

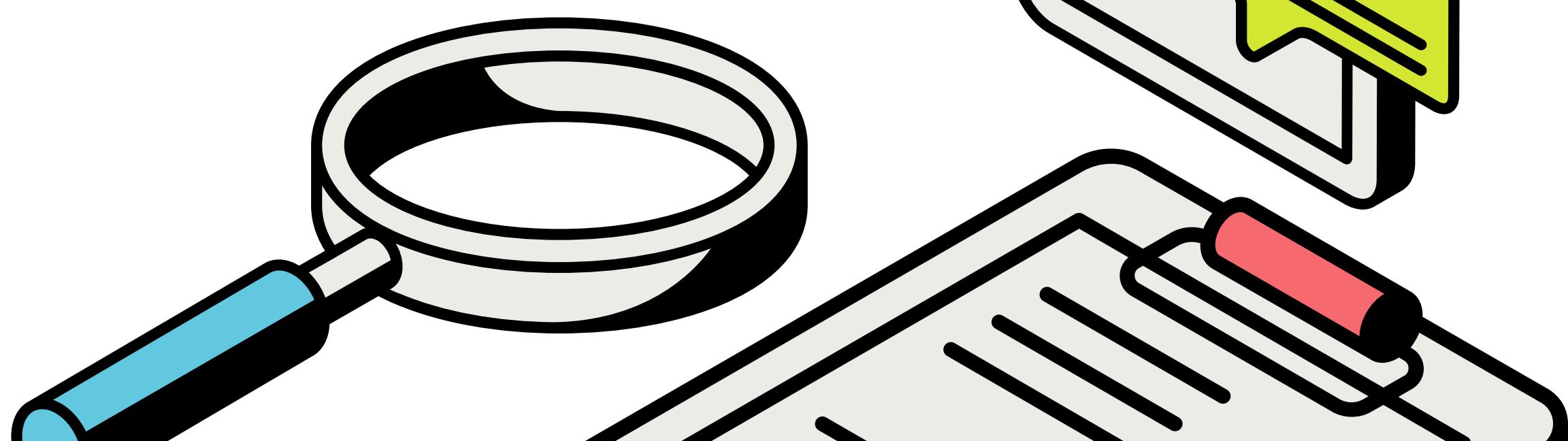


SOCIAL MEDIA

Statistic Final Project

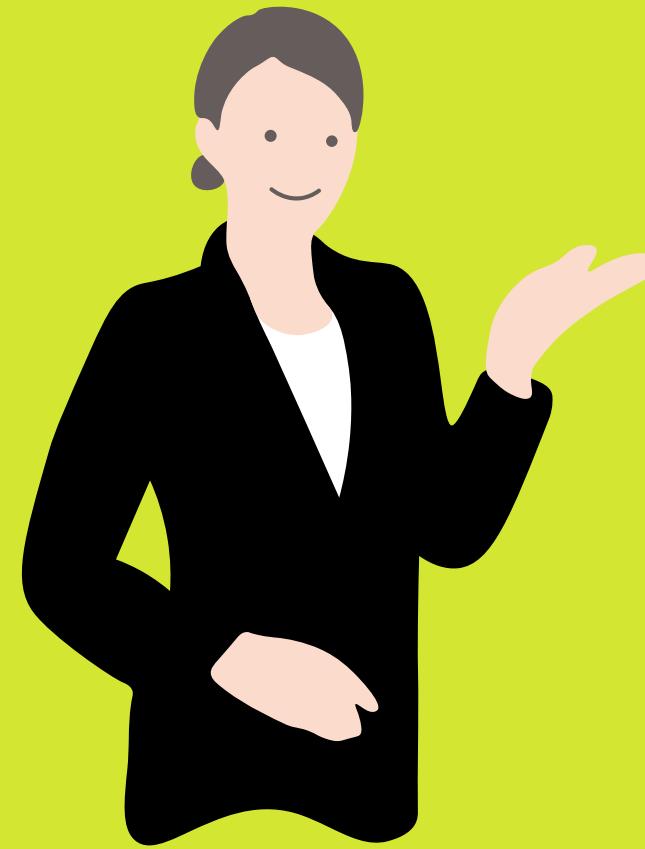
Group 5

Group Member : 張耀仁 方敬棠 王勢全 徐薇安 廖柏任 黃程宥 梁妤榛



Content:

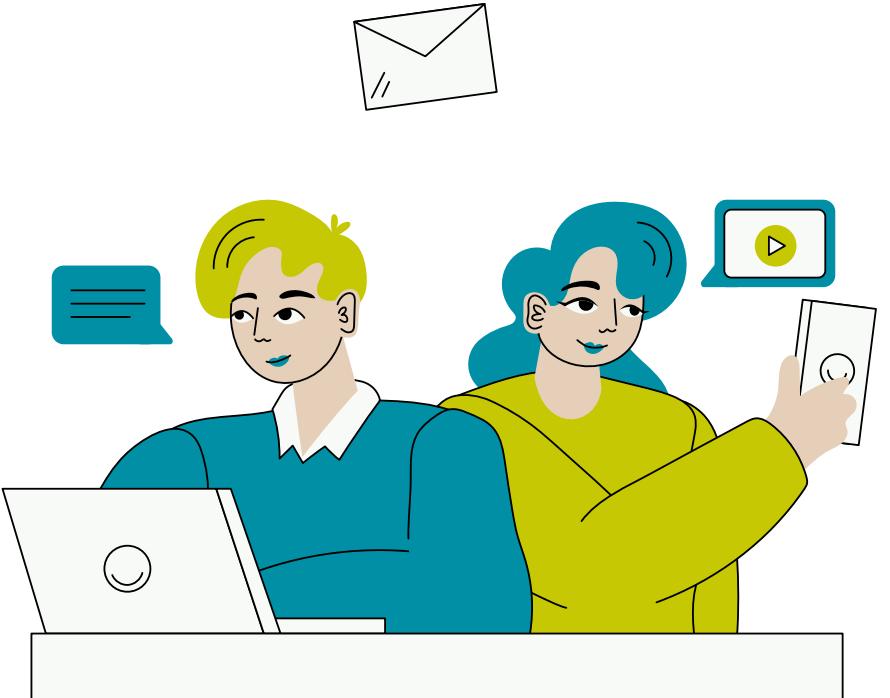
1	Introduction	5	About our test
2	Data set	6	Analyze results
3	Data pre-processing	7	Conclusion
4	Design of questionnaire	+	Additional explanation



INTRODUCTION

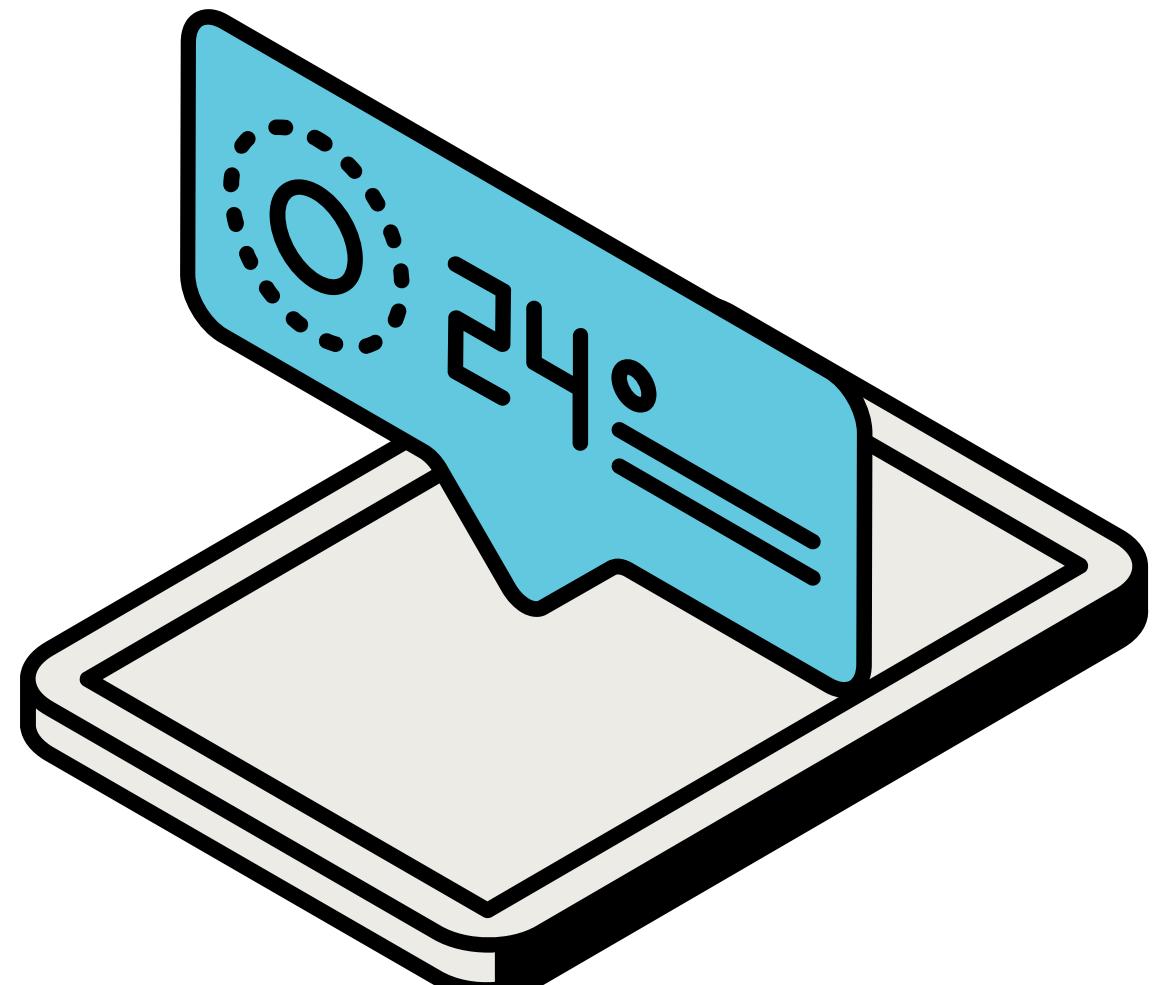
Topic

Social media usage habits and their impact on interpersonal relationships



Preface

In this digital era, social media has become an integral part of people's daily lives. From Facebook to Instagram, from Dcard to TikTok, social media platforms provide a convenient means for individuals to communicate with others, share life moments, express ideas, and establish global communities. However, the ubiquity of social media also brings forth a series of issues and challenges, one of which is its impact on interpersonal and societal relationships.



Research motivation

Social Media Use By Teens and Mental Health Statistics

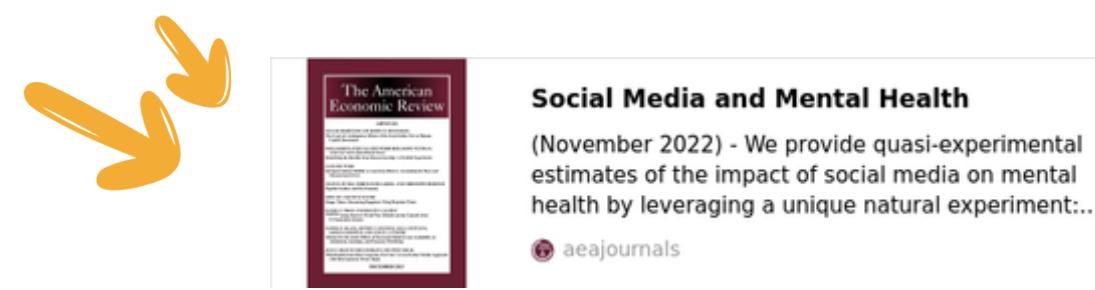
Percentage	Statistic
24%	of teenagers say social media has a mostly negative effect on their life.

Social Media and Adults Statistics

Percentage	Statistic
59%	of adults who use social media report that it has impacted their mental health.

GWI : **6.5 different social media platforms**

Through this research, we hope to understand what social media platforms people use, how they use social media applications, and how this usage affects their interactions and relationships with others. Additionally, we will explore the additional impacts of social media on social relationships and its users, as well as potential relationships.



Research direction

Shallow objectives: Gender, Age



**Preference for social media platforms
Usage duration
Social relationships**

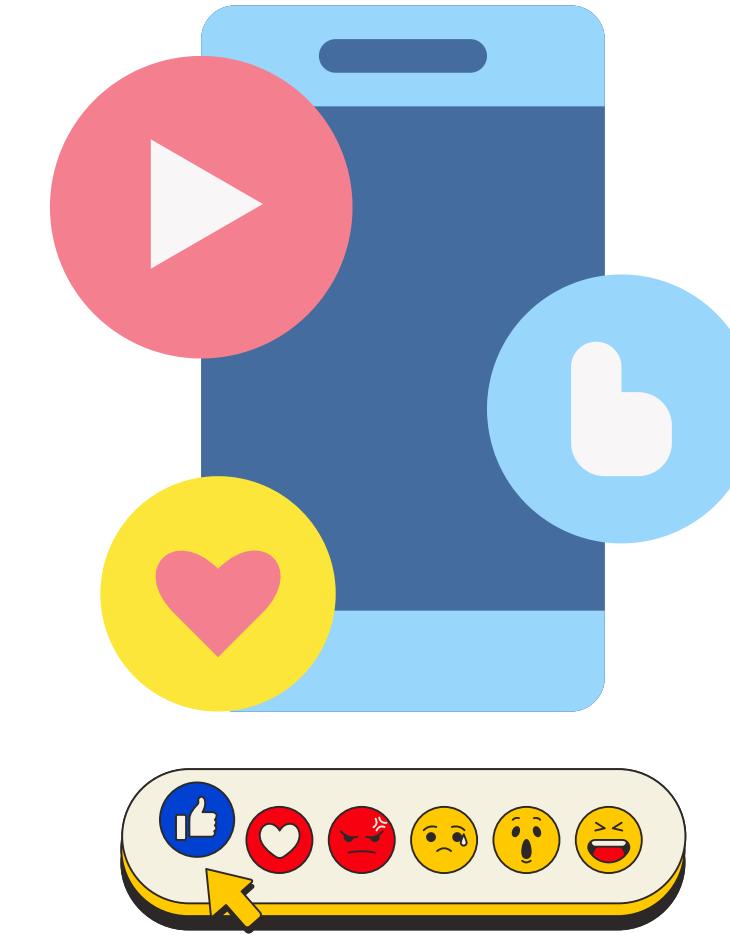
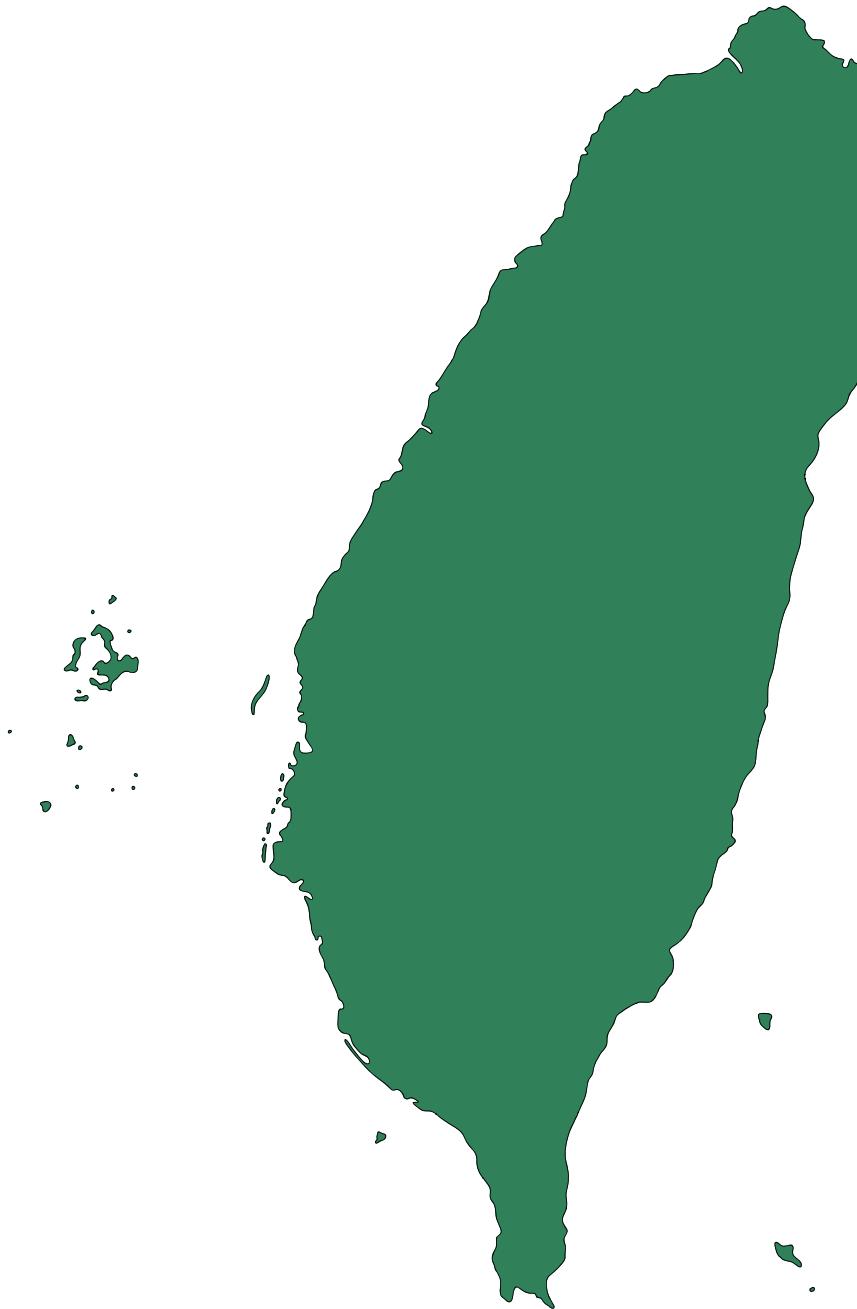
Research direction

Deep objectives: How these factors affect interpersonal relationships



relationship satisfaction

Statistics population



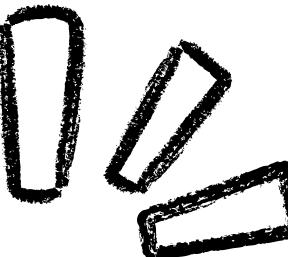
college and master students who use social media in Taiwan.

Data collection

By posting a questionnaire on “中山大小事”



Main age interval
19~24

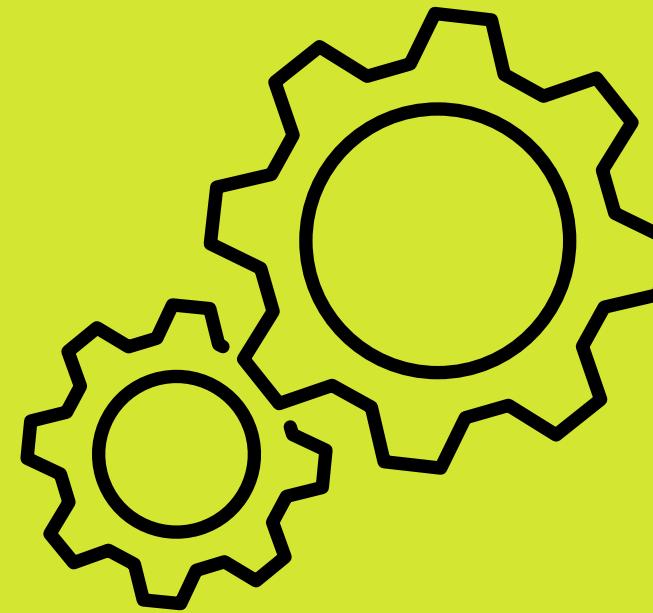




DATA SET

Data set

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	
1	生理性別	年紀	Facebook	Instagram	LINE	Discord	TikTok	Dcard	平均每日我更偏好	我更偏好	我更偏好	我更偏好	我更偏好	我日常的	我認為此	我認為此	綜合來說	對於使用	對於使用	對於使用	對於使用	交		
2	男性	20	2	2	3	0	0	1	8	LINE	LINE	Instagram	Instagram	Instagram	Instagram	Instagram				3	4	3	3	
3	男性	22	2	2	1	1	2	1	6	LINE	LINE	Instagram	Instagram	TikTok	Facebook/	Facebook/	Instagram	Instagram	Instagram	3	2	2	4	
4	男性	22	2	2	2	1	3	1	10	LINE	LINE	其他	Instagram	TikTok	Facebook/	Instagram	Instagram	Instagram	Instagram	5	5	5	5	
5	女性	20	1	5	2	0	0	1	8	LINE	LINE	Instagram	LINE	Instagram	其他	Instagram	Instagram	Instagram	Instagram	1	1	1	1	
6	男性	21	2	2	3	1	0	0	6	Facebook/	Instagram	Instagram	Instagram	Facebook/	Facebook/	Facebook/	Facebook/	Instagram	Instagram	4	4	3	4	
7	男性	21	4	4	2	3	3	1	8	Instagram	Instagram	Instagram	Instagram	TikTok	Facebook/	Facebook/	Instagram	LINE	TikTok	4	5	4	5	
8	男性	20	1	2	1	0	1	1	6	Facebook/	Facebook/	Instagram	Instagram	Instagram	Facebook/	Facebook/	Instagram	Facebook/	Instagram	2	3	4	4	
9	女性	20	5	5	5	0	0	5	10	LINE	LINE	Facebook/	Facebook/	Facebook/	Facebook/	LINE	Instagram	Facebook/	Facebook/	Facebook/	5	5	5	5
10	男性	21	3	3	2	0	0	0	6	Facebook/	Facebook/	Instagram	Instagram	Instagram	Facebook/	Facebook/	Dcard	Dcard	Instagram	3	4	4	4	
11	男性	26	1	2	4	0	0	0	6	LINE	LINE	Instagram	Instagram	Instagram	Facebook/	Facebook/	Instagram	LINE	LINE	4	4	4	4	
12	男性	21	0	2	1	2	0	0	4	LINE	Instagram	Instagram	Instagram	LINE	其他	Instagram	Instagram	Instagram	Instagram	3	3	3	3	
13	男性	23	2	1	1	0	0	0	4	LINE	LINE	Facebook/	Instagram	Facebook/	Facebook/	Facebook/	Facebook/	Facebook/	Facebook/	2	3	3	4	
14	男性	21	2	2	2	0	0	1	6	Instagram	LINE	Instagram	Instagram	Facebook/	Facebook/	Facebook/	Facebook/	LINE	Instagram	Facebook/	2	3	2	4
15	女性	20	1	0	1	0	0	0	4	LINE	LINE	其他	其他	其他	其他	其他	其他	LINE	LINE	4	4	4	5	
16	女性	22	1	2	1	3	1	1	6	Discord	Discord	其他	Discord	Instagram	Facebook/	Discord	其他	Discord	Discord	1	1	1	1	
17	女性	20	1	3	2	0	0	1	6	LINE	Instagram	Facebook/	Instagram	Instagram	Facebook/	Instagram	Instagram	Instagram	Instagram	3	4	3	4	
18	男性	24	1	1	2	4	0	0	4	Discord	3	3	3	3										
19	女性	20	1	2	1	0	0	1	4	LINE	LINE	Instagram	Instagram	Instagram	LINE	Instagram	Instagram	Instagram	Instagram	2	2	2	4	
20	女性	20	3	5	5	0	3	1	8	LINE	LINE	Instagram	Instagram	Instagram	Facebook/	Facebook/	Facebook/	LINE	LINE	4	4	4	4	
21	男性	22	2	2	1	0	0	3	6	Instagram	LINE	Instagram	LINE	Instagram	Facebook/	Facebook/	Instagram	Instagram	Instagram	4	4	4	4	
22	男性	20	2	1	1	0	0	1	2	LINE	LINE	Instagram	Instagram	Facebook/	Instagram	Instagram	Facebook/	其他	Facebook/	4	4	3	4	
23	男性	20	2	2	2	0	0	1	6	Instagram	Instagram	Instagram	Instagram	Facebook/	Facebook/	Instagram	Facebook/	Instagram	Facebook/	3	3	3	3	
24	男性	20	4	4	2	0	0	0	8	Instagram	LINE	Instagram	Instagram	Facebook/	Facebook/	Facebook/	Facebook/	LINE	Facebook/	3	3	3	4	

