

Do Suicide Websites Really Encourage Suicide? Content Analysis of Postings to a Japanese Suicide Website

Sei MATSUEDA

Doctoral Program in International and Advanced Japanese Studies

Graduate School of Humanities and Sciences

University of Tsukuba

Abstract

The main aim of this research is to reveal the function of suicide websites by examining the language used by individuals to describe their feelings and communicate in a social environment. Content analysis of seven message boards from a suicide website revealed that the central topic was self-disclosure through communication with others and not death images arising from suicidal intentions. From this research it became clear that suicide websites function in the same manner as self-help groups in the physical world and were not sufficiently biased towards suicide to justify internet regulations at the present time.

Keywords: suicide website, message boards, morphological analysis, computer coding

要旨

本稿では、自殺系サイトにおける書き込みの形態素解析とコンピュータコーディングを通して自殺企図者による CMC の実態を分析し、自殺系サイトの機能やその社会的意味を探った。分析の結果、自殺系サイト内の掲示板のすべてで「私」や「僕」、「俺」などと言った「自己」カテゴリに分類した単語の出現が多いことが認められ、活発な自己開示が行われていることが確認された。結論として研究対象サイトに限っては、自殺の手段や方法についてのみ議論しているわけではなく、主に人間関係や感情に関する自己開示が行われる場であり、政府が前提とするような「自殺+ネット=悪」という構図を裏付けるに十分なエビデンスを見出すことはできなかった。

キーワード: 自殺系サイト、掲示板、形態素解析、コンピュータコーディング

Suicide in Japan

In 1998 the number of suicides in Japan rapidly increased to 32,863, and has been going over the 30,000 level for a decade. According to the 2008 whitepaper on suicide (Lifelink 2008), the so-called “March 1998 shock” was the main aggravating factor in this increase. The credit crunch of the “March 1998 shock” had already begun with the financial crisis of 1997. The result was bankruptcy of numerous small enterprises and an increase in suicide among middle-aged people. According to age-specific suicide rates, men show a peak between their fifties to eighties unlike women where the rate increases from year to year. Furthermore, suicide is the leading cause of death among men aged between 20 and 44 and of women aged between 15 and 39. This means that suicide is the major cause of death among the young population.

The National Police Agency (2008) reported that “health problems” were the most common motive for suicide, accounting for 63% of all suicides. The second most common motives were “financial problems”, “problems at home”, and “problems at work”.

Suicide prevention in Japan

In 2000, in response to this situation, the Japanese government took a first suicide prevention measure at national level. This was based on similar measures implemented in foreign countries, and was divided into three stages: prevention, intervention, and post-intervention. In addition, the basic Act of Suicide Prevention Measures (2006) emphasized the importance of both the “medical model” and the “social model” approach to suicide prevention. This change of approach arose from a realization that previous suicide prevention methods had failed through too much importance being laid solely on the “medical model.” Furthermore, the outline of the Comprehensive Suicide Measures Act (2007) clearly advocates that suicide can be prevented by means of the social approach. Recently therefore, Japanese suicide prevention measures were modified to reflect the importance of the social model as well as the medical model. The Comprehensive Suicide Prevention Measures also make mention of internet usage. Online suicide information is at present under the supervision of the National Police Agency and local chiefs of police are authorized to order any information they consider a possible trigger for suicide to be deleted. The development of a filtering system technically makes suicide information invisible. Also, the booster plan for suicide prevention measures (2008) clearly mentions the enhancement of internet actions in the context of government-led comprehensive suicide prevention measures.

Media and suicide

Media weight has increased in the context of these comprehensive measures. However, strategic media usage in suicide prevention has not been sufficiently studied. For instance, Japanese mass media have not responded to WHO guidelines on suicide reporting (2000), nor does the Japanese government have legal right to regulate media coverage of suicide cases. Much the same is true of the internet. Until internet usage was specifically mentioned in the booster plan for suicide measures (2008) the government had paid no attention to the internet. Such lack of attention possibly resulted in the 2008 cluster suicides by hydrogen sulfide poisoning.

