

26 February 2018

Icelandic names and naming practice

Abstract The analysis of naming practice in Iceland shows that:

- only 200 given names (eiginnöfn) account for the names of almost 80% of the male or female population
- more than 35% of people less than 30 years old inherit some of their grandparents' given names. This percentage is higher for older generations
- over 8% of people less than 50 years old inherit some of their parents' names, more often men than women. The percentage is about the same for older generations
- newborns' names in Iceland are correlated to popular names from sports (football, handball), music and film around 82% of people have patronymics and/or matronymics (föðurnöfn, móðurnöfn) as their last name, about 4% have Icelandic family names (ættarnöfn), about 14% have different types of last names, mostly non-Icelandic
- when only the father has a family name, most children inherit it (about 70%), but a significant percentage receive a traditionally formed name (about 30%, mostly patronymics)
- when only the mother has a family name, most offsprings receive a traditionally formed last name (about 85%, mostly patronymic, slightly higher for men than women) and only a small proportion (about 15%, slightly higher for women than men) the mother's family name.

The distribution of birthdays has evolved with time. For instance there is a significantly higher numbers of births during summer months in the past decade than 50 years ago when births were more evenly distributed throughout the year.

Introduction

In this paper, register data is used to analyse given names' popularity by age, gender and birthplace ($landsvæ\delta i$) in Iceland and to shed light on naming practice, such as how likely it is to inherit grandparents' or parents' given names¹ ($eiginn\ddot{o}fn$), what are the recent cultural influences reflected in the choices of first names for babies, how likely is to have a patronymic ($f\ddot{o}\delta urn\ddot{o}fn$), a matronymic ($m\delta durn\ddot{o}fn$) or a family name ($attarn\ddot{o}fn$), depending on age, gender and various attributes of parents.

Details about the data sources, limitations, coverage and the uncertainty of the estimates are given in the Appendix.

¹ Guðrún Kvaran, Nöfn Íslendinga, Reykjavík: Forlagið, 2011. We thank Guðrún Kvaran for advice and useful discussions



Given names

According to the 1703 census, there were 387 and 338 given names for men and women respectively The number of Icelandic names in *Mannanafnanefnd*—database¹ at the beginning of 2017 was 1,912 for men and 2,118 for women. At the same time, the total number of given names according to Registers Iceland was 6,188 for men and 7,322 for women, these numbers include names of foreign origin and most of them have very few occurrences in the population.

Most popular given names

Alexander was the most popular given name of new born male children in 2016, followed by Aron and Mikael. For new born girls, Emilía, Emma and Elísabet were the most frequent names.

In the population as a whole the rankings of the most popular given names have not changed significantly in the last five years. Among males, Jón is the most frequent first name, followed by Sigurður and Guðmundur, while Jón Þór, Gunnar Þór and Jón Ingi are the most frequent double names. Among females, Guðrún, Anna and Kristín are the most popular names while Anna María, Anna Margrét and Anna Kristín are the most popular double name combinations.

Popularity by age group

The frequencies of given names have changed through time. For example, about one in five women was called Guðrún when the 1703 census was conducted, but only one in ten according to the 1910 census. During the same time, the total number of female names tripled. In the 100 years which followed, the number of Icelandic female names in *Mannanafnanefnd's* database has doubled while the name Guðrún is three times less frequent. The population itself has increased approximately seven times since 1703.

In addition to frequencies of names, their rankings tell an interesting story. Classical names which are most common in the population as a whole have been constantly in the top 20 for the last 100 years, as shown in figure 1a for female names and figure 2a for male names. However, fewer children born in the last 10 years have names like Guðrún, Kristín, Sigurður, Gunnar or Ólafur.

¹ https://www.urskurdir.is/

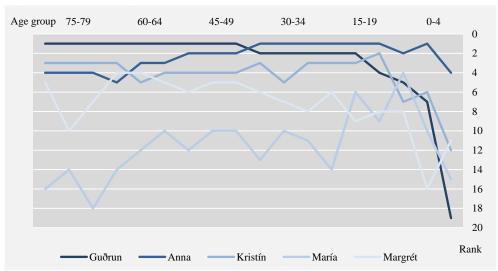
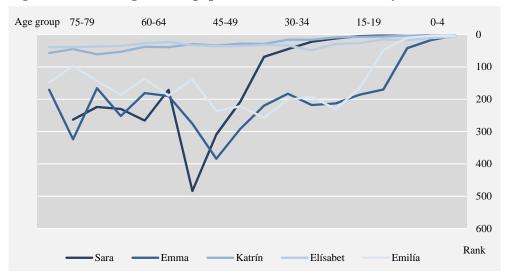


Figure 1a. Ranking of most frequent female names 1 January 2017





Other names have kept a constant, rather high ranking through time, like Kristján, Anna, Katrín and Elísabet (see figures 1a, 1b and 2b). Yet a very different pattern is shown by the names which are now most popular for young children, such as Emma, Sara, Emilía or Alexander, Aron, Viktor and Mikael. They are ranked only in the first 500 or 700 places in the older age-groups (figures 1b and 2b).