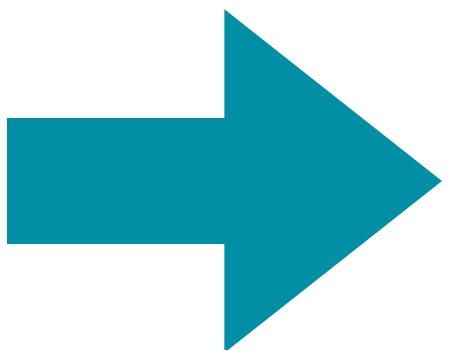


DATA PRE-PROCESSING

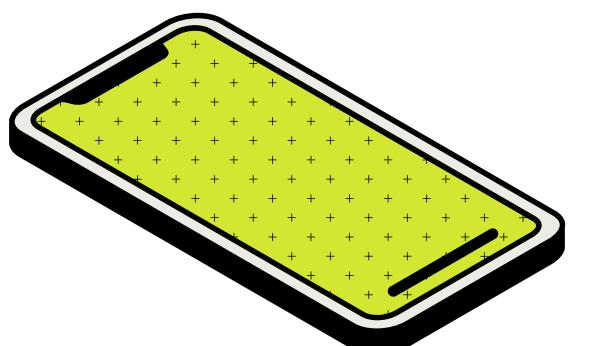
Form(Identifying Valid Questionnaires)

We designed a question to test the validity of the questionnaire

對於使用社交軟體之感受程度 [此題請填4，否則問卷無效]



all -> 332
valid -> 304
invalid -> 28



Form

Sex : male/female

Age range : mainly focus on 18 - 24

Time (particular apps):

“rarely use” --> 0

“less than an hour” --> 1

“ 1 hour ~ 2 hour ”--> 2

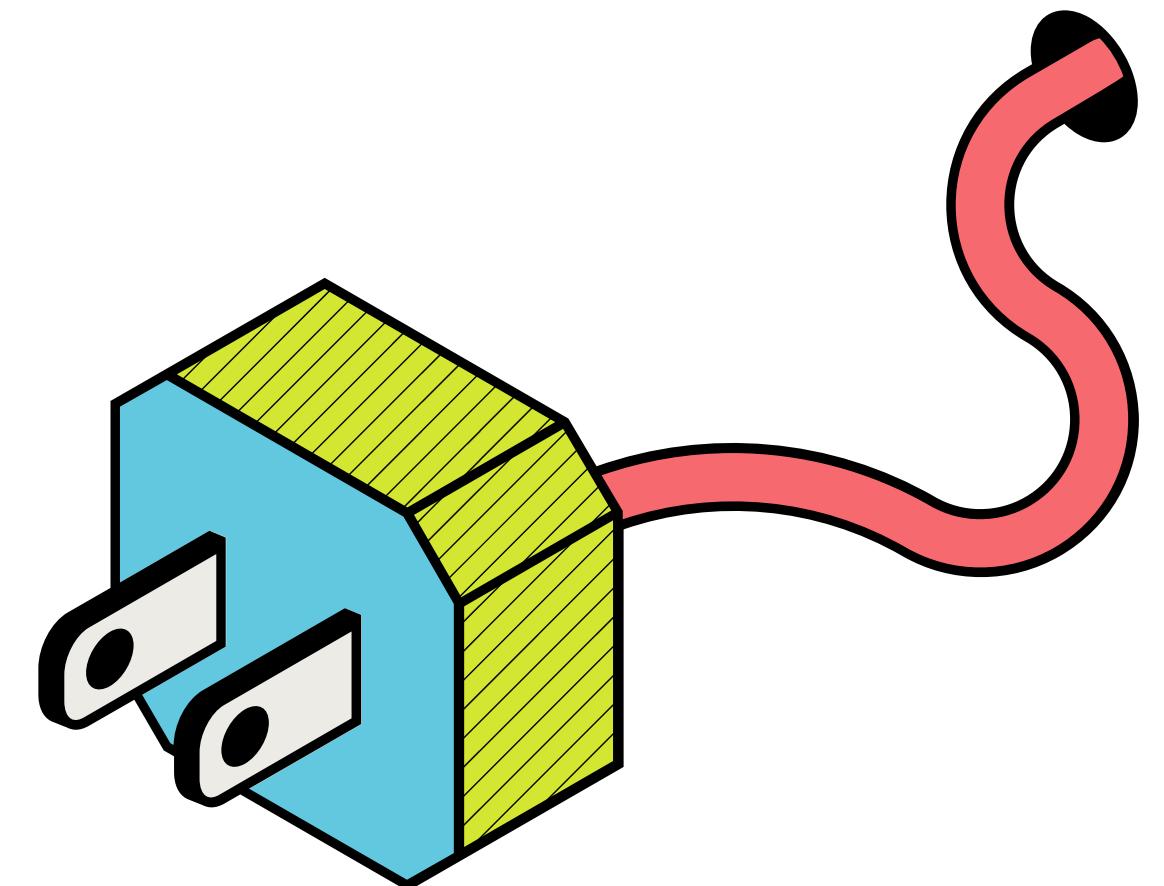
“ 2 hour ~ 3 hour ”--> 3

“ 3 hour ~ 4 hour ”--> 4

“ 4 hour ~ 5 hour ”--> 5

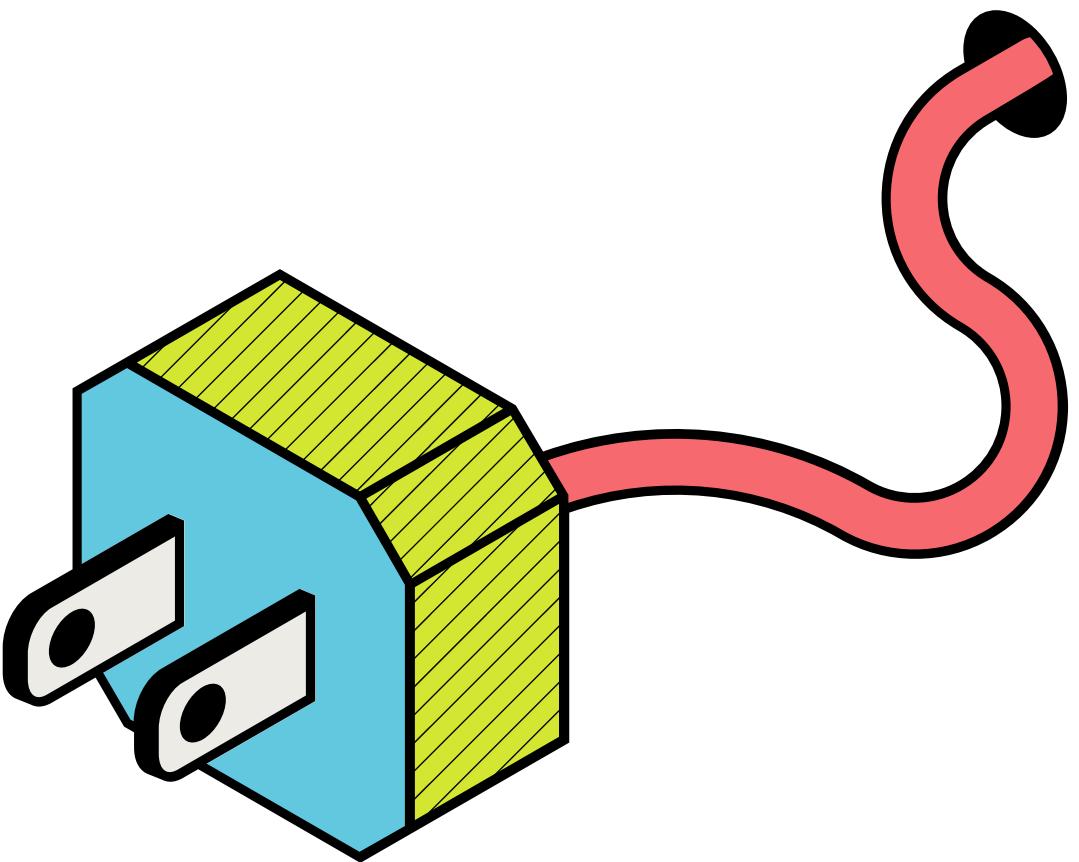
For total hours, we will use two-hour intervals,
from 0-2 to 8-10.

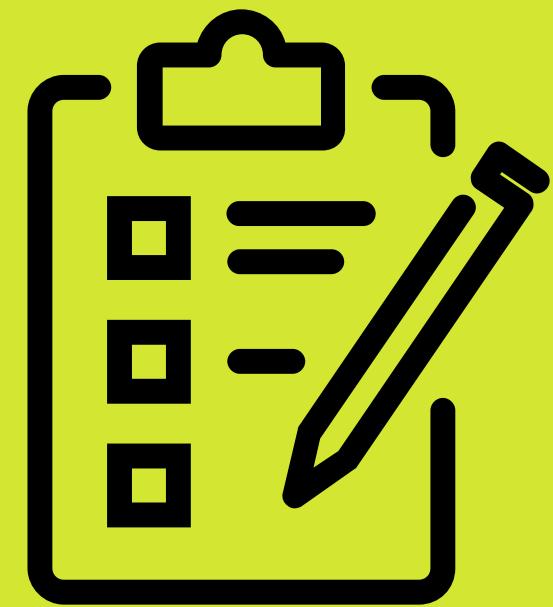
Preference : “Overall, what social media
platforms do you like the most?”



Likert Scales

- Strongly Agree --> 5
- Agree --> 4
- Neutral --> 3
- Disagree --> 2
- Strongly Disagree --> 1



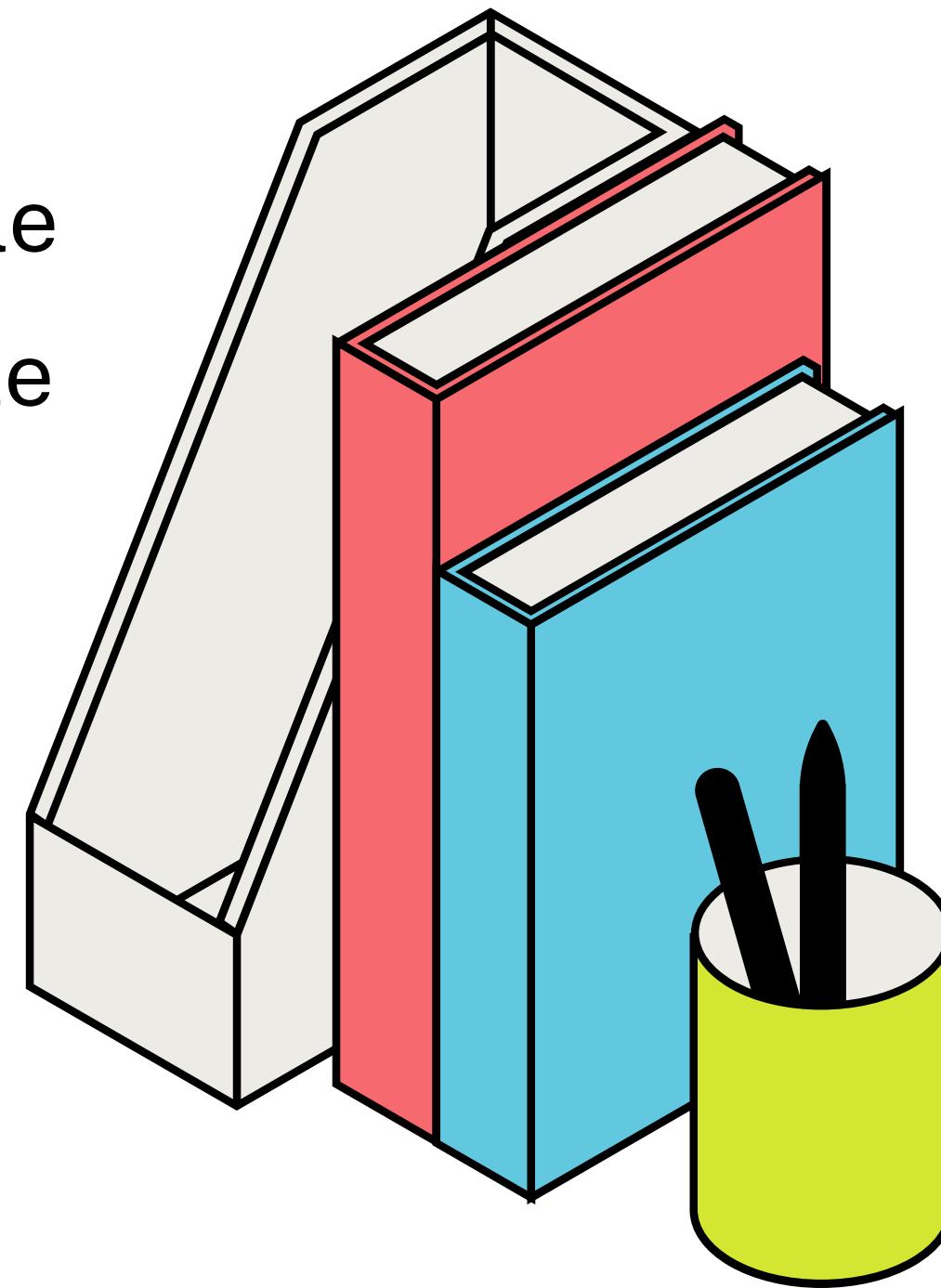


DESIGN OF QUESTIONNAIRE

Form(Compared to face-to-face interactions)

1. Prefer using social media apps to **chat** with others
2. Using social media apps makes me feel more **comfortable**
3. Prefer using social media apps to **communicate** with people
4. I feel **less nervous** using social media apps to communicate with people

Continue to the next page →



Form

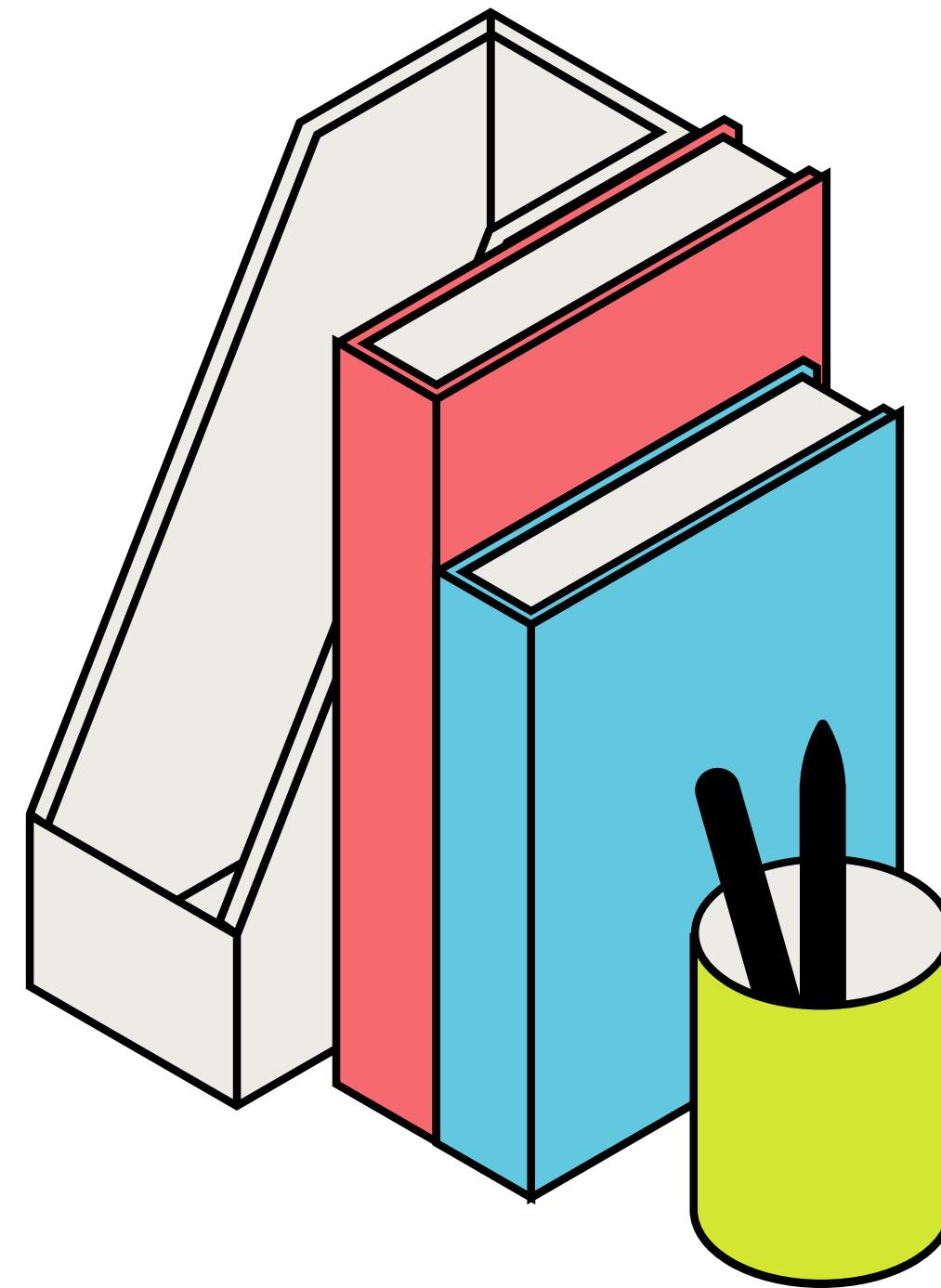
5.I can manage my relationships better online.