Suicide and the internet in Japan

The main reason for connecting suicide with the internet in Japan is the case of “Dr. Kiriko.” In 1998 a 27 year-old man represented himself as “Dr. Kiriko”, a Tezuka cartoon character. A strong supporter of euthanasia, this man sold potassium cyanide through his website to assist people in committing suicide. This case is known as the first incident where the internet was used as an aid to committing suicide. In another case, in 2000, perfect strangers met each other through a suicide website and made a group suicide pact. This case became a sensation as the first “cyber suicide” and triggered other cluster suicides. Against this background, the number of internet suicides reached a peak in 2005 and is at present on a downward trend.

Suicide and the suicide website in Japan

The media and the National Police Agency are still not clear in their definition of what constitutes a suicide website. In general, Japanese suicide websites are not only sources of information on how to commit suicide but also refuges for people who suffer from suicidal intentions (Shibui 2004). However, due to negative associations since the “Dr. Kiriko” case, suicide websites tend to be regarded as harmful. This assumption is commonly held within the government and forms the basis of the argument for internet regulation. Such a shortsighted, and in our opinion misguided, policy could be effective against a few criminally-minded individuals but would also be a block for the majority of users, who though they have suicidal intentions, seek help via the suicide websites.

Background of study

Despite the lack of evidence that suicide websites actually do encourage individuals to commit suicide, the government has been working on internet regulation. However, it is meaningless to evaluate the effects of suicide websites without gaining an understanding of their real nature. In order to ascertain the real nature of suicide websites a study of their activities and functions

should be carried out. Although there has not been enough advanced research on suicide websites, a few content analyses have been conducted outside of Japan.

Barak and Miron (2005), for example, applied the CAVE method (Buchanan and Seligman 1995) to evaluate the writing characteristics of participants of forums in online support groups. This study is quite unique in terms of its subject, i.e. the attribution of a suicidal person's writing style when participating in online activities. However, there are three difficulties in directly adopting this method to Japanese suicide websites. Firstly, the CAVE method (Buchanan and Seligman 1995) is based on written English and is therefore impossible to apply to written Japanese. Secondly, Barak and Miron (2005) hired trained specialists for qualitative analysis of the writing. Thirdly, and most importantly, it is virtually impossible to conduct qualitative analysis on specific participants due to the difficulty of traceability of Japanese internet sites which tend towards a high degree of anonymity. However, as M. Janson, E. Alssandrini, S. Strunjas, H. Shahub, R. El-Mallakh & S. Lippmann (2001) point out, communication that allows participants' anonymity is comfortable enough for suicidal people to disclose their personal feelings. Therefore, an examination of Japanese suicide websites is a reasonable basis for an understanding of the function of the suicide website.

In this paper, we will attempt to reveal the real nature of Japanese suicide websites through a quantitative analysis of writings from message boards. Considering the characteristics of Japanese suicide websites, which are places to communicate anonymously with an unspecified number of people, we will apply quantitative analysis coupled with morphological analysis and computer coding to the writings instead of qualitative analysis.

