

An analysis of information shared on hikikomoris discussion forums

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Abstract: Hikikomori aka. socially withdrawn youth live in a small virtual world. The special features of their information seeking habits and especially information needs between Japanese and Finnish hikikomori are compared in this article. Data used in this study is based on posts in Japanese (Hikkyin2ch) and Finnish (Hikikomero) online discussion groups for hikikomori. Both qualitative and quantitative analysis were used for analysis.

The theoretical framework of the study is based on Reijo Savolainen's (1995; 2005) theory of information seeking in the context of the way of life.

Main research questions were: 1)What kind of information needs do Finnish and Japanese hikikomori express in discussion forums intended for hikikomori? 2)How do the information needs of Finnish and Japanese hikikomori differ from each other? What are the basis of the possible differences and which variables may explain those differences?

According to the study the findings show that even though the small world they live in, is similar, the cultural background affects to the information needs. A cultural dimension of "individualism vs. collectivism" typifies it.

Keywords: hikikomori, information seeking, information needs, Japan, Finland

1. Introduction

Hikikomori, also known as socially withdrawn youth, are a growing problem, especially in Japan but also in Western Europe. They have a culture of their own and their way of living differs from that of ordinary people. At this moment, only one study (Haasio 2015) has been conducted about the information practices of hikikomori.

Although the hikikomori phenomenon is typically Japanese and has origins in Japan (Krysinska 2008), similar cultural behavior has been identified in other countries (Haasio 2015; Husu & Välimäki 2017). It is not known understood how the differences between Japanese and Western Europe culture interacts with the information needs of hikikomori in these two geographical areas. To

address this gap in research, this study, conducted in Finland and in Japan, had the objective to understand how different cultural background possibly affects the information needs of hikikomori. The study contributes to a growing knowledge of hikikomori's culture and way of living in everyday life.

2. Information needs and theoretical background

T.D. Wilson (1981; 2006) has pointed out the difficulties to define "information needs". Both terms in itself are hard to define unambiguously. According to Brenda Dervin (1992) information need can be understood as a gap in person's knowledge. Choo (2002) pointed out that personal information needs have to be understood by placing them in real world context in which the person experiences the need, in the ways that person use the information to make sense of her/his environment and by examining the actions they take.

In this article, we understand information as described above based on Dervin's and Choo's interpretation. Information is something that a person needs to be able to do tasks or something he/she wants to satisfy his/her curiosity. Information can be also understood as a process of communication based on social context, where information is built (Tuominen & Savolainen 1997).

The theoretical background of this article is based on Reijo Savolainen's (1995; 2005) theory of information seeking in the context of the way of life. The way of life is mainly constituted through everyday activities and their mutual valuation. According to Savolainen (1995) the concept of way of life refers to "order of things, "which is based "on the choices that individuals make in everyday life". Also Elfreda Chatman's (1991) theory of life in the small world is used in this study to understand information behaviour in subcultures. Same theory was also used in Haasio's (2015) dissertation about Finnish hikikomori and their information behaviour.

The way of life can be operationalized for example by structure of time budget, models of consumption of goods and nature of hobbies. Savolainen (1995) speaks also about the mastery of life, which can be understood as life management. The way of life is formed by the effect of values and attitudes, material capital, social capital, cultural and cognitive capital and current situation of life of person.

In this study, we have concentrated on identifying the information needs of hikikomori-subculture representatives. Subculture can be defined as "an ethnic, regional, economic, or social group exhibiting characteristic patterns of behavior sufficient to distinguish it from others within an embracing culture or society" (Merriam-Webster 2017). In this sense, hikikomori-culture can be understood as a subculture of same social group, which has similar lifestyle and interests.

