

## AUS DER FORSCHUNG

# Knowledge in and Views of Home Economics in Finland and Germany – A Pilot Study in the Region of Joensuu and the Altmarkkreis Salzwedel

Anja Müller / Margot Steinel / Anne-Maija Härkönen

*Due to the results of the Pisa studies it is assumed that the Finnish school system is more suitable to teach home economics than the German one. The objective of the paper is to test two hypotheses. The first hypothesis implies that Finnish people have a larger knowledge in home economics than German ones. The second hypothesis says that home economic workers have a better image in Finland than in Germany. To test the hypotheses, a sample of persons was drawn in each country. The Finnish sample consisted of 119 persons from the region of Joensuu, the German one of 115 persons from the Altmarkkreis Salzwedel (Sachsen-Anhalt). In 2003, the members of the sample were given a standardized questionnaire. The questions related to the two hypotheses. The analysis of the answers show that Finnish people do not have a larger knowledge in home economics than German people. Home economic workers in general and cleaners in particular have a higher reputation in Finland than in Germany.*

## 1 Problem and Objective

Private households in Middle and North Europe have to cope with several problems in the last years. Media report an increasing number of overweighted people and people with metabolic disorders. The first poverty report of the Federal Republic of Germany shows an increasing number of indebted households in the country (Bundesministerium für Arbeit und Sozialordnung 2001). One reason for

these problems may be that concerning home economics knowledge and abilities of the people decrease in the course of time. Due to the Pisa studies 2000 (Artelt et al. 2001) and 2003 (Prenzel et al. 2004) it is assumed, that the Finnish way to teach is better than the German one. Methfessel (2003) reports that the education debate in Scandinavia is run in an innovative way oriented in the Lifeworld. The literature (e. g. Aulanko 2001, 2002, 2004) and observations by the authors lead to the presumption, that cleaning services have a better reputation in Finland than in Germany.

The objective of this paper is to test the following hypotheses:

- The Finns in the region Joensuu have more knowledge in home economics than the Germans of the Altmarkkreis Salzwedel.
- Home economic workers in general and cleaners in particular have a higher reputation in Finland than in Germany.

### Hauswirtschaftliche Kenntnisse und Einstellungen zur Hauswirtschaft in Finnland und Deutschland am Beispiel der Region Joensuu und des Altmarkkreises Salzwedel

*Die Ergebnisse der Pisa-Studien legen die Vermutung nahe, dass das finnische Schulsystem für die Wissensvermittlung besser geeignet ist als das deutsche. Auch für die Vermittlung hauswirtschaftlichen Wissens kann dies angenommen werden. Der vorliegende Beitrag hat das Ziel, zwei Hypothesen zu überprüfen. In der ersten wird vermutet, dass die finnische Bevölkerung über ein größeres hauswirtschaftliches Wissen verfügt als die deutsche. Die zweite Hypothese vermutet, dass hauswirtschaftliche Kräfte in Finnland ein höheres Ansehen haben als in Deutschland. Um die beiden Hypothesen zu überprüfen, wurden in beiden Ländern nach Alter und Geschlecht aufgeteilte proportionale Quotenstichproben in der 18- bis 75-jährigen Bevölkerung zweier vergleichbarer Regionen gezogen. Die finnische Stichprobe mit 119 Personen wurde in der Region Joensuu gezogen. Die deutsche Stichprobe bestand aus 115 Personen im Altmarkkreis Salzwedel (Sachsen-Anhalt). Zwischen Juni und Oktober 2003 wurde eine schriftliche standardisierte Befragung zu ausgewählten Wissens- und Einstellungsbereichen durchgeführt. Im Ergebnis zeigte sich für die finnische Bevölkerung kein größeres hauswirtschaftliches Wissen als in der deutschen Bevölkerung. Die Wertschätzung hauswirtschaftlicher Berufe im Allgemeinen und von Reinigungskräften im Speziellen ist in Finnland jedoch signifikant höher als in Deutschland.*

## 2 Education in Home Economics in Finnish and German Schools

In Finland everybody has to go to school for nine years. During the school years 7 to 9, every pupil has to pass a course in home economics. In Germany there is a federal school system. The school systems differ from Land to Land. In Sachsen-Anhalt only pupils at secondary schools have to pass a course in home economics in class 7 to 9. There is no compulsory home economics course in grammar schools.

