

# Determinants of Saving Behaviour among Universities Students in Guangdong Province

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**Abstract:** *Saving is the final manifestation of surplus in an economic cycle and it is the most common way for people to manage their wealth. In recent years, China's domestic saving rate still remains the highest level in the world. This research focuses on Guangdong province, whose saving scale ranks the top among mainland China. At present, there are few researches based on the influencing factors of Guangdong university students' saving behaviour. Therefore, this research aims to investigate whether financial literacy (FL), parent influence (PaI), peer influence (PeI) and self-restraint (SR) have significant influence on the saving behaviour (SB) of university students in Guangdong province. Primary data are collected using self-administered questionnaire. The samples comprised 404 students from 16 different cities in Guangdong. Meanwhile, Pearson Correlations and Multiple Regression Analysis are employed to identify whether the four factors have relationship with the saving behaviour of university students. The results show that all the FL, PaI, PeI and SR have positive relationship with SB while FL has the greatest impact on SB among the four independent variables. In terms of practical significance, not only this research can fill in the academic gap to a certain extent, but also can contribute to university students, parents, universities commercial banks and other relevant parties.*

**Keywords:** *University students, Guangdong province, Saving behaviour.*

## 1. Introduction

The first chapter mainly introduces the overview of this topic. To begin with, the background of study and some general terms are provided and discussed. Then, the problem statement and the research objectives are defined, research questions are raised, and the significance of the research is discussed. Lastly, ending Chapter 1 with a summery.

### 1.1 Background of the Study

Saving is the most common way for people to manage their wealth. According to Katona (1974), the simplest definition of saving is reserving a portion of income for future use, thus can create lasting wealth. Generally speaking, the economic activities are manifested in a circular path of “Investment—Factor distribution—Formation of sector income—Consumption—Saving”, which indicates that saving is the final manifestation of surplus in an economic cycle (Qin, 2020).

Saving has great significances for both nations and individuals. From a macro point of view, having a high savings rate is a necessary step to become a high-income country. For example, Japan had a high national savings rate in the 1960s to 1970s, which was an important stage of Japan's economic development as a developed country. Similarly, when South Korea was transforming to a developed country, it also experienced a period of high savings in the 1980s (Xu & Liu, 2018). And according to a research, saving rate, investment rate and economic growth rate has strong consistency (Yang et al., 2011). From the micro perspectives, saving behaviour also can bring a lot of benefits to individuals and families. Savings can help people protect themselves against risks so they don't get overwhelmed. In addition, having saving is more likely to help people achieve a better life whether now or in the future (Wright, 2020).

China's saving rate has risen sharply since the Reform and Opening up. In recent years, China's domestic saving rate still remains the highest level in the world, “Enough to deal with 1.5 times of the 2008 financial crises”, said by Li Yang, chairman of China's National Finance and Development Research Office, in 2018 Boao Forum for Asia. For a long time, high savings serve as cornerstone to support China's GDP rapid growth and invest in the whole society (Xu & Liu, 2018). However, the China's saving

rate declines steadily in the most recent years, in order to adapt to the current new economic situation and establish "Dual circulation" development pattern (Yang, 2020).

This research focuses on Guangdong province. According to Seventh National Census and 2020 Guangdong's GDP from National Bureau of Statistic (NBS, 2021), Guangdong is the most economically developed and populous province in mainland China, Guangdong's saving scale ranks the top among other provinces and cities, which is representative and typical (He, et al., 2012).

At present, most of the researches about influence factors of saving behaviour are based on the macro level. Following are some macro determinants examples: income level, interest rate level, juvenile dependency ratio, old dependency ratio, inflation level and so on (Xu, 2020; Qin, 2020). Otto (2009) declared that adolescent saving behaviour, such as targeting university students, has been an area of neglect. Young people represent the future, while college students' saving behaviours are more influenced by micro factors, such as financial literacy (FL), parent influence (PaI), peer influence (PeI) and self-restraint (SR). At present, there are few researches based on the influencing factors of Guangdong university students' saving behaviours. Therefore, a research to investigate the determinants of saving behaviours among universities students in Guangdong province from micro view is need.

### **1.2 Problem Statement**

Chinese people have a tradition of saving, which is deemed as a traditional virtue. Most of Chinese, especially the elderly, regard waste as shameful and frugality as admirable. So, even though Chinese per capita income is low, but the saving rate is high. This tradition has also been carried on by overseas Chinese ethnic groups, they tend to have a higher saving rate than other ethnic groups. For example, in Malaysia, a multi-ethnic country made up of three major ethnic groups, the saving rate of Chinese is higher than Malaysian and Indian (Mohamad Fazli & MacDonald, 2010), which results in the average wealth of a Chinese household being 1.9 times than of a native (Khalid & Li, 2019). There is no denying that the act of saving does bring many benefits, whether for individuals, families or countries.

With the development of the economy, consumption is playing an increasingly vital role in China's economic growth. Chinese young people born after 1990 even 1995 are becoming one of the main consumption forces. They have the demand for growth & development and the desire to pursue a quality life. Credit consumption has become a vital way to upgrade consumption. What's more, due to the development of Internet financial technology, young adults can access credit consumption much easier than before (Nielsen, 2019). So, it's fair to say that young Chinese are changing their attitudes to saving and consumption compared to their parents.

Young people's changing concept of saving and consumption, along with "Living in the moment" becoming more and more popular, a wave of excessive consumption is setting off. However, it also has caused many problems. To begin with, many young people don't save money, even account for a high proportion of total loan people. According to a survey of Rong 360 institution (2019), young people born in the 1990s account for the highest proportion of total loans people, up to 49.31%, ranking first among their peers in Asia. In other words, nearly half of the young people born in the 1990s have loans. Secondly, not every young person can pay the money back on time. According to a research of Nielsen (2019), in the 86.6 percent of young people who used credit consuming products, only 42.1 percent used consumer credit and paid off the loan in the same month, which means that 44.5 percent of them were in debt because they failed to pay off the loan in time. Even worse, in accordance with the data from the People's Bank of China, the total amount of credit cards outstanding six months overdue nationwide has soared to 85.4 billion yuan as of June 30, 2020, more than 10 times the amount a decade ago. Almost half of these delinquent borrowers are post-1990s generation (Fu, 2021). Thirdly, young people, especially university students, are weak in self-control so that their irrational consumption amount is high. According to a survey jointly released by the China University Media Union and Ant Financial's Alipay, the average amount of money Chinese college students spent on Alipay in 2016 is 40,839 yuan, which number is basically equivalent to the average annual salary of workers in China's urban private sectors in 2016 (42,833 yuan). This data fully reflects the excessive consumption of college students and other irrational behaviours (Li & Wu, 2017).

