

# Research on the Current Situation and Problems of the Use of Digital Inclusive Finance

-- Taking Guangzhou University Students as an Example

Siyang He

Guangzhou Yushan Middle School, China  
18122367474 @163.com

**Abstract:** This study aims to investigate the use of digital inclusive finance among college students in Guangzhou and its influencing factors. Through the questionnaire survey and data analysis, the popularity, willingness to use, and barriers to the use of digital inclusive finance among college students are found, and the reasons behind them are analysed and discussed, which provide references and suggestions for promoting the application of digital inclusive finance among the college student population.

**Keywords:** Digital financial inclusion, University students, Current state of use.

## 1. Introduction

With the development of digital technology and changes in the financial industry, digital inclusive finance, as a new type of financial service, has gradually become an important way to improve financial inclusion and increase the efficiency of financial services. As a young group, college students' acceptance and use of digital inclusive finance has attracted much attention under the influence of digital lifestyles. However, there is a lack of research on the use of digital inclusive finance among college students in Guangzhou, and this study aims to fill this gap.

## 2. Research methodology

Using a questionnaire survey, students from major universities in Guangzhou were randomly selected as survey respondents to collect data on the use of digital inclusive finance, the experience of using it, and the barriers to using it. Through statistical analysis and correlation analysis, key factors affecting the use of digital inclusive finance are explored.

## 3. Purpose of the study

### 3.1. Investigate the popularity of digital financial inclusion among university students in Guangzhou

#### 3.1.1. Sample description

Demographic characteristics can be obtained from the analysis of the valid sample data, as shown in Table 1.

The distribution of the sample among the characteristic factors can be obtained from Table 1:

(1) The questionnaire recovered a total of 264 valid samples, of which 46.59% were male and 53.41% were female, with the ratio of male to female close to 1:1. The gender balance of the survey respondents indicates that the results of the survey have a certain degree of scientific

validity and representativeness;

(2) The academic qualifications of the survey respondents were screened to leave only undergraduate students studying in Guangzhou City. Among them, there were 71 freshmen, 62 sophomores, 58 juniors and 73 seniors, accounting for 26.89 per cent, 23.48 per cent, 21.97 per cent and 27.65 per cent of the sample size, respectively, with a relatively balanced distribution of survey respondents across all grades, indicating the results of the survey;

(3) From the statistics on majors, there are 42 people in arts, 56 in business, 71 in science and technology, 30 in agriculture, 32 in medicine and 33 in art, accounting for 15.91%, 21.21%, 26.89%, 11.35%, 12.12% and 12.50% of the sample size respectively. The distribution of respondents' majors shows that every major is covered, with science and technology having the largest number of respondents, followed by business, indicating that the survey results are somewhat comprehensive.

(4) There are seven options for the income level of this statistic, which are monthly income of 1,000~1,500 CNY for 61 people, accounting for 23.11% of the overall ratio; monthly income of 1,500~2,000 CNY for 61 people, accounting for 23.11% of the overall ratio; monthly income of 2,000~2,500 CNY for 31 people, accounting for 11.74% of the overall ratio; monthly income of 2,500~3,000 CNY for 65 people, accounting for 24.62% of the total; the total number of people with monthly income of 3,000~3,500 CNY is 35, accounting for 13.26% of the total; the total number of people with monthly income of 4,000~4,500 CNY is 4, accounting for 1.52% of the total; the total number of people with monthly income of more than 5,000 CNY is 7, accounting for 2.65% of the total. From the sample recovery, most university students in Guangzhou now earn 2,500~3,000 CNY per month, followed by 1,000~2,000 CNY, 3,000~3,500 CNY and 2,000~2,500 CNY, and there are fewer university students earning more than 4,000 CNY per month.

