

Journal of Health Monitoring · 2017 2(4)
DOI 10.17886/RKI-GBE-2017-131
Robert Koch Institute, Berlin

Authors:

Lea-Sophie Borgmann, Petra Rattay,
Thomas Lampert

Social support as a health resource in Germany

Abstract

Social support is a psychosocial resource that results from social ties and networks. It has a significant impact on health and can improve mental well-being, reduce stress and mitigate the impact of unfavourable living conditions. The GEDA 2014/2015-EHIS survey undertaken by the Robert Koch Institute (RKI) is used to examine the extent and distribution of perceived social support among the adult population in Germany (n=23,617). The results show that both women and men largely feel supported by the people they are close to and their neighbours. However, perceived social support is not distributed equally across the population: the elderly, people with low levels of education and the unemployed report relatively frequently that they receive low levels of social support. As such, the sections of the population that are more frequently affected by health problems are also less likely to be able to rely on social support.

📌 SOCIAL SUPPORT · RESOURCES · SOCIAL FACTORS · HEALTH MONITORING · GERMANY

Introduction

Social support arises out of factors such as social ties and networks and is an important resource for health. Social support can have different, sometimes overlapping functions. On the one hand, it includes emotional support, which is characterised by feelings of affection and caring, and a perception of being understood by others. On the other, social support also involves instrumental support such as in the help people receive in dealing with specific everyday tasks including through the financial support or by undertaking unpaid work. It can also include help with shopping or paying bills, assistance with decision-making, opinions about the decisions a person has taken, and the provision of informational support [1, 2]. Data can be gathered on social support for research in various ways, but is mainly done by collecting data on perceived or expected social sup-

port, as well as the actual social support that a person receives [3].

It has been demonstrated empirically that perceived social support can have an impact on various aspects of health [2, 4-7]. Links between perceptions of psychological well-being, self-confidence and self-efficacy, but also to health-related behaviour such as physical exercise, tobacco and alcohol consumption and perceived social support have been observed [1]. People who do not feel that they are receiving sufficient social support are more frequently burdened by chronic stress, more likely to suffer from physical ailments and illnesses, and have a higher risk of mortality [1, 2, 8, 9]. Moreover, research on the adult population in Germany has shown that low levels of perceived social support among women and men in all age groups are associated with a significant increase in the prevalence of depression [10].

GEDA 2014/2015-EHIS

Data holder: Robert Koch Institute

Aims: To provide reliable information about the population's health status, health-related behaviour and health care in Germany, with the possibility of a European comparison

Method: Questionnaires completed on paper or online

Population: People aged 18 years and above with permanent residency in Germany

Sampling: Registry office sample; randomly selected individuals from 301 communities in Germany were invited to participate

Participants: 24,016 people (13,144 women; 10,872 men)

Response rate: 26.9%

Study period: November 2014 - July 2015

Data protection: This study was undertaken in strict accordance with the data protection regulations set out in the German Federal Data Protection Act and was approved by the German Federal Commissioner for Data Protection and Freedom of Information. Participation in the study was voluntary. The participants were fully informed about the study's aims and content and about data protection. All participants provided written informed consent.

More information in German is available at www.geda-studie.de

Indicator

Data was gathered as part of the GEDA 2014/2015-EHIS study through information provided by respondents as part of a paper or online questionnaire. The level of perceived social support was assessed using the Oslo 3-Item Social Support Scale (Oslo-3 Scale) [11]. The questionnaire included the following questions on perceived social support: 'How many people are so close to you that you can count on them if you have serious problems?' (possible answers were: 'none', '1 or 2', '3 to 5' and '6 or more'); 'How much concern do people show in what you are doing?' (possible answers were: 'a lot of concern and interest', 'some concern and interest', 'uncertain', 'little concern and interest' and 'no concern and interest'); and 'How easy can you get practical help from neighbours if you should need it?' (possible answers were: 'very easy', 'easy', 'possible', 'difficult', 'very difficult'). The answers provided were developed into a scale used to measure people's perceived social support. This was done by adding the single-point values gained from the three questions to form an index; possible values ranged from 3 to 14 points. Results ranging from 3 to 8 points were classified as a low level of support, 9 to 11 points as a medium level of support, and 12 to 14 points as indicating a high level of social support [12].

The analyses undertaken for the GEDA study are based on the information provided by 23,617 participants aged over 18 (12,921 women; 10,696 men) with valid data on social support. Analyses of (self-defined) employment status were limited to people of working age (up to 64 years). The calculations were carried out using a

weighting factor that corrected the sample for deviations from the German population structure (as of 31 December 2014) in terms of gender, age, municipality type and level of education. 'Municipality type' refers to the degree of urbanisation in a particular area and corresponds to the regional distribution in Germany. The International Standard Classification of Education (ISCED) was used to classify the information on education provided by the participants [13]. A statistically significant difference between groups is assumed to have been demonstrated when confidence intervals do not overlap.