Purpose of study

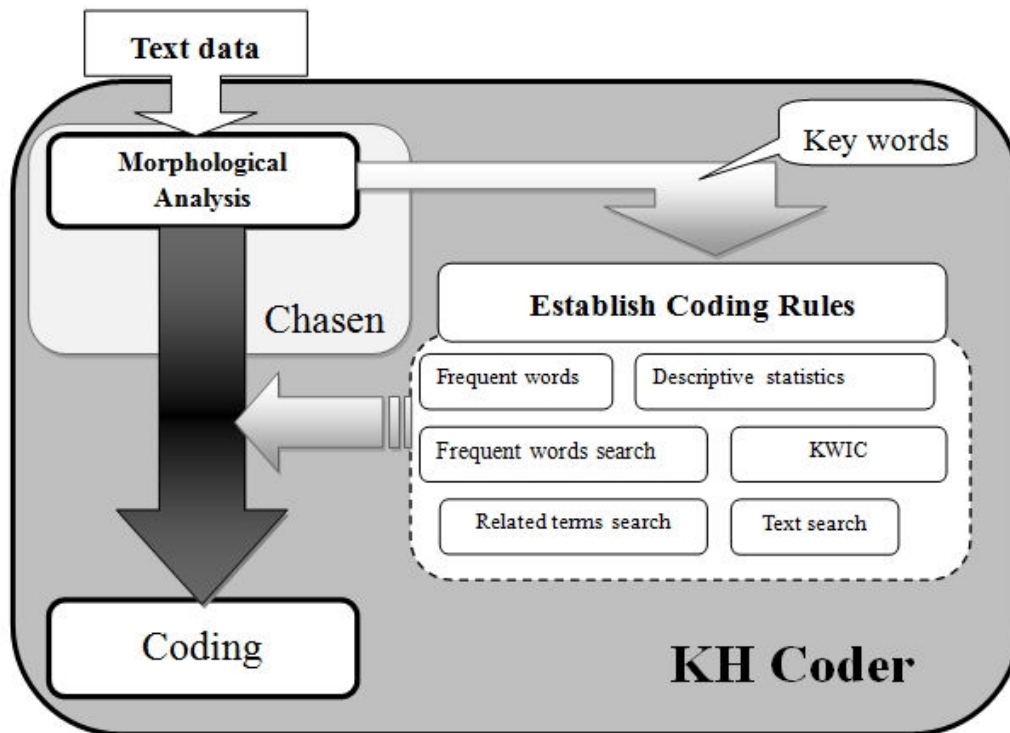
The purpose of this study is to examine the content of what is reported in writing by suicidal people who post messages on Japanese suicide websites.

Research method

This study carried out content analysis of seven message boards from a Japanese suicide website. There were two phases in content analysis: morphological analysis, followed by computer coding using KH Coder¹; Japanese morphological analysis software (see Figure 1).

¹ KH coder © Kohichi Higuchi <khc.sourceforge.net>

Fig. 1: Conceptual scheme of content analysis



Data

Online writings were retrieved from a Japanese suicide website that satisfied the following three criteria: a) imperatively had tree-structured message boards; b) NOT be cross-linked; and c) be accessible and open. The data was retrieved from 0:00 on August 1st 2008 to 18:01 on September 24th 2008. The posts were retrieved by means of an original autopilot computer program WebCollector² that retrieves information online punctually 24 hours a day, every day. By applying WebCollector, it was possible to improve precision and stability of data collection. The total data size was 1.31MB.

For the analysis, only the text data of posts from suicidal people were extracted from the suicide website's message boards. The data totaled 3,889 messages by the end of collection. Each message was counted as a basic unit of analysis.

² WebCollector © Yukihiisa Fujita, University of Nagoya

Procedure

First of all, to understand the discourse of the message boards, the words that were most frequently used in the messages were examined (see Table 1). After morphological analysis of the messages by Chasen in KH Coder, it became apparent that “human”, “I (*watashi*)”, “self”, and “wanting to die” were frequently used in the messages. The results suggest that a great deal of the effusions of suicidal thought were expressed in the form of monologue on the message boards.

Table 1. Top fifty most frequently used words in message boards

1	human	11	human life	21	job	31	value	41	together
2	I (<i>watashi</i>)	12	friend	22	reason	32	like	42	hand
3	self	13	meaning	23	talk	33	family	43	someone
4	wanting to die	14	mind	24	word	34	other person	44	disturbance
5	suicide	15	happiness	25	necessity	35	child	45	land of the living
6	death	16	loathful	26	wrist-cutting	36	consultation	46	world around us
7	humankind	17	I (<i>boku</i>)	27	matter	37	company	47	help me
8	parent	18	school	28	life	38	feel (<i>ki</i>)	48	site
9	feeling	19	world	29	understanding	39	courage	49	dislike
10	I (<i>ore</i>)	20	easy	30	around	40	existence	50	thought

For a further examination of the messages, the results were compared against the random variance index which shows how often a specified extracted word is used in the messages. The random variance of extracted words allowed the strength of linkage between a specified extracted word and other words to be measured. To grasp the overall structure of the messages, the extracted words were classified according to their random variance. Table 2 shows the list of categories which resulted from the analysis as mentioned above. Finally, in order to establish coding rules based on these categories, all the messages were subjected to KH coder. Although our subjective bias determined the procedure for establishing coding rules the process is completely explicit with proven validity.

