Information about health issues: needs, (searching) behavior and influencing factors in an Amsterdam (student) population

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Summary

This study examined the question: What are the information needs and what is the information (searching) behavior in a (student) population in Amsterdam, when searching for information about health issues and how relate health status and demographic factors to those needs and that behavior? This is being examined in interests of Oude Turfmarkt General Practitioners (HOT), who have an extensive website with information about health issues and the GP, but also with e-health tools [1]. They wanted to know if there website fitted the needs of the (potential) users. To examine the information needs and information (searching) behavior a model has been created out of different other models derived from literature [2-7].

- Information needs: knowledge motive, entertainment motive, social motive, self-actualization motive and uncertainty motive; monitors and blunters.
- Information searching behavior: specific website, cluster website or "surfing" search; analytic or wholistic search; cognitive or emotional information use.

Health is measured on the basis of different health aspects: function disabilities, physical and/or psychological ailments, mental health / depression, vitality and anxiety [8]. The information needs, information (searching) behavior, health status and demographic factors were measured through a questionnaire. This study is performed among patients of HOT and students that did the online 'studenthealthcheck' of HOT. The relation between the different aspects of health status, the demographic factors and the information needs and the information (searching) behavior were analyzed by performing a logistic regression analysis. A relation was found significant if $p<0.05$. The main results were:

- Information needs: the majority of the studied population sought out of a knowledge motive (84%) and a self-actualization motive (88%) and were monitors (91%).
- Information searching behavior: majority used search engine (84%) with the intention to reach a number of specific websites 75%, were wholistic searchers (73%) and cognitive information users (92%).
- Health status vs. information needs: depression (OR: 1.86) and anxiety (OR: 3.06) positively related to searching out of social motive. Vitality negatively related to searching out of social motive (OR: 0.52).
- Health status vs. information searching behavior: depression positively related to using the information emotionally (OR:1.85).
- Demographic factors vs. information needs: age negatively related to searching out of knowledge motive (OR: 0.97). Being student positively related to entertainment motive (OR: 3.12) and social motive (OR:2.58).

People suffering from depression and/or anxiety need information that offers them a social interaction or is emotionally supportive. Health care providers should anticipate on these needs and provide tools like discussion boards or message groups. On the other hand, providing tools for social interaction and emotional support may not found to be the role of all health care providers. This may bring some difficulties. Future studies should focus on what tools and information for social interaction and emotional support are best for these groups of people. In conclusion, health care providers should be aware of the different information needs and information (searching) behavior for various people and should provide different tools and information about health issues to fulfill everyone's needs for information.

Introduction

Oude Turfmarkt General Practitioners / Student Doctors' Office is a general practice located in Amsterdam and specifically established to provide care for students from the University of Amsterdam (UvA) and Amsterdam University of Applied Sciences (AUAS). As technology is changing certain aspects of health care, Oude Turfmarkt General Practitioners is also changing their health care providing. To provide services online, they created an extensive website with health information and information about the general practice [1]. This website also got other e-Health tools, like online health tests, an e-consult and the possibility to make a doctors' appointment online [1]. This study is induced by the presumption that the website and provided e-Health tools may not correspond with the actual information needs and information seeking behavior of the (potential) users. What are their ordinary information needs and information (searching) behavior?

Channels and sources for health information

The Dutch population uses a variety of channels and sources for health information: the internet, a general or medical practitioner, family, friends, acquaintances, newspapers and magazines, books and encyclopedia, television and radio, the pharmacy, patient organizations and courses and lectures [9].

Nowadays the World Wide Web is the most important channel to get health information for the Dutch population [9,10]. In 2013 97% of the Dutch population had access to the internet, which explains the frequent use of internet as a medium for health information [11]. According to van Deursen and van Dijk, 84% of the total internet users searched for health related information in 2012 [12].

Internet

Various reasons for using the internet as a channel for health information have been given in literature. For instance, Brabers *et al.*(2012) showed that the rapidity with which you can gain information is often a reason to use the internet for almost 50% of the studied population. The fact that the information on the internet is up-to-date is as well often a reason to use the internet as a channel for health information for almost 50% of the studied population [9]. *Brabers et al.* (2012) also shows that the Dutch population mainly used internet to search for definitions, causes and treatments of diseases, symptoms and / or ailments [9].
Other research has shown that searching for health information on the internet is related to trouble finding required health services. People who experienced problems while seeking for these needed services searched more often for health information on the internet compared to people who didn't experience these difficulties [13].
Furthermore, studies have demonstrated that internet is being used, because of the anonymous factor to find health information about sensitive topics [14,15].

Factors that influence the information need(s) and information (searching) behavior

Several studies have shown that people differ in information need(s) and information (searching) behavior [12,16,17,18]. General factors that influence these needs and this behavior are gender and age. Females search for health related information on the internet more often than males [16,17]. Not only differ the sexes in frequency of searching for health information, they also appear to differ in used sources, in motivations for searching the information online and assessing the usability of the found information [17].Furthermore, according to van Deursen and colleagues (2012) the youngest group (age 16 to 35) they studied spends the most amount of time on the internet [12]. Their use of internet on health related information had the greatest effect on health participation, compared to other age groups in the study [12]. As deriving from these facts, the information needs and information (searching) behavior differ for differences in age. Finally, it seems that health status influences the needs and (searching) behavior for information about health issues [18-21]. All these studies have in common that they only studied association between health status and if people searched for health related information and what kind of information they were looking for. However, searching for information is induced by something. Boot and Meijman (2010) describe five different motives out of which people can search for health information [5]. The reason(s) behind the search, what the information searcher want to use the information for, and a possible relation with health status has almost never been investigated [20].

Research aim

The aim of this study is to get more insight in the information need(s) and information (searching) behavior of the Dutch population for health related information (on the internet). Besides this, demographic factors and health status that may influence these needs and this behavior are being examined. These explored information needs and this information (searching) behavior, together with the factors that might affect them, will eventually make it possible to make recommendations for the website of Oude Turfmarkt General Practitioners / Student Doctors' Office and other health care providers.

In conclusion, upper discussed aims lead to the following research question: What are the information needs and what is the information (searching) behavior in a (student) population in Amsterdam, when searching for information about health issues and how relate health status and demographic factors to those needs and that behavior?

Theoretical Background

Information seeking behavior and information needs

The information seeking process on the internet is characterized by different factors. This study mostly concentrates on the searching for information on the internet, because this is the most important channel for the Dutch population to search for information about health issues. For that reason models that focused on the internet information searching process have been described. Hearst described different models about this process in his book *Search User Interfaces*. Two models discussed in Chapter 3 are the models by Broder (2002) and by Marchionini and White (2007) [2-4]. Both models show the standard information seeking on the internet. Because information behavior is a broad concept and can be approached from different sides, there has been chosen for models that only describe a general information searching behavior process. In order to fit the research questions and the research population the models of Broder (2002) and Marchionini and White (2007) will be combined [2-4]. The new model will be used to create a questionnaire.

Broder has made a model about classic information seeking on the internet, as can be seen in *figure 1.*

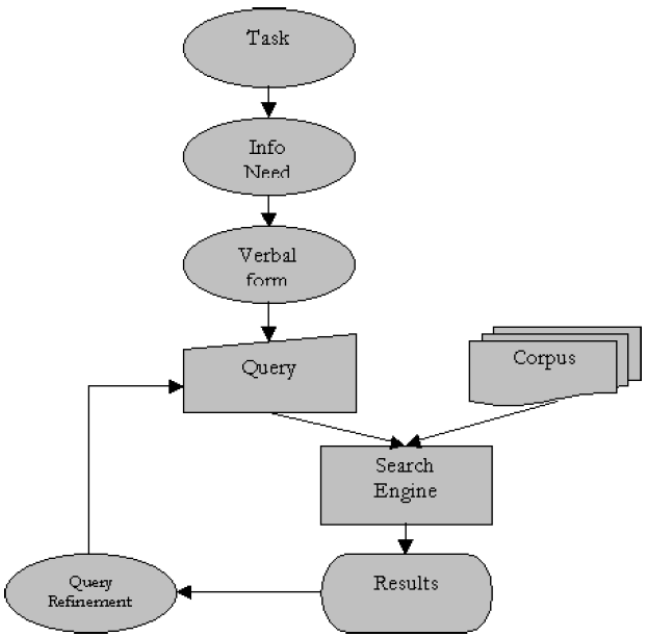

Figure 1 - Classic model about the information seeking process on the internet by Broder (2002) [2]

According to Broder the process of information searching on the internet is a cyclic process [2,3]. Another model about the information seeking process as discussed by Hearst is made by Marchionini and White (2007) and can be seen in *figure 2*.

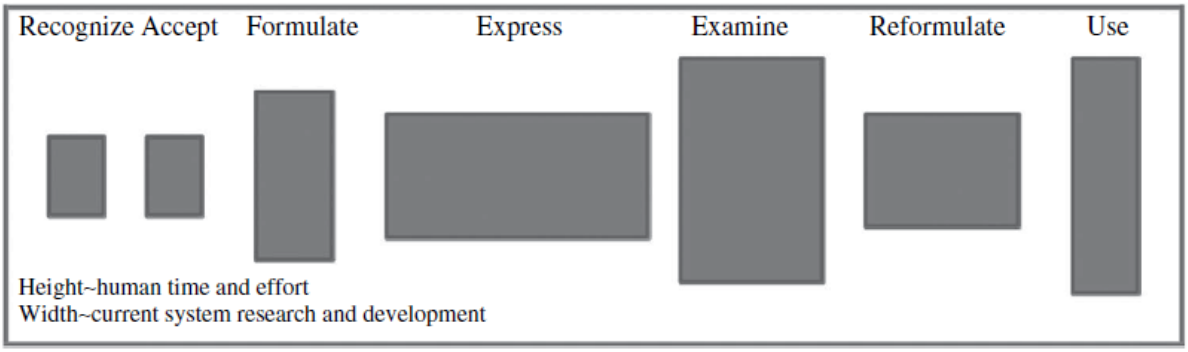

Figure 2 - Model about information seeking process on the internet by Marchionini and White (2007) [4]

Both models explain that before the searching process starts, there has to be a need for information. In the model from Broder this is referred to as 'Info Need' and in the model by Marchionini and White this is referred to as 'Recognize', which means a person has to recognize the need for information first before starting the process [2-4]. Those needs for information can arise from different drives as explained by Boot and Meijman [5]. Following the process described in both models, there is another corresponding factor, namely the actual formulation of an information need (respectively 'Verbal form' and 'Query' in Broder and 'Formulate' in Marchionini and White). Subsequently the actual search for the information on the internet starts, in the models referred to as 'Search Engine' (Broder) and 'Express' (Marchionini and White). After searching for the needed information there will be gained some results and these results will be analyzed. This is followed by a possible reformulation of the information question, all displayed in both models as 'results' and 'query refinement' in Broder and 'examine' and 'reformulate' in Marchionini and White [2-4]. Marchionini and White only, describe the usage of the actual found information. The usage of this information will also be considered in the new model.

Apart from the model for information searching behavior on the internet, Broder also classifies three different intentions when searching for information. Namely the intention to reach a specific website, the intention to find information on one or more websites ('cluster websites') and the intention to surf on the internet ('surfing') [2].

As mentioned earlier, both models show that the information seeking behavior process starts with a need for information. This need is influenced by different motivations. As Boot and Meijman suggested there are five different motives to search for health information on the internet: knowledge motive, entertainment motive, self-actualization motive, uncertainty motive and social motive [5].

- Knowledge motive:
    - Search for information to verify existing knowledge
    - Search for information to expand knowledge
- Entertainment motive:
    - Search for information to be entertained
    - Search for information to beguile time
- Self-actualization motive:
    - Search for information to be able to improve their own health
    - Search for information to find a solution for a health problem

- Uncertainty motive:
    - Search for information to release feelings of anxiety
    - Search for information to feel less uncertain
- Social motive:
    - Search for information to be able to advise others
    - Search for information to be able to talk with others about the problem [14]

Contradictory to the models described above, information seeking processes appear to vary between people. Research showed that a distinction can be made between wholistic and analytic seekers. Wholistic seekers starts searching with broad information about the subject, continuing searching for details. The analytic searcher starts seeking with lose pieces, to build a broader view on the subject later on [6].

Furthermore, two different coping mechanisms are used when searching for information to eliminate uncertainty feelings: monitors and blunters. Where monitors prefer to possess a lot of information about a subject to eliminate their uncertainty feelings, blunters prefer to know very few information [6].