According to Hofstede & Hofstede (2005) culture can be understood as 1) the training or refining of the mind or 2) the collective programming of the mind

that distinguishes the members of one group or category of people from another. Hofstede & Hofstede (2005) speak about mental programming, which is “our software of mind” which can be understood as a synonym of the word culture according to him. Culture is not inherited, but adopted from the society where we live in. According to Hofstede & Hofstede (2005) there are six layers of culture:

- i. National level
- ii. A regional and/or ethnic and/or religious and/or linguistic affiliation level
- iii. A gender level
- iv. A generation level
- v. A social class level
- vi. Organizational, departmental and/or corporate level (employed people only)

According to Mack’s and Young’s (1959) classic definition, “such shared learned behaviors which are common to a specific group or category are called subcultures”. Subculture can also be understood as a contraculture, which represents cultural characters, which compound people and differ from the mainstream culture (Yinger 1960). Schouten and McAlexander’s (1995, 146) definition of subculture is based on the idea of shared consumption of similar goods and similar consumption activities. For example manga and anime are the forms of culture (e.g. comics, DVD’s) which is typically consumed widely among hikikomori subculture both in Finland and Japan. Haslop, Hill and Schmidt (1998) understand a space (e.g. bar or pub) as a subcultural place. In this study, we understand a virtual place such as a discussion forum as a subcultural place, which can be compared to a physical space shared by people who represent similar subculture.

According to Haslop, Hill and Schmidt (1998) socialization to subculture among gay people was happening mostly by consumption in bars. For the same reason the consumption of different goods and especially the way of using internet can be understood as socialization to subculture among hikikomori.

3. Research questions and ethics

According to Savolainen (1995; 2005) information behavior can be explained by the way of life a person has. In this article, our special interest is in culture’s influence on the information needs. Finnish and Japanese hikikomori have a similar way of life and Finnish hikikomori even admire it. Our hypothesis is that in addition to the way of life we have, also the cultural environment and the society’s values and norms equally affect our information behavior. Even though the subculture is very similar, the different cultural background affects the information needs.

We assume that moral, ethical and normative values of the society affect the information needs expressed. Some subjects may be taboos in certain societies

while in others they are topics about which people speak openly. On the other hand, the history of society and the cultural environment can affect to the information needs.

Our main research questions are:

- i. What kind of information needs do Finnish and Japanese hikikomori express in discussion forums intended for hikikomori?
- ii. How do the information needs of Finnish and Japanese hikikomori differ from each other? What are the basis of the possible differences and which variables may explain those differences?

The subculture of hikikomori is congruent: for example, internet plays an important role, manga and anime are interesting for these people as well as playing games. Additionally, empirical data suggested that among the hikikomori both in Finland and in Japan, there are mental problems such as anxiety, depression, that are either diagnosed or non-diagnosed by doctors.

On the other hand, the Finnish and Japanese societies differ much from each other. Finland is a modern Western-European country where family values are not as important as they are in Japan and the value of work is understood differently. Agosto and Hughes-Hassell (2006) contend that teenagers have similar information needs across socio-economic, ethnic, cultural and geographical boundaries.

In this study, our hypothesis is that cultural and ethnic backgrounds do affect the information needs. Different historical and cultural background can explain the differences in information needs that has been detected among the Japanese and Finnish hikikomori.

4. Hikikomori phenomenon

Word *hikikomori* is based on the Japanese word *hikikomorou*, which can be translated as “to be confined inside” (Krysinska 2006; Ohashi 2008). Hikikomori is a person who tries to avoid all social contacts (Saito 1998; Furlong 2008). Originally the word hikikomori was used to describe the withdrawal as well as the psychological conditions in which it occurred, such as autism, depression and schizophrenia (Suwa & Suzuki 2013).

The hikikomori phenomenon has been studied mostly from psychological and psychiatric perspective (e.g. Kondo et al. 2013; Teo 2013; Teo et al. 2015). Information seeking patterns of Finnish hikikomori have been dealt in one dissertation (Haasio 2015). Also their sexuality (Zechner & Haasio 2016) and identity (Haasio & Zechner 2014) has been discussed. In Finland, the hikikomori phenomenon is not widely known (Husu & Välimäki 2017).

Some researchers believe that hikikomori in Japan is related to various types of mental illness and psychotic disorder. For example, Krysinska (2008) thinks the

hikikomori phenomenon can be product of the strong pressures of uniformity in Japanese society, the difficulties of communication between parents and children, and the pressures caused by the education system. Some researchers have tried to explain it relying on the misuse of and addiction to the internet as an explanatory factor (Kato et al.2011a; Kato et al. 2011b). Originally a Japanese phenomenon, the hikikomori experience has now become acute in other countries. Kato et al. (2011a) speak about pandemia, which is caused by internet and its overuse. Furthermore, the questionnaire made in eight countries supports this hypothesis (Kato et al. 2011b).