A detailed description of the methodology used for GEDA 2014/2015-EHIS can be found in Lange et al. 2017 [14] as well as in the article [German Health Update: New data for Germany and Europe](#) in issue 1/2017 of the Journal of Health Monitoring.

Results and discussion

In Germany, 29.2% of women and 25.4% of men report that they experience high levels of social support ([Table 1](#) and [Table 2](#)). A further 53.2% of women and 55.7% of men report to perceive medium levels of social support. Only 17.6% of women and 19.0% of men stated that they perceived low levels of social support. The proportion of women who perceive low levels of social support increases slightly with age. However, the differences that were identified in terms of age and gender are not statistically significant.

The data demonstrate that the degree of social support that a person perceives is linked to their level of education: the proportion of women and men with low levels of social support is lowest among people with high

Table 1
Social support
 (Oslo 3-Item Social Support Scale)
 for women by age and education
 (n=12,921 women; n=10,696 men)
 Source: GEDA 2014/2015-EHIS



More than a quarter of adults in Germany state that they receive a high level of social support.

17.6% of women and 19.0% of men state that they receive very little social support.

Women	Low support		Medium support		Strong support	
	%	(95% CI)	%	(95% CI)	%	(95% CI)
Women (total)	17.6	(16.6-18.6)	53.2	(52.1-54.3)	29.2	(28.1-30.3)
Low education	23.0	(21.0-25.2)	51.7	(49.4-54.0)	25.2	(23.1-27.5)
Medium education	17.0	(15.8-18.2)	54.2	(52.9-55.6)	28.8	(27.4-30.2)
High education	12.3	(11.0-13.7)	51.6	(49.8-53.4)	36.1	(34.3-37.9)
18-29 Years	16.7	(14.5-19.2)	55.1	(52.5-57.6)	28.2	(25.9-30.5)
Low education	23.4	(18.2-29.5)	53.2	(47.0-59.3)	23.4	(18.5-29.1)
Medium education	16.1	(13.7-18.9)	54.9	(51.8-58.0)	29.0	(26.0-32.1)
High education	9.5	(6.9-13.1)	57.9	(53.3-62.4)	32.6	(28.6-36.9)
30-44 Years	17.9	(16.1-19.7)	52.5	(50.0-55.1)	29.6	(27.3-32.0)
Low education	29.3	(23.4-36.1)	45.8	(38.2-53.5)	24.9	(18.8-32.2)
Medium education	17.7	(15.5-20.0)	54.9	(51.8-58.0)	27.4	(24.6-30.4)
High education	12.2	(10.1-14.7)	50.4	(46.6-54.1)	37.5	(33.9-41.2)
45-64 Years	15.9	(14.6-17.3)	53.4	(51.7-55.0)	30.7	(29.1-32.4)
Low education	20.5	(17.1-24.4)	55.4	(50.9-59.7)	24.1	(20.6-28.0)
Medium education	15.9	(14.3-17.7)	53.4	(51.2-55.7)	30.7	(28.6-32.8)
High education	11.7	(9.9-13.7)	51.4	(48.4-54.4)	36.9	(34.1-39.8)
≥65 Years	20.2	(18.3-22.3)	52.3	(49.9-54.7)	27.4	(25.3-29.6)
Low education	22.6	(19.7-25.7)	50.8	(47.0-54.5)	26.7	(23.3-30.3)
Medium education	18.8	(16.2-21.6)	54.5	(51.3-57.7)	26.8	(24.0-29.7)
High education	17.0	(13.8-20.8)	48.5	(43.5-53.5)	34.5	(29.9-39.4)
Total (women and men)	18.3	(17.6-19.0)	54.4	(53.6-55.2)	27.3	(26.6-28.1)

CI=confidence interval

levels of education. This difference is significant among women for all respondents aged up to the age of 64. The same can be said of men aged over 30. In terms of the 30- to 64-year olds, high levels of social support are particularly frequently seen among women with high levels of education (when compared with the group with the lowest level of education). Among men, this applies to 30- to 44-year-olds.

With regard to employment status, the share of low levels of social support among unemployed women and

men aged between 18 and 64 years was significantly higher than among full-time and part-time employees (Figure 1). Among both genders, the proportion of unemployed people who perceived low levels of social support was particularly high in middle age (people aged between 30 and 64). High levels of social support are seen significantly more frequently among men aged 30 or above in full-time employment than among unemployed men in the same age group. This also applies to women aged between 45 and 64 years (data not shown).