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Table 1: Composition of the sample by age, gender and region

Group of age (years)	Finland Region Joensuu			Germany Altmarkkreis Salzwedel		
	18-34	35-54	55-74	18-35	36-55	56-75
Women	19	25	15	17	26	16
Men	18	25	17	15	23	18
Total		119			115	

Source: Own investigation

Table 2: Content of the interview concerning the knowledge in home economics

Field of Home Economics	Content
Nutrition	– Concentration of fruit in juice (labeling of fruit juice) – Requirements of main nutrients
Cleaning	– Cleaning of wooden floors – Waste materials belonging to compost
Laundry	– Meaning of textile care symbols – Difference between washing programs
Management of household	– Value of the old currency compared with the Euro – Difference between types of life insurances

Source: Own investigation

### 3 Methodology

The population of this investigation consists of all 18 to 74 (resp. 75) year-old inhabitants of the Finnish region Joensuu and the German Altmarkkreis Salzwedel (Sachsen-Anhalt) excluding inhabitants with a vocational training in home economics.

For each region a quoted sample is worked out with at least 15 person per cell. The composition of the sample is proportional to age and gender in the population. Table 1 shows the composition of the sample. Other quotations (e. g. education level, household size) would have been desirable, but not practicable because of missing data.

The written interviews were taken with a standardized questionnaire containing eight questions concerning knowledge in home economics and nine questions about views of home economics. The questions comprise mostly knowledge at the practical level in the style of Steinel, Skaletzki (2001).

Table 2 shows the content of the questions concerning knowledge in home economics. For the evaluation of the results every correct answer is graded "1". A wrong answer and an answer "don't know" are graded "0". A knowledge score is calculated for each participant by calculating the mean of the grades for the different questions. That knowledge score is the proportion of correct answers (1 implies that all answers are correct; 0 implies no correct answer).

To test the views of Finns and Germans several aspects were taken into account. First the people should estimate the *importance of learning everyday competences* (to bake a cake; to connect a washing machine; to iron a blouse; to get along with the monthly income). They should specify by a

range of figures (1 = unimportant, 2 = less important, 3 = important, 4 = very important) how important it is in their opinion to acquire these abilities. The figures were used to calculate an average importance for every competence (the bigger the average, the bigger is the importance of learning the competence).

Furthermore, *the popularity and tolerance of home economic jobs* in the region Joensuu and the Altmarkkreis Salzwedel were investigated. To get results of the popularity of these jobs the participants had to put in order (1 = most unpopular, 2 = less popular, 3 = popular, 4 = most popular) the following jobs: kitchen worker, dustworker, cleaner, waiter/waitress. Using these figures an average popularity was calculated for each job (the bigger the number, the bigger is the popularity of each job). To find out more about the tolerance of home economic jobs the probands had to give their opinion, whether or not they feel disturbed if a cleaner or electrician is carrying out their work during the day in an office. Furthermore, an *estimated adequate salary level for cleaners* should be found out for each region. Therefore salary margins were given (less than 4 €/h, 4 to 5 €/h, 5 to 6 €/h, 6 to 7 €/h, 7 to 8 €/h, more than 8 €/h) and the probands told which salary is adequate to their opinion. Average adequate salary was calculated for each region.

Finally the prejudices towards *home economic jobs as typical jobs for women* are investigated. Therefore the probands should say, for which of the following jobs women are more suited than men: kitchen worker, dustworker, cleaner, waiter/waitress. The interviews run in German and Finnish between June and October 2003. The answers were analysed with the help of the statistic program SPSS 11.0 for Windows. To find out significant differences the t-test was used.

### 4 Results

In this paper only the main results for each region are shown. Detailed results for different ages and gender can be found in Müller (2004).

#### 4.1 Knowledge in Home Economics

Table 3 shows the knowledge scores of the Finnish (region Joensuu) and German (Altmarkkreis Salzwedel) population in each field of knowledge and for each question.

The inhabitants of the German region have a significant better knowledge in *nutrition* than the ones of the Finnish region. Almost 90 % of the Germans know among the main nutrients the one with the highest requirement. Half of the Finns know this.

In the field of *cleaning* there is no significant difference in the knowledge of Finns and Germans. Significantly more Finns than Germans know about the cleaning of wooden floors, whereas significantly more Germans know about waste materials belonging to compost.

