Survey and Analysis on the Primary Objectives of High School Students Utilizing WeChat Groups

Yiming Bao*, Shuntian Lyu

Shenghua Zizhu Academy, Shanghai, China.

How to cite this paper: Yiming Bao, Shuntian Lyu. (2023). Survey and Analysis on the Primary Objectives of High School Students Utilizing WeChat Groups. The Educational Review, USA, 7(9), 1349-1354. DOI: 10.26855/er.2023.09.021

Received: August 31, 2023
Accepted: September 30, 2023
Published: October 30, 2023

Corresponding author: Yiming Bao, Shenghua Zizhu Academy, Shanghai, China.

Abstract

This statistical paper discusses the suitability and significance of using the WeChat group in class, and identifies the main reasons why students use the WeChat group. We designed a questionnaire to collect data, including how long students have been using the WeChat group, how many WeChat groups students have, and the main purpose for students to use the WeChat group. After we collected enough data, we determined whether there was any correlation between the purpose of students using the WeChat groups and other factors. To figure these problems out, we use the regression line model, chi-square test, t distribution, and some simple diagrams. The results suggest some differences between girls and boys using the WeChat group. According to the questionnaire survey data and various analysis methods, it can be concluded that the construction of WeChat groups plays a very important role in teachers' teaching, learning, and discussion among classmates and maintaining relationships. Moreover, some purposes do not have divergence.

Keywords

Primary purposes of using WeChat group, Behavior difference between boys and girls, Statistical paper, Regression line model, Chi-square test, T distribution

1. Introduction

WeChat has already been an effective tool for socializing with other people, with the development of modern society, WeChat extends many other functions, such as WeChat groups. Therefore, we can find out the main purpose that students use the WeChat group so that teachers may utilize research on students' motivations for utilizing WeChat group chats to better understand how students interact and collaborate, and then use that understanding to drive classroom management and design. Additionally, it contributes in some ways to the promotion of the WeChat group chat program, fostering interpersonal interactions and communication.

2. Use of WeChat Groups in Student Groups

Students use WeChat groups for a number of purposes, some of which are included in the following list:

Students have the ability to readily discuss learning and other difficulties with their peers at any time and any place thanks to the WeChat group, which fosters communication and engagement among the students.

Students may improve the efficiency of their education by working together in groups on WeChat to exchange study materials, debate challenging topics, and provide answers to one another's questions.

Increase group cohesiveness via increased communication and engagement among WeChat group members.
Communication and interaction among WeChat group members may increase group cohesion and improve friendships. Through the use of the WeChat group, instructors are able to effectively manage, and assign homework, organize tests, and do a variety of other administrative tasks.

Students may broaden the breadth of their knowledge by participating in WeChat groups and gaining insight into the experiences and perspectives of their peers from a variety of educational institutions and academic disciplines.

In conclusion, the WeChat group gives students access to a convenient and effective learning and communication platform. This, in turn, serves to improve the students’ communication and engagement with one another, as well as their learning efficiency and performance and contributes to the consolidation of their connections. A sense of belonging and unity. As a result, I am OK with my teacher using WeChat groups in the classroom and across different topics.

Including the teacher's limited learning time at school, students' homework being completed alone, time and space barriers leading to our teachers to students in self-study or extracurricular learning brush problems encountered often beyond the reach of students, students' individual learning difficulties can not be timely feedback to the teacher, the teacher can not provide timely guidance and help, the result is very easy to produce some students waste time. We rely on the WeChat group instant messaging function to provide effective solutions in a timely manner at a critical period, so that the problems that students need to ask for help can be effectively solved, to achieve twice the result with half the effort (He Yongjuan, 2011).

3. Methodology

The survey was conducted on a sample of 50 students senior high school students, with ages ranging from 15-19 years old. We designed and distributed a structured questionnaire through WeChat to gather data on the main purposes and some other information about using WeChat groups. We ensure that the questions in the questionnaire do not compete for any privacy and that people are unwilling to answer, so the results in the sample check are credible and can be used as data for all students.

4. The procedure of statistical analysis

We might begin the process of conducting a survey on WeChat groups by reaching out to high school kids and their parents who use WeChat and asking them to take part in your survey. We also urge members of relevant WeChat groups to take part in the survey by posting a link to it in such groups.