Table 2. List of categories of extracted words

I	I (<i>watashi</i>), I (<i>ore</i>), I (<i>boku</i>)
self	self
others	human, humankind, other person, existence, someone
society	world, around, land of the living, world around us
life and death	death, human life, meaning, reason, life, value
self-inflicted death	wanting to die, suicide, courage, together, disturbance
self-inflicted injury	wrist-cutting
aid request	talk, word, help me, consultation, site, hand
feeling	feeling, mind, happiness, loathful, easy, necessity, understanding, like, feel (<i>ki</i>), dislike, understanding
parent-child	parent, family, child
friend	friend, school
job	company, job

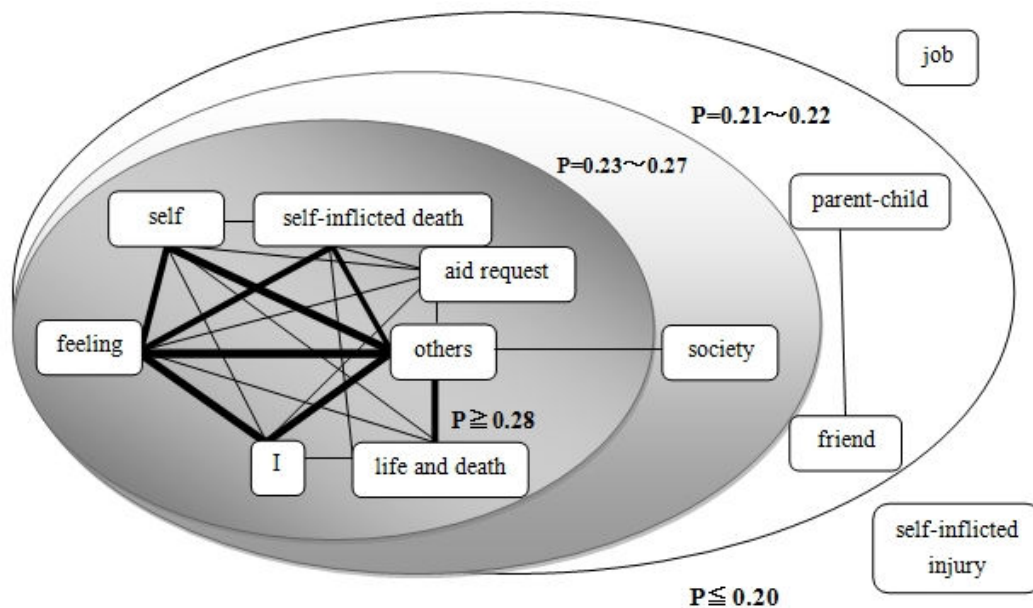
Results

The Jaccard similarity coefficient method was used to calculate the degree of similarity between categories. The Jaccard similarity coefficient method gives a figure from 0 to 1, where a higher figure denotes a higher degree of similarity as in the case of correlation coefficient. Figure 2 shows the connections between categories according to the Jaccard coefficient of each category. For convenience, categories with similarity coefficients of 0.2 and above are shown with thin lines, and those of 0.3 and above, indicating strong similarity, are shown with thick lines.

As is shown in Figure 2, there is a central structure comprising “others,” “self,” “I,” “self-inflicted death” and “life and death” which shows a high similarity coefficient. This suggests active self-disclosure, with words categorized as “I”, on all message boards. There was a tendency of posts to place a disproportionate emphasis on abstract and general concepts, with “feelings” and “others” word categories, rather than on concrete or detailed concepts, with “job” or “self-inflicted injury” word categories. In other words, human relationships and emotional transition were the central topics of the message boards. Actually, it was rare to find specific human relationships or personal issues mentioned in the posts. Most of the posts were written in a general or an abstract way.

Overall, the notable finding of this study was that the focus of communication on suicide websites was self-disclosure and not death.

Fig. 2: Correlation chart of categories according to Jaccard coefficient



* Categories sorted according to Jaccard coefficient. Assuming definite relation with $P \geq 0.20$. Solid relations among categories with $P \geq 0.30$ indicated by bold lines.

