all Nordic countries. They made up about 10 per cent of offenders in Finland and Iceland, 25 per cent in Denmark, and almost 40 per cent in Sweden and Norway (Table 26).

[78] Rates have been calculated using all victims and resident population.
[79] Rates have been calculated using all victims and resident population.

Table 26 Offenders´ country of birth in Nordic homicides in 2007–2016

Offender´s country of birth	Denmark[80]*		Finland		Iceland**		Norway		Sweden	
	N	%	N	%	N	%	N	%	N	%
Country the crime took place in	108	*74.5*	859	*91.1*	46	*86.8*	192	*61.5*	331	*62.3*
Native population	92	*63.4*	856	*90.8*	..	..	..	..	..	..
Imm. backgr.	16	*11.0*	3	*0.3*	..	..	..	..	..	..
Abroad	37	*25.5*	84	*8.9*	7	*13.2*	120	*38.5*	200	*37.7*
Other Nordic	2	*1.4*	13	*1.4*	-	-	9	*2.9*	23	*4.3*
Other EU	7	*4.8*	17	*1.8*	5	*9.4*	14	*4.5*	19	*3.6*
Other Europe	3	*2.1*	13	*1.4*	-	-	19	*6.1*	34	*6.4*
Africa	6	*4.1*	9	*1.0*	1	*1.9*	20	*6.4*	31	*5.8*
Asia	15	*10.3*	13	*1.4*	1	*1.9*	54	*17.3*	49	*9.2*
North America	-	-	-	-	-	-	2	*0.6*	-	
Latin America	4	*2,8*	3	*0.3*	-	-	1	*0.3*	11	*2.1*
Oceania	-	-	-	-	-	-	-		-	
Unknown f. c.	-	-	16	*1.7*	-	-	1	*0.3*	33	*6.2*
N	145		943		53		312		531	
Unknown	-	-	16	*1.7*	-	-	11	*3.4*	202	*27.6*
N	145		959		53		323		733	

Imm. backgr. = immigrant background; Unknown f. c. = unknown foreign country; * Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

In the Scandinavian countries, the offending rates of foreign-born residents in terms of population size were three- to five-fold those of native-born residents. In Iceland and Finland, the difference was smaller but considerable. Compared to the other Nordic countries, in terms of population size, in Finland the offending rates of natives were almost four-fold and those of immigrants two-fold higher. Thus, unlike in homicide mortality, in homicide offending, foreign-born residents contributed to Finland's outlier status in the region (Table 27).

[80] The Danish data only include homicide cases with convicted perpetrators. The proportion of homicide perpetrators born abroad might have been different if perpetrators of homicides with no convicted perpetrator were included.

Table 27 Homicide offending rates by country of birth in Nordic homicides in 2007–2016 (incl. resident offenders only; per 100,000 pop. a year)

Offender´s country of birth	Denmark[81]		Finland		Iceland*		Norway		Sweden	
	N	*rate*	N	*rate*	N	*rate*	N	*rate*	N	*rate*
Country the crime took place in	108	*0.42*	857	*1.67*	30	*0.57*	192	*0.43*	331	*0.42*
Native pop.	92	*0.37*	854	*1.68*	..	..	..		..	
Imm. backgr.	16	*2.08*	3	*0.74*	..	..	..		..	
Abroad	37	*1.50*	74	*2.67*	7	*1.34*	120	*2.29*	200	*1.40*
Other Nordic	2	,,	10	*2.94*	-	-	9	*1.42*	23	*0.96*
Denmark	.	.	-	-	-	-	1	*0.52*	-	-
Finland	-	-	.	.	-	-	1	*1.62*	17	*1.15*
Iceland	-	-	-	-	.	.	1	*1.75*	-	-
Norway	2	,,	1	*5.73*	-	-	.	.	6	*1.24*
Sweden	-	-	9	*2.87*	-	-	6	*1.88*	.	.
Other EU	7	*0.91*	11	*1.66*	..	..	14	*0.84*	19	*0.45*
Other Europe	3	..	13	*1.64*	-	-	19	*3.24*	34	*1.08*
Africa	6	*3.18*	9	*3.58*	-	-	20	*3.31*	31	*1.85*
Asia	15	*1.93*	13	*2.27*	-	-	54	*3.66*	49	*0.96*
North America	-	-	-	-	-	-	2	*2.16*	-	-
Latin America	4	..	2	*3.72*	-	-	1	*0.58*	11	*1.83*
Oceania	-	-	-	-	-	-	-	-	-	-
Unknown f. c.	-	-	16	..	-	-	1		33	
N	145	*0.51*	931	*1.72*	37	*0.64*	312	*0.63*	531	*0.57*

Native pop. = native population; Imm. backgr. = immigrant background; Unknown f. c. = unknown foreign country; * 1998–2016.

