

Social Media's Effects on High School and Middle School Students' Attitudes Toward the Homosexual Community

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Abstract: The homosexual community is becoming an important group in society and its relevant issues are attracting more attention. It is important to understand how young people perceive and change their attitudes towards the homosexual community. Social media, as an important communication channel in today's society, is the main medium for young people's various views on the homosexual community. This study can provide relevant data and relationship between social media and young people's current views on the homosexual groups. Through the methods of survey and interview, this study draws a positive correlation between social media use and the change in attitude of junior/ senior high students who learned about the homosexual community. There is a weak positive correlation between social media use and homosexuality-formation in junior/ senior high students.

Keywords: homosexuality, social media, high school student

1. Introduction

Social media, as an important communication channel in today's society, is the main medium for young people's various views on the homosexual community [1]. Social media is consisted of all sorts of optical or auditory apps. People get messages and information from videos, posts, or chats from those social media apps [2]. However, because the range and number of social media apps is too large, the paper has been decided to choose five of the most popular social media apps. Based on Share of internet users of the leading social media in China as of 3rd quarter 2022, the six most popular social media apps in China are Wechat, Douyin(TikTok), QQ, Baidu Tieba, Xiaohongshu and Sina Weibo [3]. Majority of youth is shifting speedily from electronic media like as television viewers and radio listeners to the social media among all age of group. Youth rate is very much to shifting into social media so it influences are much on youth. This craze of social media has led to a host of question regarding its impact on society, while it is agreed that the social media affects people's living styles and it is an ongoing process to identify the nature of these influence in every society and country specially on youth [4].

From the evaluations in 2011, the proportion of each sexual orientation in society has been shown. An estimated 3.5% of adults in the United States identify as lesbian, gay, or bisexual and an estimated 0.3% of adults are transgender. Among adults who identify as LGB, bisexuals comprise a slight majority (1.8% compared to 1.7% who identify as lesbian or gay). An estimated 19 million Americans (8.2%) report that they have engaged in same-sex sexual behavior and nearly 25.6

million Americans (11%) acknowledge at least some same-sex sexual attraction [5]. By comparing different groups of data, the paper will mainly work on the homosexual community because its features are more specific and special. The homosexual community is a comparatively popular group in the LGBTQ community with stronger pertinence and independence. Studying such a group in isolation makes it easier to study the topic. At the same time, in society, the homosexual community has always been one of the most well-known groups [6]. Due to this factor, the paper can obtain more effective data information about homosexual groups in the public through questionnaires and interviews.

The paper will introduce and go through the whole experiment process in steps of Method, Results, Discussion and Conclusion. For the method part, by sampling selection, all results are got from surveys and interviews in junior-high or senior-high students.

2. Method

For the method part, sampling selection is introduced. The data from the paper is from surveys and interviews.

2.1. Sampling Selection

The paper's sample was taken directly at random from high schools and middle schools. All the participants are students. They have no gender or sexual orientation. High school students and middle school students are the most accessible groups of people, and people at this stage are more likely to be shaped by avocado, resulting in the development of a variety of ideas and values. A teenager, or teen, is someone who is 13 to 19 years old [7]. They can also be described with the term "adolescent". Their minds are easily affected [8]. At the same time, teenagers will be more likely to use digital devices or social media in their lives. Exposure to screens begins early in life for many youth, with US children under age two spending an average of 42 minutes [9]. In 2018, 45% of US adolescents reported that they were online "almost constantly," up from 24% only three years prior [10]. The sample population that fit the paper will fill out questionnaires. The paper will conduct further interviews with representative questionnaires. A representative questionnaire means that the paper will screen the short answer results with detailed introduction in the questionnaire and randomly select some samples for sample interview.

2.2. Survey

The paper contains interviews for random junior-high/ senior-high students in the public.

2.2.1. Survey for Homosexual Participants

For homosexual participants who answered "yes" in Question 3:

1. Learning phase and gender.
2. Which social media app(s) do they use.
3. Is the participant a member of the homosexual community.
4. Evaluate the possibilities of two situations:
 - 1) The participant gets to know what is the homosexual community through the social media apps
 - 2) The participant changes his/ her sexuality because of the social media apps.

2.2.2. Survey for Non-homosexual Participants

For homosexual participants who answered "No" in Question 3:

1. Learning phase and gender.
2. Which social media app(s) do they use.
3. Is the participant a member of the homosexual community.
4. Does the participant know what is the homosexual community.
5. Evaluate the possibility of one situation:

1) The participant gets to know what is the homosexual community through the social media apps

This section must be in one column.

2.3. Interview

The paper contains interviews for people who did the survey, randomly. The interview focuses on different details of the correlations between social media and the young's attitudes toward the homosexuality.

For all participants, the paper question list gave them the similar research interview questions:

1. Are you a member of the homosexual community?
2. Has social media influenced your views of the homosexual community? Did you learn about the homosexual community through social media or did you become a member of the homosexual community through social media? Is social media the main reason for your opinion of the homosexual community or being gay?
3. How often do you see gay content on social media?
4. Do you think seeing this content on social media does more good than harm or more harm than good? Briefly, from your personal perspective and from the perspective of society as a whole.

3. Results

After different surveys and interview, the paper collected data from them.

3.1. Results from Surveys

The survey gives different question for homosexuals and non-homosexuals. There are 758 participants in total.