**Table 1.** Statistical descriptive analysis of the sample

name (of a thing)	options (as in computer software settings)	Frequency	Percentage (%)
1. Please select the city.	Guangdong - Guangzhou	264	100.00
2. Your gender	male	123	46.59
	women	141	53.41
3. Your academic qualifications	undergraduate (adjective)	264	100.00
4. Your grade in school	first-year university student	71	26.89
	second-year university student	62	23.48
	third-year university student	58	21.97
	fourth-year university student	73	27.65
5. Your speciality is	humanities	42	15.91
	Shangke corporation, PRC IT company (since 1994)	56	21.21
	science and engineering as academic subjects	71	26.89
	agronomy	30	11.36
	study of medicine	32	12.12
	artists	33	12.50
6. Your income level	1000~1500 CNY	61	23.11
	1500~2000 CNY	61	23.11
	2000~2500 CNY	31	11.74
	2500~3000 CNY	65	24.62
	3000~3500 CNY	35	13.26
	4000~4500 CNY	4	1.52
	5000 or more	7	2.65
7. Your consumption level	Less than 1000	91	34.47
	1000~2000 CNY	100	37.88
	2000~3000 CNY	66	25.00
	3000~4000 CNY	3	1.14
	4000~5000 CNY	3	1.14
	5000 or more	1	0.38

(5) There are six options for the consumption level of this statistic, which are monthly consumption of less than 1,000 CNY 91 people, accounting for 34.47% of the overall ratio; monthly consumption of 1,000~2,000 CNY 100 people, accounting for 37.88% of the overall ratio; monthly consumption of 2,000~3,000 CNY 66 people, accounting for 25.00% of the overall ratio; monthly consumption of 3,000~4,000 CNY 3 people, accounting for 1.14% of the overall ratio; monthly consumption of 4,000~5,000 CNY 3 people, accounting for 1.14% of the overall ratio; monthly consumption of 5,000 CNY and above 1.14%. The monthly consumption of 2,000~3,000 CNY is 66 people, accounting for 25.00% of the total; the monthly consumption of 3,000~4,000 CNY is 3 people, accounting for 1.14% of the total; the monthly consumption of 4,000~5,000 CNY is 3 people, accounting for 1.14% of the total; the monthly consumption of more than 5,000 CNY is 1 person, accounting for 0.38% of the total. In terms of sample recovery, there are more college students who spend less than 2,000 CNY per month, followed by those who spend 2,000~3,000 CNY per month, and there are fewer college students who spend more than 3,000 CNY per month.

### 3.1.2. Descriptive statistical analysis of research variables

From the valid sample data, frequency analysis and multiple response analysis (The multiple response analyses are shown in Table 2, Table 3, Table 5, Table 7, Table 8, Table 9, Table 10, Table 11, and Table 12, where n represents the responses made by the valid sample data for this survey, the response rate represents the overall proportion of n values in this option to the aggregated n values, and the prevalence rate represents the overall proportion of n values in this option to the total number of 264 people in this valid sample. Because the prevalence rate is relatively more representative, this

thesis focuses on describing the prevalence rate.) were conducted on the single-choice and multiple-choice questions in the questionnaire respectively to obtain the current status of the use of digital financial inclusion by university students in Guangzhou city, details are as follows:

#### (1) Types of digital financial inclusion products used

**Table 2.** Summary of response rates and penetration rates for types of digital financial inclusion products used Grid

term (in a mathematical formula)	responsive		Prevalence (n=264)
	n	response rate	
9. (Sweeping code payment)	204	20.30 per cent	77.27 per cent
9. (Subsistence contributions)	129	12.84 per cent	48.86 per cent
9. (Online shopping)	201	20.00 per cent	76.14 per cent
9. (Remittances)	87	8.66 per cent	32.95 per cent
9. (Purchase of insurance)	182	18.11 per cent	68.94 per cent
9. (Investment finance)	160	15.92 per cent	60.61 per cent
9. (Loan financing)	42	4.18 per cent	15.91 per cent
9. (Other)	0	0.00 per cent	0.00 per cent
aggregation	1005	100%	380.68 per cent
Goodness of fit test: $\chi^2 = 322.085$ $p=0.000$			

As shown in Table 2, the total number of responses made by this valid sample is 1005 in total, in which code payment has the highest penetration rate among university students in Guangzhou nowadays, which is 77.27%. It is followed by online shopping with a penetration rate of 76.14 per cent, and

then by purchasing insurance, investing money, paying bills, transferring money and financing loans, with penetration rates of 68.94 per cent, 60.61 per cent, 48.86 per cent, 32.95 per cent and 15.91 per cent, respectively.