6.4 Employment status

Data on victims´ and offenders´ employment status were available from Finland, Norway, and Sweden. The social structure of lethal violence was similar in all three countries. Persons who were unemployed, disabled or on early retirement were greatly over-represented both among victims and offenders.

[81] Convicted offenders only.

Table 28 Homicide victims´ employment status in Finland, Norway, and Sweden in 2007–2016

Victim´s employment status	Finland		Norway[82]		Sweden	
	N	%	N	%	N	%
Employed	210	*21.9*	117	*38.5*	140	*36.9*
Unemployed[83]	355	*37.1*	68	*22.4*	91	*24.0*
Sick-listed/ early retirement	146	*15.3*	41	*13.5*	30	*7.9*
Student/ school child	72	*7.5*	34	*11.2*	50	*13.2*
Military service	2	*0.2*	-	-	0	..
Housewife/ stay-at-home parent	16	*1.7*	13	*4.3*	1	*0.3*
Retired	100	*10.4*	19	*6.3*	45	*11.9*
Child (pre-school age)	44	*4.6*	-	-	19	*5.0*
Prisoner	5	*0.5*	-	-	..	..
Patient in closed institution	4	*0.4*	-	-	..	..
Asylum seeker	2	*0.2*	-	-	..	..
Other	1	*0.1*	12	*3.9*	3	*0.8*
N	957		304		379	
Unknown	78	*7.5*	1	*0.3*	496	*56.7*
N	1,035		305		875	

In Finland, the percentages of non-working working age population were the highest: 67 per cent of offenders and 55 per cent of adult victims. In Norway and Sweden, about 60 per cent of offenders and 35 to 38 per cent of adult victims were either unemployed or on early retirement. Correspondingly, the share of employed persons out of offenders and victims was 10 to 15 percentage points lower in Finland than in Norway or Sweden (Tables 1, 28 and 29).

Table 29 Homicide offenders´ employment status in Finland, Norway, and Sweden in 2007–2016 (%, offender based)

Offender´s employment status	Finland		Norway		Sweden	
	N	%	N	%	N	%
Employed	179	*20.0*	93	*30.0*	118	*27.7*
Unemployed[84]	485	*54.2*	138	*44.5*	212	*49.8*
Sick-listed/ early retirement	117	*13.1*	45	*14.5*	49	*11.5*
Student/ school child	54	*6.0*	22	*7.1*	36	*8.5*
Military service	4	*0.4*	-	-	0	-
Housewife/ stay-at-home parent	7	*0.8*	2	*0.6*	0	-
Retired	39	*4.4*	4	*1.3*	9	*2.1*
Child (pre-school age)	0	-	-	-	0	-
Prisoner	4	*0.4*	-	-	1	*0.2*
Patient in closed institution	2	*0.2*	-	-	1	*0.2*
Asylum seeker	2	*0.2*	-	-	..	
Other	2	*0.2*	6	*1.9*	0	-
N	895		310		426	
Unknown	64	*6.7*	13	*4.0*	307	*41.9*
N	959		323		733	

In all three countries, the homicide mortality of unemployed persons was ten- to twenty-fold and homicide offending rates twenty-five- to forty-fold of those of employed persons. However, the Finnish rates of homicide mortality and offending

[82] Excluding the 2011 terror attacks.
[83] Norway: including “arbeidsledig” and “trygdet”.
[84] Norway: including “arbeidsledig” and “trygdet”.

of both unemployed and employed population were substantially higher than those in Norway or Sweden. The higher overall homicide rate in Finland was not simply the result of a larger marginalized working-age population, although it contributed to the difference (Figure 22).