3.1.1. Data Collection for Gender and Learning Phase

According to Table 1 and Figure 1, the paper collected information about learning phases from all participants by asking them the question "Which learning phase are you at?" A total count of 758 participants answered the question, and 732(96.57%) of them are Senior-High-School students and 26(3.43%) of them are Junior High Students. A large portion of participants are senior highs.

Table 1: Learning phase.

OPTIONS	Frequency	Relative Frequency
Senior High School	732	0.96
Junior High School	26	0.03
TOTAL COUNT PARTICIPANT	758	

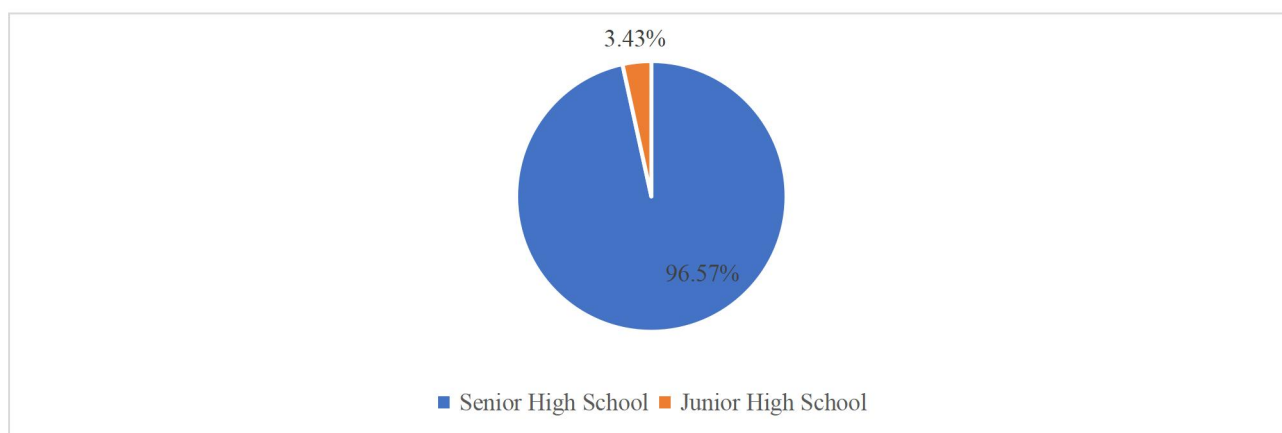


Figure 1: Learning phase.

According to Table 2 and Figure 2, the paper collected information about the genders from all participants. A total count of 758 participants answered the question. 184(24.27%) of them are males and 548(72.30%) of them are females. In addition, 26(3.43%) of the participants chose Others as an answer. The proportion of females is about three times that of males.

Table 2: Gender.

OPTIONS	Frequency	Relative Frequency
Male	184	0.24
Female	548	0.72
Others	26	0.03
TOTAL COUNT PARTICIPANT	758	

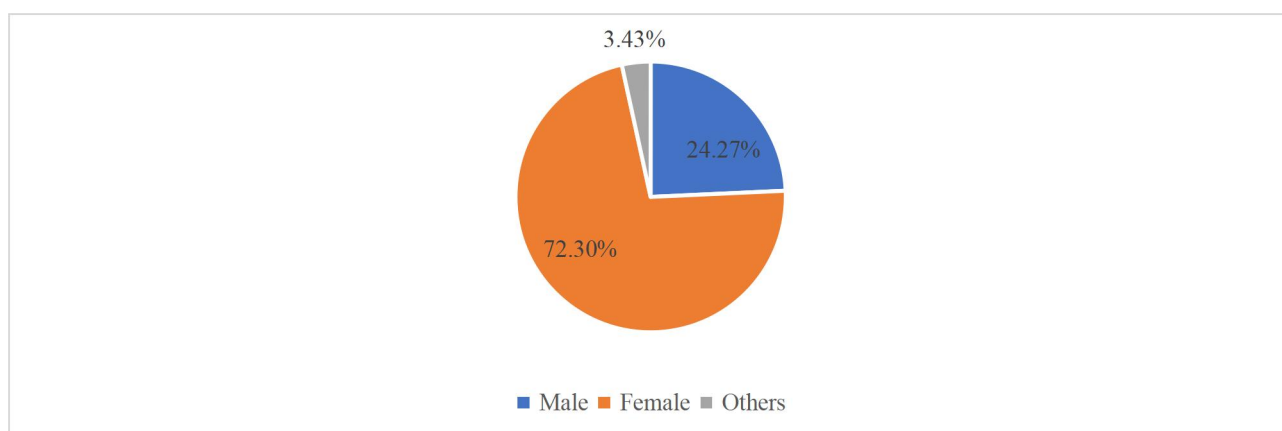


Figure 2: Gender.

3.1.2. Data Collection for Social Media Use

The survey collected data on what social media app(s) do the participants use in their daily lives. Based on Share of internet users of the leading social media in China as of 3rd quarter 2022, the six most popular social media apps in China are Wechat, Douyin(TikTok), QQ, Baidu Tieba,

Xiaohongshu and Sina Weibo [3]. The paper used the top 6 apps as the choices of the question. There may be more than one correct answer from participants. According to Table 3 and Figure 3, 676(89.18%) of participants use Wechat, 390(51.45%) of participants use Douyin(TikTok), 546(72.03%) of participants use QQ, 26(3.43%) of participants use Baidu Tieba, 442(58.31%) of participants use Xiaohongshu, and 286(37.73%) of participants use Sina Weibo. 130(17.15%) of the participants chose others. The total count of participants is 758.