Lastly, different information processing needs have been identified in research: cognitive and emotional information processing. Cognitive information processing means the information seeker wants to understand the found information. While emotional information seekers want to feel emotionally supported by the found information [7].

These differences in information needs and information (searching) behavior are important to take into consideration during the current research. Therefore, the factors described above are incorporated into a theoretical model. This model is shown in *figure 3*.

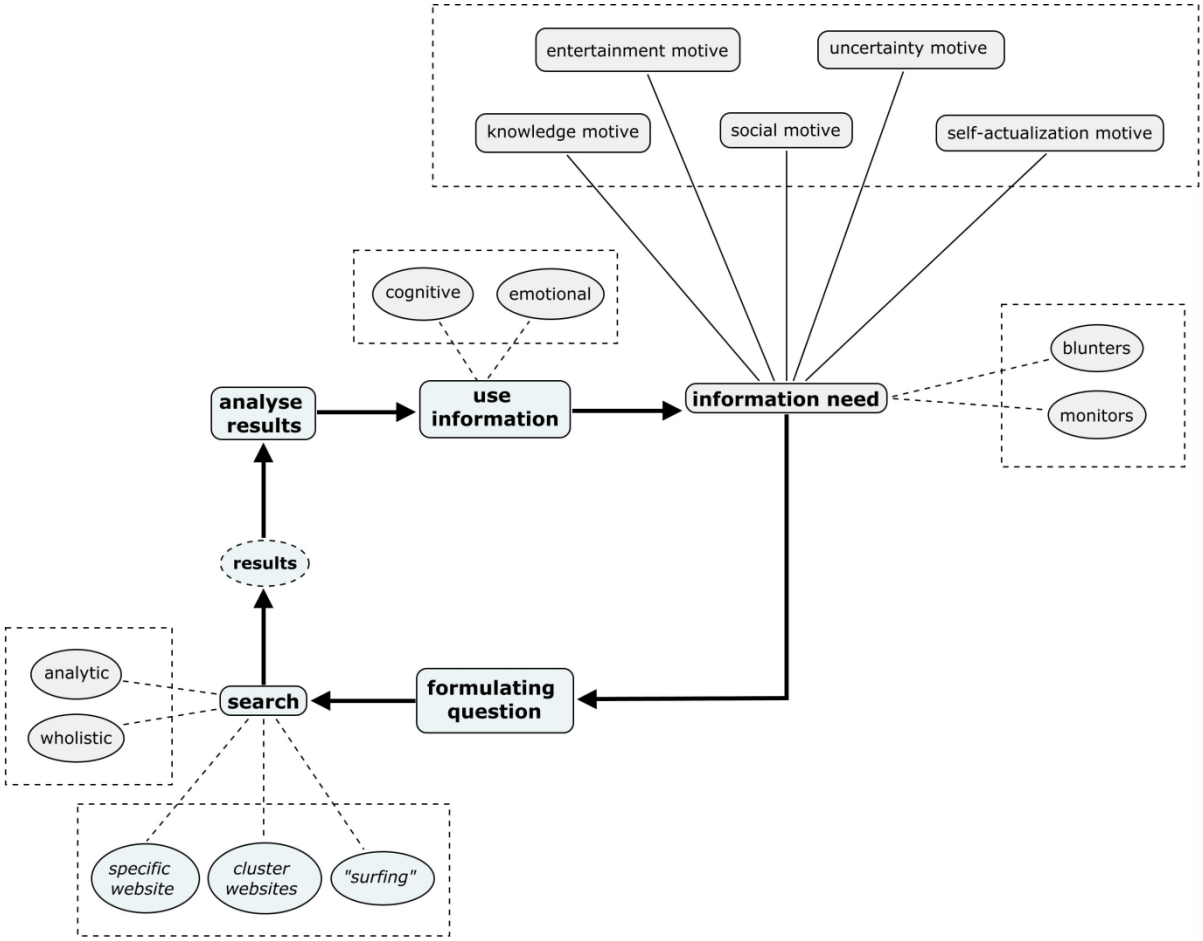

Figure 3 - Model about information needs and information (searching) behavior

Health status

In order to verify if health status is affecting the information need(s) and information (searching) behavior of people for information about health issues, perceived health is being studied. Perceived health means peoples' assessment of their own health. This perceived health is determined on the basis of different health aspects, both physical and psychological. Often measured health aspects are function disabilities, physical and/or psychological ailments, mental health / depression, vitality and anxiety [8].

Sub questions

- What is/are the underlying information need(s) (knowledge, entertainment, social, uncertainty and/or self-actualization motives; blunter or monitor), when searching for information about health issues in a (student)population in Amsterdam?
- What is the underlying information (searching) behavior (specific website, cluster website or "surfing" search; analytic or wholistic search; cognitive or emotional information use), when searching for information about health issues in a (student) population in Amsterdam ?
- What is the relation between health status (mental health/depression, vitality, anxiety and having function disabilities, physical and/or psychological ailments) and the information need(s) and information (searching) behavior, when searching for information about health issues in a (student) population in Amsterdam?

- What is the relation between demographic factors (gender, age, being employed, being a student) and the searched health problem, and information need(s) and information (searching) behavior, when searching for information about health issues in a (student) population in Amsterdam?

Methods

Study design

The information needs and information seeking behavior of the Dutch population have been examined through a questionnaire. The questionnaire contained questions about previous information needs and information seeking behavior of the participants. This means the study design was a retrospective cohort study.

Studied population

This study is held under patients of Oude Turfmarkt General Practitioners /Student Doctors' Office and students that filled in the online "studenthealthcheck" of the general practice.
Oude Turfmarkt General Practitioners / Student Doctors' Office is a general practice located in Amsterdam and originally established to provide care for students from the University of Amsterdam (UvA) and Amsterdam University of Applied Sciences (AUAS). The general practice has created an online tool for students to check their health status, e.g. www.studenthealthcheck.nl. At the end of this health check the students are offered to accept being approached for follow-up studies in the general practice.

Measurements

As earlier mentioned a questionnaire has been made to examine the information needs and information (searching) behavior of the Dutch population for health related information (on the internet). The questionnaire is made in GoogleForms, an online tool from Google to create questionnaires.
The questionnaire consisted of questions on different topics: information need(s) and information (searching) behavior, health status and questions in interest of Oude Turfmarkt General Practitioners.

Information need(s) and information (searching) behavior

The information need(s) and information (searching) behavior have been explored by questions created from the model displayed in *Figure 3*.
Information motives (knowledge, entertainment, social, uncertainty and self-actualization) have only been examined for the internet searchers. This is done because these information motives where specifically for searching information on the internet. While, the other information needs, monitors and blunters, and other information searching behavior components: analytic and wholistic searchers and emotional and cognitive information users are examined for everyone that searched for information about a health problem or consulted someone to obtain information about the health problem.
The five different motives out of which people could have sought information about health issues were measured through statements. Every motive is examined by two different statements, which represented the motive. The respondents were asked to indicate how much they agreed on the statement, with the 5-point likert scale: 'Disagree' – 'Slightly disagree' – 'Neutral' – 'Slightly agree' – 'Agree' [22].

- Knowledge motive: 'I sought for information about the health problem on internet, to expand my knowledge about the health problem.' and 'I sought for information about the health problem on the internet, to verify my existing knowledge about the health problem.'

- Entertainment motive: 'I sought for information about the health problem on the internet, to entertain myself.' and 'I sought for information about the health problem on the internet, to beguile time.'
- Social motive: 'I sought information about the health problem on the internet, to be able to advise others about the health problem.' and 'I sought information about the health problem on the internet, to be able to talk with others about the health problem.'
- Self-actualization motive: 'I sought information about the health problem on the internet, to be able to improve my own health.' and 'I sought information about the health problem, to find a solution for the health problem.'
- Uncertainty motive: this motive has been measured with four statements. The respondents was first asked if they experienced fear or felt uncertain about the health problem. When answered they experienced fear (answer was either 'Slightly agree' or 'Agree'), they were asked to answer the statement 'I sought information about the health problem, to reduce my fears towards the health problem.'. When answered they felt uncertain about the health problem, the statement 'I sought information about the health problem, to reduce my uncertainty feelings towards the health problem.' was presented to them.

Furthermore, the information (searching) behavior consisted of different components. Firstly searching for information about health issues by directly reaching for a (number of) specific website(s) or using a search engine, was examined with the question: 'How did you search for the information on the internet?'. The question contained three different answer options: 'Via a search engine', 'Directly via a specific website' and 'Directly via a number of specific websites'. When the respondent answered the question with 'Via a search engine', it was asked which search engine they had used, this was an open-ended question. In addition, the search engine users were asked with what intention the search engine had been used: 'With the intention to surf around the web', 'With the intention to reach a specific website' and 'With the intention to reach one or more websites on which I think can find the information'.
Secondly, this study examined two different searching strategies: analytic searching and wholistic searching. These searching strategies are examined through two statements. The respondent was asked to choose the statement that fitted them the most, so either 'When I search for information about a health problem, I start with searching for general information about the problem' (Wholistic) or 'When I search for information about a health problem, I start with searching for specific information about a component of the problem' (Analytic).
Furthermore, two different ways in using the found information are measured: cognitively using and emotionally using. These different ways of using the information, were measured in the same way as the two different searching strategies. The respondents could choose between 'When I search for information about a health problem, I especially want to understand the information properly.' (Cognitive) and 'When I search for information about a health problem, I especially want that the information will be emotionally support me.' (Emotional).
Lastly, the respondents have been asked to fill in the health problem they searched information for. This was an open-ended question. So to be able to examine a possible relation between this health problem and the information needs and information (searching) behavior the mentioned health problem has been categorized into four different groups: physical problem, psychological problem, cause unknown (can be either physical or psychological) and prevention/ health and well-being. To verify if the problem was psychological or physical the NGH-standard has been used [23]. All other

problem, that were not directly physical or psychological were subsumed under 'Cause unknown'. Furthermore, respondents that mentioned a problem that had to do with prevention, like medicines or lifestyles, where subsumed under the category 'Prevention / health and well-being'.

Health status

To examine the health status of the participants, questions from the online student health check have been used. This student health check contains of questions from the validated questionnaires RAND-36, K-6 and EK-10 [24].

- General health: four statements were presented to the respondent.
- Mental health / depression: six questions were asked out of the K-6 questionnaire
- Vitality: four questions out of the RAND-36 were asked
- Anxiety: five questions were asked out of the RAND-36
- Function disability, physical and/or psychological ailments: the respondents were asked if they suffered from a function disability, physical and/or psychological ailments

HOT/BSA

Questions 44 till 62 are added to the questionnaire in the interests of Oude Turfmarkt General Practitioners. This section of the questionnaire, combined with the results are not discussed in this report, because these questions are not relevant to answer the research question(s) of this study. The results for these questions can be obtained from the author, by sending an e-mail to e.r.bronkhorst@student.vu.nl.

Measure procedure

In total 2400 patients of the general practice and 367 students from the online student health check have been e-mailed to fill in the online questionnaire. One week after the first e-mail with short invitation and the link to the questionnaire was send, there has been send a reminder e-mail. The questionnaire was online available for 3,5 weeks.

Statistical analyses

All frequencies of the measured variables are showed through descriptive statistics. For the continuous outcome variables that were not normally distributed, the median and interquartile range is reported.

The five different information motives (knowledge, entertainment, social, self-actualization and uncertainty motive) and the four different components of health status (general health, mental health/depression, vitality and anxiety) have been measured through a 5-point likert scale. The given answers have been added up and transformed into scales, which can be seen as continuous variables.

The statistical analysis that have been performed to measure the possible relations between the information needs and the information (searching) behavior and the examined factors (health status, demographic factors and searched health problem) of the different respondents were logistic regression analyses. Preliminary to the logistic regression analysis, the information needs and information (searching) behavior variables that were not dichotomous have been dichotomized. These outcome variable have been dichotomized, because the continuous scales were not normally

distributed. In order to measure not only an approximation of the effect, but the actual relationship there has been chosen to dichotomize the outcomes to be able to analyze via a logistic regression.

The motivation-scales have been split into two groups, consisting of non-motive (a score of 3 or less) and motive (a score higher than 3). There has been chosen to insert the value 3 to non-motive, because the value 3 means the respondent answered to be 'neutral' on the statement, which implies that they did not agree with the statement, thus did not searched information for the health problem out of this motive.

Then the different searching strategies (using a search engine, direct via a specific website or direct via a number of specific websites) have been dichotomized into a search engine group, consisting of the answer category 'Via a search engine', and a specific website(s) group, consisting of the answer categories 'Directly via a specific website' and 'Directly via a number of specific websites'. This is also done with the intention to use a search engine ('surfing', reaching a specific website or reaching a cluster of specific websites), these three groups have been dichotomized into a 'surfing'-group, consisting of the answer category 'With the intention to surf around the web', and a website(s)-group, consisting of the answer categories 'With the intention to reach a specific website' and 'With the intention to reach one or more websites on which I think can find the information'.