### (2) Commonly used payment methods

**Table 3.** Commonly used payment methods

term (in a mathematical formula)	responsive		Prevalence (n=264)
	n	response rate	
10. (Cash payments)	120	24.69 per cent	45.45 per cent
10. (Bank card payments)	172	35.39 per cent	65.15%
10. (WeChat or Alipay)	171	35.19 per cent	64.77 per cent
10. (Chanting, Jingdong Baijiao and other credit loans)	23	4.73 per cent	8.71 per cent
aggregation	486	100%	184.09 per cent

Goodness of fit test:  $\chi^2 = 121.029$   $p=0.000$

As can be seen from Table 3, the total number of responses made by this valid sample was a total of 486, of which bank card payment was the most popular, with a prevalence rate of 65.15 per cent, followed by WeChat or Alipay, with a prevalence rate of 64.77 per cent, cash payment prevalence rate of 45.45 per cent, and the least amount of credit, with a prevalence rate of only 8.71 per cent.

### (3) Current status of the use of digital financial inclusion

**Table 4.** Survey on the Current Status of Digital Financial Inclusion Usage

name (of a thing)	options (as in computer software settings)	Frequency	Percentage (%)
11. Your average daily frequency of using digital payment methods	1~3 times	113	42.80
	4 to 10 times	119	45.08
	11-15 times	15	5.68
	15 or more	17	6.44
add up the total		264	100.0
12. Have you ever applied for a credit loan (including consumer credit such as Ant Chants and Jingdong Baijiao)	be	193	73.11
	clogged	71	26.89
add up the total		264	100.0
13. Through what channel did you apply for the credit facility (n=193)	bank loan	103	53.37
	Rural Credit Union	63	32.64
	Digital Financial Institutions	27	13.99
add up the total		264	100.0
14. Have you ever purchased investment financial products	be	94	35.61
	clogged	170	64.39
add up the total		264	100.0

**Table 5.** Main Ways of Purchasing Investment Financial Products

term (in a mathematical formula)	responsive		Prevalence (n=94)
	n	response rate	
15. (Bank counters)	60	35.09 per cent	63.83 per cent
15. (Internet or mobile banking)	55	32.16 per cent	58.51 per cent
15. (Third-party payment platforms (WeChat, Alipay, etc.))	31	18.13 per cent	32.98 per cent
15. (Other financial apps)	25	14.62 per cent	26.60 per cent
15. (Other)	0	0.00 per cent	0.00 per cent
aggregation	171	100%	181.91 per cent

Goodness of fit test:  $\chi^2 = 69.088$   $p=0.000$

Table 4 shows that digital payment methods occupy a relatively important position in the daily life of university students in Guangzhou, and those who have applied for credit loans account for 73.11% of the total, which is more than 26.89% of those who have not applied for credit loans. Among the ways of applying for credit loans, the largest number of college students, 53.37 per cent overall, used bank loans, followed by rural credit unions, 32.64 per cent, and digital financial institutions, 13.99 per cent, the least.

In addition, there are more college students who have not purchased investment financial products than those who have purchased investment financial products, and according to Table 5, it can be concluded that among the college students who have purchased investment financial products, most of them have purchased them through bank counters, as well as online or mobile banking, and some of them have purchased them through third-party payment platforms and other financial apps.

## 3.2. Analyse the factors influencing university students' use of digital financial inclusion

(1) Knowledge of digital financial inclusion and acceptance of it

**Table 6.** Results of frequency analysis

name (of a thing)	options (as in computer software settings)	Frequency	Percentage (%)
16. Do you understand digital financial inclusion?	unknown	28	10.61
	not heard of	92	34.85
	relatively knowledgeable	136	51.52
	realise	8	3.03
add up the total		264	100.0
18. Would you like to access financial services in the form of digital financial inclusion?	be	216	81.82
	clogged	48	18.18
add up the total		264	100.0

Table 6 shows that the number of university students in Guangzhou City who are more aware of digital financial inclusion is higher, with a total of 136 people accounting for 51.52% of the total ratio; then the number of people who have never heard of it is 92 people, accounting for 34.85% of the overall ratio; the number of people who don't know about it is

28 people, accounting for 10.61% of the overall ratio; and the number of people who know about it very well is 8 people, accounting for 3.03% of the overall ratio. And there is a general willingness among college students to obtain financial services in the form of digital inclusive finance, indicating that college students are highly receptive to new things and have a certain degree of judgement about things.