Table 3: Social media app use.

OPTIONS	Frequency	Relative Frequency
Wechat	676	0.89
TikTok	390	0.51
QQ	546	0.72
Baidu Tieba	26	0.03
Xiaohongshu	442	0.58
Sina Weibo	286	0.38
Others	130	0.17
TOTAL COUNT PARTICIPANT	758	

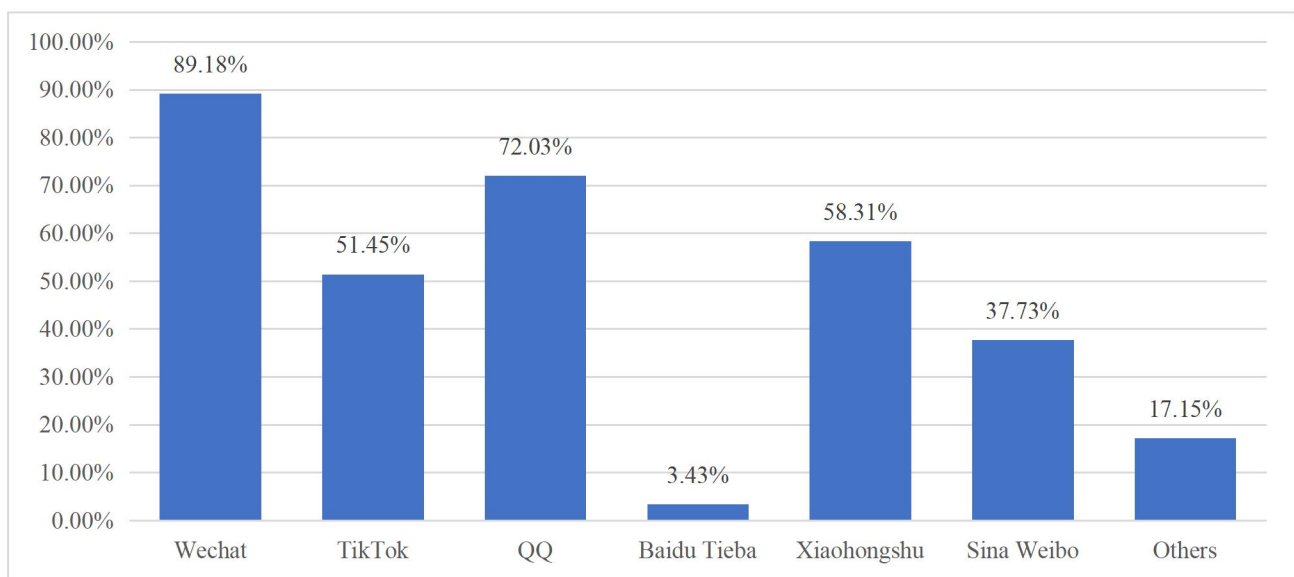


Figure 3: Social media app use.

3.1.3. Data Collection for Sexualities

The survey also asked the 758 participants about whether they are homosexuals. 137(18.07%) of them said yes and 621(81.93%) of them said no. The proportion of non-homosexual participants was about 4.5 times that of homosexual participants (Table 4 and Figure 4).

Table 4: Homosexuality determination.

OPTIONS	Frequency	Relative Frequency
Yes	137	0.18
No	621	0.82
TOTAL COUNT PARTICIPANT	758	

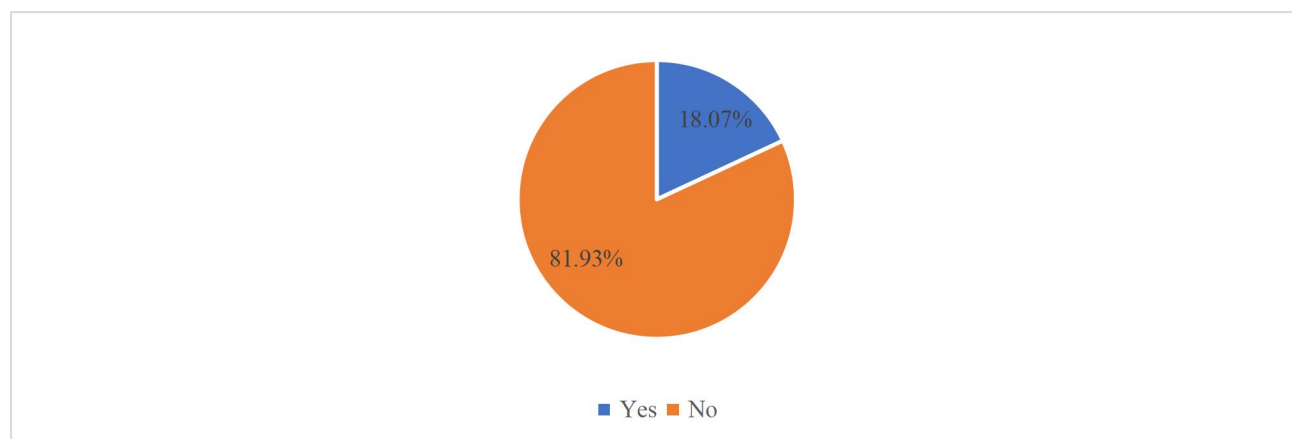


Figure 4: Homosexuality determination.