6.If I could meet face-to-face, I **wouldn't** choose to use social media apps

Aggregate into **Interpersonal Communication**

Preferences (social media apps)

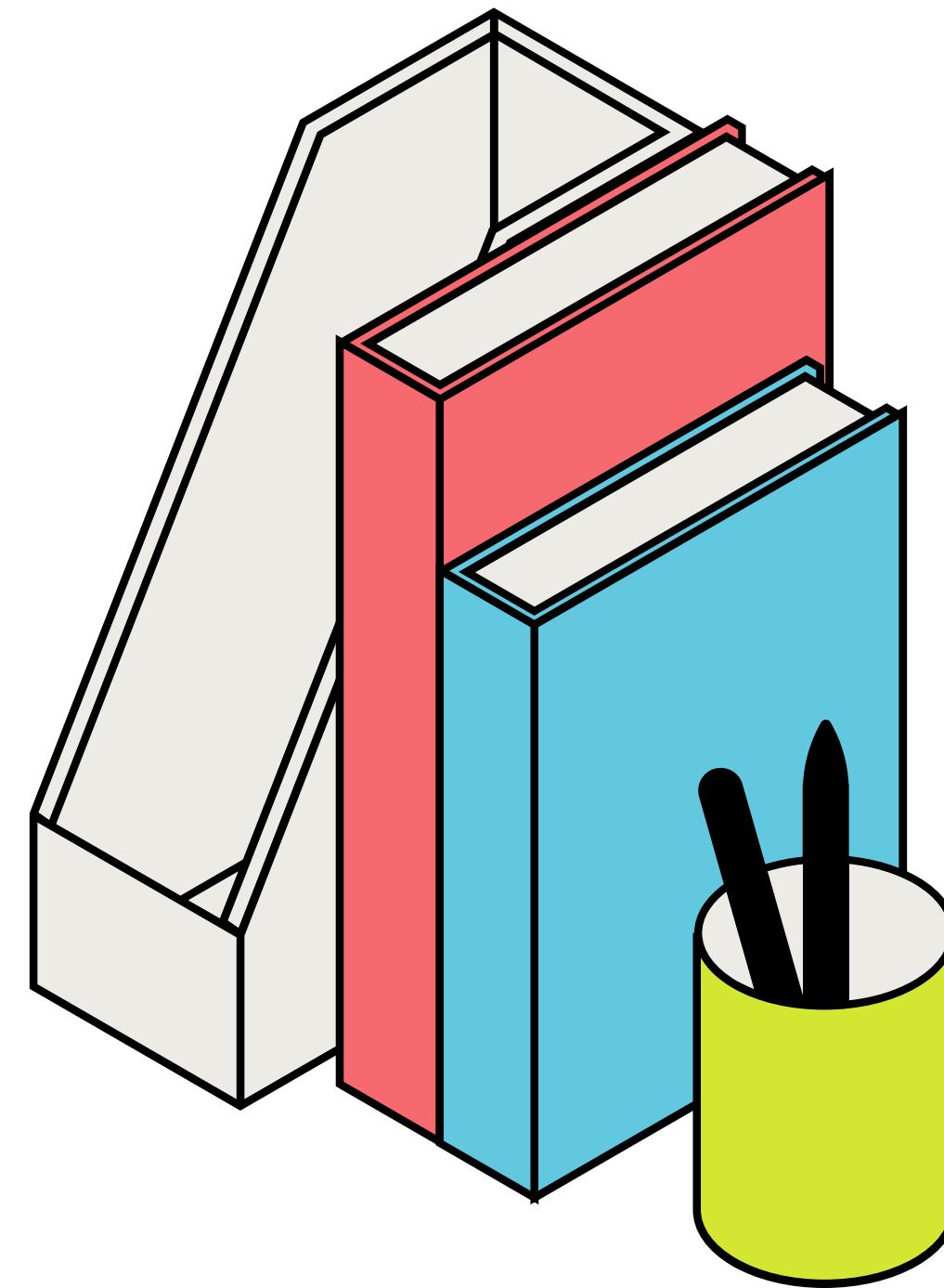
(6. reverse calculate)



Form(Compared to face-to-face interactions)

1. Using social media apps makes it easier to **get to know others**
2. Using social media apps makes me more willing to **share personal matters**
3. When I am **happy**, I will message my best friend to share it
4. When I am **sad**, I will message my best friend to confide

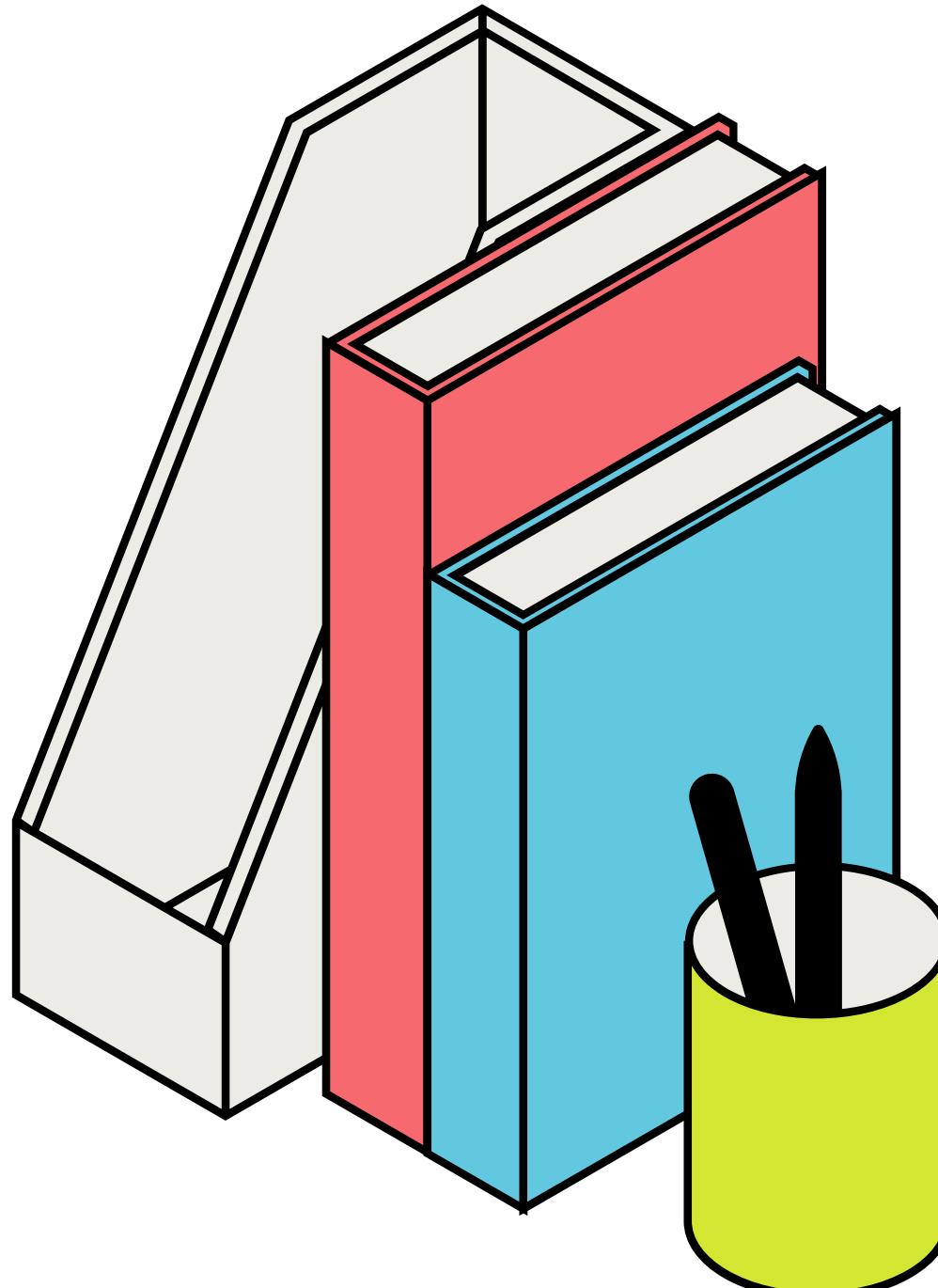
Aggregate into **Desire to Share (on social media apps)**



Form

1. I **enjoy** using social media apps
2. I believe social media apps have a **negative** impact on my interpersonal relationships
3. Social media apps have **greatly helped** my interpersonal relationships
4. Social media apps **reduce** interaction between people

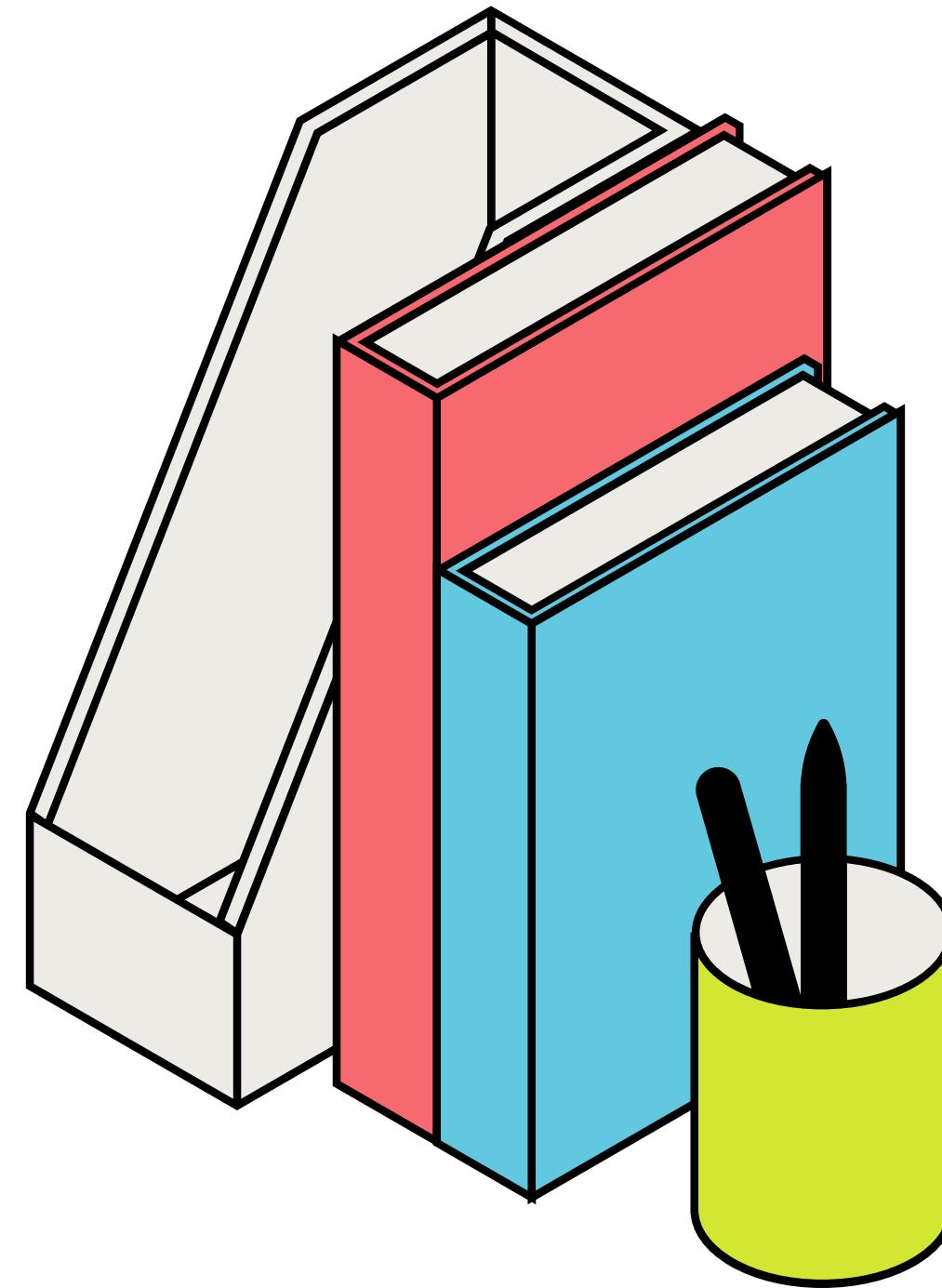
Aggregate into **Agreement Level (social media)** (**2. 4. reverse calculate**)



Form

1. I care a lot about the **number of likes** my posts get
2. I get **anxious** about the number of likes
3. After posting, I **repeatedly check** the view count
4. I hope my posts get a lot of likes
5. Rather than sharing with others face-to-face, I prefer sharing **through social media**

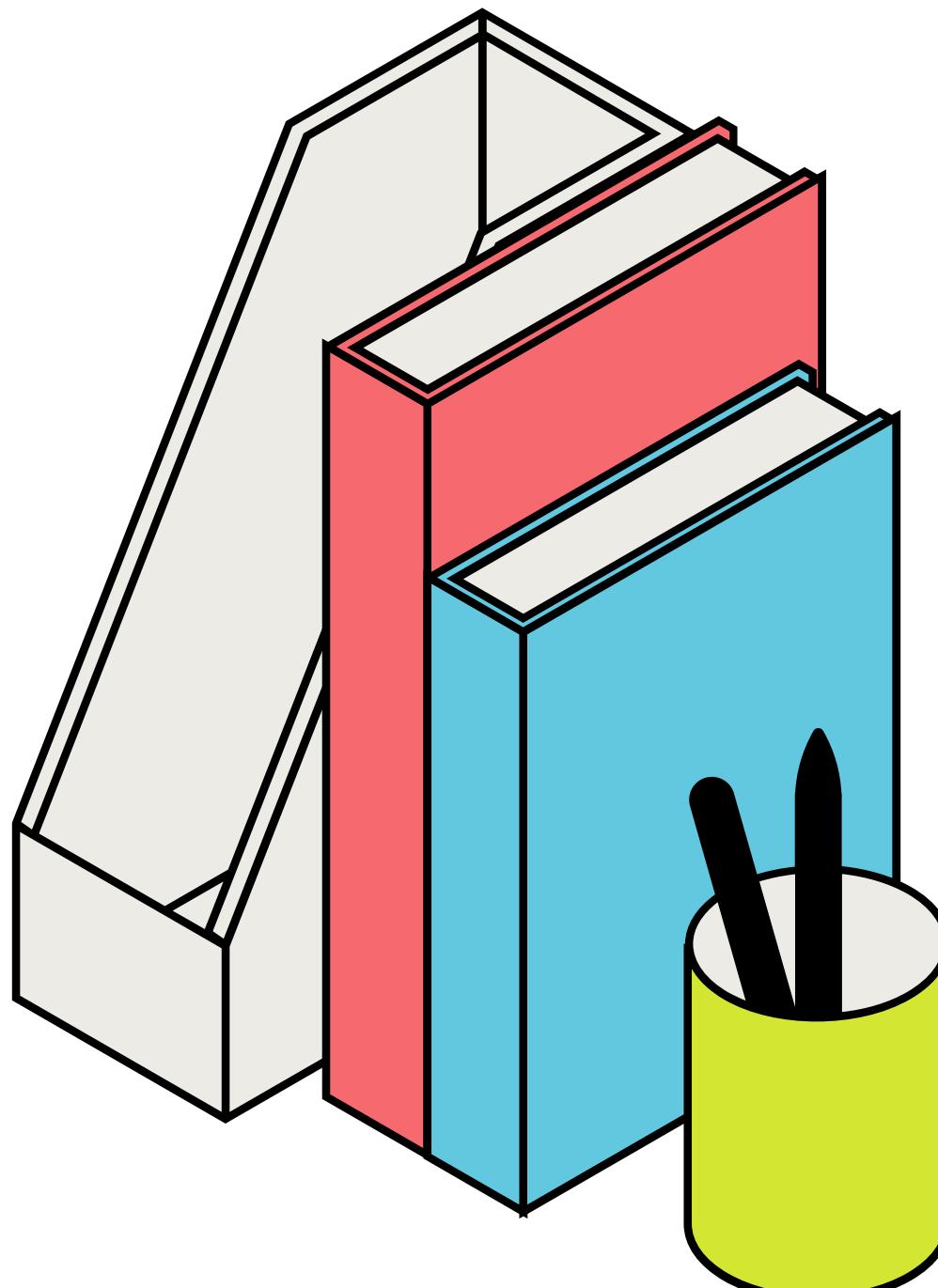
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Form

6. I post because I want to share
7. I post just to document my life
8. Social media has **reduced** the opportunities for face-to-face interactions between people
9. I believe that relationships between people are **not** affected by social media

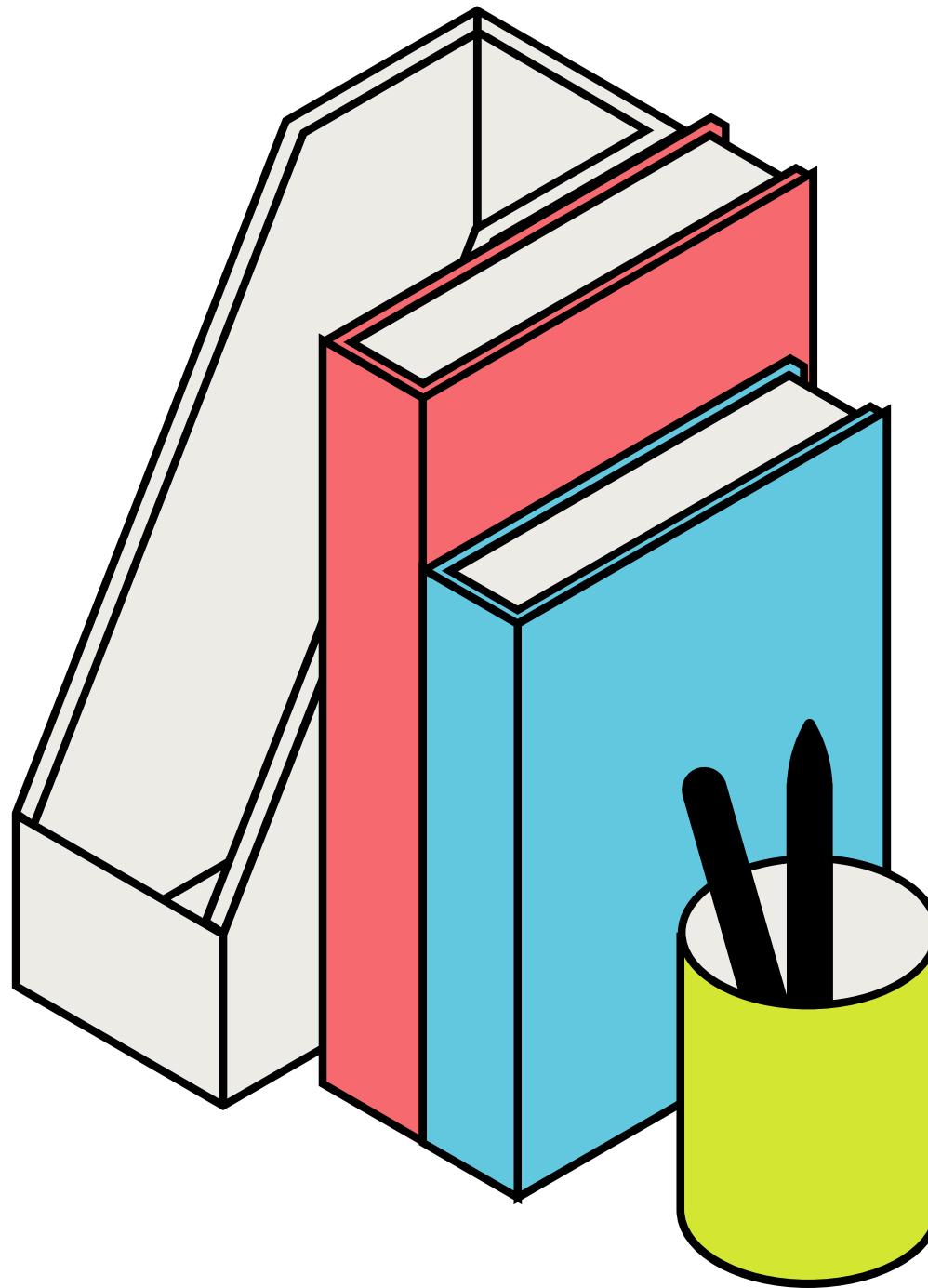
Aggregate into **Dependency on Social Media**
(6789 reverse calculate)



Form

1. I often feel lonely.
2. I have a feeling of being forgotten
3. I feel like no one can truly understand me
4. I feel estranged from the people around me