If it appeared that one group was empty in performing a logistic regression analysis, this variable is not reported in the table.

Finally, a relation between two measured variables was found significant if $p<0.05$.

Inclusion and exclusion criteria

The logistic regression analysis is only performed among the respondents that reported to have searched or consulted someone for information about a health problem. The respondents needed to report one (or the most important according them) health problem they searched information for in the past year. When respondents gave more than one health problem they were excluded from the analyses.

Furthermore, the examined motives were only analyzed for the internet users, since these were motives out of which people could search for health information on the internet [5].

If open-ended questions were answered with an answer not corresponding to the question, these respondents were excluded from the analyses.

Results

Sample

The questionnaire is completed by 276 respondents. All measured characteristics of the respondents can be seen in table 1. The table shows the respondents consisted of 71 males, which means the group of females is much greater 205. Then the studied group included a large group of young respondents, more than 75% of the respondents is younger than 35 years old. Moreover, more than half of the studied group (62%) is a student, of which 30% attends a health related study. Of the non-student group reports 75% University as their highest education. Furthermore, 78% of the studied group has a job, which also can be a voluntary job. At last is 67% of the group a patient at Oude Turfmarkt General Practitioners.

Measure	n (n_{total})	%	Median	Interquartile Range
Male	71 (276)	25.7		
Age			25.00	11.80
17 – 24	137 (276)	49.6		
25 – 34	71 (276)	25.7		
35- 44	15 (276)	5.4		
45- 54	20 (276)	7.2		
55 – 64	24 (276)	8.7		
65 and older	9(276)	3.3		
Student	172 (276)	62.3		
Institution				
University of Amsterdam	93 (172)	54.1		
Amsterdam University of Applied Sciences	51(172)	29.7		
VU University	6 (172)	3.5		
Other	22 (172)	12.8		
Studydirection				
Earth and Environment	6 (170)	3.5		
Economy and Business	17 (170)	10.0		
Exact and Informatics	9 (170)	5.3		
Behavior and Society	25 (170)	14.7		
Health	51 (170)	30.0		
Interdisciplinary	9 (170)	5.3		
Art and Culture	16 (170)	9.4		
Education and Upbringing	10 (170)	5.9		
Law and Management	14 (170)	8.3		
Language and Communication	11 (170)	6.5		
Engineering				
Study stage	2 (170)	1.2		
Propaedeutics				
Bachelor	8 (172)	4.7		
Master	111 (172)	64.5		

PhD	36 (172)	20.9
Clerkship	0 (172)	0.0
Work on a PhD	11 (172)	6.4
Other	1 (172)	0.6
	5 (172)	2.9
Non-student	104 (276)	37.7
Highest education		
None / Primary education	0 (104)	0.0
Secondary Vocational Education / Lower Vocational Education	1 (104)	1.0
Intermediate Vocational Education	1 (104)	1.0
Higher General Secondary Education School / Pre-University Education	0 (104)	0.0
Higher Vocational Education	24 (104)	23.1
University	78 (104)	75.0
Job		
Employed	214 (276)	77.5
Hours working per week		
Less than 5 hours	21 (206)	10.2
5 – 9	33 (206)	16.0
10 – 19	45 (206)	21.8
20 – 29	21 (206)	10.2
30 – 39	44 (206)	21.4
40 hours or more	42 (206)	20.4
Patient Oude Turfmarkt General Practitioners / Student Doctors' Office	185 (276)	67.0

Table 1 - This table reports the respondents characteristics

Table 2 shows the health status for general health, mental health/depression, vitality and anxiety of the studied group. On general health their score is 3.75 and on vitality they score 3.50. Their score on depression and anxiety is much lower, respectively 1.83 for depression and 1.20 for anxiety.

Health Status ***(Scores)***	**N**	**Median**	**Interquartile Range**
General health	276	3.75	1.25
Mental health / Depression	276	1.83	0.96
Vitality	276	3.50	1.25
Anxiety	276	1.20	0.60

Table 2 - This table reports the respondents health status for general health, mental health / depression, vitality and anxiety. All four different measured health components are scored from 1 till 5.

Table 3 shows the health status for function disabilities and physical and/or psychological ailments of the studied group. The results show that 22% of the respondents reported to have a function disability and 48% of the respondents reported to have physical and/or psychological ailments.

Measure	**n (total)**	**%**

Function disability		
Function disability	61 (276)	22.1
Physical and/or Psychological ailments		
Physical ailments	49 (276)	17.8
Psychological ailments	34 (276)	12.3
Physical and psychological ailments	50 (276)	18.1
No ailments	143 (276)	51.8

Table 3 - This table reports the respondents health status for function disabilities and physical and/or psychological ailments

What is/are the underlying information need(s) (knowledge, entertainment, social, uncertainty and/or self-actualization motivation; blunter or monitor), when searching for information about a health problem?

Table 4 reports the information needs, knowledge motive, entertainment motive, social motive, self-actualization motive and uncertainty motive of the respondents. As can be seen from the percentages, most respondents searched out of a knowledge motive (84%) and self-actualization motive (88%). Furthermore, most respondents that reported to feel anxious or uncertain about the health problem, are searching the information out of a uncertainty motive (76%). Additionally, most respondents recognized themselves in the monitor statement (91%) in contrast to the blunter statement (8,7%).

Information need	**n (n_{total})**	**%**
Knowledge motive	156 (186)	83.9
Entertainment motive	24 (186)	12.9
Social motive	29 (180)	16.1
Self-actualization motive	164 (186)	88.2
Uncertainty motive	63 (83)	75.9
Monitors	199 (218)	91.3
Blunters	19 (218)	8.7

Table 4 - This table reports the respondents information needs, respectively knowledge motive, entertainment motive, social motive, self-actualization motive and uncertainty motive, and monitoring or blunting.

What is the underlying information (searching) behavior (specific website, cluster website or "surfing" search; analytic or wholistic search; cognitive or emotional information use), when searching for information about a health problem?

Table 5 shows the characteristics of the information (searching) behavior of the respondents. As can be seen 79% of the respondents consulted someone or sought for information about a health problem in the past year. Most respondents sought information about a physical problem (76%). Figure 3 shows the different sources that have been used while searching for information about a health problem. As can be seen from the chart, most respondents used the General Practitioner (86%) and Internet (85%) as their source or channel for information about their health problem. In *Table 5* can be seen that most respondents who used the Internet as a channel to get information made use of search engines (84%). The greatly used search engine is Google (99%). Moreover, the intention to use a search engine was mostly to reach a number of specific websites (75%).

Measure	n (total)	%
Consulted someone to obtain information or otherwise sought information about a health problem		
Has sought information	218 (276)	79.0
Has not seek information	58 (276)	21.0
Health Problem		
Physical problem	155 (205)	75.6
Psychological problem	30 (205)	14.6
Cause unknown (can be either a physical problem or a psychological problem)	9 (205)	4.4
Prevention / Health and well-being	11 (205)	5.4
Online search		
Search engine	157 (186)	84.4
Specific website	13 (186)	7.0
Number of specific websites	16 (186)	8.6
Search engine		
Search engine type		
Google	151 (153)	98.7
StartPage	2 (153)	1.3
Ecosia	2 (153)	1.3
Yahoo	1 (153)	0.7
DuckDuckGo	2 (153)	1.3
Academic search engine / database	5 (153)	3.3
Intention to use a search engine		
"Surfing"	32 (157)	20.4
Specific website	8 (157)	5.1
Cluster websites	117 (157)	74.5

Table 5 - This table reports the characteristics for searching information about a health problem

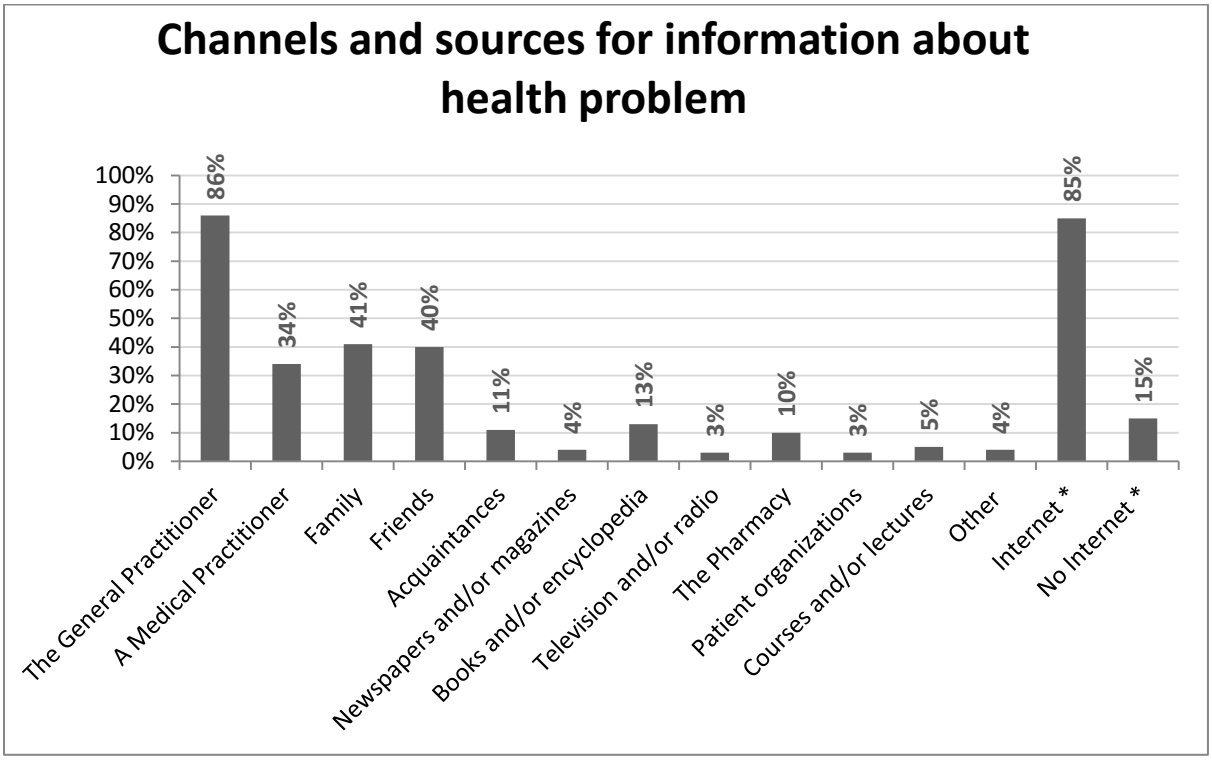

Figure 3 - Chart to display the used channels and sources for information about the health problem (n=211, * n = 218)
* The percentage of the Internet users has been measured for 218 respondents, while the percentages of the other used sources has been measured for 211 respondents. This is due to the missings in option "other" where some of the respondents filled in that they had used internet as a source.

Table 6 shows the satisfaction of the respondents with their found information. This analyzing is scored from 1 till 5, so the respondents score mostly high on having found the information they were looking for and being satisfied with the information, both a score of 4.

Measure	n	Median	Interquartile Range
Found the information I was looking for	186	4.00	1.00
Satisfied with the information found	134	4.00	1.00

Table 6 - This table reports the analyzing of the found information by the respondents

Table 7 shows the results for analytic vs. wholistic information searching and cognitive vs. emotional use of the information. As can be seen most respondents are wholistic information searchers (73%) and cognitive information users (92%).

Measure		n (total)	%
Search			
	Analytic	60 (218)	27.5
	Wholistic	158 (218)	72.5
Information use			
	Cognitive	201 (218)	92.2
	Emotional	17 (218)	7.8

Table 7- This table reports the analytic and wholistic information searching behavior and the cognitive and emotional use of information

The following sections *Health status and information needs and (searching) behavior* and *Sample characteristics and information needs and (searching) behavior* only report the significant relations between the measured factors and information needs and information (searching) behavior. All other results are presented in *Appendix – Results*.

The relation between health status and information needs and information (searching) behavior

The following paragraph reports the significant results answering the sub question: "What is the relation between health status (mental health/depression, vitality, anxiety and having function disabilities, physical and/or psychological ailments) on the information need(s) and information (searching) behavior?".
Table 8 reports an overview of the logistic regression analyses of four of the measured components of health status, both physical and psychological ailments, mental health/depression, vitality and anxiety, and the information need, social motive.