(2) Factors in the use of digital financial inclusion

**Table 7.** Channels for understanding digital financial inclusion

term (in a mathematical formula)	responsive		Prevalence (n=144)
	n	response rate	
17. (Newspaper and television news)	18	5.61 per cent	12.50%
17. (Financial awareness-raising activities)	125	38.94 per cent	86.81 per cent
17. (Financial institution counters)	78	24.30 per cent	54.17 per cent
17. (Public push)	99	30.84 per cent	68.75 per cent
17. (Other)	1	0.31 per cent	0.69 per cent
aggregation	321	100%	222.92 per cent
Goodness of fit test: $\chi^2 = 174.872$ p=0.000			

**Table 8.** What form of digital financial inclusion would you use to access financial services if you wanted to?

term (in a mathematical formula)	responsive		Prevalence (n=216)
	n	response rate	
19. (Digital payments)	103	27.39 per cent	47.69 per cent
19. (Credit facilities)	61	16.22 per cent	28.24 per cent
19. (Investment finance)	78	20.74 per cent	36.11 per cent
19. (Digital storage accounts)	43	11.44 per cent	19.91 per cent
19. (Insurance)	88	23.40 per cent	40.74 per cent
19. (Other)	3	0.80 per cent	1.39 per cent
aggregation	376	100%	174.07 per cent
Goodness of fit test: $\chi^2=102.979$ p=0.000			

**Table 9.** If not, what are the reasons why you are not willing to use digital financial inclusion?

term (in a mathematical formula)	responsive		Prevalence (n=48)
	n	response rate	
20. (Distrust for personal reasons)	34	29.57 per cent	70.83 per cent
20. (Lack of understanding of policy, lack of interpretation)	27	23.48 per cent	56.25 per cent
20. (Rejection of digital financial products)	22	19.13 per cent	45.83 per cent
20. (Inadequate hardware facilities)	5	4.35 per cent	10.42 per cent
20. (Derivatives are not popular enough)	12	10.43 per cent	25.00 per cent
20. (Not easy to operate, more cumbersome)	15	13.04 per cent	31.25 per cent
aggregation	115	100%	239.58 per cent
Goodness of fit test: $\chi^2 = 29.157$ p=0.000			

Table 7 shows that financial publicity activities accounted for the highest penetration rate of 86.81 per cent among the channels through which university students in Guangzhou learnt about digital financial inclusion, followed by public number push, with a penetration rate of 68.75 per cent, and then financial institutions' counters and newspapers and TV news, with a penetration rate of 54.17 per cent and 12.50 per cent, respectively. This shows that financial publicity campaigns and public number pushes are powerful digital means of promoting financial inclusion.

Table 8 shows that among university students in Guangzhou City, they would be more likely to use digital payment to access digital inclusive financial services, followed by insurance, investment and finance, credit loans, and digital storage accounts. Table 9 shows that the number of people who do not use digital financial services for personal reasons of distrust is the highest. Then there is a lack of understanding of the policy, lack of interpretation, rejection of digital financial products, not easy to operate more troublesome, derivatives are not popular enough, and insufficient hardware facilities. This shows that financial inclusion needs to be further promoted by digital means and still requires more innovation.

### 3.3. Explore strategies and recommendations to increase the use of digital financial inclusion among university students.

According to the sample recovery in Table 10, most of the university students in Guangzhou believe that the convenience brought by digital financial inclusion is in line with the birth concept of financial inclusion: "to provide appropriate and effective financial services at affordable costs to all social strata and groups with financial service needs." This is in line with the concept of financial inclusion.

Table 11 shows that when using digital financial inclusion some people think it is fine; most people think that digital financial inclusion services will promote the over-occurrence of malpractice and that there are large regulatory gaps and a lack of inclusion; and a few people think that there will be a high incidence of financial fraud.

