

# DOES RUMOR AFFECT OUR IMPRESSION ON AND ACTION TO OTHERS?

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**Abstract** - On the internet, there are a huge number of fake news, false information, conscious and unconscious spreading of unconfirmed information to affect our decision. In this paper, we aim to outline how Internet rumors affect our impression on and action to others. We inductively study how we change in our trust, understanding, intimacy and good impression to others by reading hypothetical rumors. Besides, we also aim to visualize how rumors affect our actions to the target persons. Our finding reveals that rumors do affect our evaluations and actions to others, it is also true in the cases when we have no contact with the target before.

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**Index Terms** - Rumor, Fake news, Bully, Internet, Impression, Action.

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## I. INTRODUCTION

According to the investigation from the National Institute for Education Policy Research[1], 40% of bully cases in Japan is isolation, 30% is teasing and bad words, 20% is slight violence and 10% comes as serious violence. It means, in other words, isolation and marginalization is the most common pattern of bully especially SNS such as LINE is extremely popular among youngsters, mark-as-read-but-no-reply (having seen the message but sending no instant reply) has become the most hated behavior that it has an abbreviation "KS" (Kidokusuru, literally means the same in Japanese)[2][3]. And, it becomes the reason of isolation and thus the cause of bullying. Teenagers usually belong to a few chatgroups at the same time, so acquiring the notorious name of "KS" and getting blocked in one group leads to a chain effect of being treated the same in others, and such bully just continues [4].

And, information over the Internet has an accumulative and spreading feature. As identified by R. D. Putnam [5], under the social structure based on "trust", "norm" and "network", cooperation among individuals are the key element, the social capital, to increase social efficiency. When social capital cannot be built soundly, such as when rumors spread and challenge "trust" and "norm", such information, no matter true or fake, accumulates and spreads online.

In some cases, cyber-isolation is reflected in isolation in real situations while in some others, cyber-isolation causes in-person isolation. All in all, rumors over the Internet is, undoubtedly, influential to interpersonal relationship in real lives.

## II. RUMOR AND FAKE NEWS

In June 18, 2018, right after the earthquake in Osaka, Japan, a fake information saying a zebra had escaped from a zoo was spread over the Internet together with

an unrelated picture. A man, who claimed the post was penned down just for some fun, was arrested for fraudulent obstruction of business. In 2012, a fake assertion of a broken bone resulted from a ride in the theme park USJ (Universal Studio Japan) was spread in Twitter, and afterwards three male students from Kobe University were arrested for forcible obstruction of business.

During the America President election, fake and obviously fake news were widely spread, such as "Pope Francis expressed supports to Donald Trump" and "Hilary provided weapons to IS, the extreme Islam organization"

On the other hand, in the national election about UK's withdrawal from EU, the walk-away supporters were ahead, on the poll, the opponent while the claim upheld by the supporters that UK is paying 350 million pound every week was, later found and proved less than halved the actual amount. Besides, the forefront of the withdrawal, Kirsten Farage, the deputy leader of the UK Independence Party causally admitted the figure was made up and fake. Citizens voted for the withdrawal then found themselves pathetically misled and aired their dissatisfaction.

A tremendous number of fake news about the key issue, immigration has appeared at the time of the president election in France as well. Anxiety-arousing contents like "44% of the Islam high school students are extremists" and "Immigrants' outrage to hospital staff" were extensively spread in SNS and caused stir towards immigrants. News directly pointing to election candidates but without any concrete evidence like "Emmanuel Macron (who is elected finally) is terminating the family allowance" and "Al-Qaeda supports Emmanuel Macron" were broadly shared and created chaos too.

Becoming pervasive together with the Internet is a huge amount of fake news and rumors, and thus an increasing number of victims[6] [7][8] [9].In one

theory, A. Kucharski [10] has points out that 'the propagation of such information [fake news] through social networks bears many similarities to the evolution and transmission of infectious diseases. Analysis of transmission dynamics could therefore provide insight into how misinformation spreads and competes online. For example, disease strains can evolve and compete in a host population, much like rumours, and infections and opinions are both shaped by social contacts. Modelling of competing disease strains indicates that, as contacts become more localized, the diversity of circulating strains can increase.'