Some researchers however believe that the hikikomori phenomenon in Japanese society can be recognized as a type of social pathological phenomenon. Although the cause of hikikomori still remains controversial in academic discussions, the term of *shakaiteki hikikomori* (Saito 1998; 2013) ("*shakaiteki*" in Japanese term means "*social*", thus *shakaiteki hikikomori* can be translated into "social withdrawal" in English) most accurately describes the *hikikomori* phenomenon in Japan. Saito defines *shakaiteki hikikomori* as 'an individual, at least 18 years old, who has completely withdrawn from *society* for more than 6 months, and the withdrawal behavior is not better explained by a premorbid psychotic disorder'" (Ohashi 2008). The Hikikomori person tends to have a tendency of a denial of a social intervention from others as well as the lack of communication.

Even though the hikikomori phenomenon is often classified in Japan as a mental disorder some researchers understand it is caused by the cultural difficulty in Japanese society about expressing failure, shame and guilt in an acceptable way and, in part, is attributable to the collision of the values of western and traditional Japanese society (Ohashi 2008). In addition to the values and the family's over-protection and respect for the parents, the Japanese school system explains at least part of the hikikomori phenomenon (Fujita 2007; see also Furlong 2008).

We understand hikikomori as a subculture, which contains the idea of social withdrawal and the focus of actions in daily life in the internet. In many cases, mental disorders can be an explanatory factor but it can also be an alternative way of living which is based on personal choice.

5. Data and methods

Data used in this study is based on posts in Japanese and Finnish online discussion groups for hikikomori. Studying the life of hikikomori and their information behavior is challenging because the phenomenon's special feature is to avoid contacts with other people. Therefore, interviewees are hard to find while use of the internet for communication plays an important role in their lives. For this reason, data about their information needs was collected in their discussion forums.

The empirical data from Finland consisted of 446 discussion threads containing 6910 messages posted to the Hikikomero discussion forum (<http://www.ylilauta.org/hikky>). Hikikomero is a forum intended to socially withdrawn people. The word 'hikikomero' is a word play: it sounds like hikikomori and means "sweaty closet". The users of the discussion forum speak about their home as a 'komero' (= closet) and when they refer their isolation they speak about 'komeroituminen' (= getting into the closet). The Finnish socially withdrawn call themselves as "hikkys" in Finnish Hikikomero discussion group. Both discussion forums are open to everyone, but the users identify themselves as hikikomoris in their messages by telling it. For example, the messages containing criticism towards the hikikomoris in Hikikomero are forbidden.

Due to anonymity, the exact age of the people involved in the discussions cannot be known. In some of the messages, the writers tell their age, and in others, the writer might mention being in high school, graduating as an undergraduate student or starting university studies. Based on this, we have concluded that a large number of posters are 16 to 30 years old. Participants in the discussion boards in Finland point out their gender in multiple messages either directly or indirectly. Almost all of them were men with a few exceptions.

We also collected empirical data from Japan from 200 discussion threads containing 6000 messages posted to the "Hikkyin2ch", a popular text-based discussion forum in Japan for socially withdrawn people who stay only at home and have no friends (<https://matsuri.2ch.net/hikky/>) ("hikikomori@ni-channelu keijiban" in Japanese). The average discussion thread in Hikkyin2ch, has more than 100 messages per month and contains a total of 5.000 to 100.000 messages. As explained below, all threads included for data collection and analysis from Hikkyin2ch limit poster's age and birth year. Therefore, we could easily estimate that posters aged from 21 to 40. People who posts to the Hikkyin2ch call themselves "Hikky".

The threads in Hikkyin2ch site vary in their contents, in their aims, and in their user profile, ranging from threads with specific topics (e.g. fashion for hikikomori, drinking) to a thread aiming at simply chatting with other users without any specific topic, to threads that limits user's age, birth year and the duration of hikikomori. The third type of threads were valuable for our research purpose because they cover a broad range of hikikomori person's interests and questions that may reflect their context in their daily information practices as well as information needs.