3.1.4.Data Collection for Cognitions and Awarenesses on the Homosexual Community

For the next few steps, the survey divided the participants into two groups by the criteria “Yes” or “No” and gives different questions for each group.

3.1.1.1.Data Collections for Questions Answered by Homosexuals

For homosexual participants who answered “No” in 3.1.3, the following survey questions has been shown.

1) Evaluate the possibilities of two situations:

- i) The participant gets to know what is the homosexual community through the social media apps
- ii) The participant changes his/ her sexuality because of the social media apps.

For the first situation, the total of 137 participants shows a stronger agreement. According to Table 5 and Figure 5, Two people (1.46%) each choose “Totally Disagree” and “Partially Disagree”. 5 people (3.65%) stay neutral. 45(32.85%) of them evaluate by “Partially Agree” and 83(60.58%) of them show “Totally Agree”. So that more participants get to know the homosexual community through social media apps.

By contrast, in Table 6 and Figure 6, larger proportion of people stay “Partially Disagree (43 people – 31.39%)” and “Neutral (74 people – 54.01%)”. 5 people (3.65%) state “Totally Disagree”, and 15 people (10.95%) state “Partially Agree” or “Totally Agree”. These mean more people do not have a strong sense or is a bit disagreed that social media apps had changed their sexualities.

Table 5: Social media apps effects on homosexual community comprehension for homosexuals.

OPTIONS	Frequency	Relative Frequency
Totally Disagree	2	0.01
Partially Disagree	2	0.01
Neutral	5	0.04
Partially Agree	45	0.33
Totally Agree	83	0.60
TOTAL COUNT PARTICIPANT	137	

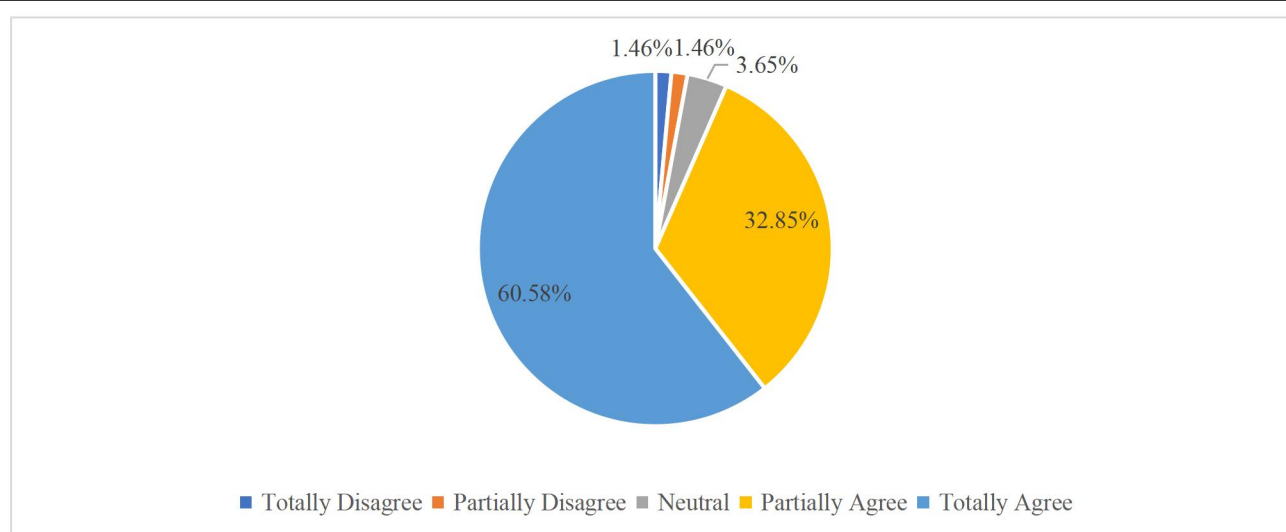


Figure 5: Social media apps effects on homosexual community comprehension for homosexuals.

Table 6: Social media apps effects on sexuality transformation for homosexuals.

OPTIONS	Frequency	Relative Frequency
Totally Disagree	5	0.04
Partially Disagree	43	0.31
Neutral	74	0.54
Partially Agree	12	0.09
Totally Agree	3	0.02
TOTAL COUNT PARTICIPANT	137	

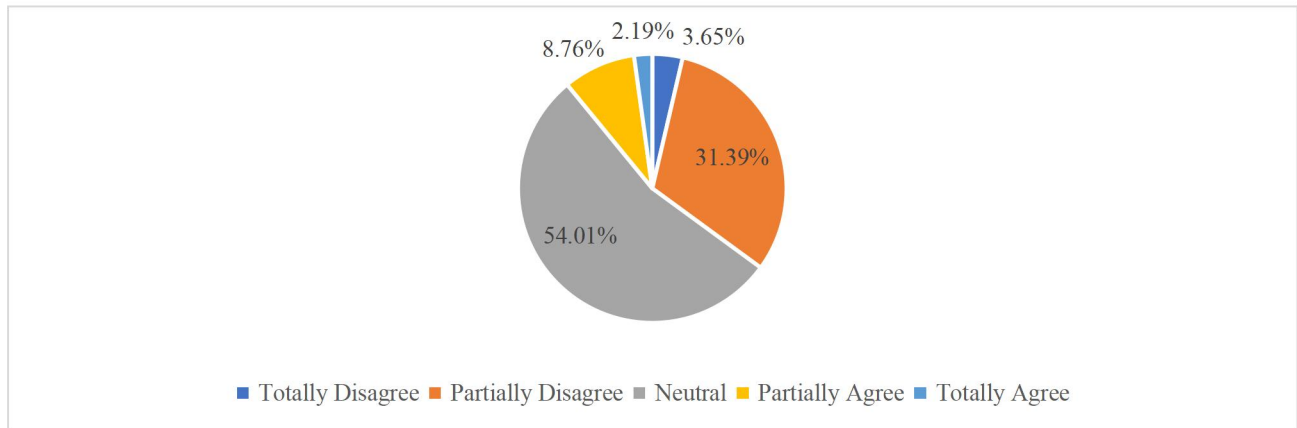


Figure 6: Social media apps effects on sexuality transformation for homosexual.