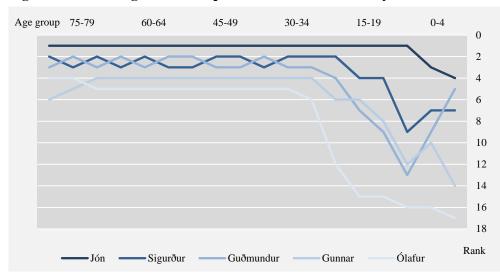


Figure 2a. Ranking of most frequent male names 1 January 2017





Popularity by birthplace

The popularity of given names vary also by region of birth. For example, most girls born in 2016 who were given the name Emilía were in the West, but girls named Íris in the East, Birta, Karítas or Sunna in the North East, Emma in the North West, Auður in the Westfjords, Hanna in Southwest, Sara in the Capital region and Kristín or Rakel in the South. Boys born in 2016 were most often given the name Alexander in the Capital region, East and Southwest, but Aron in the West and North East, Arnar in the South, Baltasar or Arnór in the North West and Haukur, Sigurður or Trístan in the Westfjords. The ranking of names in the population as a whole varies less by region of birth. Most men are named Jón, Guðmundur or Sigurður wherever they are born, while Guðrún and Anna are the most popular given names for women, irrespective of their birthplace in Iceland.

Most people share few names

Most people in Iceland (around 80%) share a pool of only 200 female and 200 male names. The evolution of the total number of names in the whole population through the last 100 years is also reflected by its distribution by age. Figure 3 shows an increase in the number of names for ages between 25 and 50, due to an

influx of immigrants. However, most of the names are very rare, belonging to one or very few people.

Number 2.000 1.800 1.600 1.400 1.200 1.000 800 600 400 200 0 10-14 | 20-24 | 30-34 | 40-44 | 50-54 | 60-64 | 70-74 35–39 45-49 55-59 Age groups ■ Female names ■ Male names

Figure 3. Names in the population by age and sex 1 January 2017

Most popular double names

About 62% of the population have more than one given name. The most popular double names for males at the beginning of 2017 were Jón Þór, Gunnar Þór and Jón Ingi. The most frequent double names for females were Anna María, Anna Margrét and Anna Kristín. María was the most frequent second name for baby girls in 2016, followed by Ósk and Rós. The second name of baby boys was most often Þór, Máni or Hrafn.

Names of grandparents

Many children inherit the names of their grandparents. Out of all people younger than 30 years, 35% have a given name which is inherited from one of their grandparents' given names. On the whole population, this proportion is likely to be *higher*, since people of older ages have higher probability of observing the tradition.

Note that expert data pairing female and male names (for example: Jakob, Jakobína) is lacking, therefore the tests for fitting children's and grandparents' or parents' names are done only for same gender.

More men than women share their grandparents' names, and the proportion grows with age, as shown by the trend in figure 4. One may estimate that more than a half of people over 65 have their names from their grandparents (see Appendix for details).

55
50
45
40
35
30
25
20
7 1 6 11 16 21 26
Females Males

Figure 4. People with first or second name identical to one of the names of their grandparents by age and sex 1 January 2017

Names of parents

Around 8% of all people less than 50 years old inherit one of their parents' given names, more often their father's name. Note that the proportions are rather stable in time, as shown in figure 5, where the variations by age for each gender are plotted.

2 Females Males

Figure 5. People with first or second name identical to one of the names of their parents by age and sex 1 January 2017

Correlated factors

A measure of the association, although not of causation, between given names and cultural/social factors may be obtained by using "google trends" for the big data of web searches during the past few years. Such a method shows that the top queries in Iceland, correlated to the most popular names of girls and boys, are related to names of people from sports (men's and women's football and handball), film and music.

For instance, the search term "Aron" has, as top correlated queries, names of Icelandic football and handball players while the term "Emilia" has names from the film industry as top correlated search topics. Comparing searches of newly popular names with classical ones, like Alexander versus Jón, or Emma versus Anna, one finds a much higher score for the classical names, although slowly declining in time, with a broader class of associated queries. The newly popular names show an increasing trend although much smaller in volume and a narrower search topic.

Patronymics or matronymics

At the beginning of 2017, about 82% of the population had traditional last names, i.e. patronymics or matronymics, around 4% had Icelandic family names and 14% other types, mostly of foreign origin.

Patronymics

More than 98% of the traditional last names are patronymics, based on the father's first or second given names. The higher the age, the higher this proportion is, see Figure 6, with the exception of women 18 to 35 years old, which show a decreasing trend.