We analyzed data collected by using both qualitative and quantitative content analysis. The discussion threads were downloaded using a manual copy-paste - technique, and put into Word documents. First, the information needs recognized from the Finnish and Japanese discussion groups were classified in 13 categories, which were extracted from the data analyzed. Haasio (2015) used

these categories in his study about the information behavior of socially withdrawn (hikikomori) people. Because some information needs recognized in Japanese material did not exist at all or existed to a small extent in Finland, two new categories were added to Haasio's (2015) classification. This gave an overall picture of different types of information needs found from the material. After that qualitative content analysis was conducted in the material collected to find the reasons and explanatory factors of different information needs.

In the qualitative analysis phase, the focus was in those information needs, which differed between Finland and Japan. Qualitative analysis was done by using content analysis. All the messages were read through by researchers. Researcher 1 analyzed the material from Finland and researcher 2 did the same to Japanese messages. During the process the messages were read through twice. In the first round the aim was to get an overall picture, in the second round closer analysis was made for those messages collected from the material during the first round.

6. Analysis

6.1 Information needs recognized

1041 different information needs were recognized in the Finnish discussion group Hikikomero and 1619 information needs in the Japanese hikikomori discussion group Hikkyin2ch. Some messages did not express any information needs. In some cases participants just told about their feelings and shared their thoughts to others. We call these messages without information needs reflective messages. In this study we concentrated to those messages where there was a formulated information need to be recognized.

Table 1. Information needs of hikikomori in Finland and Japan

Information need	Number of information needs/Finland	Number of information needs/Japan	Percentage of information needs/Finland (%)	Percentage of information needs/Japan (%)
Economic problems/housing/livelihood	187	170	18,0 %	10,5 %
Death	48	213	4,6 %	13,2%
Social relations/marriage/family	78	238	7,5 %	14,7 %
Studying/work/military service	87	208	8,4 %	12,8 %
Hobbies/leisure time	102	112	9,8 %	6,9 %

Social withdrawal and hikikomori phenomenon	107	105	10,3 %	6,5 %
Sex/dating	98	107	9,4 %	6,6 %
Health and sickness	160	144	15,4 %	8,9 %
Physical and psychological features	51	97	4,9 %	6,0 %
Society and spiritual questions	73	19	7,0 %	1,2 %
Alcohol, cigarettes and drugs	30	4	2,9 %	0,2 %
Food	5	112	0,0 %	6,9%
Other information needs	15	90	1,4 %	5,6%
total:	1041	1619	100 %	100 %

Table 1 shows the types of the information need of hikikomori in Finland and Japan based upon the result of our study. Here we divided the recognized information needs in 13 main categories (Table 1). In Finland “Economic problems/housing/livelihood” (18,0 %) and “Health and sickness” (15,4 %) - categories were the ones with most of information needs. Third biggest information need’s category in Finland was “Social withdrawal and hikikomori phenomenon” (10,3 %). In Japanese discussion forum, on the other hand, the biggest categories of information needs recognized concerned social relations/marriage/family (14,7 %), death (13,2 %) and studying/work/military service (12,8 %).

6.2 Differences between Japan and Finland

The way of living of hikikomoris in Finland and in Japan is very similar. They are isolated from the world, avoiding social contacts and spending most of their time at home surfing the internet and playing games as they reveal in the forums. However, our finding show impact of cultural differences in several information needs. Especially information needs concerning family relationship, economic problems, sex/dating, marriage, and food-related problems are quite different from between hikikomori in Finland and Japan.

Family relationship

The biggest difference in lifestyle of hikikomoris between Finland and Japan is a relationship with family. In Finnish society, the family has not such a big role whereas Japanese society is very family-oriented. In Finland, many young people move away from their parent’s house when they are about 19-21 years old. The same is true of hikikomori in Finland, that is, many Finnish hikikomoris live in their own flat, not at their parent’s home. In Japan, on the other hand, it is quite normal that young people live at parent’s home until they get married, and thus it is not surprising that all the hikikomoris in Japan live at their parent’s house, meaning they are literally homebound.

This socio-cultural difference in lifestyle of hikikomori possibly causes the difference of the information needs in both countries. As can be seen in table 1, Japanese hikikomori had plenty of information needs related to family unlike in Finland. This can also be explained by family relationships as one of practices of cultural heritages in Japan.