On the other hand, Flanagan et al.[11] has examined the reasons people tend to assume news over the Internet are less reliable while at the same time having a stronger tendency to believe or even rely on them. Wogalter et al. (2008) has investigated the clue that make people accept and believe online news. From the result of these studies, we come to know that people do not rely completely on the information over the Internet but it is still difficult to be free of its influence, i.e. people tend to regard online information doubtful and unreliable, but most of them still tend to be influenced Hence, when coming across to the fake image about the broken bone resulted from a ride in USJ, people have a tendency to regard it as doubtful and unreliable but cannot resist to think that maybe partly true, and that may not be completely untrue. That is, they are still influenced.

### III. OBJECTIVES AND METHODOLOGY

#### A. Objectives

In this paper, we aim to outline how Internet rumors affect our impression on and action to others. We inductively study how we change in our trust, understanding, intimacy and good impression to others by reading hypothetical rumors. Besides, we also aim to visualize how rumors affect our actions to the target persons.

#### B. Investigation1

We start by locating some potential targets of isolation and eventually in 2014 we come to 17 year-one students from University Y. We have them sitting in a circle and conducted an interview, and then we categorized them into four patterns A to D. After that, we created some fake information to these categories.

<Fake Information of Target Persons >

TargetA) Traditional\* & poor academic achievement  
Target B) Traditional\* & good academic achievement  
Target C) Untraditional & poor academic achievement  
Target D) Untraditional & good academic achievement  
Target E) No rumors

\* "Traditional" means being obedient to and violate no social norms

<ConcreteFake Information of Target Persons >

Target PersonA

"A is simply disgusting. He comes and sits close to you even you try to avoid him"

"It seems you can find mold A,"

"Lately when we go to summer camp I just got arranged the same room with A. When passing some snacks to him, he just grinned and ate. Then we came to a long dead air"

"More to the point, A scored 0 in the test. I also needed to sit for the make-up exam together with him but there I just saw a blank answer sheet on his desk...lol"

Target Person B

"B gets no friends. Everyone keeps a distance from him so he just read books alone like a nerd"

"B just eat alone in the school canteen all the time"

"Arranged into the same room with B in the summer camp and we almost said nothing to each other"

"But B scored full marks in the test. I just heard from others that B ranked top in the entrance test as well"

Target Person C

"C just borrowed 50 thousand yen from a friend in high school and haven't paid back for nearly a month"

"C came close and I tried to escape by saying I need to catch on the bus. Then I found he kept watching me"

"C's eyes are simply terrible"

"Just heard from others that C was a big head in junior high school but got a place in school (high school) because of the power of his parents. A personal tutor was assigned throughout the three years there and finally he got a place in college"

Target Person D

"D just skips class and lazes around"

"D two-times X from another university and Y who started working after high school"

"D comes close and I was like trying to say something, while at that time I was excited talking with Z about the internship and then he just disappeared"

"Just as a rumor, D was a big head but scored rather good in tests"

We try to show how we put our impression into social actions by the willingness in the following 4 situations.

➤ Being asked for lending some money just for lunch as wallet is forgotten

➤ Being asked for lending the lecture note for copying as class was skipped

➤ Being asked to take care of the target when he/she is sick

➤ Being asked in the school canteen whether he/she

can sit at the same table as there's a vacancy

### C. Investigation 2

Then in 2016, we in-depth studied 47 year-one students newly enrolled, with 44 valid responses and we evaluated how rumors over the Internet affect differently, their impression on and actions to the potential targets of isolation. The examination is done through paper questionnaire. Fake stories about the four targets were prepared and put on the Internet for the examinees to read through. Afterward, six perspectives about trust, understanding, intimacy and good impression were inspected. Here examinees were asked to answer questions by choosing between two provided options.

## IV. RESULT AND DISCUSSION

The result of impression is shown in Fig.1. and the action items are shown in Fig.2. The average value of trust, understanding, intimacy and good impression are shown in the Polygonal line (scales on the left) and the total of the four aspects are shown in the bar chart, with scales on the right. Cronbach of the confidence coefficient  $\alpha$  is as follow; Target Person A=0.97, B=0.94, C=0.93, D=0.83 and E= 0.92. The result offers an insight that the details inside the 4 bars are consistent and thus the total is good to use.