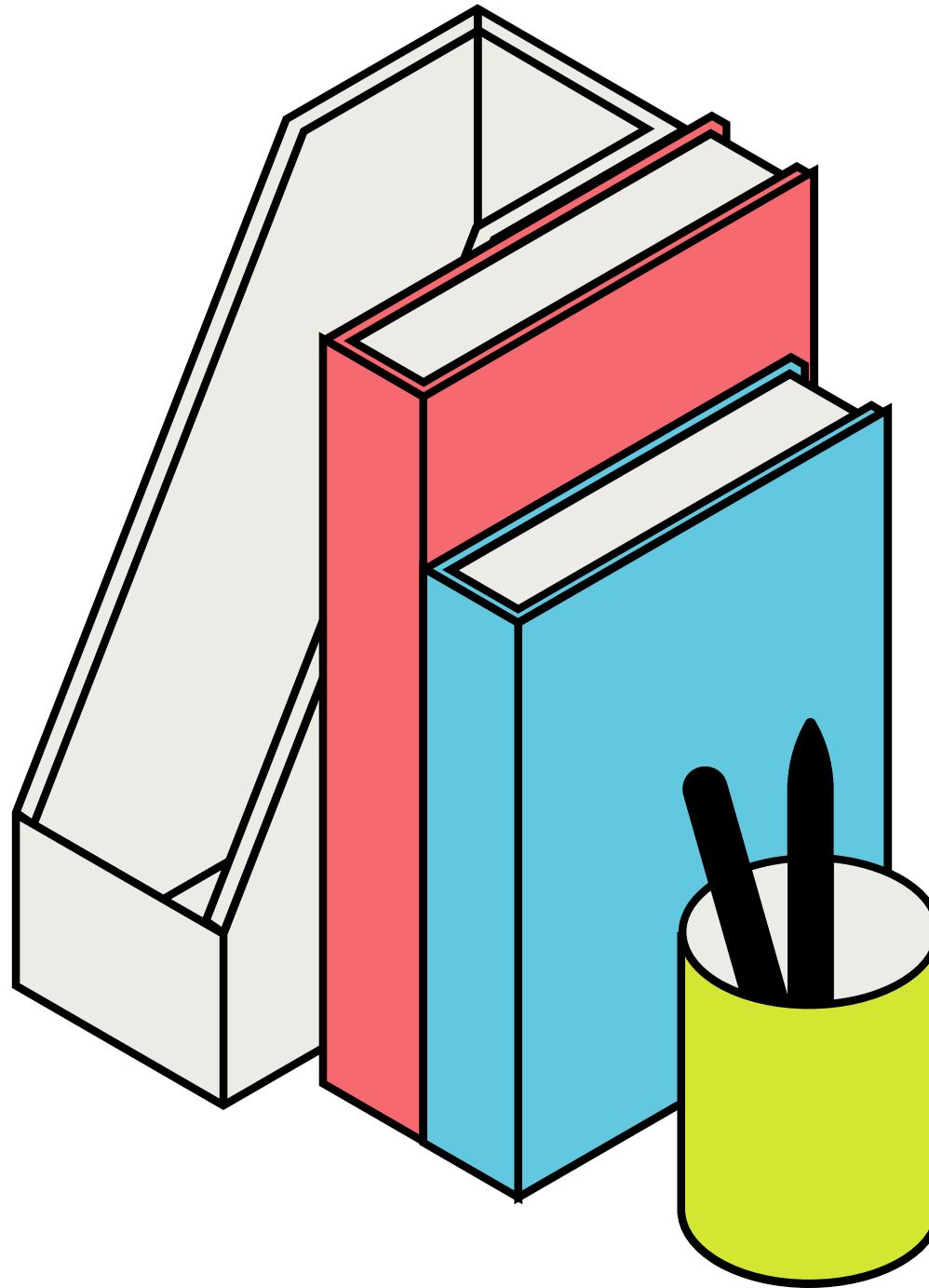
Aggregate into **Loneliness**



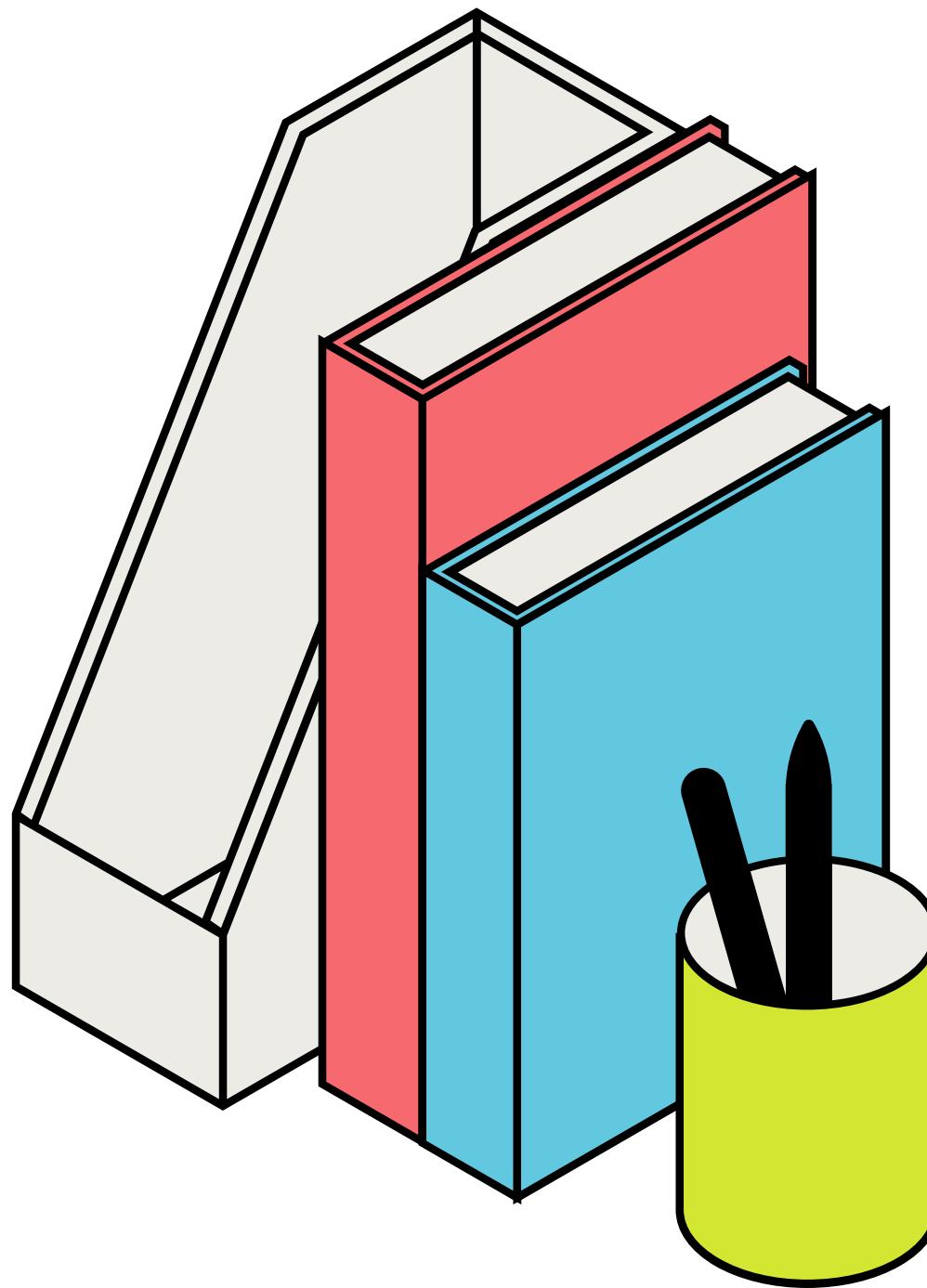
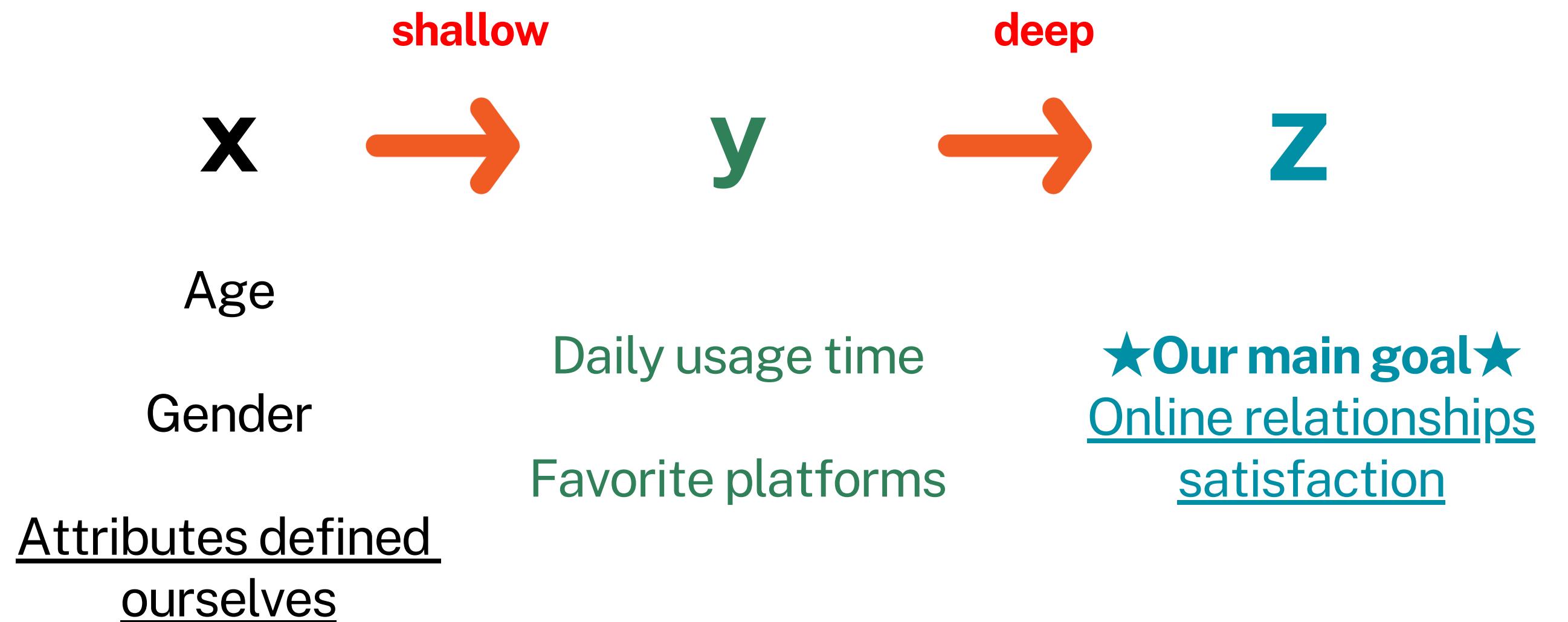
Form

1. I am very satisfied with my **current** real-life relationships.
2. I feel more comfortable online than in real life.
3. Social media is like my second home.
4. I feel more valued on social media than in real life.
5. I am very satisfied with my current online relationships.

Aggregate into **Online relationship Satisfaction** (1. reverse calculate)



About test structure

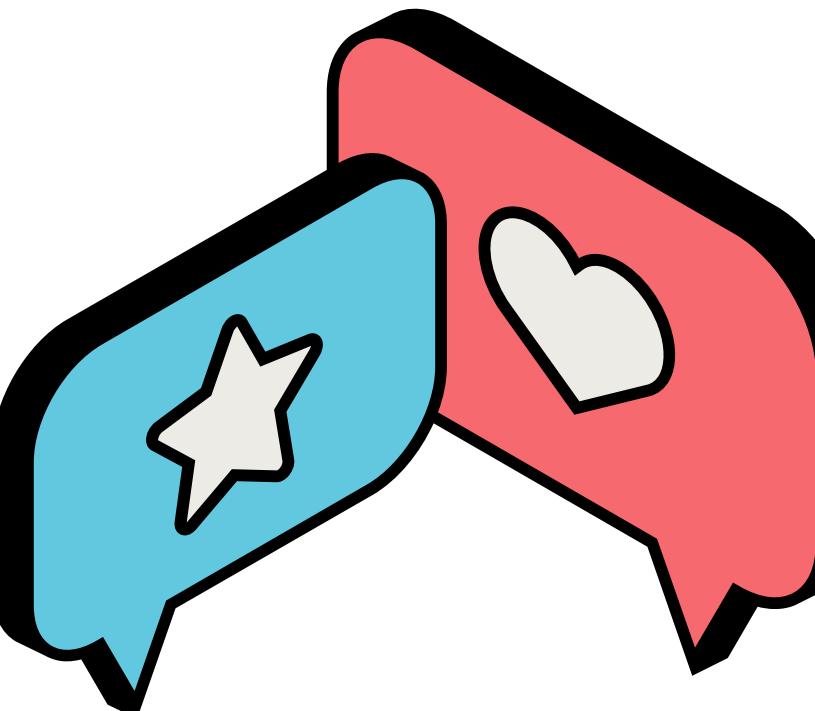




About our test

Our test

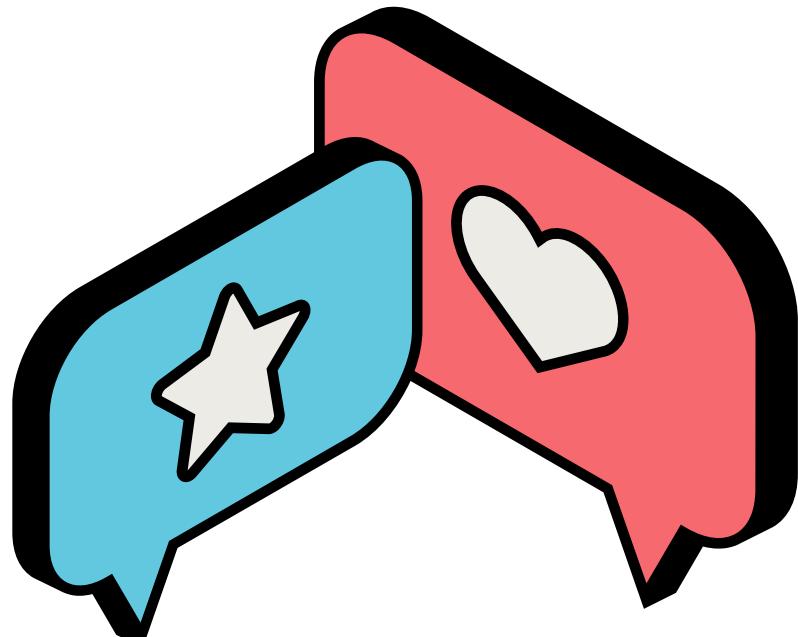
1. Is there an association between age and social media usage time? (Fisher's Exact Test)
2. Is there an association between gender and social media usage time? (Chi-Square Test of Independence)
3. Does gender affect the distribution of favoured social media platforms? (Chi-Square Test of Independence)
4. Does age (19-24) affect the distribution of favoured social media platforms? (Chi-Square Test of Independence)



Our test

5.Whether “usage time” affect “Satisfaction”
we treat daily social media usage time as a categorical variable
(Anova)

6.Whether “the most favorite social media platforms” affect
“Satisfaction”
we treat the “the most favorite social media platforms ” as
a categorical variable
(Anova)



Our test

7.Does

“Desire to Share (on social media apps)”

“Interpersonal Communication Preferences (social media apps) ”

“Agreement Level (social media)”

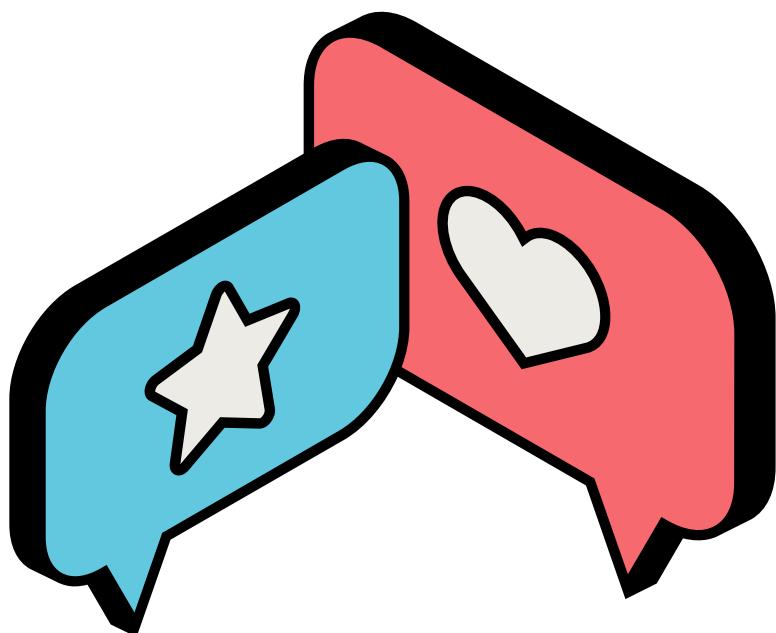
“Dependency on Social Media”

“Loneliness”

“Satisfaction”

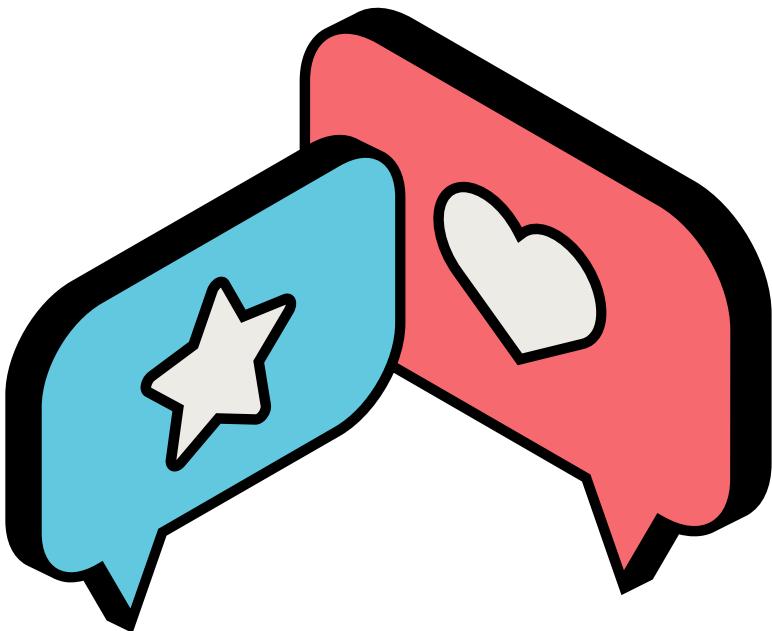
affect Daily Social Media Using Time?

(Chi-Square Test of Independence)



Our test

8.The relationship between “Interpersonal Communication Preferences”, “Agreement Level”, and “Social Media Dependence” with “Satisfaction”.
(linear regression)



「社群媒體症候群」 心情好差、好焦慮，小心被社群軟體綁架。這三種症狀你中了幾項？

看到某一則朋友聚會的動態，發現他們沒有邀請你，你可能會開始胡思亂想以及感到寂寞。看到某一場活動，你沒有參加到，你會開始擔心，自己是不是錯過了一段有意義的過程及時間。而這會讓你，不斷的去關注社群，想從中找到更好、更有趣的事物，追尋更緊密的社交活動，但你沒有意識到的是，也許你此刻在進行的事物才是更適合你的！

這一點我相信大家都很有感！從小我們就處在不斷比較的社會，學生時期比成績，出社會後比職業、比薪資、比較生活的好壞，各式比較充斥在我們周遭。而人們總是喜歡在社群上展現美好、有趣甚至是成功的一面，當你滑到這樣的動態時，你可能會反觀自己現在的狀態，然後就開始自嘆不如，甚至是懷疑自己正在追尋的夢想、努力的目標...等等。

但你有想過，你所看到的只是他人萬分之一的那一面嗎？

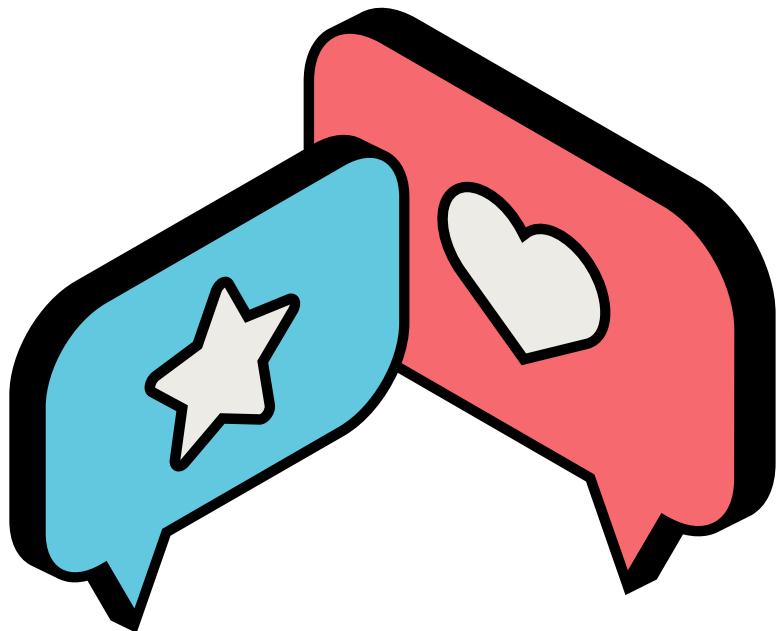
在網路、自媒體興盛的時代，我們的日常、甚至是工作，都與其息息相關，許多人的重心也就轉移到了社群上面。

點閱率、讚數、追蹤數的多寡，就好像是在宣告我們的價值有多少，被這些數字所束縛著，彷彿觀看數少了一些、世界就會崩塌，但卻忘了現實生活中更重要的那些人事物。漸漸的，我們關注社群、在社群上互動的時間，多過於和家人、愛人、朋友見面相處的時間。

Our test

9. We have discovered that “Dependency on Social Media” affects the “Loneliness”, and we want to test how it influences it.
(linear regression)

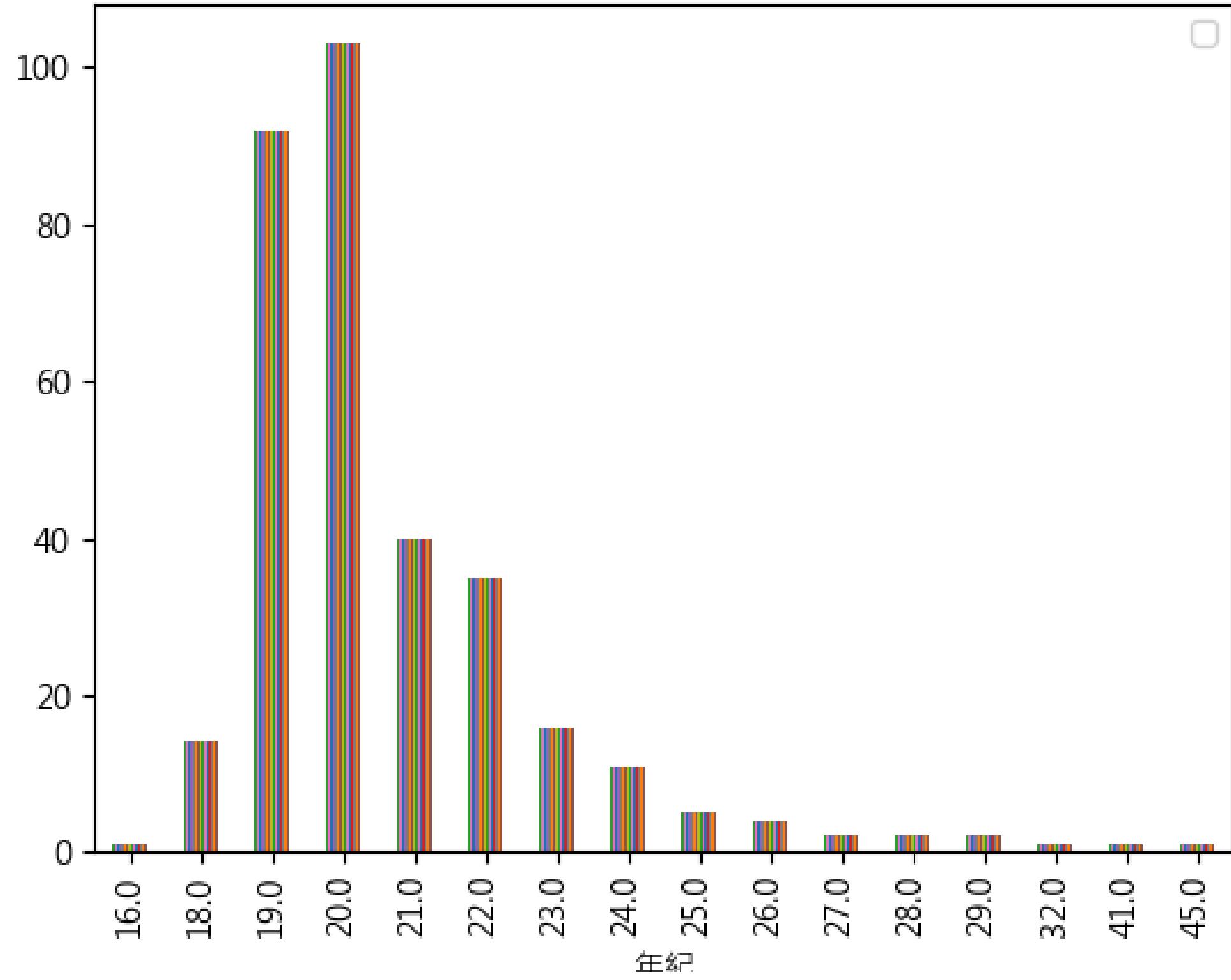
- Fear of missing out
- Comparisons are odious
- Focus more on online than reality