Such strong family-oriented society affects way of life of hikikomori in Japan positively and negatively, which resulting in occurring two opposed information needs. An example of negative information need is:

I don't want to care for my parents in their old age. I want to escape from this home before my parents suffer dementia

An example of positive information need is:

my parent[s] support me. I assume that my mother never says I have to pay money back to her, but I want to really do if my level of living improves in near future.

Economic problems

In many cases, Finnish hikikomori wanted to know how to take advantage of the social welfare system. They did not see working as an option but moving away from their parents was important for them. That is why advices for getting social security was asked from those people who were in a same situation and might have experience of getting social benefits to fund their living.

How do I get a disability pension? I cannot go to work because the head cannot withstand. Even shopping in the store causes annoying pain. It is not an option to change the forums, and not just to go to study. What am I doing?

In Japan, many hikikomoris also have a similar economic problem as Finnish hikikomoris do such as difficulty in receiving a disability pension or an income support. Many Japanese hikikomoris nevertheless tend not to say that they have an economic problem directly even though its priority seem to be high. Following example shows the process of the transition of information needs in accordance with the level of priority.

I want to go to a school somewhere to get a license or a qualification. However, I cannot imagine myself learning something at a school. First, I don't have money anyway.

Here, information need for studying occurred first at surface level, then it negatively connected to second information need for health/sickness or self-esteem, and finally third information need for an economic problem was arrived in the end. What this movement between information needs implies is that a poster of this message probably need to solve an economic problem with the highest priority. He/she might found him/herself having health issue or low self-esteem, and even regret that situation that may avoid he/her from returning a school as if hikikomoris were required to acquire a license or a qualification by Japanese society, culture and way of life.

This in-depth view of an informational movement in this message provides some interesting insight into the effect of cultural environment can influence on one's choice of information need.

Sex, dating and marriage

One interesting difference is the number of information needs about marriage, sex and dating. In Finland there was no information needs recognized about marriage, but in Japan marriage caused 1,9 % of the information needs. In contrast the information needs of Finnish hikikomori contained 98 (9,8 %) information needs about sex and dating and in Japan only 6,6, % of all information needs dealt with sex and dating.

The importance of marriage is clearly bigger in Japan than in Finland. In Japan, the marriage is often considered as a ritual event of becoming independent from parents, which results in their leaving parents' home in a very ceremonial manner. In Japan, many men and women live with their parents until they get married. However, once they decide to marry, parents will expect them to leave. A following example message posted tell us how Japanese hikikomori has an information need about marriage based on Japanese cultural norm, cultural manner, and way of life that is affected by these cultural environment.

I want "a wife" not "a girlfriend". To get married, have a child, get a job, and raise a child make up an ideal life...

In Finland, on the other hand, the role of marriage is not so important. Many people live alone or couples live together without being married. Scandinavian culture is individualistic and it is socially acceptable to be single as opposed to Japanese culture. This explains the reason why most of the information needs (18,4 %) of Finnish hikikomori concern Economic problems, housing and livelihood. Living alone or willing to do so raise information needs concerning that theme. On the other hand, Finnish hikikomoris were interested in to get sexual experiences and discussed about it more openly and widely than the Japanese hikikomoris. For example, prostitution and their services was one of the themes discussed in Finland.

Food-related problems

As shown in Table 1, in Japan, hikikomoris has a large amount of *information need about having a meal* (112 cases) compared with Finnish hikikomoris (5 cases). One example of this category is:

I want to eat a delicious *Ramen* (Japanese noodle in soup)

Interestingly adjective *delicious* and *tasty* are often used by many posters when they describe foods they want to eat, which implies that they are spending a much longer time at home having similar kind of meals regularly.

Another example is:

I want to eat a beef bowl at *Yoshinoya* (one of famous chain stores of a beef bowl in Japan) but maybe I cannot because it will take 50 minutes to get there by bicycle. It is too far from home.

This message not only tells us that his/her information need may connected to food but also indicates their hidden information need for social relationship that implies that he/she is in a negative situation in which they basically cannot go to any places.