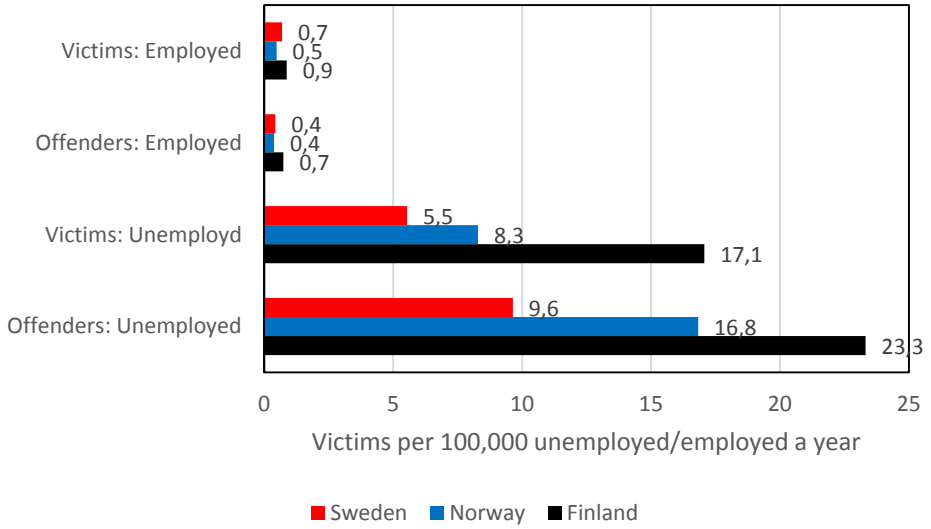

Figure 22 Offending and mortality rates of employed and unemployed 15 to 64-year-olds in Finland, Norway and Sweden in 2007–2016[85]

The correlation between social disadvantage can reflect multiple patterns of causation (Aaltonen 2013). Disadvantage can lead to crime (strain theory), and crime can lead to disadvantage due to societal rejection of offenders (labelling theory), and the correlation can reflect underlying third factors such as stable personal traits (self-control and other self-selection theories).

6.5 Substance abuse

Information about substance abuse of offenders and victims was available from all the countries except Norway. The proportion of addicted adult victims was substantially higher in Finland that in Denmark, Iceland or Sweden. This was especially true for persons described as alcohol abusers (Table 30).[86]

[85] Swedish rates are indicative only, based on the assumption that the proportion of unemployed and employed persons was the same in the missing data cases as in those with available data.
[86] In our data, information about substance abuse was based on the case descriptions in source materials, not on medical diagnoses.

Table 30 Adult victims´ substance abuse in Nordic homicides in 2007–2016 (%, 15+ victims only)

Victim´s substance abuse	Denmark*		Finland		Iceland**		Sweden	
	N	%	N	%	N	%	N	%
Alcohol abuser	18	*15.0*	397	*43.0*	2	*7.4*	88	*17.3*
Alcohol and drug abuser	11	*9.2*	105	*11.4*	7	*25.9*	44	*8.6*
Drug abuser	9	*7.5*	63	*6.8*	1	*3.7*	68	*13.4*
Not a substance abuser	82	*68.3*	358	*38.8*	17	*63.0*	309	*60.7*
N	120		923		27		509	
Unknown	13	*9.8*	57	*5.8*	17	*38.6*	309	*37.8*
N	133		980		44		818	

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

In Finland, 64 per cent of adult male and 33 per cent of adult female victims were described as alcohol abusers; in Denmark, the corresponding percentages were 31 and 20 per cent, in Iceland 50 and 10 per cent, and in Sweden 32 and 13 per cent. The proportion of drug abusing victims was higher in Iceland (26%) and Sweden (22%) than in Finland (18%) and Denmark (16%) (Table 30).

Table 31 Offenders´ substance abuse in Nordic homicides in 2007–2016 (%, offender based)

Offender´s substance abuse	Denmark*		Finland		Iceland**		Sweden	
	N	%	N	%	N	%	N	%
Alcohol abuser	15	*11.5*	298	*33.9*	8	*20.5*	76	*15.4*
Alcohol and drug abuser	24	*18.3*	196	*22.3*	12	*30.8*	111	*22.6*
Drug abuser	24	*18.3*	99	*11.3*	5	*12.8*	88	*17.9*
Not a substance abuser	68	*46.9*	285	*32.5*	14	*35.9*	217	*44.1*
N	131		878		39		492	
Unknown	14	*9.7*	81	*8.4*	14	*26.4*	240	*32.8*
N	145		959		53		732	

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

Among offenders, the percentages of substance abusers were more even, ranging from 68 per cent in Finland to 53 per cent in Denmark. Again, the proportion of alcohol abusers was substantially higher among male offenders in Finland than in the other countries: 56 per cent of Finnish male offenders were described as alcohol abusers and 35 per cent as drug abusers; in Denmark the percentages were 30 per cent and 38 per cent, and in Sweden 38 per cent and 41 per cent. Of Finnish and Swedish female offenders, alcohol abusers made up 56 per cent; of Danish offenders, only 32 per cent.