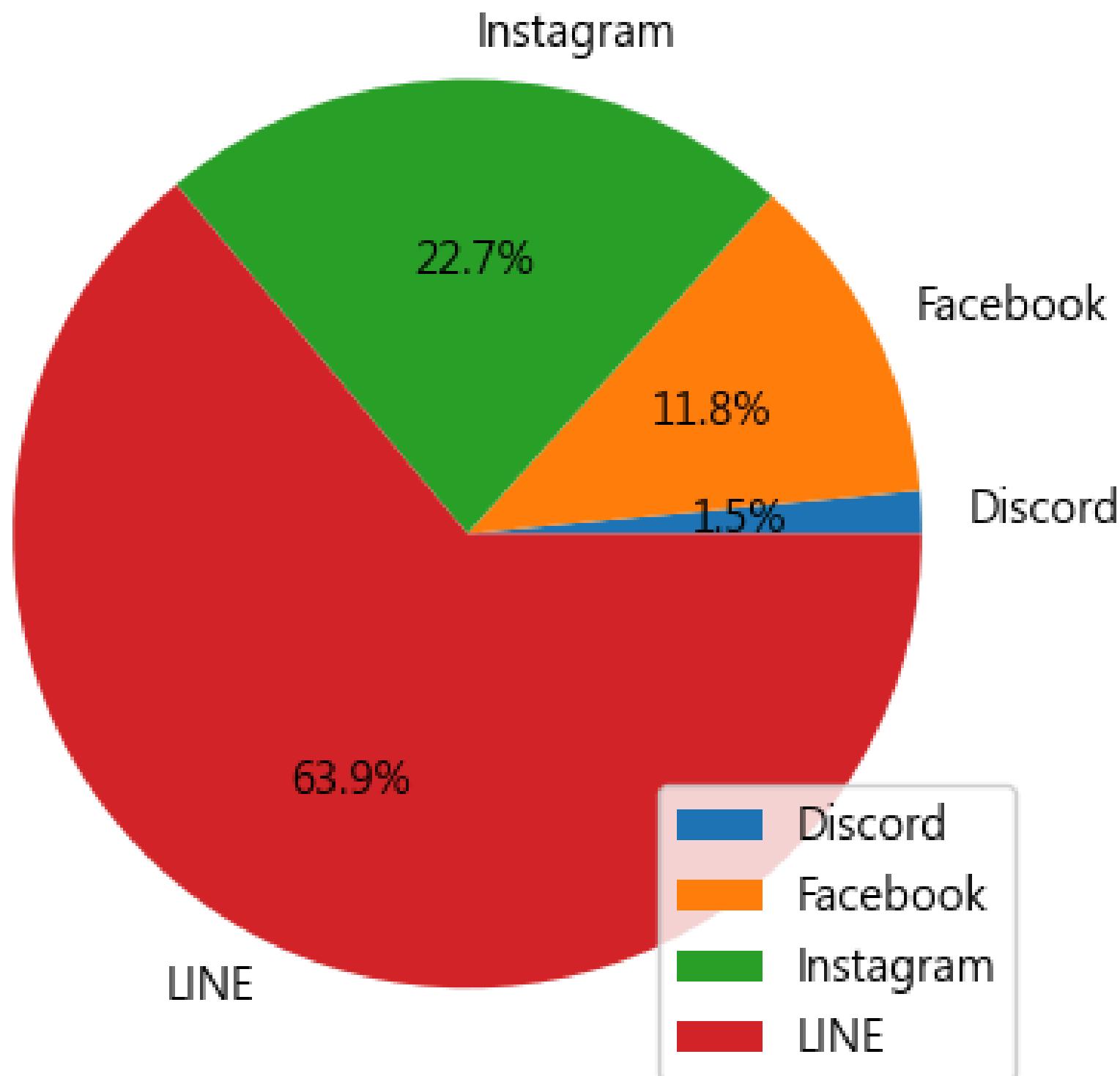


Analyze results

The Amount Of Every Ages

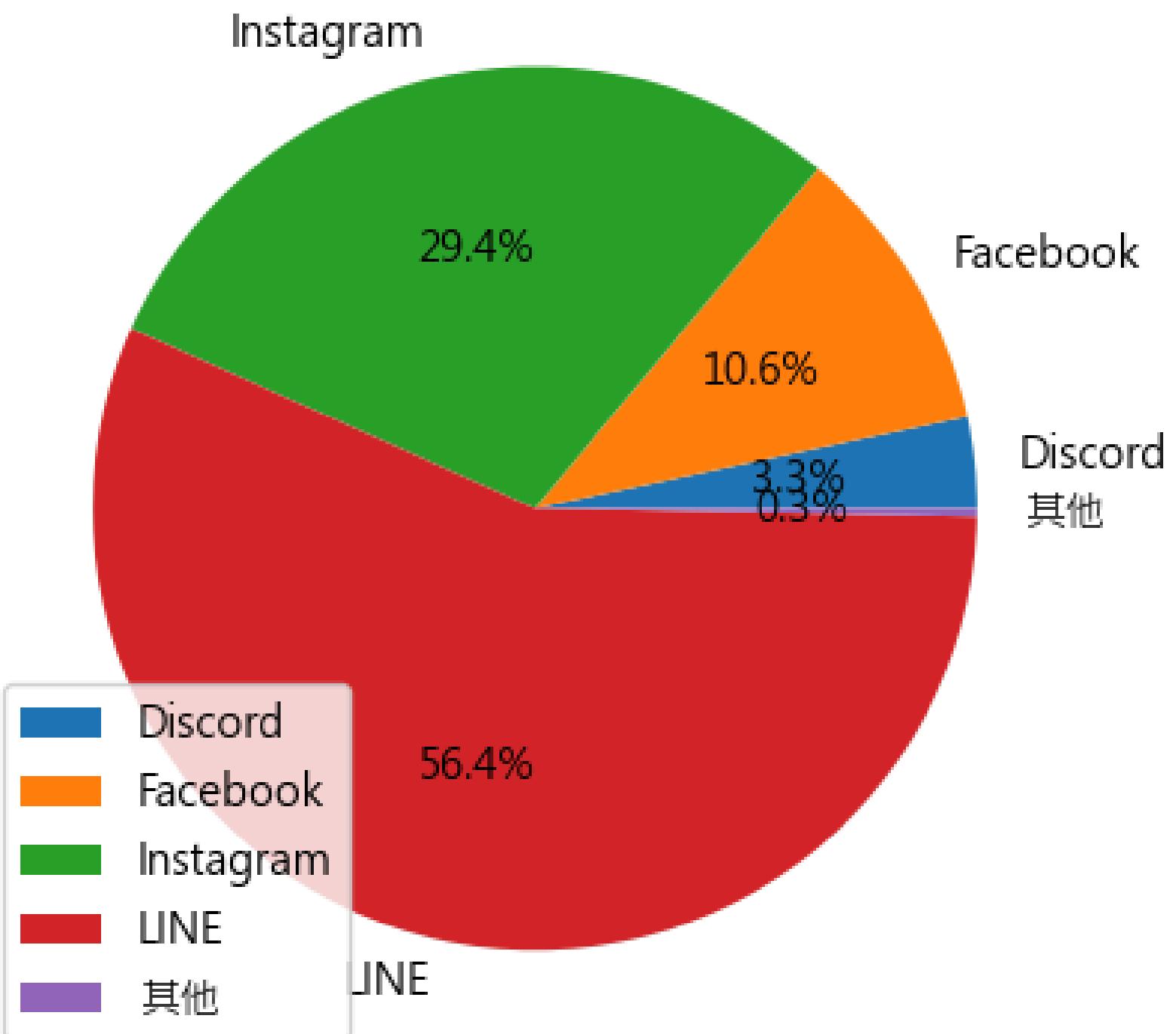


Social Media Preference

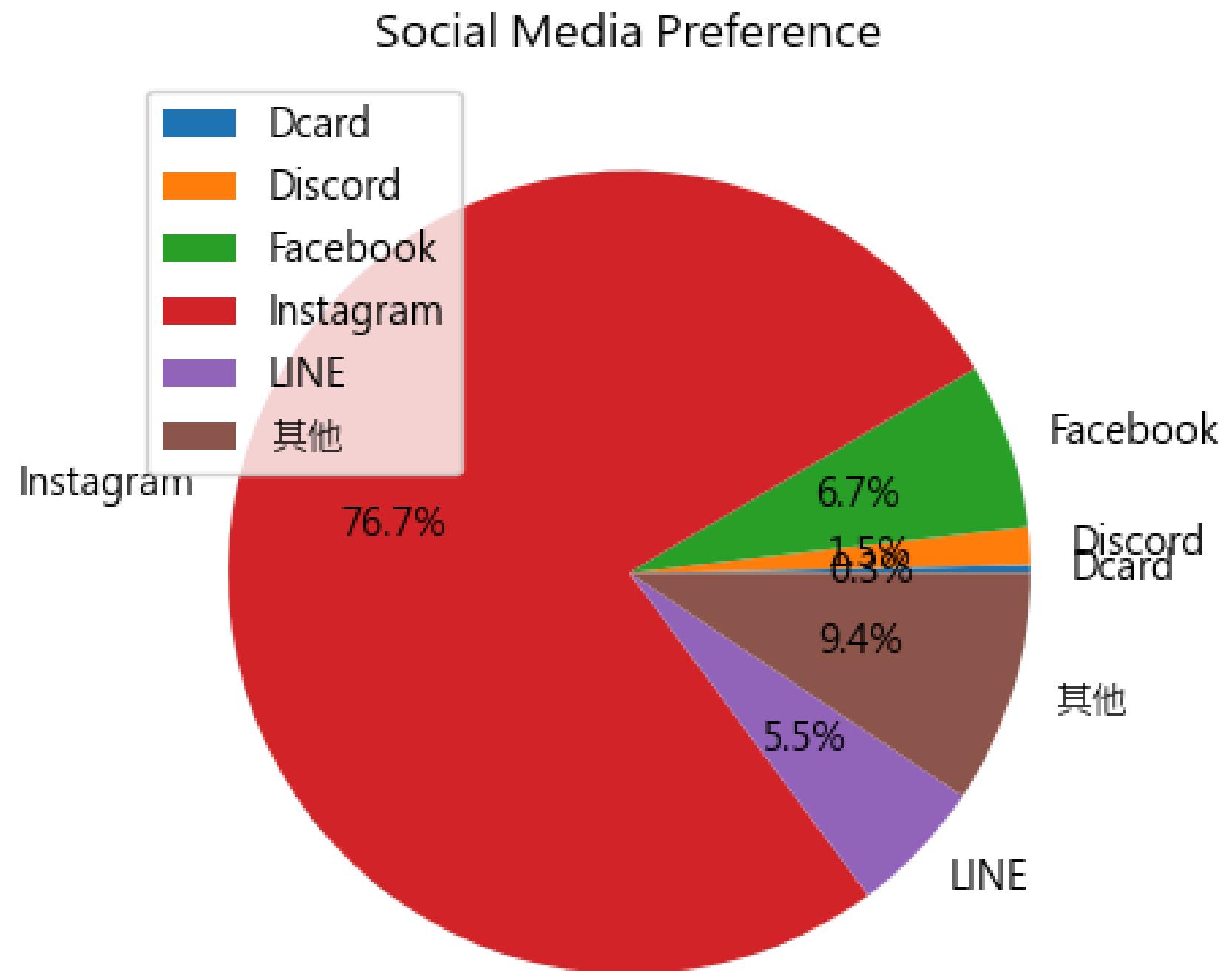


The Pie Chart of Social Media Preferences When Messaging Others

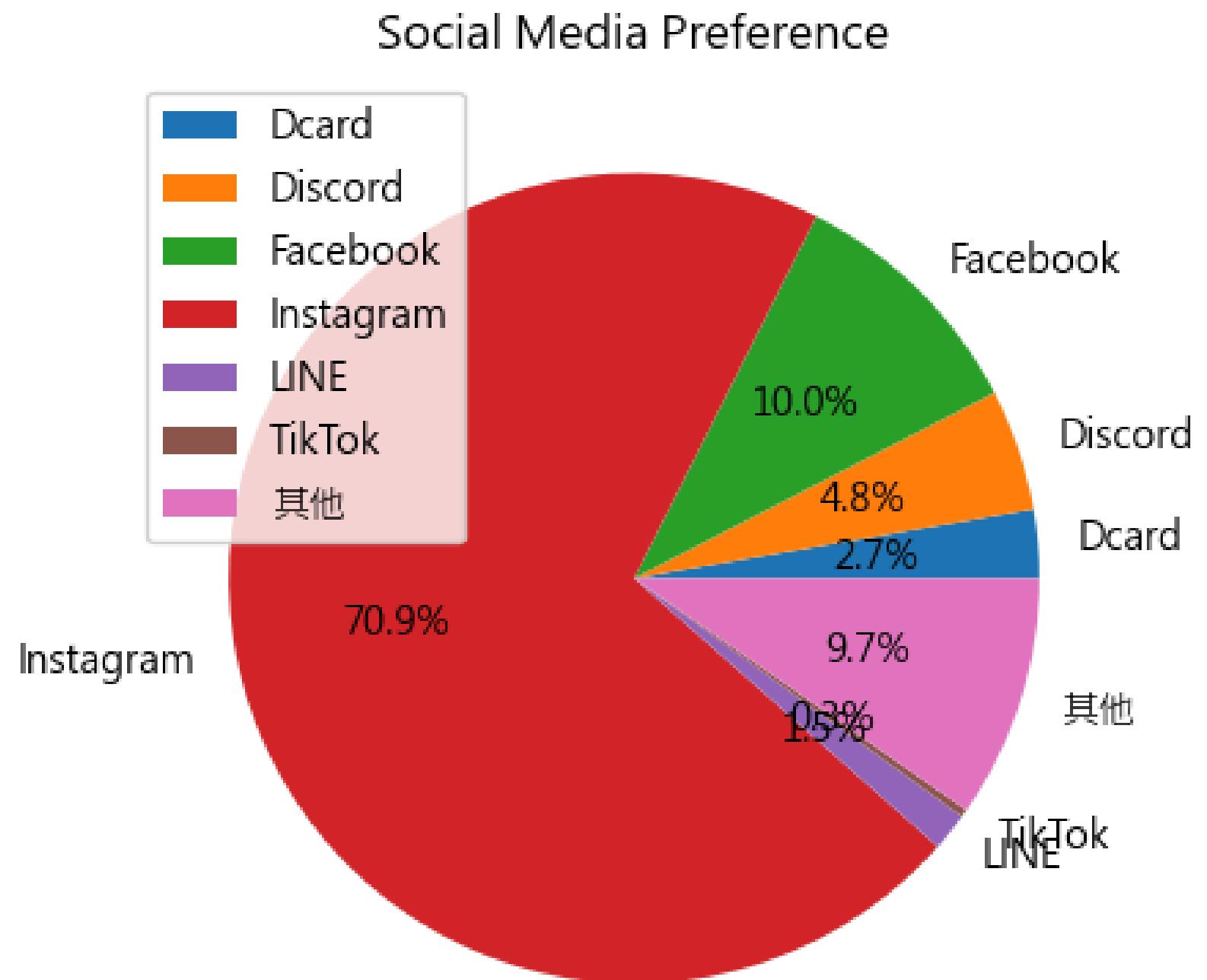
Social Media Preference



The Pie Chart of Social Media Preferences When Chatting with Others

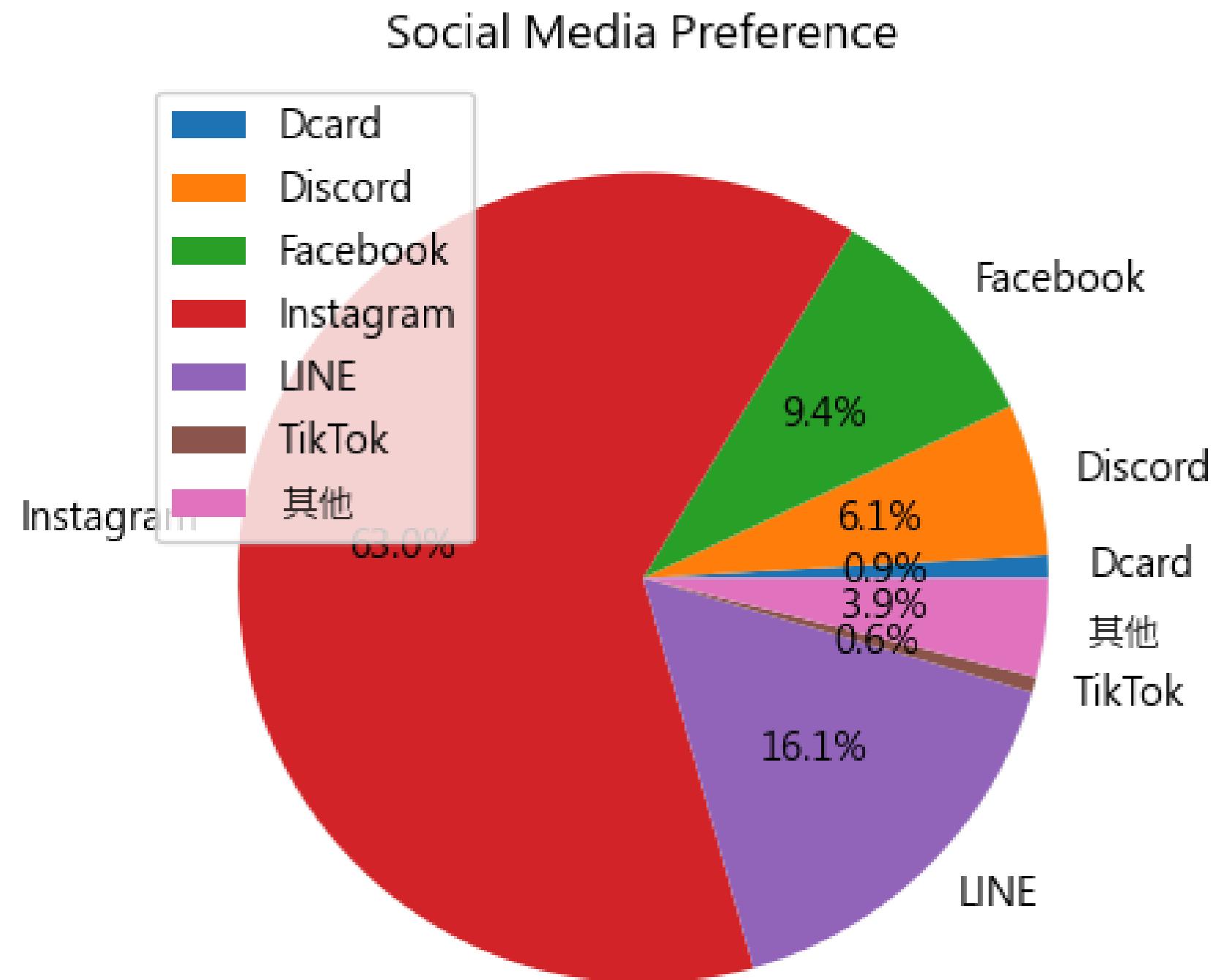


The Pie Chart of Social Media Preferences When Sharing mood



The Pie Chart of Social Media Preferences When Meeting New Friends

The Pie Chart of Social Media Preferences (overall)



Test 1

Is there an association between age and time spent using social media?

```
Fisher Exact Test Result  
Age: Freshman & Sophomore  
Average Time: 4 & 8
```

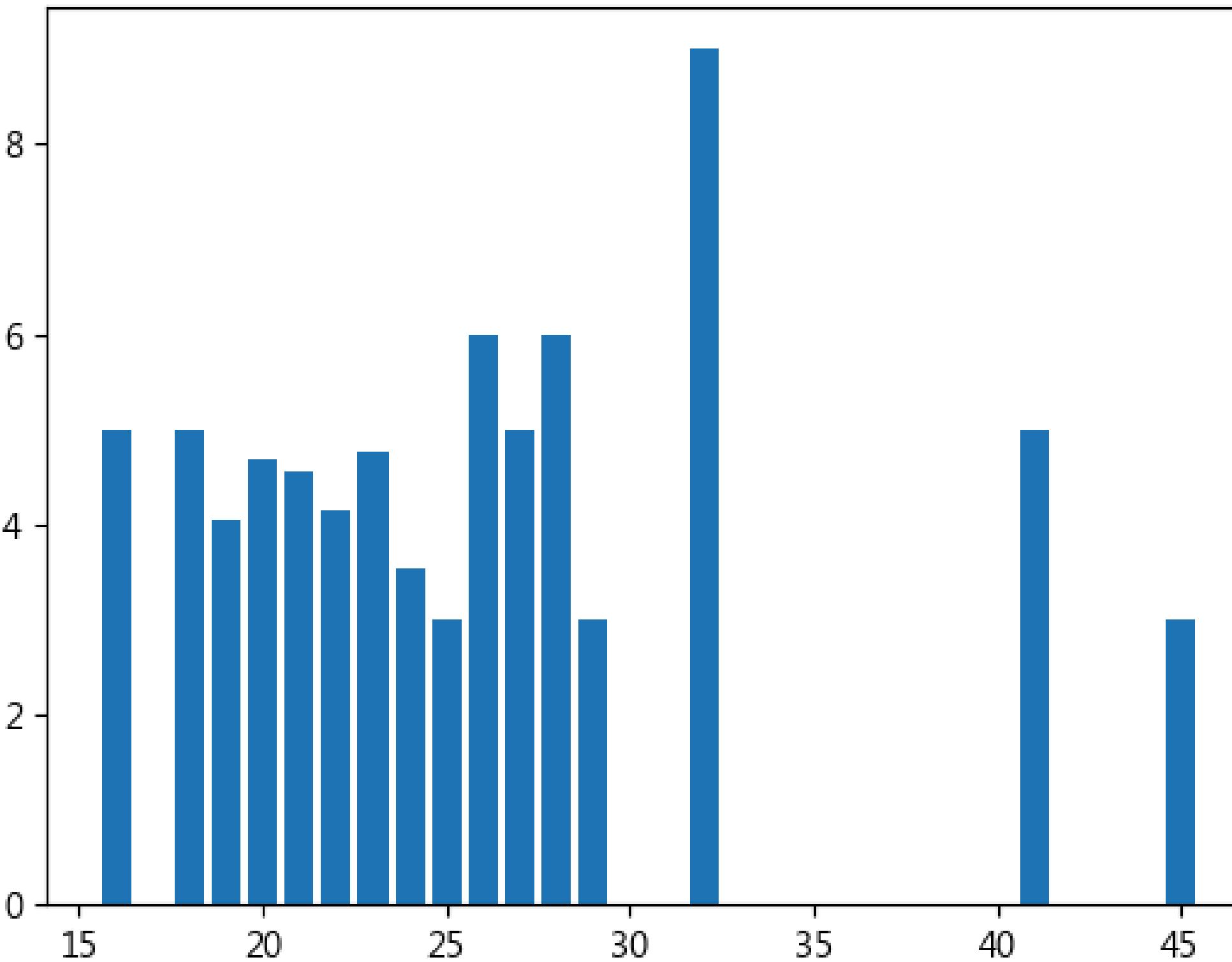
```
Odds Ratio: 2.857142857142857  
p value: 0.04997072061944083
```

	19歲	20歲	21歲	22歲	23歲
平均每日社群軟體使用時間					
2.0	6	5	1	4	1
4.0	36	27	11	11	5
6.0	27	40	17	12	5
8.0	7	15	6	3	2
10.0	4	6	1	2	2

$p>0.05$

Most of results do not Reject null hypothesis

Only when Age between 19 & 20 and the Average Using Time between 4 & 8 do reject H0



The Average Usage Time By Ages

Test 2

Is there an association between gender and time spent using social media?