Table 2
Social support
 (Oslo 3-Item Social Support Scale)
 for men by age and education
 (n=12,921 women; n=10,696 men)
 Source: GEDA 2014/2015-EHIS



Adults with lower levels of education are more likely to report low levels of perceived social support than adults with high levels of education.

The proportion of people who state that they perceive low levels of social support is significantly higher among adults who are unemployed.

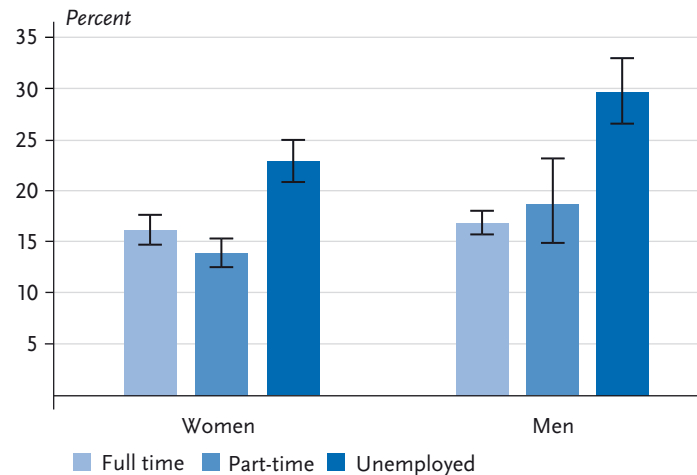
Men	Low support		Medium support		Strong support	
	%	(95% CI)	%	(95% CI)	%	(95% CI)
Men (total)	19.0	(18.0-20.0)	55.7	(54.5-56.8)	25.4	(24.4-26.4)
Low education	26.2	(23.4-29.2)	52.6	(49.3-55.9)	21.2	(18.5-24.2)
Medium education	19.4	(18.1-20.7)	56.0	(54.4-57.6)	24.6	(23.2-26.1)
High education	14.1	(12.9-15.4)	56.8	(55.1-58.5)	29.1	(27.6-30.6)
18-29 Years	18.9	(16.5-21.6)	55.0	(52.0-57.9)	26.1	(23.5-28.9)
Low education	23.4	(18.0-29.9)	51.0	(44.3-57.6)	25.6	(20.0-32.1)
Medium education	17.7	(14.8-21.0)	57.4	(53.3-61.4)	24.9	(21.7-28.4)
High education	15.2	(10.8-21.0)	51.8	(46.1-57.4)	33.1	(27.6-39.0)
30-44 Years	19.2	(17.1-21.4)	55.6	(52.9-58.2)	25.3	(23.2-27.4)
Low education	34.4	(27.0-42.7)	49.9	(42.0-57.9)	15.6	(10.3-23.1)
Medium education	18.5	(15.8-21.6)	58.0	(54.2-61.6)	23.5	(20.7-26.6)
High education	13.3	(10.7-16.4)	54.3	(50.5-58.0)	32.4	(29.2-35.8)
45-64 Years	18.9	(17.5-20.4)	55.9	(53.9-57.8)	25.2	(23.7-26.8)
Low education	24.4	(20.0-29.5)	54.0	(48.1-59.8)	21.5	(17.5-26.3)
Medium education	20.6	(18.5-22.9)	54.8	(52.0-57.6)	24.6	(22.3-27.0)
High education	13.7	(12.1-15.6)	58.5	(56.0-60.9)	27.8	(25.6-30.1)
≥65 Years	19.0	(17.2-20.9)	56.0	(53.7-58.2)	25.1	(23.0-27.3)
Low education	24.8	(20.3-29.9)	55.9	(49.9-61.6)	19.3	(15.4-23.9)
Medium education	19.6	(16.8-22.7)	54.7	(51.4-58.0)	25.7	(22.6-29.1)
High education	15.2	(13.1-17.5)	58.5	(55.2-61.8)	26.3	(23.4-29.5)
Total (women and men)	18.3	(17.6-19.0)	54.4	(53.6-55.2)	27.3	(26.6-28.1)

CI=confidence interval

The results of the GEDA 2014/2015-EHIS study show that more than four fifths of the adult population in Germany perceive themselves as having social ties and networks that provide them with medium to high levels of social support. However, women and men with low levels of education are more likely to perceive themselves as receiving low levels of social support from their social environment. In addition, unemployed women and men, in particular, report that they perceive low levels of social support. Therefore, the population groups that are more

frequently affected by health problems are also less likely to be able to rely on social support. These results are consistent with the data gathered for previous GEDA studies as well as a study on the ties between social support and health conducted within data of the Socio-Economic Panel [4, 6].