6.6 Earlier convictions of offenders

Nordic homicides offenders usually had heavy criminal backgrounds. In Finland and Sweden, over 70 per cent of offenders had earlier convictions and one-third had been in prison at least once before. This is a high percentage considering Nordic criminal policies with very low incarceration rates. Also, in Denmark most offenders had criminal records while in Iceland and Norway, 40 to 50 per cent had earlier convictions (Table 32).

Table 32 Offenders´ earlier criminal convictions in Nordic homicides in 2007–2016 (%, by offenders)[87]

Offender´s earlier convictions	Denmark*		Finland		Iceland`**		Norway[88]		Sweden	
	N	*%*	N	*%*	N	*%*	N	*%*	N	*%*
Earlier criminal convictions	87	*63.0*	658	*70.4*	14	*37.8*	142	*47.5*	339	*74.0*
Violent crimes[89]	45	*32.6*	522[90]	*55.6*	..	..	..	..	..	..
Homicides[91]	2	*1.4*	57[92]	*6.1*	2	*5.4*	..	..	13	*2.8*
No earlier convictions	51	*37.0*	276	*29.6*	23	*62.2*	156	*52.2*	119	*26.0*
Imprisonment	..	..	316[93]	*33.7*			..		152	*33.2*
N	138		934		37		299		458	
Unknown	7	*4.8*	25	*2.6*	16	*30.2*	24	*7.4*	275	*37.5*
N	145		959		53		323		733	

* Homicides with convicted perpetrators in 2012–2016; ** 1990–2016.

Specific recidivists refer to persons who had previously committed the same offence, in our case, homicide. These recidivist homicide offenders made up a higher percentage of offenders in Finland and Iceland (5% to 6%) than in Sweden (3%) or Denmark (1%). The percentage of all violent crime recidivists was also higher in Finland than in Denmark. In prior research, specific homicide recidivism had varied between one and three per cent (Liem 2013), so against this backdrop, the Finnish and Icelandic figures stand out as high. These differences may have had a link to the proportion of alcohol-related homicides. Finland and Iceland had the highest percentage of such crimes, and in Sweden their proportion was higher than in Denmark (Table 32).

[87] Earlier convictions and imprisonments in the country the crime was committed.
[88] Including the 2011 terror attacks.
[89] Convictions on intentional homicides, attempted homicides and assault crimes (excl. robbery and rape).
[90] N = 939.
[91] Convictions on intentional homicides (excl. attempted homicides).
[92] N = 939.
[93] N = 938.

7 TERRORISM IN THE NORDIC COUNTRIES

How many Nordic homicides are related to terrorism? This question depends on the definition of terrorism. Several definitions are used by national authorities, international organizations and researchers. For example, the Finnish Jokela and Kauhajoki school shootings are excluded from the Europol terrorism victims count but included in the Global Terrorism Database (GTD). Because the attacks had clear ideological motivations and goals, although not political, and the victims were selected randomly from the target group, we have included them in our list of terror attacks (Dechesne 2012).[94]

Since 2000, there have been ten major terror attacks with fatalities in the Nordic countries with 113 killed and 304 wounded victims. Thus, two per cent of Nordic homicide victims in the period 2000–2017 were killed in terrorist incidents.[95] Lone male offenders perpetrated all the attacks, and the Oslo and Utøya attacks by the same man. The motivations and methods of the offenders have varied (Table 33).

Table 33 Terror attacks with fatalities in the Nordic countries in 2000–2017

Country	Place	Date	Type	Number killed	Number wounded	Number of offenders	Method
Finland	Vantaa	11.10.2002	Motive unknown	6	164	1	Explosives
Finland	Jokela	7.11.2007	School attack	8	12	1	Firearm
Finland	Kauhajoki	23.09.2008	School attack	10	3	1	Firearm
Norway	Oslo	22.07.2011	Right wing	8	30	1	Explosives
Norway	Utøya	22.07.2011	Right wing	69	66	1	Firearm
Denmark	Copenhagen	14.02.2015	Islamist	1	3	1	Firearm
Denmark	Copenhagen	15.02.2015	Islamist	1	2	1	Firearm
Sweden	Trollhättan	22.10.2015	Right wing	3	1	1	Knife
Sweden	Stockholm	7.4.2017	Islamist	5	15	1	Lorry
Finland	Turku	8.8.2017	Islamist	2	8	1	Knife
Total				113	304	9[96]	