Information need	Measure	*n*	χ^2 (*df*)	β	*p*	*OR*	*95% CI*
Social motive							
	Both physical and psychological ailments	39	4.59 (1)	1.05	0.03	2.87	1.10-7.50
	Mental health / depression	180	7.39 (1)	0.62	0.01	1.86	1.19-2.91
	Vitality	180	7.44 (1)	-0.66	0.01	0.52	0.32-0.84
	Anxiety	180	12.62 (1)	1.12	0.00	3.06	1.64-5.72

Table 8 - Logistic regression analyses of four components of health status (both physical and psychological ailments, mental health / depression, vitality and anxiety) and searching out of a social motive for information about a health problem

As the results show in *Table 8* having both physical and psychological ailments significantly relate to searching information about a health problem out of a social motive, respectively the OR is 2.87 (95% CI: 1.10-7.50) and the p-value is lower than 0.05. When having both physical and psychological ailments it is 2.87 times more likely that the respondents sought information for the health problem out of a social motive, then when they did not have both ailments. Furthermore, show the results in *Table 8* that mental health/depression, vitality and anxiety significantly relate to searching out of a social motive ($p<0.05$). The results for mental health / depression show the OR is 1.86 (95% CI: 1.19-2.91). This means the higher the score on mental health/depression it is 1.86 times more likely that the respondents sought information out of a social motive. The OR for vitality is 0.52 (95% CI: 0.32-0.84). Therefore the higher the score on vitality it is 0.52 times less likely that the respondents sought out of a social motive. The OR for anxiety is 3.06 (95% CI: 1.64-5.72). The higher the score on anxiety it is 3.06 times more likely that the respondents sought information out of a social motive.

Tables 9 reports an overview of the logistic regression analyses of the health status component mental health / depression and one of the measured components of information (searching) behavior (using the found information emotionally)**.**

Information (searching) behavior	**Measure**	***n***	**χ^2 (*df*)**	**β**	***p***	***OR***	***95% CI***
Using the found information emotionally**							
	Mental health / depression	218	4.69 (1)	0.61	0.03	1.85	1.07-3.18

Table 9 - Logistic regression analyses of mental health / depression and one of the measured components of information (searching) behavior (using the found information emotionally compared to cognitively)

The results in *Table 9* show that mental health/depression significantly relates to using the information emotionally compared to cognitively ($p<0.05$). The results for mental health / depression show the OR is 1.85 (95% CI: 1.07-3.18). This means the higher the score on mental health/depression it is 1.85 times more likely that the respondents used the found information emotionally compared to cognitively.

The relation between demographic factors and searched health problem, and information needs and information (searching) behavior

The following paragraph reports the significant results answering the sub question: "What is the relation between the other measured factors (gender, age, being employed, being a student and the searched health problem) and information need(s) and information (searching) behavior for a (student) population in Amsterdam?".
Table 10 reports an overview of the logistic regression analyses of three measured sample characteristics (age, being a student, and searched for information about a physical problem) and searching information about a health problem out of three of the measured motives (knowledge motive, entertainment motive and social motive).

Information need	**Measure**	***n***	**χ^2 (*df*)**	**β**	***p***	***OR***	***95% CI***
Knowledge motive*							
	Age	186	4.53 (1)	-0.03	0.03	0.97	0.95-1.00
Entertainment motive**							
	Student	108	5.43 (1)	1.14	0.03	3.12	1.11-8.75
Social motive***							
	Student	105	4.62 (1)	0.95	0.04	2.58	1.04-6.40
	Physical problem	127	4.93 (1)	-1.02	0.02	0.36	0.15-0.87

Table 10 - Logistic regression analyses of three measured sample characteristics (age, being a student, and searched for information about a physical problem) and searching information about a health problem out of three of the measured motives (knowledge motive, entertainment motive and social motive)

* **The first row reports the relation between age and searching information out of a knowledge motive**

** **The second row reports the relation between being a student and searching information out of an entertainment motive**

*** **The third row reports the relation between being a student and searching out of a social motive, and the relation between searching information about a physical problem and searching out of a social motive**

The results in *Table 10* show that age significantly relates to searching information about a health problem out of a knowledge motive ($p<0.05$). The results for age show the OR is 0.97 (95% CI: 0.95-1.00). This means the older the respondent is, it is 1.85 times less likely that the respondents searched the information out of a knowledge motive.

Furthermore, the results in *Table 10* show that being a student significantly relates to searching information about a health problem out of an entertainment motive ($p<0.05$). The results for being a student show the OR is 3.12 (95% CI: 1.11-8.75). This means when being a student it is 3.12 times more likely that the respondents searched the information out of an entertainment motive.

In addition, the results in *Table 10* show that being a student also significantly relates to searching information about a health problem out of a social motive ($p<0.05$). The results for being a student in relation to searching out of a social motive show the OR is 2.58 (95% CI: 1.04-6.40). This means when being a student it is 2.58 times more likely that the respondents searched the information out of a social motive. Searching information for a physical problem too significantly relates to searching information about a health problem out of a social motive ($p<0.05$) as the results in *Table 10* show. The OR for the relation between searching information for a physical problem and searching out of social motive is 0.36 (95% CI: 0.15-0.87). This means when searching for a physical problem it is 0.36 times less likely the respondent searched this information out of a social motive.

Table 11 reports an overview of the logistic regression analysis of gender and using a search engine with the intention to reach a specific website(s) compared to surfing on the web.

Information (searching) behavior	**Measure**	***n***	**χ^2 (*df*)**	**β**	***p***	***OR***	***95% CI***
Intention to reach a specific website(s)							
	Male	28	7.88 (1)	2.15	0.04	8.54	1.12-65.45

Table 11 - Logistic regression analysis of gender and using a search engine with the intention to reach a specific website(s) compared to surfing on the web

The results in *Table 11* show that being a male significantly relates to using a search engine with the intention to reach a specific website(s) ($p<0.05$). The results for being a male in relation to using a search engine with the intention to reach a specific website(s) show the OR is 8.54 (95% CI: 1.12-65.45). This means when being a male it is 8.54 times more likely that the respondents used a search engine with the intention to reach a specific website(s) compared to surfing on the web.

Discussion

Main findings

Information needs and information (searching) behavior

To begin with, this study investigated the information needs and the information (searching) behavior for information about health issues in a (student) population in Amsterdam.
This study found that the majority of the (student) population in Amsterdam searched online for information about a health problem out of a self-actualization motive and a knowledge motive. Besides this, the majority of the population is highly educated, and several studies have shown that highly educated people experience a higher need for information than lower educated [25,6]. In addition, younger people are using the information they found to maintain their health [12]. So it is not surprising that the majority of the studied population sought for information out of a knowledge and self-actualization motive.
Furthermore, most people that experienced fear and/or uncertainty feelings against the health problem, searched online for information about the problem out of an uncertainty motive. These findings are similar to Muse et al., who found that those who have uncertainty feelings and/or fear against a health problem, want to release these feeling by searching information about it [27].
In addition, most people in the (student) population recognized themselves in the monitor statement about information need compared to the blunter statement. Or in other words, this study found that the majority of the (student) population wanted to absorb as much information as possible about the health problem. This is not surprising when knowing Wimble and colleagues found that females, younger people and higher educated people are in any case more often searching for health information and more than half of the studied population in this study were females and highly educated and young people [18].

Further found in this study is that the majority of the (student) population consulted someone or sought for information about a health problem in the past year. Mostly they sought information about a physical problem. This study found that most people in the (student) population in Amsterdam consulted a General Practitioner and used the Internet to find information about their health problem. These findings are similar to findings of various other studies [9,10,19]. In addition, most internet users made use of a search engine to get the information, thereby is Google mostly consulted. They used a search engine with the intention to reach a (number of) specific website(s) compared to just surfing on the web. Houston et al. also reports that most information seekers used a search engine to find information [21].
This study also discovered that most men found the information they were looking for and they were also satisfied with the found information. These findings are similar to the findings Ybarra and Suman (2008) found in their study [28].
At last, the majority of the population were wholistic information seekers and cognitive information users. This means they started broadly with searching information about the health problem, instead of starting with searching information about a specific part of the health problem. The cognitive using means, they primarily wanted that they would understand the information they found, instead of that the information would emotionally be supportive for them.

Health status vs. information needs and information (searching) behavior

Secondly this study investigated the relation between health status and the information needs and information (searching) behavior.

This study found that those having both physical and psychological ailments it is more likely they searched for information about a health problem out of a social motive. These findings need to be interpreted carefully, because the group of people that had both physical and psychological ailments consisted of only 39 people (*n* = 39). Furthermore this study found that the more vital someone is, the less likely it is that they search information out of a social motive. These findings suggest that the more someone is suffering ailments and the less vital someone is feeling, the more likely it is they search information for social interaction, which is similar to findings of Houston and colleagues (2002) [21].

The more depressed or anxious someone is, the more probable is it they seek information out of a social motive. Searching out of a social motive, meant among other things that they searched information to be able to talk with others about the health problem. Which might also explain that the more depressed someone is, the more likely it is that they want the information they search for to be emotionally supportive. Thus, people who experience anxiety-feelings or are suffering from a depression, are looking for some sort of social interaction and emotional support about the subject. Which is similar to what Muse et al. found, their findings were that people who are anxious, are likely to search for message boards and/or support groups on the internet [27]. Furthermore, these online message boards and support groups are found effectively in people who are suffering from a depression [29,30]. So there is not only a need for this type of information, it is also effective in reducing depressive symptoms [29,30].

Demographic factors and searched health problem vs. information needs and information (searching) behavior

At last, the relation between demographic factors and searched health problem and the information needs and information (searching) behavior have been examined in this study.

First, this study found that older people are, the less likely it is they search for information about a health problem out of a knowledge motive.

Secondly, this study found that being a student makes it more likely to search information about a health problem out of an entertainment motive and out of a social motive. Verouden and colleagues found that students want to be part of a group and experience a lot of social pressure, which would explain why being a student makes it more likely to be searching information out of a social motive [31].

Furthermore this study found that searching out of a social motive became less likely when the person is searching for information about a physical problem. This finding might correspond with the findings for health status, having psychological ailments make it more likely to search out of a social motive. Thus, searching for information about a physical problem, compared to psychological ailments, make it less likely they sought the information out of social motives.

At last, this study found that males are more likely to use a search engine with the intention to reach a (number of) specific website(s) than females. But this finding needs to be interpreted very carefully, because there were only 28 males in the examined group (*n* = 28). On the other hand, research has shown that males are more directly searchers when using a search engine than females, so this might explain the finding that males use a search engine more often with the intention to reach a (number of) specific websites [32].

Limitations and future research

Some limitations of the study are small samples in some of the studied groups. Thus, some results and conclusions need to be interpreted carefully, because these groups included less than 100 respondents.

Furthermore, contained the reminder e-mail of the questionnaire of a link to the questionnaire with an error. The respondents went to either an error-page or a VU-net log in page when they clicked on the link, instead of the questionnaire. If the link had worked properly, this study might have had more respondents.

Moreover, GoogleForms brought out a limitation, the tool does not report how many people started the online questionnaire. So Google Forms only registers the people that finished the complete questionnaire. This gives us no insight in the dropouts.

Then there were also some limitations to the questionnaire itself. First, the respondents were asked to answer the questions about information they sought for a health problem in the past year. It is possible that recall bias occurred in the study.

Secondly, the respondents were asked about the sources that they had used to find information about a health problem. Contradictory, these answer options contained also several channels to search for sources with information instead of only sources for information. In a future study it might be interesting to make a distinction between channels and sources to search for health information.

Thirdly, although the questions in the questionnaire were based on several different models derived from literature, it is not proved that the questionnaire did exactly measure what was wanted to be measured. Further research might give us more insight in the reliability and validity of the questionnaire.

Lastly, a large part of this study was discussing and defining what would actually be studied. This study had multiple supervisors, which brought multiple interests and views on the subject. A big part of the study has therefore been discussing about the different interests and views of everyone involved, and reifying the subject of the study. Future studies on this subject should plan more time to be able to discuss about the subject of the study and still have much time to analyze all that has been asked.

Conclusions & implications

As the results of this study imply, different people means different information needs and differences in using the information.