平均每日社群軟體使用時間	2.0	4.0	6.0	8.0	10.0
Male	9	34	50	10	10
Female	9	71	68	26	9
0.1484220459541979					

p>0.05

Do not Reject
null hypothesis

There is no significant correlation between gender and time spent using social media

Test 3

Does Gender affect the distribution of favorite Social Media?

Female

綜合來說我最喜歡什麼社交軟體 ?	
Facebook	11
Instagram	124
LINE	30
TikTok	1
其他	17
Name:	生理性別, dtype: int64

Male

綜合來說我最喜歡什麼社交軟體 ?	
Facebook	15
Instagram	67
LINE	15
TikTok	1
其他	15
Name:	生理性別, dtype: int64

Test 3

Does Gender affect the distribution of favorite Social Media?

0.09166240298433984

Facebook

Instagram

LINE

其他

0.43277

0.00004

0.02535

0.72367

$p > 0.05$

**Do not Reject
null hypothesis**

**There is no significant
difference between them**

Test 4

Does age (19-24) affect the distribution of favorite social media?

```
-----  
p value: 0.13333165623489096  
  
Age 19:  
綜合來說我最喜歡什麼社交軟體 ?  
Facebook      10  
Instagram     57  
LINE          9  
其他          4  
Name: 年紀, dtype: int64  
  
Age 20:  
綜合來說我最喜歡什麼社交軟體 ?  
Facebook      9  
Instagram    54  
LINE         18  
TikTok        1  
其他         11  
Name: 年紀, dtype: int64  
-----
```

p>0.05

**Do not Reject
null hypothesis**

**There is no significant
correlation between
them**

Test 5

Whether “usage time” affect “Satisfaction” (Anova)

```
F: 4.8881344879706505
p value: 0.000790134689409519

Multiple Comparison of Means - Tukey HSD, FWER=0.05
=====
group1 group2 meandiff p-adj    lower   upper  reject
-----
2.0     4.0      0.7556  0.8327 -1.2237  2.7348  False
2.0     6.0      1.6318  0.1538 -0.3314  3.595   False
2.0     8.0      1.5556  0.3161 -0.6841  3.7952  False
2.0    10.0      3.345   0.0034  0.7931  5.8969  True
4.0     6.0      0.8763  0.1443 -0.1646  1.9171  False
4.0     8.0       0.8   0.5857 -0.6984  2.2984  False
4.0    10.0      2.5895  0.0026  0.6552  4.5237  True
6.0     8.0     -0.0763  0.9999 -1.5535  1.4009  False
6.0    10.0      1.7132  0.1047 -0.2047  3.6311  False
8.0    10.0      1.7895  0.1706 -0.4106  3.9895  False
```

**p<0.05 Reject
null hypothesis**

**There is significant
correlation between them**

Test 6

Whether “Favorite Social Media” affect “Satisfaction” (Anova)

$p > 0.05$

Do not Reject
null hypothesis

```
F: 0.6988460981448148
p value: 0.6507577134705063
```

There is no significant
difference between them

Test 7

Does “Interpersonal Communication Preferences” affect Daily Social Media Using Time?

	人際交流選擇_x	人際交流選擇_y
平均每日社群軟體使用時間		
2.0	8	10
4.0	44	61
6.0	67	51
8.0	21	15
10.0	14	5

Chi-square Test of 人際交流選擇
p value: 0.04150069169915843

p<0.05

Reject null hypothesis

**Interpersonal Communication
Preferences will affect Daily
Social Media Using Time**

Test 7

Does “Desire to Share (on social media apps)” affect Daily Social Media Using Time?

	分享慾_x	分享慾_y
平均每日社群軟體使用時間		
2.0	4	14
4.0	52	53
6.0	65	53
8.0	20	16
10.0	11	8

Chi-square Test of 分享慾
p value: 0.112027025742381

p>0.05

Do not reject
null hypothesis

There is no significant
correlation between them

Test 7

Does “Agreement Level” affect Daily Social Media Using Time?

	認同度_x	認同度_y
平均每日社群軟體使用時間		
2.0	3	15
4.0	47	58
6.0	61	57
8.0	17	19
10.0	15	4

Chi-square Test of 認同度
p value: 0.0038579786079196146

p<0.05

Reject null hypothesis

**Agreement Level will
affect Daily Social Media
Using Time**

Test 7

Does “Dependency on Social Media” affect Daily Social Media Using Time?

	社交軟體綁架程度_x	社交軟體綁架程度_y
平均每日社群軟體使用時間		
2.0	4	14
4.0	45	60
6.0	64	54
8.0	23	13
10.0	11	8

Chi-square Test of 社交軟體綁架程度
p value: 0.01902899906464481

p<0.05

Reject null hypothesis

**Dependency on Social Media
will affect Daily Social Media
Using Time**

Test 7

Does “Loneliness” affect Daily Social Media Using Time?

	孤獨感_x	孤獨感_y
平均每日社群軟體使用時間		
2.0	9	9
4.0	37	68
6.0	51	67
8.0	18	18
10.0	10	9

Chi-square Test of 孤獨感
p value: 0.3631289962516383

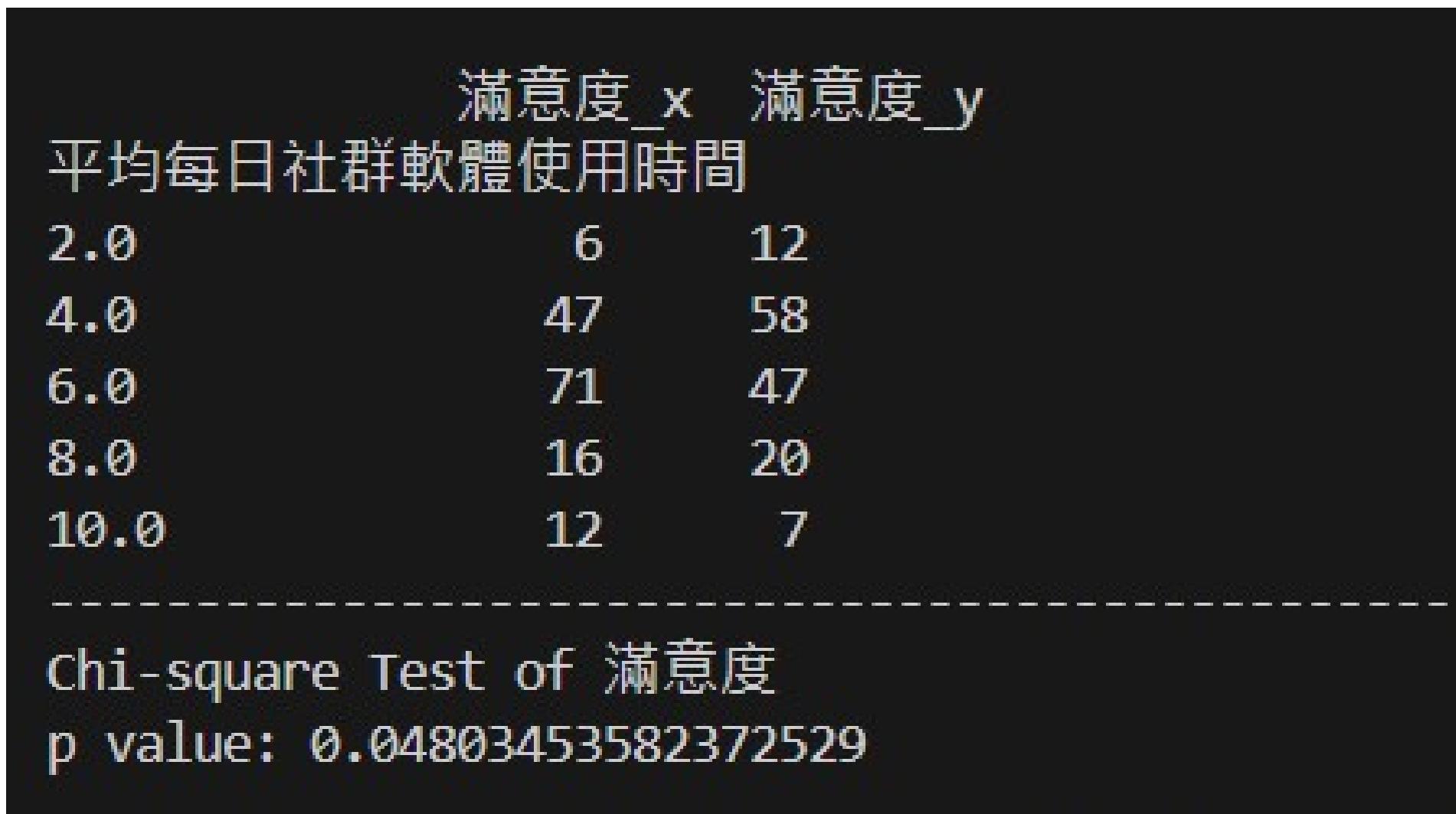
p>0.05

**Do not reject
null hypothesis**

**There is no significant
correlation between them**

Test 7

Does “Satisfaction” affect Daily Social Media Using Time?



p<0.05

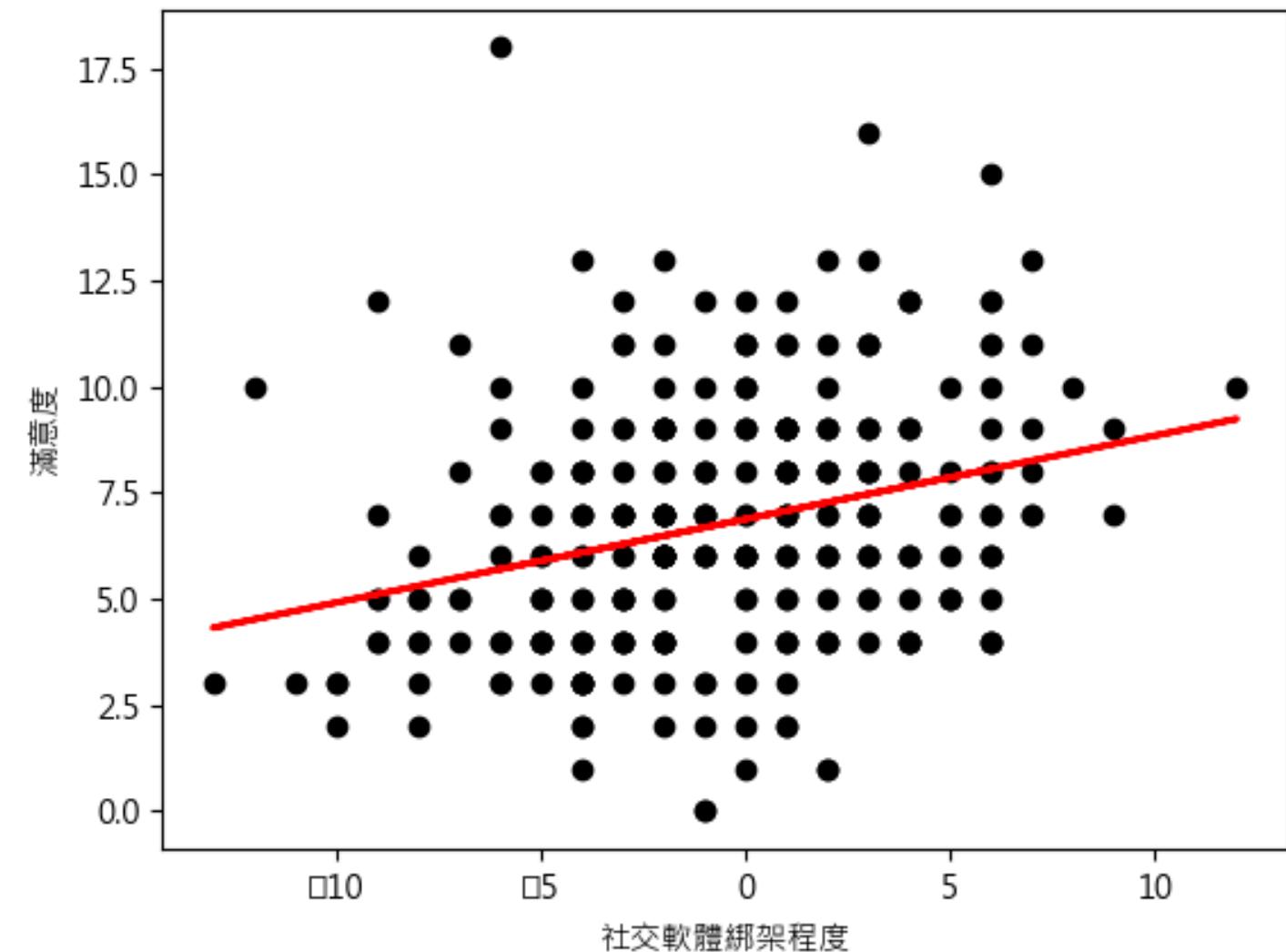
Reject null hypothesis

Satisfaction will affect Daily Social Media Using Time

Test 8

Relation Between Social Media Dependence and Satisfaction

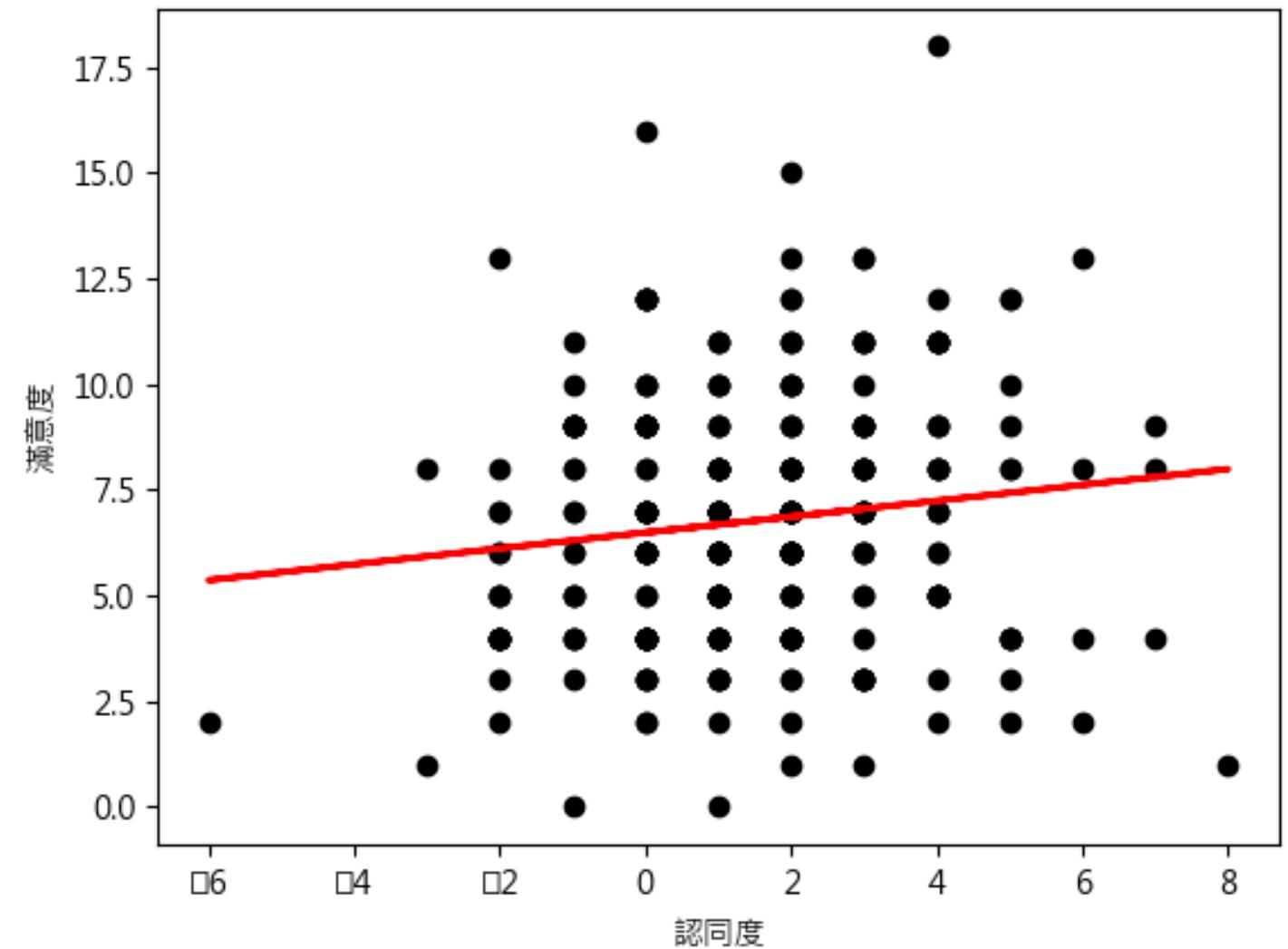
OLS Regression Results						
<hr/>						
Dep. Variable:	滿意度	R-squared:	0.083			
Model:	OLS	Adj. R-squared:	0.080			
Method:	Least Squares	F-statistic:	26.70			
Date:	Sat, 01 Jun 2024	Prob (F-statistic):	4.40e-07			
Time:	17:01:06	Log-Likelihood:	-721.79			
No. Observations:	296	AIC:	1448.			
Df Residuals:	294	BIC:	1455.			
Df Model:	1					
Covariance Type:	nonrobust					
<hr/>						
	coef	std err	t	P> t	[0.025	0.975]
Intercept	6.8786	0.163	42.173	0.000	6.558	7.200
社交軟體綁架程度	0.1969	0.038	5.167	0.000	0.122	0.272
<hr/>						
Omnibus:	19.506	Durbin-Watson:	1.806			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	24.802			
Skew:	0.516	Prob(JB):	4.11e-06			
Kurtosis:	3.972	Cond. No.	4.32			
<hr/>						