3.1.1.2.Data Collections for Questions Answered by Non-homosexuals

For homosexual participants who answered “No” in 3.1.3, the survey provides another two specific questions for the participants.

1) According to Table 7 and Figure 7, all participants (621 in total) state that they do know what is the homosexual community.

Table 7: Homosexuality “Yes or No” understanding for non-homosexuals.

OPTIONS	Frequency	Relative Frequency
Yes	621	1.00
No	0	0.00
TOTAL COUNT PARTICIPANT	621	

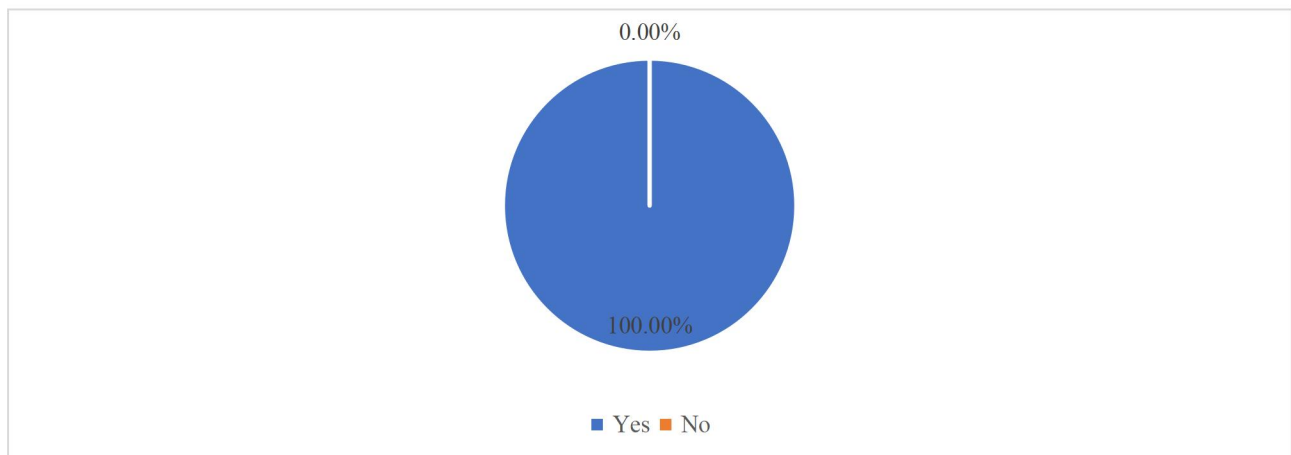


Figure 7: Homosexuality “Yes or No” understanding for non-homosexuals.

2) Evaluate the possibility of one situation:

i) The participant gets to know what is the homosexual community through the social media apps.

The question gets 621 answers in total. According to Table 8 and Figure 8, 55 people (8.86%) state “Totally Disagree” or “Partially Disagree”. 197(31.72%) of them state “Neutral”. 213(34.80%) of them choose “Partially Agree” and 158(25.44%) choose “Totally Agree”.

Table 8: Social media apps effects on homosexual community comprehension for non-homosexuals.

OPTIONS	Frequency	Relative Frequency
Totally Disagree	24	0.04
Partially Disagree	29	0.05
Neutral	197	0.32
Partially Agree	213	0.34
Totally Agree	158	0.25
TOTAL COUNT PARTICIPANT	621	

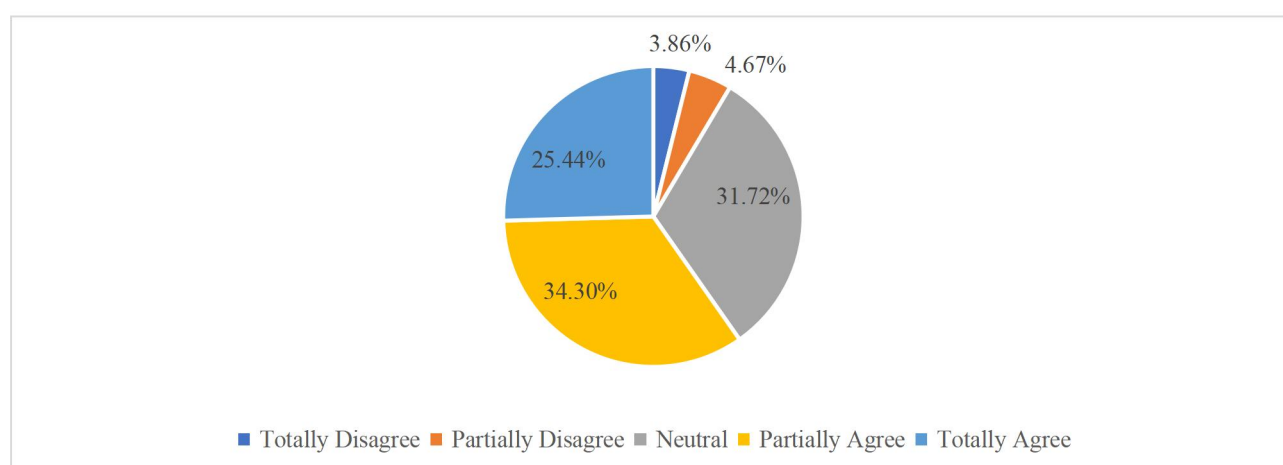


Figure 8: Social media apps effects on homosexual community comprehension for non-homosexuals.