Young people including university students represent the future of a country. If the above problems cannot be solved, young people continue to save less and spend more, it is bound to bring bad influences to both individuals and country. For young people themselves, due to poor consumption habits, their consumption concept will be distorted, resulting in inability to save money and the possibility of waste (Kanthor, 2020). When risk comes, young people are vulnerable to risk because they do not have savings,

and the chance of personal bankruptcy increases greatly. At this time, they have to rely on their parents and friends, which leads to the increase of social burden and not good for national economic development (Cohran et al., 2008).

Up to now, most of the researches on influence factors of Chinese resident savings behaviours are based on the macro level, and few researches based on the micro level, especially for Chinese university students. In other countries, there are some researches based on micro level to explore the determinants of saving behaviours of university students (Falahati et al., 2018), which can be references. Therefore, researcher is very interested in this topic and it is meaningful to do this research.

### ***1.3 Research Objectives***

#### ***1.3.1 General Objectives***

Generally speaking, the objectives of this research is to study the saving behaviour of Guangdong university students from micro level and to determine the factors that influence their saving behaviour, such as financial literacy, parent influence, peer influence and self-restraint.

#### ***1.3.2 Specific Objectives***

To ascertain the relevancy between financial literacy and saving behaviour among the university students in Guangdong province.

To analyse the relevancy between parent influence and saving behaviour among the university students in Guangdong province.

To discover the relevancy between peer influence and saving behaviour among the university students in Guangdong province.

To explore the relevancy between self-restraint and saving behaviour among the university students in Guangdong province.

### ***1.4 Research Questions***

#### ***1.4.1 General Research Question***

Aiming at the university students in Guangdong province, what are the factors that influence their saving behaviour?

#### ***1.4.2 Specific Research Questions***

Is financial literacy one of the factors in determining saving behaviour of university students in Guangdong province?

Is parent influence one of the factors in determining saving behaviour of university students in Guangdong province?

Is peer influence one of the factors in determining saving behaviour of university students in Guangdong province?

Is self-restraint one of the factors in determining saving behaviour of university students in Guangdong province?

### ***1.5 Significance of the Study***

The main purpose of this study is to explore the influencing factors of university students' saving behaviour in Guangdong Province. To some extent, not only this research can fill the academic gap, but also contribute to solving current saving problems from university students' personal level, family level, society, and national level.

From the aspect of university students, this research can help them to know what factors influence their saving behaviour, which aspect of their lack. In this way, it is helpful for university students to cultivate their saving consciousness and form proper concepts of consumption and values.

From the family perspectives, this study could help parents better understand the factors that influence their children's saving behaviour, so they can develop strategies to educate and monitor them.

As for the society and national aspects, young people often represent the future. Only when the young

generation grows up healthily and has good values, can the society and the country develop better. This research can help universities and educators to design some programs and finance courses to help students manage their money, in order to avoid being in a personal debt dilemma. And as for some financial institutions, they can make more suitable marketing strategies aiming at young adults (Lim et al., 2019). And the government can strengthen guidance in the macroscopic aspect, in order to form a good social atmosphere (Chai et al., 2012).

### **1.6 Chapter Summary**

In Chapter 1, an overview of this topic is presented. Background of the study, problem statement, research objectives, research questions and significant of the study are explained in detail.

The main content of the next chapter is the literature review, in order to clarify dependent variable and independent variables, setting up hypotheses and provided conceptual framework.

## **2. Literature Review**

In Chapter 2, the definitions of terms are explained and the relationships between every independent variable (IV) and dependent variable (DV) are disclosed by reviewing published literatures. In addition, this chapter also includes hypotheses, conceptual framework and a chapter summary.

### **2.1 Review of the Literature**

#### **2.1.1 Dependent Variable – Saving Behaviour**

There are various interpretations of “Saving” this word. From an economic point of view, saving is explained as the amount retained after deducting expenses from income within a particular period of time (Browning & Lusardi, 1996). However, there is a different definition from the psychological perspective. According to Warneryd (1999), saving means that people curb their desire to consume now, leaving their purchasing power for later or not seeking to satisfy this desire. By the way, some researchers trend to classify saving as a kind of investment, because unconsumed income would be converted into saving, and saving would eventually be converted into investment (Keynes, 1936). In a word, saving behaviour is the integration of present rational decision and future planning, and people saving behaviour is affected by various factors.

#### **2.1.2 Financial Literacy (Independent Variable 1)**

Financial literacy is not a new concept. Referring to previous studies, there are a lot of different explaining versions of this phrase. According to Kapoor, Dalabay and Hughes (2012), financial literacy refers to the ability to understand terms and issues related to finance. In addition, according to Lusardi (2008), financial literacy also emphasizes the integration and efficient use of financial knowledges, including personal financial management, budgeting and saving. Financial literacy enables individuals to become self-sufficient and thus achieve financial stability.

Financial literacy has been used as an important factor in the study of people's saving behaviour. And many studies have shown that people who have high financial literate are more likely to save than people who are low financial literate. Referring to the research of Chai et al. (2012), Malaysian university students with high financial literacy, their willingness to save is significantly higher those with insufficient financial literate. It happens that there is a similar case, in a study of United States, 1, 004 households across the state were interviewed by phone calls. It turns out that families with higher financial test marks get more saving practices. Therefore, the researchers drew conclusions that financial literacy had a positive and significant effect on people's saving behaviour and more financial skills lead to better saving practices (Hilbert et al., 2003).

#### **2.1.3 Parent Influence (Independent Variable 2)**

Attitude toward money reflects people's personalities and value expectations, and thus affects people's thoughts, emotions and behaviours. Correct economic attitude will guide people economic behaviours, which refers to people to participate in the economic life of a variety of behaviours, such as consumption behaviours, donation behaviours, saving behaviours and investment behaviours (Guo & Xin, 2020). Research on financial socialization shows that young people's understanding of the value of money is influenced by the social agents in their social environment, and parents are the primary social agents to children (Conger et al., 2000).

In the field of psychology and economics, a large number of studies have focused on the relationship between parents' and children's economic behaviour, and found the phenomenon of intergenerational transmission (Brown, Srivastava, & Taylor, 2015; Mittal & Royne, 2010). In other word, parents' economic attitudes and behaviours may also influence their children's economic attitudes and behaviours (Wang & Wu, 2018).

As mentioned before, saving behaviour is a kind of economic behaviours, and some researchers specifically looked at the phenomenon of intergenerational transmission of saving behaviour. In a research of Otto (2009), the sample of this research is 446 students aged 13 to 14 in England, and they are asked to fill out a questionnaire about money management. The results show that parents can contribute the development their children's financial abilities, which plays a vital role in cultivating children's saving behaviour.

