

# Issues of Online Communication and Immediate Response Syndrome

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**Abstract**— In this paper, immediate response syndrome refers to the feeling of having to check SNS sites and being in a state of psychological imbalance. As a contemporary issue, I pointed out the issue of the immediate response syndrome, slander, cyberbullying and false information. I divided into two groups from the results of the immediate response syndrome (IRS) checklist, and analyzed IRS Low group/High group with students' experience about slander, cyberbullying, false information and education. As a result, we found that students with experience of educated online communication, were less likely to have Immediate Response Syndrome.

**Index Terms**—SNS, communication, cyber bullying, immediate response syndrome.

## I. INTRODUCTION

The popularization of social networking services (SNS) has greatly changed the state of communication between people (Kanoh, 2007, 2008) [1]-[3]. Before SNS became popular, if one wanted to know the recent circumstances of another person, one grasped the other person's circumstances by having some sort of contact with the other person, such as sending a letter, making a phone call, or writing an email. However recently, when one opens up a SNS, it is possible to know the other person's circumstances without having contact with the other person, such as where one's friends are now and what they are doing, or whether they are well. These factors are shown in ranks 1 and 2. Immediate response syndrome refers to the feeling of having to check SNS sites and being in a state of psychological imbalance.

It is taboo to close the window because they are apparently well. They are seeking some sort of recognition for the circumstances they have conveyed, such as pressing the 'like' button. If the other people one is connected to is 20 or 30 people, interacting by viewing everyone's circumstances and pressing the 'like' button may be comfortable. However, when the number of connected people increases to 200 or 300 people, checking everyone's circumstances every day and responding immediately ends up requiring a great deal of time and effort in the midst of one's daily routine.

N. Phillips & A. Broderick (2014) point out that SNS influence on identity adaptation and consumption [4]. L. Leung (2007) point out that internet use has become a Stressful Life Event for children [5].

According to a survey by Goo Research (January 19th,

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2012), the ranking for becoming tired of SNS is as follows [6]. The survey summary has been reported that the number of valid responses was 1048 (male:38.4%, female:61.6%) and under 19 were 12.3%, twenties were 15.6%, thirties were 27.9%, forties were 25.8%, over 50 were 18.4%. The investigation period was January 17, 2012 - January 18, 2012.

They responded on the Internet.

- 1) Obsessively stuck looking at Twitter everyday
- 2) Coordinating each SNS with Twitter
- 3) Checking number of followers everyday
- 4) Posting just because I want to get 'likes'
- 5) Frequently getting invitations for social games
- 6) Constantly seeing negative tweets
- 7) Visualization of the number of my friends
- 8) Saw someone else drop a bombshell on Twitter and get attacked
- 9) Reluctantly approving friends requests due to work associations
- 10) Constantly making negative tweets

It would seem that the main factors identified in 1)-5) are why even people who are initially interested in how everyone is doing, and check SNS while eating, while commuting, and even while studying and working, become tired of doing so all year round. Succumbing to the compulsion that SNS must be checked immediately and reaching an emotionally unstable state has been called 'immediate response syndrome', and is thought to be one of the pathologies of the SNS culture [7].

## II. ISSUES OF ONLINE COMMUNICATION

### A. Immediate Response Syndrome

Nowadays, waterproof mobile telephones are popular amongst children. For an adult, there may be some merit to being able to use them with wet hands if the phone rings during breaks between laundries or cooking. Waterproof mobile phones are popular because today's children want to use their mobile phone email even while bathing. Already it seems they are unable to let go for even a moment, as if they are a part of their bodies.