Figure 1
Proportion of low levels of perceived social support (Oslo 3-Item Social Support Scale) by gender and employment (n=10,140 women; n=7,847 men)
 Source: GEDA 2014/2015-EHIS



References

- Berkman LF, Glass T (2000) Social integration, social networks, social support, and health. *Social Epidemiology* 1:137-173
- Uchino BN, Cacioppo JT, Kiecolt-Glaser JK (1996) The relationship between social support and physiological processes: a review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin* 119(3):488
- Schwarzer R, Knoll N (2007) Functional roles of social support within the stress and coping process: A theoretical and empirical overview. *International journal of psychology* 42(4):243-252
- Kroll LE, Lampert T (2011) Unemployment, social support and health problems: results of the GEDA study in Germany, 2009. *Deutsches Ärzteblatt International* 108(4):47
- Uchino BN (2006) Social support and health: a review of physiological processes potentially underlying links to disease outcomes. *Journal of Behavioral Medicine* 29(4):377-387
- Kroll LE, Lampert T (2007) Sozialkapital und Gesundheit in Deutschland. *Das Gesundheitswesen* 69(03):120-127
- Taylor SE (2011) Social support: A review. *The handbook of health psychology* 189:214
- Hapke U, Maske U, Scheidt-Nave C et al. (2013) Chronischer Stress bei Erwachsenen in Deutschland - Ergebnisse der Studie zur Gesundheit Erwachsener in Deutschland (DEGS1). *Bundesgesundheitsbl Gesundheitsforsch Gesundheitsschutz* 56(5/6):749-754 <http://edoc.rki.de/oa/articles/re4jxGWhL5gE/PDF/21xYyCjzhA-zM.pdf> (As at 28.09.2017)
- Holt-Lunstad J, Smith TB, Layton JB (2010) Social relationships and mortality risk: a meta-analytic review. *PLoS medicine* 7(7):e1000316
- Mütters S, Hoebel J, Lange C (2013) *Diagnosis Depression: Differences in Women and Men*. Robert Koch Institute, Berlin. *GBE kompakt* 4(2) <http://edoc.rki.de/series/gbe-kompakt/4-2/PDF/2.pdf> (As at 28.09.2017)
- Dalgard OS, Tambs K (1995) Social support, negative life events and mental health. *The British Journal of Psychiatry* 166(1):29-34
- Kilpeläinen K, Aromaa A (2008) *European health indicators: development and initial implementation: final report of the ECHIM project*. Helsinki University Press, Helsinki
- Statistical Office of the European Union (Eurostat) (2016) *International standard classification of education (ISCED)* [http://ec.europa.eu/eurostat/statistics-explained/index.php/International_Standard_Classification_of_Education_\(ISCED\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/International_Standard_Classification_of_Education_(ISCED)) (As at 13.01.2017)
- Lange C, Finger JD, Allen J et al. (2017) Implementation of the European health interview survey (EHIS) into the German health update (GEDA). *Archives of Public Health* 75(1):40

Imprint

Journal of Health Monitoring

Author details

Robert Koch Institute
Department of Epidemiology and Health Monitoring, Berlin

Corresponding author
Lea-Sophie Borgmann
Robert Koch Institute
Department of Epidemiology and Health Monitoring
General-Pape-Str. 62–66
D-12101 Berlin, Germany
E-mail: BorgmannL@rki.de

Conflicts of interest

The authors declared no conflicts of interest.

Funding

The GEDA study was funded by the Robert Koch Institute and the German Federal Ministry of Health.

Note

External contributions do not necessarily reflect the opinions of the Robert Koch Institute.

Publisher

Robert Koch Institute
Nordufer 20
D-13353 Berlin, Germany

Editors

Susanne Bartig, Johanna Gutsche, Dr Franziska Prütz,
Martina Rabenberg, Alexander Rommel, Dr Anke-Christine Saß,
Stefanie Seeling, Martin Thißen, Dr Thomas Ziese
Robert Koch Institute
Department of Epidemiology and Health Monitoring
General-Pape-Str. 62–66
D-12101 Berlin
Phone: +49 (0)30-18 754-3400
E-mail: healthmonitoring@rki.de
www.rki.de/journalhealthmonitoring-en

Typesetting

Gisela Dugnus, Alexander Krönke, Kerstin Möllerke

Translation

Simon Phillips/Tim Jack

Please cite this publication as

Borgmann LS, Rattay P, Lampert T (2017) Social support as a health resource in Germany. *Journal of Health Monitoring* 2(4):110–115.
DOI 10.17886/RKI-GBE-2017-131

ISSN 2511-2708



This work is licensed under a
Creative Commons Attribution 4.0
International License.



The Robert Koch Institute is a Federal Institute within
the portfolio of the German Federal Ministry of Health