From Table 12, it can be seen that the development of digital financial inclusion, first of all, we need to publicity in place to increase the popularity; secondly, the digital means

technology should be growing day by day, and the rule of law in society needs to be well managed in order to let everyone feel more at ease to put it into use; in addition to the need to

innovate and personalise the design, to improve customer interest as well as to increase the stickiness.

**Table 10.** What digital financial inclusion facilitates

term (in a mathematical formula)	responsive		Prevalence (n=264)
	n	response rate	
21. (Lowering the threshold for financial services, providing access to loans, investments, insurance, etc.)	164	26.67 per cent	62.12 per cent
21. (Reduced transaction costs)	59	9.59 per cent	22.35 per cent
21. (Increased sources of income)	61	9.92 per cent	23.11 per cent
21. (Reduces the cost of financial services and promotes universal access to financial services)	184	29.92 per cent	69.70 per cent
21. (Promotes information sharing and overcomes information asymmetry)	115	18.70 per cent	43.56 per cent
21. (Integration of the Internet and the real economy to promote the development of industry, markets and society)	32	5.20 per cent	12.12 per cent
aggregation	615	100%	232.95 per cent
Goodness of fit test: $\chi^2 = 186.980$ p=0.000			

**Table 11.** What problems are encountered or exist when using digital financial inclusion

term (in a mathematical formula)	responsive		Prevalence (n=264)
	n	response rate	
22. (No problem)	154	19.47 per cent	58.33 per cent
22. (Contribute to the incidence of undesirable overspending)	195	24.65 per cent	73.86 per cent
22. (Large regulatory gaps)	138	17.45 per cent	52.27 per cent
22. (Lack of universality)	183	23.14 per cent	69.32 per cent
22. (High incidence of financial fraud)	97	12.26 per cent	36.74 per cent
22. (Other)	24	3.03 per cent	9.09 per cent
aggregation	791	100%	299.62 per cent
Goodness of fit test: $\chi^2 = 151.546$ p=0.000			

**Table 12.** Areas for improvement in digital financial inclusion services

term (in a mathematical formula)	responsive		Prevalence (n=264)
	n	response rate	
23. (Policy advocacy needs to be deepened and is not sufficiently widespread)	85	10.28 per cent	32.20 per cent
23. (Digital technology to be improved, coverage not available)	206	24.91 per cent	78.03 per cent
23. (Inadequate personalisation)	150	18.14 per cent	56.82 per cent
23. (The legal environment needs to be improved)	202	24.43 per cent	76.52 per cent
23. (Safety and security mechanisms need to be improved and regulatory policies need to be improved)	179	21.64 per cent	67.80 per cent
23. (Other)	5	0.60 per cent	1.89 per cent
aggregation	827	100%	313.26 per cent
Goodness of fit test: $\chi^2 = 225.220$ p=0.000			

## 4. Results

(1) College students generally have a high level of awareness of digital financial inclusion, but the actual usage rate still needs to be improved;

(2) The main factors affecting college students' use of digital financial inclusion include: level of awareness, level of financial knowledge, ease of use, and security;

(3) The main usage scenarios of digital financial inclusion by university students include: online payment, wealth management and money transfer.

## 5. Discussion and Recommendations

(1) Raising the level of awareness of digital financial

inclusion among university students and strengthening related education and training;

(2) Improve the digital inclusive financial service system and enhance user experience and security;

(3) Strengthening the promotion of digital inclusive financial products and guiding university students to use digital financial services more conveniently.

## 6. Conclusion

The use of digital financial inclusion among university students in Guangzhou is affected by a variety of factors, and increasing the use of digital financial inclusion among university students requires comprehensive consideration of factors such as education, technology and services, as well as

the adoption of appropriate strategies and measures. Future research can further explore the effects and influencing factors of the application of digital inclusive finance in the college student population.

## References

- [1] World Bank Group. (2018). Digital Financial Inclusion: Definitions, Frameworks, and Metrics.
- [2] Allen, F., Demirgüç-Kunt, A., Klapper, L., & Peria, M. S. M. (2016). The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts. *Journal of Financial Intermediation*, 27, 1-30.
- [3] Liu, Z., & Sun, H. (2019). A Study on the Factors Influencing the Adoption of Mobile Financial Services by Chinese College Students: based on an Extended TAM with Trust. *Sustainability*, 11(8), 2361.