Test 8

Relation Between Agreement level and Satisfaction

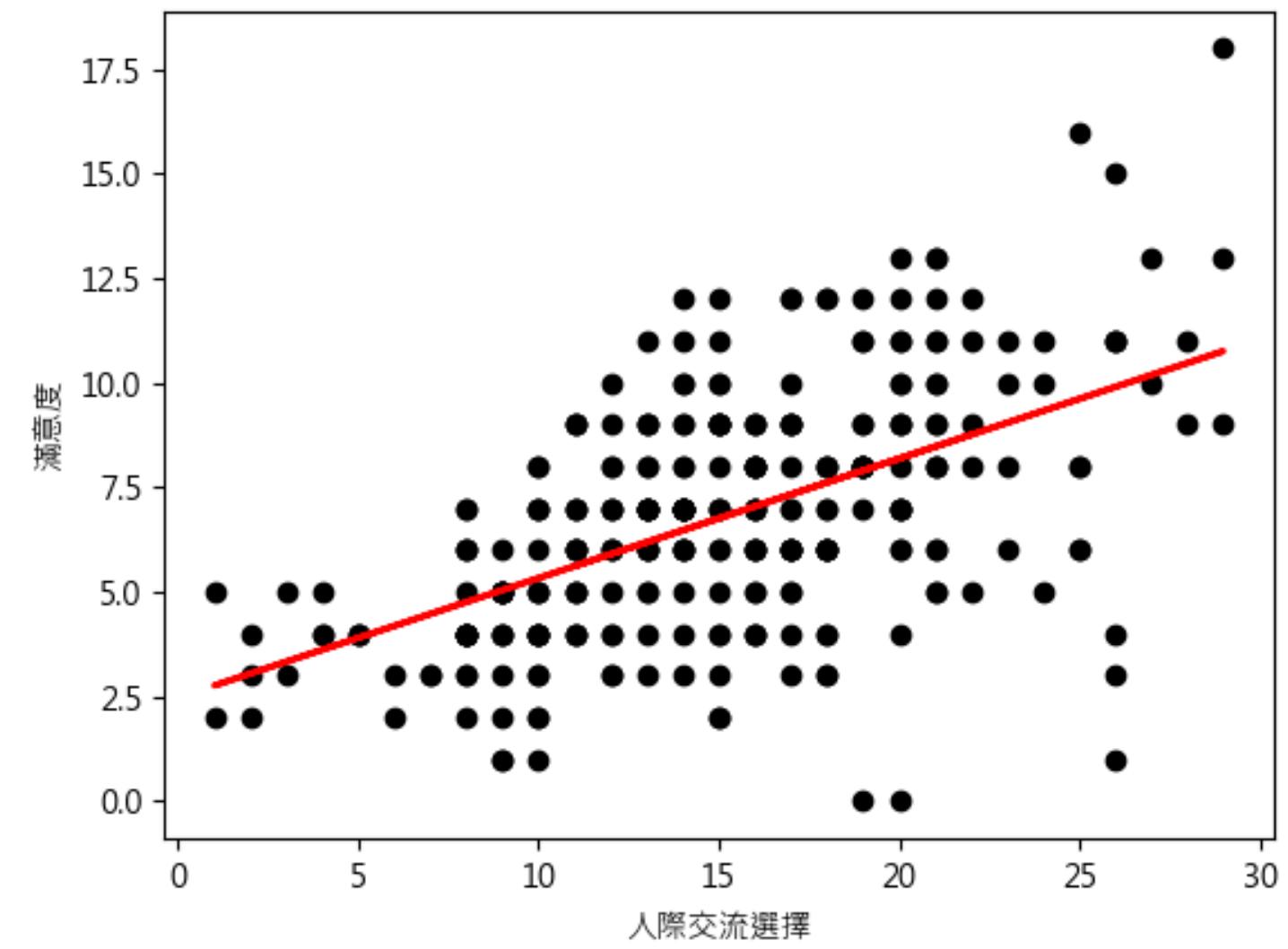
OLS Regression Results						
<hr/>						
Dep. Variable:	滿意度	R-squared:	0.017			
Model:	OLS	Adj. R-squared:	0.014			
Method:	Least Squares	F-statistic:	5.069			
Date:	Sat, 01 Jun 2024	Prob (F-statistic):	0.0251			
Time:	16:59:56	Log-Likelihood:	-732.13			
No. Observations:	296	AIC:	1468.			
Df Residuals:	294	BIC:	1476.			
Df Model:	1					
Covariance Type:	nonrobust					
<hr/>						
	coef	std err	t	P> t	[0.025	0.975]
Intercept	6.4896	0.208	31.225	0.000	6.081	6.899
認同度	0.1878	0.083	2.251	0.025	0.024	0.352
<hr/>						
Omnibus:	9.182	Durbin-Watson:	1.798			
Prob(Omnibus):	0.010	Jarque-Bera (JB):	9.197			
Skew:	0.388	Prob(JB):	0.0101			
Kurtosis:	3.380	Cond. No.	3.29			
<hr/>						



Test 8

Relation Between Interpersonal Communication Preferences and Satisfaction

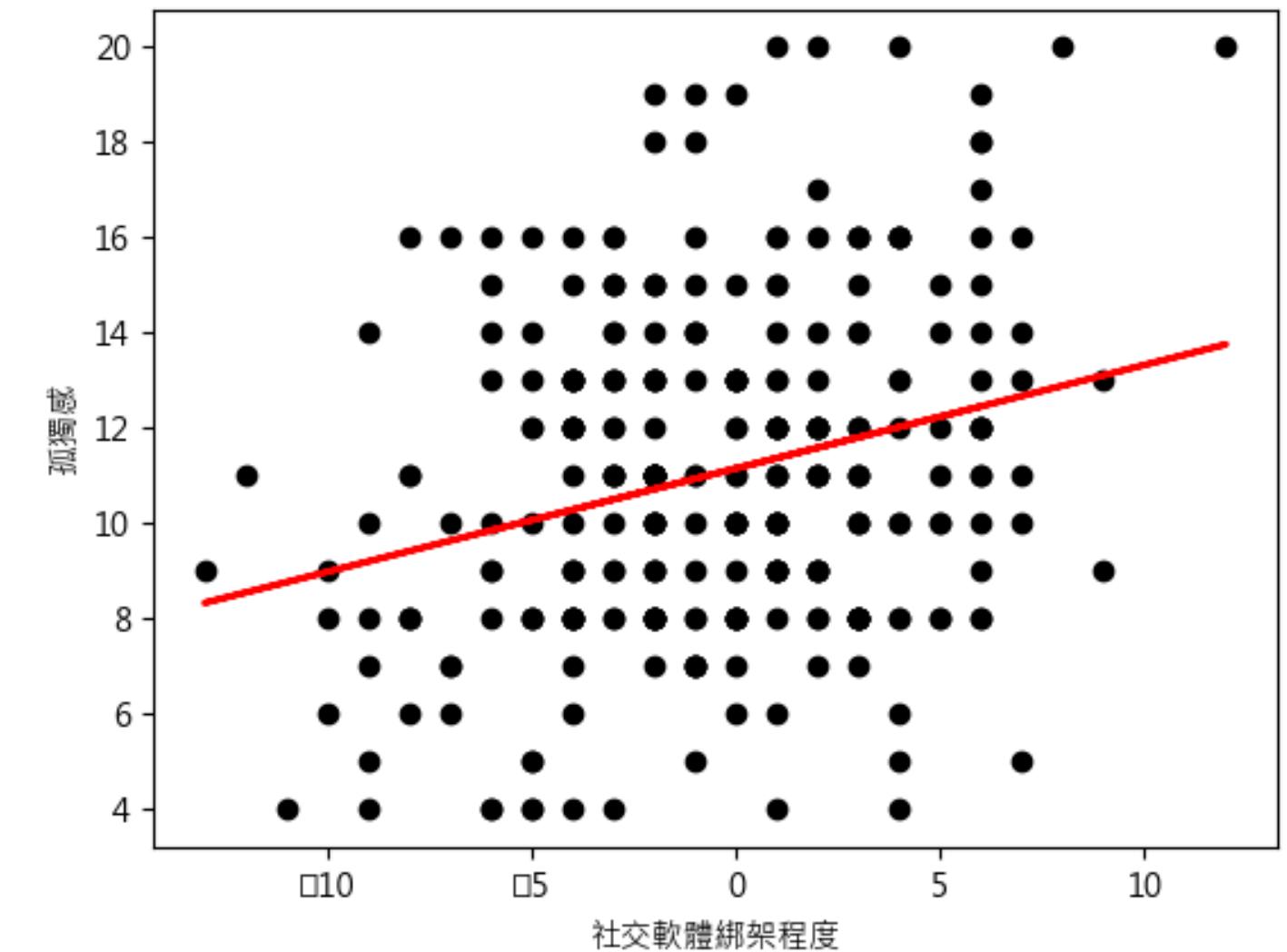
OLS Regression Results						
Dep. Variable:	滿意度	R-squared:	0.302			
Model:	OLS	Adj. R-squared:	0.299			
Method:	Least Squares	F-statistic:	127.1			
Date:	Sat, 01 Jun 2024	Prob (F-statistic):	9.77e-25			
Time:	16:58:39	Log-Likelihood:	-681.49			
No. Observations:	296	AIC:	1367.			
Df Residuals:	294	BIC:	1374.			
Df Model:	1					
Covariance Type:	nonrobust					
coef	std err	t	P> t	[0.025	0.975]	
Intercept	2.4768	0.406	6.102	0.000	1.678	3.276
人際交流選擇	0.2856	0.025	11.273	0.000	0.236	0.335
Omnibus:	10.088	Durbin-Watson:	1.838			
Prob(Omnibus):	0.006	Jarque-Bera (JB):	14.035			
Skew:	-0.256	Prob(JB):	0.000896			
Kurtosis:	3.936	Cond. No.	46.2			



Test 9

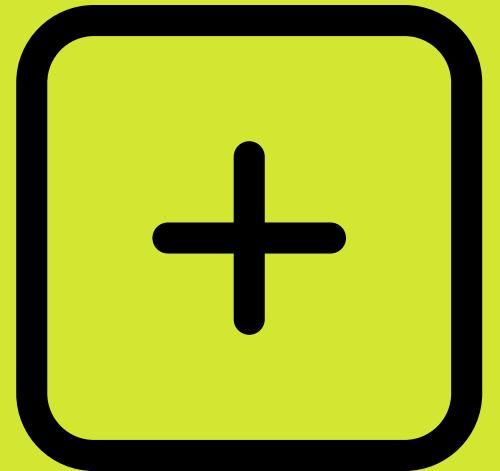
Relation Between Social Media Dependence and Loneliness

OLS Regression Results						
Dep. Variable:	認同度	R-squared:	0.002			
Model:	OLS	Adj. R-squared:	-0.001			
Method:	Least Squares	F-statistic:	0.7367			
Date:	Sat, 01 Jun 2024	Prob (F-statistic):	0.391			
Time:	22:07:12	Log-Likelihood:	-625.78			
No. Observations:	296	AIC:	1256.			
Df Residuals:	294	BIC:	1263.			
Df Model:	1					
Covariance Type:	nonrobust					
coef	std err	t	P> t	[0.025	0.975]	
Intercept	1.4629	0.118	12.406	0.000	1.231	1.695
社交軟體綁架程度	-0.0236	0.028	-0.858	0.391	-0.078	0.031
Omnibus:	4.306	Durbin-Watson:	1.896			
Prob(Omnibus):	0.116	Jarque-Bera (JB):	4.508			
Skew:	0.170	Prob(JB):	0.105			
Kurtosis:	3.499	Cond. No.	4.32			





CONCLUSION



ADDITIONAL EXPLANATION

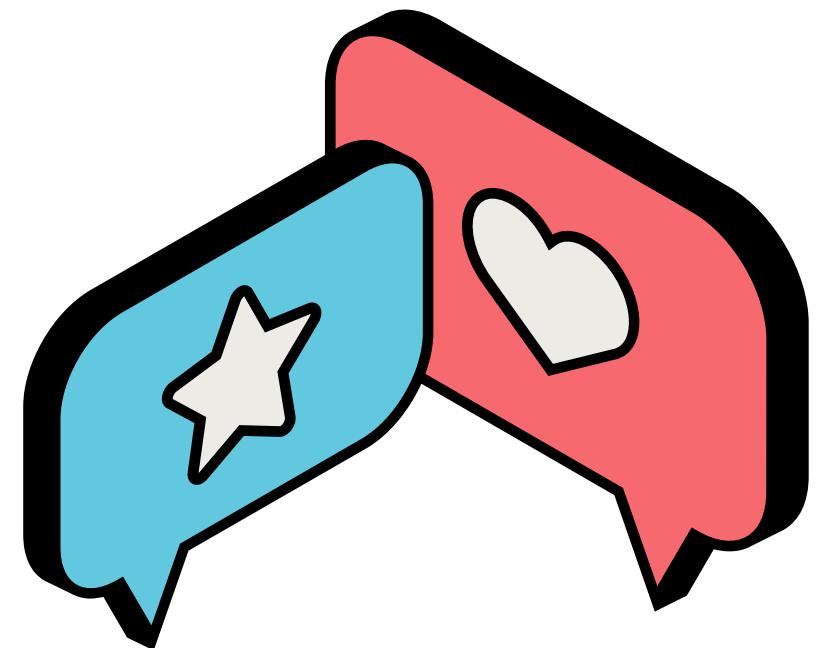
1. IS THERE AN ASSOCIATION BETWEEN AGE AND SOCIAL MEDIA USAGE TIME?

- Fisher's Exact Test of Independence
- Do not reject the null hypothesis
- There isn't an association between age and social media usage time



2. IS THERE AN ASSOCIATION BETWEEN GENDER AND SOCIAL MEDIA USAGE TIME?

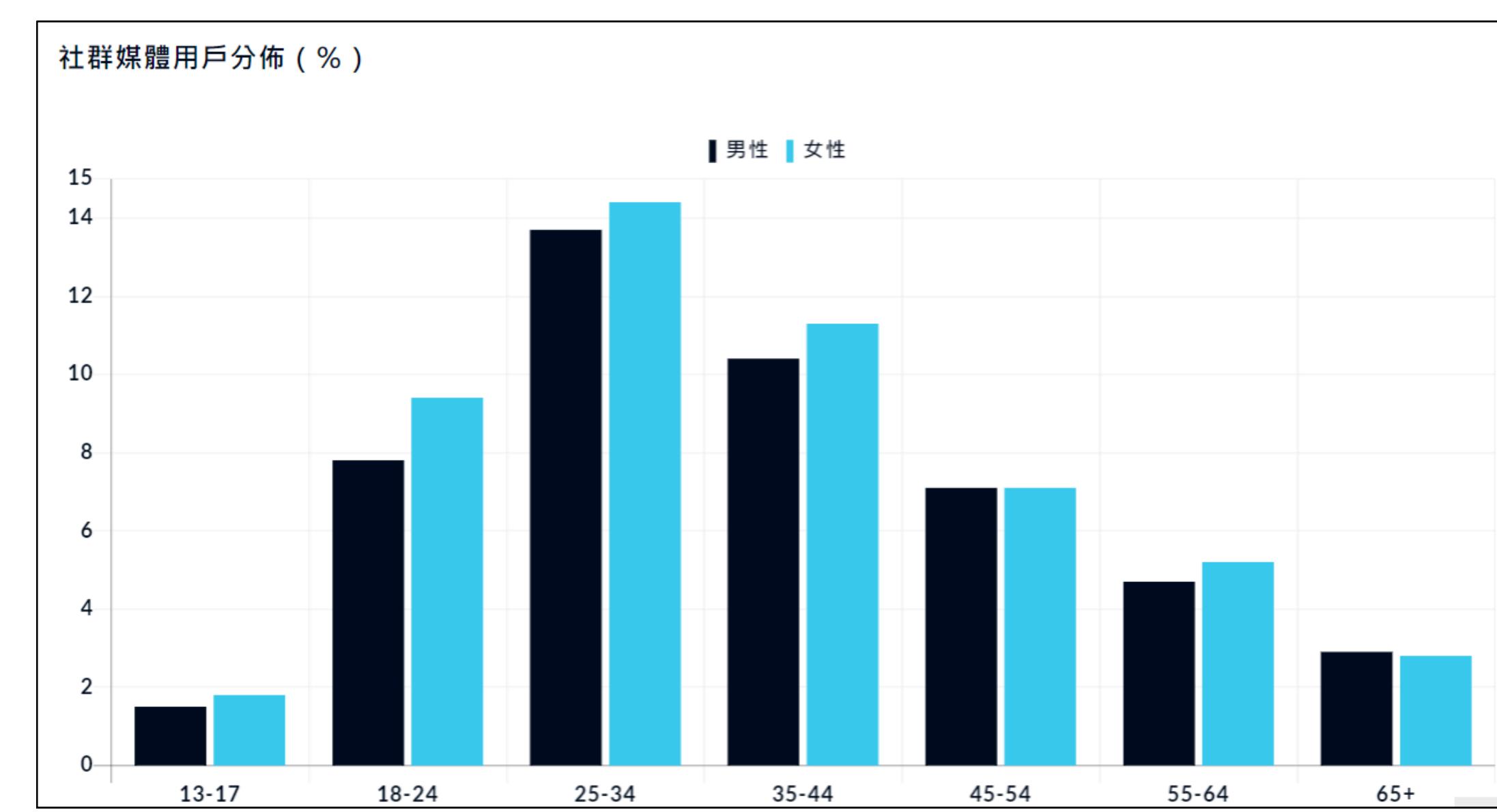
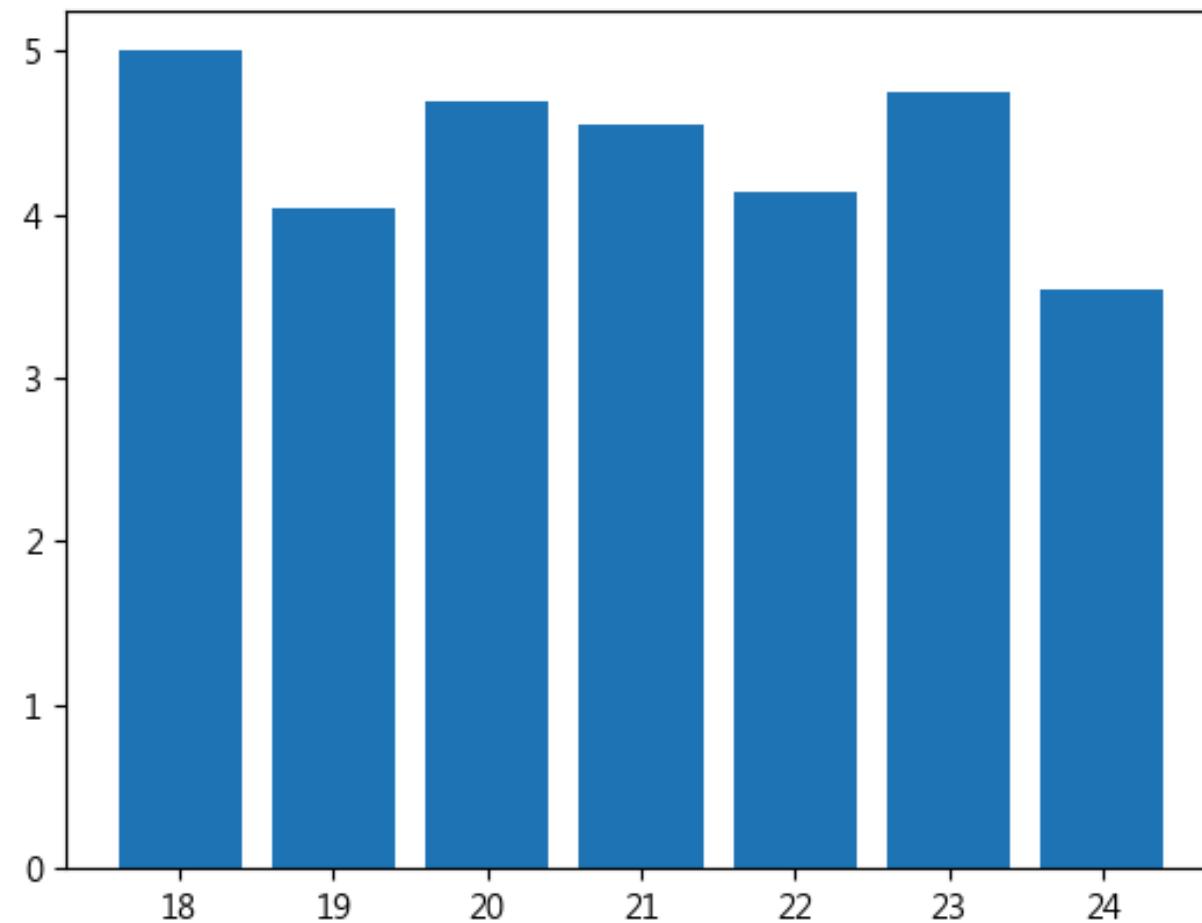
- Chi-Square Test of Independence
- Do not reject the null hypothesis
- There isn't an association between gender and social media usage time



Additional Explanation-1,2

age, gender

age(18-24)



3. DOES GENDER AFFECT THE DISTRIBUTION OF FAVOURED SOCIAL MEDIA PLATFORMS?

- Chi-Square Test of Independence
- Only Instagram significantly reject the null hypothesis
- Gender influences the distribution of preferences for liking Instagram.

Additional Explanation-3

有趣的是，若按性別觀察，女性偏好從畫面（如影音平台、臉書、Instagram）蒐集資訊，用Instagram的比例比男性高了7.8%。男性更喜歡論壇和地圖服務，兩者使用比率皆比女性高出9%以上。

It was found that females tend to prefer collecting information from **images and photos**.