It is the quick reply (response) to an email or SNS post by a friend itself that is proof of their friendship. The other person who responds so quickly must be a close friend, and there are cases where if 15 minutes have passed but they haven't responded, communications from them will be blocked because they were ignoring the friend and so the friendship is over. If one doesn't respond within 15 minutes (or within 30 minutes), one does not survive in the children's network. In order to continue to be the best friend of the other person, one needs to reply to the other party faster than anyone else; one is

desperate to survive, being on standby without letting go of the mobile phone for a moment, even while eating, even while bathing, even while studying, even when in bed, just so one is able to reply at any time to the emails which one doesn't even know when they will arrive. "Morning, what are you doing?" "I was just washing my face"... this not particularly urgent conversation may continue endlessly from waking up until going to bed and sleeping. At night, the exchange may continue for more than an hour after sending a "goodnight" email. The purpose is not to convey information that needs conveying; rather, mutually replying in and of itself is the purpose, which is also proof of the friendship. And is this sort of immediate reply and communication absolutely unnecessary?

Certainly if considered logically these are unnecessary actions. In a state of excessive immediate response syndrome, where one is constantly obsessed with their mobile phone throughout the day, one becomes mentally unstable, and unable to focus on devoting themselves to study or sports. There has been a case of a female high school student like this, who was made to declare to her email friends that she couldn't reply because her mobile phone had been confiscated for a while, and who was then made to live her life without her mobile phone. During the first day or two she was anxious and did not seem calm, similar to withdrawal symptoms, but after about a week's time, she became able to lead a calmer life than when she had been in a state of excessive immediate response syndrome. Even the girl herself responded that she was able to relax more than when she'd been constantly obsessed with her mobile phone.

If one falls into excessive immediate response syndrome to the point that one becomes mentally unstable, temporarily forcing suspension of immediate replies and communication is certainly one method.

However, it is necessary to permit immediate replies and communication if the frequency of use is not moderate. The reason for this is because friendships are confirmed together and the balance of the relationships are mutually held through immediate replies and communication. Unreasonably confiscation may end up destroying the relationship balance. There have been experiments where monkeys lose their calm and become mentally unstable if their grooming habits are forcefully prohibited, such as by attaching devices to the monkeys and having an electric current flow automatically when they begin grooming. Before questioning the rights and wrongs of the activity itself whereby children pay excessive attention to their mobile phones even while eating and bathing, it is necessary for adults to pay more attention to why immediately replies and communication are needed, and to the hearts of the lonely children who are unable to survive in internet societies if not caught up in immediate response syndrome(Kanoh,2016)[8].

The following shows the immediate response syndrome checklist.

< Immediate response syndrome Checklist >

- 1) Obsessed with mobile phone and cannot part with it.
- 2) Touching mobile phone without realizing.
- 3) Feels anxious when mobile phone is not within arm's reach.
- 4) Feels irritated when mobile phone is not within arm's

reach.

- 5) Cannot calm down when mobile phone is not within arm's reach.
- 6) Has received an expensive mobile phone bill.
- 7) Becomes anxious and irritated when there is no reply after waiting 15 minutes or more.
- 8) Replies immediately if email arrives late at night.
- 9) Replies immediately if email arrives while bathing.
- 10) Replies immediately if email arrives while eating.
- 11) Has nearly lost an important personal relationship due to the mobile phone.
- 12) Thinks they can't survive without their mobile phone.

#### *B. Check Count*

0-4: Within normal range

5-8: Tendency towards immediate response syndrome

9-12: Immediate response syndrome

When there is a large number of emails, such as with children who fall into immediate response syndrome, emails are often sent without thorough scrutiny, and it is easy for discrepancies in mutual understanding to occur, which often causes misunderstandings. There is the possibility that, mobile phone battles may unfold due to these misunderstandings, and communication may go badly. Conversely, attention is also needed at times when email and access to sites decreases. The reason is because there is a possibility that they may be experiencing internet bullying from friends they have been exchanging emails with previously, such being shunned, having their communications blocked, or not receiving replies.

In the SNS culture, the reverse of the problem of falling into immediate response syndrome where communication with others becomes excessively intimate, is that it is also an environment where it is easy for bullying related to communication to occur, such as insults, slander, and shunning.