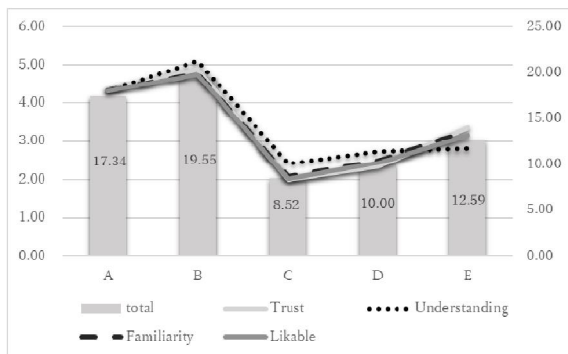


Fig.1. The result of impression

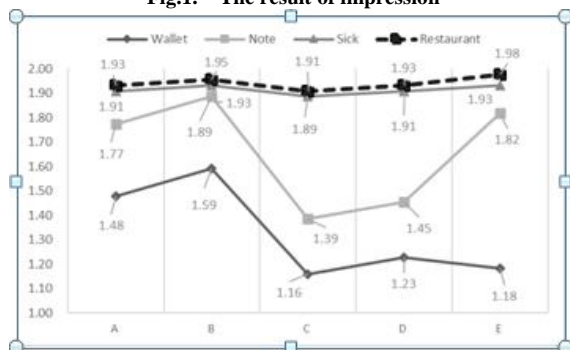


Fig.2. The action items

Fig. 1. provides support that Target Person B, the traditional bring with great academic achievement, scored the best in all "trust", "understanding", "intimacy" and "good impression", which is then

followed by Target Person A, still being traditional but without good academic performance. On the other hand, untraditional Target Person C, with bad academic performance scored the worst in all four categories, slight better than Target Person C is D, untraditional beings with good academic results. The control experiment group, Target Person E, scores lower than the traditional groups Target Person A and B but higher than the untraditional groups with rumors, Target Person C and D.

And from Fig. 2., we witness that regardless the rumors, many respondents are willing to take care of the target person in sick. It is believed that taking care patience, the person in need, with or without rumors, is universally moral. A similar responding pattern can also be noted in sharing the same table in canteen. It is predicted that thought sharing and eating at the same table, they can still remain silent, and a meal time is, relatively short down to earth. Especially as the eating time is very much limited by the tight schedule of lectures, rumors are not an important factor to consider just for sharing a table at the school canteen.

On the contrary, when coming to the question whether they are willing to lend money for lunch, most of the respondents resist to do so, and it clearly shows the influence of rumors. Though with the effect from rumors, traditional groups A&B still have a certain number of respondents willing to lend, while the untraditional groups Target Person C and D, as well as the control group E almost have no one to lend money from. When asking for the reason for rejection, we come across a lot of similar answer saying "it has no point to borrow money to someone whom you think you can't get your own money back". In the item about lending a note, since it is assumed to lend over a short time but not taking home and overnight, risks like lose is rather low, and lower than lending money for meal. Yet, here, we come to witness that the untraditional groups Target Person C and D still don't have many to lend from.

Then, when getting the correlations, the action categories and the total of the 4 aspects and, lunch money's  $r=0.95$ , lecture note's  $r=0.87$ , which is rather high sick  $r=0.63$ , sharing table  $r=0.42$ . Here we can see correlations. It carries truth to say, for sure indeed, people are willing to lend money to someone they trust but not to someone they don't trust. Specifically, when it comes to money, respondents show hesitation and we can particularly see the influence of rumors, though respondents are not willing to lend out money also to the group without rumors as well. The relatively big influence of rumors can also be shown in the question about note. Oppositely, the influence of rumor is insignificant in the items of sickness and sharing a table.

Our finding reveals that rumors do affect our

evaluations and actions to others, it is also true in the cases when we have no contact with the target before. On the internet, there are a huge number of fake news, false information, conscious and unconscious spreading of unconfirmed information to affect our decision. There is no shadow of doubt that people take no responsibility when stating, claiming and upholding things on the Internet, while it is vitally important to increase the literacy of the information consumers. Besides the limited content in school, information consumers have to do self-learn. And, it is also essential for school to pass correct information and right concepts to students so not to release, spread out or be affected by fake information, and be thinkers to judge information. This is the important role of information education.

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