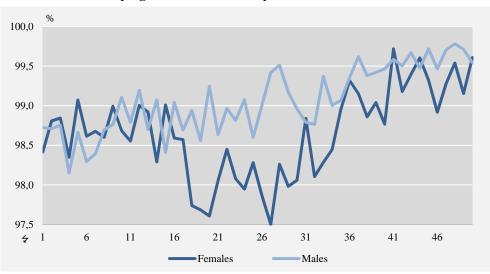


Figure 6. People with a patronymic name, out of all people with traditional names by age and sex 1 January 2017

Matronymics

The use of matronymics has increased lately, especially for women 18 to 35 years old, as shown in Figure 7, the complement of the trend in Figure 6. This practice is not yet as common as the use of patronymics and only around 1% of people with

-

¹ https://www.google.com/trends.

traditional last names have a matronymic name. The estimated percent for people over 65 years old is smaller than half percent.

2,5 2,0 1.5 1,0 0,5 0,0 6 11 16 21 36 41 31 46 Females Males

Figure 7. People with a matronymic name, out of all people with traditional names by age and sex 1 January 2017

Icelandic family names

A list of 630 family names in Iceland has been built by The Árni Magnússon Institute for Icelandic Studies, according to a set of rules described on their website¹. This list is based on multiple sources, including the *Ættarnafnabók 1915-1925*. Almost 400 of these family names are represented in the population at the beginning of 2017. Twenty families have more than 100 people each (see Table 1). The total number of people with family names is around 12,000, i.e. almost 4% of the population. The most common family names as of 1st of January 2017 were Blöndal (324), Thorarensen (293) and Hansen (282).

Icelandic family names by age

The likelihood of having a family name has changed with time. This is illustrated by the fact that the proportion of people of a given age who carry a family name is lower for people younger than 40 than for people older than 40, as shown in Figure 8, for both men and women.

¹ http://www.arnastofnun.is/page/aettarnofn_a_islandi

5,0
4,5
4,0
3,5
3,0
2,5
2,0
7 1 11 21 31 41 51 61
Females Males

Figure 8. Proportion of people with family names by age and sex 1 January 2017

The way a family name propagates across generations depends on which of the parents carries the name but it is almost independent of the sex of the children.

In families where at least one parent has a family name, it is the mother who has such a name in 51% of the cases, in 45% of the cases it is the father and in 4% of the cases both parents have one (same one or two different ones). A child born in such a family receives a traditional last name (57%), the father's (35%) or the mother's (8%) family name.

Father's family name, more often than a patronymic

Most people share their father's family name (about 70%), but a significant percentage receives a traditionally formed name (about 30%, mostly patronymic), irrespective of gender, and almost independent of age. The only change in this pattern concerns people aged between 25 and 35, where the two categories have almost equal chances.

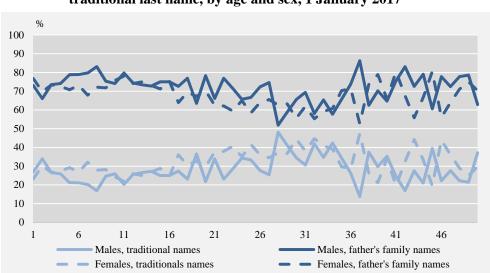
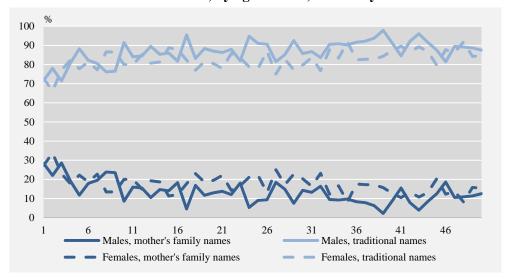


Figure 9. Proportion of people who carry their father's family name or a traditional last name, by age and sex, 1 January 2017

Mother's family name, less often than a patronymic

When only the mother has a family name, most offsprings receive a traditionally formed last name (about 85%, mostly patronymic, slightly higher percentage for men than for women) and only a small proportion (about 15%, slightly higher percentage for women than for men) the mother's family name. A small change in this trend, towards increasing the transmission of the mother's family, can be noticed in the last few years.

Figure 10. Proportion of people who carry their mother's family name or a traditional last name, by age and sex, 1 January 2017



When both parents have family name(s)

When both parents have a family name, the following inheritance patterns are observed:

- if the family names of the parents are different, 23% of the children receive a traditional name, 68% receive their fathers' family name and 9% their mother's family name.
- if the family names of the parents are the same, 95% of the children receive that name, while 5% receive a traditional last name.

Family name as middle name

Another way of preserving an Icelandic family name is by using it as a middle name. Around 1% of the total population have middle names which can be found on the standard list of Icelandic family names, while still carrying a traditional last name.