#### *C. Slander*

The negative tweets indicated in #6 in the ranking shown in the introduction section are not just solely pessimism about oneself, or tweets about feeling sorrowful. Statements related to insults or slander of specific people are also seen. Followers add a 'like' to the slanderous comments without properly scrutinizing them, and once they start spreading, they will spread in the blink of an eye as if they were truth, even though they are unfounded rumors or exaggerated representations.

There are just two main goals that people have for slandering. One is when they want to wrong another person, and the other is when they want to make themselves look good. In August, 2013, an incident occurred where the member information of more than 30,000 accounts from the internet forum 2-channel was leaked. Through this leak, it became clear who had been posting slander. An author of young adult fiction in their thirties had attacked a rival author, saying that they were "a compulsive liar", and had criticized a survey carried out by a publisher concerning another rival author, saying "it was a waste of resources, what with the decision to quit". Meanwhile, they sang their own praises, saying of themselves "exceedingly exceptional for shopping by author.

In a newspaper interview regarding what they had been thinking when they made posts that wronged the rival authors and praised themselves, they reflected that “it was this vague spitefulness of wanting to look down on the other person and show contempt for them. It felt good to post one-sided abuse of the parts I saw as the other person’s flaws (Asahi Shimbun, December 23<sup>rd</sup> 2013, page 39).”

There are no perfect people in the world. Everyone makes mistakes. However, the reason I looked at the series of events for this young-adult fiction author, and felt that they are completely beyond redemption, is the fact that in contrast to their apology, thought to be carried out under decision of the publisher, the author themselves answered “it felt good” during the exclusive interview.

Could it perhaps be that 50% of the person’s consciousness is anger at the leak of the membership information, 25% is displeasure that the world knows that they made the posts, and about 10% is a memory of feeling that good feeling? It would appear that any shame about singing their own praises or any awareness of the fault of writing posts that wronged rival authors is virtually nonexistent.

The true value of a person is questioned when they make some sort of mistake. People who are able to sincerely accept what they have done and discipline themselves will mature and grow. They will likely not repeat the same mistake again. However, if they force the responsibility on the times, or the environment, or other people when they make a mistake, they will first experience a surge of dissatisfaction, such as that they failed an exam because they’re poor, or that they don’t understand because their teacher’s method of teaching was bad. They fall into a vicious cycle where their dissatisfaction invites anger, and they strike out.

The fact that slander on the net is never-ending is probably because a vicious cycle arises with no way out “Figure 1”. There is only one way to break this vicious cycle. That is for the person themselves to just quit. If they are able to quit, the vicious cycle will immediately be broken.

If they are the type of person who is able to reflect on their own actions and discipline themselves, they will be able to break the vicious cycle under their own power, however if they are not, then education will be required [9].



Fig. 1. Model of a vicious cycle with no way out.

#### D. The Hurdles of Damage and Harm through Slander

##### 1) Hurdle for carrying out acts of harm

While there are times when things that are difficult to say directly are easy to convey via email, such as “I love you” or “I like you”, it can also be very easy to convey to the other person things that are cruel and can’t be said directly. This is

even more true if from an anonymous email address. Although the hurdle of conveying these things directly is high, the hurdle of the action of emailing indirectly is low; in other words, the hurdle connection for the perpetrator carrying out acts of harm is as follows “Fig. 2” [10].



Fig. 2. Hurdle for carrying out acts of harm.

##### 2) Degree of damage to the victim

On the other hand, when it comes to the degree of damage to the victim, if something is said directly, there is room for defending themselves, and they can also respond. However if it is anonymously made public on the internet, it is known to people around the world, and there is no room for defending themselves, even if it is a misunderstanding, so there is deep emotional damage suffered by the victim, and the degree of damage is large. In other words, the relationship of the degree of damage to the victim is as follows “Fig. 3”[10].



Fig. 3. Degree of damage to the victim.

Directly or indirectly communication, this can be explained from C. E. Shannon’s communication theory. “Fig. 4” shows the diagram of C. E. Shannon’s communication theory [11], [12].