#### **2.1.4 Peer Influence (Independent Variable 3)**

Peer effect refers to that by spreading information about peer behaviour, people can be convinced that the behaviour is common, and therefore more likely to engage in this common behaviour. And the herd mentality is common among young people (Liu et al., 2019).

According to the research done by Erskine, Kier, Leung, and Sproule (2005) to determine further predictors for the saving behaviour of teenagers and young adults, the sample of this study is 1,806 young Canadians aged 12 to 24, the theory bases are economic theory of time preference and psychological theories about adolescent crowds. As for the results, the groups that are ranked high on the peer-oriented dimension were expected to be less patient and less likely to save money. Therefore, it can conclude that peer influence has an impact on individuals' saving behaviour.

Generally speaking, peer information intervention initially aims at making the individual's behaviour develop towards the general behaviour of the peer (Liu et al., 2019). However, some research results are opposite to popular belief. Beshears, Choi, Laibson, Madrian and Milkman (2015) have investigated the influence of peer information intervention on retirement savings with the help of field study. The sample population is divided into two main groups, one consisting of employees participating in a company retirement savings plan and the other not participating in this savings plan. The results show that peer information had a negative effect. In other words, compared with the control group without peer information, individuals with low income and low savings are less willing to participate in retirement savings if they have information about peer high savings rate. The opinion of researchers on this phenomenon is that peer information will lead to upward social comparison, which discourage low-saving people and make them more reluctant to save (Liu et al., 2019). Hence, Peer influence does have an impact on individuals' saving behaviour.

#### **2.1.5 Self- Restraint (Independent Variable 4)**

Self- restraint, also is referred to as self-control, which is the ability to regulate emotions, thoughts and behaviour in the face of temptations and impulses (DeLisi, 2014). A striking characteristic of people with well self- control is that they can delay gratification by using will, self-discipline, and ability (Baumeister, 2002).

According to the research done by Chai et al. (2019), the sample is 420 university students from Malaysia, and the results show that the relationship between self- restraint and saving behaviour is positively correlated. Because people with high levels of self-control can accept delayed gratification, they are less likely to overspend than people with low levels of self-control. As a result, people with more self-control tend to be more willing to save.

Some researchers focus on the influencing factors of self-control ability. For example, A finding from the study done by Lim et al. (2019) is that there are 2 inverse powers-- desire & willpower, whose strength determine the personal ability to maintain self-restraint for savings. In addition, people are more likely to save if they are able to control themselves with a reasonable budget and an assessment of financial costs.

In addition, according to a study of Otto (2009), it is discovered that the psychological variables associated with saving in adults emphasize that self-restraint and the ability to delay gratification are vital skills for saving at a young age.

## **2.2 Hypotheses Development**

According to previous revisions of literature, the following hypotheses can be proposed:

**H1:** There is a relationship between financial literacy and saving behaviour of university students in Guangdong province.

**H2:** There is a relationship between parent influence and saving behaviour of university students in Guangdong province.

**H3:** There is a relationship between peer influence and saving behaviour of university students in Guangdong province.

**H4:** There is a relationship between self-restraint and saving behaviour of university students in Guangdong province.

### 2.3 Proposed Conceptual Framework

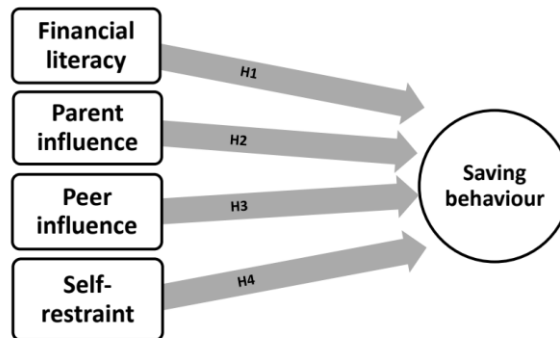


Figure 1: Proposed Conceptual Framework

### 2.4 Chapter Summery

In Chapter 2, after finishing revisions of literature, one dependent variable and four independent variables are identified, as well as a conceptual framework and hypotheses are proposed. In the next chapter, the research methodology will be discussed in detail.

## 3. Research methodology

Chapter 3 emphasizes on designing the research and obtaining primary data. In the following part, sample size, types of data use, method of data collecting, measurement of variable and proposed data analysis are clarified.

### 3.1 Research Design

#### 3.1.1 Exploratory Research

This research is classified as an exploratory research. Because there is no clearly defined of influence factors of saving behaviour of university students in Guangdong province, which is up to researchers to find out. In addition, compared with other types, exploratory research methods are more flexible.

#### 3.1.2 Quantitative Method

The quantitative method is adapted to this research. The purpose of quantitative methods is to provide a summary of data to support the generalization of research phenomena. In order to do this, quantitative research usually involves fewer variables and more cases, and prescriptive procedures are used to ensure validity and reliability.

There are only 1 dependent variable and 4 independent variables of this study, but the sample size should be large.

#### 3.1.3 Cross-Sectional Analysis

This study is identified as a cross-sectional analysis due to the data collecting period-From May 16, 2021 to May 29, 2021 (2 weeks).

### 3.2 Type of Data Used, Population and Sample Size

In this research, the type of data used is primary data, which is gained directly and specifically from university students in Guangdong province through questionnaire survey.

According to the data of Ministry of Education of the People's Republic of China (2015), The number of university students in Guangdong province exceeded one million in 2015. In 2020, just Guangzhou one city has nearly 1.31 million university students, ranking first in mainland China. Therefore, according to theory of Sekaran and Bougie (2016), the minimum of sample size is 384 students.

### 3.3 Data Collection Method & Measurement of Variables

The primary data of this research comes from questionnaire. This questionnaire has 2 main section, section A aims at collecting the demographic data, and section B focuses on the influence of each variable.

#### 3.3.1 Section A- Demographic Data

Demographic information includes gender, age, major of study, level of monthly pocket money and situation of part-time job. Nominal scale is used to measure gender, major of study and situation of part-time job. And ordinal scale is used to measure age and level of monthly pocket money.

Following table shows the questions in Section A:

Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female
Age: <input type="checkbox"/> ≤18 <input type="checkbox"/> 19-21 <input type="checkbox"/> 22-24 <input type="checkbox"/> ≥25
Major of study: <input type="checkbox"/> Arts <input type="checkbox"/> Business <input type="checkbox"/> Science <input type="checkbox"/> Other
How much pocket money do you get from your parent every month? <input type="checkbox"/> ≤¥500 <input type="checkbox"/> ¥501-¥1000 <input type="checkbox"/> ¥1001-¥1500 <input type="checkbox"/> ¥1501-¥2000 <input type="checkbox"/> ≥¥2001
Do you have a part-time job? <input type="checkbox"/> Yes <input type="checkbox"/> No

#### 3.3.2 Section B- Influence of Each Variable

In Section B, the statements used to test independent variables and dependent variable accord to interval scale measurement, the specific manifestation is five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

- Financial literacy

As for the first independent variable-Financial literacy, 6 statements in accordance with Kapoor et al., (2012); Lusardi (2008); Chai et al., (2012) and Hilbert, et al., (2003) are employed in the questionnaire.