The Amsterdam (student) population mostly consisted of people that searched for health information out of knowledge and self-actualization motives. These men are likely to want information to verify and expand their knowledge and/or to improve their health or find a solution for their health problem. Further, most of them wanted to find as much information about the health issue as possible. Thus, health care providers in Amsterdam should provide much information about health issues to fulfill the needs of the majority of the Amsterdam (student) population. Other interesting findings were relations between health status and the information needs and information (searching) behavior. Health care providers should anticipate on the need for social

interaction and emotional support for people suffering from anxiety and/or depression, but also for students who feel these needs. Here can be thought of information that offers social interaction and is emotionally supportive for groups of people that feel the need for this kind of information. For patients that suffer from depression and/or anxiety feeling it would be helpful to provide information that stimulates social interaction and is emotionally supportive, like discussion boards or message groups. On the other hand, providing tools for social interaction and emotional support may not found to be the role of all health care providers. This may bring some difficulties. Future studies should focus on what tools and information for social interaction and emotional support are best for these groups of people.

In conclusion, health care providers should be aware of the different information needs and information (searching) behavior for various people and should provide all kind of different tools and information about health issues to fulfill everyone's needs for information.

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Reflection

Op 1 februari 2016 startte mijn stage bij Huisartsen Oude Turfmarkt | Bureau Studentenartsen, welke vier maanden zou duren. De praktijk zelf, evenals het prachtige centrum van Amsterdam, verwonderde mij vanaf dag 1 tot aan de laatste dag. Mijn werkplek, evenals de werkplek van de andere stagiaires en de senior onderzoekster van de praktijk, Claudia van der Heijde, bevond zich op de bovenste etage van het gebouw. De afgelopen vier maanden ben ik flink wat trappen op en af gelopen. Niet alleen in de letterlijke zin bevatte de afgelopen weken hoogte en dieptepunten. Vanaf het moment dat ik had gesolliciteerd voor deze stage, wist ik dat het een uitdaging zou worden dit onderzoek uit te voeren. Het onderzoek had nog geen duidelijke richting, dus ik wist dat het richting bepalen mede een onderdeel van mijn stage zou zijn. Al tijdens mijn sollicitatiegesprek, met alle drie de begeleiders, Peter Vonk, directeur en huisarts bij Huisartsen Oude Turfmarkt, Claudia van der Heijde, senior onderzoekster van de praktijk, en Frans Meijman, inhoudelijke projectcoördinator vanuit de praktijk en tevens mijn VU-begeleider, bleek al snel dat eigenlijk niemand hetzelfde idee voor ogen had voor het onderzoek. Toch heeft het mij er niet van weerhouden, de kans om deze stage uit te voeren met beide handen aan te pakken. Samen met alle betrokkenen, waartoe inmiddels ook huisarts Daan Tempelman behoorde, zijn vooral in de beginfase van de stage vele gesprekken gevoerd. Dit alles was een lang proces van afwegen en telkens weer opnieuw de richting van het onderzoek aanpassen. Af en toe leidde dit bij mij tot frustratie en vond ik het moeilijk te beargumenteren welke visie ik zou volgen. Frans Meijman was er dan om mij opnieuw in te laten zien dat onderzoek doen niet makkelijk is en dat zo'n proces als deze absoluut de weerspiegeling was van werkelijk onderzoek doen. Dit brengt mij dan ook tot mijn eerste twee persoonlijke leerdoelen: 'mijn opgedane kennis in de opleiding leren toe te passen in de praktijk' en 'meer kennis opdoen van onderzoek naar communicatie en dit onderzoek leren toe te passen'. Ik kan wel zeggen dat ik mijn kennis zeker heb leren toe passen in de praktijk. Vooral de kennis die ik in de minor 'Communicatie over gezondheid' in de eerste helft van dit studiejaar had opgedaan, kon ik nu tot uiting brengen in mijn eigen onderzoek. Onderzoek doen naar communicatie over gezondheid leek mij op voorhand al een lastig karwij, de minor had mij namelijk al laten inzien dat communicatie een erg breed begrip was en van alle hoeken belicht kan worden. Iets dat in mijn stage alleen maar werd bevestigd. Mijn stage liet mij niet alleen kennis nemen van onderzoek naar communicatie over gezondheid, maar ook van de toepassing ervan in de praktijk. Wat mij bij mijn laatste persoonlijke leerdoel brengt: 'meer kennis opdoen van innovatieve projecten in de zorg'. Door de stage in de huisartsenpraktijk maakte ik kennis met verschillende innovatieve projecten die Huisartsen Oude Turfmarkt uitvoert. Zo hebben zij onder andere een online gezondheidstest voor studenten gemaakt, maar bieden hun patiënten ook een aantal praktische e-health tools zoals een e-mail consult. Verder ontwikkelde en evalueerde een medestagiaire, Truus Hooijveld, een online anticonceptie keuzehulp voor vrouwelijke studenten en evalueerde een andere medestagiaire, Camille ten Velden, een e-tool die ontwikkeld is voor herhaalde blaasontsteking bij vrouwen. Door onze gezamenlijke werkplek, kreeg ik ook een inkijkje in het ontwikkelen en evalueren van deze specifieke innovaties in de zorg. Mijn eigen onderzoek en het proeven aan de verschillende

innovatieve projecten in de praktijk, hebben mijn nieuwsgierigheid en interesse hiervoor alleen maar versterkt.

Ik kijk met veel plezier terug op deze prachtige ervaring. Waarbinnen ik veel heb mogen leren over het werkelijk doen van onderzoek en het eventueel toepassen van nieuwe bevindingen in de praktijk. Daarnaast heeft het mij geleerd om verschillende kanten van een onderwerp te bekijken, zelf aandachtig na te denken en beslissingen te nemen over onder andere te volgen richtingen binnen een onderzoek.

Tot slot wil ik al mijn begeleiders en alle andere medewerkers van Huisartsen Oude Turfmarkt bedanken. Vanaf dag 1 was iedereen erg behulpzaam en heb ik mij enorm welkom gevoeld in de praktijk. Peter Vonk wil ik graag bedanken voor het bieden van deze fantastische stageplek en de vele inkijkjes in hoe het er echt aan toe gaat in de medische praktijk. Peter, maar ook Daan Tempelman, hebben mij telkens weer opnieuw laten zien hoe de wetenschap en de praktijk aan elkaar gekoppeld kunnen zijn, bedankt daarvoor. Verder wil ik Claudia van der Heijde bedanken voor haar dagelijkse steun tijdens mijn onderzoek. Daarnaast heeft Claudia mij geleerd, niet direct tien stappen tegelijk te willen nemen, maar dat iedere stap even aandachtig en in rust genomen moet worden. Tot slot, wil ik Frans Meijman bedanken voor zijn steun tijdens het gehele proces van onderzoek doen en zijn inspirerende en leerzame kijk op de wetenschap en communicatie over gezondheid. Frans bracht mij met zijn woorden regelmatig in verwarring over mijn onderzoek, maar prikkelde mij hier telkens mee om verder na te denken en tot nieuwe inzichten te komen. Alle ervaringen die ik heb mogen opdoen zal ik meenemen in mijn volgende wetenschappelijke en persoonlijke avonturen en daar ben ik erg dankbaar voor!

Appendix – Accopanying letter

Patients of Oude Turfmarkt General Practitioners | Student Doctors' Office

Beste lezer,

U ontvangt deze mail, omdat uw e-mailadres in het patiëntenbestand van de praktijk is opgenomen. In het belang van de praktijk, zouden wij u willen vragen de bijgevoegde vragenlijst (zie link) in te vullen.

VRAGENLIJST: http://goo.gl/forms/AIbw7xp4Ct

Gezondheid is een populair onderwerp om informatie over in te winnen. Door middel van de antwoorden op de vragenlijst wordt in kaart gebracht hoe men zoekt naar informatie over gezondheid. Dit onderzoek wordt uitgevoerd door een derdejaars studente Gezondheid en Leven van de Vrije Universiteit van Amsterdam.

Het invullen van de vragenlijst zal ongeveer 15 minuten duren. Uiteraard is de vragenlijst anoniem in te vullen en wordt er zorgvuldig met de gegevens omgegaan.

Onder alle daarin geïnteresseerde deelnemers wordt vijf keer een **Bol.com** **cadeaubon ter waarde van €20** verloot!

Bij vragen of opmerkingen kunt u ons bereiken via e.r.bronkhorst@student.vu.nl.

Met vriendelijke groet,

Elke Bronkhorst, onderzoekster
Peter Vonk, huisarts

Huisartsen Oude Turfmarkt | Bureau Studentenartsen

DISCLAIMER.

De informatie opgenomen in dit bericht kan vertrouwelijk zijn en is uitsluitend bestemd voor de geadresseerde. Indien u dit bericht onterecht ontvangt, wordt u verzocht de inhoud niet te gebruiken en de afzender direct te informeren door het bericht te retourneren. Aan de inhoud van dit bericht kunnen geen rechten worden ontleend. Openbaarmaking, vermenigvuldiging, verspreiding en/of verstrekking van deze informatie aan derden is niet toegestaan.

Students that did the online student health check of Oude Turfmarkt General Practitioners | Student Doctors' Office

Beste student,

In het afgelopen jaar heb je deelgenomen aan de Studentengezondheidstest. Je hebt daarin aangegeven dat je benaderd mocht worden voor eventueel vervolgonderzoek. Bedankt daarvoor!

Gezondheid is een populair onderwerp om informatie over in te winnen. Door middel van de antwoorden op de bijgevoegde vragenlijst (zie link) wordt in kaart gebracht hoe men zoekt naar informatie over gezondheid. Dit onderzoek wordt uitgevoerd door een derdejaars studente Gezondheid en Leven van de Vrije Universiteit van Amsterdam.

VRAGENLIJST: http://goo.gl/forms/AIbw7xp4Ct

Het invullen van de vragenlijst zal ongeveer 15 minuten duren. Uiteraard is de vragenlijst anoniem in te vullen en wordt er zorgvuldig met de gegevens omgegaan.

Onder alle daarin geïnteresseerde deelnemers wordt vijf keer een **Bol.com** **cadeaubon ter waarde van €20** verloot!

Bij vragen of opmerkingen kun je ons bereiken via e.r.bronkhorst@student.vu.nl.

Met vriendelijke groet,

Elke Bronkhorst, onderzoekster
Peter Vonk, huisarts

Huisartsen Oude Turfmarkt | Bureau Studentenartsen

Reminder e-mail

Beste lezer,

Afgelopen week bent u benaderd om een vragenlijst van Huisartsen Oude Turfmarkt / Bureau Studentenartsen in te vullen. Deze e-mail dient ter herinnering. Wanneer u de vragenlijst over zoeken naar gezondheidsinformatie al heeft ingevuld, kunt u deze e-mail als niet verzonden beschouwen.

U ontvangt deze e-mail, omdat uw e-mailadres in het patiëntenbestand van de praktijk is opgenomen. In het belang van de praktijk, zouden wij u willen vragen de bijgevoegde vragenlijst (zie link) in te vullen.

VRAGENLIJST: http://goo.gl/forms/AIbw7xp4Ct

Gezondheid is een populair onderwerp om informatie over in te winnen. Door middel van de antwoorden op de vragenlijst wordt in kaart gebracht hoe men zoekt naar informatie over gezondheid. Dit onderzoek wordt uitgevoerd door een derdejaars studente Gezondheid en Leven van de Vrije Universiteit van Amsterdam.

Het invullen van de vragenlijst zal ongeveer 15 minuten duren. Uiteraard is de vragenlijst anoniem in te vullen en wordt er zorgvuldig met de gegevens omgegaan.

Onder alle daarin geïnteresseerde deelnemers wordt vijf keer een **Bol.com** **cadeaubon ter waarde van €20**verloot!

Bij vragen of opmerkingen kunt u ons bereiken via e.r.bronkhorst@student.vu.nl.

Met vriendelijke groet,

Elke Bronkhorst, onderzoekster
Peter Vonk, huisarts

Huisartsen Oude Turfmarkt | Bureau Studentenartsen

DISCLAIMER.

Appendix – Questionnaire

Online anonieme vragenlijst: zoeken naar informatie over gezondheid

Beste deelnemer,

Gezondheid is een populair onderwerp om informatie over in te winnen. Door middel van de antwoorden op deze vragenlijst wordt in kaart gebracht hoe men zoekt naar informatie over gezondheid. Dit onderzoek wordt uitgevoerd door een derdejaars studente Gezondheid en Leven van de Vrije Universiteit van Amsterdam.
Het invullen van de vragenlijst zal ongeveer 15 minuten duren. Uiteraard is de vragenlijst anoniem in te vullen en wordt er zorgvuldig omgegaan met de gegevens.

Onder alle daarin geïnteresseerde deelnemers wordt vijf keer een Bol.com cadeaubon ter waarde van €20 verloot!

Bij vragen of opmerkingen kunt u ons bereiken via e.r.bronkhorst@student.vu.nl.