6.3. Cultural differences explaining differences in information needs

According to Savolainen (1995; 2005) the way of living plays a big role in the information seeking process of which information needs is as a part. Hikikomori in Finland and Japan have a similar way of living - they try to be isolated from society and live a lonely life where almost the only contacts with other people are within their family. If they live alone, as if many do especially in Finland, the contacts to other people are even rarer. Their interests and hobbies in both countries are very similar: playing games, watching TV, surfing the net and reading - especially manga and anime seem to be popular.

Despite very similar life situation and the way of living, information needs vary quite a bit among the Japanese and Finnish hikikomori. Our findings show that the explanatory factor is the cultural difference of these societies. However, Agosto and Huges-Hassell (2006) argue that youth have similar information needs across the world without depending the culture they live in. This should be taken for reconsideration based on our results. In our point of view the way of living, subculture and cultural environment should be observed as factors affecting information needs.

There are significant differences in information needs even though the way of living and the subculture where the person belongs is the same. Our findings in this empirical research show that the information needs in different subcultures cannot simply be explained by the way of living. For instance, among Japanese hikikomori marriage is considered as one of important stages of life, In Finland not. Finnish hikikomori are keen to know how to get sexual experiences and they discuss openly about sex, Japanese are not so open-minded in those types of questions because of cultural difference between Finland and Japan. For the same reason, the way of living - at parent's house in Japan and often in an own flat in Finland - also makes a difference. Yet another, the attitude towards food is very different between Finland and Japan. In Japanese culture it is an important thing - Finnish hikikomori just do not have information needs about it.

In Savolainen's (1995) model, the person's cultural capital is taken into account but the influence of the society's cultural heritage and its special features are not

visible enough. Despite globalization and cultural integration, the local traditions and cultural heritage affect the information needs.

Cultural environment includes the cultural heritage, manners, ethical issues and different traditions in a society. According to our findings, it may affect the types of information needs. Even belonging to similar cultural background, the special features of society's own culture are assimilated.

There are two features that shape Japanese' communication style through a language and they differ from the communication style of Finland and other western countries. First, Japanese communication style is deeply rooted in a language system with a complicated expression of "politeness". According Hall, Japan culture is positioned as the most a high-contextual culture in the list. In a high-context culture, an expression in an indirect and implicit way by using negative politeness strategies and off-record politeness strategies (Brown & Levinson, 1978) in order to avoid a hearer's negative face (Goffman, 1955; Goffman, 1959) is highly recommended when people communicate with each other through a language. For example, an Japanese expression of "I want to eat something" a real meaning is an expression of a request such as "I want [need] a food. I am wondering if you could cook something for me" but other meaning is a simple intention such as "I am hungry. I am going to cook something to eat", and what is more, whatever his or her meaning is an explicit or implicit, Japanese tend to prefer to simply say "I am hungry", which makes a hearer more difficult to understand speaker's real intention within a context of a whole dialogue.

Second feature of Japanese communication style is that it is strongly influenced by a cultural feature based on social norms, cultural values and a hierarchical society, what Hofstede categorized as a *collective culture*. Some researchers found that Japanese culture seems to be based on a hierarchical and a collective cultural dimension, whereas Finnish culture is based on a non-hierarchical and an individualistic cultural dimension although both cultures belong to a high-context culture (). In their article, researchers mentioned that a collective Japanese culture was best exemplified in a Japanese expression of "*tatemaie and honne*" that "describe a situation in which a person's stated reason (*tatemaie*) differs from his real intention or motive (*honne*)". Other research found that Hofstede's cultural dimension of "individualism vs. collectivism" could be applicable for explaining cultural differences in a continual use of social media such as Facebook and in expressing information need though such social networking services. According to this article, while Facebook users in culture from an individualism including western cultures (although not mentioned about Finnish culture) tend to use Facebook for seeking an individual information need, users in culture from a collectivism such as Japan tend to use Facebook for seeking collective interests and gaining an emotional support from other users in a community. Authors of this article categorized this tendency of the usage of SNS in culture from a collectivism as "socialization", the process by

which a person learns to function within a particular society or group by internalizing its values and norms (OED) and “self-presentation”. The act of expressing oneself and behaving in ways designed to create a favorable impression or an impression that corresponds to one(). These cultural features are frequently identified in the content of the messages posted by Japanese hikikomoris.