Following table shows the statement of independent variable 1 (FL):

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I have the habit of keeping accounts.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2	Managing my money well is not a difficult problem for me.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3	I can manage my credit consumption very well.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4	I can make a weekly/monthly budget for myself.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5	I often learn about financial information consciously.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6	I have a better understanding of financial instruments. (eg. bonds, stock, T-bill, future contract, option and etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Measurement:** The higher the marks, the higher the financial literacy of the interviewees, and vice versa.

- Parent influence

As for the second independent variable- Parent influence, 5 statements in accordance with Otto (2009); Wang & Wu (2018); Brown et al., (2010); Conger et al., (2000) and Guo, & Xin (2020) are employed in the questionnaire.

Following table shows the statement of independent variable 2 (PaI):

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My parents are my role models when it comes to financial management.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2	Sometimes it's good to let my parents take care of my money to help me save.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3	My parents are happy and gratified for my saving.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4	I appreciate my parents' advice on what to do with my money.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5	Saving money is what I always do, because my parents want me to save money when I am very young.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Measurement:** The higher the marks, the greater the impact of parent influence on respondents' saving behaviour, and vice versa.

- Peer influence

As for the third independent variable- Peer influence, 5 statements in accordance with Liu et al., (2019); Erskine et al., (2005) and Madrian & Milkman (2015) are employed in the questionnaire.

Following table shows the statement of independent variable 3 (PeI):

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	As far as I know, some of my friends have the habit of saving money often.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2	My friends often discuss financial matters (saving) and I also participate in it.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3	I always compare the amount of savings and consumption with my friends.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4	I always spend my free time with my friends.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5	I always go to money-spending activities with my friends.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Measurement:** The higher the marks, the greater the impact of peer influence on respondents' saving behaviour, and vice versa.

- Self-restraint

As for the fourth independent variable- Self-restraint, 6 statements in accordance with DeLisi, (2014); Baumeister, (2002); Chai et al., (2019); Lim et al., (2019) and Otto (2009) are employed in the questionnaire.

Following table shows the statement of independent variable 4 (SR):

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Saving is too difficult for me so I don't save.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2	Every time I get a sum of money, I always spend it right away (within 1 or 2 days).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3	"Just do it" is my style of buying things.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4	I am more concerned with what happens to me in short run than in the long run.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5	I enjoy spending money on things that aren't practical.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6	I'm easily attracted to temptation.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Measurement:** The higher the marks, the more impulsivity and lower self-restraint of respondents, and vice versa.

- Saving behaviour



As for the dependent variable- Saving behaviour, 6 statements in accordance with Warneryd (1999) and Browning & Lusardi (1996) are employed in the questionnaire.

Following table shows the statement of dependent variable (SB):

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I save money regularly against future needs.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2	In order to save money, I often compare prices and choose the lower one.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3	In order to save money, I often consider whether I really need something before I buy.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4	When risks come from, I have the available money to deal with them.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5	I plan to reduce my expenses to save money.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6	Achieving saving goals is not difficult for me.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Measurement:** The higher the marks, the more effective the saving behavior of the interviewees, and vice versa.

### 3.4 Proposed Data Analysis

#### 3.4.1 Descriptive Analysis

Describing, displaying, or summarizing data in a meaningful way is a simple explanation of descriptive analysis. Researchers can convert data summaries into charts through graphical processing of data, so as to have a more intuitive understanding of the distribution of data. And they can also analyse the data, such as mean, median, mode, standard deviation and variance, to understand the concentration and dispersion of observations within each variable (Saunders, Lewis & Thornhill, 2009).

In this research, demographic data can be shown through pie chart, and all data related to independent variables and dependent variable can use to calculate average levels, frequency distribution and percentage distribution for preliminary analysis.

#### 3.4.2 Reliability Analysis

To ensure that the measurement is not biased so as to gain a consistent result, in reliability test, the Cronbach Coefficient Alpha need to be found and compared with standard. Following table shows the relationships between Cronbach Coefficient Alpha and strength of association (Hair, Babin, Money & Samouel, 2003).

Alpha Coefficient Range	Strength of Association
Less than 0.60	Poor
0.60 to less than 0.70	Moderate
0.70 to less than 0.80	Good
0.80 to less than 0.90	Very good
0.90 and above	Excellent

Figure 2: The rule of thumb for Cronbach's alpha coefficient value

#### 3.4.3 Inferential Analysis

How to infer popular quantitative characteristics from sample data is what inferential analysis does. In this study, inferential analysis is needed to test if the hypotheses are valid. Correlation and regression analysis are two common methods which fall into the category of inferential analysis (Saunders et al., 2009).

In this experiment, correlation is a statistical test that evaluates the strength of the relationship between two numerical data variables. Regression analysis can help to understand whether there is correlation between independent variables (FL, PaI, PeI, SR) and dependent variables (SB), as well as correlation direction and intensity (Saunders et al., 2009).

### 3.5 Chapter Summary

The main context of chapter 3 is the explanation of research methodology. Based on the characteristics of this topic, this research is identified as an exploratory research, using quantitative method and cross-sectional analysis to conduct. Next, the research use primary data collecting from questionnaires. As for the sample size, 384 is considered to be the minimum in accordance with Sekaran and Bougie (2016). By the way, Chapter 3 also presents data collection method and how to measure variables. Finally, 3 analysis methods are proposed in order to handle data better in the next Chapter.

## 4. Data analysis

From May 16, 2021 to May 29, 2021 (2 weeks), 414 questionnaires were collected. After excluding 10 invalid questionnaires, 404 valid results will be analysed and discussed in Chapter 4. The software used in this chapter is SPSS 23.0. There are 4 methods are used to analyse, descriptive analysis, reliability analysis, correlation analysis and multiple regression analysis.

### 4.1 Descriptive Analysis

#### 4.1.1 Respondent demographic profiles

The demographic profiles of respondent are concluded in Table 1 and there are totally 6 demographic characteristics in this research, respectively city, gender, age, major, pocket money monthly, and part-time job situation.

