

How can a proxy improve your life?

Determinants of Surrogate Health information Seeking in Germany

In many cases, not only those affected themselves but also their family members are seeking health information. This behavior is called proxy or surrogate seeking. It is defined as: “those who seek information on behalf or because of others, with or without necessarily being asked to do so [...]” (Abrahamson et al. 2008, p. 311). Proxy seeking can lead to more adequate use of health care services and improved health status by providing information to otherwise ‘hard-to-reach’ individuals (Lederle, Weltzien & Bitzer 2017).

In the U.S., approximately 67 % of health information seeking is proxy seeking (Cutrona et al. 2015). In Europe, the rate is as high as approximately 71 % (Reifegerste et al. 2017) and an increase in proxy search behavior has been observed for Germany in recent years (Link et al. 2022). Some determinants of proxy seeking (such as demographics, relationship-related factors, health status (of the person seeking the information), health literacy, and resources used for the seeking) are already known from older international studies (e.g. Sadasivam et al. 2013; Abrahamson et al. 2008; Oh 2015) and a more recent systematic review (Zhang & Liu, 2023). However, there is a lack of more current data on influencing factors of proxy seeking for Germany. Therefore, the aim of this study is to analyze the development of proxy seeking in the more recent years for Germany. Our research questions (RQ) are:

RQ1: What is the current rate of proxy seekers in Germany?

RQ2: How has the rate changed in the most recent years (2018/19 and 2022)?

RQ3: Which factors influenced the proxy search in Germany in the recent years?

To answer these questions, we conducted a quantitative secondary data analysis. The two waves of the HINTS Germany, surveyed in 2018/19 (N= 2.902) and 2022 (N= 2.602) and publicly available, served as the basis for the analysis (Stiftung Gesundheitswissen 2020; Stiftung Gesundheitswissen 2022). We considered all active health information seekers (2018/19: N = 2.147) (2022: N = 1.865) including self-seekers, surrogate seekers and those doing both in our analysis.

The results show differences in the rate of proxy seekers. With respect to RQ 1, only 36% (n = 772) could be classified as proxies in the first wave, whereas 42% (n = 778) were proxies in the second wave. With regard to RQ2 an increase of 6.2 % ($\chi^2(1) = 16.27$; $p < 0.001$) compared to the first wave could be detected. Considering RQ3, not all variables included in the hierarchical logit model were significant. The final models of the computed Hierarchical Logistic Models can be found in Table 1.

Table 1

<i>Model 1 and 2 Association of demographics, social support, health status, personal beliefs and the used source adjusting for multiple covariates (used data: HINTS, 2018/19 & 2022)</i>				
Variable	wave 1 (2018/19)		wave 2 (2022)	
	Adjusted OR	(95% CI)	Adjusted OR	(95% CI)
Gender				
male	Reference		Reference	
female	1.43	(1.17; 1.76)	1.59	(1.27; 1.98)
Age				
18-34 years	Reference		Reference	
35-49 years	0.93	(0.69; 1.26)	1.31	(0.93; 1.85)
50-64 years	0.98	(0.72; 1.33)	1.08	(0.78; 1.51)
65-75 years	1.14	(0.70; 1.88)	0.91	(0.53; 1.56)
o. 75 years	1.06	(0.60; 1.88)	0.92	(0.48; 1.78)
Employment status				
Full-time employed	Reference		Reference	
Part-time employed	0.97	(0.73; 1.28)	1.05	(0.76; 1.44)
Marginally employed (520 Euro job)	1.30	(0.63; 2.68)	1.20	(0.60; 2.41)
retired/pension	0.82	(0.56; 1.20)	1.11	(0.73; 1.69)
Other	1.52	(0.90; 2.56)	2.25	(1.12; 4.52)
Unemployed	0.80	(0.48; 1.34)	1.48	(0.98; 2.23)
Vocational training				
no training	Reference		Reference	
in training	1.70	(0.81; 3.57)	0.76	(0.33; 1.77)
other vocational qualification	1.43	(0.64; 3.19)	1.66	(0.75; 3.68)
apprenticeship/ training	2.18	(1.25; 3.79)	2.19	(1.32; 3.65)
University degree/ master craftsman	1.72	(0.97; 3.06)	1.95	(1.12; 3.38)
highest educational attainment				
Secondary level 1	Reference		Reference	
Secondary level 2	1.10	(0.82; 1.46)	1.35	(0.98; 1.87)
University	1.29	(0.97; 1.71)	1.39	(0.99; 1.94)
family status				
without partnership	Reference		Reference	
in a steady partnership	1.37 *	(1.10; 1.72)	1.63 *	(1.25; 2.13)
Children in the household				
No	Reference		Reference	
Yes			1.07	(0.71; 1.63)
Number of people in the household	1.12 *	(1.02; 1.23)	1.05	(0.90; 1.23)
Health status				
very good	Reference		Reference	
Good	0.89	(0.79; 1.14)	0.80	(0.60; 1.06)
average	0.73 *	(0.53; 0.99)	0.58 *	(0.41; 0.82)
bad to very bad	0.52 *	(0.32; 0.86)	0.75	(0.45; 1.25)

How confident are you that you can get advice or information about health or medical issues when you need it?	(not included)	0.81 *	(0.71; 0.92)
How confident are you in your ability to take good care of your health?	1.00	(0.88; 1.14)	(not included)
Source used			
Physicians& other medical personnel.	Reference		Reference
alternative practitioners			
Media	2.00 *	(1.43; 2.80)	1.55 * (1.06; 2.28)
social environment	3.39 *	(1.79; 6.42)	2.02 * (1.09; 3.75)
Healthcare organization	1.02	(0.62; 1.66)	1.14 (0.68; 1.91)
Internet	2.00 *	(1.60; 2.49)	1.53 * (1.21; 1.94)
Other	2.67 *	(1.43; 4.97)	(not included)

Comparing the results of the model for wave 1 with those for wave 2, we find both similarities (e.g., being "female," employment status "other," having completed an "apprenticeship/training," having an "average" health status, and using certain sources such as "media," "social environment," and "Internet") and differences (see Table 1). Looking more closely at the differences, in wave 1, "number of people in the household," "bad to very bad" health status, and source type "other" are other significant determinants of proxy seeking; in wave 2, having a "university degree/ master craftsman" and confidence in getting advice or information on health or medical issues when needed are other significant determinants (see Table 1).

Over all our results are consistent in many respects with the findings of various previously named international studies. The results inform us, how family members can be addressed in a target group-specific manner to improve communication with vulnerable individuals.

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