Though these reviews of some previous researches, we propose a following hypothesis; information needs in both Finland and Japan is influenced by the cultural difference typified by a cultural dimension of “individualism vs. collectivism”. Japan is an example of the society, which represents collectivism and Finland on the other hand represents individualism typical for many western countries (see Hofstede & Hofstede 2005).

7. Discussion

The results of our study show that the influence of the cultural environment is not sufficiently taken into account in the analysis of the factors affecting the information needs of different groups of people who have similar way of life. The further studies should analyze the impact of the different cultural characteristics of different cultures on the acquisition of information and develop a model of how culture affects information behavior.

In addition, the whole information acquisition process should be looked at as a holistic phenomenon among different subcultures and people with similar lifestyles.

Alongside the information needs participants express their thought and feelings in reflective messages. The content and purpose of those expressions is one interesting area of study in this field.

References

- Agosto, D.E. & Hughes-Hassell, S. (2006). *Toward a Model of the Everyday Life Information Needs of Urban Teenagers, Part 2: Empirical Model*. Journal of American Society for Information Science and Technology 57(11), 1418-1426.
- Chatman, E.A. (1991). "Life in a small world: Applicability of gratification theory to information-seeking behavior." Journal of the American Society for Information Science 42 (6), 438-449.
- Choo, C. W. (2002). *Information management for the intelligent organization: the art of scanning the environment*. Information Today, Inc..
- Dervin, B., From the Mind's Eye of the User: the Sense-making Qualitative-Quantitative Methodology. In: Glazier, J.D. & Powell, R.R.(eds.), *Qualitative Research in Information Management*. 5. 61-84. Englewood, Colorado: Libraries Unlimited, 1992.
- Fujita, T. (2007). *Rapporteur's comments. Workshop on Transition Policy for Young People with Low Educational Background*. Japan Institute for Labour Policy and Training, Tokyo 26th-27th February.
- Furlong, A. (2008). The Japanese hikikomori phenomenon: acute social withdrawal among young people. *The Sociological Review*. Vol.56(2), 309-325.