Table 1: Respondents Profile (N=404)

Characteristics		Frequency	Percentage
City	GD-Chaozhou	4	0.99%
	GD-Dongguan	61	15.10%
	GD-Foshan	5	1.24%
	GD-Guangzhou	197	48.76%
	GD-Huizhou	11	2.72%
	GD-Jiangmen	4	0.99%
	GD-Jieyang	10	2.48%
	GD-Maoming	5	1.24%
	GD-Meizhou	3	0.74%
	GD-Shantou	25	6.19%
	GD-Shaoguan	5	1.24%
	GD-Shenzhen	55	13.61%
	GD-Yunfu	3	0.74%
	GD-Zhaoqing	6	1.49%
	GD-Zhongshan	4	0.99%
GD-Zhuhai	6	1.49%	
Gender	Male	152	37.62%
	Female	252	62.38%
Age	≤18	24	5.94%
	19-21	296	73.27%
	22-24	72	17.82%
	≥25	12	2.97%
Major	Arts	102	25.25%
	Business	90	22.28%
	Science	172	42.57%
	Others	40	9.90%
Pocket Money Monthly	≤¥500	28	6.93%
	¥501-¥1000	70	17.33%
	¥1001-¥1500	144	35.64%
	¥1501-¥2000	100	24.75%
	≥¥2001	62	15.35%
Part-time Job Status	Yes	192	47.52%
	No	212	52.48%

Firstly, all the interviewees come from Guangdong province. Out of them, the largest number of respondents come from Guangzhou, 197 people, accounting for 48.76%, followed by Dongguan with 61 people (15.10%) and Shenzhen with 55 people (13.61%). As for the gender, there are 152 (37.62%) males and 252 (62.38%) females participated in the survey. In terms of age, most of respondents fall into age 19-21, total 296 account for 73.27%, followed by age 22-24 with 72 people (17.82%), and age less than or equal to 18 has 24 respondents (5.94%) and the minority is more than or equal to 25, only 12 respondents (2.97%). As for the major, most of respondent's study science (42.57%), followed by arts (25.25%), business (22.28%) and others (9.90%). Regarding to the monthly pocket money level, most of Guangdong students have ¥1001-¥1500 a month (35.64%). Higher levels than this are ¥1501-¥2000 a month (24.75%) and  $\geq$ ¥2001 a month (15.35%). Lower levels include  $\leq$ ¥500 (6.93%) and ¥501-¥1000 (17.33%). Finally, as for the part-time job situation, there are 192 (47.52%) respondents having a part-time job while 212 (52.48%) not.

#### 4.1.2 Financial literacy

Table 2 shows the items for Financial literacy (FL). Six questions are asked on 5-point Likert scale. From strongly disagree (1) to strongly agree (5), the higher the marks, the higher the financial literacy of the interviewees, and vice versa. The means of financial literacy are in the range of 2.81-3.59, FL3 has the highest mean while FL6 is the lowest. For standard deviation, FL1 has the highest score of 1.280; while 1.103 is the lowest value scored by FL4. Therefore, FL1 has the highest degree of dispersion compared to others.

Table 2

No.	Items	N	Mean	Std. Deviation
FL1	I have the habit of keeping accounts.	404	2.93	1.280
FL2	Managing my money well is not a difficult problem for me.	404	3.28	1.129
FL3	I can manage my credit consumption very well.	404	3.59	1.155
FL4	I can make a weekly/monthly budget for myself.	404	3.24	1.103
FL5	I often learn about financial information consciously.	404	2.92	1.227
FL6	I have a better understanding of financial instruments. (eg. bonds, stock, T-bill, future, contract, option and etc.)	404	2.81	1.113

#### 4.1.3 Parent influence

Table 3 demonstrates the items for Parent influence (PaI). Five questions are inquired by using 5-point Likert scale. From strongly disagree (1) to strongly agree (5), and the higher the marks, the greater the impact of parent influence on respondents' saving behaviour, and vice versa. The means of parent influence fall in the range of 3.12-3.62. PaI3 has the highest mean while PaI2 has the lowest mean. In terms of standard deviation, PaI2 has the highest score of 1.118; whereas 0.980 is the lowest value scored by PaI3. Therefore, PaI2 has the highest degree of dispersion compared to others.

Table 3

No.	Items	N	Mean	Std. Deviation
PaI1	My parents are my role models when it comes to financial management.	404	3.37	1.008
PaI2	Sometimes it's good to let my parents take care of my money to help me save.	404	3.12	1.118
PaI3	My parents are happy and gratified for my saving.	404	3.62	0.980
PaI4	I appreciate my parents' advice on what to do with my money.	404	3.33	1.032
PaI5	Saving money is what I always do, because my parents want me to save money when I am very young.	404	3.34	1.067

#### 4.1.4 Peer influence

Table 4 demonstrates the items for Peer influence (PeI). Five questions are inquired by using 5-point Likert scale. From strongly disagree (1) to strongly agree (5), and the higher the marks, the greater the impact of peer influence on respondents' saving behavior, and vice versa. The range of peer influence's mean is from 2.89 to 3.51. PeI1 is the highest on 3.51 while PaI2 has the lowest mean on 2.89. About standard deviation, PeI3 has the highest value of 1.080; whereas 0.925 is the lowest value scored by PeI1. Therefore, PeI3 has the highest degree of dispersion compared to others.

Table 4

No.	Items	N	Mean	Std. Deviation
PeI1	As far as I know, some of my friends have the habit of saving money often.	404	3.51	0.925
PeI2	My friends often discuss financial matters (saving) and I also participate in it.	404	3.18	0.933
PeI3	I always compare the amount of savings and consumption with my friends.	404	2.98	1.080
PeI4	I always spend my free time with my friends.	404	3.48	0.936
PeI5	I always go to money-spending activities with my friends.	404	3.43	1.058

#### 4.1.5 Self-restraint

Table 5 presents the items for Self-restraint (SR). There also are six questions inquired by using 5-point Likert scale. From strongly disagree (1) to strongly agree (5), the big difference from previous independent variables is that questions of SR adopt negatively worded scale items, and during analysis process, the original data are recoded (eg: Old 1= New 5). After recoding, the higher the marks represent the higher self-restraint of respondents, and vice versa.

Following all analyses of SR use the recoded data. The range of self-restraint's mean is from 3.08 to 3.68. SR2 is the highest while SR6 is the lowest. Regarding of standard deviation, SR3 has the highest value of 1.167; whereas 1.060 is the lowest value scored by SR5. Therefore, SR3 has the highest degree of dispersion compared to others.