3.2. Results from Interviews

The results are mainly based on specific participants, whose names are Edo, Icey, Zora, Eddie and Derek. Interviews are asking three main questions: “Social Media’s Effect On Either Changing the Junior/ Senior High Students Attitudes Toward the Homosexual Community or Letting Them to Become the Homosexual”, “How Often Do People Usually See Homosexual Contents On Social Media” and “Does Receiving Content About Homosexuality On Social Media Has More Good Than Harm Or More Harm Than Good”

3.2.1. Social Media’s Effect on Either Changing the Junior/ Senior High Students Attitudes Toward the Homosexual Community or Letting Them to Become the Homosexual

Knowing about whether a person likes someone with a similar sex or a different sex will be harder for the young. Some people may believe that they are heterosexual at first due to their common family education, and they have to experience a set of events to get to know their change in

sexualities, which is a very long process. Edo, one of the participants in the interview, provides her own experience on that:

Social media has influenced my view of the homosexual community. And the development of social media has also greatly affected my self-cognition: I am a girl, in primary school was pursued by many boys. But at that time, I did not understand what is love, only feeling in a piece of play. The relationship is very good is the so-called "love", so and outsiders' claim that they are heterosexuals.

Some participants know that their love to the same-sex people may be shown from certain events. However, they do not have the evidence to prove that they will fall in love with someone with similar sex. So many people may go on to the social media to comprehend these contents. Edo shows her point of view towards this:

But with the growth of age, to the first summer vacation in junior high school, I found that my same-sex friend "A" had a strange emotion: she was different from other friends, when I saw her and other people go together, I would feel unhappy; When I walk with her, my heart beats faster and I want to hold her hand. Because of the shame of the elders and the perception of the difference between my classmates and me, I can only go to Baidu, can only go to the Douban forum, and found that there are two types of feelings of homosexuality and same-sex attachment.

Sometimes searching for knowledge about the homosexual community is not the best way, because sometimes people cannot figure out whether they are accorded with the criteria or feature the homosexual. This will lead to the deeper exploration in the future. Edo continues her story that:

The explanation on Baidu is not detailed. Based on my primary school awareness of my sexual orientation and the impact of the surrounding environment, I thought it was just same-sex attachment.

Edo shows her opinions toward social media's effects on her mind on the homosexual community. The belief that she is gay is formed by her own emotional changes, his own data search, and communication with people who have the same experience on social media. It is a kind of self-cognition that both subjective and objective coexist. And social media was an important step in letting her know she was lesbian:

In the second day of junior high school, social media began to enter a stage of development, and the rise of various "same-sex star groups", "same-sex couples" and "same-sex talent shows" enabled people to have a more profound understanding and research on the "same-sex" group. After the "love", I once again contacted the more perfect social media, chasing the girl group love beans, joining the fan group, and chatting with some sisters who have the same experience with me to truly complete the realization of self-cognition - I am Lesbian.

Some people identify themselves as homosexuals through social media, while others find out about their sexual orientation through social media. Unlike Edo, Icey came to know the term "homosexuality" because of the lesbian bot. The Lesbian bot is a less popular, targeted social media outlet. She used this social media by accident. Her original goal was not to learn about lesbians, but to follow various "gay couples" with her friends. This is what Icey says:

Social media has influenced my view of the homosexual community. I think it was mainly through the lesbian bot... It's more about life. I am not interested at all in TikTok, little red book clip video set-up videos. I learned about the homosexual community through social media, but I don't think it had any impact on my personal orientation, maybe because I was not interested in dating at that time but focused on chasing stars, or maybe the homosexual couples I knew were gay. But I'm a girl!

As the first homosexual social software she used, Lesbian bot played a leading role in Icey's life. The Lesbian bot provided informational support, but not a cause for her sexual orientation. This is what Icey explained:

I think social media is part of the way I feel about the homosexual community. In fact, I will still follow my own love style in life, and I just look at the evaluation of these trends and trends on the Internet. However, if there are some content related to daily life and love in the contribution of the lesbian bot, I will pay attention to it and consider it in light of the actual situation.

After people with homosexuality explained their points of view towards the connections between social media and the homosexual community, participants who are not homosexuals show their different opinions toward that. Zora, who is in a relationship with her boyfriend, states positively that:

Social media has allowed me to see more of the homosexual community in society and to be more accepting of it. I think social media has had a big impact on my views about the homosexual community, it's made me more aware of the community, and it's made me more identified with respect for the community.

At the same time, two male participants showed more negative attitudes. They said social media had not changed their views of the homosexual community positively. For example, Eddie believes that excessive exposure to homosexual content on social media can have a relatively negative effect:

I'm a little tired of the massive and frequent propaganda for the LGBT community on ins and weibo. I learned about this part of the community through social media. Personally, I can't accept such relationships, but don't discriminate or oppose the homosexual community around me. Social media has nothing to do with my opinion.