- Haasio, A. (2015). *Toiseus, tiedontarpeet ja tiedon jakaminen tietoverkon "pienessä maailmassa"*: Tutkimus sosiaalisesti vetäytyneiden henkilöiden informaatiokäyttäytymisestä. Diss. Tampere: Tampere University Press. Acta Universitatis Tamperensis 2082. Available <http://urn.fi/URN:ISBN:978-951-44-9878-7>. (Summary in English). (Otherness, information needs and information sharing in the "small world" of the Internet: A study of socially withdrawn people's information behavior)
- Haasio, A. & Zechner, M. (2014). Identiteettipuhetta Hikikomero-keskustelufoorumilla. In Gissler, Mika & Kekkonen, Marjatta & Känkänen, Päivi & Muranen, Päivi & Wrede-Jäntti, Matilda (ed.) *Nuoruus toisin sanoen – Nuorten elinolut vuosikirja 2014*. Helsinki: Terveyden ja hyvinvoinnin laitos. (Identity speech at the Hikikomori discussion forum)
- Haslop, C., Hill, H. and Schmidt, R.A., (1998). The gay lifestyle-spaces for a subculture of consumption. *Marketing Intelligence & Planning*, 16(5), pp.318-326.
- Hofstede, G. & Hofstede, G. J. 2005. *Cultures and Organizations: software of the mind*. Rev. and exp. 2nd ed. New York: McGraw-Hill.
- Husu, H. M., & Välimäki, V. (2017). Staying inside: social withdrawal of the young, Finnish 'Hikikomori'. *Journal of Youth Studies*, 20(5), 605-621.
- Karlova, N.A & Fisher, K.E. (2013). A social diffusion model of misinformation and disinformation for understanding human information behaviour. *Information Research* 18(1).
- Kato, T. A., Shinfuku, N., Sartorius, N., & Kanba, S. (2011a). Are Japan's hikikomori and depression in young people spreading abroad? *The Lancet*, 378(9796), 1070.
- Kato, T.A., Tateno, M., Shinfuku, N., Fujisawa, D., Teo, A.R., Sartorius, N., Akiyama, T., Ishida, T., Young Choi, T., Singh Balbara, Y.P., Matsumoto, R., Umene-Nakano, W., Fujimura, Y., Wand, A., Chang, J. P-C., Chang, R. Y-F., Shadloo, B., Ahmed, H.U., Lerthattasilp, T. & Kanba, S. (2011b). Does the hikikomori syndrome of social withdrawal exist outside Japan? A preliminary international investigation. *Social Psychiatry and psychiatric epidemiology* 47(7), 1061-1075.
- Kondo, N., Sakai, M., Kuroda, Y., Kiyota, Y., Kitabata, Y., & Kurosawa, M. (2013). General condition of hikikomori (prolonged social withdrawal) in Japan: Psychiatric diagnosis and outcome in mental health welfare centres. *International Journal of Social Psychiatry*, 59(1), 79-86.
- Krysinska, D. (2007). *Hikikomori (Social Withdrawal) in Japan: Discourses of Media and Scholars; Multicausal Explanations of the Phenomenon*. Doctoral dissertation, University of Pittsburgh.
- Mack, R. W., & Young, K. (1959). *Sociology & social life*. New York: American Book.
- Merriam-Webster*. (2017). Available at <https://www.merriam-webster.com/dictionary/subculture>.
- Ohashi, N. (2008). *Exploring the psychic roots of Hikikomori in Japan*. Ann Arbor, MI: Pro Quest LLC.
- Saito, T. (1998). *Shakaiteki hikikomori: owaranai shishunki*. [Hikikomori: Adolescence without end]. Tokyo: PHP.
- Saito, T. (2013). *Hikikomori: Adolescence without End* (English translation of Shakaiteki hikikomori: owaranai shishunki). Minnesota University Press.
- Savolainen, R. (1995). Everyday life information seeking: Approaching information seeking in the context of "way of life". *Library & information science research* 17.3, 259-294.
- Savolainen, R. (2005). Everyday life information seeking. In: *Theories of information behavior*. Ed. by Karen Fisher & Sanda Erdelez & Lynne McKechnie. Medford, NJ: Information Today, 143-148.

- Schouten, J. W., & McAlexander, J. H. (1995). Subcultures of consumption: An ethnography of the new bikers. *Journal of consumer research*, 22(1), 43-61.
- Suwa, M. & Suzuki, K. (2013). The phenomenon of "hikikomori" (social withdrawal) and the socio-cultural situation in Japan today. *Journal of Psychopathology* 19/2013, 191-198.
- Teo, A. R. (2013). Social isolation associated with depression: A case report of hikikomori. *International Journal of Social Psychiatry* 59(4), 339--341.
- Teo, A. R., Fetters, M. D., Stufflebam, K., Tateno, M., Balhara, Y., Choi, T. Y., ... & Kato, T. A. (2015). Identification of the hikikomori syndrome of social withdrawal: psychosocial features and treatment preferences in four countries. *International Journal of Social Psychiatry*, 61(1), 64-72.
- Tuominen, K. & Savolainen, R. (1997). Social constructionist approach to the study of information use as discursive action. In: *Information Seeking in Context. Proceedings of an International Conference on Research in Information Needs, Seeking and Use in Different Contexts, 14-16 August, 1996 Tampere, Finland*. Ed. by Pertti Vakkari & Reijo Savolainen & Brenda Dervin. London (UK): Taylor Graham, 1997, 81-96.
- Watts, J. (2002). Public health experts concerned about "hikikomori". *The Lancet*, 359(9312), 1131.
- Wilson, T. D. 2006. On user studies and information needs. *Journal of documentation*, 62(6), 658-670.
- Wilson, T. D. (1981). On user studies and information needs. *Journal of documentation*, 37(1), 3-15.
- Yinger, J. M. (1960). Contraculture and subculture. *American sociological review*, 625-635.
- Zechner, M. & Haasio, A. (2016). Seksuaalisuus sosiaalisesti vetäytyneiden nuorten verkkopuheessa. *Seksologinen aikakauskirja* 2(1). Available <http://seksologinenseura.fi/index.cfm?sivu=160>. (Sexuality of hikikomori in the discussion forum's comments)