Table 5

No.	Items	N	Mean	Std. Deviation
SR1	Saving is too difficult for me so I don't save.	404	3.38	1.090
SR2	Every time I get a sum of money, I always spend it right away (within 1 or 2 days).	404	3.68	1.135
SR3	"Just do it" is my style of buying things.	404	3.33	1.167
SR4	I am more concerned with what happens to me in short run than in the long run.	404	3.14	1.089
SR5	I enjoy spending money on things that aren't practical.	404	3.36	1.060
SR6	I'm easily attracted to temptation.	404	3.08	1.081

#### 4.1.6 Saving behavior

Table 6 presents the items for saving behavior (SB). There are six questions inquired by using 5-point Likert scale. From strongly disagree (1) to strongly agree (5), and the higher the marks, the more effective the saving behavior of the interviewees, and vice versa. The scope of saving behavior's mean is from 3.14 to 3.78. SB3 is the highest while SB6 is the lowest. Regarding of standard deviation, SB6 has the highest value of 1.238; whereas 0.818 is the lowest value scored by SB4. Therefore, SB6 has the highest degree of dispersion compared to others.

Table 6

No.	Items	N	Mean	Std. Deviation
SB1	I save money regularly against future needs.	404	3.34	1.235
SB2	In order to save money, I often compare prices and choose the lower one.	404	3.69	0.854
SB3	In order to save money, I often consider whether I really need something before I buy.	404	3.78	0.842
SB4	When risks come from, I have the available money to deal with them.	404	3.69	0.818
SB5	I plan to reduce my expenses to save money.	404	3.73	0.895
SB6	Achieving saving goals is not difficult for me.	404	3.14	1.238

#### 4.2 Reliability Analysis

Cronbach's coefficient is the tool to test reliability. And according to Hair, Babin, Money & Samouel (2003), if Cronbach's alpha is below 0.6, the questionnaire should be reprepared, more than 0.6 is acceptable and the higher alpha indicates the more reliable. As Table 7 shows, all variables' Cronbach's alphas are more than 0.7, and two of them are more than 0.8. Therefore, the constructions of measurements are regarded as reliable, and no item need to be excluded.

Table 7: Summary of Reliability Statistics

Construct	Cronbach's Alpha	Number of Items
Financial literacy (IV1)	0.856	6
Parent influence (IV2)	0.783	5
Peer influence (IV3)	0.771	5
Self-restraint (IV4)	0.833	6
Saving behavior (DV)	0.721	6

#### 4.3 Correlation Analysis

Before proceeding analysis, the averages of all variables are calculated and the method adopted is Pearson correlation analysis due to averages are continuous values.

Following Table 8 shows the Pearson correlation analysis results. All independent variables have positive and significant relationships with saving behaviour. The more Pearson correlation gets closer to 1, the stronger relationship between 2 variables. Therefore, in these 4 independent variables, the financial literacy has the strongest relationship with saving behaviour ( $r=0.632$ ) while peer influence has the weakest one ( $r=0.234$ ). Additionally, all hypotheses could be accepted due to all p-values of this study are less than 0.05 even 0.01, which indicates that relationships are significant at the 0.01 level (Malhorta, 2010).

Table 8: Summary of Pearson Correlation Analysis

Saving Behaviour (DV)		
Financial Literacy (IV1)	Pearson Correlation	.632**
	Sig. (2-tailed)	.000
	N	404
Parent Influence (IV2)	Pearson Correlation	.320**
	Sig. (2-tailed)	.000
	N	404
Peer Influence (IV3)	Pearson Correlation	.234**
	Sig. (2-tailed)	.000
	N	404
Self-restraint (IV4)	Pearson Correlation	.341**
	Sig. (2-tailed)	.000
	N	404
Saving Behaviour (DV)	Pearson Correlation	1
	Sig. (2-tailed)	
	N	404

\*\* Correlation is significant at the 0.01 level (2-tailed).

#### 4.4 Multiple Regression Analysis

Model summary shows the relationship between the model and saving behaviour. R indicates that there is a 0.684 strength linear relationship between the observational and model-forecasted values of the saving behaviour. And R Square indicates that there is 46.8% of the observed saving behaviour variation can be interpreted by the predictors' inputs (IBM, 2014).

Table 9: Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684 <sup>a</sup>	.468	.463	.47285
<i>a. Predictors: (Constant), Financial Literacy, Parent Influence, Peer Influence, Self-Restraint</i>				
<i>b. Dependent Variable: Saving Behaviour</i>				

The ANOVA table shows the acceptability of the model from a statistical perspective. The row of Regression interprets information about the variation constituted by this model, and the Residual row shows it that is not constituted by this model. Therefore, there is 46.8%  $[(78.451/167.664) * 100\% = 46.8\%]$  variation in proportion of influenced saving behaviour can be interpreted by this model, which is as same as the R Square's meaning. Additionally, F value is 87.718 and less than 0.05, which indicates that the variation interpreted by this model is not accidental (IBM, 2014).

Table 10: ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.451	4	19.613	87.718	.000 <sup>b</sup>
	Residual	89.212	399	.224		
	Total	167.664	403			
<i>a. Dependent Variable: Saving Behaviour</i>						
<i>b. Predictors: (Constant), Financial Literacy, Parent Influence, Peer Influence, Self-Restraint</i>						

According to Table 11, all the B values are positive and all variables are significant at 95% level (p-value <0.05). Therefore, a linear regression equation can be determined, which includes all independent variables and dependent variable.

$$\text{Equation: } SB = 1.147 + 0.381FL + 0.153PaI + 0.089PeI + 0.125SR$$

Additionally, as for the meaning of Beta, it shows the degree of influence of each independent variable to dependent variable. Out of FL, PaI, PeI and SR, FL ( $\beta=0.527$ ) has the largest influence on saving behaviour, which can be specially interpreted as every unit increase in FL will lead to a raise of 0.527 units in SB, holding other variables constant. Continuously, PaI ( $\beta=0.181$ ) has the second largest influence and followed by SR ( $\beta=0.158$ ). In comparison, PeI ( $\beta=0.125$ ) has the minimum influence on SB whereby SB only expands 0.125 units for every PeI unit raise.

Table 11: Summary of Regression Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	1.147	.169		6.773	.000	
1	Financial literacy (IV1)	.381	.029	.527	12.932	.000
	Parent influence (IV2)	.153	.037	.181	4.162	.000
	Peer influence (IV3)	.089	.040	.098	2.208	.028
	Self-restraint (IV4)	.125	.033	.158	3.836	.000
<i>a. Dependent Variable: Saving Behaviour</i>						

#### 4.5 Chapter Summery

In this chapter, four main analyses are proceeded in order to analyze 404 valid questionnaires results. To begin with, in the descriptive analysis, the respondent demographic profiles include 6 fundamental elements: City, Gender, Age, Major, Pocket money monthly and Part-time job status. All of these are presented in frequency and percentage. Secondly, through the reliability analysis, four independent variables and one dependent variable are verified their reliabilities since their Cronbach's alphas are more than 0.6. Subsequently, by doing correlation analysis, all independent variables are proved having positive and significant relationships with saving behaviour. Therefore, all the hypotheses can be accepted. Finally, in order to deeply explore the linear relationship between saving behaviour and 4 independent variables, multiple regression analysis is conducted. The result shows that there is 46.8% variation in proportion of influenced saving behaviour can be interpreted by this model and the linear equation is  $SB = 1.147 + 0.381FL + 0.153PaI + 0.089PeI + 0.125SR$ .