Conclusion

In conclusion, the central topic of suicide websites is self-disclosure based on an individual's emotions through communication with others and not on death images arising from suicidal intentions or a desire for self-injury. The suicide website is an ordinary web-community and not a site for arranging suicide pacts. In other words, the function of the suicide website is not as an aid to committing suicide, but rather as a place for self-disclosure and expression of an individual's feelings in the same manner as a self-help group in the physical world. From the present research, it is apparent that there is no evidence to support the Japanese government's assumption that "suicide" and "the internet" are necessarily agents of harm. Moreover, it became apparent that the suicide website was not sufficiently biased towards suicide to justify internet regulation at the present time.

This study revealed WHAT is discussed on the suicide website, but a collocation analysis will be required for further study in understanding HOW suicidal thoughts are narrated. Furthermore, in-depth interviews of people active on suicide websites will also be necessary in order to evaluate the usefulness of suicide websites in suicide prevention.

Bibliography

- BARAK, A. & MIRON, O. (2005). Writing characteristics of suicidal people on the internet: a psychological investigation of emerging social environments. *Suicide and Life-Threatening Behavior*, 35: 507-524.
- BUCHANAN, G., & SELIGMAN, M. (1995). *Explanatory Style*. Hillsdale, NJ: Lawrence Erlbaum Association.
- JANSON M., ALSSANDRINI E., STRUNJAS S., SHAHAB H., EL-MALLAKH R., & LIPPMANN S. (2001). Internet-observed suicide attempts. *Journal of Clinical Psychiatry*, 62: 487.
- SHIBUI Tetsuya. *Cyber Suicide-Pact*. Tokyo, Japan: NHK Publish.
(渋井哲也(2004). 『ネット心中』 東京：日本放送協会出版.)
- SHIMIZU Yasuyuki (Ed.)(2008). *Whitepaper of Suicides 2008*. Tokyo, Japan: Project Team For Analyzing Suicides. 清水康之(編) (2008). 『自殺実態白書 2008』 東京：自殺実態解析プロジェクトチーム.)
- WHO (2000). Preventing suicide: a resource for general physicians. Washington, DC.

Internet sources

- Conference of Comprehensive Suicide Measures (2008). *The Speed-up Plan for Suicide Measures*. Cabinet Office. (2009.09.01)
<www8.cao.go.jp/jisatsutaisaku/taikou/pdf/plan.pdf>
(自殺総合対策会議 (2008). 「自殺対策加速化プラン」 内閣府ホームページ)
- Basic Act of Suicide Measures*. Cabinet Office. (2009.09.01)
<www8.cao.go.jp/jisatsutaisaku/pdf/basic.pdf>
(「自殺対策基本法」 (2006). 内閣府ホームページ)
- Community Safety Bureau of The National Police Agency. *Brief Information of Suicides in 2007*. The National Police Agency. (2009.09.01)
<www.npa.go.jp/toukei/chiiki10/h19_zisatsu.pdf>
(警察庁生活安全局地域課 (2008). 「平成 19 年度中における自殺の概要資料」警察庁. 警察庁ホームページ)
- Cabinet Office Task Force on Suicide Prevention (2008). *Attitude Survey of Suicide Measures*. Cabinet Office. (2009.09.01) <www8.cao.go.jp/jisatsutaisaku/survey/report/index.html>
(内閣府自殺対策推進室 (2008). 「自殺対策に関する意識調査」 内閣府ホームページ)
- Whitepaper of Suicide Measures*. Cabinet Office. (2009.09.01)
<www8.cao.go.jp/jisatsutaisaku/whitepaper/w-2008/pdf/gaiyou/index.html>
(「自殺対策白書」 (2008). 内閣府ホームページ)
- Outline of Comprehensive Suicide Measures. Cabinet Office. (2009.09.01)
<www8.cao.go.jp/jisatsutaisaku/sougou/taisaku/pdf/t.pdf>
(自殺総合対策大綱 (2007). 内閣府ホームページ)
- Round-table Conference for Suicide Prevention Measures (2002). *Proposal for Suicide Prevention*. Cabinet Office. (2009.09.01)
<www.mhlw.go.jp/houdou/2002/12/h1218-3.html>
(自殺防止対策有識者懇談会 (2002). 「自殺予防に向けての提言」 厚生労働省ホームページ)
- World Health Organization. (2009.09.01) <www.who.int/mental_health/media/en/56.pdf>