Another male participant, Derek, says that social media has nothing to do with his view toward the homosexual community. This is how Derek illustrates:

I don't think I changed my view towards the homosexual community because of social media, I guess. Probably because so many teachers at my school are homosexuals, so I usually deal with the real life homosexual community. My opinion of the homosexual community probably stems more from reality.

3.2.2. Frequency of Seeing Homosexual Contents on Social Media

Social media has memory. It can be difficult to learn purely theoretical knowledge about homosexuality from social media when one has no awareness or idea about it. But the purely theoretical knowledge of homosexuality is also rarely presented as independent information. Much of the information about homosexuality is incidental to a interest of other things and curiosity. A person may enjoy watching movies, and there is a random probability that social media will provide that person with homosexual-themed movies. Edo states the similar idea on that:

As we all know, big data algorithms are now sufficiently developed. As a lesbian, I follow many same-sex bloggers and like many content posted by same-sex bloggers, so naturally the frequency will be high. About one interface to Little Red Book, three out of four entries are same-sex content. Jitterbug also basically swipes video content with the #le hashtag.

Icey often sees the homosexual content based on the Lesbian bot. She states that:

I see homosexual content about 30 to 40 percent of the time. The content is still related to the lesbian bot. I kind of enjoy reading these!

Derek gives different kinds of viewing of homosexual contents on different social media, from both the local country and the foreign countries. Derek explains that:

I see less homosexual content on social media in China, but occasionally I see gay bloggers on Bilibili and Xiaohongshu. In foreign social medias, I see a little more on Youtube or Instagram, but not too much.

However, some people nearly never see homosexual contents on social media. Instead, they may see homosexuals or homosexual contents in their daily lives. One of this kind of participant, Eddie, shows that:

It is often seen in the students in the International department of my school but not on the social media. I never see those gay contents on my social media. I only watch rock and base.

3.2.3. Analysis of Advantages and Disadvantages of Receiving Content about Homosexuality on Social Media

Here are many people who hope that people of all sexual orientations can have equal rights, and all of this can be subtly influenced by different forms of social media, which undoubtedly does more good than harm. Edo shows her point of view by considering the views of others:

I think there are more advantages than disadvantages, no matter from which Angle of personality. Personally, if you are not sure about your sexuality, you can find self-knowledge by understanding these things; If you are gay, you can gain emotional value and self-identity by discussing it in the content (after all, the homosexual community is still a minority, and it is not easy to find similar people in daily life); If you are a person of other sexual orientation, if you have gay friends or are curious about homosexuality, you can find out through these posts.

From a social point of view, such posts help to achieve sexual equality and can improve the happiness of life of the homosexual community. By getting to know each other's groups, other sexual groups can reduce the likelihood of conflict and thus reduce crime rates. There are many gay people in small cities who suffer from depression because of the discrimination of the surrounding environment and the lack of self-identity, which they think is a "disease" rather than a "sexual orientation" that can normally exist in the world. If we can expand the popularization of homosexuality to literacy, we will reduce the occurrence of such tragedies.

At the same time, some participants judged the pros and cons of the event by themselves from their own perspective or from the social perspective. They may prove that the advantages of the event outweigh the disadvantages in some way. Ikey used her own method to prove it:

Personally, I think the advantages outweigh the disadvantages. But the reason is very personal. Because I am very self-conscious and in control of my own thinking. Therefore, when I see the relevant content, I can control myself to be biased, and take the first step to think with my own ideas and then deal with the information. So, for me, the information I'm sifting through is basically advice and content that I think I can refer to, that doesn't hurt me. Ideas that are too radical or naive or contrary to my values will be screened out at the beginning. The bottom line is that I sift out the good stuff and leave out the bad stuff. So for me personally, the advantages outweigh the disadvantages.

For the society, I think the advantages outweigh the disadvantages. Just because the crowd is more, so it will be more complicated. The good thing is that I think society's awareness of homosexuality is not only affecting the public's view of this group, but also instilling the idea that "traditional is not necessarily necessary, and non-traditional is not necessarily incorrect". The downside is that homosexuality does not necessarily fit into social media as an "Internet fad."

Some participants felt that mentioning gay content on social media would protect the gay community. Zora believes so:

I think the advantages outweigh the disadvantages. From a personal point of view, seeing more and more gay people talk about their lives, more and more people speak up for the gay community, and I have been able to accept the community more and more. From a social point of view, maybe this phenomenon will cause some ignorant kids to follow suit, but I think it is more about protecting and supporting the real gay community.

Some participants also expressed that for different groups of people, this phenomenon can produce different effects, which may be good or bad. This is how Derek says:

Socially speaking, the behavior of some bloggers will reinforce the stereotype of homosexuality. My mom and dad just watch their videos every day, and they end up being so homophobic. In fact, I found out through personal experience that gay people are not very different from straight people.

Still, some people hold a comparatively negative view on the phenomenon. Eddie explains that:

It's bad from a personal point of view, because repeating these messages doesn't make me more accepting of homosexuality. Socially speaking, it's good to be in an inclusive, open society. And in a more conservative, authoritarian societies, it's not good.