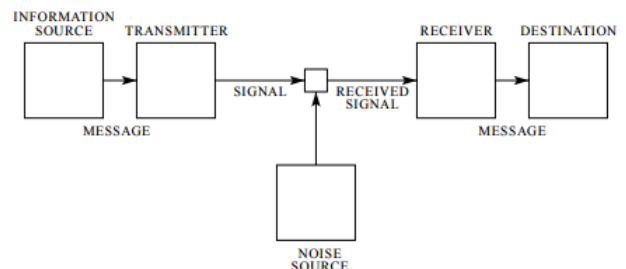


Fig. 4. Schematic diagram of a general communication system (C. E. Shannon, 1948).

If the "information source" is negative, becomes the longer

the "decision-making", becomes the bigger the "noise source". If the "information source" is positive, becomes the longer the "decision-making", becomes the bigger the "noise source"[13].

And focused on the influence of whether or not nonverbal communication [14], [15] elements are added to the above-mentioned well-known communication theory. Klafehn *et al.*(2016), concludes with a brief commentary on the feasibility of using nonverbal methods to assess noncognitive skills, with a specific focus on the extent to which structuring the context to elicit certain behaviors may influence the validity and robustness of nonverbal responses as a measurement source. This discussion is dovetailed by a review of research from the nonverbal assessment and interpersonal task literatures, as well as a synthesis of these literatures to highlight the degree to which situational factors (as manifested through different tasks) influence the assessment of personality via nonverbal behavior. Additionally, the potential value of using noninvasive tools, such as the sociometer, to collect nonverbal behavioral data during these tasks is discussed [16].

In other words, depending on whether or not nonverbal situational factors are added to direct words, the degree of hurting and the degree of harm will act in reverse. As a feature of direct communication, nonverbal communication also added to words.

When hurdle for carrying out acts of harm "Fig. 5."

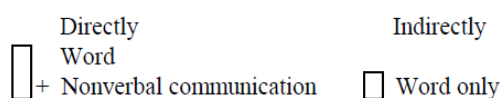


Fig. 5. Degree of adverse behavior.

When degree of damage to the victim "Fig. 6."

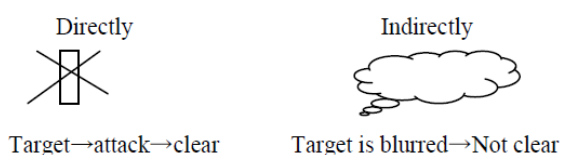


Fig. 6. Degree of damage to the victim.

### E. Cyber Bullying as Participatory Entertainment

The perpetrators of cyber bullying done anonymously cannot easily be identified unless a thorough investigation is carried out by the police, and cyber bullying is liable to turn into entertainment, due to the fact that the hurdles on the assault side are low.

The perpetrators who upload bullying videos look at videos that have been uploaded, believe the contents, and giggle, watch them covertly, and make the assumption that there were spectators or bystanders laughing with them at the awkward, wretched victim. If there were no viewers at all, it would not stand up as entertainment. Furthermore, they are hoping that even if the spectators or bystanders are thinking that it was on purpose, that it was a faked situation, or that it was a lie, they will nonetheless be in agreement with them about "what a selfish person" and "they deserve to be bullied". Spectators

who agree click the 'like' button or post "I lol'ed" and through that go from the position of spectator to participant.

For the spectator as well, there is a greater sense of fulfillment from entertainment which the spectator can in some way act upon and participate in than there is from entertainment which they can only watch like a movie. There are also cases where free survey tools have been used for cyber bullying, such as where people click "yes" or "no" to the survey question of "people who think A is a disgusting character", and the survey results are immediately turned into a graph.

In reality, there have also been schools identified where survey results with contents considered to be bullying have been placed in graduation anthologies. In a well-known case, defendant Yuta Saito, who trespassed on a scheduled bus outside JR Toride Station and inflicted major and minor injuries on 14 female high-school students, was described in his high school 'graduation anthology survey' as #1 for "person most likely to be single their whole life", #1 for "person most likely to get stressed", and #4 for "person most likely to cause trouble". The graduation anthology was not something that was secretly created by students, but rather something which the teachers should also have looked over. In reality the teachers of the school also served on the side of the perpetrators of bullying as entertainment. Although there are cases of intentionally concealing the truth in the interests of peace at any price, there are also cases where the surrounding people end up controlled by the intent on the perpetrator's side[10].