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Table 3: Knowledge in home economics (knowledge score) in the Finnish and German population

Field of Knowledge	Finland Region Joensuu	Germany Altmarkkreis Salzwedel
<b>Nutrition*</b>	<b>0.40</b>	<b>0.64</b>
Labeling of fruit juice	0.33	0.42
Requirement of main nutrients*	0.47	0.88
<b>Cleaning</b>	<b>0.66</b>	<b>0.68</b>
Cleaning of wooden floors*	0.89	0.74
Waste products belonging to compost*	0.43	0.63
<b>Laundry</b>	<b>0.35</b>	<b>0.41</b>
Meaning of textile symbols*	0.24	0.42
Difference between washing programs	0.47	0.39
<b>Management of household</b>	<b>/</b>	<b>0.57</b>
Value of the old currency compared with the Euro*	0.72	0.53
Difference between types of life insurances	/	0.61
<b>Overall</b>	<b>0.51</b>	<b>0.57</b>

Source: Own investigation

1: all answers correct; 0: no answer correct; \*: difference is significant

There is no large knowledge in the field of laundry in both populations. The score is in both regions under 0.50. However, the Germans know significantly more about the meaning of the textile care symbols than the Finns. The Finns have (not significantly) more know-how about the different washing programs. In the field of *management of households* the knowledge score could be investigated only for the German region. Due to translation problems the Finnish answers to the question about the types of life insurances could not be analysed. It was however found out that significantly more Finns than Germans know the value of their old currency compared with the Euro.

Altogether the Finns have a significantly lower knowledge in home economics (0.51) than the Germans (0.57). Therefore the assumed hypothesis is refused.

### 4.2 Views of Home Economics

#### 4.2.1 Popularity and Tolerance of Home Economics Jobs

Table 4 shows the rank of popularity of the different jobs in both regions. The job of a kitchen worker is the most popular in the Finnish region Joensuu.

The most popular job in the German region is waiter or waitress. The job of a cleaner is in both regions on the third position. The job of a dustworker is for Finns and Germans the most unpopular of all four jobs.

Figure 1 shows the tolerance concerning the presence of a cleaner or an electrician during the day in the Finnish (region Joensuu) and German (Altmarkkreis Salzwedel) population. Finns are significantly more tolerant than the

Table 4: Popularity ranking of home economic jobs in the Finnish and German region

Finland Region Joensuu	Germany Altmarkkreis Salzwedel
kitchen worker (3.19)	waiter/waitress (3.01)
waiter/waitress (2.45)	kitchen worker (2.70)
cleaner (2.31)	cleaner (2.51)
dust worker (2.05)	dust worker (1.70)

Source: Own investigation

(4 = most popular, 3 = popular, 2 = less popular, 1 = most unpopular)

Germans towards the presence of a cleaner in an office during the day. They are also (not significantly) more tolerant to an electrician in an office than the Germans. Germans are more tolerant towards an electrician in the office than towards a cleaner. Finns are more tolerant towards a cleaner than an electrician.

From the above results it can be concluded that home economic jobs have a better reputation in the Finnish than in the German region. Therefore the presumed hypothesis is accepted.

#### 4.2.2 Estimation of an Adequate Salary Level for Cleaner

Finnish people (region Joensuu) estimate the adequate salary for a cleaner significantly higher (8,30 €/hour) than the Germans (7,30 €/hour) (Altmarkkreis Salzwedel). This shows that cleaners have a better reputation in the region Joensuu than in the Altmarkkreis Salzwedel. The presumed hypothesis is accepted.

#### 4.2.3 Importance of Learning Everyday Competences

Figure 2 shows, how Finns and Germans assess the importance of learning everyday competences. For Finns (region Joensuu) the learning of connecting a washing machine is on second position, for the Germans (Altmarkkreis Salzwedel) this is the most unimportant competence to learn. In both regions it is most important to learn how to get along with the monthly income until the end of the month.

#### 4.2.4 Home Economic Jobs as Typical Jobs for Women

Figure 3 shows the opinion of Finns (region Joensuu) and Germans (Altmarkkreis Salzwedel) about the prejudice that home economic jobs are typical jobs for women.

In the Finnish region 32 % of the population and in the German region 48 % think that women are more suited to be a kitchen worker than men. Also significantly fewer Finns (27 %) than Germans (46 %) think that women are more suited for the job of a cleaner. 43 % of the Finns and 23 % of the Germans have the opinion that women are not more suited for any of these jobs than men. The opinion that home economic jobs are typical jobs for women is in the German region more spread than in the Finnish region.