If we narrow the analysis to events since 2007, the role of terrorism in Nordic lethal violence becomes more noteworthy. The definitions, counting methods and numbers of victims of terrorism vary in different international databases. For 2007–2017, Europol specifies 488 victims[97] in its member states, while the Global Terrorism Database refers to 655 victims in Western Europe.[98] The Europol figure does not include offenders, the GTD numbers include all fatalities, including offenders killed in connection with the attacks. In both cases, the number of Nordic deaths make up more than one-in-six of the fatalities – a much higher percentage than their presence

[94] In this chapter and Table 33 we have used the Global Terrorism Database inclusion principle. The GTD defines a terrorist attack as the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation. The victims are selected randomly from the target group (www.start.umd.edu/gtd).
[95] According to national police statistics, in 2000–2017 5,738 persons were killed in homicides in the Nordic countries.
[96] The same offender perpetrated the Oslo and Utøya attacks.
[97] TE-SAT annual reports 2009–2018.
[98] The GTD includes the Finnish and Swedish school attacks (www.start.umd.edu/gtd).

in the population.[99] The main reason for the high percentages are the 2011 attacks in Norway, an exceptionally brutal attack in a European context with 77 fatalities and 96 wounded. However, as Table 33 shows, the frequency of all kinds of terror attack has been increasing during the current decade. Between 2000 and 2009, there were three attacks, all in Finland. During the current decade the number so far has been seven and attacks have taken place in all Nordic countries except Iceland. On the other hand, although the number of fatal attacks has been increasing, it is still small.

The attacks in Finland in the first decade of the century were linked to international social media networks promoting suicidal attacks among teenagers, especially at schools or similar public locations.[100] Since 2011, all the Nordic attacks have been linked in one way or another to immigration. Right-wing extremists opposing immigration policies carried out two attacks, while Islamists linked to international jihad groups have perpetrated four. The offenders of the first type were native Norwegians and Swedes, those of the latter type resident immigrants or non-resident foreigners with Islamic backgrounds.[101]

Attackers have used various methods: explosives, firearms, knives and a lorry. In the attacks carried out in open space with a chance of escape, explosives and lorry have caused the highest number of casualties. However, the most lethal attacks have been those carried out with firearms in locations where it was not possible for the targets to escape.

When compared to the other attacks registered in the Europol and GTD databases, the specific characteristics of the Nordic attacks are their close connection to immigration policies. Although Islamist and anti-immigration attacks have a prominent role in contemporary European terrorism as a whole, the motivation background of terrorism is more heterogeneous elsewhere in Europe including separatist terrorism and political left wing terrorism, which are currently non-existent in the Nordic countries.

[99] The proportion of terror victims out of all Nordic homicide victims in 2007–2017 was 3.2 per cent.

[100] The motivation and goal of the 2000 bomb attack at the Myyrmanni shopping centre in Vantaa remains unclear but the profile of the attacker resembled that of the offenders of the Jokela and Kauhajoki school attacks.

[101] Immigrant refers here to a foreign-born person with legal residency in the country; foreigner refers to a foreign-born person without legal residency, i.e. someone visiting the country or living there illegally.

8 CLEARANCE RATES AND SENTENCING PRACTICES

Very few Nordic homicides remain unsolved (Liem et al. 2019). In Iceland, the police cleared all homicides reported during the studied period. In Finland, the clearance rate was 99 per cent and in Norway 97 per cent. In Sweden, the number of unsolved crimes was the highest, but even there, the police solved 83 per cent of the homicides of the period. The Danish homicide clearance rate could not be calculated on the basis of our data but according to Leth (2010), it has been about 97 per cent in the 2000s.