Met vriendelijke groet,

Elke Bronkhorst, onderzoekster
Peter Vonk, huisarts

Huisartsen Oude Turfmarkt | Bureau Studentartsen

*Vereist

1. **Geslacht** *
   Markeer slechts één ovaal.
   - Man
   - Vrouw
2. **Leeftijd** *
   .....
3. **Bent u student?** *
   Markeer slechts één ovaal.
   - Ja *Ga naar vraag 4.*
   - Nee *Ga naar vraag 7.*
4. **Aan welke instelling studeert u?** *
   Markeer slechts één ovaal.
   - Universiteit van Amsterdam
   - Hogeschool van Amsterdam
   - Vrije Universiteit van Amsterdam
   - Anders: .....
5. **Studierichting / opleiding** *

.....

6. **In welke fase van de opleiding bevindt u zich?** *
   Markeer slechts één ovaal.
   - o Propedeuse *Ga naar vraag 8.*
   - o Bachelor *Ga naar vraag 8.*
   - o Master *Ga naar vraag 8.*
   - o Doctoraal *Ga naar vraag 8.*
   - o Co-schappen *Ga naar vraag 8.*
   - o Promotietraject *Ga naar vraag 8.*
   - o Anders: ..... *Ga naar vraag 8.*

Ga naar vraag 8.

7. **Wat is uw hoogst genoten opleiding?** *
   Markeer slechts één ovaal.
   - o Geen / Lager- of basisonderwijs
   - o VMBO / MAVO / LBO
   - o MBO
   - o HAVO / VWO
   - o HBO
   - o WO
8. **Werkt u?** *
   Hieronder word took vrijwilligerswerk of een bijbaan verstaan.
   Markeer slechts één ovaal.
   - o Ja *Ga naar vraag 9.*
   - o Nee *Ga naar vraag 10.*
9. **Hoeveel uur per week werkt u?** *
   .....
10. **Bent u ingeschreven als patiënt bij Huisartsen Oude Turfmarkt / Bureau Studentenartsen?** *
    Markeer slechts één ovaal.
    - o Ja
    - o Nee
11. **Heeft u in het afgelopen jaar iemand geraadpleegd om informatie in te winnen of anderszins naar informatie gezocht over een gezondheidsprobleem?** *
    Markeer slechts één ovaal.
    - o Ja
    - o Nee *Ga naar vraag 41.*
12. **Noem het gezondheidsprobleem waar u in het afgelopen jaar informatie over heeft gezocht of waarvoor u iemand heeft geraadpleegd:** *
    Indien u voor meerdere gezondheidsproblemen informatie heeft gezocht, vul dan het voor u belangrijkste gezondheidsprobleem hier in.
    .....
    .....
    .....

.....
.....

Houd dit onderwerp en deze zoekactie(s) naar informatie in gedachte bij het beantwoorden van de volgende sectie vragen.

13. **Welke bron(nen) heeft u geraadpleegd toen u naar informatie over dit gezondheidsprobleem zocht?**
    Meerdere antwoorden mogelijk.
    Vink alle toepasselijke opties aan.
    - o De huisarts
    - o Een specialist
    - o Familie
    - o Vrienden
    - o Kennissen
    - o Kranten en/of tijdschriften
    - o Boeken en/of encyclopedieën
    - o Televisie en/of radio
    - o De apotheek
    - o Patiëntenorganisaties
    - o Cursussen en/of lezingen
    - o Anders: .....
14. **Heeft u (ook) het internet geraadpleegd toen u naar informatie over het gezondheidsprobleem zocht?** *
    Markeer slechts één ovaal.
    - o Ja *Na de laatste vraag in dit gedeelte ga je naar vraag 16.*
    - o Nee *Na de laatste vraag in dit gedeelte ga je naar vraag 41.*
15. **Waarom heeft u juist deze bron(nen) geraadpleegd?** *
    .....
    .....
    .....
    .....
    .....

Ga naar vraag 16.

U heeft aangegeven via het internet naar de informatie te hebben gezocht. Beantwoord de volgende sectie vragen.

16. **Hoe heeft u op het internet naar deze informatie gezocht?** *
    Markeer slechts één ovaal.
    - o Via een zoekmachine *Ga naar vraag 17.*
    - o Direct via een specifieke website *Ga naar vraag 19.*
    - o Direct via een aantal specifieke websites *Ga naar vraag 20.*
17. **Benoem de zoekmachine(s) die u heeft gebruikt:** *
    .....

.....
.....
.....
.....

18. **Met welke intentie maakte u gebruik van een zoekmachine?** *
    Markeer slechts één ovaal.
    - o Met de intentie te surfen over het web *Ga naar vraag 21.*
    - o Met de intentie een specifieke website te benaderen *Ga naar vraag 21.*
    - o Met de intentie een of meer websites te benaderen waarop u denkt de informatie te kunnen vinden *Ga naar vraag 21.*

Ga naar vraag 21.

19. **Benoem de specifiek website:** *
    .....
    .....
    .....
    .....
    .....

Ga naar vraag 21.

20. **Benoem de specifieke website:** *
    .....
    .....
    .....
    .....
    .....

Ga naar vraag 21.

21. **Waar heeft u de informatie uiteindelijk gevonden (benoem en/of omschrijf de bron(nen))?** *
    .....
    .....
    .....
    .....
    .....

Kruis aan wat het meest van toepassing op u was, toen u de informatie over het bovenstaande gezondheidsprobleem op het internet zocht.

22. **“Ik zocht op het internet naar informatie over het gezondheidsprobleem, om mijn kennis met betrekking tot het gezondheidsprobleem te vergroten.”** *
    Markeer slechts één ovaal.

- Oneens
- Gedeeltelijk oneens
- Neutraal
- Gedeeltelijk eens
- Eens

23. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om te kijken of mijn bestaande kennis met betrekking tot het gezondheidsprobleem klopt."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens
24. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om mezelf te vermaken."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens
25. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om tijd te verdrijven."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens
26. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om iemand in mijn omgeving te kunnen adviseren over het gezondheidsprobleem."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens
27. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om met anderen mee te kunnen praten over het gezondheidsprobleem."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens

- Er praat niemand over dit onderwerp

28. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om mijn gezondheid te kunnen verbeteren."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens
29. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om een oplossing te vinden voor het gezondheidsprobleem."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens
30. **"Ik ervaarde angst voor het gezondheidsprobleem."** *
Markeer slechts één ovaal.
    - Oneens *Ga naar vraag 32.*
    - Gedeeltelijk oneens *Ga naar vraag 32.*
    - Neutraal *Ga naar vraag 32.*
    - Gedeeltelijk eens *Ga naar vraag 31.*
    - Eens *Ga naar vraag 31.*
31. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om mijn angsten voor het gezondheidsprobleem te verminderen."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens
32. **"Ik voelde mij onzeker over het gezondheidsprobleem."** *
Markeer slechts één ovaal.
    - Oneens *Ga naar vraag 34.*
    - Gedeeltelijk oneens *Ga naar vraag 34.*
    - Neutraal *Ga naar vraag 34.*
    - Gedeeltelijk eens *Ga naar vraag 33.*
    - Eens *Ga naar vraag 33.*
33. **"Ik zocht op het internet naar informatie over het gezondheidsprobleem, om me minder onzeker te voelen over het gezondheidsprobleem."** *
Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal

- Gedeeltelijk eens
- Eens

34. **“Ik heb de informatie over het gezondheidsprobleem gevonden, waar ik naar op zoek was.”** *
    Markeer slechts één ovaal.
    - Oneens *Ga naar vraag 35.*
    - Gedeeltelijk oneens *Ga naar vraag 35.*
    - Neutraal *Ga naar vraag 41.*
    - Gedeeltelijk eens *Ga naar vraag 38.*
    - Eens *Ga naar vraag 38.*

U heeft aangegeven niet de informatie over het gezondheidsprobleem te hebben gevonden waar u naar op zoek was. Beantwoord de onderstaande vragen.

35. **Wat had u willen vinden?** *
    .....
    .....
    .....
    .....
    .....
36. **Wat heeft u gevonden?** *
    .....
    .....
    .....
    .....
    .....
37. **Hoe denkt u dat het komt dat u niet de informatie heeft gevonden, waar u naar op zoek was?** *
    .....
    .....
    .....
    .....
    .....

Ga naar vraag 41.

38. **“Ik ben tevreden met de gevonden informatie.”** *
    Markeer slechts één ovaal.
    - Oneens
    - Gedeeltelijk oneens
    - Neutraal
    - Gedeeltelijk eens
    - Eens
39. **Licht bovenstaand antwoord toe:** *
    .....

.....
.....
.....
.....

40. Hoe heeft u de gevonden informatie uiteindelijk kunnen gebruiken? *

.....
.....
.....
.....
.....

41. Welke omschrijving past het beste bij u? *

Markeer slechts één ovaal.

- "Wanneer ik informatie zoek over een gezondheidsprobleem, begin ik met zoeken naar algemene informatie over het probleem."
- "Wanneer ik informatie zoek over een gezondheidsprobleem, begin ik met zoeken naar specifieke informatie over een onderdeel van het probleem."

42. Welke omschrijving past het beste bij u? *

Markeer slechts één ovaal.

- "Wanneer zich er een gezondheidsprobleem bij mij voordoet, wil ik graag zoveel mogelijk informatie over dit probleem tot mij nemen."
- "Wanneer zich er een gezondheidsprobleem bij mij voordoet, wil ik graag zo weinig mogelijk informatie over dit probleem tot mij nemen."

43. Welke omschrijving past het beste bij u? *

Markeer slechts één ovaal.

- "Wanneer ik informatie zoek over een gezondheidsprobleem, wil ik vooral dat ik deze informatie goed begrijp."
- "Wanneer ik informatie zoek over een gezondheidsprobleem, wil ik vooral dat deze informatie mij emotioneel steunt."

44. "Wanneer ik naar de huisarts ga met een gezondheidsprobleem, zoek ik voorafgaand aan dit bezoek informatie over het probleem op het internet." *

Markeer slechts één ovaal.

- Nooit *Ga naar vraag 51.*
- Soms *Ga naar vraag 45.*
- Regelmatig *Ga naar vraag 45.*
- Vaak *Ga naar vraag 45.*
- Altijd *Ga naar vraag 45.*
- N.v.t. *Ga naar vraag 51.*

45. "Ik breng de gevonden informatie ter sprake bij de huisarts." *

Markeer slechts één ovaal.

- Nooit *Ga naar vraag 50.*
- Soms *Ga naar vraag 46.*
- Regelmatig *Ga naar vraag 46.*
- Vaak *Ga naar vraag 46.*
- Altijd *Ga naar vraag 46.*

46. **"Ik ervaar dat het ter sprake brengen van de door mij gevonden informatie, een positieve invloed heeft op de zorgverlening."** *
    Markeer slechts één ovaal.
    - o Nooit
    - o Soms
    - o Regelmatig
    - o Vaak
    - o Altijd
47. **Licht bovenstaand antwoord toe:** *
    .....
    .....
    .....
    .....
    .....
48. **"Ik ervaar dat het ter sprake brengen van de door mij gevonden informatie, een negatieve invloed heeft op de zorgverlening."** *
    Markeer slechts één ovaal.
    - o Nooit
    - o Soms
    - o Regelmatig
    - o Vaak
    - o Altijd
49. **Licht bovenstaand antwoord toe:** *
    .....
    .....
    .....
    .....
    .....

Ga naar vraag 51.

50. **Waarom brengt u de gevonden informatie niet ter sprake bij de huisarts?** *
    .....
    .....
    .....
    .....
    .....
51. **"Ik weet dat Huisartsen Oude Turfmarkt / Bureau Studentenartsen een eigen website heeft."** *
    Markeer slechts één ovaal.
    - o Ja *Ga naar vraag 52.*
    - o Nee *Ga naar vraag 58.*
52. **Hoe bent u achter het bestaan van de website van Huisartsen Oude Turfmarkt / Bureau Studentenartsen gekomen?** *
    Meerdere antwoorden mogelijk.

Vink alle toepasselijke opties aan.

- Via het internet
- Via de huisartsenpraktijk
- Via familie, vrienden en/of kennissen
- Anders: .....

53. "Ik bezoek de website van Huisartsen Oude Turfmarkt / Bureau Studentenartsen (www.huisartsenamsterdam.nl of www.studentenartsen.nl) …" *

Markeer slechts één ovaal.