## III. FALSE INFORMATION

### A. False Information

In 2012, false posts were made on Twitter that there had been broken bones on attractions at USJ and so on, and there were criminal cases where 3 male students of Kobe University had charges filed against them for suspicion of forcible obstruction of business. The false posts had been repeated, and there were even false posts that had X-ray images of broken bones attached. These university students also may have felt some sort of dissatisfaction with USJ, which had changed into anger, and then turned into an attack, but even so, it would appear they had fallen into a vicious cycle with no way out, where they were dissatisfied with something where management had apparently not changed at all, and that dissatisfaction had changed into anger, until they repeated posts with false information countless times. If it had been reasonable dissatisfaction, they should have put a suggestion to USJ directly, and requested improvement.

Furthermore, in July 2013, the world was alarmed by false information about "firing of guns at Shibuya Station". The information that "an incident occurred where a violent man who fired a gun was arrested by a fully defended police force" at Shibuya Station on the Tokyu Den-en-toshi Line began spreading on the internet, and a related summary site was flooded with 12,000 hits in roughly one and a half hours. Each changed it into their own expression when they posted the false information, such as "man with gun gets violent at Shibuya Station" and "shooting spree fiend arrested in

Shibuya”. In actuality, there was a man holding a toy gun, and the incident did not go beyond him being taken away by security guards, but why did it spread this far? A chart of the spread of false rumors is shown in the false rumor spread model in “Figure 7”. If there is just a flurry over a statement posted by one person, then it will probably be regarded as chain mail, and not become a huge uproar. Because the unclear information was rephrased in each person’s own words and then spread, more anxiety was awoken from the fear and anxiety that a shooting spree fiend actually existed, and so it became an uproar. In order to stop this, rumors or information only heard from other people should not be accepted blindly, and should only be tweeted or forwarded after one has confirmed them for oneself.

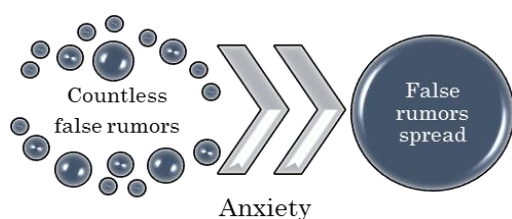


Fig. 7. False Rumor Spread Model

### B. False Information Moment When a Lie Becomes Truth

There are times when, as time goes by, one starts to think that something they originally thought of as a lie may actually be true. For example, let’s compare the following two circumstances.

- 1) You hear from the homeroom teacher that “A is absent from school because she’s sick”.
- 2) It is written on the internet that “A is absent from school because she ran away from home”.

Immediately after hearing these two things, people who think that A is usually diligent and doesn’t seem like the type of student who would run away from home will think that a) is highly credible and b) is probably a false rumor. For b), which they thought just a false rumor, they see posts which embellish the false rumor, such as “apparently [name] is staying at the place of a person she met on a ‘Waiting for God Site’ (sites where runaway girls seek companions who will let them stay the night)” and “apparently she was taking heaps of drugs, and they don’t know when she’ll come home”. Study findings have shown that after about 4 weeks have gone by, the relationship of [ information details ] --- [ source ] ( [ because of illness ] --- [ school teacher ], [ because of running away ] --- [ internet post ] ) becomes diluted, even though it was closely associated directly after hearing them. This has been named the ‘sleeper effect’ by Hovland et al (Hovland & Weiss, 1951)[17]. Directly after seeing or hearing a discussion, people are strongly affected by whether it was information from a highly credible source or not. The credibility of the source of information is closely linked to the details. However, after a period of time, that influence is considerably reduced, and the difference between where the information came from either vanishes almost entirely or else may even be reversed. The reason for why it would be reversed is that directly after receiving the information, the awareness that the source of information has low credibility is suppressing the awareness that wants to trust the details. However as time passes, the

memory of high or low credibility becomes separated from the details, and the reaction which was initially suppressed turns into a strong belief “Figure 8”.