#### 5. Discussion and Conclusion

Chapter 5 is a comprehensive summary of whole research. To begin with, an overview of study is presented. And then the study results, contributions, limitations, and recommendations for future research are also elaborate in this chapter.

## 5.1 Overview of the Study

Generally speaking, the objectives of this research is to study the saving behaviour of Guangdong university students from micro level and to determine the factors that influence their saving behaviour, such as financial literacy, parent influence, peer influence and self-restraint. And the general research question is what are the factors that influence university students in Guangdong province saving behaviour? Therefore, after reviewing relevant literatures, 1 dependent variable and 4 independent variables are determined. By the way, 4 hypotheses are put forward, which assume that there are relationships between saving behaviour and 4 independent variables (Financial Literacy, Parent Influence, Peer Influence, Self-Restraint).

The target audience of this research is the university students studying in Guangdong province. As for the data collection, this research uses primary data gained from questionnaire. As for the sampling technology, non-probability sampling technique is used in this study as it ensures fine estimates of the population characteristics (Malhotra, 2010). All of questionnaires are sent directly and specifically to university students in Guangdong province by using convenience sampling method, because it is the simplest non-probability sampling technique as the sample is selected randomly until meeting required sample size (Saunders et al., 2009). In 2 weeks' time (May 16, 2021 to May 29, 2021), totally 414 questionnaires were collected. After excluding 10 invalid questionnaires, 404 valid results are used in data analysis.

Following part is about overall results. There are approximately half of respondents from Guangzhou, which is the concentration area of Guangdong universities. This questionnaire also collects other demographic data such as gender, age, major, pocket money level (Monthly) and part-time job status. As for measurements of variables, this questionnaire adopts five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). And after reliability, correlation, and multiple regression analysis, 4 hypotheses can be accepted and a linear equation ( $SB = 1.147 + 0.381FL + 0.153PaI + 0.089PeI + 0.125SR$ ) can be developed.

## 5.2 Discussion of Results

### 5.2.1 Discussing the results of descriptive analysis

Derived from Chapter 4, nearly half of respondents come from Guangzhou, which is the city with maximum universities in Guangdong province. 62 percent of respondents are female and respondents are mainly aged between 19 and 21. Most of them do not major in business. Additionally, more than 75% Guangdong university students' pocket money is more than ¥1000 a month and more than half of them do not have part-time job. The descriptive analysis results of 4 independent variables and 1 dependent variable mainly are presented by mean and standard deviation, in order to intuitively show the average and dispersion of each option.

### 5.2.2 Discussing the results of reliability analysis

As for the results of reliability analysis, all variables' Cronbach's Alpha are more than 0.6, actually more than 0.7 (FL's  $\alpha=0.856$ ; PaI's  $\alpha=0.783$ ; PeI's  $\alpha=0.771$ ; SR's  $\alpha=0.833$ ; SB's  $\alpha=0.721$ ). Therefore, all the constructs are reliable.

### 5.2.3 Discussing the results of correlation analysis

Pearson correlation analysis results show that every independent variable has positive and significant relationships with saving behaviour. The financial literacy has the strongest relationship with saving behaviour ( $r=0.632$ ) while peer influence has the weakest one ( $r=0.234$ ). In addition, all hypotheses (H1, H2, H3, H4) could be accepted due to all p-values of this study are less than 0.05 even 0.01, which indicates that the relationships between IVs and DV are significant at the 0.01 level (Malhorta, 2010).

### 5.2.4 Discussing the results of multiple regression analysis

Derived from Chapter 4, the results of multiple regression analysis interpret that there is 46.8% ( $R^2=0.468$ ) variation in proportion of influenced saving behaviour can be interpreted by this model, and the linear equation is developed as  $SB = 1.147 + 0.381FL + 0.153PaI + 0.089PeI + 0.125SR$ . The results of multiple regression analysis also prove that the relationships between IVs and DV are significant due to each p-value less than 0.05.

### 5.2.5 Discussing the results of hypotheses

*H1: There is a relationship between financial literacy and saving behaviour of university students in Guangdong province.*

According to Chapter 4, it is well-documented that there is a positive and significant relationship between financial literacy and saving behaviour of university students in Guangdong province ( $p < 0.05$ ,  $r = 0.632$ ,  $B = 0.381$ ), which indicates that students with better financial literacy are more conscious of saving. Generally speaking, the research results are consistent with previous studies (Kapoor et al., 2012; Lusardi 2008; Chai et al., 2012; Hilbert, et al., 2003).

*H2: There is a relationship between parent influence and saving behaviour of university students in Guangdong province.*

Derived from Chapter 4, it is evidential that there is a positive and significant relationship between parent influence and saving behaviour of university students in Guangdong province ( $p < 0.05$ ,  $r = 0.320$ ,  $B = 0.153$ ), which indicates that parent influence is consequent in leading and inspiring their children to save. Generally speaking, the research results are consistent with previous studies (Otto, 2009; Wang & Wu, 2018; Brown et al., 2010; Conger et al., 2000; Guo, & Xin, 2020).

*H3: There is a relationship between peer influence and saving behaviour of university students in Guangdong province.*

In accordant with Chapter 4, it is reasonable that there is a positive and significant relationship between peer influence and saving behaviour of university students in Guangdong province ( $p < 0.05$ ,  $r = 0.234$ ,  $B = 0.089$ ), which indicates that students are easily influenced by their peers, thereby affecting their saving behavior. Generally speaking, the research results are consistent with previous studies (Liu et al., 2019; Erskine et al., 2005; Madrian & Milkman, 2015).

*H4: There is a relationship between self-restraint and saving behaviour of university students in Guangdong province.*

According to Chapter 4, it is reasonable that there is a positive and significant relationship between self-restraint and saving behaviour of university students in Guangdong province ( $p < 0.05$ ,  $r = 0.341$ ,  $B = 0.125$ ), which indicates that students with better self-restraint are more tend to saving. Generally speaking, the research results are consistent with previous studies (DeLisi, 2014; Baumeister, 2002; Chai et al., 2019; Lim et al., 2019; Otto, 2009).