- Nooit *Ga naar vraag 63.*
- Soms *Ga naar vraag 54.*
- Regelmatig *Ga naar vraag 54.*
- Vaak *Ga naar vraag 54.*
- Altijd *Ga naar vraag 54.*

54. "Ik bezoek de website van Huisartsen Oude Turfmarkt / Bureau Studentenartsen, www.huisartsenamsterdam.nl of www.studentenartsen.nl om: *

Meerdere antwoorden mogelijk.

Vink alle toepasselijke opties aan.

- Informatie over gezondheidsproblemen te vinden
- Informatie over de praktijk te vinden
- Om een (e-mail)afspraak of herhaalrecept aan te vragen
- Om online een (gezondheids)test te doen
- Ik bezoek de website van Huisartsen Oude Turfmarkt / Bureau Studentenartsen nooit
- Anders: .....

55. Voldoet de website aan uw verwachtingen? *

Markeer slechts één ovaal.

- Ja *Ga naar vraag 57.*
- Nee *Ga naar vraag 56.*
- Weet ik niet *Ga naar vraag 57.*

Ga naar vraag 57.

56. Waarom voldoet de website niet aan uw verwachtingen? *

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57. Wat mist u op de website? *

Indien u niets mist op de website vult u "n.v.t" in.

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Ga naar vraag 63.

58. Nu u heeft gehoord van de website, denkt u deze in het vervolg te bezoeken? *

Markeer slechts één ovaal.

- ○ Ja *Ga naar vraag 59.*
- ○ Nee *Ga naar vraag 60.*
- ○ Weet ik niet *Ga naar vraag 61.*

59. Nu u gehoord heeft van de website denkt u deze in het vervolg te bezoeken, omdat: *

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Ga naar vraag 61.

60. Nu u gehoord heeft van de website denkt u deze in het vervolg niet te bezoeken, omdat: *

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61. Wat verwacht u voor informatie op de website van Huisartsen Oude Turfmarkt / Bureau Studentenartsen te vinden? *

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62. Wat zou u graag voor informatie op de website van Huisartsen Oude Turfmarkt / Bureau Studentenartsen zien? *

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63. De volgende vragen brengen in kaart hoe u verschillende aspecten van uw gezondheid waardeert. De vragen komen van de gevalideerde vragenlijsten RAND-36, K-6 en EK-10. U kunt elke vraag beantwoorden door het juist hokje aan te kruisen. Wanneer u twijfelt over het antwoord op een vraag, probeer dan het antwoord te geven dat het meeste van toepassing is. *

Markeer slechts één ovaal per rij.

	Heel erg oneens	Gedeeltelijk oneens	Gemengd	Gedeeltelijk mee eens	Heel erg mee eens
"Ik lijk gemakkelijker ziek te worden dan andere mensen."	○	○	○	○	○
"Ik verwacht dat mijn gezondheid achteruit zal gaan."	○	○	○	○	○
"Ik ben net zo gezond als andere mensen die ik ken."	○	○	○	○	○
"Mijn gezondheid is uitstekend."	○	○	○	○	○

64. Deze vragen gaan over hoe u zich de afgelopen 4 weken heeft gevoeld." *

Markeer slechts één ovaal per rij.

	Nooit / Bijna nooit	Soms	Regelmatig	Vaak	Bijna altijd / Altijd
Hoe vaak voelde u zich zenuwachtig?	○	○	○	○	○
Hoe vaak voelde u zich hopeloos?	○	○	○	○	○
Hoe vaak voelde u zich rusteloos of ongedurig?	○	○	○	○	○
Hoe vaak voelde u zich zo somber dat niets hielp om u op te vrolijken?	○	○	○	○	○
Hoe vaak vond u uzelf afkeurenswaardig, minderwaardig of waardeloos?	○	○	○	○	○
Hoe vaak had u het gevoel dat alles veel moeite kostte?	○	○	○	○	○
Voelde u zich levenslustig?	○	○	○	○	○
Voelde u zich erg energiek?	○	○	○	○	○
Voelde u zich uitgeblust?	○	○	○	○	○
Voelde u zich moe?	○	○	○	○	○

65. Deze vragen gaan over hoe u zich de afgelopen 4 weken heeft gevoeld. *

Markeer slechts één ovaal per rij.

	Nooit	Soms	Regelmatig	Vaak	Heel vaak
Heeft u in de afgelopen maand een paniekaanval gehad, waarbij u zich plotseling bang of angstig voelde of plotseling veel lichamelijke verschijnselen kreeg?	○	○	○	○	○
Heeft u in de afgelopen maand een sterke angst gehad om alleen uit huis te gaan, in een menigte te zijn, in een rij te staan of om met de bus of trein te reizen?	○	○	○	○	○
Heeft u zich in de afgelopen maand een sterke angst gehad om iets te doen in het bijzijn van andere mensen, zoals praten, eten of schrijven?	○	○	○	○	○
Heeft u zich in de afgelopen maand het merendeel van de tijd bezorgd, zenuwachtig, gespannen of angstig gevoeld?	○	○	○	○	○
Heeft u de afgelopen maand medicijnen tegen angst, depressie, spanning of stress gebruikt?	○	○	○	○	○

66. Heeft u een beperking die u belemmert in uw functioneren? *

Markeer slechts één ovaal.

- ○ Ja *Ga naar vraag 67.*
- ○ Nee *Ga naar vraag 73.*

67. Welke beperking heeft u? *

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68. Bent u hiervoor onder behandeling? *

Markeer slechts één ovaal.

- ○ Ja *Ga naar vraag 69.*
- ○ Nee *Ga naar vraag 70.*

69. Geef aan welke behandeling of medicatie: *

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Ga naar vraag 72.

70. Bent u niet onder professionele behandeling, heeft u dan zelf maatregelen getroffen, zoals zelfzorg of iets nalaten? *

Markeer slechts één ovaal.

- ○ Ja *Ga naar vraag 71.*
- ○ Nee *Ga naar vraag 72.*

71. Welke maatregel? *

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72. Mijn aandoening of beperking hinderen mij bij: *

Markeer slechts één ovaal per rij.

	Nooit / Bijna nooit	Soms	Regelmatig	Vaak	Bijna altijd / Altijd
De dagelijkse dingen (huishouden, mobiliteit, recreëren, hobby's, uitgaan, etc.)	○	○	○	○	○
Het studeren	○	○	○	○	○
Werk	○	○	○	○	○
Sociale contacten (familie, relaties, vriendschappen)	○	○	○	○	○

73. Ervaart u langdurige lichamelijke en/of psychische klachten? *

Markeer slechts één ovaal.

- ○ Lichamelijke klachten *Ga naar vraag 74.*
- ○ Psychische klachten *Ga naar vraag 75.*
- ○ Beide *Ga naar vraag 76.*
- ○ Geen van beide *Ga naar vraag 83.*

74. Welke langdurige lichamelijke klachten ervaart u? *

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Ga naar vraag 78.

75. Welke langdurige psychische klachten ervaart u? *

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Ga naar vraag 78.

76. Welke langdurige lichamelijke klachten ervaart u? *

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77. Welke langdurige psychische klachten ervaart u? *

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Ga naar vraag 78.

78. Bent u hiervoor onder behandeling? *

Markeer slechts één ovaal.

- o Ja *Ga naar vraag 79.*
- o Nee *Ga naar vraag 80.*

79. Geef aan welke behandeling of medicatie: *

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Ga naar vraag 82.

80. Bent u niet onder professionele behandeling, heeft u dan zelf maatregelen getroffen, zoals zelfzorg of iets nalaten? *

Markeer slechts één ovaal.

- o Ja
- o Nee *Ga naar vraag 82.*

81. Welke maatregel? *

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82. Mijn klachten hinderen mij bij: *
Markeer slechts één ovaal per rij.

	Nooit / Bijna nooit	Soms	Regelmatig	Vaak	Bijna altijd / Altijd
De dagelijkse dingen (huishouden, mobiliteit, recreëren, hobby's, uitgaan, etc.)	○	○	○	○	○
Het studeren	○	○	○	○	○
Werk	○	○	○	○	○
Sociale contacten (familie, relaties, vriendschappen)	○	○	○	○	○

83. Om kans te maken op een Bol.com cadeaubon ter waarde van €20, kunt u hier uw e-mailadres achterlaten:
N.B. Indien u hier uw e-mailadres achterlaat is uw anonimiteit niet meer gegarandeerd.
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Appendix - Results

What is the relation between health status (mental health/depression, vitality, anxiety and having function disabilities, physical and/or psychological ailments) on the information need(s) and information (searching) behavior?

Table 1 report an overview of the logistic regression analyses of health status and the different information needs, respectively knowledge motive, entertainment motive, the effect of health status on the different information needs, respectively knowledge motive, entertainment motive, social motive, self-actualization motive, uncertainty motive and blunting vs. monitoring.

Information need	Measure	*n*	χ^2 (*df*)	β	*p*	*OR*	*95% CI*
Knowledge motive							
	Function disability	47	0.04 (1)	-0.09	0.85	0.92	0.38-2.23
	Physical ailments	33	3.41 (1)	-0.91	0.06	0.40	0.16-1.04
	Psychological ailments	26	1.02 (1)	-0.75	0.35	0.47	0.10-2.25
	Both physical and psychological ailments	40	0.14 (1)	0.21	0.71	1.23	0.41-3.72
	General Health	186	0.58 (1)	0.16	0.44	1.17	0.78-1.76
	Mental health / depression	186	1.69 (1)	0.33	0.21	1.40	0.83-2.36
	Vitality	186	0.01 (1)	-0.02	0.94	0.98	0.61-1.59
	Anxiety	186	3.86 (1)	0.89	0.09	2.43	0.88-6.70
Entertainment motive							
	Function disability	47	1.17 (1)	-0.59	0.30	0.55	0.18-1.71
	Psychological ailments	26	2.27 (1)	0.83	0.12	2.30	0.80-6.64
	Both physical and psychological ailments	40	0.04 (1)	-0.11	0.84	0.89	0.29-2.73
	General Health	186	1.21 (1)	0.26	0.28	1.30	0.81-2.07
	Mental health / depression	186	0.30 (1)	0.14	0.58	1.15	0.70-1.90
	Vitality	186	0.08 (1)	0.08	0.78	1.08	0.63-1.83
	Anxiety	186	0.21 (1)	0.17	0.64	1.19	0.58-2.44
Social motive							
	Function disability	46	1.38 (1)	0.52	0.23	1.69	0.72-3.94

Information need	Measure	*n*	χ^2 (*df*)	β	*p*	*OR*	*95% CI*
	Physical ailments	32	2.58 (1)	-1.45	0.18	0.24	0.03-1.92
	Psychological ailments	26	3.02 (1)	0.99	0.08	2.69	0.90-8.00
	General Health	180	2.11 (1)	-0.31	0.15	0.74	0.49-1.11
Self-actualization motive							
	Function disability	47	0.05 (1)	-0.12	0.82	0.89	0.33-2.42
	Physical ailments	33	0.51 (1)	0.47	0.49	1.60	0.42-6.08
	Psychological ailments	26	0.75 (1)	0.65	0.41	1.92	0.40-9.19
	Both physical and psychological ailments	40	0.04 (1)	0.11	0.84	1.12	0.37-3.43
	General Health	186	2.34 (1)	-0.38	0.14	0.68	0.42-1.13
	Mental health / depression	186	2.20 (1)	0.45	0.16	1.57	0.84-2.93
	Vitality	186	1.65 (1)	-0.37	0.21	0.69	0.38-1.24
	Anxiety	186	2.92 (1)	0.90	0.14	2.45	0.75-8.00
Uncertainty motive							
	Function disability	26	0.50 (1)	0.41	0.49	1.50	0.48-4.69
	Physical ailments	17	0.09 (1)	-0.19	0.77	0.83	0.23-2.93
	Psychological ailments	11	0.70 (1)	0.71	0.42	2.03	0.36-11.34
	Both physical and psychological ailments	26	3.19 (1)	1.24	0.09	3.45	0.82-14.53
	General Health	83	0.03 (1)	0.04	0.87	1.05	0.61-1.79
	Mental health / depression	83	0.10 (1)	-0.10	0.75	0.91	0.51-1.63
	Vitality	83	0.18 (1)	-0.14	0.68	0.87	0.44-1.70
	Anxiety	83	1.71 (1)	0.63	0.23	1.87	0.68-5.12
Blunters							
	Function disability	55	0.01 (1)	0.06	0.91	1.06	0.37-3.10
	Physical ailments	44	1.01 (1)	0.59	0.31	1.80	0.58-5.53
	Psychological ailments	31	1.01 (1)	-0.97	0.37	0.38	0.05-3.16
	Both physical and psychological ailments	44	0.04 (1)	0.13	0.84	1.14	0.32-4.00
	General Health	218	1.06 (1)	-0.26	0.30	0.77	0.47-1.26
	Mental health /	218	0.13 (1)	-0.11	0.73	0.90	0.50-1.63

Information need	**Measure**	***n***	**χ^2 (*df*)**	**β**	***p***	***OR***	***95% CI***
	depression						
	Vitality	218	0.01 (1)	-0.03	0.93	0.98	0.55-1.73
	Anxiety	218	0.02 (1)	0.06	0.90	1.06	0.47-2.38

Table 1 - An overview of the logistic regression analyses of the measured components of health status (function disability, physical ailments, psychological ailments, both physical and psychological ailments, general health, mental health/depression, vitality and anxiety) and the information needs (knowledge motive, entertainment motive, social motive, self-actualization motive, uncertainty motive and blunters compared to monitors)

Table 2 report an overview of the logistic regression analyses of the measured components of health status (function disability, physical ailments, psychological ailments, both physical and psychological ailments, general health, mental health/depression, vitality and anxiety) and the different measured components of the information (searching) behavior (searching by directly reach for a (number of) specific website(s), using a search engine with the intention to reach a specific website(s), analytic searching and using the found information emotionally).