4. Discussion

Through the statistical gender data (Question 2 Survey), it can be seen from the paper that the number of female participants is very much more than that of male participants, about three times. On reflection, this sex ratio is quite incongruous. Studies should involve nearly equal numbers of responses from both male and female participants so that further in-depth studies of men and women can be conducted separately. In addition, the entire paper only focused on the study of the association between men and women on social media and the homosexual community, and did not select participants who chose "Others" from gender to conduct in-depth research. Although only 3.43% of the participants chose "Others", we should also select a certain number of samples from them for interview.

The paper use the results of the national survey data in China as the control group. All the data will be compared with the national survey results. According to the result of the third question in the survey, the choice of Baidu Tieba is only 3.43%, which indicates that Chinese junior-high students and senior-high students' choices of social media are only different from that of the people in the whole Chinese society because they do not often use Baidu Tieba. Therefore, in the future, if people want to study the relationship between social media and the life of middle and high school students, they can almost ignore the option of Baidu Tieba. Meanwhile, according to the ranking of national data and the ranking of middle and high school survey results, middle and high school students use TikTok less frequently than expected.

By answering question 5 of the survey to the non-homosexual community, all non-homosexual people know what the homosexual community is. This further proves that the prevalence of homosexual groups in society is very high, and it is also a mass group worth studying.

When comparing the results between Question 5 for homosexual participants and Question 6 for non-homosexual participants, we can see some differences between these two groups of data. Based on Table 9 and Figure 9, there is a significant difference between the "Neutral" choice for the two groups. Non-homosexual participants are more likely to choose "Neutral" than homosexual participants. By contrast, homosexual participants are more likely to answer "Totally Agree" than the non-homosexual because there is a significance between these two bars of data. As a result, homosexual participants are more likely to agree with the statement that they get to know what is the homosexual community through the social media apps than non-homosexual participants.

Table 9: Comparison on social media apps effects on homosexual community comprehension between homosexuals and non-homosexuals.

OPTIONS	Frequency	Relative Frequency	Frequency	Relative Frequency
Totally Disagree	24	0.04	2	0.01
Partially Disagree	29	0.05	2	0.01
Neutral	197	0.32	5	0.04

Table 9: (continued).

Partially Agree	213	0.34	45	0.33
Totally Agree	158	0.25	83	0.60
TOTAL COUNT PARTICIPANT: 758	TOTAL COUNT NON-HOMO PARTICIPANT: 621	0.82	TOTAL COUNT HOMO PARTICIPANT: 137	0.18

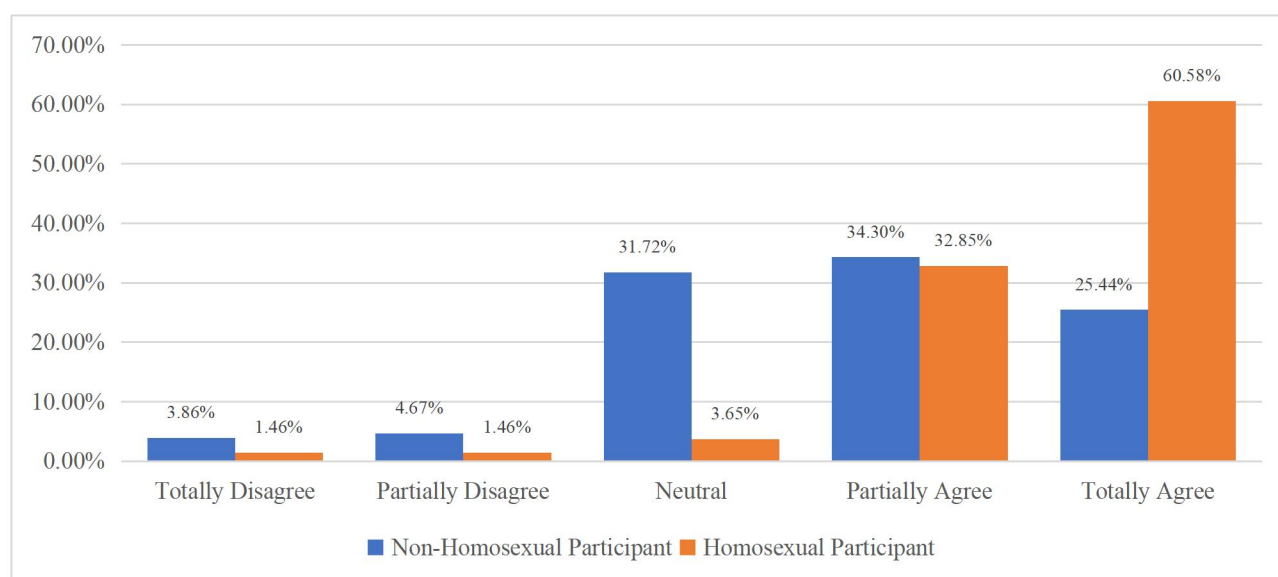


Figure 9: Comparison on social media apps effects on homosexual community comprehension between homosexuals and non-homosexuals.

5. Conclusion

This article studies and investigates the relationship between social media and junior/ senior high students' perceptions of the homosexual community. The results showed a positive correlation between social media use and the change in attitude of junior/ senior high students who learned about the homosexual community. There is a weak positive relationship between social media use and homosexuality-formation in junior/ senior high students.

It is hoped that this experimental study can provide effective information and data for future research on "the changes of social media use on the attitudes of junior/ senior high students of different genders toward the homosexual community". Based on these data, the research results can also be used to regulate the dissemination of homosexual culture according to regional policies and human culture, and have a positive impact on the freedom and equality of various sexual orientations in the future.

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