Patterns of birthdays

The distribution of birthdays has changed with time. The 10 years pooled data of births for people born 1956-1965 shows that they are almost as likely to be born any month of the year, except for November to February. The same kind of data for people born 50 years later show a clear pattern of significantly more births during the summer months.

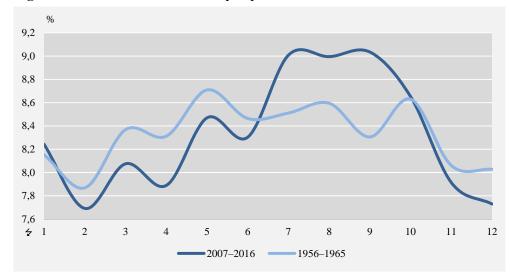


Figure 11. Distribution of birthdays by month 1956–1965 and 2007–2016

Appendix: data, coverage, errors, limitations

The quality of names' data is continuously improved by Registers Iceland / $Pj\delta\partial skr\dot{a}$ through a gradual process of verifying and updating complete names which started a few years ago. Almost 87% of the names in the population as of 1st of January 2017 have been confirmed or updated already.

The information about parents is incomplete, especially for people over 50 years old, and therefore on grandparents of people over 30 years old. In addition, Statistics Iceland does not have information about the parents of individuals of foreign background who arrive in Iceland when they are 18 years old.

A total of 209,690 people living in Iceland at the beginning of 2017 have full/partial information about their parents' names. For people less than 50 years old, the coverage is 83.7% of the population.

A total of 68,943 people have full/partial information about their grandparents' names, which is a 60% coverage for people less than 30 years old and with an Icelandic background, while for the coverage for the same age independent of background is 47%.

The margins of errors at 95% confidence level for the estimated proportions in the previous sections range from 0.3% for the frequencies which use the whole population as a reference, up to 1–5% for the conditional frequencies analysed by age and sex. The highest error values are for the distributions conditional on family names and the lowest for the ones conditional on traditional names, with intermediate values (1-2%) for the proportions regarding first names fitting the parent/grandparent's names, by age and sex.

Data regarding last names have good coverage, since full names are known for the whole population. The errors are generated mainly, but not exclusively, by the method of classifying them as patronymic, matronymic, Icelandic family names or foreign.

In addition, the incomplete data about parents has an impact when analysing last names statistics. There exist, for example, 10,456 persons (set A) with a set (m) of 41 names ending in "son" which could be either Icelandic family names or patronymics, and with insufficient information about parents.

The problem is solved by estimating the probability of being a family name versus a traditional name, for each element of the set m. This is done by using a calibration set of people, i.e. with known parents' names and also having names in m. The overall chance to have a family name for the people with names in m is estimated at $(1.7 \pm 0.2)\%$. Therefore, the people in A may be split into two subsets (of about 10,500 and 180 people) to be added, as counts, to the un-ambiguously defined sets of people with traditional and family names (of sizes 268,153 and 11,815 people, respectively).

Patronymics and matronymics were identified by a simple pattern matching algorithm, with estimated error rate of 0.4%. Only the very last name of each individual was considered. The group of people having both patronymic and matronymic names was not analysed separately.

A limitation of this study is the lack of a database regarding pairings of male and female names, which implies that the calculated proportions of people sharing first names with parents or grandparents are underestimated.

Another limitation is because of how given names are treated. Many of them are grouped according to alternative spellings which have been provided by the Icelandic Naming Committee. This procedure was changed several years ago, so that the names recently approved by this committee are not given an alternative spellings anymore. Until new expert opinion is provided, they are analysed as independent, distinct names.

Table 1. Family names belonging to largest families in Iceland 1 January 2017

Family name	Number
Blöndal	324
Thorarensen	293
Hansen	282
Olsen	224
Andersen	206
Thoroddsen	206
Möller	198
Nielsen	180
Waage	171
Bergmann	158
Briem	156
Thorlacius	155
Jensen	146
Hjaltalín	137
Scheving	135
Petersen	126
Kvaran	123
Fjeldsted	123
Norðdahl	113
Berndsen	105

Hagtíðindi Mannfjöldi Statistical Series *Population*

103. árg. • 4. tbl. 26 February 2018

ISSN 1670-4770 Umsjón Supervision Violeta Calian • violeta.calian@hagstofa.is

Anton Örn Karlsson • anton.karlsson@hagstofa.is

© Hagstofa Íslands Statistics Iceland • Borgartúni 21a 105 Reykjavík Iceland

www.hagstofa.is www.statice.is

Sími *Telephone* +(354) 528 1000 Um rit þetta gilda ákvæði höfundalaga. Vinsamlegast getið heimildar.

Bréfasími Fax +(354) 528 1099 Reproduction and distribution are permitted provided that the source is mentioned.