With the example from the start, even if one believes the teacher’s explanation that it is because of illness, after about 4 weeks have gone by, the credibility rises that she may possibly have run away from home and perhaps gone missing. Meanwhile, even if one originally thought that the things posted on the internet were a false rumor, after about 4 weeks have gone by, one comes to believe that they’re true. Using this sort of sleeper effect, posts done as pranks on bulletin boards such as “selfish” will even make classmates who didn’t initially think the person was selfish begin to think that they really are selfish, which creates a sense that they deserve to be bullied. Previously I have actually met with teaching staff who seriously told children being bullied that it was because they were selfish.

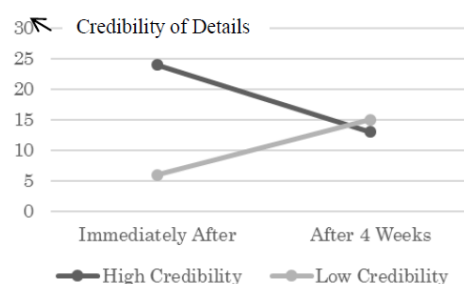


Fig. 8. Sleeper effect (Hovland & Weiss, 1951).

### C. False Information Reasons Why False Rumors on the Internet are Easy to Believe

With pyramid selling scams such as product buying clubs and similar, a chair is offered to the visitor to the store, they are cordially entertained with warm tea, juice, and sweets, and relaxing music is played. This type of manufacture of atmosphere is called the luncheon technique by Razran (Razran, 1938, 1940) [18], [19] and it is not done without basis; it has been made clear through psychological experiments that people are more receptive to discussions when they are relaxed and feel good. Janis et al (Janis, I.L., 1965) carried out experiments on whether people were receptive to a discussion after reading a composition about it [20]. The results were that the participants who were treated with Coca-Cola and peanuts went more in the persuaded direction (accepted the direction of the tone of the composition they read) compared to the participants who did not receive such service “Table I”. No matter what the theme, the results were that those who had cola and peanuts had a higher ratio of changing to the persuaded direction.

In addition to the pyramid selling scams of product buying clubs, this is also carried out so that negotiations are concluded favorably in practice, such as when conducting negotiations at high class clubs, or when politicians establish locations for discussion at traditional Japanese restaurants.

If the messages are aimed at observing the rules and ethics of society, such as stopping drink driving, or stopping slanderous posts, this method is effective because it leads people in a good direction. However the problem would seem to be the fact that it also works effectively for messages that

are not like that.

To return to the discussion of posts on the internet, there are underground school websites where rankings can be done for anything at all within a class, such as “ranking of #1 guys most likely to become murderers in the future, ranking of #1 guys most likely to commit suicide in the future, ranking of #1 guys who you have no idea what they’re thinking”, and so on. One would probably look at these sort of posts while relaxing. It would be while listening to one’s favorite music, and while snacking on juice and sweets. Posts on the internet are often viewed in an environment where the persuasiveness of the luncheon technique takes effect. Rather than looking at them critically, one is in a state of mind that easily accepts what is written as-is, even while one is dubious.

The dreadful thing is that rather than making posts to hurt the other person with distinct animosity, one gets carried away with the atmosphere of the situation, goes from bystander to spectator, and then casually becomes a perpetrator. And then, before one is even aware of it, a fact that one thought to be a false rumor seems to be true.