Table 34 Prosecution rates and sentences in Nordic homicides in 2007–2016 (offender based)

	Denmark*		Finland		Iceland**		Norway		Sweden***	
	N	%	N	%	N	%	N	%	N	%
Died before process	..	9.8[102]	79	9.8	2	3.8	27	10.8	31	5.2
Less than 15 y	..	..	1	0.1	0	-	-	-	2	0.3
Prosecuted	..	..	729	90.1	51	94.3	..	..	307	90.3
Non accountable	37	25.5	77	10.6	9	17.0	30	13.4	39	12.7
Sentenced	108[103]	74.5	633	86.8	40	75.5	194	86.6	256	83.4
For life[104]	10	9.3	101	16.0	-	-	10	5.2	39	15.2
Fixed-term imp[105]	98	90.7	489	77.3	39	97.5	184	94.8	215	84.0
Other[106]	-	-	43	6.8	1	2.5	-	-	2	0.8
Acquitted	..	..	19	2.6	2	3.8	..	..	12	3.9
Mean length[107]	9 y 8 m 8 d		8 y 3 m 14 d		11 y 8 m 25 d[1]		13 y 8 m 8 d		13 y 4 m 10 d	

Fixed-term imp = fixed-term imprisonment; * Homicides with convicted offenders in 2012–2016; ** Homicides in 1990–2016; *** Homicides in 2007–2013 (Court decision information missing for 36% of prosecuted offenders).
[1] The mean length of fixed-term imprisonment for Iceland has been corrected 28 October 2019.

[102] Thomsen et al. (2019, 4–5), the proportion of homicide-suicides out of all homicide events.
[103] Includes those sentenced to acute psychiatric care and prison (two persons).
[104] In Norway, where life imprisonment for homicides has been abolished, we have included in this category, 21 years' imprisonment (including those with preventive detention). In Denmark, the category also includes all persons sentenced to a custodial sentence (*forvaring*) (five persons). In Norway, a person sentenced to 21 years' imprisonment is eligible for parole after serving 2/3 of the sentence, i.e. 14 years. In Finland and Denmark, a person sentenced for life may be released on parole after serving 12 years; in Finland, the length of an average life sentence is 14 years and in Denmark, 17 years before parole. The average length of Danish custody sentences is 14 to 15 years (www.dr.dk/nyheder/indland/ekspert-i-kriminologi-forvaring-er-en-saerligt-streng-sanktion). In Iceland, persons sentenced to life imprisonment are eligible for parole after they have served 16 years. In Sweden, a life sentence can be commuted to a fixed-term sentence of 18 years or longer by request of the sentenced person. The request can be made after the person has served 10 years of his/her sentence.
[105] Unconditional imprisonment. In Norway, the category includes also fixed-term imprisonment with preventive detention and in Finland fixed-term imprisonment without eligibility to parole (19 persons). In Sweden, the category includes also those sentenced to youth prison. The category does not include 21-year imprisonment in Norway.
[106] Conditional imprisonment, community service, fines etc..
[107] Mean *nominal* length of all fixed-period unconditional imprisonment for homicide, *regardless of the legal typology of crime*. The calculations do not include life imprisonment in any of the countries. In Norway, it does not include the 21-year imprisonment. The mean length refers here to all fixed-term unconditional prison sentences for crimes included in the

Table 34 shows the situation after the crime has been solved and the police investigation ended. Five to ten per cent of Nordic homicide offenders remain unprosecuted, because they died in connection with their crime or during the police investigation. The proportion of those who are indicted, but never sentenced due to mental illness or unaccountability, varies depending on country. During the studied period, the proportion of these was the highest in Denmark (26%) and the lowest in Finland (11%). In principle, if the prevalence and treatment of mental illness is similar in a group of countries (as one would suppose in the Nordic countries), the proportion of homicides by mentally ill offenders should be the higher the lower the crime rate. This was not the case in our data. Even though Norway had the second-lowest overall homicide rate, the proportion of mentally ill offenders was similar to that of Finland with the highest homicide rate. Despite the highest percentage of mentally ill offenders in Denmark, Norway and Sweden were the outliers among the five countries concerning mental illness-related homicides. The annual rate of this type of offending per one million inhabitants was: in Iceland 1.1, in Denmark 1.3, and in Finland 1.4, but in Norway and Sweden only 0.6.

The sentencing practices are more difficult to compare. Counting mere mean or median lengths of nominal prison sentences does not tell us much if we do not standardize the statutory definitions and other juridical sentencing principles, as well as take into account the characteristics of the crimes and their offenders, not to mention the actual lengths and conditions of the imprisonment. This was not possible in the context of our project.

In the homicide cases included in our data, the mean length of fixed-term imprisonment was the lowest in Finland and the highest in Norway and Sweden. On the other hand, the usage of life imprisonment was more common in Finland than in Denmark or Norway, but similar to that in Sweden.[108] The length of life imprisonment is more or less similar in Denmark, Finland, Iceland and Norway. Swedish data on the average length of life sentences were not available for this study.