To guarantee our reliable data, we carefully construct your survey questions and offer clear instructions to participants. It is essential to provide a concise explanation of the goals of your survey and to validate the applicability of the questions you want to ask in light of those goals. In addition, we want to think about inserting some demographic questions so that we can have a better understanding of the respondents' attributes.

After we have finished collecting the data from our survey, we will do an analysis of it using statistical techniques. When summarizing and presenting our data, we can find it helpful to make use of descriptive statistics. We will also use inferential statistics to test hypotheses and make inferences about the population based on our sample but this would depend on the aims of the survey.

We created an online questionnaire and asked 50 people, divided evenly between males and females. Under these conditions, we will be able to determine whether or not there is a distinction between the primary purposes for which young men and young women use the WeChat group. We take measures to ensure that there are no unique questions so that the students who fill out the questionnaire will not make inappropriate selections.

5. Statistical Analysis

According to the results of the poll, the vast majority of high school students use WeChat groups for social purposes. This can be seen in the bar chart that displays the survey's findings. This was exchanging information with friends, classmates, and family members through talking to them and having conversations with them. It is fascinating to see that a sizeable percentage of students employ WeChat groups for educational purposes. Some examples of these uses are studying, discussing the work that has been assigned, and exchanging academic knowledge with other students and professors.

Discussions in the Academic Community One of the key reasons individuals join WeChat groups is to discuss things that are important to their studies, such as intellectual difficulties. This is one of the most common reasons why people join WeChat groups. According to the statistics, around 68 percent of students take part in intellectual discourse inside their own WeChat groups. Students are able to communicate with one another and exchange materials and notes. When using WeChat groups, students may quickly discuss their questions and concerns with their classmates, and they can
obtain fast replies from both their professors and their fellow students. The usage of WeChat groups by certain students as a means to solicit assistance with their academics or obtain answers to inquiries regarding their assignments is one possibility (Wu Yuting, 2018).

Students routinely collaborate on group projects together, and one additional means of communication that they use is through WeChat groups. According to the data, around 76 percent of students participate in group projects with other individuals via WeChat. The students can work together on a solution to this problem and share their ideas and opinions with one another in order to provide the best possible response. In addition, students are able to acquire the materials they require in a more efficient manner through their professors, and they also have an easier time connecting with one another.

Students use WeChat groups for a variety of reasons, the most significant of which is communication for academic purposes; however, they also use it to interact with other students. The most important reason students use WeChat groups is to communicate for academic purposes. The findings show that 82 percent of students take part in social activities inside their own WeChat groups. Students can utilize WeChat groups during their leisure time to cooperate on arranging group activities, post hilarious memes or jokes, or simply communicate with their friends. The whole educational experience of such pupils is enhanced as a result of this factor, in addition to its contribution to the establishment of strong bonds among classmates (Ji Fengyan, 2011).

Shopping: Some students may participate in a shopping group, which may include purchasing clothing, footwear, or other essentials for daily life. Students may find what they’re looking for in these WeChat groups while purchasing online.

6. Discussion

<table>
<thead>
<tr>
<th>Table 1. t-test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-test results</td>
</tr>
<tr>
<td>Gender (mean±standard deviation)</td>
</tr>
<tr>
<td>Shopping</td>
</tr>
<tr>
<td>Academic</td>
</tr>
<tr>
<td>Material Sharing</td>
</tr>
<tr>
<td>Family</td>
</tr>
</tbody>
</table>

It is clear from the table that a t-test should be used to investigate whether or not gender matters when it comes to making use of WeChat groups. The fact that two items from distinct gender samples do not reveal significance for data sharing between instructors and students and family groups (p> 0.05) indicates that data sharing between teachers and students and family groups is constant and that there is no difference between various gender samples. Additionally, two aspects of your gender sample are statistically significant for shopping groups and academic talks, suggesting that there
are variations between the gender samples for shopping groups and academic discussions. These findings point to the fact that there are disparities between the gender samples for academic discussions and shopping groups. The results of an in-depth investigation indicate that:

The gender variable showed a significant level of 0.01 for the shopping group ($t=-3.027$, $p=0.004$), and the particular comparison difference suggests that the average value of males will be much lower than that of girls (0.32 against 0.72 for girls).