Additional Explanation-3

社群使用行為：女性較常分享生活瑣事、回應貼文

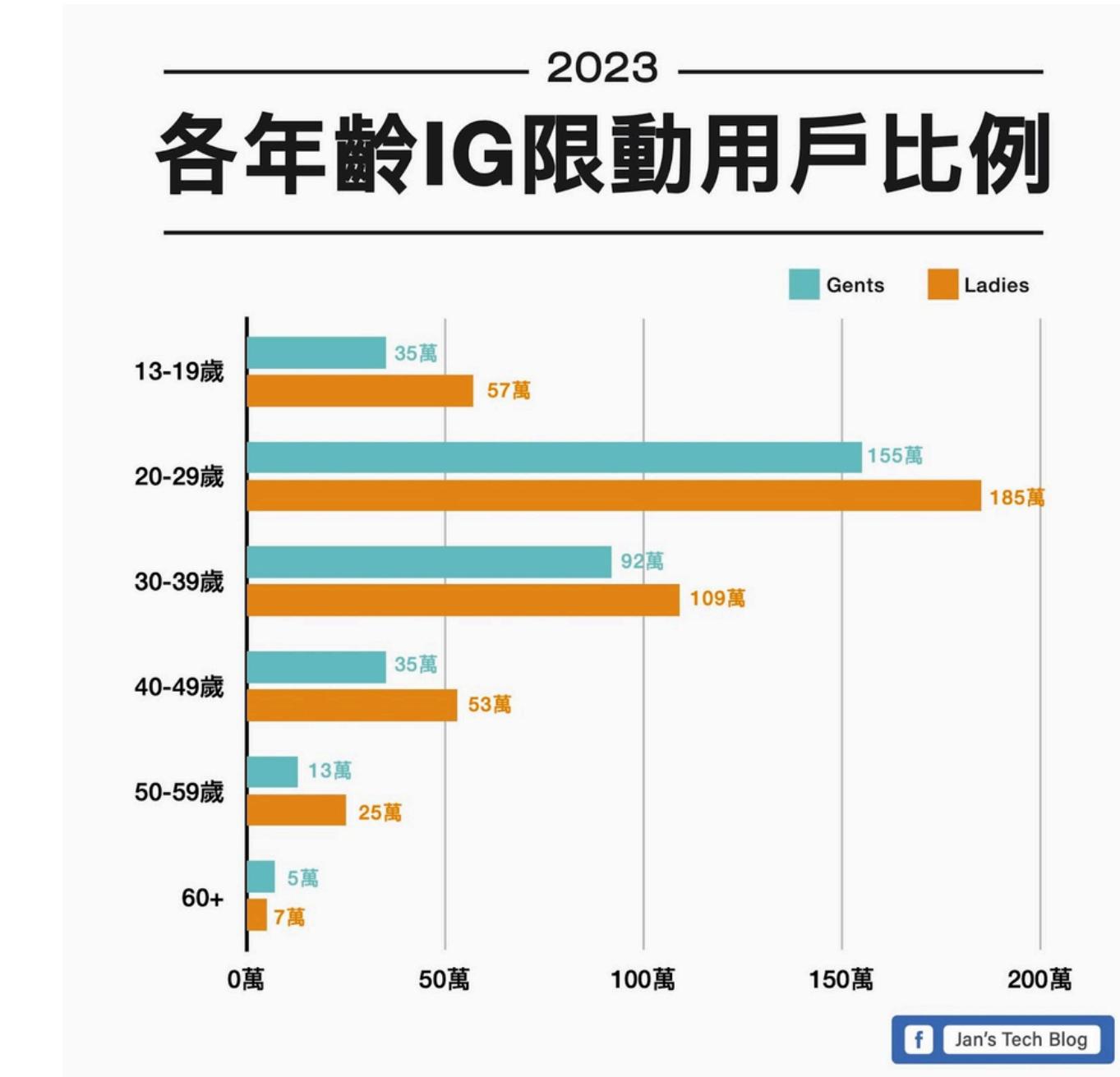
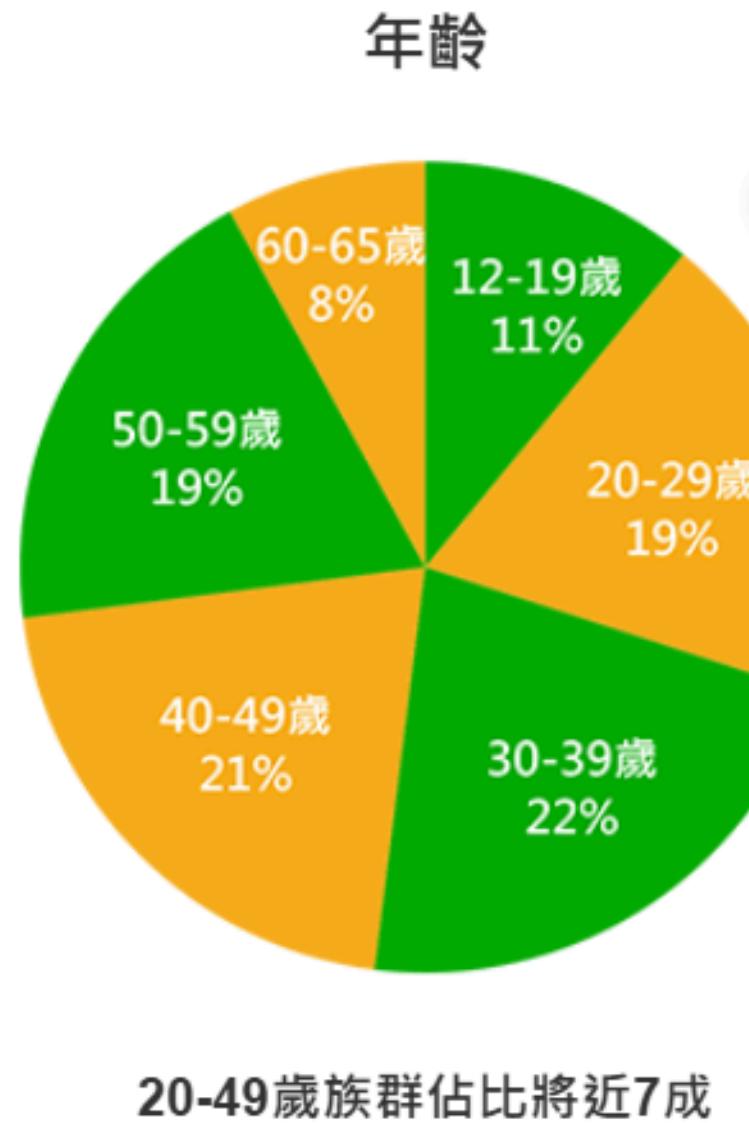
針對男、女性社群媒體使用行為頻率平均得分（從未、很少、有時、經常，分別對應1至4分）進行分析，能發現兩性的使用方式也相當不同。如圖三所示，就分享內容的性質而言，女性民眾較常在社群媒體上分享生活中的一般事情 ($M_{男} = 2.23$ vs. $M_{女} = 2.35$, $F = 5.65$, $p < .05$)，男性民眾較會在社群媒體上討論爭議性議題 ($M_{男} = 1.66$ vs. $M_{女} = 1.50$, $F = 14.68$, $p < .01$)，此外兩性分享個人情感與非爭議性流行資訊的頻率則無顯著差異 (all $p > .1$)。另一方面，相較上述行為，不論男女皆更常回應他人的發文女性，但其中女性群眾回應頻率又比男性更高 ($M_{男} = 2.73$ vs. $M_{女} = 2.95$, $F = 18.845$, $p < .01$)。

Female also enjoy sharing daily life details and responding to posts.

4. DOES AGE (19-22) AFFECT THE DISTRIBUTION OF FAVOURED SOCIAL MEDIA PLATFORMS?

- Chi-Square Test of Independence
- All results fail to reject.
- Instagram remains significantly preferred, while Facebook and Line rank second and third respectively.
- **This suggests that age does not significantly influence the preference for social media platforms.**

Additional Explanation-4



Regardless of the social media platform, the age distribution of users is mostly young to middle-aged adults, with fewer children and elderly users.

5. THE ASSOCIATION BETWEEN USAGE TIME AND SATISFACTION.

WE TREAT USAGE TIME AS A CATEGORICAL VARIABLE.

- ANOVA
- Reject the null hypothesis
- **There is significant correlation between usage time and satisfaction**

Additional Explanation-5

花較多時間在網路上對於自己的社會接納感會隨著在網路上的時間越多而得到滿足，會在網路上找尋自我價值的存在感；無時無刻想上網或對怕錯過網路上的事物則影響與家人的互動關係，造成疏遠或陌生的情形；常時間上網則會忽略掉現實生活的同學或朋友，還有師長；反而沉溺於網路的世界中的虛擬人際互動。本研究可知，網路成癮對於真實人際關係帶來許多負面的影響，而網路成癮對於網路人際關係則有密切的相關程度。

6.THE ASSOCIATION BETWEEN THE FAVORITE SOCIAL MEDIA PLATFORMS AND SATISFACTION.

WE TREAT THE PREFERRED SOCIAL MEDIA PLATFORM AS A CATEGORICAL VARIABLE.

- ANOVA Test
- Do not reject the null hypothesis
- Favorite social media platforms are not closely linked to Satisfaction.

Additional Explanation-6

Facebook、LINE、Instagram、抖音……等等，這些大家耳熟能詳的軟體，就是常見的社群媒體，不論其外形與功能如何差異，最終都有著相同的目標：讓使用者黏得越緊越好！

為了達成這個目標，社群媒體多被設計成極度容易取得反饋的機制（按讚、愛心……等等），並且藉由演算法過濾資訊來讓使用者感到舒適，以此達到讓人持續使用的良好體驗。

7.DOES

**“INTERPERSONAL COMMUNICATION PREFERENCES” ,
“DESIRE TO SHARE (ON SOCIAL MEDIA APPS)”,
“AGREEMENT LEVEL (SOCIAL MEDIA)”,
“DEPENDENCY ON SOCIAL MEDIA”,
“LONELINESS”,
“SATISFACTION”**

AFFECT DAILY SOCIAL MEDIA USING TIME?

- Chi-Square Test of Independence
- Interpersonal Communication Preferences, Agreement Level , Dependency on Social Media and Satisfaction are reject the null hypothesis.
- **They influence social media usage time.**

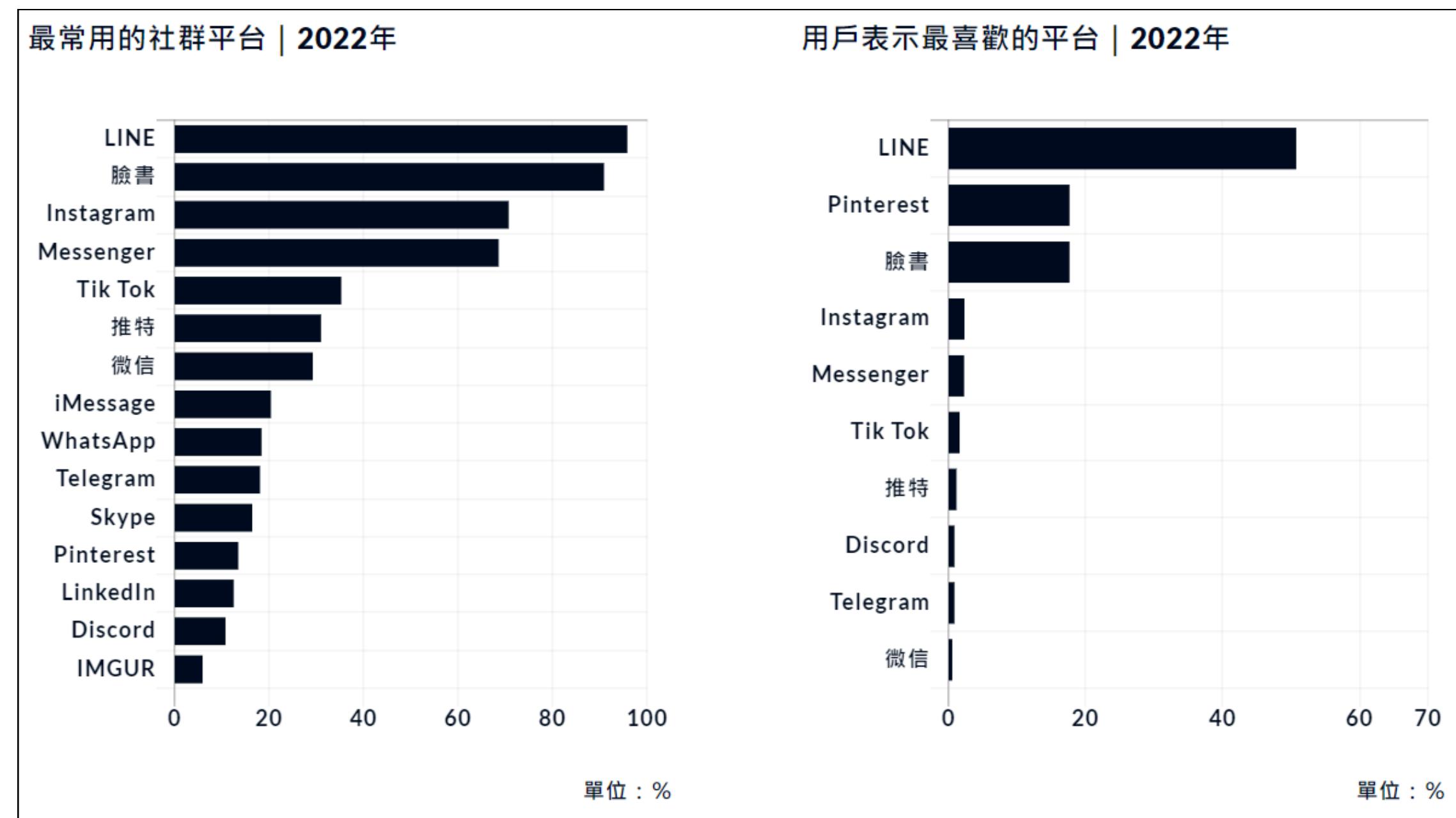
Additional Explanation-7

"Interpersonal Communication Preferences"

Referring back to the question asked during the introduction: how much has social media impacted the way we communicate and interact with each other? After reviewing all the findings, seeing the relationship individuals have with their mobile phones, and comparing social media platforms, it is clear that many young adults have an emotional attachment with their mobile device and want interaction that is quick and to the point, with minimal "in-person" contact. Many young adults prefer to use their mobile device to send a text message or interact via social media. This is due to their comfort level being higher while posting via social media applications, as opposed to in-person interaction. To successfully and accurately

Additional Explanation-7

“Agreement Level (social media)”



Additional Explanation-7

"Dependency on Social Media"

1錯失恐懼（Fear of missing out）

指的是擔心一旦離開社群網路，就會害怕變成邊緣人，或是錯過現在在流行的事物，也因此易陷入與他人比較的挫敗感。

比如現在在流行的劇，我是不是也應該要去看？因為最近很多人都在看，如果沒看好像會跟不上和朋友討論的話題。

我們希望可以透過網路與他人連結、獲得對方認可，而每個讚數、留言數都會無形中產生大量的正負面情緒，同時也驅使我們習慣同一個平台尋求慰藉，而無意識的花太多時間。

Additional Explanation-7

"Satisfaction"

a. 社群意識二因素對「社群依賴」進行迴歸分析，發現「認同感」、「歸屬感」對「社群依賴」迴歸分析結果顯著。若以逐步迴歸分析結果來看，可以發現「歸屬感」對「社群依賴」的解釋力最高 ($R^2 = 0.3097$)；「認同感」次之 ($R^2 = 0.0242$)，整體模式解釋力 $R^2 = 0.3339$ 。H1 假設獲得支持。

影響相契合。可能是因為使用者在社交媒體上獲得了自身所期待的人際關係互動，或者是建立了滿意的人際關係網路，期盼的事物在社交媒體上獲得了實現，導致使用者會更願意使用社交媒體去維持或是建立人際關係網路。因此人際關係滿意度高的使用者較滿意度低者不易產生倦怠感。

社交媒体倦怠為使用者對於社交媒体的使用意圖下降，並且對於在社交媒体之上的資訊產生負向的態度（謝名家, 2012），根據本研究分析結果指出，社交媒体倦怠對於口

8. LINEAR REGRESSION BETWEEN “INTERPERSONAL COMMUNICATION PREFERENCES”, “AGREEMENT LEVEL”, AND “DEPENDENCY ON SOCIAL MEDIA” WITH “SATISFACTION”.

There is a positive relationship between the Interpersonal Communication Preferences, Agreement Level, Dependency on Social Media, and Satisfaction.

Additional Explanation-8

"Agreement Level"

立即分享是重要的，因為這是獲得他人回應的重要橋梁。H 說，線上可以隨時隨地分享生活中真實的事情，例如限時動態；M 強調你不需要跟別人說話，自然有人來回應。觀看訊息的人更多，來自各方的廣泛回應也很多元，自然容易得到他人的留言或按「讚」。誠如參與者所說，當你無話可說時，只是按一個「讚」就好，不需要文字，但仍然傳遞出支持。這是一種簡單、快速又沒有負擔的互動方式，事實上等待也不會過久。



Additional Explanation-8

"Agreement Level"

從「線下」到「線上」的比重轉移，社群媒體上他人的分享，都能直接加以擷取、運用或感受，大大的提升了生活效率，也有增廣見聞的效果，此乃線上互動的潛在優勢，但相對減少了個人親自體驗和發現的成就。俗語說：「讀萬卷書，不如行萬里路」、「坐而言不如起而行」等，在強調親身經歷與實做的重要；然而，社群媒體發達，經由他人的經驗分享，省去了自己親自探索，這樣的影響有多大呢？事實上可能不如我們想像的大。近期的研究告訴我們，社群媒體的多樣功能可以豐富生活，包括結交新朋友、研究作業或報告、尋找課業相關資源，以及瀏覽最新趨勢與消息，且使用社群媒體與學業成就無關（Oguguo et al., 2020），甚至使用臉書可以提升心理健康（Ngussa et al., 2020）。然這些正向論述也有一些條件，Rahman 等人（2020）認為，若能感知社群媒體的正向功用，則社群媒體使用能提升學習效果；

（Odgers & Jensen, 2020）。整體的優勢在於，當我們能對社群媒體使用有充分的感知，在線上彼此的共享、借鏡、參照都是正向積極的交流。

Additional Explanation-8

"Interpersonal Communication Preferences"

社群媒體使人與人的關懷更容易，透過瀏覽親朋好友的訊息、心情、影片、照片等，就可以輕鬆明瞭彼此的狀態。即便個人處於忙碌時，亦能透過社群媒體簡要給予對方關懷。

透過這樣社群的連結，你可以知道朋友或是身邊的人發生的相關事情，給予適時的關心，因為有時候忙碌也不見得能夠見面。（A2021）

三不五時也是要去 follow 一下別人在幹嘛，真的碰到面就直接有話聊，也是展現誠意。你知道的，就是有關心、在乎他最近的生活。（N1036）

Additional Explanation-8

"Dependency on Social Media"

追蹤或關注對方，被列入是否在乎對方的指標，這意味著定期追蹤並回應對方在社群網站上的訊息是重要的。A 與 B 都提到，若沒有定期追蹤或關注特定對象的近況，恐或遭對方指責，恐或友誼難存，因此願意花時間長期追蹤，以表示自己在乎身邊的人。例如，A 就遇過朋友說：「你為什麼都沒有看我的動態，沒有知道我怎麼了？」（A2024）。B 則提到，「你可能要持續關注他，也許他有回你，你還是要回他；如果他回你，你忘記回，可能就沒了。」（B2062）。由此可知，社群媒體上的追蹤與關注是一種友誼的象徵，也是了解親友人近況與相互表達關懷的重要機制之一。

經營要拉滿長的，你也真的要花時間在上面。因為你不可能亂槍打鳥，你要持續關注他，他有回你，你還是要回他；如果他回你，你忘記回，可能就沒了。（B2062）

總體來說，社群媒體的關注與追蹤，代表彼此的在乎與關心，是一種友誼與人際關係的維繫；

9. LINEAR REGRESSION BETWEEN LONELINESS AND DEPENDENCY ON SOCIAL MEDIA.

The dependency on social media shows a positive correlation with feelings of loneliness.

Additional Explanation-9

的按讚數後，多數人在乎的，已經不是我關懷我身旁的人，而是透過社群的連結，想要知道這個人混得好不好，以確保自己混得還不錯，或更甚的是希望別人知道自己混得好，以此獲取更多眼球與稱讚。那份與人的連結，有時候成為一種需要證明自己夠好的存在，而連結也因此失去真正重要的意義而變得單薄。現代人寂寞的真實狀況是：他不認為有任何人想要真正認識與瞭解彼此，他們渴望的，似乎只是我在這群體裡，我是個還不錯的存在，在歡笑聲驅除心中的孤獨感。

people sometimes don't genuinely seek to understand others; instead, they hope to be perceived as doing well within the group.

Additional Explanation-9

然而，發文之後若沒有獲得回應，孤單感瞬息倍增。有參與者表示，自己曾發文邀請大家一起唱歌，但沒有人回應，感到很落寞。B 表示，有時候到了晚上發現，怎麼沒有人找自己或回應自己的貼文，覺得有些淒涼與孤單。J 則說，如果有一天社群網站上沒有人找自己，就會開始胡思亂想。G 談到，在一些團體照片中發現自己沒有被標註在上面，就會感到不舒服。更甚者，C 使用社群媒體一陣子之後，認為自己是一個不被在乎的人。

假設你 po 了一個「二手烏龜誰要」，過了一整天沒有人理你，然後你還 po 了降價資訊，一樣沒有人理你。可是你的朋友有三千多個，你就會瞬間覺得孤單到爆炸。（C2102）

你原本以為你朋友很多，然後你就 po 了一個「今天晚上十點唱歌」，結果沒有半個人回應你，你瞬間就會覺得孤單。（B2089）

個人主動且樂於社群媒體上分享，期待他人能給予回應，以產生連結感，而這樣的連結簡單、快速，也相對容易，即便是被動地等待，也不會過久。但若未得到他人的回應，落寞的孤單感就會油然而生。

when posts remain unanswered for a long time, it's easy to feel a significant sense of loneliness.

FINAL CONCLUSION

1.

- 1 Instagram (for leisure and entertainment)
- 2 LINE (for messaging purposes)

Gender has little influence on social media platform preferences.

2.

The more time spent online tends to positively impact satisfaction with online interpersonal relationships.

3.

Avoid excessive internet addiction. The more severe the social media addiction, the greater the sense of loneliness.

Thank you.



Social media usage habits and their impact on interpersonal relationships
Group 5