When comparing the lengths of fixed-term imprisonment, it is important to note that the factual lengths depend on parole statutes and policies. In Finland, the length of a fixed-term sentence is usually 1/2 or 2/3 of the nominal length. In the other Nordic countries, prisoners are normally released on parole after they have served 2/3 of their sentence.

The mean lengths of imprisonment do not explain anything about the factual conditions of prison sentences. Also, they don´t consider the structural differences of lethal violence between the countries, for example, in our case, the substantially smaller proportion of domestic homicides in Finland. Our data from each country were based on a similar definition of intentional homicide but there might still have

data, i.e. considered by police as intentional homicides. Thus, the calculations have not included merely the sentences for murder and voluntary manslaughter but also other sentences based on Penal Code paragraphs. Because of this, the mean length differences do not assess the sentencing practices for murder and voluntary manslaughter in each country. The share of convictions in the data (not based on murder or voluntary manslaughter) differed in each country, and was partially influenced by the structural differences in homicidal crime.

[108] I.e., in Norway, 21 years fixed-term imprisonment. In Sweden, in 2007–2013, the frequency of the usage of life imprisonment seemed to be similar to that of Finland. According to Lappi-Seppälä (2016), in Sweden in 2014, 5 to 7 per cent of persons sentenced for homicide or attempted homicide got life imprisonment.

been some differences in the composition of data that would have influenced our mean length calculations. However, our results correlated negatively to some extent with the overall homicide rates. Finland with the highest homicide level had the shortest average sentences, while Norway and Iceland with the lowest homicide levels had the longest sentences. The sentencing practices in Denmark fell in between.[109] (Sweden was an exception with a relatively high homicide rate and relatively long nominal sentences.)

As in other correlations found in this report, the causal nature of this link requires further inquiry. Apart from possible deterrence logics,[110] one hypothesis would be that there is an inverse relationship between actual violence and tolerance: i.e. the lower the level of violence, the less tolerant people tend to be, and entertain wider definitions of violence (Kivivuori 2015). But, as mentioned, our results are indicative at best and more detailed analyses would be needed for any conclusive assessments. However one conclusion can be drawn: in all Nordic countries, homicide offenders are almost without exception caught and sentenced. The official control policies seem to be relatively effective and probably contribute to the globally very low homicide rates in the Nordic region.

[109] Also the results of Lappi-Seppälä (2016), based on published 2014 data indicate that nominal sentence lengths are relatively long in Sweden in the Nordic context. According to him, in Sweden, the aggregated average nominal sentence of homicides and attempted homicides (murder and voluntary manslaughter) given by official statistics is currently about 11 years whereas in Finland it is 7.8 years. The share of attempts and completed crimes has not been standardized in these calculations and may contribute to the difference in the average length of the sentences.

[110] Due to the rise and relevance of gang and criminal milieu-related homicide in some Nordic countries, the logic of deterrence may be becoming more important, even though alcoholised-marginalized locus of many homicides may be resistant to that logic.

9 CONCLUDING REMARKS

Based on sociodemographic measures and political indicators, contemporary Nordic societies are quite similar to each other. Based on the social conditions and cultural similarity, one would not expect significant differences in the homicide levels or main characteristics of lethal violence between the five countries. However, this is not the case.

Regarding the rates of lethal violence, Finland has been an outlier in the region for 200 years (Verkko 1951). During the post-Second World War era, and especially in the 2000s, the difference between the Finnish level and that of the other Nordic countries has decreased. Nonetheless, Finland still presents the highest homicide mortality in the Nordic area.

Because of the status of Finland as an outlier with respect to Nordic homicide levels, one would also assume that the main structural characteristics of homicidal crime would differ in Finland from those elsewhere in the region. However, when focusing on the structure of lethal violence, the picture becomes more complex. The five countries present both similarities and differences with respect to crime characteristics. The two main similarities in the Nordic area are 1) a clear male dominance in homicides and 2) the extreme social marginalization of lethal violence. In all the countries, irrespective of differences in other characteristics, non-working men in working age groups are hugely over-represented among offenders, to a lesser degree even among the victims. Regarding differences, four stand out in our analysis.