There is a gender difference in academic talks that is significant at the 0.05 level ($t=2.028$, $p=0.048$), and the particular comparative difference shows that the average value of men (0.68 vs. 0.40) is substantially higher than the average value of girls (0.40).

![Fig. 2. The main proportion of men and women using WeChat group chat function.](image)

### Table 2. Chi-square analyze result

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>$X^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping</td>
<td>68.00%</td>
<td>28.00%</td>
<td>48.00%</td>
<td>8.013</td>
<td>0.005**</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>32.00%</td>
<td>72.00%</td>
<td>52.00%</td>
<td>3.945</td>
<td>0.047*</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material Sharing</td>
<td>20.00%</td>
<td>24.00%</td>
<td>22.00%</td>
<td>0.117</td>
<td>0.733</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>56.00%</td>
<td>60.00%</td>
<td>58.00%</td>
<td>0.082</td>
<td>0.774</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p<0.05$ ** $p<0.01$
Gender has a significant level of 0.01 for the shopping group \((\text{chi}=8.013, p=0.005<0.01)\). Boys choose not to be selected 68.00% of the time, compared to 28.00% of girls. Girls selected more than boys—72.00% versus 32.00%.

Academic debates are gendered \((\text{chi}=3.945, p=0.047<0.05)\). Girls choose not to be selected at 60.00%, compared to 32.00% for boys. Boys chose more than girls—68.00% versus 40.00%.

It may be concluded that different gender samples will not exhibit significant differences in two items: data sharing between teachers and students, family group, and your gender sample will show substantial differences in two items: shopping group and academic discussion.

Fig. 3. WeChat group chat quantity versus WeChat group usage time.

A second question that piques our curiosity is whether or not there is a correlation between the amount of time students spent in their various WeChat groups and the total number of WeChat groups they were a part of.

Following the completion of the calculations, the conclusions that we reached are as follows:

The equation for determining the number of group conversations you have on WeChat is: \(1.529 + 0.520t\). It has been quite some time after the first interaction through the group function on WeChat, and the value of R square for this relationship is now 0.248. This indicates that there is a median positive link between the amount of time students spent using their respective WeChat groups and the total number of WeChat groups they were a part of (Zhu Yuping, 2017).

It can't be overstated how essential it is that our research focuses on the reasons why students utilize WeChat group chat in the first place. Knowing that the fundamental aim of WeChat group chat for students is communication and cooperation will help educators better understand the learning and communication needs of students, enhance teaching models and approaches, and nurture students’ learning and growth. In addition, educators may benefit from examining the secondary reason for students' usage of WeChat group chats, which is for the purpose of socializing and being entertained. This can help educators plan and manage student-related extracurricular activities and social practices. It is possible that having an understanding of the communication techniques and content of diverse groups of people in WeChat group chats may also serve as a reference for the design and marketing of other social apps, encourage communication and exchanges among individuals, and advance social development (Leng Yefu, 2016).

WeChat group is equivalent to a good management platform, which can store certain teaching information, has certain educational significance for the management of students, and can narrow the relationship between students, parents, and teachers. The handover work between class teachers has also become more concise, which is conducive to the construction of a new class style. As for the communication of students, teachers can communicate in the WeChat group and communicate outside normal working hours to enhance their understanding of the class without leaving a bad impression in front of the class, gain teaching experience and knowledge, create a new class management model, and build a positive class style. Although WeChat can not replace real communication, the role of the WeChat group is still playing an irreplaceable role. Teachers need to find the loopholes in class management in time, find ways to solve problems, provide shortcuts for improving students' performance and all-round development, and make contributions to the educational cause of the school.
In short, class WeChat group is a new way of school education, a good platform for students to display, a new medium for resource sharing, and a beneficial supplement for home-school communication. In the process of using the class parents' WeChat group, we should develop our strengths and avoid weaknesses, make reasonable use of the class parents' WeChat Group, and strive to create a positive, healthy, and beneficial WeChat communication platform.

References

Athukorala, A. W. V. (2021). Usage of WeChat by International Students and Its Usefulness: Study Based in Wuhan University China.