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Figure 1: Tolerance concerning the presence of a cleaner or electrician in an office during the day

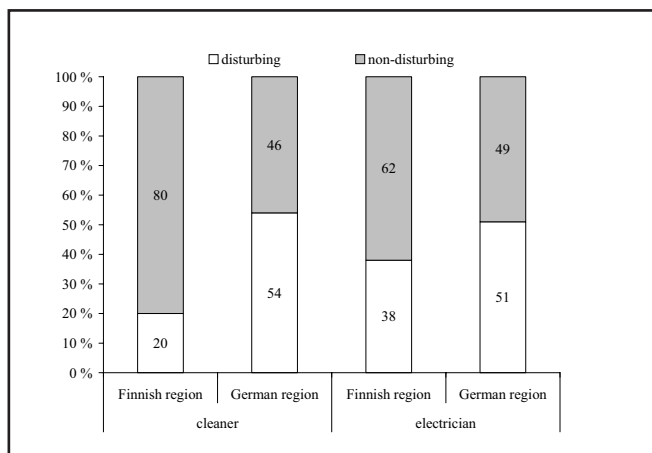


Figure 2: Importance of learning everyday competences in the Finnish and German region

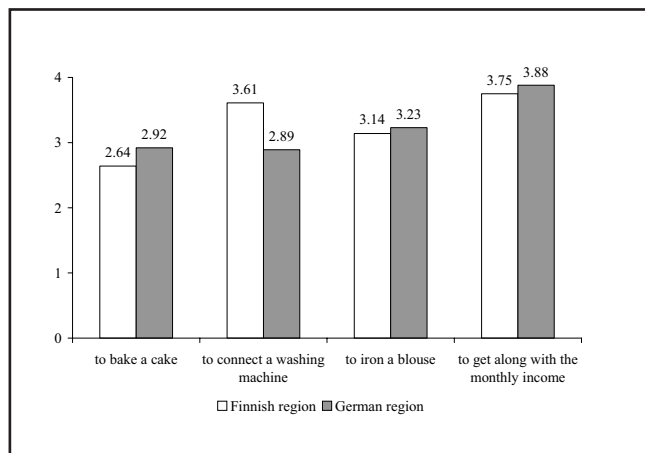
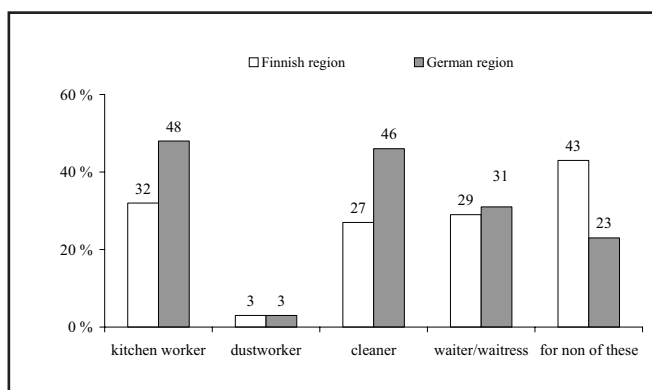


Figure 3: Finnish and German assessment of the better suitability of women for Home Economic jobs



Source of all figures: Own investigation

## 5 Conclusion

This investigation found a significant better knowledge in home economics, but a lower reputation of home economic jobs and especially cleaning jobs in the sample of the German Altmarkkreis Salzwedel compared with the Finnish region Joensuu.

Unfortunately, the sample is representative only concerning age and gender of the population in these regions; not concerning education level, household size, or rural vs urban origin. Therefore these results can only show a trend.

Further investigations with bigger and more representative samples are recommended. Furthermore the reasons for these differences should be analysed.

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(4 = very important, 3 = important, 2 = less important, 1 = unimportant)

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**Dipl.-oec.troph. (FH) Anja Müller**

Kalbenser Str. 26  
39638 Engersen

**Prof. Dr. Margot Steinel**

Hochschule Anhalt (FH)  
Strenzfelder Allee 28  
06406 Bernburg  
Tel. (03471) 355-1213  
Fax (03471) 355-91213  
steinel@loel.hs-anhalt.de

**Anne-Maija Härkönen, M.Sc (Food)**

North Karelia Polytechnic  
Degree Programme in Tourism  
Niskakatu 17  
FIN-80100 Joensuu  
Tel. +358-13-260-6780  
Fax +358-13-260-6771  
Anne.Harkonen@ncp.fi