Information (searching) behavior	**Measure**	***n***	**χ^2 (*df*)**	**β**	***p***	***OR***	***95% CI***
Searching by directly reach for a (number of) specific website(s)							
	Function disability	47	0.02 (1)	-0.07	0.88	0.93	0.37-2.34
	Physical ailments	33	0.32 (1)	-0.31	0.58	0.74	0.25-2.19
	Psychological ailments	26	0.24 (1)	-0.29	0.63	0.75	0.23-2.46
	Both physical and psychological ailments	40	3.35 (1)	-1.10	0.10	0.33	0.09-1.21
	General Health	186	0.86 (1)	0.20	0.36	1.22	0.80-1.87
	Mental health/ Depression	186	4.39 (1)	-0.58	0.05	0.56	0.31-1.00
	Vitality	186	3.30 (1)	0.48	0.08	1.61	0.94-2.74
	Anxiety	186	4.75 (1)	-1.04	0.06	0.35	0.12-1.05
Intention to reach a specific website(s)							
	Function disability	40	1.01 (1)	0.48	0.33	1.62	0.61-4.28
	Physical ailments	28	0.09 (1)	0.16	0.76	1.18	0.41-3.38
	Psychological ailments	22	1.21 (1)	0.71	0.30	2.03	0.54-7.71
	Both physical and psychological ailments	37	0.97 (1)	0.51	0.34	1.66	0.59-4.65
	General Health	157	0.70 (1)	0.17	0.40	1.19	0.80-1.76
	Mental health / depression	157	0.14 (1)	0.09	0.71	1.10	0.69-1.73

Information (searching) behavior	**Measure**	***n***	**χ^2 (*df*)**	**β**	***p***	***OR***	***95% CI***
	Vitality	157	1.27 (1)	0.27	0.26	1.30	0.82-2.07
	Anxiety	157	0.03 (1)	0.06	0.87	1.06	0.54-2.07
Analytic searching							
	Function disability	55	0.98 (1)	0.34	0.32	1.40	0.72-2.72
	Physical ailments	44	0.03 (1)	-0.07	0.87	0.94	0.41-2.12
	Psychological ailments	37	0.96 (1)	0.44	0.32	1.54	0.65-3.65
	Both physical and psychological ailments	44	0.02 (1)	0.05	0.99	1.05	0.47-2.34
	General Health	218	0.01 (1)	0.01	0.94	1.01	0.74-1.39
	Mental health / depression	218	0.41 (1)	-0.12	0.52	0.89	0.61-1.29
Analytic searching							
	Vitality	218	1.18 (1)	-0.20	0.28	0.82	0.57-1.17
	Anxiety	218	0.04 (1)	-0.05	0.84	0.95	0.56-1.61
Using the found information emotionally							
	Function disability	55	2.26 (1)	0.80	0.12	2.23	0.81-6.18
	Physical ailments	44	0.35 (1)	-0.47	0.57	0.63	0.13-3.14
	Psychological ailments	31	0.95 (1)	0.67	0.32	1.95	0.53-7.15
	Both physical and psychological ailments	44	0.17 (1)	0.27	0.68	1.31	0.36-4.74
	General Health	218	0.54 (1)	-0.20	0.46	0.82	0.49-1.38
	Vitality	218	1.22 (1)	-0.33	0.27	0.72	0.40-1.29
	Anxiety	218	1.35 (1)	0.46	0.22	1.58	0.76-3.28

Table 2 - An overview of the logistic regression analyses of the measured components of health status (function disability, physical ailments, psychological ailments, both physical and psychological ailments, general health, mental health/depression, vitality and anxiety) and the different measured components of the information (searching) behavior (searching by directly reach for a (number of) specific website(s), using a search engine with the intention to reach a specific website(s), analytic searching and using the found information emotionally)

What is the relation between the other measured factors (gender, age, being employed, being a student and the searched health problem) and information need(s) and information (searching) behavior for a (student) population in Amsterdam?

Information need	**Measure**	***n***	**χ^2 (*df*)**	**β**	***p***	***OR***	***95% CI***
Knowledge motive							
	Male	35	1.34 (1)	-0.55	0.23	0.58	0.23-1.43

Information need	Measure	*n*	χ^2 (*df*)	β	*p*	*OR*	*95% CI*
	Employed	146	0.07 (1)	0.13	0.79	1.13	0.45-2.87
	Student	108	1.88 (1)	0.55	0.17	1.73	0.79-3.80
	Physical problem	131	3.18 (1)	-0.93	0.10	0.39	0.13-1.20
	Psychological problem	28	1.04 (1)	0.62	0.34	1.86	0.52-6.61
	Cause unknown	8	0.13 (1)	0.38	0.73	1.46	0.17-12.33
Entertainment motive							
	Male	35	0.65 (1)	0.42	0.41	1.53	0.56-4.19
	Age	186	4.43 (1)	-0.04	0.07	0.96	0.92-1.00
	Employed	146	0.90 (1)	-0.48	0.33	0.62	0.24-1.62
	Physical problem	131	1.33 (1)	-0.60	0.24	0.55	0.20-1.49
	Psychological problem	28	1.52 (1)	0.73	0.20	2.08	0.68-6.33
	Cause unknown	8	1.36 (1)	1.09	0.21	2.96	0.55-15.84
Social motive							
	Male	34	0.59 (1)	0.38	0.43	1.46	0.57-3.77
	Age	180	0.00 (1)	0.00	0.97	1.00	0.97-1.03
	Employed	144	4.51 (1)	1.37	0.07	3.92	0.89-17.34
	Psychological problem	26	3.18 (1)	0.95	0.06	2.58	0.95-7.00
	Cause unknown	8	0.61 (1)	0.70	0.41	2.01	0.38-10.60
	Prevention / Health and well-being	9	0.38 (1)	0.54	0.52	1.71	0.34-8.77
Self-actualization motive							
	Male	35	0.24 (1)	-0.27	0.62	0.76	0.26-2.23
	Age	186	0.72 (1)	-0.01	0.39	0.99	0.96-1.02
	Employed	146	0.02 (1)	0.08	0.88	1.08	0.37-3.14
	Student	108	1.61 (1)	0.58	0.21	1.78	0.73-4.36
	Physical problem	131	0.50 (1)	0.35	0.47	1.43	0.54-3.75
	Psychological problem	28	0.09 (1)	-0.19	0.76	0.83	0.26-2.67
	Cause unknown	8	0.00 (1)	0.00	1.00	1.00	0.12-8.54
	Prevention / Health and well-being	9	0.70 (1)	-0.74	0.38	0.48	0.09-2.45
Uncertainty motive							
	Age	83	0.39 (1)	0.01	0.54	1.01	0.97-1.05
	Employed	68	0.07 (1)	0.17	0.80	1.18	0.33-4.23
	Student	48	0.05 (1)	-0.12	0.82	0.89	0.32-2.48
	Physical problem	50	0.14 (1)	-0.21	0.71	0.81	0.27-2.46
	Psychological problem	19	0.18 (1)	-0.27	0.67	1.31	0.38-4.57
	Cause unknown	3	2.46 (1)	-1.90	0.13	0.15	0.01-1.75
Blunters							
	Male	19	2.38 (1)	0.81	0.11	2.25	0.83-6.07

Information need	Measure	*n*	χ^2 (*df*)	β	*p*	*OR*	*95% CI*
	Age	218	2.89 (1)	0.03	0.08	1.03	1.00-1.06
	Employed	169	0.17 (1)	-0.23	0.68	0.80	0.27-2.33
	Student	125	0.19 (1)	-0.21	0.67	0.81	0.32-2.09
	Physical problem	155	0.49 (1)	0.44	0.50	1.56	0.43-5.65
	Psychological problem	30	0.13 (1)	-0.27	0.73	0.76	0.17-3.52
	Prevention / Health and well-being	11	0.01 (1)	0.11	0.92	1.11	0.13-9.25

Table 3 - An overview of the logistic regression analyses of the measured sample characteristics (gender, age, being employed, being a student, the searched health problem) and the information needs (knowledge motive, entertainment motive, social motive, self-actualization motive, uncertainty motive and blunters compared to monitors)

Information (searching) behavior	Measure	*n*	χ^2 (*df*)	β	*p*	*OR*	*95% CI*
Searching by directly reach for a (number of) specific website(s)							
	Male	35	0.60 (1)	0.38	0.43	1.47	0.57-3.77
	Age	186	0.77 (1)	0.01	0.37	1.01	0.99-1.04
	Employed	146	0.14 (1)	-0.18	0.71	0.84	0.33-2.13
	Student	108	1.34 (1)	-0.47	0.25	0.63	0.28-1.39
	Physical problem	131	2.13 (1)	0.78	0.17	2.18	0.71-6.70
	Psychological problem	28	0.59 (1)	-0.48	0.46	0.62	0.17-2.22
	Prevention / Health and well-being	9	0.14 (1)	-0.39	0.72	0.68	0.08-5.65
Intention to reach a specific website(s)							
	Age	157	1.84 (1)	0.02	0.20	1.02	0.99-1.06
	Employed	124	1.16 (1)	0.50	0.27	1.65	0.68-4.01
	Student	94	0.56 (1)	-0.31	0.46	0.74	0.33-1.66
	Physical problem	108	0.00 (1)	0.00	0.99	1.00	0.41-2.49
	Psychological problem	25	1.17 (1)	0.67	0.31	1.95	0.54-7.01
	Cause unknown	8	1.50 (1)	-0.98	0.20	0.38	0.09-1.68
	Prevention / Health and well-being	8	0.16 (1)	-0.34	0.69	0.71	0.14-3.72
Analytic searching							
	Male	48	0.01 (1)	-0.03	0.94	0.97	0.47-2.00
	Age	218	1.28 (1)	0.01	0.25	1.01	0.99-1.03
	Employed	169	0.84 (1)	0.34	0.37	1.41	0.67-2.98
	Student	125	2.73 (1)	-0.50	0.10	0.60	0.33-1.10
	Physical problem	155	3.37 (1)	0.72	0.08	2.04	0.92-4.54
	Psychological	30	2.37 (1)	-0.75	0.15	0.47	0.17-1.30

Information (searching) behavior	Measure	*n*	χ^2 (*df*)	β	*p*	*OR*	*95% CI*
	problem						
	Cause unknown	9	0.14 (1)	0.27	0.71	1.32	0.32-5.44
	Prevention / Health and well-being	11	2.49 (1)	-1.40	0.19	0.25	0.03-1.97
Using the found information emotionally							
	Male	48	0.22 (1)	-0.30	0.65	0.74	0.20-2.70
	Age	218	0.58 (1)	-0.02	0.47	0.99	0.95-1.03
	Employed	169	1.39 (1)	0.83	0.28	2.29	0.51-10.37
	Student	125	0.15 (1)	-0.19	0.70	0.82	0.31-2.22
	Physical problem	155	0.18 (1)	0.27	0.68	1.32	0.36-4.86
	Psychological problem	30	0.02 (1)	-0.12	0.88	0.89	0.19-4.16
	Prevention / Health and well-being	11	0.05 (1)	0.25	0.82	1.29	0.15-10.78

Table 4 - An overview of the logistic regression analyses of the measured sample characteristics (gender, age, being employed, being a student, the searched health problem) and the different measured components of the information (searching) behavior (searching by directly reach for a (number of) specific website(s), using a search engine with the intention to reach a specific website(s), analytic searching and using the found information emotionally)