TABLE I: THE PERSUASIVE EFFECT OF COLA AND PEANUTS (JANIS, I.L. ET AL, 1965)

Theme		Cola and Peanuts (%)	No Cola and Peanuts (%)
Cure for cancer	People changed in the persuaded direction	87.4	74.6
	People with no change	6.3	12.7
	People changed in the opposite direction	6.3	12.7
Reduction in the Size of the Armed Forces	People changed in the persuaded direction	67.2	47.6
	People with no change	32.8	47.6
	People changed in the opposite direction	0.0	4.8
Trip to the moon	People changed in the persuaded direction	67.2	50.8
	People with no change	20.3	28.6
	People changed in the opposite direction	12.5	20.6
3D Movies	People changed in the persuaded direction	76.6	71.5
	People with no change	14.0	17.4
	People changed in the opposite direction	9.4	11.1

#### IV. SURVEY SUMMARY

##### A. Procedure

A questionnaire survey was used to gather information on the use of mobile devices and PC. Survey participants included male and female of university students who had agreed to participate in a questionnaire survey.

The number of valid responses was 382 [male:210 (55.0%), female:172(45.0%)], their ages ranged from 18 to 24. Create a questionnaire with Google Docs, I asked students of classes to answer on the Internet. The survey was conducted from April 12 to 28, 2016.

I divided into two groups from the results of Immediate Response Syndrome (IRS) checklist(See section II A).

IRS Low group: 0-4: Within normal range

IRS High group: 5-8: Tendency towards immediate response syndrome and 9-12: Immediate response syndrome  
Cronbach Confidence coefficient was  $\alpha = .89$ .

##### B. Results

I showed results of IRS and each items, “Figure 9” IRS × Slander(See Section II BC), “Figure 10” IRS ×Cyber bullying(See Section II D), “Figure 11”. IRS ×False Information(See Section III A), “Figure 12” IRS ×Education and I calculated the  $\chi$ -square test for each items. Therefore, there are learn students and not learn students..

For the "education", I asked Yes or No about the educational experience for online communication. In Japan, we have a class of only one year about information in the high school. Depending on the teacher's discretion, sometimes students learn about online communication in elementary school or junior high school. But we have not textbook about online communication and not included in the official curriculum.



Fig. 9. IRS × slander ( $\chi^2=8.125, p<.01$ ).

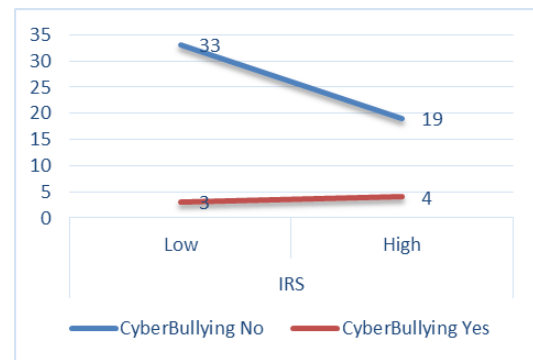


Fig. 10. IRS × cyber bullying.

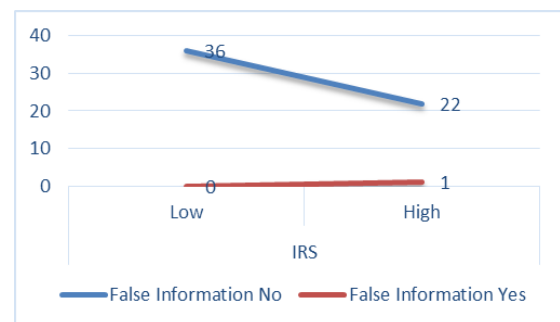


Fig. 11. IRS × false information.

Results of  $\chi$ -square test for each items, IRS × Slander and IRS × Education were statistically significant. About Slander experience, IRS high group were tended to be higher than the low group. About the educational experience for online

communication, IRS low group were tended to be higher than the high group.