## 5.3 Contributions of Study

### 5.3.1 Body of knowledge

Guangdong Province is the most economically developed province in China. To some extent, the university students here represent a group of people who are at the forefront of the times in China. However, there is no special research on the factors affecting the savings behavior of university students in Guangdong. Therefore, this paper fills in the academic gap to a certain extent and lets people have more understanding of the savings behavior of university students in Guangdong.

### 5.3.2 Practical-Individual

The study is helpful for college students in Guangdong to understand the factors that affect their saving behavior, so that they can improve their saving behavior in a targeted way. For example, if a student wants to save money but he always fails, he can consider improving from financial literacy, parent influence, peer influence and self-restraint these 4 aspects. To begin with, he can improve his financial literacy by increasing knowledges of individual financial management. And he also can improve self-restraint to save money, such as making consume plan, making sure of own needs and comparing prices before buying. In addition, if his peers have good saving habits, they have a positive influence on him, or he also can influence his peers to save money together. If he still fails to save money, he can ask his parents to monitor and give him some advices.

### 5.3.3 Practical-Parents

Derived from the results of this study, parent influence is an important factor to affect university students' saving behaviour because of intergenerational transmission (Brown, Srivastava, & Taylor, 2015; Mittal & Royne, 2010). Many of students indicate that their parents are their models in financial management and feel happy when their children saving, and students are appreciated if parents give them



some advices on saving. Therefore, parents can do a better job of setting good examples for their children in terms of saving, thus directly influencing their children's saving behavior. What's more, parents can give advice and guidance on their children's saving behavior. If it is for children with weak self-control, parents can take control of the level of pocket money and other means to make children develop the habit of saving, which not only lets children know how to save, but also improves their self-control, which further affects the children's saving behavior.

#### **5.3.4 Practical-Universities**

A good university cultivates students' abilities in sound aspects and personal financial management ability is included, as well as saving behavior is a subdivision of it. This study shows there is a significant relationship between financial literacy and saving behaviour, but for numerous students who are not studying business, they have less opportunities to learn financial knowledges. Therefore, universities in Guangdong can pay more attention to cultivate students' financial literacy by offering general courses on financial knowledges. In addition, universities also can organize relevant activities, such as personal finance skills contest, financial lectures and so on, using peer influence to improve students' financial literacy.

#### **5.3.5 Practical-Commercial Banks**

Commercial Banks can get more understanding about saving behaviour of university students in Guangdong province. Therefore, they can launch more targeted financial products and develop more effective marketing strategies at the same time. For example, through this research the commercial banks know that saving behaviour of university students of Guangdong is significant influenced by their peer, so if banks want to explore more potential customers of university students, they can start from the savings group of university students and spread the information among their peers. In addition, instead of facing university students group directly, the banks also can start by reaching out to parents, because parents influence is also significant to university students' saving behaviour.

### **5.4 Limitations of Study**

Although the whole research process is scientific and reasonable, there still are some limitations of this study which can be improved in further similar studies.

#### **5.4.1 Sample size and geographical constraint**

Finally, the sample size is 404, meeting the minimum criteria as proposed by Sekaran and Bougie (2016). However, there are more than 1 million universities students in Guangdong, results from 404 samples may not be robust and representative enough. In addition, due to geographical constraint and randomness, the results not cover all cities in Guangdong province (excluding Heyuan, Shanwei, Qingyuan, Yangjiang and Zhanjiang), although there are not many university students in these cities.

#### **5.4.2 Cross-sectional analysis**

This study is identified as a cross-sectional analysis due to the data collecting period-From May 16, 2021 to May 29, 2021 (2 weeks). Therefore, the influence of time cannot be considered, and it is hard to make sure the time spot is representative. In addition, cross-sectional analysis is unable to show the causal relationship between the variables (Saunders et al., 2009).

#### **5.4.3 Mediating factor**

In this study, the relationships between independent variables (FL, PaI, PeI, & SR) and dependent variable are key points and the research processes ignore any mediating factors that may have significant influence on saving behaviour. Therefore, in the absence of mediating factors, it may affect the accuracy and reliability of the study.

#### **5.4.4 Self-report measurement**

Self-reported measurement is used as the only data source for this study. When students are asked to self-report their behavior, problems such as method bias and subjective self-evaluation occur, resulting in low validity (Podsakoff & MacKenzie, 2003). Although sometimes students are willing to report themselves honestly, they may distort their answers to exaggerate their personalities. Additionally, there are total 27 questions in this questionnaire, it cannot be ruled out that some interviewees do not fill in the questionnaire carefully because they want to finish the task quickly.

### **5.5 Recommendations for Future Research**

After discussing the limitations of this study, following part is some recommendations for future similar research.

#### **5.5.1 Use larger sample size and cover a wider range of areas**

Compared with small sample size, larger sample sizes are more likely to be representative, and the sample mean is more likely to be equal to the population mean (Saunders et al., 2009). Therefore, when other researcher doing similar research, they are recommended to use larger sample size to gain more reliable and accurate results. Additionally, range of areas can be explained to all cities in Guangdong province, although some of them are economically underdeveloped and have a small amount of university students.

#### **5.5.2 Employ a longitudinal research**

Time influence can be considered in further studies. It is recommended that future research can observe university students' saving behavior through longitudinal study. This will help researchers obtain valuable data that can provide powerful insights into how every factor influences students' saving behavior.

#### **5.5.3 Add mediating factors**

Since this study is not sufficient to account for all the system variances, it is suggested that mediators should be included in future studies to better explain the relationship between independent and dependent variables. Therefore, in future studies, we suggest using behavioral intention as a mediating variable, as it can explain a person's willingness to perform a particular behavior (Ajzen, 1991). For example, a student with high financial literacy and self-control may be less likely to develop saving behavior because he or she has no desire to save. In other words, saving behavior only occurs when the willingness to save is formed, which is usually influenced by other independent variables, such as financial literacy and self-control. Therefore, mediating variables can ensure that future researchers can draw firm conclusions about the relationship between independent variables and dependent variables.

#### **5.5.4 Adopt other alternative data collection methods**

Only using self-administered questionnaires to collect data is risky to some extent, in order to avoid the bias brought by this method, it is suggested that adopting additional measures is useful to verify participants' perceptions, such as field observations. A variety of data acquisition methods can help researchers obtain more accurate data. Additionally, when using self-administered questionnaires, the questionnaire should be carefully designed to avoid interviewees' impatience due to too many questions.

### **5.6 Conclusion**

In a word, Chapter 5 makes a complete summary of the whole research. The research objectives, research questions and hypotheses are reaffirmed again. On the basis of the previous chapters, data collection methods, sample size and overall results are discussed again. Contributions of this study are discussed in 5 aspects. Limitations are also put forward and some recommendations for solving limitations are provided for further similar research.

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