Urban-rural distinction. In contemporary Denmark, Iceland, Norway, and Sweden, lethal violence is concentrated in the metropolitan areas of the largest cities. In contrast, the homicide rates of Finnish large cities are significantly lower than the national average, even though the size of the urban concentrations are comparable to those of other Nordic metropolises. The higher overall national mortality in Finland is the result of the high homicide rates in rural areas and small towns, especially in the provinces of eastern and northern Finland with rates much higher than in any other Nordic provinces.

Immigration and homicide. In the three Scandinavian countries, immigrants make up to 25 to 40 per cent of the homicide offenders, while in Iceland and Finland they represent only about 10 per cent. This is not merely due to differences in the overall proportion of foreign-born residents in the population. In all Nordic countries the homicide offending rates of immigrants are higher than those of native residents, but this difference is substantially larger in Scandinavia than in Iceland or Finland. Regarding homicide mortality, the situation is similar in Iceland and the Scandinavian countries: immigrants´ homicide mortality is two- to four-fold compared to that of the native population. In Finland the situation is the opposite, as the risk of native-born persons to die of homicide is higher than that of foreign-born residents. In fact, it is also higher than foreign-born residents´ risk to die of homicide in any other Nordic country except Norway.

Alcohol. The role of alcohol and drinking situations in lethal violence is central in Finland, Iceland and Sweden, but only moderate in Denmark and non-significant in Norway. This is reflected in the temporal, especially weekly, distribution of homicide incidents; and to the lower percentage of domestic homicides and the higher percentage of male victims in Finland, Iceland and Sweden. It may also lie behind the higher mean age of male victims in Finland and Iceland. Thus, phenomena that

are often linked to differences in mere overall homicide mortality levels: the proportion of domestic homicides and proportion of male victims in the Nordic countries, seem to be linked to the role of alcohol in homicidal crime, not in the level of overall homicide mortality (Lappi-Seppälä & Lehti 2016; Suonpää et al. 2019).

Firearm homicide. Concerning firearm homicides, Sweden is currently a clear outlier in the region with a quarter of homicides perpetrated by firearms; also the firearm homicide rate in Sweden at the moment is the highest. The situation has deteriorated fast in the last few years. The crimes are concentrated in the metropolitan areas of Stockholm, Gothenburg and Malmö and to a large extent are linked to gang violence in a few residential districts. Firearm homicide mortality has increased among young males (Sturup et al. 2018). The exceptional situation in these districts has caused Sweden´s overall homicide rate to increase and is also one reason behind the lower clearance rate of homicides in Sweden than in the other Nordic countries.

Only a small amount of interpersonal violence is lethal. Criminologists sometimes suggest that homicide can be taken as a proxy for total violence in society. However, this may not be entirely self-evident. The higher homicide mortality observed in Finland does not seem to mean higher general crime levels or higher non-lethal violent crime levels. According to Nordic Criminal Statistics (von Hofer et al. 2012), multinational victim surveys (van Dijk, Kesteren, & Smit, 2007) and youth crime surveys (Kivivuori 2007), non-lethal violent crimes are not more prevalent in Finland than in other Nordic countries. Thus, it is possible, that lethal violent crimes have partially different aetiologies than non-lethal crimes do. However, a Finnish study comparing violent lethal and non-lethal offenders reported that homicide offenders tend to resemble offenders of non-lethal aggravated violent crimes (Suonpää, Kivivuori & Aaltonen 2018). It is also probable that the proportion of unreported violent crimes is substantially larger among non-lethal violence, and this disparity hampers the comparisons. Hence, the question of whether higher homicide levels reflect the higher level or higher lethality of severe violence, remains contested.

In general, however, Nordic homicide clearance rates are among the highest in the world, offenders are almost without exception caught, and sentenced. The official control policies are effective and arguably contribute to the globally very low homicide rates in the region. Even the homicide levels of Finland and the Swedish metropolises, while high in the Nordic context, are extremely low in the global context.

A long-term ambition of this report will be the basis for regular updates in the years to come. These updates would facilitate the disaggregation of new trends that may occur in lethal violence in the Nordic area. Second, we plan to expand the current report to cover Northern Europe (see Suonpää et al, 2019 for an example). Third, homicide research would benefit from a separate analysis of metropolitan areas. All these initiatives should start from the basic goal of detailed and disaggregated description. Based on that, homicide research could move towards more explanatory aims and designs. These efforts of contemporary criminology are further assisted by the parallel expansion of Nordic homicide databases into historical periods, providing a comparative basis for interpretation across the long duration.

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