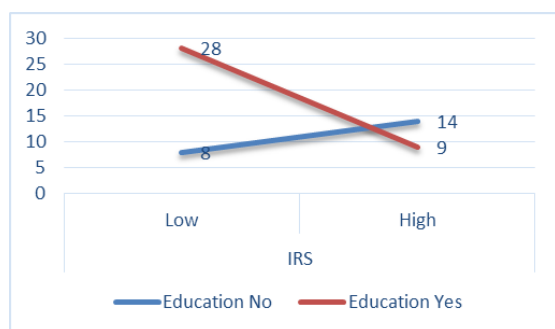


Fig. 12. IRS  $\times$  Education ( $\chi^2=8.964, p<.01$ ).

## V. CONCLUSION AND DISCUSSION ABOUT EDUCATION OF ONLINE COMMUNICATION

That is, we found that students with experience of educated online communication, were less likely to Immediate Response Syndrome. By education of online communication, I expected to decrease problem of slander and cyberbullying and false information, with the decrease of Immediate Response Syndrome.

### A. Communication via SNS

Cyber bullying occurs in various places, such as shunning using the block function, insults, and making available photos and videos of the disliked person, all within the group functions on LINE and Facebook. When asked about the cause, it is said that one child had done a 'read and ignore' within the group chat. When one looks at a post on a SNS, an 'already read' mark is appended, so it can instantly be known whether the other party has read it or not. Reading but not replying is called 'read and ignore'. There are many unavoidable circumstances for the reason one cannot reply immediately, such as they have opened LINE and read the post, but it is time to get off the train, and they just thought they would reply later because it is dangerous to use their smartphone while walking.

Why are they unable to consider that it is not that the other party did not reply through ill intent, but rather that perhaps there were unavoidable circumstances and they were unable to reply? Previously they would have been thought of as not having been raised with a sympathetic heart, but somehow that does not seem to be the case.

An event announcement is posted in the group chat asking "I'm holding XY event. Won't you all attend?" It seems that a culture exists where people who will attend post that they will attend, but if they are not attending there is almost no response. This is not just limited to events; one also 'ignores' and doesn't reply when a friend writes something contrary to one's own feelings. In a space where this 'ignoring culture' has become a matter of course, the fact that the other person has not responded stirs up animosity that they object to what one has written. In order to make sure that this ignoring culture does not become established, it is necessary to learn what should be posted on SNS, how one should respond, and how one should react, before the ignoring culture comes into existence.

### B. Educational Opportunities

When should we be learning about the fact that we should not write slander, the fact that we should not create and distribute viruses, the fact that we should not blindly believe false information, and the way we should deal with communication on SNS? By the time we are middle school students, the ignoring culture has already taken hold, and 'blocking' bullying has already begun, so it is already too late. According to the percentage of mobile phone ownership amongst primary school students by the Ministry of Education, Culture, Sports, Science and Technology [21], the nationwide percentage of 6th grade primary school students who own mobile phones is 44.1%, an increase of 8.2 points from 35.9% in 2012. Numerous trends can be seen in the Tohoku region, such as a high percentage of ownership in urban areas, where Tokyo was first place in 2013 with 51.33%, and Kanagawa was second place with 56.8%, and low ownership percentage of 24.5% in Akita and 28.9% in Yamagata. Overall the trend is for an annual increase, and if we look at the situation in urban areas, we have already reached an age where every second primary school student possesses a mobile phone. A system is needed for all children to learn fundamental information ethics equally at the primary school level, rather than entrusting this to the different levels of information ethics of each individual teacher. If they are not taught properly when they are learning, the outcome may be an increase of young people in the future who are arrested for distributing viruses after becoming graduate students, or posting false information after entering university.

There are teachers and parents who feel the need for childcare on the problems of SNS and the internet, however because they don't consider it to be an important matter of priority, information literacy and information ethics education are not placed as subjects on par with Japanese language and mathematics. Is it because the adults themselves do not understand why slander occurs, or the structure through which false rumors easily spread and develop into serious problems on the internet, that there is so little understanding that this is something that must be taught?

In the future, as our information society continues to develop, it will be necessary to establish opportunities for systematically carrying out education related to communication and information literacy on the internet, in proportion with developmental stages, rather than just allowing it to be finished with short event-like courses.

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